

## 1. Introduction

Hoa Binh is one of the provinces in the northern mountainous region of Vietnam. Hoa Binh is still poor among the northern mountainous ones. Different ethnic minority groups in the province with backward custom and habits and low intellectual standards together with complicated geographical conditions have caused more difficulties to the health care and medical activities. From this view point, the Hoa Binh Health Service (HBHS) proposed a project, which aims at strengthening Healthcare Services Provision in Hoa Binh Province.

The content of this Project draws mainly from four sources: 1) The results of the Project Formulation Study dispatched between October and November 2001; 2) The content of the “Application for The Project for Enhancement of Capacity of Hoa Binh Province’s Healthcare Sector,” submitted by the Government of the Socialist Republic of Vietnam (GOV) to the Government of Japan (GOJ) on August 2003; 3) the outcome of the Project Preparatory Study, dispatched between August 21st and September 17th 2003; and, 4) the outcome of the Second Project Preparatory Study, dispatched between February 25th and March 11th 2004 .

This Project Document has been prepared by the Japan International Cooperation Agency (JICA), building on the outcomes of the Mission for the Project Preparatory Study Team. The designing process followed the PCM Method, in which the participatory planning workshops were held during the said Mission involving broad stakeholders, followed by close consultation with the key stakeholders. Information contained in the Project Document was also compiled through interviews of relevant central and local authorities, bilateral and multilateral organizations implementing projects in Hoa Binh Province, and site visits to health-related institutions within Project target area.

This project document contains the following. Section 1 - Executive Summary provides an overall picture of the Project in brief. This section, together with Section 3 - Background of the Project, explains the context in which the Project was formulated, the socio-economic and policy environment of the health sector and the province, and the prior and on-going national and international efforts made in the health sector. Section 4 – the Current Situation and the Problems to be Addressed and Section 5 - Project Strategy explain why and how this Project should be implemented. In Section 6 - Project Design and Section 7 - Project Management and Coordination, the project’s location, target beneficiaries, and the detailed design of the Project are presented, as well as the organizational set-up of its implementation. Section 8 - Ex-Ante Assessment summarizes the preliminary assessment based on the information available at present, examining the value of the Project and its relevance for JICA assistance. At the end of the main text, Section 9 lists the reference documents, while Section 10 includes the Annexes.

## 2. Background Information

Recent rapid economic growth in Viet Nam has contributed to development in rural infrastructure, decreases in hunger and poverty, and smaller household size. Such progress, combined with steady efforts by a comprehensive grassroots health network, contributed to significant improvement of health indicators, “beyond [the level] expected for a country at its stage of economic development (ADB, 2001).” Nevertheless, there remain prior and newly emerging challenges in the sector that require further attention, but have not yet be addressed due to budgetary restrictions, administrative inefficiencies, and difficulties in handling regional disparities and diversities.

The Japan International Cooperation Agency (JICA) has been providing assistance to Viet Nam’s health sector to help enable the country to respond to those challenges. More specifically, JICA has formulated an assistance strategy to contribute to the strengthening of the referral system, focusing on enhancing the functions, step-by-step, of each vertical stratum of healthcare services providers, from top-referral level to the providers in lower strata, and also to strengthen the links between providers in different levels.

It is against this background that JICA organized the Project Formulation Study on Strengthening Healthcare Services Provision in Northern Part of Viet Nam, in order to conduct situation analysis, select priority provinces for assistance, and identify needy areas for technical cooperation. The Team observed a major technical and resource gap between the top-referral and lower levels, and suggested that in order to strengthen the capacity of healthcare services providers at the provincial level and below, JICA’s assistance should proceed step-by-step, with the first stage being the selection of a pilot province(s) for a trial project, with the decision on whether to pursue further projects, either through replication or scaling up, to follow.

Resulting from a series of discussions that took place during the Study, the document requesting technical cooperation on the “Project for Enhancement of Capacity of Hoa Binh Province’s Healthcare Sector” was formulated and forwarded to GOJ in August 2003. The Project Preparatory Study Team, dispatched in response to the request, consolidated the above-mentioned two processes to produce a draft Project Design Matrix (PDM).

### 2.1 Health Sector in Vietnam<sup>3</sup>

#### *Overview of the Current Health Sector and Challenges*

Viet Nam currently has a mixed pattern of morbidity and mortality: in rural areas, levels of infectious and parasitic diseases typically seen in developing regions are still dominant, while morbidity and mortality by cancer, injury due to traffic accidents and cerebrovascular diseases, prevalent causes in highly industrialized countries, are growing nationwide.

In addition, new challenges for health sector reform in the context of transitional economies remain to be dealt with. These are laid out as eleven areas of intervention in the government sector Strategy. They also reflect challenges seen in the donor’s review and analyses of the sector. Among them are:

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<sup>3</sup> Contents of this section is mainly drawn from the report of JICA Project Formulation Study conducted between October ~ November 2001, ADB Project Appraisal.

- improving health care financing to assure equity among all people, as well as to improve efficiency in providing demand-oriented services;
- strengthening planning and managerial capacity of the health administration at all levels;
- consolidating and developing effective primary health care/community-based services;
- improving curative care and putting in place an effective referral system and good management practices; and,
- strengthening the health system suitable to socio-economic, geophysical, ethnic, epidemiological conditions of particular regions.

All in all, two principles underlie these challenges: improving equality and increasing efficiency in the provision of health care services.

### *Improving Equality and Equity*

GOV in cooperation with the development assistance agencies has formulated the Comprehensive Poverty Reduction and Growth Strategy Paper (CPRGS), and has also set the Vietnam Development Targets<sup>4</sup>. The Poverty Task Force maintains that, despite impressive past achievement of health-related targets in Viet Nam, there remain issues of disparities/differentials in health indicators/status by, for instance, regions, poverty levels, and different social groups. Therefore, health interventions should pay particular attention to those underserved areas/population in achieving target indicators.

Such regional disparities are better documented than before. The Northern Uplands and Central Highlands score the worst, let alone strong rural-urban disparity found in the country. They have higher infant and under-5 mortality rates, higher maternal mortality rate, and a higher total fertility rate. Such indicators are also worse among those in lower income quintiles and ethnic minorities. Factors contributing to lower health status among those groups of people include, among others, a lack of resources at the provincial level to support quality healthcare service provision, more difficult access to health care facilities, lower educational attainment level, and non-health amenities such as water, electricity, information, and sanitation.

### *Improving Efficiency of Healthcare Service Provision*

Viet Nam has long ago established a far-reaching healthcare system extending to the commune level, at which level village health workers form a link between services providers and residents. The structure is standardized nationwide, with rather limited reflection of the disease burden of each locality. On the other hand, under the present law, everyone is entitled to go to any medical institution of his/her choice. This, in addition to the recent economic liberalization and accompanying increased movements of people, has created a situation where patients bypass Commune Health Centers (CHCs), District Health Centers (DHCs), or District Hospitals, and/or Provincial Hospitals for a few top-referral hospitals in major cities, resulting in overloads of patients, sometimes with less severe symptoms. As well, some lower-level hospitals and health centers, especially ones in less economically prosperous regions, do lack the capacity to treat patients with

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<sup>4</sup> Poverty Task Force. "Improving Health Status and Reducing Inequalities: Consultation draft," *Localizing IDTs for Poverty Reduction in Viet Nam*, November 2001, Ha Noi

less severe symptoms. As a result, the referral system is generally in disarray; hence the new challenge arises, to make the healthcare service provision system and its management more efficient and responsive to the demands of the population.

## 2.2 National Strategy

### *Government's Sector Strategy*

The overall goals of the health sector Strategy are: 1) for all people to receive primary health care; 2) to improve access to and use of qualified health services; and, 3) to reduce morbidity rate, improve physical strength; and increase average life expectancy. The target indicators to be achieved by the year 2010 are set as shown in the Table 1.

**Table 1: Specific Targets of the Health Strategy**

| Target Indicators             | Value      |
|-------------------------------|------------|
| Average Life Expectancy       | 75 years   |
| Maternal Mortality Rate       | 70/100,000 |
| Infant Mortality Rate         | > 25‰      |
| Under 5 Mortality Rate        | > 32‰      |
| Low Birth Weight Rate         | > 6%       |
| Malnutrition Rate > 5         | > 20%      |
| Average Height of the Youth   | ≤ 160cm    |
| Doctors per 10K population    | 4.5        |
| Pharmacist per 10K population | 1          |

*Source: The Health Care and Protection Strategy for the period of 2001 to 2010 years, MoH, 2001*

The contents of the Strategy is summarized and attached in the Annex 8.

## 2.3 The Provincial Context

Hoa Binh Province, where the Project will be implemented, is located in the Northwest sub-region of the country (See Map 1 attached). Administratively, there are a total of 10 districts and 1 township, consisting of 214 communes. Two districts are classified as uplands with mountainous profile, three as lowlands with seasonal flooding, and six others as normal. One hundred and nineteen (119) communes fall under the category of communes with special difficulties, while 64 communes are categorized as remote and 150 as mountainous. The highly sloping Da River flows from the Chinese border across Lai Chau, Son La, Hoa Binh and then meets the Red River. The province has a large lake (8,000 hectares) that contains water for the Da River hydroelectricity plant. The annual average temperature is 23.4°C, while the annual rainfall is 1,927mm. The average humidity is 85%.

Main and trunk roads have improved in recent years, with some currently undergoing repair work. National highway No. 6 (121 km in length) runs through Hanoi, Hoa Binh, Son La and Lai Chau and is the main transportation artery in Hoa Binh. In addition, the province has other roads such as the 20 km national highway No.15 linking Mai Chau District and Than Hoa Province and the 40 km national highway No. 12B linking Tan Lac District and Ninh Binh province. Nevertheless, it is

difficult for the local residents to access these main roads (See Map 2 attached).

Among 780,000 residents in Hoa Binh province, there are seven ethnic groups, of which the majority is Muong (60%), followed by Kinh (31%) and Thai (4%) (HBPPC, November 2002).

In regards to the economy, GDP per capita is relatively low at 178 US\$, compared with the national average at US\$ 317 (1999 figures). The GDP growth rate of the Northwest sub-region, however, was recorded at 5.8% in the year 2000, and that of the Province was 6.3% in 2000, slightly lower than the national average. 786,010 residents live in 174,668 households, of which 27% are classified as poor families (1999 Census), and 14.5% as poor and hungry (HBPPC, November 2002).

The basic socioeconomic indicators of the Province are presented in Table 2.

**Table 2: Basic socioeconomic indicators of Hoa Binh Province (2000)**

| Items   | Unit                        | Hoa Binh    | Country Overall |
|---|-----------------------------|-------------|-----------------|
| <b>Demography</b>   |                             |             |                 |
| Population  | 1,000 person                | 772.40      | 77,912.00       |
| Natural increase rate                                       | %                           | 1.52        | 1.53            |
| Trained laborer rate  | %                           | 8           | 18-20           |
| <b>Economic Indicators</b>                                  |                             |             |                 |
| GDP at current price  | USD million                 | 2,122       | 53,300          |
| GDP growth rate (1996 – 2000)                               | %                           | 6.7 (5.8*)  | 6.7             |
| GDP structure:  | - Agriculture and forestry  | 47.0        | 25.0            |
|   | - Industry and construction | 19.0        | 34.5            |
|   | - Services                  | 34.0        | 40.5            |
| GDP/person (1994 price)                                     | USD                         | 178         | 317             |
| <b>Social Indicators</b>                                    |                             |             |                 |
| Proportion of poor and hungry HH                            | %                           | 14.5        | 10 -11.0        |
| Proportion of HH in rural area that can access living water | %                           | 30.5 - 35.0 | 60.0            |
| Proportion of under five malnourished children              | %                           | 40          | 35 - 36         |

Source: People's Committee of Hoa Binh, 2000. Summarized Report on Master Plan for the Socio-Economic Development of Hoa Binh Province Period 2001 – 2010.

(\* GDP growth rate in parentheses indicates the growth rate of the Northwest Sub-region.)

### *Pattern of Morbidity and Mortality*

Hoa Binh Province is typical of the Northern Upland region of Viet Nam: 69% of the total population is made up of 7 ethnic groups; there are a high number of Mountainous and poor communes; access to rural infrastructure, including health facilities, safe water, sanitary toilet facilities, electricity, and information, is poor; the province is financially dependent on the national budget; and the population bears the burden of a disease profile “heavily influenced by traditional communicable and infectious diseases and morbidity and mortality associated with child bearing<sup>6</sup>.” The Infant Mortality and Under 5 Mortality rates are higher than the national average at 35% and 42%, respectively, in 2000 (HBPHS, 2002), and the ratio of malnourished children under 5 years is 42%. Although there are not reliable data on Maternal Mortality Ratio in Hoa Binh Province, the maternal death rate in mountainous areas is estimated to be very high (UNFPA, 1999). The Total

<sup>6</sup> EPOS Health Consultants/InDevelop Consultant Services

Fertility Rate of 2.4 (UNFPA, 1999) is not so high, but the number is skewed towards ethnic minorities residing in mountainous areas.

Top 10 causes of hospitalization and hospital deaths in the Northern Uplands as well as in Hoa Binh Province are shown in the Table 3 and 4. It reflects a polarized picture of disease pattern with combination of communicable and non-communicable diseases, indicating that double-edged interventions, both preventative and curative sides, are required.

There was a declining trend in the communicable diseases from 55% in the previous years to 32% in 2001, whereas traffic accidents and poisoning cases have been seen to increase. This is reflected in the fact that over the past three years (2000~2002), traffic accidents have been the major killer in the Province. HIV/AIDS is increasing as well. In 2001, there were 52 new instances in the province, for a total of 216 prevalence; 13 cases were detected in the remote district of Mai Chau, while 19 were in the provincial capital. There were 982 drug addicts including some instances of children under 16 (ADB-PMU/JICA, 2002).

**Table 3: Top 10 Causes of Hospitalization and Hospital Deaths in Northern Uplands in 1999**

| Top 10 causes of Morbidity                  | Per 100K | Top 10 causes of Mortality             | Per 100K |
|---|----------|--|----------|
| 1. acute bronchitis and bronchilitis        | 517,21   | 1. pneumonia                           | 2,62     |
| 2. pneumonia                                | 483,83   | 2. intracerebral hemorrhage            | 1,23     |
| 3. acute pharyngitis and tonsillitis        | 339,16   | 3. heart failure                       | 1,13     |
| 4. influenza                                | 331,38   | 4. transport accident                  | 1,05     |
| 5. diarrhea & gastroenteritis (infectious)  | 257,08   | 5. neonatal death                      | 0,85     |
| 6. medical (induced) abortion               | 219,49   | 6. acute bronchitis and bronchilitis   | 0,84     |
| 7. other acute upper respiratory infections | 146,32   | 7. intracranial injury                 | 0,79     |
| 8. malaria                                  | 139,99   | 8. respiratory tuberculosis            | 0,59     |
| 9. other injuries of multiple body regions  | 137,13   | 9. stroke                              | 0,57     |
| 10. other diseases of digestive system      | 115,53   | 10. fracture of skull and facial bones | 0,57     |

Source: Health Statistics Yearbook 2000, HISD, Ministry of Health, 2000

**Table 4: Top 10 Causes of Hospitalization and Hospital Deaths in Hoa Binh Province in 2002**

| Top 10 Causes of Hospitalization             | # cases | Top 10 Causes of Hospital Deaths        | # cases |
|--|---------|---|---------|
| 1. acute bronchitis, bronchilitis S02-03     | 2376    | 1. traffic accident V01-V09             | 46      |
| 2. trauma / traffic accident V01,V09         | 2243    | 2. suicide X60-X84                      | 13      |
| 3. diarrhea A09                              | 2191    | 3. trauma / general S24-S25-S91         | 12      |
| 4. bronchitis S20-S21                        | 2070    | 4. upper respiratory infections S00-S01 | 10      |
| 5. medical (induced) abortion O04            | 1378    | 5. intracranial injury S06              | 5       |
| 6. trauma / general S24-25                   | 1318    | 6. food and chemical poisoning T36-T50  | 2       |
| 7. oviductitis, ovaritis N70                 | 918     | 7. respiratory tuberculosis A02         | 2       |
| 8. other upper respiratory infections S00-01 | 756     | 8. damage to thyroid gland E00-E02      | 1       |
| 9. born fracture of the limbs S42-S52        | 745     | 9. gastric ulcer, duodenal ulcer K29    | 1       |
| 10. primary hypertension I10                 | 537     | 10. hepatitis K11-K77                   | 1       |

Source: Hoa Binh Provincial Health Service, 2003

## 2.5 Prior and On-going Local and International Efforts

In Viet Nam, following the development and adoption of the Comprehensive Poverty Reduction and Growth Strategy, major donor agencies have been intensifying their support to underserved regions, particularly the Northern Uplands and Central Highlands, and populations, particularly those in

lower income quintiles. Thus, their support is mainly extended to the levels that benefit the poor most, such as health promotion, provision of primary health care and basic healthcare services (i.e. at the DHC level and below). Assistance to health activities occupies the largest portion (29%) by International Non-Governmental Organizations' support.<sup>7</sup> This aid is especially extended to those who cannot be reached by, areas that lack support from, and/or regions, which receive no assistance from Bi- and Multi-lateral donors. In addition, their areas of assistance are focused on community-based services or training in a certain focused area, generally small in scale.

Hoa Binh Province has made good progress in Primary Health Care (PHC) activities with due attention and support from the Government to the grassroots health care network. Malaria control, which received technical support from the Belgium Technical Cooperation for five years (1994-99), is a good example, with not a single epidemic outbreak seen in recent years. The Extended Program on Immunization (EPI) is making improvement, with the ratio of children vaccinated with 6 types of vaccines rising to 96.3% in 2000 from 90.5% in the previous year (HBPHS, December 2002). The maternal health service is making progress in its performance as well, although persisting problems, such as the high number of unattended deliveries (33% of home deliveries occurred without attendance of health workers in 2000) and poor attendance at ante-natal and post-natal care, remain to be addressed.

List of the past and on-going technical cooperation and grant aid to the health sector in Hoa Binh Province is provided in Table 5<sup>8</sup>. The total external funding for health the Province received during 1990 - 1998 amounted to 4.8 million US dollars (ADB, 2007), or US\$ 6.3 per person. This relatively large figure is attributed to the large malaria project implemented between 1994 and 1999. Provision of used medical equipment occurs at rare intervals, with some of the equipment arriving incomplete, non-functional or missing operating instructions. In addition, although small in sum, some international NGOs in the past have provided upgrading of facilities and equipment.

**Table 5: List of recent and major foreign assistance to the health sector in Hoa Binh Province**

| Donor                    | Period     | Type of aid           | Amount (USD) | Outline of Project   |
|--------------------------|------------|-----------------------|--------------|--|
| BELGIUM                  | 1994-1999  | Technical Cooperation | 1,470,000    | Malaria Control Project  |
| UNFPA/JAPAN <sup>9</sup> | 2001       | Grant                 | 183,224      | Supply of medical equipment to CHCs  |
| UNFPA                    | 2002-2005  | Grant                 | 1,611,832    | Improvement of the Quality and Utilization of RH Services Project                                  |
| JAPAN                    | 2002       | Grant                 | 120,400      | Supply of medical equipment to the emergency and examination department to the Provincial Hospital |
| JAPAN                    | 2002-2004  | Technical Cooperation | 2 persons    | Specialists (JOCVs) in Public Health and Rural Development   |
| ADB                      | 2004 -2009 | Grant and Loan        |              | Rural Health Project (strengthening mainly District Health Centers in 8 provinces)                 |
| BELGIUM                  | 2004 -2009 | Technical Cooperation | 3,150,000    | Upgrading of Community Health Services in Hoa Binh Province  |

<sup>7</sup> "Partnerships for Development: International NGO Contributions to Vietnam," NGO Resource Center, Hanoi, December 1999

<sup>8</sup> The list is not comprehensive, capturing only recent and major assistance.

<sup>9</sup> Funds for equipment supply to the CHCs were secured from mobilized resources from JICA under the UNFPA's "Improvement of the Quality and Utilization of Reproductive Health Services Project."

*Source: Hoa Binh Provincial Health Service, December 2002; UNFPA, 2002; Preparatory Study Team, September 2003; Memorandum of the formulation mission, BTC, December 2003*

External funding is on the increase in Hoa Binh Province due to its low socio-economic and health profiles, with UNFPA, ADB and Belgian Technical Cooperation implementing and/or starting health-related interventions in the Province. In addition to the dissemination of the National Reproductive Health Guideline, the UNFPA Reproductive Health Project is concerned with changes in the health-seeking behavior of residents on matters related to reproductive health, and, thus, with making changes at CHCs and villages levels. ADB's Rural Health Project, on the other hand, intends to cover comprehensively the District level. Major components of the Project include rehabilitating and rebuilding the DHCs, providing equipment and training of DHC staff. BTC Project will be focused on accessibility and quality of appropriate health services especially below District levels.

While much assistance has been extended to the DHC level and below, or to Primary Health Care activities, the provincial institutions, in particular the Provincial Hospital, have not received much attention, leaving the provincial referral hospital with a degraded structure and compromised functions. The reason for this could be that the other donor agencies, with their shared orientation of poverty reduction, attempt to concentrate their assistance on those health institutions that are most likely to benefit the poor. As well, investing in a hospital of this technical level requires capital that is rather difficult to operationalize cross-provincially.



### 3. Problems to be Addressed and the Current Situation

#### 3.1 Institutional Framework for the Sector

##### *Health Administration*

Hoa Binh Provincial Health Service (HBPHS) is a provincial apparatus under the direct administration of the People's Committee of Hoa Binh that provides state oversight of the healthcare sector in the Province in accordance with the healthcare policy set by the Ministry of Health. HBPHS is responsible for the guidance and supervision of all health-related institutions of provincial level and below in the province, including those providing preventative and curative care. Severe limits on budget provision over the past years, however, has caused its functions to atrophy, creating a gap between the demands of the population and the provision of services. As for human resources, there is no master plan for health personnel development, nor has a sufficient review of the personnel structure or development of a clear policy on financial support for trainees or on attracting qualified human resources to the Province been conducted.

##### *Healthcare Services at the Provincial Level*

Provincial Hospital is a comprehensive general unit equipped to provide secondary curative care, with more specialty departments and higher-level diagnosis and treatment services. It also provides technical support and guidance to lower-level medical facilities, just as the central-level hospitals do to provincial hospitals through the Direction Office of Healthcare Activity at provincial and lower levels (DOHA activities).

However, the Provincial Hospital currently performs the minimum required of it in terms of provincial curative referral, as demands and expectation for services within the Province increasingly outstrip the amount of technical upgrading that the Hospital can afford. Due to its financial and technical constraints, the Provincial Hospital is unable to take up a role as an effective training and advisory unit for the lower branch of curative service providers in the Province.

##### *Healthcare Services at the District Level and Below*

In most villages there is at least one village health worker (VHW), who has as a rule received three months of training at the Provincial Medical Secondary School in the Province. These VHWs conduct, together with mass organizations, activities such as immunization, health information gathering and reporting, education and promotion of health-related topics and family planning. It is often expressed that the quality of services provided by village health workers has room for improvement. Securing a sufficient number of workers for each village, especially in remote localities, is also a difficult task. Some village health workers have yet to go through the standardized training provided in the Medical Secondary School, and/or have a very weak educational background.

The Commune Health Centers (CHCs), inter-commune polyclinics (ICPs) and District Hospitals, or District Health Centers (DHCs) are medical facilities for primary care. Each District except Hoa Binh Town has a hospital with a clinic, an Epidemic Prevention Team and a Social Disease Prevention Team, which together form the District Health Center. Two to three ICPs are available in each District, each covering three to four communes. CHCs are available in all 214 communes. They are the core healthcare providers for all residents in the commune, and equipped to handle cases that exceed the village health worker's ability.

Patients with more serious symptoms, ones which are beyond the technical, material and financial capacity of the CHCs, are referred to or will automatically seek a higher level of care, e.g. ICPs or District Hospitals. The DHCs, being the first referral institution (as a District Hospital), are mandated to provide a higher level of care than a CHC, such as surgery for appendicitis, caesarian section, abortion, and simple emergency treatments for children and adults. Their mission also includes monitoring disease trends in their assigned areas, as well as conducting series of preventative interventions.

However, the Survey recently conducted in the Province revealed that there may not be a significant difference between the services provided by DHCs and CHCs, due to the weak diagnostic ability of DHCs. Few DHCs are equipped with functional medical equipment (such as ultrasound or bio-chemical testing machines), and most are short in medical doctors and laboratory technicians with a basic knowledge of specialties. Specialized care, even in relatively simple specialties such as dentistry, conjunctivitis or Ear-Nose-Throat, is scarce at this level. This discourages people from seeking health care services at the district level and below. Nevertheless, a series of group discussions among users and potential users of hospital services revealed that many wish to be treated at a nearby facility (i.e., not more than 15 to 20 km from their houses). Considering the fact that many of patients in the Provincial Hospital are often from nearby districts or the town itself (10% were from the remote areas), it is essential that the quality and technical level of the services provided at the District Hospitals must be strengthened in order to meet the needs of the residents.

### 3.2 Analysis of the Problems

Results of the Objectives Analysis of the PCM Workshop conducted in Hoa Binh Town is shown in Diagram 1.

The participants of the PCM Workshop determined that seven direct means are required to achieve the core objective, defined as the level of improvement where the “Health Status of residents in Hoa Binh Province is improved.” Participants clearly saw that each condition described in the direct means was independent of the others, although ends-means relationships may exist among the following seven conditions. Further description of the current status of the issues indicated in each statement is provided in the following.

*The Core Objective: Health Status of residents in Hoa Binh Province is improved.*

As mentioned before, Hoa Binh Province has a polarized disease structure, with persisting disease burden due to communicable and infectious diseases and relatively high morbidity and mortality associated with child bearing, as well as a rising burden of non-communicable diseases and morbidity caused by traffic and industrial accidents. The trend is for mortality due to communicable disease to decrease and traffic accidents and poisoning cases to increase.

*Direct Means 1: Health-seeking behavior of residents is improved.*

This condition was actually expressed as “Bad customs held by residents are improved,” meaning that some residents, for example, pregnant women do not bring themselves to the CHCs due to traditional beliefs and customs. Of about 12,000 annual deliveries, 33 % and 23% occurred at home in 2000 and 2001, respectively, while 25% and 23% of deliveries were not attended by health workers. The frequency of ante-natal attendance was about 1.8 times per person both in 2000 and

2001, far from the target, i.e. 3 times per person (ADB/JICA, 2002).

This problem, according the analysis, is attributed to: 1) the lack of availability and affordability of transport and road infrastructure; 2) low level of knowledge and education among residents; 3) compromised quality and quantity of village health workers that form the core part of the grass-root healthcare network; and, although not pointed out in the Workshop, 4) low level of trust in services provided at the CHC level. The UNFPA study discovered that few clients use CHCs for RH services. National highways and inter-district roads are being improved, and almost all the DHCs and CHCs are located near those roads. However, in some areas, especially mountainous and lowland regions, access from the villages to the nearest CHCs is severely limited and/or deteriorates with heavy rainfalls. For example, horse and walking are the only transport means available to some villagers in Da Bac District, taking in some cases as long as a day to make a single trip to the CHC. Thus, it is necessary to strengthen the grass-root level health care network in order to effectively support the preventative and health-seeking behavior of residents.

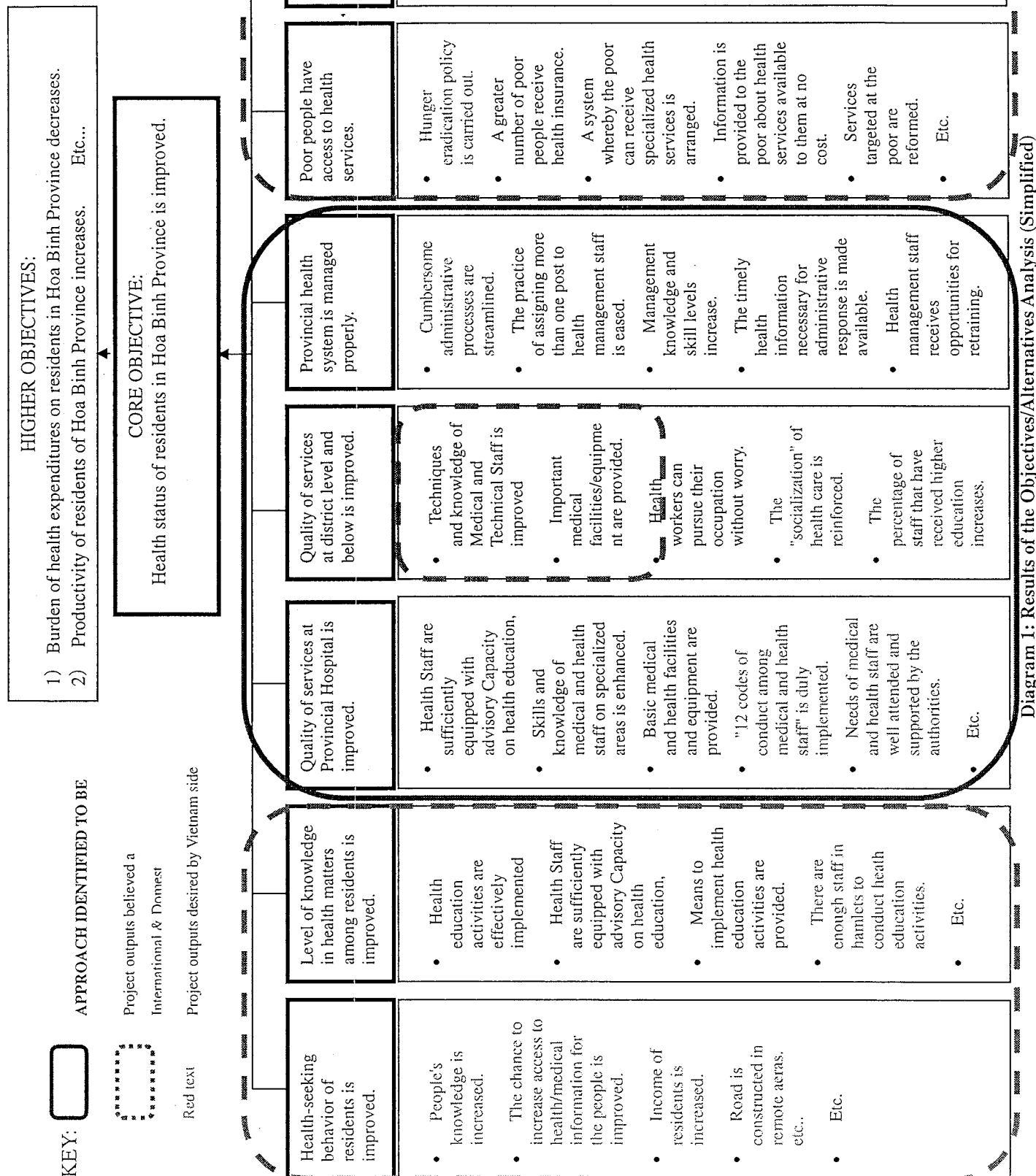


Diagram 1: Results of the Objectives/Alternatives Analysis (Simplified)

*Direct Means 2: Level of knowledge in health matters among residents is improved.*

This issue is also touched on under Direct Means 1. It is commonly believed that the residents of these rural provinces lack knowledge on health-related issues. While little solid research data is available in Hoa Binh Province on the knowledge level of residents, the recent study conducted under the UNFPA Project suggests that basic knowledge on Reproductive Health (RH) among residents, including knowledge of the danger signs for pregnant women, is very limited. In addition, it revealed that residents receive most information on RH-related matters mainly from mass media channels and health and population workers on the ground. This is illustrated by the ineffectiveness of health education interventions through the grass-root healthcare network, resulting often from the limited advisory and technical capacity of the health staff with regards to health education, the limited number of health education collaborators available in villages, and the lack of means to conduct health education and promotion activities.

*Direct Means 3: Poor people have access to health services.*

Several national studies have shown that poor people are less likely to bring themselves to health facilities. Of the different health facilities, drug stores and dispensaries are the most frequently utilized irrespective of users' income. CHCs are the most frequently utilized by those in the lowest and middle income quintiles, whereas more than half of the users of hospitals, including DHCs, the Provincial Hospitals and the central hospitals, are members of the two highest income quintiles. Only 10% and 14% of hospital users are from the lowest and the second lowest quintile, respectively. Underutilization of the higher-level facilities by the less advantaged is due to several factors.

First of all, the poor cannot afford the opportunity costs associated with hospital visits and/or hospitalization. A single visit to a public hospital of national quality, for instance, can cost almost half of the annual non-food expenditures of an individual in the poorest area. User fees are another reason why indigent people have less access to hospital services. The health insurance scheme for poor people, under which the government pays the premium, currently covers only 30% of those entitled in the Province due to budgetary limitations. There is an exemption system for the poor, but it does not seem to work adequately, nor is information given to those in need of it. Furthermore, no provision has yet been made for the poor to obtain specialized healthcare services<sup>10</sup>.

Several pilot-based interventions on insurance schemes are incorporated in the ADB-financed Rural Health Project, including a pilot in compulsory health insurance, a review of the premium level of the free health card scheme for the poor, dissemination of information on these schemes for potential beneficiaries, and consideration of the idea of reimbursement to CHCs<sup>11</sup>.

*Direct Means 4: Residents in remote areas have timely access to services.*

Access to healthcare services is one of the biggest challenges in northern mountainous provinces, which are sparsely populated and whose geographical features hinder road access from villages to the first health facility. Out of 214 communes, 30% are categorized as remote and 70% as mountainous. This, coupled with weak economic profile and residents' belief in cultural healing

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<sup>10</sup> Generally, the hospitals charge extra fees for clinical examinations and treatment protocols that require special diagnostic/treatment materials and/or equipment. This is mainly for the purpose of recovering operating costs for the equipment. These kind of specialized services are often not subjected to exemption through the free card scheme.

<sup>11</sup> The health insurance structure currently does not reimburse health care services at the commune level, due to the lack of sufficient administrative capacity to deal with the large number of CHCs.

practices, seems to correlate with the general underutilization of CHC facilities. In the UNFPA Study done in 30 sample CHCs in Hoa Binh Province, the average number of clients that came for health examination and treatment per CHC was about 5 clients a day, or 1.2 clients per health staff per day (UNFPA, 2003). At the same time, it is often mentioned that people may have limited confidence in services provided at the CHC level. In order to address this issue, the analysis suggests upgrading CHC facilities and maintaining sufficient staffing and equipment at this level. Upgrading specialized skills among medical staff at the DHC and CHC levels is also recommended, along with increasing the number and skills of VHWs on the ground.

The UNFPA-supported Project aims to curve this unfavorable trend, through multi-level interventions aimed at building capacity to provide quality RH services and information. At the village level, the Project disseminates RH-related information through trained VHWs to promote utilization of CHCs among residents, while at the CHC level, it invests in bringing up the quality of RH service provision. The project also conduct training on National standards on RH services and Behaviour Change in RH services provision for health workers and develop advocacy and IEC/BCC materials to be used.

*Direct Means 5: Quality of services at Provincial Hospital is improved.*

Quality of services, in this analysis, refers to the adequacy of facilities, proper medical equipment and competency of medical technical personnel. Investment in facilities and equipment has been compromised for many years. Most of the existing buildings, including the water supply system and the waste treatment facilities, were built in 1958-1960 and are severely deteriorated. Most of the equipment dates to the 1970s ~ 80s, as the budget allocation for medical equipment barely supports the maintenance of existing equipment, leaving little for renewal. The skills of medical technical personnel also require improvement. The Hospital is increasingly required to respond to the ever-more-frequent instances of traffic accidents, poisoning and cardio-vascular emergencies. The majority (53%) of hospital staff have completed only secondary training; only 27% have university degrees. Nevertheless, very few opportunities for training, long-term or short-term, are given to the staff, with the exception of the programs provided by the Bach Mai Hospital through DOHA activities.

*Direct Means 6: Quality of services at district and below levels is improved.*

As mentioned in the previous chapter, the quality of services at district, commune and village levels are said to be low. In the Workshop, participants noted that quality of service at the district level and below means the existence of basic facilities and medical equipment, improvement in the skills of medical technical personnel and acceptability of services to the clients. Currently, both the facilities and medical equipment of District Hospitals are substandard. Some hospitals cannot carry out emergency surgeries due to the absence of blood analyzer and anesthetic machines. Medical technical training and guidance provided by the Provincial Hospital is severely limited due to the lack of trainers, facilities and funding for training activities. Only four persons from the District level or below received training at the Provincial Hospital during the past three years. During the same period, two short-term courses were conducted where 100 staff were trained, but that was organized by the Bach Mai Hospital. Training provided by the central-level hospitals absorbs some of the need, but these programs are rather limited and expensive. As a result, the health staff working at the District level and below receives only sporadic and intermittent opportunities for training.

Much of the need identified by the analysis, however, will be catered for under the ADB Rural Health Project, which will provide major investment into the upgrading of eight District Hospitals and supplying standard medical equipment. Staff capacity building comes with such investment: during its five-year implementation period, 500 doctors and 700 nurses at District Health Centers are also to receive opportunities to be taught in emergency, surgical and diagnostic skills and in quality of total nursing care, respectively. At the commune and village levels, 3-day and 2-day courses, respectively, will be provided on PHC topics to CHC workers (3 from each CHC: total 6,000) and VHWs (1 selected VHW or TBA per village: total 14,500). District health managers will be trained in project management, district health management, management in health insurance scheme, and health statistics. Those courses address the most crucial training needs at these levels quite extensively. However, some of the courses are rather short-term, and the post-training follow-ups are left out to the Province. In addition, the interventions do not focus on building a local mechanism for replicating such training programs.

*Direct Means 7: Provincial health system is managed properly.*

HBPHS currently has 25 staff, significantly fewer than needed. With a severely limited budget and a staff that has too few members assigned too many duties, the office is unable to fulfill its function as desired. Management and leadership skills analyzed as weak include: 1) Prioritizing different types of interventions; 2) Coordinating and managing different projects; 3) Leadership, supervision and inspection, monitoring and evaluation; and, 4) Linking activities with actual results. The small budget does not allow HBPHS to adequately formulate an institutional development plan to respond to demand for their services. Operational research in specialized topics is rarely conducted. Furthermore, supportive supervision and monitoring do not occur regularly, missing out on opportunities for the HBPHS to redress deficiencies and to support health institutions in improving their functions. Therefore, equipping the HBPHS staff with improved planning and management skills is considered a priority theme in interventions involving health and medical institutions at the provincial level and below, in order to safeguard and sustain the envisaged improvements.

Both the ADB and UNFPA Projects include some training components for HBPHS staff in project management and monitoring (Annex 5: Annex 5: List of training activities by other Projects).

#### 4. Project Strategy

The ultimate goal of the Project is to improve the health status of residents in Hoa Binh Province. To this end, this Project will place emphasis on the enhancement of the managerial capacity of HBPHS and the improvement of the quality of service for Provincial Hospital and its capacity to supply leadership and training capacity to the District level and below, an area yet to be covered by other Projects or addressed through local efforts (See Diagram 2 below). However, the Project would render support in the area of health education and promotion among residents in Hoa Binh province by the first preparatory study mission in September 2003, finally removed it from PDM on the result of the second preparatory study mission in March 2004. This will be carried out with due consideration with approaches and methods applied within the on-going initiatives by the UNFPA and ADB-supported projects, looking into its progress with more synergetic collaboration.

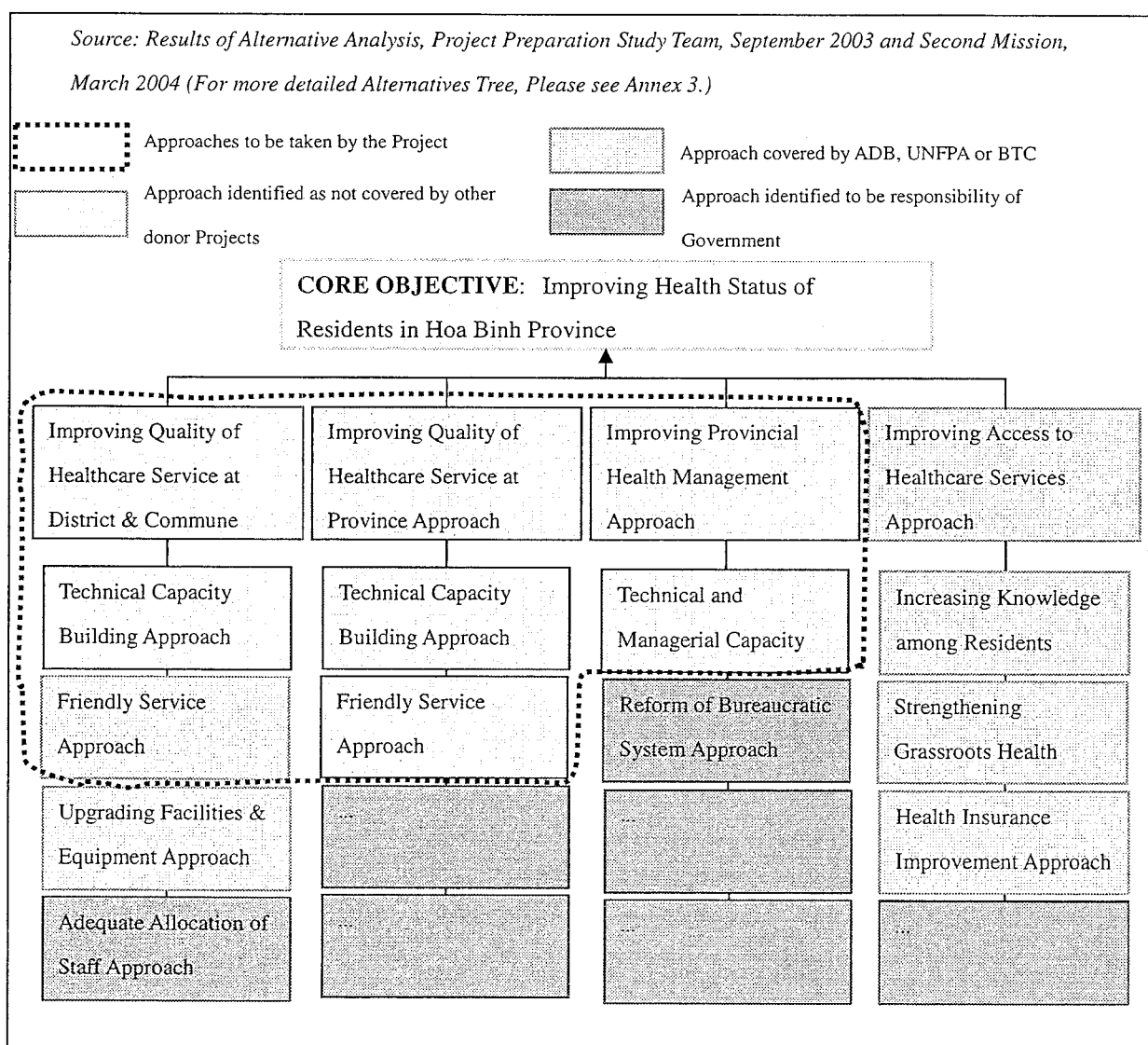


Diagram 2: Alternatives Analysis (simplified)



More specifically, the Project is an attempt to reinvigorate a referral system in disarray by enhancing the functions of institutions (i.e. the Provincial Health Service, the Provincial Hospitals, DHCs level and below) through enabling the provincial institutions to readily provide sufficient and constant technical and managerial support to healthcare providers at the District level and below. Its contents are characterized by 1) Stressing the leadership and supervisory roles of the HBPHS as components that support other components of the Project; 2) Running a pilot program in one province to see the effectiveness of intervening at the provincial level to strengthen the lower branch of healthcare institutions, and then looking into potential application of the method in other provinces; 3) Building upon past achievements in the functional enhancement of Bach Mai Hospital, supported by JICA, through actively utilizing local resources and expertise in this Project.

## 5. Project Design

### 5.1 Project Site

This proposed project will be conducted in Hoa Binh Province<sup>12</sup>, as per the recommendation of the Project Formulation Study. The following conditions were considered when selecting the two pilot provinces:

- 1) Provinces in the northern part of Viet Nam are favorably considered, in order to facilitate and promote close coordination and collaboration with the Ministry and other donor agencies;
- 2) Provinces considered to be priorities by the Bach Mai Hospital when conducting DOHA activities (Hoa Binh, Vinh Phuc, Lai Chau, and Ha Tinh) are favorably considered; and,
- 3) Provinces expected to receive inputs into primary health care level through ADB-funded Rural Health Project are favorably considered for the potential collaboration and synergic effects between the two initiatives.

Selection of the pilot provinces was done through close consultation with the JICA Project Formulation Study Team, as well as discussions with various stakeholders, including the Ministry of Planning and Investment, the International Cooperation Department, Planning Department, and Therapy Department of our Ministry, DOHA section of the Bach Mai Hospital, and the Hoa Binh Provincial Health Service.

### 5.2 Target Beneficiaries

The ultimate project beneficiaries are, in a general sense, the 780,000 residents in Hoa Binh Province, or those who received improved healthcare services in Hoa Binh Province. Project interventions consist of two components, each with a different targeting strategy, i.e. different intermediary beneficiaries. The flow of benefits among different beneficiaries is shown in Diagram 3.

Within the first component, the enhancement of managerial staff in health administration, the Project first targets the management staff in Hoa Binh Provincial Health Service, the enhancement of whom will benefit providers of adequate quality of healthcare services. The second component attempt to upgrade the provision of health and medical services by targeting managerial and technical staff at the provincial level and below. A portion of these service providers will receive more intensive, first-hand and/or TOT trainings, passing on the benefits of their training to others.

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<sup>12</sup> Vinh Phuc Province, which was also to be a project province, was excluded from the scope of this Project due to the fact that it will receive assistance from KOICA that is similar to this Project.

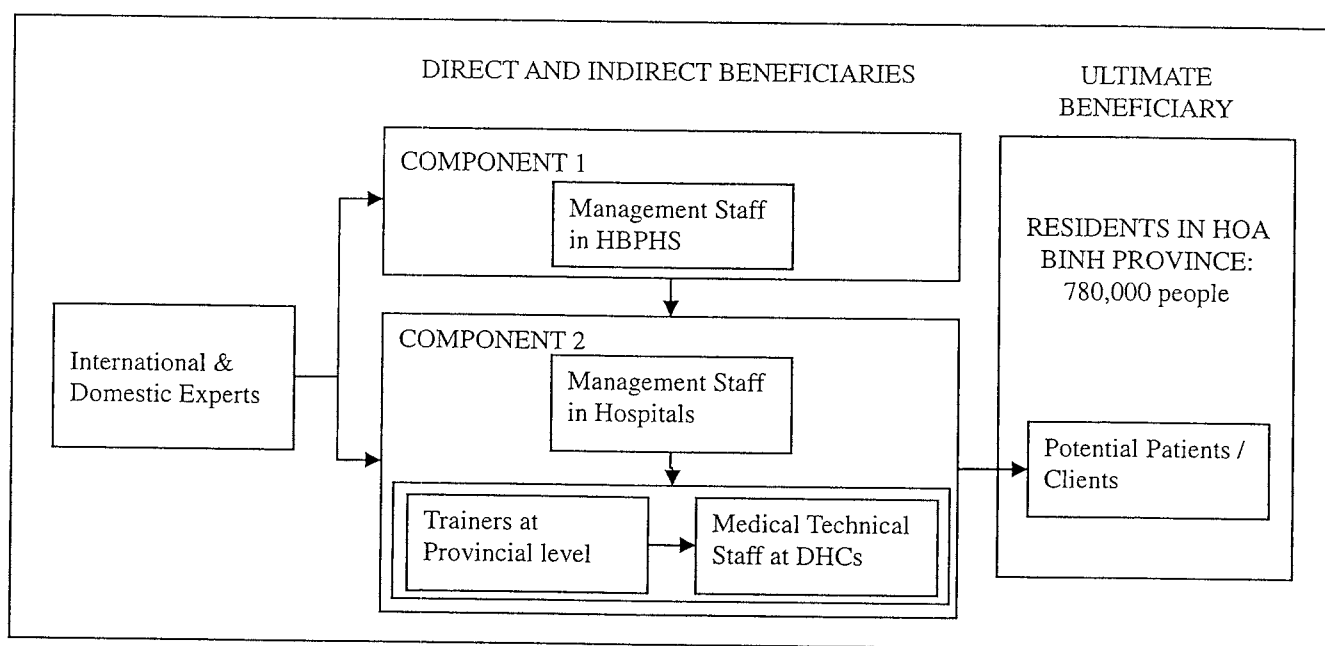


Diagram 3: Flow of Benefits among Beneficiaries

### 5.3 Long Term Direction and Overall Goal

#### *LONG-TERM DIRECTION:*

The project has defined its overall goal, which is expected to be achieved in the long-term as a result of Project interventions, as:

#### *OVERALL GOAL:*

Medical system which has its effectiveness verified in Hoa Binh Province will be introduced and spread throughout other provinces in northern Vietnam

As a result, outputs gained thorough DOHA activities will be utilized at DOHA in the Bach Mai Hospital and lessons learned from Project activities will be applied to other northern provinces.

### 5.4 Project Purpose

Project purpose, to be achieved by the end of the Project, is:

#### *PROJECT PURPOSE:*

Medical system in Hoa Binh Province is strengthened through establishment of DOHA and patient referral system

However more specifically, the Project will attempt to achieve, within the cooperation period, the following results:

- The Project, as a result of these interventions, will increase the number of Provincial and District Hospitals holding the special commendation as “Excellent Hospital” in treatment, environmental and service standards from the current 4 hospitals to 8 hospitals over a period of several years following completion of the Project.
- Enhanced capacity in the supervisory and technical transfer skills of the HBPHS and the Provincial Hospital, so that District Hospitals, Inter-Communal Polyclinics (ICPs) and Commune Health Centers (CHCs) can continuously and consistently receive timely and appropriate technical and managerial support, instead of relying on central-level medical institutions. As a result, the reliability of the Provincial Hospital and District Hospitals among residents in the Hoa Binh Province increases.

## 5.5 Outputs and Activities

Four (4) Outputs were selected as the Project’s strategic focus in order to achieve the Project Purpose.

Means-ends relationships can be seen among those Outputs. As explained in Chapter 4 (Project Strategy), Output 1 is intended to support the process of achieving all the other Outputs, while Output 2 and 4 are a means for the improvement of the quality for the healthcare services of the Provincial Hospital and below.

Actions required to achieve Output 1 naturally precede those with the objective of achieving all other Outputs. Likewise, some training activities leading to Output 2 will have to be scheduled after Output 4 is achieved to some extent, and these lead Output 3 to achievement.

The details of how each Output is to be achieved are described below.

### **OUTPUT 1:**

Management capacity of Hoa Binh Provincial Health Service (HBPHS) is enhanced

Among the challenges faced by the Provincial Health Service is making the health system more efficient and demand-oriented. At the same time, problem analysis indicated that the HBPHS staff, who are often overloaded with multiple responsibilities and time-consuming bureaucratic procedures, are still weak in terms of leadership and managerial skills such as prioritization, coordination of different projects, supervision, monitoring and evaluation. This Project will attempt to strengthen the management capacity of HBPHS. Much focus will be placed on the area of planning training activities to upgrade and maintain the medical and technical skills of service providers, based on analysis of current and future demands of the sector. Importance will also be placed on the management of those services, i.e. on strengthening the supervisory and support system for service providers.

### **ACTIVITIES for the OUTPUT 1:**

- 1-1. Conduct training for HBPHS managerial staff on 1) training management, 2) service management (healthcare service providers monitoring), 3) referral system
- 1-2. Identify needs for healthcare and technical guidance in the community based on the review of

provincial and hospital statistical data and surveys

- 1-3. Conduct regular monitoring for healthcare service providers
- 1-4. Regular donor meeting is held by HBPHS

It should be kept in mind that this component focuses on areas that could best support the realization of other Outputs of the Project. Actions under this Output are not limited to the conducting of training sessions, but also include the application and implementation of the skills and knowledge acquired through such training, with timely and on-site support provided by the long and short-term experts. As such, some of the training activities may take the form of learning by doing.

Training activities under this Output will mainly be short-term, customized from previously available courses held either in Viet Nam or abroad, or long-term and short-term on-the-job expert technical support. To the extent possible, resource persons for training activities will be secured locally. For instance, trainers for medical technical management can be made available by the Hanoi School of Public Health<sup>3</sup>. The Project seeks to invite those trainers to HBPHS to form a team charged with formulating their own action plans in this regard based on the training received.

#### *OUTPUT 2:*

Technical guidance system from Hoa Binh General Hospital to DHCs and lower levels can function effectively by collaboration with the Bach Mai Hospital

This Output is essentially the dissemination of skills and knowledge obtained through Outputs 1 and 4 from the Provincial Hospital to the District Hospitals. The strategy calls for the Provincial hospital to assume a leadership and technical support role for lower level facilities. Implementing these activities is also a process of gradually building and enhancing the capacity of the Provincial Hospital to provide technical training and guidance to lower levels, so that a foundation capable of sustaining such activities is soundly established.

As these activities are most likely to be scheduled in a later part of the project period, it is realistic to set the indicators at the operational level.

#### *ACTIVITIES for OUTPUT 2:*

- 2-1. Review and identify needs and technical level of provincial health staff by collaboration with DOHA in the Bach Mai Hospital
- 2-2. Provincial health needs reflect on planning / management and curriculum of training activities
- 2-3. Formulate annual training plan for Provincial Hospital in collaboration with Mach Mai Hospital
- 2-4. Conduct regular meetings among MoH, BMH, HBPHS, Provincial Hospital, DHCs and donors on technical guidance system
- 2-5. Conduct training for DOHA staff in Provincial Hospital on planning / management of training

activities

- 2-6. Conduct teaching sessions for training (Trainers of Training: ToT) of Provincial Health Staff by the Bach Mai Hospital
- 2-7. Review and identify needs and technical competency of DHC staff
- 2-8. Formulate annual training plan for DHCs
- 2-9. Conduct training and evaluation for DHCs

The execution of some of these activities will be possible only after the medical and technical capacity of the Provincial Hospital is upgraded, and its staff is acquainted with leadership and training skills. It should be noted that, along with civil works to upgrade the District Hospital facilities and provision of basic equipment, certain clinical and other training activities for the medical staff in District Hospitals are planned under the ADB-supported Rural Health Project. The Project will require close coordination with the activities of the ADB-supported project<sup>4</sup>, to avoid duplication and to coordinate the timing of interventions. (Please refer to Annex 5).

### *OUTPUT 3:*

Patient's referral system is established

Output 3 aims to improve the system on referral of patients by enhancing the function of each level of the institutions through all Outputs. To achieve this, it is vital that each level of the institutions will be assured of the appropriate quality of services such as competency of medical technical personnel, adequacy of facilities, proper medical equipment and staff and facilities with friendly atmosphere. However, it also will be catered for under the ADB Project and UNFPA, which will provide major investment into facilities, equipment and training especially at District level and below.

Increase in types of treatment procedures provided by the Provincial and District Hospitals, as well as improvement in technical level, of Provincial and District medical staff, so that patients will be able to receive adequate treatment within the province. Monitoring for the number of patients referred to the upper-level hospitals in Ha Noi, as well as the number of patients counter-referred to lower-level hospitals can indicate to what extent such effects are obtained.

### *ACTIVITIES for the OUTPUT 3:*

- 3-1. Committees on referral system at provincial and district levels are established and hold regular meeting for further improvement of referral system
- 3-2. Conduct training for HBPHS staff and health service providers in Hoa Binh Province on referral system
- 3-3. Improve reporting and recording system on patient referral in Hoa Binh Province
- 3-4. Improve communication measures between Provincial Hospital and DHCs (FAX machine etc...)
- 3-5. Conduct regular meetings among MoH, BMH, HBPHS, Provincial Hospital, DHCs and donors on the referral system

Some activities will be possible after the medical and technical capacity and facilities are improved. In order to keep comprehensive approach among the various actors, coordination and

communication are essential.

**OUTPUT 4:**

Hoa Binh General Hospital can function effectively in the frame of Provincial Referral system

It has been pointed out that, nationwide, the technical quality of healthcare services at the district and commune levels is low. In the case of Hoa Binh Province, technical quality is compromised even at the Provincial Hospital level. Resources for re-training medical technical personnel are extremely limited, as the small budget is usually taken up with facilities and equipment maintenance. As a result, very little training can take place at the Provincial level. If a need for training arises, the Province is compelled to rely on central-level hospitals such as Viet Duc and Bach Mai Hospitals. One of the reasons why the HBPHS views intervention as crucial is the low quality of skills and motivation of health workers. In addition the high proportion of medical technical staff having only secondary degrees severely limits the opportunities in re-training and refresher trainings. They have the second lowest remuneration scale amongst civil servants and along with poorly equipped facilities these factors all appear to contribute to the current situation. Output 4 aims at redressing this condition through planning and implementing re-training activities for medical technical workers at the Provincial Hospital that will upgrade and improve their skills and knowledge in priority fields, and thereby boosting the staff's motivation.

Furthermore, in its later stages the Project will work towards establishing sufficient capacity at the Provincial level to continue providing re-training activities for health workers at the District level and below, so that the Province is capable of maintaining and upgrading the skills and knowledge of its employees on its own. This will in turn support the implementation of the actions stipulated under Output 2.

As such, this Output, i.e. the improvement of medical technical skills and knowledge among Provincial Hospital staff, will form the core of the Project, and thus receive the largest inputs under this Project. Priority is placed on emergency and other concerned areas including nursing and total care along with all critical care specialties in high demand both at the Provincial and District levels.

For each training activity, measurement of the achievement levels of the Output can be made using both operational and effectiveness indicators. Operational indicators include, for example, the proportion of trained staff actually utilizing the skills and knowledge acquired in training, the number of library users, or the number of medical technical staff who received technical support or training from those initially trained. The effects of interventions can be verified through such measures as decreases in the percentage of laboratory examination items that require re-testing or any decrease in the incidence rate of nosocomial infections. Evaluating the satisfaction levels of patient treatment by quality control measures will provide a tool for continuous quality improvement in medical, nursing and auxiliary care at the Provincial Hospital.

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<sup>15</sup> Supports to conduct trainings/ guidance on activities concerning nosocomial infection control will be sought from Bach Mai Hospital. Advisory from Japanese experts can be considered as needed. Nosocomial infection control Team to be organised within the Hospital, to whom the training and guidance activities are targeted.

*ACTIVITIES for the OUTPUT 4:*

- 4-1. Conduct trainings for Provincial Hospital medical/ technical staff on priority areas: Emergency treatment and Total care.
- 4-2. Conduct conference on emergency care services
- 4-3. Equip the library with relevant textbooks and journals
- 4-4. Provide reception desk, which is specifically for patients referred by other institutions
- 4-5. Conduct training for Provincial Hospital managerial staff on 1) planning, 2) financial management, 3) management of medical equipment, 4) nursing management, 5) nosocomial infection control, 6) pharmaceutical management and, 7) medical record management
- 4-6. Establish nosocomial infection control<sup>15</sup> division and make its guideline
- 4-7. Establish an audit system for regular evaluation of medical equipment and maintenance
- 4-8. Hold regular meeting among hospital management staff with the goal of continuous service improvement

Activities under this Output consist of eight (8) items in clinical and technical areas as proposed above, each with three progressive stages: 1) intensive training to selected staff (ToT), 2) dissemination of knowledge and skills to other relevant staff and, 3) application and evaluation of acquired skills on the ground. Training activities under Output 2 will be short-term and on-site practical courses in the Provincial Hospital, and/or on-the-job technical support provided mostly by domestic experts.

In receiving technical assistance, the Provincial Hospital will organize a nosocomial infection control team and the medical equipment management department, to whom the training and guidance activities are targeted and by whom actions will be planned and duly implemented.

## **5.6 Planned Inputs**

Planned Inputs required for Project Implementation are given in Table 6. They are broken down into Inputs to be made by the Vietnamese Government and Inputs to be made by the Japanese Government. It should be noted that these Inputs are indicative, and can be revised with the agreement of the Project Management Unit (PMU) and the approval of the Joint Coordination Committee (JCC). A more realistic list can be formulated based on the results of several assessments (of disease trends, training, health education, etc.), which are scheduled to take place either prior to or at the inception of the Project.

It should also be kept in mind that input-level coordination, in terms of type, quality, quantity and timing, is essential to the on-going and expecting projects supported by UNFPA, ADB and BTC, especially the Inputs relating to health education and promotion activities, to DHCs and to the HBPHS.



**Table 6: Inputs required for Project Implementation**

| <b>Vietnamese Government</b>   | <b>Japanese Government</b>   |
|--|--|
| <b>HUMAN RESOURCES</b><br><input type="checkbox"/> Joint Coordination Committee<br>PROJECT DIRECTOR, Deputy Chairperson,<br>People's Committee, Hoa Binh Province<br>Director of International Cooperation Department,<br>MoH<br>Director of Department of Therapy, MoH<br>Director of Department of Science and Training,<br>MoH<br>PROJECT MANAGER, Director, HBPHS<br>Director of Bach Mai Hospital<br>Director, Department of Finance, Hoa Binh<br>Province<br>Deputy Director, Department of planning and<br>Investment, Hoa Binh Province<br><input type="checkbox"/> Counterpart Personnel<br>PROJECT MANAGER, Director, HBPHS<br>Deputy Director, HBPHS<br>Director of Hoa Binh General Hospital<br>Head of Planning Division, HBPHS<br>Head of Human Resource and Training Division,<br>HBPHS<br>Director of Health Education and Communication<br>Center, HBPHS<br>Head of Medical Technical Department, HBPHS<br>Expert of Health, Labor and Social Division,<br>HBPPC<br>Others as assigned for Project implementation<br><input type="checkbox"/> Others<br>Coordinator<br>Translator | <b>HUMAN RESOURCES</b><br><input type="checkbox"/> Joint Coordination Committee<br>Country Representative, JICA Viet Nam<br>CHIEF ADVISER, Adviser to the MoH<br><input type="checkbox"/> Long-term Experts and Project Personnel<br>Chief Adviser/ Training Management<br>(60MM: 2004~2009)<br>Project Coordinator (60MM: 2004~2009)<br><input type="checkbox"/> Short-term Experts<br>Training Planning on Emergency Medicine<br>Community Health Planning<br>Healthcare Network<br>Nursing Management<br>Training Management<br>PCM (Monitoring & Evaluation) |
| <b>MATERIAL RESOURCES</b><br><input type="checkbox"/> Office space for Experts<br><input type="checkbox"/> Training Facilities<br>For in-country training activities   | <b>MATERIAL RESOURCES</b><br><input type="checkbox"/> Training Facilities<br><input type="checkbox"/> Materials needed for setting up Project Office<br><input type="checkbox"/> Medical Equipment<br>Medical Equipment at Provincial Hospital   |
| <b>FINANCIAL RESOURCES</b><br><input type="checkbox"/> Administration and Operational Cost<br>Travel allowance for Vietnamese personnel<br>Electricity for office purposes (as per government<br>standard)   | <b>FINANCIAL RESOURCES</b><br><input type="checkbox"/> Training in Vietnam<br><input type="checkbox"/> Training of Vietnamese Project Personnel in<br>Japan (Counterparts Training: 2 persons/year)<br><input type="checkbox"/> Other costs relating to Project implementation   |

## 5.7 Important Assumptions and Risk Analysis

Important assumptions for the Project's success, as summarized in the PDM (Annex 1) and added by the Team through the ex-ante assessment, are presented in Table 7, together with their implications for the Project. Incorporating certain measures into the project design could mitigate some of the risk factors. Some of these measures have been incorporated in the PDM, while others

require further consideration between the members of the PMU. In so doing, the Project shall actively look into networking with other relevant programs and projects, both to explore opportunities for collaboration and to identify potential resources that could mitigate negative influences on the results of the Project.

Table 7: Risk Analysis

| Risks/Assumptions and Implications   | (Possible) Risk Mitigation Measures   |
|--|---|
| <p><b>From Project Purpose to Overall Goal</b></p> <p><input type="checkbox"/> Financial allocation to the health sector by the Government does not decrease.</p> <p><u>Implication:</u><br/>⇒ Securing resources to sustain the attained quality-level of services would face difficulty.</p> <p><input type="checkbox"/> Healthcare users covered by the health services for the poor do not decrease from current 20%.</p> <p><u>Implication:</u><br/>⇒ Opportunities for the poor to benefit from the improved health services could diminish.</p>   | <p><input type="checkbox"/> <i>The Vice Chairperson of HBPPC acts as the Project Director, to provide advice and support on this issue.</i></p> <p><input type="checkbox"/> <i>The Project places emphasis on capacity building in the financial management of both HBPHS and the Provincial Hospital, for efficient use of resources.</i></p> <p><input type="checkbox"/> Ensure active advisory role played by the Policy Adviser (a Japanese long-term expert to be assigned to the MoH).</p> <p><input type="checkbox"/> Explore possibilities for follow-up support to enhance self-sustainability.</p> <p><input type="checkbox"/> <i>PMU and JCC of this Project by design maintain close discussion with the ADB Project, both at the central and provincial levels.</i></p> <p><input type="checkbox"/> Ensure active advisory role played by the Policy Adviser (a Japanese long-term expert to be assigned in the MoH).</p>  |
| <p><b>From Outputs to Project Purpose</b></p> <p><input type="checkbox"/> Master plan of development of health sector of Hoa Binh for period 2001-2010 is implemented.</p> <p><u>Implication:</u><br/>⇒ Effectiveness and efficiency of Project implementation would be compromised.</p> <p><input type="checkbox"/> Training activities for District Hospital staff are conducted as planned under the ADB-financed Rural Health Project and BTC.</p> <p><u>Implication:</u><br/>⇒ Additional resources for training may be required from the Project budget.</p> <p><input type="checkbox"/> Selected facilities are upgraded and essential medical equipment is provided to District Hospitals as planned under the ADB-financed Rural Health Project.</p> <p><u>Implication:</u><br/>⇒ Application of the skills and knowledge to be acquired through the planned training activities would be hindered.</p> | <p><input type="checkbox"/> <i>Vice Chairperson of the HBPPC acts as the Project Director, to provide advice and support on this issue.</i></p> <p><input type="checkbox"/> <i>Continuous and on-site technical and moral support is made available from Japanese long-term experts.</i></p> <p><input type="checkbox"/> If this condition significantly affects the effectiveness and the efficiency of the Project, consider downscaling the activities and re-examine target indicators.</p> <p><input type="checkbox"/> <i>The Project Management Unit (PMU) and the Joint Coordination Committee (JCC) of this Project by design maintain close discussions with the ADB and BTC, both at the central and provincial levels.</i></p> <p><input type="checkbox"/> Explore the most cost-efficient ways to cover for such activities under the Project.</p> <p><input type="checkbox"/> <i>PMU and the JCC of this Project by design maintain close discussion with the ADB and BTC, both at the central and provincial levels.</i></p> <p><input type="checkbox"/> Explore the most cost-efficient ways to cover for such activities under the Project, or consider scaling down the objectives under the Output 2.</p> |

| Risks/Assumptions and Implications  | (Possible) Risk Mitigation Measures   |
|---|---|
| <p><input type="checkbox"/> UNFPA-funded Project continues to be implemented.</p> <p><u>Implication:</u><br/>⇒ Additional resources for training may be required from the Project budget.</p>   | <p><input type="checkbox"/> <i>PMU and JCC of this Project by design maintain close discussion with the UNFPA Project, both at the central and provincial levels.</i></p> <p><input type="checkbox"/> Explore the most cost-efficient ways to cover for such activities under the Project, or consider scaling down the objectives.</p>   |
| <p><b>From Activities to Outputs</b></p> <p><input type="checkbox"/> Transportation of emergency cases is not worsened.</p> <p><u>Implication:</u><br/>⇒ Patients may not reach the Provincial Hospital in timely manner.</p> <p><input type="checkbox"/> Staff who obtained training do not transfer to other institutions.</p> <p><u>Implication:</u><br/>⇒ Skills and knowledge to be acquired through the planned training activities would not benefit the relevant institutions.</p> <p><input type="checkbox"/> Improvement plan of road in Hoa Binh Province is implemented.</p> <p><u>Implication:</u><br/>⇒ Patients may not reach the Provincial Hospital in timely manner.<br/>⇒ Improvement of system on referral of patients would be hindered.</p> <p><input type="checkbox"/> Labor conditions of health-sector civil servants do not worsen.</p> <p><u>Implication:</u><br/>⇒ Low motivation among health workers may hinder active application of skills and knowledge acquired under the Project activities.</p> <p><input type="checkbox"/> Quality and quantity of VHWs do not deteriorate.</p> <p><u>Implication:</u><br/>⇒ Community-based health education and promotion activities would be hindered.</p> <p><input type="checkbox"/> Bureaucratic administrative system does not hamper Project activities.</p> <p><u>Implication:</u><br/>⇒ Effectiveness and efficiency of Project implementation would be compromised.</p> | <p><input type="checkbox"/> <i>When such conditions are detected, conduct a quick assessment on their impact on fatality and, if necessary, seek possibilities to redress them, either within or outside of the Project scope.</i></p> <p><input type="checkbox"/> <i>Selection of trainees requires careful examination by and approval of PMU and JCC.</i></p> <p><input type="checkbox"/> Include a component in management training to improve managers' skills in supporting and encouraging newly trained personnel to apply their newly acquired knowledge and skills.</p> <p><input type="checkbox"/> <i>When such conditions are detected, conduct a quick assessment on their impact.</i></p> <p><input type="checkbox"/> <i>Relevant MoH officials (i.e. Director of ICD, Deputy Director of Curative Dept.) are included in JCC to Monitor the progress of the Project.</i></p> <p><input type="checkbox"/> <i>Continuous and on-site technical and moral support is made available from Japanese long-term experts.</i></p> <p><input type="checkbox"/> Ensure sufficient moral support role played by the MoH in this Project</p> <p><input type="checkbox"/> <i>Vice Chairperson of the HBPPC acts as the Project Director, to provide advice and support on this issue.</i></p> <p><input type="checkbox"/> <i>PMU and JCC of this Project by design maintain close discussion with the UNFPA Project, both at the central and provincial levels.</i></p> <p><input type="checkbox"/> Explore ways to supplement the capacity building of the VHWs under the Project, or consider downscaling the objectives under the Component 3.</p> <p><input type="checkbox"/> <i>Vice Chairperson of the HBPPC acts as the Project Director, to provide advice and support on this issue.</i></p> <p><input type="checkbox"/> <i>Relevant MoH officials (i.e. Director of ICD, Deputy Director of Curative Dept.) are included in JCC to monitor the progress of the Project.</i></p> |

| Risks/Assumptions and Implications  | (Possible) Risk Mitigation Measures  |
|---|--|
| <p>□ Adequate number of staff is assigned to each institution.</p> <p><u>Implication:</u></p> <p>⇒ Effectiveness and efficiency of Project implementation would be compromised.</p> <p>⇒ Extent of application of the acquired skills and knowledge by the staff may be less than the expected level.</p> | <p>□ <i>Vice Chairperson of the HBPPC acts as the Project Director, to provide advice and support on this issue.</i></p> <p>□ If this condition significantly affects the effectiveness and the efficiency of the Project, consider downscaling the activities and re-examine target indicators.</p> |

Note: Italic letters indicate the risk mitigation measures that are incorporated into the project design.

## 5.8 Preconditions and Prior Obligations

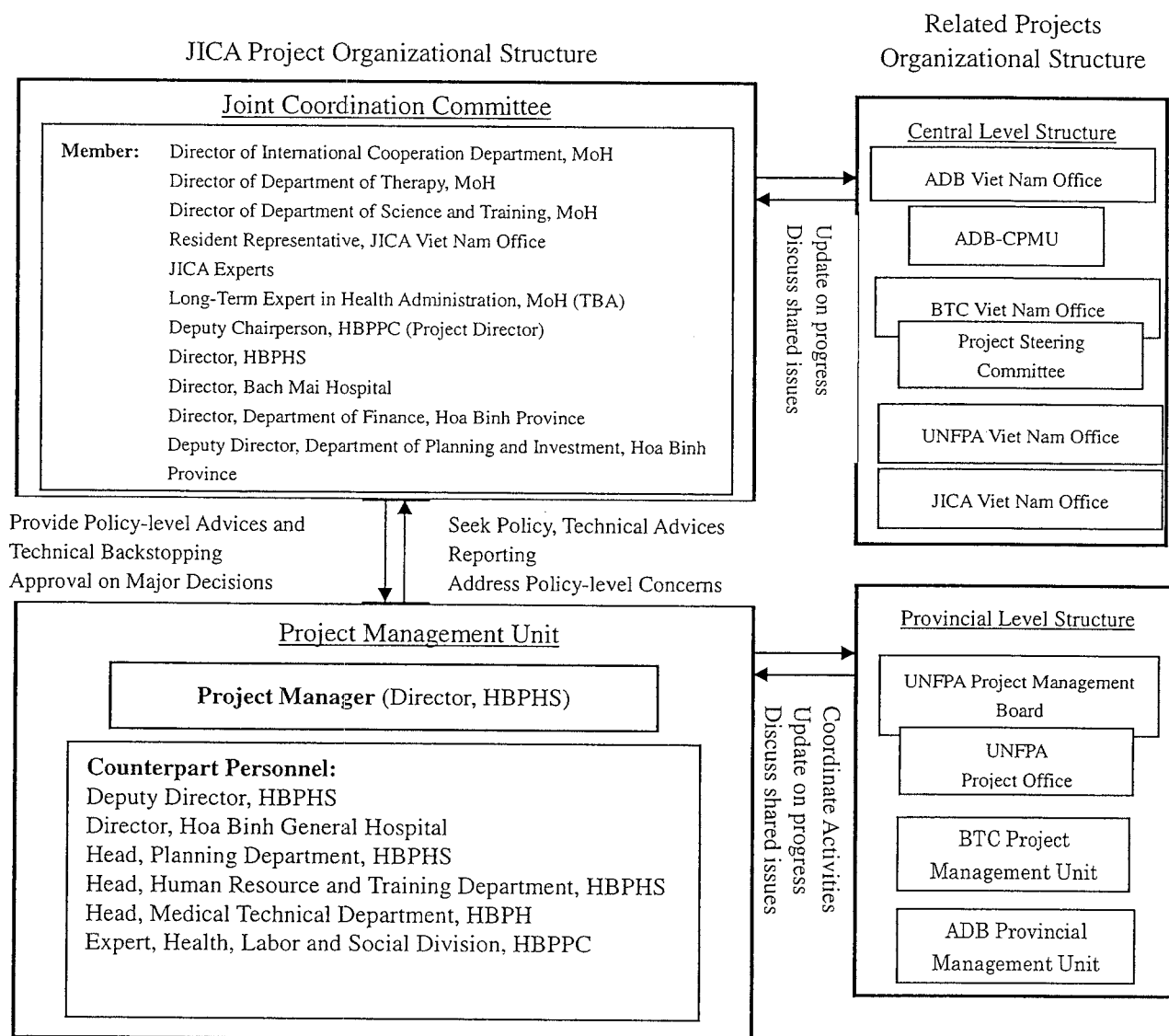
There are two important conditions that are required for successful project implementation. The first one is the commitment of HBPPC to maintain, to the extent possible, its investment and other support to the health sector throughout and beyond the project implementation period, in order that the inputs become fully operational, bring about results and sustain them.

The second condition is the commitment of the Bach Mai Hospital to further utilize and disseminate the human resources and knowledge and skills obtained through the on-going Project for the Functional Enhancement of the Bach Mai Hospital to lower-level hospitals. In addition, building collaborative relationships with other central-level hospitals, such as the Viet Duc Hospital, Institute for the Protection of Mother and Child, and 103 Hospital, will be required to secure the most appropriate trainers for the Provincial Hospital staff. From this point of view, a role of health policy advisor is crucial to gain necessary assistance and cooperation from these institutions and Ministry of Health

## 6. Project Management and Coordination

### 6.1 Organizational Structure for Project Management and Implementation

The organizational structure of this Project is presented in Diagram 5 shown below.



**Diagram 4: Organizational Structure for the Project and its relationship with Related Projects**

At the provincial level, a management committee, namely the **Project Management Unit (PMU)**, consisting of project's Counterpart personnel, is established. PMU will be the core unit responsible for overall project operation, i.e. planning, implementation, monitoring and evaluation of Project activities. The PMU ensures close coordination with relevant provincial institutions, local mass organizations and other stakeholders involved in project implementation, as well as the central-level advisory committee. PMU participates in bi-annual meetings with relevant Project Management boards supported by other donors such as ADB, UNFPA and the Belgian Technical Cooperation, for coordination and potential collaboration of activities. Project management structure of ADB and UNFPA Projects are attached in Annex 5.

At the central level, an advisory committee, namely the **Joint Coordination Committee (JCC)**,

will be established to provide necessary supervision and advice on matters relating to the overall direction of the Project, policy/technical aspects of the Project, and coordination with other related projects, as and when needed (Member List attached in Annex 1). The JCC, co-chaired by the Head of International Cooperation Department of the Ministry of Health and the Representative of JICA Vietnam Office, will meet at least twice each year in order to fulfill its functions. The Committee meeting will also be convened at the time of mid-term and final evaluations, to provide necessary input to the evaluation mission and to review evaluation findings. The Committee also considers the participation of other stakeholders, as and when needed, as co-opted members.

The Project Director, the Vice Chairperson of the Hoa Binh People's Committee, will assume overall supervisory responsibility for the Project and be the core member of JCC, while the Project Manager (the Director of Hoa Binh Provincial Health Service) and a JICA Expert in Planning and Management of Training Activities jointly provide managerial and technical guidance to the principal implementing institutions, namely, the Provincial Hospital through PMU.

## **6.2 Monitoring and Evaluation**

As this project is implemented on a pilot basis, monitoring and evaluation of project interventions will be a priority theme. The project will formulate a monitoring and evaluation plan, in line with a logical framework or a Project/Program Design Matrix (PDM), which stipulates aims, activities, inputs and target indicators. Performance and achievements of the Project/Program will be measured against indicators given in the PDM. To enable result-based monitoring against pre-set targets, it is crucial that collection of baseline data and status benchmarking be conducted to re-examine the indicators in the draft PDM and revise them into realistic figures.

To the extent possible, collaboration with other projects implemented in the region will be explored in conducting monitoring activities.

## 7. Ex-Ante Assessment

### 7.1 Expected Impact

Potential positive impacts of the Project are summarized in Table 8. The Overall Goal, one of the intended positive impacts and the basis for the overall direction of the Project, is “Healthcare services provision in Hoa Binh Province are improved.” The “healthcare services” indicated in this sentence actually directs the Project to two sets of goals, one aiming at improving technical skills and knowledge among hospital staff and the other pointing to improvement in the ability of health staff to disseminate health-related knowledge and information (effects expected from the Component 1 and 3.

**Table 8: Summary of potential positive impacts of the Project**

|   |  |
|---|--|
| <b>Policy Level</b>   | <ul style="list-style-type: none"><li>• Improvement in policies and mechanisms for building capacity in healthcare services provision at provincial and below levels.</li></ul>  |
| <b>Other Provinces</b>  | <ul style="list-style-type: none"><li>• Learning lessons from experiences in Hoa Binh Province</li></ul>   |
| <b>Provincial and district level Hospitals in Hoa Binh Province</b> | <ul style="list-style-type: none"><li>• Improvement in provision of quality services.</li><li>• Improvement in fee recovery rate, with a resultant increase in hospital income.</li><li>• Increase in motivation among medical and technical staff.</li><li>• Increase in motivation among staff engaging in health education and promotion.</li></ul> |
| <b>Residents in Hoa Binh Province</b>                               | <ul style="list-style-type: none"><li>• More opportunities to obtain improved hospital services.</li><li>• Avoiding negative impact on household expenses due to reduced health-related expenditure.</li></ul>   |

*Source: Project Preparatory Study, September 2003*

As for potential negative impact, poor people need continuous monitoring of obstacles to accessibility of medical services. At the same time, it could be possible that technical upgrading of services will raise the operational costs of the Hospital, potentially resulting in increased charges to its users. The Project has to ensure that management-related interventions under Components 1 and 2 will sufficiently forestall this issue to minimize negative influence to the organization and to its clients.

### 7.2 Relevance

The overall relevance of the Project is assessed to be high from the following 4 aspects:

- Consistency of the contents with GOV’s policy and priorities;
- Needs of the target groups of the Project;
- Coherence with Japan’s assistance policy and priorities;
- Relevance in terms of applying the past experiences/achievements of Japanese assistance to Viet Nam.

The Project is also considered to be appropriate for public investment. In a poverty-stricken

province like Hoa Binh, no private institutions provide hospital services and the public medical institutions are the only provider of such services.

### **7.3 Efficiency**

The project was designed with due consideration to its efficiency.

The basic principle of the Project is to attempt to secure as many expert personnel as are available in Viet Nam, especially those from the Bach Mai Hospital, which has received technical assistance from Japan. As for anticipated effective use and maintenance of medical equipment, adequate technical support from both Japanese and Vietnamese experts are planned, coupled with intensive financial management training to both HBPHS and the Provincial Hospital. At the same time, the selection of equipment is limited to the most essential and frequently used. To what extent the inputs will turn into outputs depends much on whether inputs from the Viet Nam side are secured in a timely manner, as well as the extent to which result-oriented management will be practiced.

### **7.4 Effectiveness**

The strategy and functions required at each level of the Provincial health system for improving the quality of care is lead by HBPHS. The HBPHS conduct analysis of health statistical data and implement an annual action plan in Hoa Binh Province. The Project is focused on the provincial level as enhancement for the management capacity of the HBPHS and strengthening the healthcare service of Provincial Hospital in the first half of the Project. Importantly there is an emphasis to shift the positive results onto the District and its lower levels in the latter of the Project. To achieve the Project Goal, it is essential for close collaboration with donor agencies mainly extended to District level and below.

This Project is to be implemented on a pilot basis, in order to see the effectiveness of intervening at the provincial level to strengthen the lower branch of healthcare institutions, and for looking into potential application in other provinces at a later stage. Although effectiveness was considered in the process of designing the Project, assessment is rather difficult at this stage, when the indicators have not yet been confirmed. That is partly because, in the Narrative Summary of the draft PDM, the objectives set at Project Purpose and Outputs levels are not defined specifically enough to set the envisaged targets. These require indicators to consolidate which capacity and to what extent the Project tries to achieve them.

### **7.5 Sustainability**

The financial sustainability of the Project may not be as high as its institutional and technical sustainability.

The effects obtained as to institutional capacity are likely to last, considering the large amount of ownership of this Project by the Vietnamese stakeholders demonstrated during the planning process, as well as their willingness so far, to make accommodations for the Project, e.g. establishing a new Medical Equipment Department in the Provincial Hospital, and the very low rate of staff turnover. In terms of technical adaptability, such as clinical skills and medical equipment that the Project will newly introduce to the Province, sufficient training and technical support will be provided within the Project.



On the other hand, sustainability in terms of financial resources has several challenges to overcome. In the case of the Bach Mai Hospital, a positive economic effect has been observed, in that an increase in operational and maintenance costs to provide improved technical services is actually met by a greater increase in hospital income, to the extent that the revenue has been re-invested into continuous technical upgrading as well as re-distribution to staff as a bonus. In Hoa Binh Province, however, this effect is rather unlikely, cost recovery from the poor residents will be a challenge. In addition, much concern has been raised regarding whether a similar budget will continue to be allocated after the completion of the Project period. Thus, the Project shall be aware of this challenge, and will seek ways to forestall this issue in order to encourage sustainability through continuous advocacy efforts to HBPPC and ensuring Components 1 and 2 include sufficient and adequate financial management training.

## 8. Reference Documents

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