

energise the planning and budgeting process. Planning is generally understood as the process of preparing the budget proposal for the next fiscal year. This orientation is quite prevalent at the aimag and soum levels and in many of the hospitals.

- o Health Insurance

Currently the HIF is under the SSIGO and its operations are guided by the HISC at the central level and by the sub-councils at the aimag level. Greater control of the HIF is necessary by the MoH so that collection rate is improved and the management of the fund supports the implementation of the policies of the MoH which are based on the government plan of action.

- o Resource allocation criteria

At present resource allocation for the HIF is done on a prospective capitation fee basis. Allocation of the resources from the central budget is for the fixed costs namely utilities, heating, maintenance and salaries. There is very limited costing information available for establish unit costs for services because an outmoded accounting system in use and the lack of a national health accounts. So resource allocation is at best ad hoc and at worst haphazard and influenced by requirements for counterpart funding in response to donor conditionalities.

- Political – Decentralization Commitment Tasks

Long term national development plan does not exist at the moment. Prior to 1990 or during the socialism period there were 5-year plans. At the present, a mid term strategy (outline of action) for the health is used as the basis for a plan for the next 4 years. There is a strong need to have a long-term development plan for the health sector with a time frame of at least 15 years.

Local government involvement is not sufficient due to lack of appropriate mechanism for participation at the aimag and soum levels.

Community participation is not suitably implemented due to lack of managerial skills to empower communities and involve them in various phases of health action.

- Environmental issues

One of the main environmental health problems is the fact that risk of exposure to chemical, biological and physical pollutants through dirt, air, water or food is getting much higher.

Food safety

For the last few years amount of out of date food usage has been significantly increasing, indicating poor knowledge of consumers and producers, frequent violation of regimes of processing, transporting, storage and sales and very limited practice of internal quality control and quality assurance system in food producing facilities.

It was found that microbial contamination of food makes up 22.7% of total food contamination cases, chemical contamination 14.2%, heavy metal contamination 6 %. In 1997, sanitary and safety inspection detected 19.5 million tugriks (in 1998 31.5, 1999 54.7 and in 2000 135.9 million tugriks) worth of food products that could not meet minimal safety requirements were disposed. Depriving use of imported alcoholic drinks, beer and fruit juice because of safety requirements tends to increase. 48% of all food products that were prohibited in 1996-1999 was vodka and other alcoholic drinks (35).

The system of registering and reporting food intoxication and toxic infection is not accurate in Mongolia. Only massive outbreaks are registered and reported but those sporadic cases of infectious diarrhea which affect a few people or just one family member are left out. According to test results performed in laboratory at the Infectious Disease Center 17.8% of 118 cases confirmed as 'GI infection' was found to be food intoxication or toxic infection, mostly caused by Staphylococcus, Proteus, Klebsiella and Clostridium botulinum.

Mongolia trades with more than 60 countries and approximately 20% of all imported products is food. It makes up 70% of total food supply in the country (35).

The Government should develop and implement a strict policy on imported food product and improve the coordination different health organizations activities and establish a reporting system of intestinal infection, in particular food intoxication or toxic infection, thus develop preventive strategy based on scientific evidences about aetiology of the infections.

Atmospheric issues: Urbanization and Air

Sources of environmental pollutants are increasing in numbers and because of urbanization, centralization and migration, thus becomes the main factor that pollutes atmosphere air, overloading environment with pollutants, causing ecological imbalance in biosphere.

In big cities mining, fabrics, power stations (plants), chimneys (more than 200), simple ovens in gers (around 60 000), automobiles(50 000), soil damage and

solid wastes are the main sources of air pollution (37, 39). Air stagnation and temperature inversion, which are mostly observed in cold season, geographical location, severe climate and features of built up area planning creates the condition that aggravate and increase atmosphere air pollution.

Researchers have determined that level of nitrogen dioxide, lead, formaldehyde in the air was 1.5-2.0 times more than acceptable maximum level in Ulaan Baatar City, where 1/3 of Mongolia's total population resides. Especially during cold season, levels of pollutants and their negative impact on health of population, particularly health of children, their physical development, status of skin normal microflora and non-specific immune system have been found to be much higher than in warmer seasons (48, 55).

Respiratory organ diseases such as acute respiratory infections, acute bronchitis and nasopharyngitis are the leading causes of morbidity among Ulaan Baatar citizens particularly common among children and were determined to have direct, strong association with air pollutants (48).

Quality, availability and safety of water

At water supply points in aimag and cities, main codex of the legal documents such as 'Water Law', 'Sanitation law' on proper use of water resources, protection of water is usually violated. The study result on Ulaanbaatar's water supply quality and safety for the last 10 years has showed level of chemical contamination of water from A and B station was above the maximum acceptable level in April and October.

Rest rooms, family houses and gers with their yards are built near or inside of the sanitary protection zone with the wells, main source of drinking water for Ulaan Baatar, polluting water source with chemical forage, toilets and liquid waste.

85.8% of the problems related to water sources occur in non-centralized water supply sources (35).

Changes in level of microelements in drinking water have negative impacts on human health. Some studies are done in order to link hardness and mineral contents of water for instance level of calcium, magnesium, iodine and fluorine with the geographical features of that area and give an evaluation. The study determined association between geographical features, and drinking water mineral contents with some endemic diseases. For example average level of fluorine for aimags was 154.3 ± 45.6 per 1000 population and incidence of caries was 607.9 ± 9.1 per 1000 population.

Incidence of goiter among 7-14 year old children was 24.7 ± 3.09 (50, 51).

Content of water from Tuul, Orkhon and Kharaa which are nearby Ulaanbaatar, Erdenet, Darkhan cities respectively has changed: level of minerals, sodium sulfate and requirement of oxygen for biochemical reactions were increased.

Waste disposal

Some areas of cities are filled with solid waste, creating conditions to spread different infections among human population, cattle and other animals because adequate waste management is not in place and residents don't have appropriate attitude and practice to handle solid waste.

In many aimags local hospitals do not have special place or container to collect and transport bio-hazardous solid waste and incinerator to burn the waste.

Lead levels of Ulaan Baatar city soil was 95.7 mg/kg in 1993, 106.3 mg/kg in 1994, 108.2 mg/kg in 1995, 107.1 mg/kg in 1996 and 124.8 mg/kg in 1997. Lead level is going up due to increased number of automobiles and number of families that use simple stove (48, 52,53,54).

In Ulaan Baatar city approximately 4,600 persons die, therefore cemeteries are overloaded and toxic gas that forms from corpse decomposition pollutes soil, water and air adversely affecting health of residents. It takes 3-5 years for soft tissues to decompose completely, 40-50 years for bones and more than 20 different kinds of toxic substance are released to the environment during the process.

Soil in the areas near cities is significantly polluted by chemicals and solid waste. Heavy metals in the soil around Ulaan Baatar, Nalaikh, Baganuur, Erdenet, Darkhan and Sukhbaatar is determined relatively higher and phosphorus in soil around Moron was 4-20 times higher when compared with the soil around other cities.

Natural degradation

Intensive mining operations, especially for gold have contributed to land degradation. Around 600 sites have been under exploration and 200 are being mined actively. However, rehabilitation of the land by the mining companies is not taking place.

Risks

- Macroeconomic

Fiscal deficits, inflation other macroeconomic imbalances and a weak banking

system have continued to threaten economic growth. In terms of macroeconomic stability, inflation has been brought under control although still high over 8%. However, the government has increased its deficit spending in recent years reaching 33% of revenues in 1999. A growing fiscal deficit will weaken macro-economic stability, raise inflation and crowd out private sector initiative.

The banking system is nearly insolvent and now makes little or no contribution to economic growth. The most severe breakdown of the banking system has been in the countryside, which has had an impact on the timely payment of salaries. Government revenue has dropped and the fiscal deficit is high reaching 11% in 1999. The tax structure is not buoyant and tax compliance is weak. There is also growing debt burden owed to international lenders equal to 75% GDP. The loans are concessionary but servicing them will cost an estimated 12% of GDP per year beginning 2001, the equivalent of about the level of current domestic savings per year. This debt burden does not include the much larger amount Russia claims it is owed or the subsidy provided to Mongolia during the socialist period.

The dependence of Mongolia on livestock in the domestic economy and minerals in the international market make it vulnerable to natural and external shocks.

- Transition,

Mongolia is also experiencing all the signs and symptoms of transition from a centralised system to a market economy. This is evident in the government circles where attitudes similar to the social period prevail with regards to the approach to efficiency and reliance on central budgetary subsidies and the expectation of the population that grew up during the socialist period for the central government to continue to provide all the basic amenities and social services no matter how inefficiently they were provided. However, the younger generation seem to be preparing themselves for the market economy even though the current educational approaches still hark back to the socialist period and the teaching orientation reflects the orientation of the same period.

- Staff changes and rapid turnover

The main reason for staff turnover is low incentives for highly qualified personnel working in the Government sector. On the other hand following the elections and Government change increased staff turnover is noticed due to partisan control of the government bureaucracy. Therefore, the more

competent civil servants feel increasingly insecure in their positions and tend to leave seeking more secure jobs.

- Periodic changes in government and impact on policy direction

During past 4 years, there have been three Governments. General elections are held in every 4 years and from previous experiences, the ruling party in the Parliament tend to be changed every 4 years as well. Policy discontinuation will be main threat to the health sector development. Therefore, consensus building among the parliamentarians on health sector policy would be a most important action to avoid such a risk.

Donor Coordination

Donor coordination is currently done through the division of International Cooperation of the Department of Strategic Planning and Management. There are desk officers responsible for liaising with bilateral and multilateral donors. Much of the liaison work is following up with donor requests for reports and financial statements and for selection of participants for attending conferences, seminars and meetings and for fellowships and study tours etc. The other area of work is the drafting of project proposals and Aide Memoirs and follow up on the review and approval of project proposal by the MoH and government. Another task is to provide logistic support and making of appointments for mission teams and consultants.

Systematic coordination of donor inputs vis-à-vis a national health plan for the medium to long term is limited because such a plan does not exist. So much of the coordination become rather ad-hoc and responsive to donor requests, conditionalities and to their approval of project proposals developed as a result of various missions and consultant visits.

5.4 Schedule for the Study

The total study period shall be 15 months from commencement of the feasibility study.

5.5 Reports

5.5.1 INCEPTION REPORT (IR)

IR should review ToR & current status, project analysis and propose detailed plan of action.

30 copies of IR in English to be submitted one month before end of feasibility study.

5.5.2 PROGRESS REPORT (PR)

PR should include, project progress since the start of the project, project planning for the next reporting period.

30 copies of PR in English to be submitted 6 months after since the start of the project.

5.5.3 DRAFT FINAL REPORT (DFR)

DFR will consist of overall objectives, approach employed or used, detail achievement of each objective, list of outputs in terms of Health Master Plan, related reports, materials produced, etc. as required by the objectives, conclusion, recommendations and future direction.

30 copies of DFR in English to be submitted within 14 months since the start of the project.

5.5.4 FINAL REPORT (FR)

FR shall be modified based on the comments on the DFR by related entities of the study.

50 copies of FR in English and Mongolian to be submitted at the end of the project.

6 Study Structure

Following is the proposed member shall be involved in the study and the roles of each members.

6.1 MINISTRY OF FOREIGN AFFAIRS

MoFA should serve as the official agency between Government of Mongolia and Government of Japan for facilitating the various diplomatic and related processes for technical cooperation with regard to the development of Health Master Plan.

6.2 MINISTRY OF HEALTH

MOH will serve as the official counterpart agency to the Health Master Plan study team for implementing the development of Health Master Plan project.

The role of MOH will be;

- To establish a task force that will be work with Health Master Plan study team, eventually setting up a sector wide planning framework for the health sector
- To devise mechanisms for facilitating participation of the various actors and stakeholders in the health sector
- To establish appropriate planning and monitoring mechanisms within the Ministry to advance the development of the Health Master Plan,

- To establish coordinating mechanisms for donor inputs,
- To closely collaborate with the Health Master Plan study team in the following areas:
 - o Setting up joint working groups in the various areas as described in the inception report, the situation analysis and in accordance with agreed programme and management areas.
 - o Jointly conduct the various consultative meetings for obtaining consensus on issues and priorities.
 - o Jointly develop approaches and methods for determining priorities and projects.
 - o Jointly draft the Health Master Plan.
 - o Work together to develop and operate the necessary planning and donor coordination frameworks.
 - o Jointly monitor progress of the Development of the Health Master Plan Project.
 - o Jointly prepare the required reports in English and Mongolian.
 - o Ensure participation of the Health Master Plan study team and local consultants where required in various internal meetings in the MoH and with donors and other agencies.
 - o Ensure participation in the policy review and development meetings conducted in the MoH and with the donor agencies.
- And to provide necessary logistics, office support, materials and resources in accordance with the MOU between Mongolian Government and Government of Japan for the technical assistance.

7 Undertakings of the Both Governments

7.1 UNDERTAKINGS OF THE MONGOLIAN GOVERNMENT

- 1) To provide counterpart to work with the Japanese study team members.
- 2) To provide suitable secretariat service.
- 3) To provide suitable office room(s) and necessary furniture to the Japanese study team
- 4) To bear necessary costs of water supply, electricity
- 5) To provide the Japanese study team with available data, information, documents, maps, photographs and other related to the study.
- 6) To assist in carrying out supplementary survey
- 7) To exempt from any duties and other imposition to the members of Japanese study team themselves and their personnel effects and necessary equipment imported for

the study.

- 8) To arrange meeting as required between the study team and various entities concerned.
- 9) To be assist of the study team whenever necessary and possible.

7.2 UNDERTAKINGS OF THE JAPANESE GOVERNMENT

- 1) To dispatch to the Mongolia the study team consisted of the suitable experts
- 2) To provide technical transfer to the Mongolian counterparts
- 3) Claims against the Japanese Study Team

The Government of Mongolian shall bear claims, if any arise against member(s) of the Japanese study team resulting from, occurring in the course of or otherwise connected with the discharge of their duties in the implementation of the study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the study team.

7.3 COUNTERPART AGENCY / COORDINATING BODY

The MOH shall act as a counterpart agency to the Japanese Study team and also as a coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the study.

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List of persons met during the mission:
(yet to be completed)

研究成果の刊行に関する一覧表

書籍

著者氏名	論文タイトル名	書籍全体の編集者名	書籍名	出版社名	出版地	出版年	ページ
無							

雑誌

発表者氏名	論文タイトル名	発表誌名	巻名	ページ	出版年
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