2. INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) SECTOR

2.1 Development Policy

Mongolia has achieved significant progress in information and communication technology development due to foreign investment and cooperation with technically advanced nations. Initiatives from the private sector play an important role in IT development. Mongolia Telecom, the state-owned and operated telecommunication company, has been reorganized and modernized with Korean investment, expanding its operation and capability. An increasing number of companies supporting commercial Internet services, including Datacom (a pioneer and the largest IT company in Mongolia), is increasing year by year. The first competitive cellular operator Mobicom (a private joint venture with Japan), started 5 years ago and has shown tremendous success generating subscribers and revenues. In general, successes within the new deregulated and liberalized business environment convinced government to recognize that ICT has a positive and significant impact on economic growth. This could lead to reducing poverty, as well as offering new opportunities to facilitate socio-economic development.

The government of Mongolia has taken a number of steps, including submission of new telecommunications legislation for parliamentary approval in October 2001, articulation of a national ICT Vision in 2010, and establishing a National ICT Committee headed by Prime Minister of Mongolia. The Committee consists of key representatives from private companies, government, non-government organizations (NGOs) and the public community. Although IT Vision in 2010 has been declared as the principle of IT development strategy, there is no specific Action Plan

for implementation in the short, medium, and long term. The mission of the ICT Vision-2010 is to develop a society based on knowledge and intellectual potential, improving qualities of life for the people of Mongolia. Main objectives are to create (i) policy and regulatory environment to facilitate development of the ICT sector; (ii) a business environment ensuring efficient integration into the global economy and improve competitiveness; (iii) opportunities for Mongolian citizens for equal and active participation in social activity and improved quality of life.

The National ICT Council established in 1999 was recently re-established as a non-government organization called MIDAS (Mongolia Information Development ASsociation). The Association represents ICT experts from public, business, professional and academic communities in Mongolia.

Telecom Mongolia provides basic telecommunications services such as international and domestic calls, Internet, TV broadcasting and leasing of digital circuits. The other phone service provider is Mongolian Railway Company (MRC), a state owned joint-venture with Russia, offering domestic and long distance telephony for location adjacent to the railway. There are two cellular operators in Mongolia providing GSM 900 and CDMA services in Ulaanbaatar and 6 other cities and aimags. Both operators provide basic cellular phone services including WAP (wireless Internet) and message handling.

As a result of initiatives taken by companies such as Datacom, and with assistance of International Development Research

Center of Canada and the National Science Foundation of USA, access to the Internet is a reality in Mongolia. Other domestic companies including BodiComputer, MCS Communications, and individuals have entered the Internet market, creating a competitive environment for Internet service.

Access and use of ICT is inhibited by infrastructure limitations such as limited provision of fixed telephone lines, poor quality electricity, the number of personal computers, and availability of other Internet ready devices (such as routers, content servers, and local customer services) — especially in rural areas. Given the economic importance of ICT to rural communities, there is compelling need for public policy and regulatory intervention to promote universal access. While the MRC owns a limited fiber optic network, there is a clear need and justification to optimize and develop additional resources to extend network access through support of the private sector. Although Mongolia has a highly literate population, limited foreign language ability and IT skills are challenges in promoting Internet applications. To address this inhibitor, an education curriculum for youth has been changed to include language and computer training classes. This curriculum is also becoming available to the public through adult education provided by both the education systems, as well as private ICT related companies.

2.2 Regulatory Environment

Currently, the regulatory framework for the development of ICT sector presents significant challenges to policy makers. The existing regulatory framework is relatively complex, with overlapping functions and responsibilities for telecommunications spanning several government departments. Based on analysis of regulatory processes,

restructuring of telecommunications regulation and new efficient regulatory policy requires additional deregulation and opening of the telecommunications market — further liberalizing tariff and service pricing to ensure market and industry competitiveness. There is no formal regulation for the Internet community. Internet regulatory framework requires an extremely broad range of activity, ranging through operational service quality level, country top level domain name distribution procedure, privacy issues, connectivity requirements, content regulation, taxation, and commerce. This is an urgent task for the ICT National Committee and the government. Without significant guidance within the regulatory environment, attracting additional foreign investment and support to the community will also lag, as most investment requires extensive due-diligence including a focus on government regulation and support of investment.

The **Ministry of Infrastructure** is the main regulatory body for the ICT sector in Mongolia. The role of the Ministry is to develop policy and strategic planning and monitor its implementation. Further responsibilities include licensing, frequency allocation, tariff regulation and setting standards. Regulation and implementation functions of the Ministry are handled by the **Communications Regulatory Council (CRC)** and **Post and Telecommunications Agency (PTA)**. CRC is responsible for interconnection regulation, preparing licenses, and providing methodology for tariff regulation and standards. PTA is the agency for implementation of policies on post, broadcasting and telecommunications in Mongolia. The **State Inspectorate for Infrastructure** controls compliance of business entities, organizations and individuals with laws and standards.
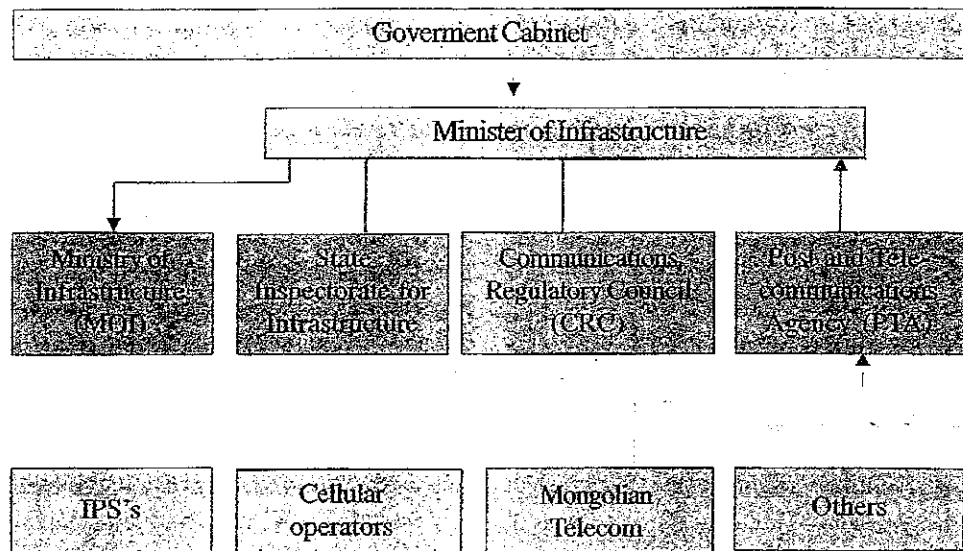
Although Telecom Mongolia's management company is partially liberalized, its pricing and tariffs are still subject to government intervention. Mobile operators also need permission from the Ministry on pricing due to their exclusive licenses. Internet services, however, are purely market driven, with no standardization or regulation for access and service tariff.

The fast growing ICT market and importance of ICT applications in daily activities of institutions and individuals is driving policy authorities to recognize the need for improvement of current telecommunications legislation, and evaluating a new regulatory framework for the Internet based services.

Existing ICT related laws are: Telecommunication Law, 1995 (Amendment made in October 2001), Patent and Copyright Laws, Intellectual Property Law and Law on Technology Transfers.

3. NETWORK ACCESS

3.1 Telecommunication Infrastructure

3.1.1 Mongolia Telecom Network

Mongolia Telecom is a state dominated incumbent shareholding company, providing basic telecommunication services such as international and domestic long distance telephony service, faxing, Internet, TV broadcasting and leased of digital circuits. Mongolian Telecom was privatized in 1995. Korea Telecom acquired 40 percent of its total shares through open international competitive bidding, and the Mongolian Government owns all remaining shares. Communications network assets are owned by the Mongolian Government and leased to Mongolia Telecom for provisioning all telecommunication services such as international, domestic long distance, and local telephone services according to license granted from the government.

The overall Mongolian telecommunication basic network consists of 3100km analogue, and approximately 900km of digital microwave lines connecting Ulaanbaatar and province/aimag centers.

Ulaanbaatar's central digital switching systems are connected with transit tandem switches in other main cities (5 cities), crossbar and digital exchanges in aimag (provinces) centers, with mechanical and manual exchanges in soum (county) areas. The network includes 1 international ex-

change (with capacity of 180 channels), 2 national transit exchanges, 23 domestic exchanges, and more than 280 analog small capacity exchanges in rural areas. The main routes between Ulaanbaatar and aimags are connected via microwave systems, the soums are connected via open-wire systems to aimag centers.

The switching stations have a total switching capacity of 143,857 telephone lines, with more than 122,120 lines currently in service. More than 93.7 percent of the total switching capacity and 30 percent of the transmission network are digital. The telephony density was 5.14 per 100 inhabitants in the country and 9.85 per 100 inhabitants in Ulaanbaatar, 7.49 in aimags and 0.89 in soums[3]. 13 aimag centers, 3 towns, and 1 soum center are linked using VSAT systems via INTELSAT satellite. 16 aimag center analogue exchanges have been replaced by digital switches.

International telephone calls are handled by a NEAX-61E digital international transit switch. Mongolia Telecom has an access to the INTELSAT satellites in the Indian Ocean region and to the Express-6 satellite of INTERSPUTNIK system. The majority of international traffic to the direct destinations in over 148 countries is carried by satellite via INTELSAT and INTERSPUTNIK through Russia. Mongolia national TV broadcasting services are provided via these satellites.

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[3] Report from Communications Department of Ministry of Infrastructure Development, 2000

There are seven international main routes:

|	International routes	Satellite	Trunk capacity	Comment
1	Moscow	Intersputnik	2 Mbps	
2	Beijing	Intelsat	2 Mbps	
3	Tokyo	Intelsat	2 x 2 Mbps	9 channel to AT&T
4	Hong-Kong	Intelsat	1,5 Mbps	
5	Seoul	Intelsat	2 Mbps	
6	Singapore	Intelsat	512 Kbps	
7	Montreal	Intelsat	2 Mbps	

Source: Ministry of Infrastructure

Despite innovative achievement in telecommunications network infrastructure, the telecommunication network is still poorly developed in urban and non-urban areas. Within the framework of telecommunications network infrastructure achievements, 15 provinces of 21 province centers now have fully installed and operational digital switches. Local communities in province centers could have low speed (average 9.6kbps) dial-up access to the Internet through access ports located in Ulaanbaatar if adequate access router devices were installed at the local exchanges – reducing the tariff charges for companies and other users, as well as delivering performance only partially degraded from the level of performance enjoyed in Ulaanbaatar, Darkhan, and Erdenet.

3.1.2 Mobile Communications

There are two cellular operators in Mongolia providing GSM 900 and CDMA services in Ulaanbaatar, with coverage extended to an additional 6 cities and provinces. The total number of mobile subscribers is expected to exceed 176'000 by end of year 2001. Both operators provide basic cellular phone services including WAP and message handling services. Mobicom introduced WLL service in remote areas of Ulaanbaatar, with anticipated subscription at 7,000 by end of year 2001.

Mobile phone density is 7.4 per 100 inhabitants as of 2001 in Mongolia. More than 90% of subscribers are based in Ulaanbaatar. The number of mobile phone subscribers in Ulaanbaatar exceeds the

Mobile phone service coverage
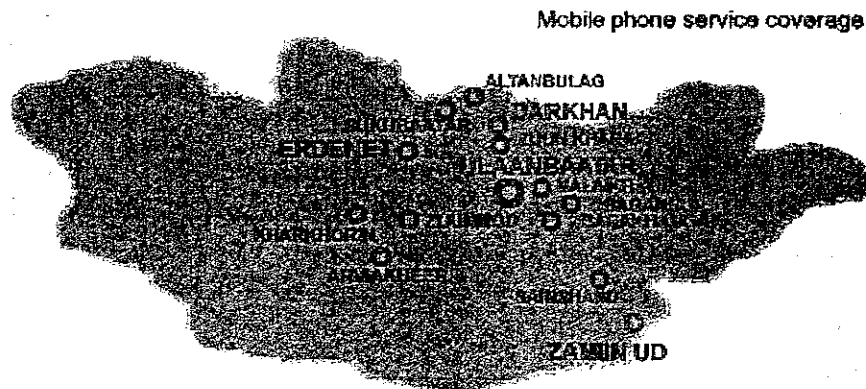
total fixed telephone subscribers of Mongolia Telecom.

3.1.3 Railway Communications

Mongolian Railway is joint venture between the Governments of Mongolia and Russian Federation. Mongolian Railway Communications provides public domestic and long distance telephone services from exchanges adjacent to the railway.

The railway network had a total capacity of 7,900 subscribers at the beginning of 2000 and planned to expand its capacity by 7,000 lines during 2000-2001. A new fiber optic cable (1600km) was laid alongside the railway tracks in 2000. 29 transmission exchanges are planned for installation by NEC and switching facilities in 13 railway stations by Siemens[4].

According to Mongolian Railway information, the railway network has approximately 9000 subscribers by the end of 2000, of which 3,700 are based in Ulaanbaatar. The railway network interconnects with Mongolia Telecom and mobile phone operators via fiber optic.

3.2 TV/CATV and Radio Broadcasting

Radio Broadcasting started in 1934 with national broadcasting launched in 1967. The plan for radio was to cover 75 percent of Mongolia's territory by reliable radio broadcasting. However due to electricity power shortage and obsolete equipment this task has not been successfully fulfilled.

There are 3 private cable TV providers operating in Ulaanbaatar and the other 4 main cities. Currently CATV is provided to more than 30 thousand households in

Ulaanbaatar and connected province centers.

3.3 Internet Service Providers

Private companies are playing a dominant role in development of Internet and internet network related services. The first Internet e-mail service provided to the public was established in 1994. Full Internet services were introduced in early 1996, and at present there are seven ISPs in Mongolia. Five of of the ISPs are private companies, with an additional two subsidized and established by direct involvement of the government. The ISP serving for education sector was established through international assistance. There is also a local ISP operating in Erdenet, second city by its size and infrastructure development in Mongolia.

Dominant ISPs provide a variety of services such as dial access, email, web hosting, domain name registration, dedicated leased line service via fiber optic, satellite, xDSL, voice over Internet, fax over Internet, e-commerce, and additional emerging applications and services. It is estimated that there are approximately more than 9,000 Internet subscribers including corporate customers and more than 30,000 users accessing Internet as of 2001[5]. Total international bandwidth to Internet is approximately 10Mbps, with six ISPs connecting to upstream Internet Service Providers in US, and one connecting through Hong Kong. Five ISPs have fully digitized access facilities for dial customers at 56Kbps. Additional Internet penetration growth in Ulaanbaatar is estimated at 200 additional users per month.

Price decline and service diversity highlights a maturation of the Internet market

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[4] Mongolia Telecom report, 2000
[5] "ISPs in Mongolia" report by InfoCon, 2001

in Mongolia. The market in Ulaanbaatar is characterized by relatively high service quality (low level of traffic congestion, no busy signal, no waiting list, comparatively low cost etc.) and a fully liberalized environment (no content/traffic control, licensing is open and transparent). Poor telecommunication infrastructure impedes Internet service quality in the countryside (average dial-up connection speed is 9,6-14,4Kbps). Low penetration rates and access to Internet are primarily due to high cost (range from 10-25 cents per minute) of long distance communication, as well as low availability of personal computers and access devices.

In 2001 Infocon Co. established the Mongolia Internet Exchange. Five ISPs have interconnected their networks over E1 xDSL dedicated circuits. The MIX allows Domestic Mongolian ISPs to exchange local content and traffic, bypassing international links.

There are more than 40 Internet cafés and 5 Public Internet centers operating in Ulaanbaatar and in 4 aimag centers. The Internet cafes offer shared access to Internet, providing service to users who do not have access to either their own computers, or dial access to one of the ISPs. This also includes a high number of foreigners or travelers who use Internet cafes and Internet centers for accessing home accounts for email.

Three Public Internet Centers in aimag centers were established as a non-commercial Internet access through support of MFOS. The PICs have 32K VSAT Internet connections.

Internet penetration in provinces is very low, and requires significant improvement. Factors include: low PC penetration in rural

areas (private, academic, and commercial), very limited local content or applications (limits usefulness of Internet for non-English speaking users), lack of local dial access ports in provinces, double charging - long distance call plus Internet access charge, poor or low speed connection.

This is a problem needing immediate attention. Without easy access to Internet, and online resources – both for training and professional use – in Mongolian language, the Internet is of limited value to those in remote locations. In particular, it is vital and urgent that Mongolian language training material and distance education support resources be made available to existing and potential users of Internet based resources – otherwise there will be a long term continuing condition where people in remote locations are going to be disadvantaged in their ability to diffuse ICT related activities into their social and economic capacities.

3.4 Special Information Networks

Despite Internet and basic telecommunications infrastructure, there is a continuing need for special purpose information networks.

Mongolia Civil Aviation Authority has satellite VSAT X.25 network connecting Ulaanbaatar and other 20 provinces. This is private network that provide basic terrestrial air control, passenger, shipping, and other operational support services to national and international airline companies.

SITA, International Airline Telecommunications Society, provides services to local and international air ticketing offices in Mongolia. This connects not only airport and airline offices, but also supports the

travel industries access to airlines and international airline schedules, itinerary, and to book tickets. This will become less important in the future as international airline consortiums continue their migration to IP networks, and start dismantling the current travel support infrastructure in favor of new models.

Hydro Meteorological Research Institute has a nationwide X.25 network for collecting and disseminating basic weather forecast to government agencies and the public.
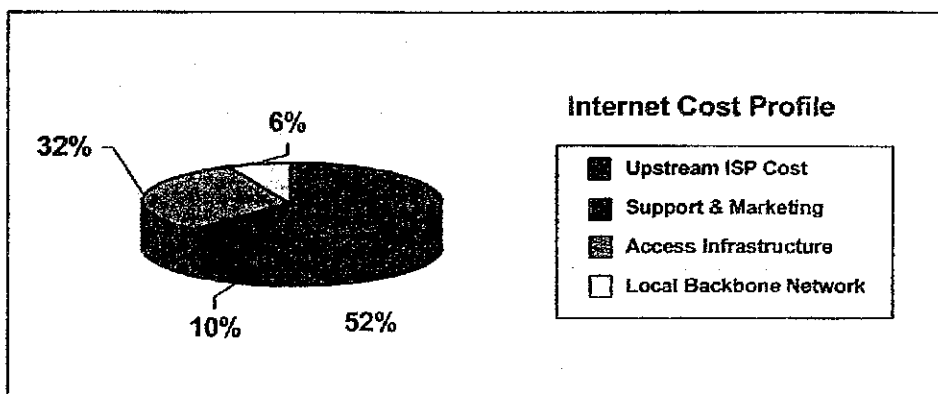
3.5 Internet affordability

Mongolia is isolated geographically from North American, European and Asia Pacific high-speed Internet and Internet transit backbones. Local ISP cost structure is characterized by high percentage (more than 50%) of upstream satellite circuit expenditure for connection to the global backbone networks. Therefore, the local Internet market price is quite sensitive to the cost of long distance satellite communication. Cost of transmission dominates the cost of service operations.

Dial Internet access is charged in hourly usage basis independent on traffic volume or access speed. ISP bandwidth occupancy, given the fact most Internet content is transferred from locations outside of Mongolia, is a more critical cost factor, as the true benefit to the end user will rarely match the access dial speed of their local modem or LAN interconnection. So if a Mongolian dial user is able to connect to the local ISP at 56kbps, there is very little possibility of that user actually being able to receive information requested, as the true throughput will be a matter of the ISPs connection to their upstream backbone network, and all intermediate networks between the upstream provider and the source of requested data or information. Tariffs for Internet access vary between 50 to 90 cents per hour throughout the country depending on monthly usage or ISP bundled promotional packages. This price doesn't include phone connection cost of 36 cents (per hour) in Ulaanbaatar or domestic long distance calling cost in the countryside.

For dedicated/leased line services, fees are based on connection speed/bandwidth and the extent of promotional/value added services. Service fee includes fixed charge of 50-200USD (based on package of services offered) for port allocation service and variable cost of 10USD per Kbps. Leased line of 64Kbps and 128Kbps costs 650-850 and 1,200-1,500 US dollars respectively.

Internet Cost Profile

32%
6%
10%
52%

■ Upstream ISP Cost
■ Support & Marketing
▓ Access Infrastructure
☐ Local Backbone Network

Tariffs in Mongolia are extremely high relative to other countries. Given the high cost of connecting to the Internet for both organizational and individual users, and the fact other countries are implementing a variety of applications and services based on broadband (individual connections of 2mbps +), the tariff issue is acute.

In terms of purchasing power of the people, there is a substantial gap in the wages and income distribution in Mongolia. Average salary of public workers is 50-100USD[6] per month while people employed in private sector earns more, approximately 100-500USD per month.

3.6 Hardware and software
There are not yet solid official statistics

available for the number of personal computers in Mongolia. According to the survey conducted by the Infocon, currently approximately 40,000 PCs are in use, and this number is expected to increase by 8-10 % by the end of 2001. Computer hardware distributors and retailers have introduced retail presence in the market, with well-known brands such as Dell, HP, Compaq, Acer, Packard and others being sold through local distributors. There are also domestically assembled computers available for lower prices.
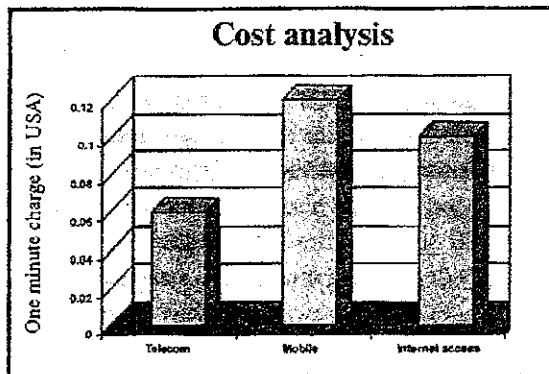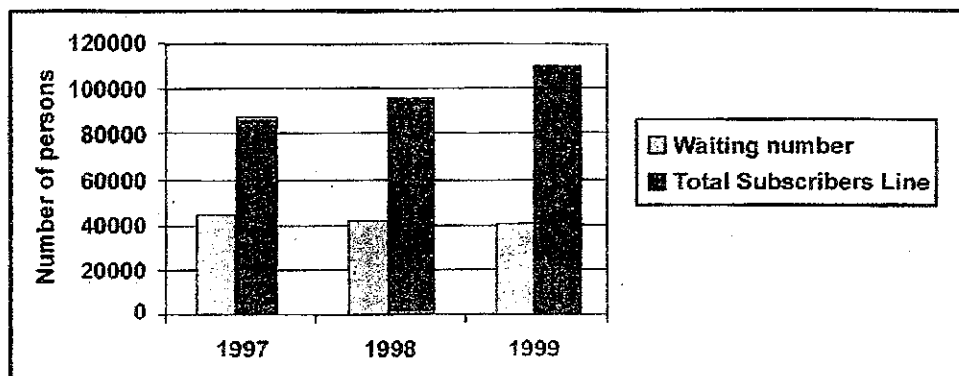
The number of brand-name computers sold accounts for approximately 30 percent of total PCs sold directly in the local market. The PC market is one of the fastest growing (approximately 4 % a year), and competition is starting to pressure pricing for computers. Up to 60 % of total computers are connected to the Internet. More than 90% of total computers have the Microsoft operating system and applications, and Mac OS, Linux or Unix systems are rarely (less 1%) used. More than 30 software companies serve the local market with customized applications including financial accounting, banking, insurance, customer service systems, and others. Controlling pirated software use is still a challenge identified by respective authorities.

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6 State employees salary scheme, 2000

3.7 Service and Support

Mongolia still has a substantial waiting list for telephone line provision. In 2001, there were more than 38,063 subscribers on Mongolia Telecom's waiting list. Provisioning backlog compared to actual switch capacity is very high, and is about 35% of all installed lines.

Provisioning lead times are starting to decrease. However, the waiting list backlog stays at a very high level. Comparing international telephone line penetration and provisioning statistics it becomes clear that Mongolia has a very high ratio of unsatisfied demand - measured as the percentage of number of backlog orders against the total number of subscribers. However, in Ulaanbaatar and in two other major cities the waiting period is about 1 to 1.5 years – a stark contrast to the rest of the country.

Customer Service and support quality is improving. The waiting period to fix telephone lines problems depends on problem difficulty or nature, and varies from one to several days.

Customer Service and support provided by mobile phone operators and Internet service providers is quite promising and more flexible than Telecom Mongola. There are no waiting lists for either cellular or Internet services in Ulaanbaatar, nor in the other two major cities Erdenet and Darkhan.

Cellular and Internet services are based on competition between rival companies, resulting in higher levels of service.

4. INTERNET ECONOMY

4.1 ICT jobs and services

According to Infocon's survey, 11,500 people working in 54 companies and organizations participate in ICT related businesses or activities. 85 % of total employees working in government organizations, including Telecom, and 15 % of other employees are working in ICT related private sectors. There are at least 600 software programmers employed in the software industry, of which about 40 % work for government and 60 % working in the private sector[7]. More than 4500 people are employed within the telecommunications sector and about 150 people employed in the mobile networking industry.

The ICT related job market is characterized by high demand of well-experienced professionals. Although Mongolia has well trained professionals in software and networking industries, they do not hold international certifications.

Mongolian professionals may find opportunity to engage in software cross-border outsourcing, taking advantage of low labor and overhead cost, highly skilled software developers, and the local industry capacity to quickly expand to meet a larger industry requirement.

4.2 Employment opportunities

ICT related studies such as electronics engineering, telecommunications engineering, network engineering, and computer programming are available in eleven colleges and universities, with a total of 1,897 students attending engineering courses. There are 1,600 telecommunications and 1500 software engineering graduates from local universities. In addition, many of ICT professionals have graduated from former Soviet Union and Eastern European coun-

tries during former periods.

There is no formal statistical analysis prepared on ICT job market - yet. However estimates show employment opportunities growing not only within Mongolia, but also internationally. The number of Mongolian programmers and network engineers working for overseas ICT companies is increasing. One positive market trend in Mongolia ICT employment opportunity is that overseas companies acknowledge and consider Mongolia as a possible cross-border outsourcing area for ICT development within their company. Several software development joint ventures have started activity to prepare and employ IT professionals in Mongolia.

4.3 Business to customer (B2C) E-Commerce

A detailed assessment of e-commerce in Mongolia is not available at this time due to the limited information. However the research team observed the following activities in e-commerce.

B2C E-commerce is used experimentally within a few closed groups. Basic challenges of B2C e-commerce development in the country are related to technological solutions for electronic payment and e-commerce transactions, largely still under development. The legal environment for e-commerce and e-banking has not been established, nor are there delivery or distribution systems suitable for e-commerce in place.

Despite the lack of preconditions for e-commerce, some progress has been achieved during last two years in E-commerce and E-banking. Three companies are providing e-transaction service (debit/credit card transactions over Internet)[8] and

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[7] Survey report on Current ICT Situation in Mongolia, by Infocon, 2000
[8] URL: http://www.netcard.mn

some companies are trying to introduce e-commerce services. According to those companies, E-banking service will be publicly available by end of 2002. Credit/debit card services are available at several shopping centers, banks, and hotels.

In addition, computer and computer related equipment retailers, books and flowers are successfully selling their products via Internet.

4.4 Business to business (B2B) E-Commerce

Few Mongolian companies do B2B e-commerce via Internet. Some freight forwarder and shipping companies are now starting to integrate schedules, catalogs, and other business-to-business integration models supporting their e-commerce applications for logistic systems through Internet.

Most companies using B2B e-commerce limited their trading with overseas companies only. There is no estimate on trade volume available at this time.

4.5 E-Government

According to a survey conducted by the Government Cabinet Secretariat, central and local government offices are well computerized and have telephones. The government communications department takes responsibility to supervise, control, implement and innovate basic communications infrastructure for government. At the central structural level (ministries and government agencies in Ulaanbaatar) all ministries are connected to the Internet, have implemented LANs, and have internal and public web sites. Ministry web sites are mostly focused and developed for the information purposes, not for bringing government services to citizens and internal automation. Government agencies located in Ulaanbaatar and major cities have Internet access and email accounts. Tele-

phone and fax is still a widely used common communication tool between central and province governors.

Use of computers at the local government offices is limited to word-processing and other office applications. Although Internet access is available in most aimags, e-mail is rarely used for communication or information exchange. Internet and simple message handling services are still not available at soums due to poor development of telecommunications infrastructure.

In 1997 the government implemented the "ICT for Sustainable Human Development Program" with support of UNDP. Program objectives focused on greater transparency and better information dissemination within the government, and from the government to the public. As a result, the Public Management Information System (PMIS) was developed, networking not only central but also local governments in rural areas through Rural Citizen Information Centers. This network is not working as the way as it was expected. The main reasons for this is that a) no content developed, b) the users, government officials and staff were not prepared to share or publish information, c) it was LAN-based, and communication enabled only by email. In rural areas, access to the networked computer was almost impossible for ordinary people.

In 2001 the government made another commitment to e-government. With the support of USAID, the office of Prime Minister created a website entitles "Open Government." More than just a brochure-ware, Open Government site enables the public to directly interact with government offices, sending online comments and feedback on draft laws and regulations prior to discussion by Parliament. It is in an early stage, and the results have not yet been evaluated.

5. INTERNET SOCIETY

5.1 People and Organizations Online

Computers and connectivity bind people and organizations into a single digitally connected learning community, supporting education and human interaction to the entire networked community. Two fundamental studies for assessing the networked community are to define networked Internet users and related demographics, and to identify ways the Internet is actually used by the community members.

A market survey conducted in the beginning of 2001 shows the number of Internet users and traffic volume is exponentially increasing.

following categories: individuals-20%, business entities-65, government-5, NGO's-6 and 4 % of others. About 60 % of .mn domain names are registered by international or overseas organizations. Domain name registration is fully automated and requires no human involvement in the registration and payment procedures[9].

5.2 Local relevant contents

Mongolian "national Internet zone" characterized by its bilingual contents, primarily in Mongolian and English language. According to a survey by the project team, there are more than 500 active websites

	1997	1998	1999	2000	2001
Number of ISP's	1	2	5	6	7
Number of internet users	600	2900	6000	8000	9000
Number of registered domains	15	60	98	200	531
Source: "ISP Business Development in Mongolia" report by B.Narantsetseg, 2001					

By 2001, total number of Internet active subscribers, including both corporate and individual accounts, reached more than 9,000. Trends indicate this amount will increase by about 8-10 percent annually. Estimated Internet users are currently more than 30,000. The average Internet connectivity time is 10 hours a month per one user.

60 % of total Internet users are organizations, 38 % are households or individual users. Geographically, around 95 % of total users are based in Ulaanbaatar.

Registered domain names under .mn, country top-level domain, are divided into the

under .MN domain hosted on local ISP's servers. 10 % of total number of websites belonged to government, 14 % to educational, 61 % to business community, 13 % to NGOs, and rest to individuals.

Those web sites are distributed and allocated on 35[10] web servers supported and

2% 10% 13% 14% 61%

Government
Education
Business
NGO
Personal

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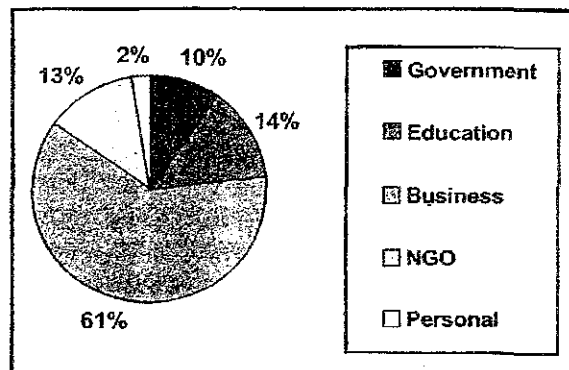
[9] MN domain registration, http://www.nic.mn
[10] Unofficial report, 2000

managed by local ISPs. About 22 % of web servers are based on Linux operating system, 10 % are on Solaris and about 60 % are based on WindowsNT/2000. Hundreds of Mongolia related or directed websites are running on overseas web servers under .com domain.

As analysis shows 10-15%[11] of total websites are frequently updated — alive — sites with dynamic content. Nearly all content is developed for information purposes (brochure-ware), and very few sites have interactive or catalog based services.

5.3 ICT in Daily Life

Internet, telephones, mobile phone, faxes, web and other ICT related services are becoming part of everyday life, used widely by businesses, governments, and communities. ICT services are not only used for the communication purposes, but also widely used for online shopping, banking, learning, education, business process integration, etc. While utilization of telephones and mobile phones remains very high within both households and organizations, Internet and fax are rarely used within private households. Today Internet and fax is most widely used by business entities and organizations. In last two years mobile phone have became more popular, with nearly one of five persons in Ulaanbaatar carrying a personal mobile phone.

From the survey conducted by the ICT team among the 500 individuals, about 11 % of individual users have Internet access from home, about 40 % of users use Internet from their office or school during office hours, and 33 % from Internet cafés or Internet public service centers.

From the survey conducted among 150 organizations, nearly 30% of organizations use a PBX-office telephone exchange. 5% of total households and more than 90% of organizations have or use computers in their everyday life. According to the Telecom survey, 80% of households and 90% of offices in Ulaanbaatar have telephone.

Internet gaming, online chat, and web browsing are most popular services among Internet users. Web based free email services such as Yahoo, Hotmail, MongoliaOnline are widely used by communities, especially at Internet cafes or Internet centers.

5.4 ICT in Workplace

Modern ICT technologies are aggressively diffusing into the business community. However, based on survey[12], the level of utilization is different among various companies depending on size and type of business. Activity ranges span companies which primarily use computers for simple word-processing, preparing documents for printing, calculation and accounting/ bookkeeping for company finance, and some basic Internet services such as email, information searches, and other web based activity.

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[11] Survey report, "Cross Border E-Services" UNDP project, 2001
[12] Survey report, "Cross Border E-Services" UNDP project, 2001

6. INTERNET IN EDUCATION

6.1 Computer penetration

According to Ministry of Education, Culture, Science and Technology statistics, 506,000 children attend in 683 secondary schools, from which 95 schools are in Ulaanbaatar and 511 schools are in provinces. There are about 740 PCs in Ulaanbaatar schools and 770 PCs are available in rural schools. By 2000, 55 schools in Ulaanbaatar and 8 schools in provinces had basic Internet email access. One PC is available for every 333 school children, and computer availability in schools are 2.4 PCs per one school.

Internet and computer penetration in colleges and universities is growing and is quite promising. The total number of PCs in colleges and universities added to more than 3,000,[13] where about 35 % are installed at the Science and Technology University, with more than 70% allocated for training or laboratory research activities.

6.2 Access to Internet

In 1999 Ministry of Education, Science, Technology and Culture allocated aid funds to finance an educational Internet project. The project was successfully implemented, and a new non-commercial ISP- Erdemnet was founded. Erdemnet's mission is to provide Internet services to education sectors and schools at low charge. Erdemnet has full-duplex 1 Mbps satellite connection to AT&T, a major USA backbone network.

80 % of state owned colleges and universities have established internal LANs.

Currently 15 universities and colleges are connected to Internet via a high-speed wireless network, and 40 secondary schools have dial access to the Internet through Erdemnet.

The first of 3 schools are connected to Internet thorugh support of the International Development Research Center (IDRC/Canada), and 33 schools received a grant to for establishing email access to Internet from the Mongolian Foundation for Open Society (MFOS).

The Ulaanbaatar Central Metropolitan Library is connected to the Internet with a 64Kbps leased line, and has implemented dynamic library website to provide online library services through support of IDRC in 1998.

MFOS offered a grant to 10 libraries for email access to the Internet, 8 of which are in aimags and 2 in Ulaanbaatar.

6.3 Internet/computer skills for non-ICT employees

Internet and computer skills of non-ICT employees are considered unsatisfactory due to low computerization and financial constraints to purchase new software and application systems at their workplace. Computer and Internet usage is limited to basic applications such as word-processing, spreadsheet, e-mail and web browsing.

The existing IT training centers offer short-term classes of basic applications like word-processing, spreadsheet system

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[13] Presentation by Dr. D.Badarch, President of Science and Technology University, 2001

(e.g. MS Word, Excel), Internet-browsers (e.g. Netscape, MS Explorer). More advanced studies are not available.

6.4 Technology-based Distance Education

There are ongoing UNESCO supported grant projects for radio-based informal education.

IDRC initiated a pilot project on Web-based Distance Education in Mongolia in 2001.

Finally, the World Bank is planning to establish a GDLN center fully equipped with multimedia, video and audio conferencing facilities for government officials' training by 2002.

CONCLUSION

Based on analysis of information gathered during the study, Mongolia E-Readiness SWOT analysis is represented as follows:

Strengths

High literacy rate
High percentage of young people
Quick-learner, easily adapts to new situation
Good Telecommunications and Internet Infrastructure in capital city
Technology availability
Private sector leadership
Government vision
Donor's commitment for ICT development
Attitude (readiness)

Weaknesses

Low-population density & vast territory
Rural isolation (geographic, human resource difference)
Poor level of penetration of ICT services in rural area
Language standard
No international approved Unicode of Mongolian scripts
Weak financial institutions
Lack of online local content (paper-based source of information/data)
Lack of information processing standard
Inadequate implementation of legal framework
No government long-term specific action plan
Lack of adequate, internationally recognized training institutions/centers
Lack of certified professionals in ICT

Opportunities

Small population potential can be used efficiently
IT enabled services/jobs
Entry opportunities to international market
Integration of Mongolia to world information society
Creation of financial markets
Efficient coordination & increased accountability
Socio-economic development
Ecology-friendly industry

Threats

Migration of qualified-labor force from rural to bigger cities
Obstacles of infrastructure (transport, road) development

Assessment Indicators for E-Readiness of Mongolia to the Networked World

The indicators are rated following HUG assessment methodology guide, ranking each of them by levels of One (for lowest) through Four (for highest).

Assessment Indicators		Rates		
		Country	Ulaanbaatar	Rural
Network Access				
Information Infrastructure		2	3	
Internet Availability		3	4	
Internet Affordability		2	3	
Network Speed and Quality		2	3	
Hardware and Software		2	2	
Service and Support		3	3.5	
Additional Factors	Transport Infrastructure	3	4	
	Distribution channels	2.5	3.5	
	Electricity	2.5	4	
	Local conditions	3	3	
	Wireless communications	+	+	
Networked Learning				
School's access to Information and Communications Technologies (ICT)		2	3	
Enhancing Education with ICT		2	2	
Developing the ICT workforce		2	2	
Networked Society				
People and organizations online		2	3	
Locally relevant content		1.5	2	
ICT in everyday life		2	3	
ICT in the workplace		2	2.5	
Networked Economy				
ICT employment opportunities		2	2.5	
B2C Electronic commerce		2	3	
B2B Electronic commerce		2	2	
E-Government		2	2	
Networked Policy				
Telecommunications regulation		2	2	2
ICT trade policy		4	4	4

5. CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY DEVELOPMENT OF MONGOLIA BY YEAR 2010 (ICT VISION UP TO 2010)

5. CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY DEVELOPMENT OF MONGOLIA BY YEAR 2010

ICT VISION UP TO 2010

The current vision is defined considering information and communication technology as a major accelerator to develop Mongolia in 21st century, which provides favorable conditions for development of government-legislation, economy-business, people-society frameworks and based on necessity to establish state policy and regulatory regimes.

One. Mission

The mission of the ICT development vision in Mongolia is to develop a knowledge-based society and to improve the quality of people's lives.

Two. Principle

A principle to ensure accessible and flexible info structure, the main information service-provider.

Three. Goals

1. Within Government-Legislation framework:

The government is the builder of the an informatized social structure, the open information and service-provider.

2. Within Business- Economy framework:

To create a business environment capable to ensure efficient integration into the world's economy, to enhance intellectual capacities of domestic, national products and improve their competitiveness.

3. Within Human Development framework:

Irregardless of where citizens live, to ensure opportunities for their equal and active participation in social life, for improving qualities of life and freely communication with each other and the world community.

Four. Strategy and operational objectives

I. Objectives of Government-Legislation framework

II   The following are strategic objectives to be implemented within government-legislation framework:

1. Creation and development of a favorable legal and development environment.

2. Creation of policy and regulatory regime.

3. Support and development government info structure through ICT

Implemented the following activities within framework of first strategic objectives:

1.   The following are directions to develop information and communications technology, creation of legal environment for coordination of information communication

1.1 Streamline the national information communications technology management, policy and regulatory regime.

1.2 Develop culture education and business environment for information society.

1.3 Establish conditions to promote citizens' equal participation, protection of intellectual property rights and copyright and development of fair competition.

1.4 Ensure the openness of government information to society and enable citizens' monitoring of government activities.

1.5 Develop electronic trade commerce and join international treaties and agreements.

2. Develop national standards and recommendations on information and communications technology in accordance with international standards and implement those standards.

Implement the following activities within framework of second strategy objective:

3. Support and reward use and utilization of information communications technology and establish the financial structure

4. Establish a state find to develop information and communications technology

5.   Initiate national movement from state to development information and communications technology.

6.   Compile action plan to development information and communications technology, implement this action a plan through taking necessary coordinating measures to introduce economic and social development in the action plans of that year.

7.   Provide state support to foreign and local investment into development of information and communications technology, implement projects and conduct monitoring activities.

8.   Provide state support to create communication and information infrastructure based on national satellite.

9.   Provide support and implement all kinds of services on ICT

10.   Provide state support and implement fundamental and applied research on ICT

11.   Provide support and implement national production of ICT products

12.   Support the localization of hi-tech technology of information and communications technology

13.   Ensure the state use of software application developed in Mongolia language.

14.   Develop system to ensure information confidentiality, protection and reliable operation.

Implement the following activities within framework of third strategic objective.

15.   Develop public administration information system.

       15.1   Support public administration capacities through information technologies.

       15.2   Develop efficient information relations between state organizations

16.   Establish and develop step-by-step creation and implementation of office automation, information management system, support tools to assist administrative decision-making and management and monitoring automated system.

       16.1   Improve level of office automation of civil servants,

       16.2   Establish and develop the structure of government information network, database and search system

16.3   Introduce and promote use of electronic mailing, Internet and Intranet systems in activities of government.

17.   Connect and further develop government information network in coordination with networks of non-governmental organization and business information networks.

Objectives within Business-Economy framework

The following are strategic goals to be implement within Business-Economy framework

4.   Expansion of ICT business and make it highly efficient economic sector.

5.   Establishment of economic – business profitable and operative info structure

6.   Implement information and communications technology in national production and services.

Implement the following activities within fourth strategic objective.

18.   Bring up an industry for exporting software, hardware and info ware

19.   Develop market for software applications in Mongolian language

20.   Establish in develop information service market.

20.1   Finalize necessary measures to acquire every economic entity with e-mail address in Ulaanbaatar by the year 2002 and for companies in the Aimags- by the year 2010

20.2   Transfer taxation, customs, insurance, banking, finance and other business services into electronic forms

21.   Set up high-tech service centers to support small and medium size enterprises

22.   Establish stock exchange for ICT products.

Implement the following activities within fifth strategic objective

23. Implement electronic commerce and introduce electronic payment tools such as smart card, electronic checks

24.   Introduce Internet as main tool for business, finance and trade information sharing

25.   Establish open information center for state and international tenders

26.   Establish the open information environment for fair competition under market relations.

27.   Set up public service virtual center to protect customers' rights and provide consultation.

Implement the following activities within sixth strategic objective

28.   Implement electronic trade and commerce methods to improve the export of national products (such as cashmere, gold, copper, carpets, wool, tourism, fur and skins, raw materials, stamps and others)

29.   Improve the production and productivity through introduction of bar codes, smart cards and other electronic methods

30.   Widely implement electronic value-added services

III   Goals within Human Development framework

The following are strategic goals to be implemented within Human Development framework:

7.   Provide opportunities for active and equal participation of citizens in social relations

8.   Establish info-structure for open access to information by citizens.

9.   Implement information and communications technology in social sector

Implement the following activities within seventh strategic objective.

31.   Ensure importance of information needs, intellectual wealth and capacities in human life.

32.   Support and ensure equal participations of citizens in relations using ICT advantageous features, not depending from religions, political opinions, race, age and center.

33.   Widely utilize information and communications technology for job search, employment, improve work performance quality and level.

34.   Create structure to provide education on information and communications technology for all citizens.

Implement the following activities within eighth strategic objective

35.   Set up knowledge and education-based high-tech centers in Ulaanbaatar and the centers of the socio-economic development regions.

36.   Create a set of possibilities to access information technologies at mobile sights running sustainable common services libraries and aimags and soum schools.

37.   Provide opportunities for household to receive newspapers, press releases and other information in timely manner from desirable sources of information.

38.   Create info structure for the following branches of such as law, legislation, banking, insurance, agriculture, industry, infrastructure, trade and commerce, science, technology, health, education, environment, social protection, labor markets, history, culture, arts and others.

39.   Resolve in detail human resource development issue of the national info structure (user, trainer, specialist)

Implement the following activities within ninth strategic objectives

40.   Provide all kinds of information services to 30% or more households

41.   Provide opportunities to make all types of electronic services accessible to every citizen:

41.1   Introduce electronic version of library system such as ordering, search and others

41.2   Provide opportunities for distance employment

41.3   Introduce electronic versions for all kinds of citizens' advisory services.

41.4   Develop open learning through distance learning and education

41.5   Implement tele-diagnosis, treatment expert system at soum and settlements level

41.6   Introduce electronic service for leisure and entertainment services (virtual libraries, museums, culture, centers, game centers, interest groups)

42.   Widely use information and communications technology for questionnaires and social surveys.

6. ACTION PROGRAMME (2000 – 2004) (GOVERNMENT OF MONGOLIA: JAN. 2001)

THE GOVERNMENT OF MONGOLIA

ACTION PROGRAM
(2000-2004)

Ulaanbaatar, January 2001

ACTION PROGRAM OF THE GOVERNMENT OF MONGOLIA

The Government of Mongolia formed as a result of the third parliamentary elections defines its Action Program for the next four years on the basis of the election program of the MPRP.

The key objectives of the Action Program of the Government of Mongolia are to:

- Continue and deepen the economic reform and ensure higher economic growth;

- Pursue an export-oriented economic policy and sustain higher economic growth;

- Respect and preserve education and culture, and promote human factor - the keystone of the development;

- Improve the living standard of people by streamlining the distribution of wealth and income, and develop an effective system of social welfare;

- Adopt and implement regional development concept and on this basis, narrow the gap between the development and living standard in the rural and urban areas;

- Formulate and effectively implement a social and economic development policy, tailored to the specific conditions of Mongolia, and set up highly efficient and accountable Governance.

One. SOCIAL POLICY

The key objectives of the social sector lie in creating an environment for human development, improving the living standard of citizens, ensuring an equal access to social services, and reducing unemployment and poverty.

1.   An environment which provides people with equal opportunity and access to education shall be created; the system of basic education and all types of professional training shall be developed in compliance with individual's interest, needs of the society and the market force; and a system that provides with modern education shall be established.

- Increase investment and capital repair in the education sector;

- Expand and construct buildings for crowded schools and maintain the rural school buildings to meet the normal requirements of educational activities;

- Support and encourage private Investment in the education sector;

- Computerize all secondary schools and install the Internet;

- Redesign the education content in order to prepare young generation for the future life and work and to teach them the traditional and as well as modern production technologies; Enforce educational environment standards; and, adopt the quality evaluation system;

- Actively seek possibilities for mutual acceptance of educational documents by domestic and foreign schools;

- Review regulations on accreditation of professional schools and take measure to improve quality of schooling;

- Improve text book writing, publishing and distribution systems;

- Expand secondary school attendance and fully subsidize expenses related to the school dormitory;

- Provide children of vulnerable group families and those families with more than three children attending schools starting 2000-2001 school year with free textbooks and stationary;

- Expand scope of pre-school education activities, improve kindergarten attendance and introduce a new method of training children at home school;

- Welcome branches of colleges and universities of developed countries in Mongolia and provide them an opportunity to function normally and permanently; Support with tuition to students of such institutions;

- Resolve issues of providing grants and awards to talented and academically brilliant students of domestic universities and colleges;

- Grant scholarships to domestic universities and college students of poor and herder's family and a student of a family with more than two children attending higher education schools;

- Take measures to ensure that domestic university and college students receive the same benefits and allowances in accordance with the international practice, and support students to improve their lives by working during non-class hours;

- Effectively conduct informal and distance education, and specialized training; Provide drop-outs with necessary training and reduce substantially illiteracy rate;

- Formulate a policy designed at staffing Government institutions and organizations with qualified personnel; Make an request of such personnel according to needs and requirements and ensure that contracted students have a guaranteed job upon graduation;

- Increase the number of students in MA and Ph.D. degrees in developed countries; Set up the requirements to learn and use internationally accepted languages as a door to the latest information and new technology;

- Renew training and retraining system of teacher and education management staff;

- Upgrade and intensify professional training.

2.   The quality of health service and health preventive measures shall be developed to international standards and on this basis the objectives to improve population health and increase the average life expectancy shall be achieved.   These objectives include the following:

- Budget allocations to the basic health care and services shall be increased each year;

- Free preventive medical check-ups, diagnosis and laboratory testing at Government–run hospitals shall be introduced by way of revising the types of medical car and services covered by health, insurance and the latter shall be developed independently;

- A system of providing basic medical assistance through family doctors shall be introduced;

- An immunization fund shall be set up measures designed at gradually decreasing and eventually eliminating infectious diseases using preventive vaccines shall be taken;

- Free medical services shall be provided to vulnerable groups, i.e., the elderly, female headed households with many children, adolescents and handicapped people;

- Programs on protecting maternal and infant health, and reducing infant and maternal mortality shall be financed and implemented by the Government;

- Within the framework of an integrated drug policy the availability of medical drugs shall be improved and quality control shall be tightened. Abnormal practices of patients paying the ambulance fuel cost and drugs used during therapy shall be eliminated;

- A national Healthcare Technology Program shall be formulated and implemented

- Diagnostic and therapeutic centers shall be set up in economic regions and they shall be furnished with modern medical equipment and staffed with qualified & doctors;

- Not less than 40% of ambulance fleet in soums and 60% in aimag centers and the capital city shall be renovated;

- Soum hospital development program shall be implemented and soum hospitals shall be provided with designated premises and equipment, the access to and the quality of medical services to rural

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population shall be improved by way of creating the and create conditions and incentives for doctors and health workers to improve their knowledge and profession, and to work continuously in one place;

- Measures shall be taken to protect the health of the population, and in particular by encouraging the extensive utilization of mineral spring care services in rehabilitative therapy;

- Private health institutions shall be supported and their coverage by the health insurance fund shall be expanded;

- The quality of medical services to the population shall be improved by way of improving the quality of certified health institutions & medical doctors system;

- Big sports shall be patronized. Mass physical culture and sports shall be developed extensively to protect population health and promote physical health of shall be patronized young people.

3.   The Government shall work to ensure an intensive development of national culture and arts in conformity with the world cultural achievements and values and the unique features of Oriental culture. Within this context, the Government shall:

- Improve institutional set up of cultural and art institutions and strengthen their management;

- Develop traditional culture and art in combination with classical and modern art; Introduce into practice universal norms and standards of civilized human relations such as the study and advocacy of and respect for national language and culture;

- Implement projects on the protection and rehabilitation of monuments in Harhorin and of those pertaining to the period of the Turks in Mongolia;

- Patronize classical and children's art and books, increase financial support to their creators in order for them to take part in international contests and to improve their professionalism;

- Re-open soum culture centers and libraries and increase the scope and coverage of cultural, art and information services provided to the rural population;

- Build a Children's Book Palace;

- Support outstanding artists and sportsmen;

- While ensuring the religious freedom of people, the Government shall support the research of traditional religion which is a cultural, intellectual and ethical heritage of the Mongolian people and shall support the revival, inheritance and development of religious culture;

- The activities of all educational institutions, and cultural & scientific organizations shall be directed at promoting national spiritual traditions of the Mongolians such as respect for the elderly and complying with humane morality of ancestors.

4. The Government shall implement a national program on acquiring a relative development edge by way of boosting scientific & technological capabilities, and shall work to increase the evaluation of works by scientists and researchers. Within this framework, the Government shall:

- Formulate and start implementing a long-term national program on the development of Mongolia's science   and technology up to the year 2010;

- Establish a self-financing and independent science-education-production complex in line with the Long-term development program priorities;

- Increase government orders for priority research on traditional technology, biotechnology, new materials, information technology and new energy sources, support & encourage their application into production;

- Increase the number of researchers and scholars to be trained in the country and abroad in   priority areas of science and technology;

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- Establish an integrated scientific and technological information network and database; enrich research libraries fund and improve their usage;

- Increase the supply of necessary instruments, equipment, chemical reagents and other materials for research institutions ;

- Improve and expand cooperation and coordination among scientific, educational and production organizations; increase the evaluation of intellectual products and streamline related legislation;

- Cooperate actively with international organizations and foreign countries in the field of science and technology; and support the establishment of joint laboratories and centers.

5. The Government shall improve the system of wealth and income distribution, halt the decline in the living standard of the people, narrow income gap among social groups and eliminate absolute poverty. For this purpose, the Government shall:

- Reduce by twice, as compared to 1999, the number of poor households living under the poverty line through the implementation of a set of social and economic measures to prevent living standard decline and the creation of jobs for able-bodied and working age poor citizens;

- Starting this year, gradually increase the minimum wage to triple it as compared to the level at the beginning of 2000;

- Increase the salary of civil servants every year starting from 2001 to double it more than the present level;

- Improve the working and living conditions of civil servants and set up a concessional credit fund designed at providing loan to them for construction of private houses;

- Grant special allowances to civil servants, teachers and doctors working in remote and desert areas;

- Streamline the national social welfare system and increase its capacity;

- Improve social insurance relations and take measures to protect children, family members and relatives from risks by bringing them under the insurance system;

- Gradually increase the size of pensions and allowances provided from the Social Security Fund starting from 2001 to twice that of today's level;

- Increase to the minimum pension level the compensatory pension of those who have retired before their retirement age due to administrative arrangements;

- Fully introduce the notional individual pension account;

- Expand social insurance coverage and strengthen the responsibility of timely payment of insurance contributions; improve self financing of the social insurance fund;

- Revise and enforce labor safety and sanitary standards in accordance with the Labor Code;

- Enforce new regulation on payment of benefits from industrial accident and professional illness insurance fund for disabled people during their injury period caused by industrial accident and professional illness, and expenses incurred during care and treatment;

- Cover herders and self employed citizens under social insurance and improve their social welfare;

- Establish and enforce a procedure on granting long-term soft loan to young families for construction of private houses; resolve the issue of privatization of apartments owned by organizations;

- Increase the number and types of benefits and services rendered to senior veterans;

- Improve social care for poor and disabled people, and mothers with many children;

- Support and encourage the creation of new jobs as a part of a set of measures to create better employment opportunities. Promote micro-credit;

- Provide opportunities for people not covered by unemployment insurance and for long-term unemployed people with professional training and labor market activities;

- Pay attention to creating favorable conditions for neglected children to live in their own homes and take measures to provide them with assistance and services;

- Improve the quality of training at vocational education and production centers;

- Establish a credit fund to promote small and medium size enterprises and small-scale crop, vegetable, fruit, berry, and poultry farming in rural areas;

- Create a favorable legal environment for the protection of the rights of Mongolian citizens working abroad and for export and import of labor;

- Formulate and implement a policy on population migration in accordance with regional development.

Two. ECONOMIC POLICY

Sustainable and high economic growth shall be ensured by reinforcing macro economic stability and intensifying structural reforms based on export-oriented and private sector led economy. Priority shall be given to improving the level of processing mining and animal-origin raw materials and developing export-oriented and tourist industries.

Economic growth shall be accelerated, and shall be increased by 6 percent 2004. In order to achieve these objectives, the following policies shall be implemented:

- Ensure macroeconomic stability;
- Build up sound banking and financial sectors;
- Continue the privatization process and improve its efficiency;
- Restore domestic industries and promote export;
- Intensively develop infrastructure.

1. Ensure macroeconomic stability:

- Stabilize the real exchange rate of the national currency and maintain the inflation rate at an adequate level that would stimulate the economy, production and investment;

- Reduce budget deficit;

- Decrease unemployment by not less than 50%;

- Reduce foreign trade deficit;

- Take a set of legal and economic measures to eliminate the shadow economy;

- Strengthen the independent status of the statistics office and ensure transparency by improving official statistics information system.

Tax issues:

- Expand the basis assessment and develop it to support production, improve collection of taxes, and take comprehensive measures aimed at building the capacity of tax authorities;

- Tighten control on tax imposition and payment, enhance the management for tax arrears and tighten legal regulations;

- Resolve the issue of dual taxation and make the relevant decision available to the public. Reduce tax concession and exemption;

- Pursue a differentiated and flexible customs duty and tax policy in order to promote production and investment in the regions; reduce tax burden on business entities by up to 30 percent;

- Exempt from corporate income taxes for a definite period of time those investors, that have created jobs other than in alcoholic production and its trade in rural areas;

- Take measures to gradually reduce individual income tax imposed on low income people;

- Impose an average of 10% import duty;

- Grant tax holidays on the importation of machinery and equipment, raw and other materials by business entities exporting their goods and products;

- Make public information on registration of customs duty, exemptions, and tax payments.

Fiscal issues:

- Formulate and implement a policy directed at ensuring a stable growth of budget revenue sources;

- Formulate budget proposals in conformity with medium and long-term macroeconomic policies; improve budget financing process and gradually introduce output-based financing;

- Improve the basis of budget expenditure financing norms and standards;

- Streamline treasury cash management system;

- Establish a price risk-proof mechanism of protecting main strategic commodities as gold, copper and cashmere;

- Clearly determine the sources and utilization of special funds, improve their management and organization, and ensure their transparency;

- Provide local governments greater opportunity to generate local budget independently and take measures to strengthen the duties and responsibilities of local representative authorities.

2. Build up sound banking and financial sectors:

- Develop a sound banking system by accelerating the structural reform process, privatizing commercial banks, improving their management and by attracting foreign investment;

- Tighten legal procedures in order to improve responsibilities of debtors and creditors in repayment of the loans extended by commercial banks;

- Restructure the Agricultural Bank into Development Bank, and enhance its competitive edge;

- Create the necessary legal environment related to supporting non-banking financial institutions and developing a better system that mobilizes the remaining balance of insurance companies;

- Pursue flexible monetary and credit policies to expand production services activities and to encourage and promote domestic industry and investment;

- Create a favorable environment for development of securities market, expand its scope and increase information and public awareness campaign;

- Improve supervision over participants' activities in the securities market, develop a system on allocation and distribution of dividends to shareholders, and protect their interests;

- Broaden insurance coverage and increase the number of different types of insurance. Take measures to increase the accountability of insurance companies and make information about them available to the public;

3. Continuation of the privatization process and improving its efficiency:

- Eliminate distortions of the privatization process, strengthen law enforcement and improve accountability;

- Improve the management of privatized entities and pay attention to the final results and efficiency improvement;

- Privatize business entities on the basis of the most appropriate methods allowed by law and accelerate the privatization process;

- Privatize most valuable enterprises with an eye on their economic efficiency and national security concerns;

- Restructure the energy sector and gradually market the government shares in state-owned enterprises in the energy and mining sectors;

- Create a legal environment for privatization of the social sector, and commence social sector privatization;

- Adopt a principle of mobilizing privatization earnings solely for investment purposes.

4. Revival of domestic industries and promotion of export:

Promoting domestic industries:

- Implement the "Cashmere" program, increase export of Mongolian cashmere products and improve their competitiveness on the world market;

- Establish a reserve fund of strategic raw materials such as cashmere and wheat grain and support domestic producers by giving loans for working capital and raw materials purchase;

- Improve the quality of processing of animal-origin raw materials, particularly meat, cashmere, sheep and camel wool, skin and hides;

- Implement "Wool", "Skin and Hides" sub-programs and increase the export of scoured wool and processed skin. Encourage export through revision of standards for preparation of sheep and camel wool, yak and horse hair, skin and hides and improvement of quality of raw materials and products;

- Adopt the "Meat" program, and increase the export of meat and meat products;

- Create greater opportunities for export of meat, wool and leather products by acceding into agreements on veterinary and sanitary conditions;

- Implement projects and programs designed at improving business entity management capacity, enhancing business activity and quality of products;

- Support production and service cooperatives through tax and credit policies, and encourage the creation of new jobs;

- Create the legal environment for establishing free economic zones in Altanbulag, Zamiin Uud and Tsagaannuur and start its implementation;

- Develop an appropriate system of procurement, transportation, storage, and processing of agricultural produce according to market forces. Raw material procurement system shall be organized through the creation of a wholesale trade network;

- Increase foreign and domestic investment, and strengthen the country's competitiveness on the world market;

- Reduce administrative red-tape and develop a "one-stop" system in order to facilitate foreign investment;

- Mobilize revenues generated from the sale of foreign aid products for the purpose of expanding production and services, and improve control through greater information transparency;

- Develop the legal environment for protecting consumer rights, prohibiting unfair competition, and combating monopoly.

Increase mining product export:

- Increase export revenues from the mining industry;

- Support Erdenet plant's efficiency improvement through technological renovation and deepening the level of copper concentrate processing;

- Increase the production capacity of cathode copper to produce 10-15 thousand tons of refined copper a year;

- Increase gold production by 1.5 times from the present level;

- Create conditions for the construction of plants for processing zinc ore deposits in Tomort, gold in Boroo, placer gold deposits in Toson and Bayangol, and start production in the next few years;

- Develop a project for the exploitation of coking coal deposit in Tavan Tolgoi and submit it for consideration by foreign investors;

- Create conditions for the utilization of gold deposit in Tavt, copper deposit in Tsagaan Suvarga and silver ore deposit in Asgat;

- Create an internationally accepted legal environment to protect domestic and foreign investors' rights and set up a tax and financial system in order to attract investment in the geology and mining sectors.

Intensifying geological surveying and creating mineral reserves:

- Enhance geological surveying of oil and oil extracting activities;

- Gradually increase the scale and scope of geological surveying financed from the central government budget to increase it annually at a constant rate of 2.5 times;

- Take a step-by-step measure to create a 1:200,000 scale geological map of Mongolia;

- Conduct a general prospecting work in and create a 1:50,000 scale geological map in a field, not less than 50,000 square kilometers, and with possible long-term mineral deposit and close to the border areas;

- Support private investment in geological surveying by way of creating a favorable investment and taxation environment;

- Continue the work on developing geological information database meeting international information technological requirement and based on geographical information network.

Stop the decline in the farming industry:

- Arrest the decline in the farming industry and create a favorable legal and economic environment to ensure its stable growth;

- With a view to improving arable land utilization and ownership, increase the size of fee for neglected arable land and exempt companies, organizations and individuals of land fee provided they harvest a stable crop and efficiently utilize fallow and arable land;

- Meet the domestic needs in high quality grain-seed by way of supporting seed production business entities and research institutions;

- Increase the utilization of irrigated arable land;

- Support initiatives and activities to produce fertilizer;

- Formulate and implement a constructive credit policy of promoting the crop farming industry;

- Support efforts to establish business entities that provide technical services to crop farming companies and individuals;

- Intensify the implementation of the "Green Revolution" national program;

- Accelerate the implementation of the "White Revolution" national program and improve the supply of dairy products to urban population;

- Improve the food production standard and quality control system, and create an environment that ensures food security.

Developing the tourist industry as a priority sector:

- Streamline cross-sectoral coordination and management of the implementation of the National Tourism Master Plan;

- Develop tourist infrastructures in Ulaanbaatar, Harhorin, Omnogobi and Huvsgul;

- Upgrade the quality of tourism services international standard.

5. Development of regional infrastructure:

- Extensively engage unemployed people in road construction, repair and maintenance work in order to provide them with a regular source of income.

Three. REGIONAL AND RURAL DEVELOPMENT POLICY

The economy shall be developed according to regions, infrastructure will be set up in the rural areas and a rural-oriented taxation, investment and credit policies shall be implemented which would create favorable conditions for people in the given regions to continue to live and work there. Towards this end, the Government shall:

- Take a set of measures designed at developing a concept of regional development and its legal coordination, defining the strategy for regional, aimag and rural development and ensuring their relatively uniform progress;

- Implement a differentiated tax and customs policy designed at encouraging investment and industrial growth in the rural areas;

- Set up a network of wholesale trade of raw materials, goods and food stuffs in each region and take measures to supply the herders and the general rural population with cheap but good quality food and consumer goods;

- Regulate by law economic and legal relations of herder households and farmers, support initiatives by herders to improve their livelihood and business through the establishment of co-operatives and farms;

- Improve the system of maintaining herds under state protection in conformity with the market forces, direct the government policy towards supporting veterinary services, irrigation of pastureland and the creation of buffer fodder stock;

- Introduce a livestock insurance system;

- Set up a mechanism of protecting livestock from natural disasters and establish a disaster relief network.. Establish inter-Aimag reserve pastureland in the regions;

- Take measures to recover within the next 2-3 years the damage caused by the zud disaster in 1999-2000. Under community scrutiny and participation, implement measures on restocking herder households whose income level has dropped below the poverty line due to the zud disaster;

- Promote cooperation between herders, farmers, business entities and research institutions, and support initiatives designed at fostering close linkage between production and science;

- Improve the system of protecting livestock health, renew, in conjunction with market forces, legal regulations on animal gene pool, animal health protection and quarantine;

- Improve the quality of work to fight animal diseases: brucellosis, glanders, tuberculosis, leukocyte, anemia in the horses, build up the capacity of veterinary laboratories and support efforts to intensify animal husbandry;

- Improve water supply in not less than 70 per cent of the pastureland in the desert and steppe regions by constructing new wells and repairing the damaged and abandoned ones;

- Resolve the issue of ownership of watering points;

- Improve water supply and public services in aimag centers, take a set of measures on supplying the population with clean and safe water meeting hygienic and health requirements. A stage-by-stage measure shall be taken to soften and purify human-consumption water with a high level of mineralization and hardness;

- Public bath houses will be built in all Aimag and Soum centers;

- Public services in Ulaanbaatar, Hovd, Ulaangom, Ulgii, Murun and Uliastai will be reintroduced and the rehabilitation of similar services in the central and eight eastern aimags will be implemented;

- Renew diesel generators in more than 80 soums, hook 2 aimag and 40 soum centers to the central power grid;

- Renewable sources of energy will be supplied to large consumers in soum centers;

- Measures will be taken to meet the basic needs of 100,000 herder households with solar and wind generators;

- Measures will be taken to improve and renew the railway rolling stock and railway lines, and implement anti-flood security measures;

- Measures will be taken to enhance the competitiveness of the Mongolian railway in the regional and continental railway network;

- Air space usage on the territory of Mongolia will be improved through the introduction of new navigation and communication technology in the civil aviation sector;

- Support will be given to renovating the fleet of civil aviation;

- The system of inspecting the technical conditions of automobiles shall be renewed and streamlined to meet internationally recognized standards;

- International road communication link will be expanded and developed;

- Reinforced concrete bridges along the major highways in Bulgan's Egiin, Zavkhan's Tes and Buyant, Selenge's Zuunburen rivers will be commissioned, and the construction of reinforced concrete bridges over Khumuult river in Hentii and Sarkhairkhan river in Zavkhan will commence;

- Technical support will be provided to equip all aimag centers with IDD and DDD connections, the automation level of trunk-call telephone lines will be increased to 85%, and the number of telephone subscribers will be raised by 20%;

- Digital technology will be introduced at radio and TV studios, and the entire transmission network, and all aimag centers will have FM radio stations;

- Increase the number of radio and TV channels beamed to rural areas and improve the quality of radio and TV broadcast transmission;

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- Improve the quality of basic and introduce new types of postal services.. Improve delivery services of subscribed newspapers and posts to baghs;

- Expand the range of mobile communication. Develop information technology and internet as a tool for intensifying economic relations;

- Efforts will be exerted to implement the Mongolian Law on the Use of Sea and Marine Wealth;

- Elaborate and implement a Master Plan of construction and building materials industry;

- Support technological renovation of coalmines and take measures to improve coal supply in the rural areas.

In the western region:

- Measures will be taken to build hydropower stations on Durgun, Ulaangom and Uyench rivers and set up an independent energy system of the western zone;

- The airports in Khovd and Ulgii will be renovated;

- The construction of the Khovd-Ulaangom-Khandgait and Ulgii-Tsagaannuur roads, and the work to link the Gobi Altai-Khovd-Uvs-Bayan Ulgii highway to he Arvaikheer-Bayankhongor highway will be continued. The construction of the Tsetserleg-Tosontsengel-Uliastai road and Bulgan-Yarant road in Khovd will begin;

- Measures will be taken to install VSAT stations in the administrative centers of Bayankhongor, Gobi-Altai, Khovd, Bayan-Ulgii, Uvs and Zavkhan aimags;

- The radio transmission system between Zavkhan and Uvs aimag centers as well as regional radio relay stations will be transferred into digital technology.

In the khangai region:

- The Chargait hydropower station will be built and effort to seek funding for the Egiin hydropower station will be intensified. A thermal power station will be built basing on the Bayanteeg coal deposit and the center of Bayankhongor aimag will be hooked to the central power grid;

- The construction of the Erdenet-Bulgan-Murun road will begin. The Harhorin-Tsetserleg highway will be commissioned;

- Measures will be taken to expand and renovate automatic telephone exchanges and cable lines will be laid to the centers of Arkhangai and Huvsgul aimags.

In the central region:

- The thermal power station in Dalanzadgad will be commissioned;

- The Darkhan-Erdenet and Nalaikh-Maant-Choir paved roads will be commissioned and the construction of the Choir- Sainshand- Zamyn Uud road will begin;

- Measures will be taken to transfer the radio communication systems in the soums of Tuv and Selenge aimags from single to multiple spots;

- Measures will be taken to install VSAT stations in Gobisumber, Dornogobi, Dundgobi and Umnugobi aimag centers.

In the eastern region:

- The expansion and renovation of the Choibalsan thermal power station will be completed to provide reliable sources of energy to the regional consumers;

- The construction of the Erdene soum-Baganuur-Undurkhaan-Choibalsan road will be continued;

- The Choibalsan and Baruun Urt airports will be expanded and renovated;

- A fiber cable network, connecting the centers of Hentii, Sukhbaatar and Dornod aimags will be established and the communication equipment of nearby soums and settlements will be expanded and renovated with digital technology;

In the capital city:

- Consumers will be provided with reliable services through the introduction of new technology in the power, heating and water supply systems of Ulaanbaatar. The Master Plan of developing Ulaanbaatar city will be revised;

- A special fund for the construction of apartment houses will be set up designed at increasing the availability of housing and alongside this a housing complex for 1000 families of civil servants and young people will be built;

- The City Road Fund will be used for the repair and renovation of roads and bridges, and roads in the residential estates will be repaired thoroughly;

- International Direct Dialing exchange will be expanded;

- The ger districts will be developed under an integrated policy matrix and their water, communication, transport supply and everyday services will be upgraded. Land entitlement rights will be consolidated which will guarantee a normal livelihood.

Four : NATURE AND ENVIRONMENT POLICY

The Government shall aim to rationally utilize and rehabilitate natural resources with due consideration of their capacity to ensure an eco-oriented economic growth; precisely define civil rights and responsibilities related to the utilization and protection of local natural resources and create a mechanism of nature and environment protection by the citizens themselves. Proceeding from this premise, the Government shall:

- Consecutively implement a long-term environment policy and program designed at promoting sustainable growth with due consideration of regional social and economic development;

- Improve legal co-ordination designed at ensuring concerted actions of the ministries, local governments, NGO's and individuals successfully implementing environment policy and policy measures;

- Support the introduction of advanced and eco-friendly technology and the development of ecologically clean products;

- Determine the eco-economic and deficiency cost and criteria of nature and its main riches, and on this basis, adopt and enforce standards for the utilization, protection and rehabilitation of the natural resources;

- Establish anew fees and dues for the utilization of natural resources and pollution of the nature and environment, and on this basis, set up a reliable financial base for the protection and rehabilitation of the nature and environment;

- The rational utilization, protection and rehabilitation of the forest resources will be intensified. Actions will be taken to implement the initial goals set forth in the National Forest program;

- Put in place a legal monitoring and incentive system for the introduction of eco-friendly technology in mines;

- Expand the network of protected areas, improve their management. Implement measures to improve the living standards of communities living in protected parks and areas;

- Take measures to multiply rare and endangered species of flora and fauna;

- Streamline the system of environment monitoring and make it more efficient. Renew the system of monitoring the environment, meteorology, pollution and radiation levels, and renew its technology;

- Bring the system of environment information and statistical database to international standard;

- Expand the rights of citizens to land ownership and utilization, and on this basis the relevant legal environment shall be streamlined to ensure that the citizens reap the benefits of the land for a long period of time;

- Raise interests in employing land for business purposes and improve land utilization in order to ensure that citizens and organizations have a long-term ownership of land;

- The mechanism of long-term land entitlement shall be streamlined to attract foreign investment and ensure a stable operation of foreign invested entities;

- The process of desertification on the territory of Mongolia will be studied within the framework of projects and in collaboration with international organizations, and on this basis, desertification and soil erosion will be prevented;

- Measures will be taken to prevent soil erosion. Actions will be taken to protect cultivated crops from hail, increase the level of precipitation for the purpose of increasing the harvest yield and extinguishing forest and steppe fires in remote inaccessible areas;

- Efforts to combat forest and steppe pests and rodents, check the spread of harmful plants will be intensified by introducing eco-friendly technology, and starting in the year 2000, the acreage of land for destroying *Brandt vole* shall be increased by 1.5 times;

- The question of classification, transportation and disposal of wastes in Ulaanbaatar city and building an eco-friendly recycling plant will be considered in a systematic manner. Preparatory work will be made on classifying, transporting and disposing of wastes and building recycling plants in the larger cities of Darkhan, Erdenet and Choibalsan;

- Consecutive measures will be taken to providing households with efficient stoves in order to reduce pollution level in Ulaanbaatar;

- Bilateral and multilateral cooperation in the sphere of nature and environment protection will be expanded. Measures will be taken to increase support and assistance from foreign countries and international organizations in addressing pressing ecological problems.

Five. DEFENSE AND FOREIGN POLICY

1. The defense system and military reform policy of Mongolia will be implemented consistently in accordance with the principles of the state military policy and measures will be taken to eradicate distortions and drawbacks that emerged in the system in recent years. To accomplish the above, the Government shall:

- Revise the defense and other related laws and legislation, and strengthen civil monitoring of activities of the armed forces and other military organizations;

- Define the priorities in upgrading the technical capacity of the armed forces and the frontier troops, and the initial stage of the program will be launched;

- Streamline the structure of military forces, deepen reforms, and build the capacity of the military;

- Upgrade the professionalism of military personnel by way of improving the terms and conditions for contractual military service on a voluntary basis;

- Revise and improve the content of training and preparedness of the personnel with due consideration of the present objectives and needs, and at the same time, besides their major duties and responsibilities, to render humanitarian assistance to the civilians in eliminating the consequences of natural disasters and industrial accidents;

-   Train people recruited for alternative military service in such concrete areas as preventing and fighting natural disasters and industrial accidents;

-   Armed forces personnel shall be trained to serve in UN peacekeeping efforts.

2. Measures will be taken to protecting and preserving the independence and sovereignty of Mongolia and creating an environment for a peaceful life to its people. Proceeding from this premise, the Government sets forth the following objectives:

-   The implementation of the Mongolian state border policy, laws and legislation on border and international agreements acceded to by the country shall be evaluated and their legal coordination shall be improved. An independent frontier troop system will be created;

-   Actions will be taken to check cross-border robbery and in particular measures to prevent border violations Uvs, Zavkhan, Huvsgul, Dornod and Sukhbaatar aimags will be intensified and the inviolability of the border will be guaranteed;

-   Communication and technical supply as well as transport means of the frontiers troops will be improved stage-by-stage;

-   The system of mass voluntary involvement of local organizations and the local community in the protection of the state border will be further improved;

-   Measures will be taken to streamline and renew treaties and agreements on border regime, border ports and passes concluded with the Russian Federation and the People's Republic of China;

-   Efforts will be made to create an environment whereby officers and company sergeant majors in the border areas will have continued interest in working in those areas they are stationed in;

-   The living conditions and social status of military officers and company sergeant majors will be improved; support will be given to their effort to simultaneously acquire dual civilian profession. Assist the family members of military officers and company sergeant majors serving on the border by helping them find a job;

-   Take active part in multilateral effort to strengthen regional security and military confidence and trust, expand bilateral cooperation and foreign relations of the armed forces;

-   Fully address the question of creating funding resources for fighting major industrial accidents and natural disasters;

-   Prevent and eliminate all internal and external factors that could adversely affect the political, economic, civil and ecological aspects of national security;

-   Create peaceful living conditions for the civilians, and expand cooperation between the civilians and the police;

-   Create a legal environment that protects the rights of Mongolian citizens working overseas and foreign citizens living in Mongolia.

3. The Government is committed to consistently implement all the principles and directions outlined in the concepts of national security and foreign policy of Mongolia in keeping with the new national and global circumstances and will energetically pursue an independent, open and multi-prop foreign policy that is consistent with the vital national interests and the principles of sustainable development. The Government, upholding the continuity and integrity of its foreign policy, shall consistently conduct activities designed at strengthening Mongolia's independence, sovereignty and its international position. Within this framework, the Government shall undertake the following actions:

In respect to neighboring countries:

-   Extend good-neighborly relations and all-round cooperation with the neighboring countries on the basis of traditions and trust;

- Extend good neighborly relations, equitable and mutually beneficial cooperation with the Russian Federation in all spheres and directions in keeping with the provisions, the letter and spirit of the Treaty of Friendly Relations and Cooperation between Mongolia and the Russian Federation, and shall make consistent efforts to resolve all outstanding issues;

- Extend good neighborly relations, equitable and mutually beneficial cooperation with the People's Republic of China in accordance with the ideas and provisions of the Treaty of Friendly Relations and Cooperation between Mongolia and the People's Republic of China and the Joint Statement of 1998;

- Promote cultural and humanitarian relations designed at regulating pressing border problems, tapping to the full the opportunities and potentials of economic cooperation, and enhancing its efficiency.

In respect to Asia-Pacific regional countries:

- Conduct an active foreign policy in the Asia-Pacific region, and develop bilateral relations and cooperation with the regional countries;

- The Government shall work to further extend relations and cooperation with the United States of America, taking into consideration the importance of established relationship with the USA in strengthening democracy, the market system in and foreign ties of Mongolia;

- Relations and cooperation of comprehensive partnership established with Japan will be further strengthened and extended;

- Friendly relations and cooperation will be developed with the Republic of Korea, Republic of India and other countries of the Asia-Pacific region;

- Political relations established with the ASEAN member countries, Australia, New Zealand and Canada shall be extended, and the scale and scope of cooperation with them will be strengthened;

- With due respect for traditional historical and cultural links, friendly relations and cooperation will be promoted with the Republic of Turkey, Republic of Kazakhstan and other countries of Central Asia;

- Cooperation with Latin American countries will be fostered within the framework of international organizations and the Government will work to establish trade and economic relationship with the major countries of the region;

- Exchange of bilateral opinions and holding of talks and negotiations on security in the Asia-Pacific region and South East Asia will be conducted energetically and on a regular basis.

In respect to the countries of Europe:

- Considering the importance of the relations established with European countries in strengthening democracy and free market economy in Mongolia, the Government will promote mutually beneficial cooperation with them;

- Partnership relations will be developed with the European Union and cooperation with its member countries, such as Germany, Great Britain, France and Italy will be extended;

- Mutually beneficial cooperation will be developed with other European countries.

In respect to the countries of Middle East and Africa:

- Within the framework of its open foreign policy, the Government will extend relations and in particular, commercial and economic cooperation with the Mid-East and African countries.

On relations with the UN and other international organizations:

- Mongolia will take an active part in the activities of the United Nations, its specialized agencies and other international organizations, and will make efforts to apply their influence and capacity in guaranteeing national security and implementing social and economic objectives;

- The UN General Assembly Resolution on Mongolia's international security and Non-Nuclear Weapon Status, and the Law of Mongolia on a nuclear-weapons free status will be implemented, and the country's Non-Nuclear Weapon Status will be consolidated legally at the international level;

- Mongolia will take an active part in the activities of the Non-Aligned Movement and the Group of 77, and work closely with them on issues that meet the common objectives and interests of developing countries, and will contribute to furthering North-South talks and understanding;

- Mongolia will honor its commitments before international organizations and international agreements;

- Mongolia will study the possibility of acceding to international agreements on human rights, environmental protection, improving the situation of the society's vulnerable groups, multinational issues such as combating organized crimes, terrorism, and drug trafficking, and will cooperate with international organizations in these directions.

Participation in multilateral activities:

- Mongolia will seek constructive means for an effective participation in multilateral processes, talks and negotiations on Asian-Pacific, North-East Asian and Central Asian security issues as well as regional political and economic integration;

- Mongolia will take an energetic part in the ASEAN Regional Forum (ARF) and in the multilateral talks and negotiations of APEC and Asia-Europe designed at promoting political and economic cooperation.

Promoting foreign economic relations:

- Mongolia will conduct a policy designed at preserving the integrity of Mongolia's foreign and economic policies, and directing foreign economic relations to addressing pressing social and economic objectives;

- The Government will work closely with the donor countries and on this basis create a favorable environment for foreign trade and direct foreign investment. Proceeding from this premise, relevant laws and legislation will be improved.

Protecting Mongolian citizen's rights in foreign countries:

- The conditions for overseas travel by Mongolian citizens will be eased, priority will be given to creating the most favorable legal environment for study or work overseas and consular services will be developed to international standards.

In the field of cultural and humanitarian relationship:

- While developing humanitarian relations with foreign countries, the Government will work closely with individuals, NGO's and local authorities and will give priority to encouraging and supporting their activities;

- Mongolia will deal closely with international education, culture, sport and information organizations and funds; acceded to the necessary treaties and agreements; and step up its participation in international humanitarian activities;

- Mongolia will work to increase international interest in Mongolia through the promotion of national culture;

- The Government will conduct a policy of extending ties and relationship with Mongolians living overseas, utilizing and supporting their capacity.

Six. POLICY OF OVERCOMING GOVERNANCE CRISIS AND STRENGTHENING PUBLIC ORDER AND DISCIPLINE

1. The Government shall strive to put in place good governance that would develop and implement state policies efficiently, effectively serve the people, meet their basic needs and establish justice. Proceeding from this premise, the Government shall:

- Develop an integrated legal system of structural and management set-up of the Government, ministries, agencies, administrations and local units, and create a favorable legal framework for their operation;

- Streamline the division of rights and responsibilities, objectives and strategy of the Government and the administrative institutions of all levels in order to eliminate duplication of duties, responsibilities and interruptions in the services provided by the Government to the public;

- Extend the reform in the Government administration and civil services, enhance the knowledge and skills of civil servants, and implement in stages projects and programs designed at building up the capacity of the government institutions;

- Ensure quality and efficiency of services extended by government institutions to the population in terms of taxation, finance, social insurance, civil registration, health and granting of land tenure license;

- Streamline the legal basis of the public sector administration and financing for their subsequent transition to a new constructive and cost-effective structure;

- Eliminate duplicity in granting official licenses and permissions, take measures to reduce the number of licenses and permissions granted by way of enforcing related laws and legislation. Illegal distribution of licenses and permissions will be stopped;

- Improve the forms and methods of interpreting and educating the public in new laws and legislation, support informal training and expand the involvement of NGO's in this effort. Establish the legal framework of an integrated state information network, take measures to ensure efficient distribution of information through the use of modern technology. Define and enforce standards of information exchange among government agencies;

- Improve the registration and monitoring of foreign citizens and set up an information network;

- Give citizens greater opportunity to directly monitor the performance of their elected Citizen's Representative Hural and the executive agencies nominated by the Hural;

- Support the activities of NGO's, expand their involvement in the development and implementation of government policy and in particular in the social sector;

- Integrate the activities of local department, sections and agencies under local governors, and make them directly accountable to the latter;

- Expand trilateral partnership and cooperation of the Government, the trade unions and the employer's association, take measures to involve non-governmental organizations in executing some of the government functions and services on a contractual basis;

- Develop a special policy for homeless children and adults, and alcohol addicts, and take measures for their integration into the society;

- Improve traffic safety and traffic police inspection and patrol activities, and renew their car park;

- Create a peaceful and safe environment for citizens by raising the efficiency and increasing the number of patrol police in towns and settlements, and expand cooperation between the citizens and the police.

2. Improve accountability system of public service, raise and strengthen its reputation and capacity.

- Define the needs for the improvement of the qualification and skills of civil servants, introduce new forms of free training, systematically involve them in post-graduate training both inside the country and overseas, and on this basis the professional skill and knowledge of the civil servants will be improved;

- Improve the registration of the wealth and income of all political appointees and those working in the key state and government positions, and conclude anti-corruption agreement with them;

- Amend the clauses in the Law on Public Service, create an efficient mechanism of protecting the rights of professional civil servants from all kinds of political pressure, concretize job description and terms of reference at all stages, create and introduce a system of accountability and bonus;

- Tighten and improve the efficiency of control on budget revenue and expenditure, utilization, preservation and protection of government property and the ethics of civil servants, and introduce new procedures on independent auditing of financial statements and performance of government organizations;

- Decisively oppose all forms of pressure by state administrative and service organizations on citizens and consumers, all manifestations of abuse of power, introduce rules that will oblige government organizations to consider and monitor applications from citizens;

3. Deepen legal reform and improve the implementation of laws.

- Introduce a system of studying, monitoring and evaluating the implementation and efficiency of laws and legislation;

- Streamline the enforcement of court decisions;

- Draft and submit to the State Ikh Hural for consideration and approval the guidelines on amending laws and legislation by the year of 2004;

- Institute a national human rights organization, take measures to fine tune national laws and legislation with international treaties and conventions on Human Rights to which Mongolia is a party;

- Ensure the equality of parties involved in legal process;

- Create conditions for the safety of state archives and take measures to improve the system of filing and documenting government correspondence;

- Intensify the work on bringing to international standards the coordination of intellectual property rights and accord intellectual property rights laws and legislation with that of international treaties and agreements. Improve the legal environment for the protection of national and traditional intellectual property;

- Improve the organizational structure, linkages and responsibilities of government institutions, and ensure the transparency of their activities;

4. Tasks will be set to decisively combat corruption, bribery and crime, and destroy the basis of their appearance.

- Develop and implement a national anti-corruption Program;

- Improve work on uncovering and preventing new forms of serious crimes such as armed robbery, drug and narcotics trafficking and drug abuse, and production and circulation of counterfeit money;

- Root out gratuity acceptance for providing the government services like income tax collection, imposition of customs duty, issuing of licenses and permissions;

- Reinvestigate obscure criminal cases related to privatization, customs, taxation and banking operations, and inform the public in a transparent manner;

- Introduce a system of public monitoring of discipline and ethics of lawyers and improve the mechanism of their resignation, withdrawing their appointment and making them accountable for their actions;

- Develop and consecutively implement a strategic program guaranteeing independence of lawyers.

7. Policy Document (The Government of Mongolia : Good Governance for Human Security Programme: Jan. 2001)
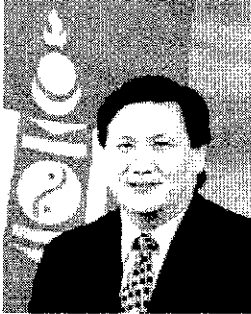
THE GOVERNMENT OF MONGOLIA
GOOD GOVERNANCE FOR HUMAN SECURITY
PROGRAMME

POLICY DOCUMENT

Ulaanbaatar, January 2001

PREFACE

The policy objective to "put in place good governance to efficiently develop and implement state policies, effectively serve the people, meet their basic needs and establish justice" was proposed in the "Action Programme of the Government of Mongolia", which was approved by the State Great Hural (Parliament) Resolution #33 of 2000. Furthermore, the resolution to implement the "Good Governance for Human Security Programme" was incorporated in the "Main socio-economic development objectives of Mongolia in 2001" approved by the State Great Hural (Parliament) Resolution # 45 of 2000.

Decisions approved by the Government Cabinet related to programme policy and strategy of the "Good Governance for Human Security Programme" (hereinafter "the Programme") have been integrated into the present Policy Document of the Government of Mongolia.

The mission of the Programme is to support policy formulation, operationalization and implementation of the priority objectives of the Government Action Program.

Government Cabinet Resolution #161 of 2000 approved the Priorities of Government Actions and in the Paragraph 2 of the Resolution it ordered all ministers and governors at all levels to work towards coherent organization of activities related to the management and organization of the implementation of the Action Program of Government to undertaking of Priorities of the Government Actions and involving central and local public administrative bodies at all levels, NGO's, private sector, mass media, academic institutions and citizens.

This Programme shall play an important role as a mechanism to implement the Government Action Program, particularly, the Government's top priorities.

In order to insure the effective operations of the Component Working Group mechanism of the Programme and other structural units of the Programme, namely the Programme Advisory Committee, Donor Coordination Committee and Programme Management Unit, the Prime Minister will provide overall management for the Programme.

The Programme policy and strategy and this Policy Document were formulated by the Working Group established by Prime Minister's Ordinance #118 of 2000, with the participation of the Component Working Groups.

Likewise, central and local public administrative authorities, and other government organizations (Office of the President, Parliament Secretariat, State Auditing & Inspection Board, Courts' and Prosecutors' Office Secretariats), NGO's, mass media and academic institutions participated in the formulation of the policy document. This will facilitate effective support from these organizations in the implementation of the Programme.

The Government of Mongolia deeply believes that the international donor community will continuously mobilize their efforts as they always have in order to provide vital support to the undertaking of this Programme.

N. ENKHBAYAR, PRIME MINISTER OF MONGOLIA
AND CHAIR OF THE PROGRAMME

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1.0. INTRODUCTION

1.1. Human Security

The policy goal of achieving human security for all Mongolians requires combined ecological, economic, social, political, and cultural actions.

The threats to human security in Mongolia are complex and highly interrelated processes. They include desertification, pollution, vulnerability to natural disasters, economic decline, low levels of investment and project implementation, poverty, low incomes, unemployment, declining health and educational services, poverty, corruption, crime, extreme political swings, and policy discontinuity, as well as technological, economic, and cultural globalization. The highly integrated, holistic approach necessary to confront these threats to human security requires a good governance enabling environment.

1.2. Good Governance

No one ministry left to its own resources can resolve any of these risks to the human security of the Mongolian people, nor take adequate advantage of related opportunities (for example, those inherent in technological globalization). Not even the government with all of its resources can unilaterally resolve any of these risks, especially considering how many of them are closely interrelated. It is necessary for the government, all the powers or state, the private sector, and civil society to work in partnership to reduce these risks to the human security of the Mongolian people. The additional support of the international donor community is also necessary at this stage of national development in an increasingly inter-dependent world.

What are required are national policies that go beyond ministerial, governmental, or even State policies to create consensus among all major actors and stakeholders, opinion formers, and public opinion. This is what can permit the policy continuity and sustainability that can produce meaningful results in the short, medium, and long-term. Extreme political swings and/or continual shifts in policy reduces the probability of results and their long-term impacts.

It is far easier to promulgate a ministerial policy, governmental resolution, or even law approved by a majority of parliament, than to involve and commit the media, academia, other opinion formers, the private sector, civil society, and public opinion. The reward, however, is societal ownership of a policy that can lead to extensive collaboration between the sectors in implementation and greater policy effectiveness, in addition to greater policy continuity and sustainability. This is what can create a good governance enabling environment for human security.

2.0. GOVERNMENT ACTION PRIORITIES

Government Cabinet Resolution # 161 of 23 October 2000 approved Government Action Priorities to intensify implementation of the Government Programme of Action which was approved by State Great Hural (Parliament) Resolution # 33 of 2000. This resolution instructs all ministers and governors at all level to work towards coherent organization of activities related to the management and organization of the implementation of Government's Programme of Action through the implementation of the Government Action Priorities and to involve central and local administrations at all levels, NGOs, private sector, mass media, academic and citizens.

The Government Action Priorities are:

1. To facilitate stabilization of the macro-economy, deepen the reform and intensify restructuring

2. To rehabilitate the banking and financial system

3. To facilitate economic growth by rehabilitating national industry and supporting export oriented industry

4. To support regional and rural development and promote infrastructure development

5. To create an equitable social environment for human development, to improve quality of education, health assistance and access to services at all levels

6. To reduce poverty and unemployment, and to improve the livelihood of the people

7. To implemental environmental policy aimed at providing sustainable development and ecological balance by harmonizing protection of biodiversity with regional socio-economic development

8. To intensify land reform

9. To improve the living environment of the citizenry by reducing air, water and soil pollution in urban areas, and by recycling garbage and waste

10. To remove the governance crisis and create good governance for human security

11. To develop a democratic civil society with strong ethics that secures citizens' basic rights and fundamental democratic principles by facilitating the independence of the judiciary and a free mass media.

3.0. FUNDAMENTAL OBJECTIVES OF THE PROGRAMME

The Government Cabinet session of 18 October 2000 approved in principle the fundamental objectives of the "Good Governance for Human Security Programme", which were proposed within the framework of Government Action Priorities.

The fundamental objectives of the Programme proposed within the framework of the Government Priorities are following by components:

Fundamental Objectives of the Government of Mongolia's "GOOD GOVERNANCE FOR HUMAN SECURITY PROGRAMME"

Priority 1.

To facilitate stabilization of macro-economy, deepen the reform and intensify restructuring

1. To develop production and services, pursue appropriate policy on foreign trade, budget, finance, money and credit and ensure main economic balances
2. To pursue policy to keep inflation in non-crisis situation, keep Tugrig (national currency) rate at comparably stable level
3. To establish reliable sources of state revenue and decrease budget deficit through pursuing optimal tax policy, expanding its base, and improving tax collection
4. To decrease the foreign trade deficit and attract more foreign investment
5. To create a legal environment to restrict the shadow economy
6. To privatize large, high value economic entities
7. To undertake restructuring in the energy and mining sectors and gradually privatize the energy sector
8. To create a legal base for privatization of the social sector and begin privatization
9. To intensify land reform and raise its contribution to the economy

Priority 2.

To rehabilitate the banking and financial system

1. To privatize some state - owned and partially state owned commercial banks and improve their financial capability
2. To expand the operational framework of banking and financial institutions through improving the legal environment
3. To create a legal and technical environment to facilitate prompt non-cash payment systems, and ensure efficient payment flows
4. To introduce strict financial and payment discipline, and establish habits of fulfilling duties assigned in financial contracts and agreements
5. To introduce saving's insurance scheme for protecting interests of account holders
6. To expand insurance services and improve accountability in the insurance system
7. To create a favorable environment for the development of the stock exchange and expand its services
8. To ensure expansion of banking and financial services and allow access to rural areas

Priority 3.

To facilitate economic growth by rehabilitating national industry and supporting export oriented industry

1. To support and revive privatized entities by creating favorable environment for private business development
2. To pursue tax, investment and credit policies in support of export and rehabilitation of industry
3. To promote exports, and to implement sub-programmes to restore processing industries and to encourage their export, priority being given to "cashmere", "wool" and "leather" sub-programmes
4. To ensure protection from price (instability) risks of strategic goods such as gold, copper, cashmere and wheat
5. To promote export of meat and meat products
6. To increase productivity and quality of the mining industry by creating a favorable economic and legal environment
7. To promote tourism
8. To increase crop industry and improve food supply
9. To create the legal and economic basis for prevention and treatment of livestock from contagious diseases and improve the accessibility of veterinary services
10. To intensify the installation and restoration of pasture land water-points by improving their utilization/ownership and improving water supply for the rural population
11. To create a protection system for animal husbandry from natural disasters through expanding the forage emergency fund livestock insurance system, and the establishment of private farms, cooperatives
12. To increase the capacity of the pasture land through improving skills for restoration, utilization and ownership

Priority 4.

To support regional and rural development and promote infrastructure development

1. To identify a policy on and create the legal basis for regional economic development
2. To define development strategies for the economic regions
3. To formulate and implement a "Soum development programme" in order to strengthen the rural economy, improve social services and create a favorable living environment
4. To establish free trade and economic zones
5. To improve energy, water, and fuel supply in rural areas and to expand roads, communications, and urban services
6. To create a rural and national trade network through promoting wholesale trade of goods and raw materials at capital city, aimag/provincial/ and soum/county/ level
7. To pursue policy to increase the productivity of animal by developing an effective livestock sector consistent with the specifics of each region and to improve quality and services of livestock breeding
8. To ensure development of information technology

Priority 5.

To a create equitable social environment for human development, to improve the quality of education, health assistance and access to services at all levels.

1. To provide equal access to primary health care for the population at large
2. To improve health care services in order to reach international standards
3. To develop healthcare mechanism based on an appropriate correlation of state, private and non – governmental financing
4. To develop sport and physical culture in order to promote public health
5. To implement state policy on basic education for all
6. To improve the quality of higher education to reach international standards
7. To improve conditions of rural schools (buildings, dormitories, heating, electricity, equipment)
8. To increase the number of children enrolled in pre-school education
9. To develop national art and culture in relation to achievements and values of world art
10. To improve scope and accessibility of rural culture and art services
11. To increase the scientific and technological capacity of the country to meet sustainable economic development needs
12. To increase gradually funding and investment for development of science and technology
13. To strengthen relationship between science and business/industries

Priority 6.

To reduce poverty and unemployment, and improve the livelihood of the people

1. To reduce unemployment by implementing an active employment policy
2. To create legal and economic environment to improve employment
3. To create appropriate system for labor market
4. To provide overall support from government to restore and promote vocational training and facilitate broad participation of public
5. To increase participation of citizens and employers to generate jobs
6. To improve social welfare system and its capacity
7. To identify appropriate framework for social care and to improve its quality and access
8. To increase the proportion of the national budget destined to fund poverty reduction efforts and solve pressing social issues
9. To pursue the policy of reducing income disparity in the society through tax policy
10. To increase income using economic incentive mechanisms and improve human settlements through policies that create conditions to attract manufacturing in remote regions and the Gobi area