

# Mongolia City Development Strategies for Secondary Cities





# FINAL REPORT

**DECEMBER 29, 2005** 

Prepared for World Bank

Prepared by PADCO

# FINAL REPORT

# **Mongolia City Development Strategies for Secondary Cities**

Contract No. 8001943

# **TABLE OF CONTENTS**

Introduction	2
Role of Mongolian Association of Urban Centers	4
Relationship of CDS to City Master Plan	5
Municipal Finance Issues	6
City Development Strategies	8
Darkhan CDS	
Erdenet CDS	
Khovd CDS	
Choibalsan CDS	
Tsetserleg CDS	

**Response to World Bank Comments on the Draft Final Report** 

#### 1 Introduction

The Mongolia City Development Strategies for Secondary Cities Project (CDS-2), funded by Cities Alliance and implemented by PADCO under World Bank Contract No. 8001943, provided assistance to selected secondary cities in Mongolia to develop new visions and strategic plans for their future development. Since the project began in April 2004, the five secondary cities of Erdenet, Darkhan, Tsetserleg, Khovd and Choibalsan have:

- diagnosed their development status; analyzed their strengths, weaknesses, opportunities, and threats (SWOT); and identified key issues and assets;
- clarified their city development visions through a participatory process;
- formulated City Development Strategies (CDS) and prioritized actions plans to realize the adopted visions; and
- shared and discuss the outputs at four milestone workshops.

The CDSs and action plans prepared under this project are designed to provide a strategic framework for improved rural-urban linkages and will form the basis of support to the cities from the national government and donors. The Strategies build on strengths in each city to create an enabling environment for economic growth, to alleviate poverty through job creation and sustainable livelihoods, to build institutional capacity for improved governance, and to ensure the sustainability of the proposed projects and programs.

A participatory approach involving all stakeholders was emphasized in the planning process to meet the above objectives. Transparency, comprehensiveness in the planning process and consensus among stakeholders at the local level on development priorities are key to this approach. The methodology employed includes a four-stage stakeholder consultation process, seeking inputs on four questions: (a) Where are we now? (b) Where would we like to be? (c) What issues do we need to address? and (d) What action must we take to get there?

The four milestone workshops that correspond to the four stages of the planning process are as follows:

1. **Launch Workshop**. A Launch Workshop was held in Ulaanbaatar on May 6, 2004. Members of the Working Groups in Erdenet and Darkhan, selected representatives from

Tsetserleg, Khovd and Choibalsan, and other interested parties in Ulaanbaatar, such as the Urban Development Institute, Chamber of Commerce and ADB Housing Sector Finance Project, attended this workshop. The main purpose of the Workshop was to kick off the Project, provide an overview of the initial Ulaanbaatar CDS experience, review the current development status of Erdenet and Darkhan—answering "Where are we now?", and discuss the next steps for visioning and asset mapping.



- 2. **Visioning Workshop**. A separate Visioning Workshop was held in each of the five cities. The Visioning Workshops were designed to determine "Where do we want to be in the future?" Participants included Working Groups, members of the business community, selected Bag leaders, active NGOs and donor projects, and local organizations and associations. The results of data gathering and analysis for each of the cities were presented to inform the visioning process. The CDS Team led participants through a participatory SWOT analysis, followed by small group sessions, in which each group brainstormed and developed consensus around a vision for the future of their city. Visions were shared and discussed and synthesized into one common vision statement.
- 3. **City Development Strategy Workshop.** A Strategy Workshop, designed to determine "What are our priorities?", was also held in each of the cities.<sup>2</sup> After determining priorities using selected criteria to systematically rank the proposed projects, action plans were outlined and preliminary performance indicators discussed. At this Workshop, participants began to consider immediate actions to realize projects and to determine who would be responsible for implementation.
- 4. **Final Workshop for Action**. At the Final Workshop, held on July 6, 2005 in Ulaanbaatar, each Mayor presented the CDS to an audience of development agencies, NGOs and government ministry representatives. Discussions focused on implementation of the strategies and ways to mobilize financial resources.

The participatory planning process resulted in City Development Strategies that reflect local concerns and priorities for development of each city. It has also resulted in local ownership over the resulting Strategies. Local ownership and commitment to the Strategy is cited by the Cities Alliance as both a key objective and a factor for successful planning and implementation of City Development Strategies. In the end, the cities not only adopted strategies to guide their future development process, they also acquired skills for strategic planning and for involving stakeholders in a participatory planning process.

The CDS-2 Project's success is reflected in the requests of additional Mongolian cities for their own City Development Strategies. Mayors from the cities of Bayankhongor, Murun and Avaiheer attended the Final Workshop for Action. Each expressed interest in assistance to prepare a CDS. The Mongolian Association of Urban Centers (MAUC) recommends these three cities, plus Altai and Dalanzagad for the next CDS project. These cities were selected based on their geographic location—to ensure equal representation of each of the regions of Mongolia—but more importantly, because they are some of the most active members of MAUC. Their enthusiasm and interest in improving their management and dealing more effectively with urban issues signal that they will be engaged and committed to the CDS planning process.

<sup>2</sup> The dates of the Strategy Workshops were: March 25, 2005 in Darkhan; March 26 in Erdenet; May 4 in Khovd; May 11 in Tsetserleg; and April 7 in Choibalsan.

3

<sup>&</sup>lt;sup>1</sup> The dates of the Visioning Workshops were: January 13, 2005 in Erdenet; January 17 in Darkhan; January 27 in Khovd; February 17 in Tsetserleg; and April 6 in Choibalsan.

# **2** Role of Mongolian Association of Urban Centers

The Mongolian Association of Urban Centers (MAUC) has played a significant role in the CDS-2 Project, and it will continue to play an important role in implementation of the Strategies. Through a cost-sharing arrangement with the Project, MAUC hired a full-time staff person, Ms. P. Batchimeg, an engineer and economist, to work on the CDS-2 Project, and has also provided logistical support and office space. Ms. Batchimeg has worked closely with the CDS-2 Team in all aspects of the project, including data gathering and analysis, visioning and participatory SWOT analysis, strategy development, project prioritization and action planning. MAUC's Executive Director, Ms. Altai Zulgerel, has also contributed to implementation of the project, participating in field visits and workshops and liaising with city officials. The direct and sustained participation of MAUC has helped to strengthen capacity in Mongolia for participatory, strategic planning. MAUC's involvement in the project has also helped to raise its visibility among its members, as well as in the international donor community.

Moving forward, MAUC's role in the CDS process can grow and expand, to include the following types of activities and support:

- **Replicate CDS in other cities.** Participatory strategic planning is a new concept for Mongolia, which has had a tradition of centralized, top-down planning. For this concept to be adopted on a broader scale country-wide, it is necessary to establish in-country expertise and advocates for the preparation of strategic plans through community participation. MAUC is acquiring the expertise necessary to help prepare the strategies and their continued involvement in a third round of CDS in Mongolia is critical for the sustainability and replication of the CDS process.
- **Advocate on behalf of cities.** To improve the national policy framework for secondary cities, MAUC can advocate for official legal status for the cities, fiscal decentralization and better urban planning and land management frameworks.
- **Identify donor resources.** MAUC is in a position to monitor donor assistance, liaise and build relationships with donor organizations and project teams, facilitate communication between its members and the donor community, and to help identify opportunities and areas of overlap between member and donor priorities.
- **Link private investors.** MAUC can create a database of investment opportunities in each of its member cities as defined through the CDS planning process and work to match private investors with the most appropriate opportunities. The Association can liaise on behalf of the cities with other organizations and associations, such as the Chamber of Commerce and foreign investment groups.
- **Provide technical assistance.** As MAUC grows, it will be able to fulfill specific requests from its members for technical assistance, both in-house and through outside sources, to implement priority projects and programs.
- **Disseminate information.** MAUC is becoming a clearinghouse of information on best practices in urban development, and it provides various forums for dialogue and exchange among city leaders and administrators.

# 3 Relationship of CDS to City Master Plan

Four of the five cities participating in the CDS-2 Project were designated as "pillar centers" in the Government's Regional Development Concept (2001) and Mid-Term Strategy on Regional Development (2003). As such, their Master Plans were updated in 2004 to reflect their new status as growth nodes of their respective regions. Tsetserleg is the only city of the five that has not had a Master Plan prepared recently (the city's last Master Plan was completed in 1984).

The Master Plans, even the most recent versions, have been prepared using a Soviet-style, centralized planning methodology. They resemble illustrated site plans, targeting uses for each specific land parcel, and represent what amounts to an investment plan for the central government. The Plans are based on the assumption that the state owns the land and will finance the development of the property, because under the socialist system, the state was the unique owner of urban real estate. There was no need to set fixed or legal forms of land use rights.

The Plans are also a symptom of national fiscal policies that still restrict local governments' ability to be financially self-sufficient. Because local government resources and their ability to investment in capital improvements are limited, the Master Plans comprise urban investments dependent on the central government for financing. They do not make room for local government, nor private sector investment. In today's context, the Master Plan's restrictions for individual parcels hinder the exercise of market-driven choices by individuals and businesses that would put the land and infrastructure to their most productive uses.

Another major drawback of the current master planning process is that it lacks public participation. The plans are prepared by non-resident consultants with very little input even from the local government, let alone the city's residents and businesses. In fact, the only "public" involvement is a review of the plan, after it has been prepared, by the local parliament. This process does not give the city the opportunity to set its own development priorities and make those known to the central government, donors or private investors. For example, the Master Plans typically disregard the ger area settlements altogether, where as much as 90 percent of the population lives, in some cases designating other uses, such as parks or recreation areas on land occupied by ger communities, and in all cases failing to make provisions for the extension of central service supply networks to these areas.

Rather than replacing or contradicting the Master Plan, the CDS complements it, making up for some of the short comings of the existing planning process. The CDS prioritizes selected investments outlined in the Master Plan and provides action plans for implementation of priority projects. It also brings new development ideas to the table based on local knowledge and input to the planning process. Given that it was prepared with substantial local input, not only from the city officials and administrators, but also from local businesses and community representatives, the CDS contains more local insight into the problems and opportunities for development.

Since the city of Tsetserleg does not have a Master Plan in place, it presents an opportunity for the CDS to influence national policies related to urban planning. Tsetserleg's CDS actually includes the renewal of its Master Plan as a priority project. The city's CDS can serve as a model for introducing a new style of planning that is more responsive to the development needs of the city.

## 4 Municipal Finance Issues

Mongolia's secondary cities are constrained by fiscal policies that limit their ability to raise own-source revenues and their authority to spend local resources on capital investments. Under the new Public Sector Management and Finance Law (PSMFL), adopted in 2003, there are very few funds in the local budget, nor means to raise them for capital expenditures.

The PSMFL established three parts to local government budgets: (i) local government revenue, (ii) local government expenditure, and (iii) the state budget expenditures of Portfolio Ministries for local expenses. The latter portion is the major change from the former 'bottom-up' budgeting system, placing all expenses for local budget organizations such as schools, hospitals and housing on the budget of the central Portfolio Ministry. As a result of this new system, since 2003 total expenditure for local expenses by the Portfolio Ministries has increased by some 30 percent, while capital expenses have declined dramatically from 2 percent of total expenditures to only 0.13 percent of total expenditures. Not only are local governments unable to spend their own meager resources on capital investments, but the amount spent by the central government on local capital improvements has also declined precipitously.

Significantly, when the state budget expenditures of Portfolio Ministries are broken down by ministry, it can be seen in Table 4.1 that three ministries get about 91 percent of the budget: (i) Education, Culture and Science – 57 percent; (ii) Health – 28 percent; and (iii) Justice and Internal Affairs – slightly over 6 percent. Construction and Urban Development is projected to receive one of the least amounts of the ministries, only some MNT 756 million in 2005, or 0.41 percent of the total. If this is the case, it seems that the majority of financing for urban development activities, including housing and infrastructure improvements must come from private or donor sources.

Table 4.2 illustrates the revenues and expenditures for the five cities.<sup>3</sup> Before 2003 the state budget made up any shortfalls between local revenue and local expenditures. However, from 2003 state budget expenditures of Portfolio Ministries for local expenses was included. In addition, personal income tax, corporate income tax, VAT and excise tax are now collected by local governments but are remitted to central government. Prior to 2003, local governments were allowed to retain a major portion of personal income tax receipts, as well as that portion of corporate income taxes and VAT relating to local enterprises. Proceeds from all four taxes are now reallocated to the aimags according to the new budgeting process, with the VAT depending on population size.

This pattern is evident from Table 4.2, where revenue declines from 2002 to 2003, but the percent of expenses financed by the State Budget increases for all the cities in deficit. Only Erdenet and Darkhan generate enough local revenue to cover their total expenditures. Significantly, for these cities, revenue from local property tax is in the range of 13 percent. However, for the smaller aimag centers, it is about 3 percent to 4 percent. This is due to the fact that there is substantially more industry in these cities than in the other aimag centers. According to Article 17 of the General Law on Taxation of Mongolia, property taxes are a local tax, but are only levied on private entities and corporations. According to the Property Tax Law, apartments and other residences are exempt

\_

<sup>&</sup>lt;sup>3</sup> The figures in Table 4.1 are aimag (province) revenues and expenditures. Budget data were not available at the soum/city level. In most cases, these figures give a fairly accurate picture of the financial status of the aimag centers. However, it is important to note that soums have even less taxation authority than aimags and are dependent on both aimag and central government transfers.

from property taxation. Thus, a substantial source of local revenue, which could be used to finance local infrastructure, remains outside the tax authority of local government.

Each city has addressed these financial issues in their City Development Strategies by proposing to develop a strategy to strengthen municipal finance. This has been selected as a priority project for each city, to create momentum for the revision of national policies and to obtain outside assistance to build capacity at the local level for revenue generation, budgeting and expenditure management.

Table 4.1 STATE BUDGET EXPENDITURE OF PORTFOLIO MINISTRIES FOR LOCAL EXPENSES

(MNT thousands)

	2003 Actual		2004 Expected		2005 Projected		
I. TOTAL EXPENDITURE and NET LOAN	141,104,737	100%	166,959,256	100%	183,402,689	100%	
II. TOTAL EXPENDITURE	141,104,737	100%	166,959,256	100%	183,402,689	100%	
IV. TOTAL CURRENT EXPENSES	138,169,287	98%	166,726,256	100%	183,169,689	100%	
CAPITAL EXPENSES	2,935,449	2%	233,000	0%	233,000	0%	
FINANCING SOURCE FOR EXPENSES:	142,367,751	100%	166,959,256	100%	183,402,689	100%	
Financing from health insurance	11,770,684	8%	13,230,389	8%	15,467,491	8%	
Financing from operating revenue	6,491,075	5%	6,014,399	4%	6,667,640	4%	
Financing from other activities	1,821,692	1%	1,318,702	1%	1,234,233	1%	
Financing from public education fund	433,495	0%	0	0%	0	0%	
Financing from budget	121,850,804	86%	146,395,767	88%	160,033,325	87%	
NUMBER OF ORGANIZATIONS	2,900		2,777		2,866		
TOTAL EMPLOYEES	75,258	100%	73,619	100%	75,980	100%	
Managers	4,013	5%	3,744	5%	3,792	5%	
Staff	50,870	68%	51,062	69%	54,844	72%	
Service staff	20,375	27%	18,814	26%	17,344	23%	
DDIME MINICTED	2 022 700	0.700/		0.000/		0.000/	
			2004 Expected		2005 Projected		
PRIME MINISTER	3,933,769	2.79%	0	0.00%	0	0.00%	
JUSTICE AND INTERNAL AFFAIRS ENVIRONMENT	9,702,205	6.88%	10,904,520	<b>6.53%</b>	11,774,108	<b>6.42%</b>	
	1,877,864	1.33%	2,378,204		2,717,075		
DEFENCE	160,755	0.11%	0	0.00%		0.00%	
EDUCATION, CULTURE AND SCIENCE SOCIAL WELFARE AND LABOR	80,939,962	57.36%	95,328,869	57.10%	105,346,417	57.44%	
	1,438,594	1.02%	1,323,622	0.79%	1,419,968	0.77%	
FOOD, AGRICULTURAL	1,164,444	0.83%	1,287,459	0.77%	1,391,058	0.76%	
HEALTH	37,913,854	26.87%	46,651,546	27.94%	51,188,846	27.91%	
NATIONAL GENERAL AUDITOR	435,245	0.31%	0	0.00%	0	0.00%	
STATISTICAL OFFICE MANAGER	267,011	0.19%	296,946	0.18%	314,394	0.17%	
CONSTRUCTION AND URBAN DEVELOPMENT	54,410	0.04%	693,358	0.42%	756,233	0.41%	
FUEL AND ENERGY	107,957	0.08%	0	0.00%	0	0.00%	
DEPUTY PREMIER	1,495,127	1.06%	1,459,905	0.87%	1,308,987	0.71%	
MINISTER FOR STATE PROFESSIONAL INSPECTION	1,613,540	1.14%	2,237,669	1.34%	2,379,646	1.30%	
MINISTER FOR DISASTER PROTECTION	0	0.00%	4,397,160	2.63%	4,805,959	2.62%	
TOTAL	141,104,737	100.00%	166,959,256	100.00%	183,402,689	100.00%	

#### 4.2 REVENUE AND EXPENDITURE OF SECONDARY CITIES

( million tuaruas)

( million tugrugs)																				
	Tsetserleg		Khovd Choibalsan				Erdenet				Darkhan									
LOCAL BUDGET REVENUE	2002 Actual	2003 Actual	2004	2005	2002	2003	2004	2005	2002	2003	2004 Exposted	2005 Budget	2002	2003	2004 Exposted	2005	2002	2003	2004	2005
				— Ŭ	Actual	Actual		Budget	Actual	Actual	Expected	Budget	Actual	Actual	Expected	Budget	Actual	Actual	Expected	Budget
I. TOTAL REVENUE	66.0	32.0	24.3	43.7	89.3	40.9	83.1	56.1	436.6	233.9	282.6	132.6	5,344.7	4,810.1	8,494.6	8,494.5	4,891.5	1,318.6	1,529.8	1,538.4
CURRENT REVENUE	66.0	32.0	24.3	43.7	89.3	40.9	83.1	56.1	404.2	193.0	274.2	124.6	5,344.7	4,810.1	8,494.6	8,494.5	4,781.0	1,318.6		1,538.4
TAX REVENUE	64.1	24.1	21.1	41.2	65.5	37.7	82.8	55.2	379.8	165.8	239.8	91.1	4,728.6	4,694.4	8,246.9	8,252.9	3,700.2	1,130.5	1,215.7	1,224.4
Income Tax Personal income tax	33.4 28.6	21.1	15.6 15.6	17.5 17.5	36.1 36.1	11.5 11.5	17.5 17.5	20.4 20.4	262.0 262.0	34.4 34.4	43.4 43.4	54.8 54.8	1,441.4 1,441.4	59.8 59.8	74.5 74.5	74.5 74.5	981.9 981.7	60.1 60.1	122.0 122.0	122.0 122.0
Income tax of economic entities and organization	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Property Tax	0.6	0.6	0.8	0.8	2.7	1.6	34.0	3.4	0.0	4.3	47.8	0.0	112.5	932.2	874.9	874.9	139.9	244.5	198.3	198.3
Product and services tax	20.5	0.0	0.0	0.0	14.0	16.6	19.6	18.5	44.4	43.3	49.2	0.0	1,263.2	230.2	432.0	438.0	1,657.2	398.2	446.5	455.1
VAT	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	1,079.0	102.6	301.7	307.8	1,279.4	296.1	342.3	349.1
Excise tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.6	0.0	400.0	400.0	273.8	0.0	1010	400.0
Transport and vehicle tax  Other taxes	17.2 9.5	0.0 2.4	0.0 4.8	0.0 22.8	14.0 12.7	16.6 8.1	19.6 11.6	18.5 12.9	44.4 73.4	43.3 83.7	49.2 99.4	0.0 36.3	127.6 1,911.5	127.6 3,472.2	130.3 6,865.5	130.3 6,865.5	104.0 921.3	102.1 427.8	104.2 449.0	106.0 449.0
Nontax revenues	1.9	7.9	3.2	22.6	23.8	3.1	0.3	0.9	24.4	27.2	34.4	33.5	616.1	115.8	247.7	241.6	1,080.8	188.1	314.0	314.0
Capital revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	40.8	8.5	8.0	0.0	0.0	0.0	0.0	110.5	0.0		
Sales revenue of state property	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	40.8	8.5	8.0	0.0	0.0			15.5	0.0		0.0
Privatization revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0				0.0	0.0			95.0	0.0		
TOTAL REVENUE (except privatization)	66.0	32.0	24.3	43.7	89.3	40.9	83.1	56.1	436.6	233.9	282.6	132.6	5,344.7	4,810.1	8,494.6	8,494.5	4,796.5	1,318.6	1,529.8	1,538.4
LOCAL BUDGET EXPENDITURE																				
II. TOTAL EXPENSES	81.8	73.8	124.3	64.4	3,265.2	337.4	591.5	875.2	1,483.9	223.4	285.6	136.7	5,621.9	1,563.4	1,837.1	975.1	7,655.5	1,065.2	1,370.6	1,094.6
CURRENT EXPENSES	81.8	73.8	124.3	64.4	3,147.6	245.8	420.8		1,454.5	153.0	143.1	136.7	5,018.6	812.0	1,020.6	975.1	7,078.8	900.6	1,034.8	991.6
Output - Service Expense	79.9	71.5	122.7	64.4		243.9	416.8	-	1,450.2	152.7	138.5	136.3	4,962.1	789.2	993.1	947.2	7,005.1	887.5	1,008.6	975.9
Payroll and premium	21.0	21.1	27.6	28.9	2,144.4	51.7	77.8	85.0	645.9	37.5	42.6	43.1	2,189.7	129.2	207.0	199.0	2,989.9	225.4	200.9	206.8
Social insurance expense	5.5	5.6	7.3	7.6	566.1	13.6	19.4	22.4	172.3	9.8	11.3	11.4	516.9	34.9	54.7	52.5	936.2	55.9	53.0	54.6
Other output expense Subsidy and Current Transfers	53.4 <b>2.0</b>	44.9 <b>2.2</b>	87.8 <b>1.6</b>	27.9 <b>0.0</b>	403.7 <b>33.3</b>	178.6 <b>2.0</b>	319.6 <b>4.1</b>	574.5 <b>6.2</b>	632.0 <b>4.3</b>	105.4 <b>0.3</b>	84.7 <b>4.6</b>	81.8 <b>0.3</b>	2,255.4 <b>56.5</b>	625.1 <b>22.8</b>	731.4 <b>27.5</b>	695.7 <b>28.0</b>	3,078.9 <b>73.8</b>	606.1 <b>13.1</b>	754.7 <b>26.2</b>	714.5 <b>15.7</b>
Electricity subsidy	2.0	2.2	1.0	0.0	33.3	2.0	4.1	0.2	4.3	0.5	4.0	0.5	30.3	22.0	21.5	20.0	73.0	13.1	20.2	13.7
Public transportation subsidy																				
Other subsidies and transfers																				
Transfers to households	2.0	2.2	1.6	0.0	33.3	2.0	4.1	6.2	4.3	0.3	4.6	0.3	56.5	22.8	27.5	28.0	73.8	13.1	26.2	15.7
Capital Expenditure	0.0	0.0	0.0	0.0	117.6	91.6	170.6		29.4		142.6	0.0		751.3	816.5	0.0		164.6	335.8	103.0
Domestic investment  Budget investment	0.0	0.0	0.0	0.0	117.6 117.6	91.6 16.0	170.6 87.4	187.1 91.1	29.4 29.4	70.5 13.0	142.6 61.9	0.0	316.4 316.4	491.5 297.3	599.0 0.0	0.0	61.9 61.9	129.1 0.0	106.0	103.0
Road Fund investment	0.0	0.0	0.0	0.0	117.0	10.0	07.4	91.1	29.4	13.0	61.9	0.0	310.4	291.3	0.0	0.0	01.9	0.0	0.0	0.0
Own sourse investment																				
Local investment, rehabilitation																				
Local road foundation investment	0.0	0.0	0.0	0.0	0.0	75.6	83.2	96.0	0.0	57.5	80.6	0.0	0.0	194.2	599.0	0.0	0.0	129.1	106.0	103.0
Food fund for livestock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					6.0	0.0	0.0	0.0
Expenditure for planting trees Capital transfer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	286.9	259.8	217.5	0.0	508.8	35.5	229.8	0.0
Budget organization rehabilitation	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	286.9	259.8	217.5	0.0	508.8	35.5	229.8	0.0
FUNDS TO FINANCE EXPENDITURE:	79.9	70.0	122.5	63.9			591.5		1,483.9	223.4	285.6	136.7	5,621.9	1,599.5	1,967.4	1,111.6		1,070.0		1,094.6
Road fund	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5	80.6	0.0	0.0	0.0	130.3	136.5	0.0	0.0	106.0	103.0
Health insurance fund	0.0	0.0	0.0	0.0	410.1	0.0	0.0		0.0		0.0	0.0	290.6	0.0	0.0	0.0	372.7	0.0	0.0	0.0
Operating revenue	28.8	7.2	23.3	43.2	183.4	3.6	5.6		45.7	0.0	0.0	0.0	146.5	1.6	45.1	49.0	829.4	35.4	33.0	33.0
Revenue from other activities	0.0 51.1	0.0 62.9	0.0 59.2	0.0	0.0 2,671.8	0.0 333.8	0.0 585.9		7.4 1,430.8		2.3 202.7	0.3 136.4	65.9 5,118.9	0.0 1,597.9	0.0 1,792.0	30.0 896.1	112.0 6,341.5	7.0 1,027.6		12.9 945.7
Budget (local budget and state transfers)					1 2,011.0	JJJJ.0	500.9	1 000.1	1,430.8	100.7	202.7	130.4	3,110.9	1,381.8	1,792.0	090.1	0,341.3	1,021.0	1,210.0	940.7
STATE BUDGET EXPENDITURE OF PORTFOLIO I				4.040.5	<u> </u>	2 000 0	2 5 4 2 2	2244		4 454 0	4.000.0	4 740 4	0.01	47040	6 404 0	6.507.0		6 000 =	7.450.0	7.000.0
III. TOTAL EXPENSES TOTAL CURRENT EXPENSES	<b>371.9</b> 294.1	<b>778.5</b> 778.5	<b>998.8</b> 998.8	<b>1,012.5</b> 1,012.5	0.0	<b>3,082.6</b> 2,933.8	-,	/-	<b>0.0</b>	<b>1,451.3</b> 1,438.7	<b>1,668.9</b> 1,668.9	<b>1,719.1</b> 1,719.1	0.0	<b>4,794.8</b> 4,704.6	<b>6,134.3</b> 6,126.3	<b>6,527.9</b> 6,519.9	0.0	6,923.7 6,796.6	7,153.0 7,144.0	7,983.8 7,974.8
Capital Expenses	77.8	0.0	998.8		0.0				0.0		0.0	1,719.1	0.0	90.2	6,126.3	8.0				
FUNDS TO FINANCE EXPENDITURE:	659.2	778.5		1,012.5		3,082.6						1,719.1	0.0	4,795.2						
Health Insurance	0.0	7.5	7.7	8.4	0.0		352.4		0.0		0.0	0.0	0.0	396.1	423.3	446.7				603.9
Operating revenue	20.1	0.0	0.0	32.0	0.0		12.7		0.0		58.6	61.9	0.0	113.5	224.1	267.4	0.0			
Revenue from other activities	0.0	32.0	43.1	3.0	0.0		0.0		0.0		9.5	4.7	0.0	70.3	22.8	26.1	0.0	175.9		
Public education fund	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0		370.4		
Budget	639.1	739.0	947.0	969.1	0.0	2,638.7	<i>3</i> ,066.3	1,845.5	0.0	1,384.3	1,600.8	1,652.5	0.0	4,215.3	5,464.1	5,787.8	0.0	5,056.3	5,794.0	6,412.2
IV. TOTAL STATE AND LOCAL BUDGET EXPENDITURE DISBURSED FOR LOCAL (II+III)	453.8	852.3	1,123.1	1,076.9	3,265.2	3,420.0	4,131.8	3,190.1	1,483.9	1,674.7	1,954.5	1,855.8	5,621.9	6,358.2	7,971.4	7,503.1	7,655.5	7,988.9	8,523.5	9,078.4
V. TOTAL EXPENDITURE FINANCED BY STATE BUDGET FOR LOCAL (IV-I)	387.8	820.4	1 009 9	1 022 2	3 175 0	3,379.1	4 049 9	3 134 0	1,047.3	1,440.8	1,671.9	1,723.2	277.3	1,548.0	-523.2	-991.5	2,764.0	6,670.3	6,993.8	7,540.0
PERCENT OF EXPENSES FINANCED BY STATE		İ											İ							
BUDGET (V/IV)	85%	96%	98%	96%	97%	99%	98%	98%	71%	86%	86%	93%	5%	24%	-7%	-13%	36%	83%	82%	83%

# **5** City Development Strategies

The following section contains the City Development Strategies of the five cities that participated in the CDS-2 Project. Each CDS includes:

- 1. Vision Statement & Strategy Overview
- 2. Introduction to the City
- 3. Description of Strategic Initiatives & Priority Projects
- 4. Prioritization of CDS Infrastructure Projects
- 5. Preliminary Proposals for Priority Projects
- 6. Annexes:
  - a. Working Group Members and Workshop Participants
  - b. S.W.O.T. Analysis
  - c. Project Prioritization
  - d. City Profile

# DARKHAN City Development Strategy

In April 2004, the city of Darkhan began a participatory planning process to develop a **City Development Strategy**—a vision and strategies for the future development of the city and priority projects to realize that vision. After months of analysis and deliberation among city officials and administrators, local business owners and community leaders, Darkhan's first strategic plan is complete.

The future city vision, developed with input from residents, businesses and civil society is as follows:



#### Darkhan Vision

Flourishing and progressive city with a clean, healthy and safe environment, whose citizens are creative, well-educated and patriotic, with a well developed economy of small and medium-size industries, and in which every family has access to basic services and information technologies.

To achieve this vision, Darkhan developed six key strategic initiatives:

- 1. Improve business environment to encourage the development of small and mediumsize enterprises;
- 2. Improve living conditions of the ger communities;
- 3. Develop human resources capable of meeting existing and future labor market requirements;
- 4. Adopt appropriate urban development and land management systems;
- 5. Protect the environment; and
- 6. Improve human development and social welfare policies.

Darkhan proposed a preliminary set of projects and programs designed to meet the objectives of each Strategic Initiative. The city prioritized the projects within each Strategic Initiative according to a set of criteria, including: a) relevance to development policies; b) financial viability and economic returns; c) environmental benefits; d) social benefits; and e) implementation capacity. The results of the prioritization exercise are included in Annex C. The Working Group then reprioritized these 22 projects, and preliminary proposals were developed for the 16 highest ranked projects.<sup>1</sup> These priority projects form the core of Darkhan's CDS. They represent the development priorities of the city within the framework of a larger vision for the city's future.

The CDS is a living document to be used in everyday decision-making, revisited on a regular basis and updated as the city grows and changes. It complements the city's Master Plan by prioritizing key projects and programs outlined in the Master Plan and providing an action plan for implementing the projects.

<sup>&</sup>lt;sup>1</sup> A list of Working Group members and participants of the workshops is included in Annex A.

#### **Introduction to Darkhan**

With 73,408 residents, Darkhan is the second largest city in Mongolia, but is still less than one-tenth the population size of the capital city, Ulaanbaatar. Darkhan is located in central Mongolia, approximately 236 km northwest of Ulaanbaatar, in Darkhan-Uul Aimag. Eighty-five percent of the aimag's population live in Darkhan.



Like the other aimag centers in Mongolia, Darkhan does not have the legal status of a city, and therefore, does not have significant taxation or decision-making authority. The Mayor of the city is also the Governor of Darkhan-Uul Aimag. Additionally, there is a soum governor who is responsible for certain administrative duties. The overlapping jurisdictions and responsibilities complicate management of the city, while the lack of authority to spend local resources on capital investments make the city dependent on national government subsidies.

During the Socialist period, Darkhan was the construction materials manufacturing capital of Mongolia, supplying goods to the Council of Mutual Economic Assistance common market within the Soviet Union and its satellite countries. Following Mongolia's transition to a democratic, market-oriented state, many of the construction enterprises privatized, but defaulted on loans and closed operations. Darkhan still views itself as a construction industry city, but now the construction sector employs just 6 percent of the working population and contributes only 8 percent to the aimag's GDP.

Many industries did not survive the transition, contracting the job market and resulting in outmigration primarily to either Ulaanbaatar or neighboring Khongor soum. While the city population has steadily grown at an annual rate of about 3.2 percent, the number of out-migrants has also steadily increased, so that by 2003, they outnumbered in-migrants by 1,414. The main remaining factories—wood, meat, sheepskin and construction materials factories—do not operate at full capacity due to lack of raw material inputs and outdated technologies.



Despite these economic setbacks, the employment rate and labor force involvement rate—71 and 73.3 percent, respectively—are both about 8 percent higher than the national average. The transportation, financial services and real estate sectors have shown employment growth in recent years and the sector contributing the most to the aimag's GDP is the Wholesale and Retail Trade sector (21 percent).<sup>2</sup> Paved roads and railways linking Darkhan to Ulaanbaatar and Erdenet provide the city access to domestic and international markets. Moreover, the city is surrounded by some of the most fertile land in Mongolia, providing the opportunity for substantial agricultural inputs to the agro-processing sector.

<sup>&</sup>lt;sup>2</sup> Gross Domestic Product (GDP) data is not available at the soum/city level.

Infrastructure was cited as both a main strength and weakness of the city.<sup>3</sup> The infrastructure is better developed than most other aimag centers, and certainly than other soums. Those residents living in apartment buildings—62.6 percent of the population—have access to basic services, including water, sewerage, heat, electricity and solid waste collection. There is also a substantial amount of fully serviced land lying dormant between old and new Darkhan, which offers opportunities for new in-fill development. However, since the construction of the city, there has been very little maintenance, repair



work or upgrading of the main infrastructure networks. The water loss level is 30 percent due to deteriorated pipelines, and the water company began running at a loss in 2004. The sewage treatment plant only operates at 60 to 70 percent of its capacity. Heating and electricity are currently sufficient to meet the demands of the formal built environment; however, these services do not extend to the informal ger communities where more than 30 percent of the population lives.

Residents in ger areas lack many of the basic services available to apartment dwellers, including heating, sewerage and solid waste services. They can access potable water at thirty water kiosks, which are mainly supplied by trucks. Poverty is heavily concentrated in the ger areas. Of 2,000 Darkhan households (12.5 percent of total households) living below the poverty line of 20,600 MNT (for the Central Region), 1,875 or 94 percent live in ger communities.

More detailed data and information on Darkhan is compiled in the City Profile, included in Annex D.

3

<sup>&</sup>lt;sup>3</sup> Results of the participatory SWOT analysis conducted at the Visioning Workshop are included in Annex B.

## **Darkhan Strategic Initiatives**

Darkhan developed six key strategic initiatives, which represent priority areas of investment for achieving the city's future vision. The objectives of each strategic initiative will be met by a series of priority projects and programs. The projects included in the CDS represent a short list of initial project ideas, which were prioritized at the Strategy Workshop held on March 25, 2005.

# <u>Strategic Initiative 1</u>: Improve business environment to encourage the development of small and medium-size enterprises.

To develop an economy based on small and medium-size enterprises in Darkhan as stated in Darkhan's vision, it is necessary to improve the investment climate and encourage private sector entrepreneurship. To its advantage, Darkhan's economy is one of the most diverse of the five secondary cities. The most dominant sector is Wholesale and Retail Trade and Repair, contributing 21 percent to Darkhan-Uul aimag's GDP. The Power, Heating and Water Supply sector accounts for 15 percent of GDP, followed by Manufacturing and Agriculture at 13 percent each. The construction



industry, while only contributing 8 percent to GDP currently, is one deserving exploration for future development given the city's past experience and the existing infrastructure to support the sector. Market studies and related analysis should be conducted to determine the feasibility of growing this industry and to develop a strategy for attracting substantial private sector investment in this sector.

While there is currently a USAID-funded project, the GER Initiative, providing support to business development in ger areas (including micro-credit, business planning, etc...), the city is not involved in the project and there are currently no other city or donor initiatives to improve the private sector business environment. The development of a Free Economic Zone is one possibility for encouraging private sector growth. The concept, currently being tested in Altanbulag, is a new one for Mongolia, which provides preferential tax conditions, easy registration procedures and simplified entrance/exit procedures for businesses.

To meet the objectives of Strategic Initiative 1, the city proposes the following priority projects.

- 1. Expand the business environment by merging aimags and soums and enlarging administrative units:
- 2. Development of economical technologies and equipment to supply and maintain clean sources of energy;\*
- 3. Development of a Free Economic Zone with emphasis on the production of construction materials for national and regional distribution;\*
- 4. Develop "one village-one product" project; and
- 5. Provide a favorable environment for small and medium-size businesses (e.g. loan rebates, flexible tax policy, support projects and programs, open up markets, new training and advertising centers).

<sup>\*</sup> Indicates projects that have been selected among the 16 highest ranked projects for which more detailed proposals have been prepared.

### Strategic Initiative 2: Improve living conditions of the ger communities.

Over 30 percent of Darkhan's population live in ger areas without access to basic services. The ger areas comprise approximately 3,750 households living on 444 hectares of land. Potable water is available through 30 kiosks, which are supplied by trucks. Most households use simple coal or wood-burning stoves for heating and cooking, and there are no solid waste collection or sewerage services. There are also no paved roads or street lighting, limiting access particularly in winter, and disrupting water delivery when roads become impassable.



Close to 94 percent of Darkhan's poor households live in ger communities. The average household income of a family in the ger areas is 56,000 MNT, or just half of the average income for families living in apartments.



The estimated value of housing in ger areas is 500,000 MNT per ger/house, or an approximate total value of 3.75 billion MNT. As of Dec 1, 2004, 13 percent of eligible households had privatized their land, reaching 39 percent of Darkhan's planned privatization. As more households continue to privatize their land, the costs for relocation, which may be necessary to provide infrastructure, will increase. The city recognizes the need to plan for future development of the ger areas by first establishing the road network and rationalizing plots in preparation for laying infrastructure networks, and thereby reducing resettlement.

Improving the living conditions and reducing poverty among Darkhan's ger area residents is vital for achieving the city's future vision of development. Currently just one donor initiative is addressing these issues—a pilot HAAP upgrading scheme in Bagh 7, financed by an ADB loan, which includes new water kiosks connected to the central water supply network, street lighting and other neighborhood amenities. The Japan Fund for Poverty Reduction is supporting housing finance to low-income households in the neighborhood and the development of an Integrated Community Center, which includes a bathhouse, laundry, water kiosk and hairdresser, a greenhouse and a briquette-making facility. A Community-Based Organization (CBO) formed under this project provides a model for helping the city to plan for and manage future upgrading and neighborhood improvement activities.

To meet the objectives of Strategic Initiative 2, the city proposes the following priority projects.

- 1. Promotion of smokeless stoves and more efficient fuel for heating/cooking;\*
- 2. Development of urban farming and animal husbandry in ger areas (increase on-plot agricultural production);\*
- 3. Design and plan ger housing areas to have access to basic infrastructure;\*
- 4. Improve solid waste management in ger areas;\* and
- 5. Provide infrastructure to ger communities.

# <u>Strategic Initiative 3</u>: Develop human resources capable of meeting the existing and future job market requirements.

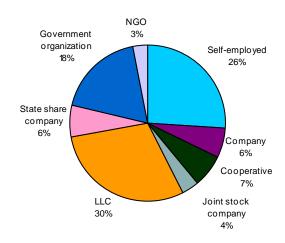
An important component of the city's strategy to promote economic growth includes measures to ensure an adequately skilled labor force will be available to attract future employers. This Strategic Initiative must be coordinated closely with Strategic Initiative 1 to encourage small and medium-size enterprises. To date, no comprehensive studies have been prepared to understand the labor market demand.

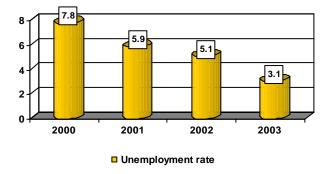
Darkhan currently has two universities, one foreign language institute and seven technical colleges, focusing, for example, on training medical or management professionals, with a total of 5,295 students. There are also two vocational training schools with 1,582 students total.

While registered unemployment was just 3.1 percent, this figure can be deceiving. Registering for unemployment is fairly uncommon amoung Mongolians, because the benefits are quite meager. Anecdotal evidence suggests that the actual rate of unemployment and underemployment is much higher.

Investing in training human resources to meet labor market demand will not only

# Employment by Type of Employer, 2003





create employment, but also increase productivity of city businesses. The GDP per capita of Darkhan-Uul aimag was 512,518 MNT in 2004, which is almost 30 percent less than the national figure.

A study of the labor market demand and supply in Darkhan would be a useful first step in developing targeted training programs, as well as enhancing secondary school curriculum.

To meet the objectives of Strategic Initiative 3, the city proposes the following priority projects.

- 1. Develop "student-centered" specialized training program\*; and
- 2. Preparation of professionals that meet the demand of market economy requirements and generate employment.\*

## Strategic Initiative 4: Adopt appropriate urban development and land management systems.

The Master Plan of the city was updated in 2003 after Darkhan was designated as a pillar center of the Central The Master Plan is an illustrated site plan. which prescribes targeted uses for specific sites and includes a series of planned improvements for infrastructure networks, which are not prioritized or coordinated and lack implementation strategies.

Within the current framework. planning and land/construction management are separate and distinct activities, carried out by different agencies and Without mechanisms to link the organizations. processes, ad hoc, piecemeal development will continue. There is substantial vacant land available in



Darkhan with full access to utility services, lying dormant as a result of the existing planning systems.

As of Dec 1, 2004, 39 percent of the 6,667 eligible households in Darkhan had privatized their land, well over the national privatization rate of 29.5 percent. Of the land privatized so far, 64 percent was for new occupation and the rest was for already occupying households. The Master Plan does not respond to the new real estate requirements that arise from the privatization of urban land and the emergence of a market economy, in which private actors, not the state make investment decisions.

Meanwhile, existing apartment buildings are deteriorating rapidly. Condominium associations are too weak organizationally and financially, and are unable to borrow funds to maintain the buildings. The city does not have a housing strategy for maintenance of existing shelter, construction of new housing, or improvements to ger area housing.

Moreover, the city is constrained by national policies limiting its ability to generate substantial ownsource revenues, and prohibiting it from spending local revenues on capital improvements. Even though the city is in one of two aimag in which local revenues exceed expenditures, the city requires a strategy to improve its financial situation in order to plan, finance and manage urban infrastructure and other investments.

To achieve the objectives of Strategic Initiative 4, the city proposes the following projects.

- 1. Update the city's utility infrastructure master plans;\*
- 2. Improve coordination of city Master Plan, Land Management Master Plan, regional development planning and other related documents, maps and projects;
- 3. Develop a safe and sufficient heating supply system;\*
- 4. Develop a participatory strategic planning process, establish workgroups and review strategic documents each quarter;
- 5. Develop a housing (including low-cost housing) construction, repair and maintenance strategy and related plans; and
- 6. Develop strategies for strengthening municipal finance.\*

#### **<u>Strategic Initiative 5</u>**: Protect the environment.

Soil erosion and sand drift are cited as the key environmental problems in Darkhan. Pollution and erosion of 1 m<sup>2</sup> of land has reached 30.0 percent on average and the rate of erosion is considered to be high.

Forest reserves are declining, primarily as a result of illegal tree cutting by residents for use as fuel, which is contributing to erosion problems. In a 10 year span—1985 to 1995—the equivalent of 65 years worth of tree growth were lost. Of the 73,600 hectares of forest destroyed during that period, only about 10 percent were



destroyed by fire, and the rest were for household fuel consumption.

The Kharaa river running adjacent to Darkhan is 2.5 to 4.0 times more polluted than the permitted level. The flow and direction of the river has begun to change, because forests and river embankments are being destroyed. The process of excavating raw construction material inputs is one of the main contributing factors to environmental damage, such as soil erosion and pollution of the Kharaa river.

Moreover, nature conservation procedures are not effective; urbanization is not coordinated with a healthcare policy to reduce the environmental hazards and health risks associated with urban development; and the system for funding environmental protection measures is unresponsive to the actual needs, according to the Nature Protection Authority Report, 2003.

To address these environmental problems, the city proposes the following priority projects.



- 1. Remediation of environmental damages from mining activities;
- 2. Implementation of the "Protect Darkhan from Sand Drifting" program and work to reforest the city;\* and
- 3. Reduce industrial pollution by encouraging clean technologies.\*

## Strategic Initiative 6: Improve human development and social welfare policies.

The city does not have the required authority or capacity to plan for and implement human development and social welfare policies. Hospitals and schools are run by the central government, and policy decisions regarding healthcare and education are made at the national level While the professional quality of social services may be better controlled by this arrangement, it makes the social services system unresponsive to local needs.

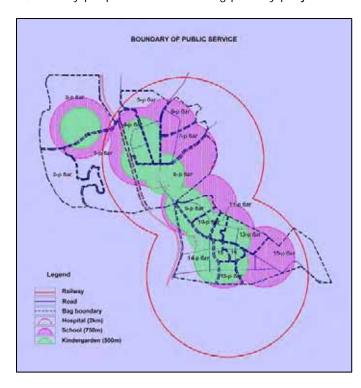
Social	Infrastructure	Capacity
--------	----------------	----------

	Unit	Planned capacity	Actual Use	Required Capacity	% of Demand Met
Schools	Pupils	15,022	22,036	22,022	68.2
Kindergartens	Children	2,209	2,559	7,340	30.0
Hospitals	Beds	486	421	588	82.6

The city Master Plan include projections for demand of social services and plans for the construction and siting of any new facilities that might be required, but it is merely a schematic facilities plan. It does not address personnel requirements, curriculum development, healthcare equipment or technology needs.

To meet the objectives of Strategic Initiative 6, the city proposes the following priority projects.

- 1. Build a regional diagnostic health center;
- 2. Development of program to ensure healthy and safe living environment for the population and prevention of diseases;\* and
- 3. Implement a self-education program, including development trainings and lectures.



# **Priority Infrastructure Projects**

Six projects related to infrastructure development are included in Darkhan's CDS. Many of these same projects are included in the city Master Plan. However, the Master Plan does not prioritize the infrastructure improvements. Through the CDS the city has prioritized these infrastructure improvements as follows:

- 1. Update the city's utility infrastructure master plans;
- 2. Design and plan ger housing areas to have access to basic infrastructure;
- 3. Provide infrastructure to ger communities;
- 4. Develop a safe and sufficient heating supply system;
- 5. Development of low-cost techologies and equipment to supply and maintain clean sources of energy; and
- 6. Improve solid waste management in ger areas.



Developing new plans for the city's infrastructure networks is the first step towards upgrading the systems, and has therefore been given the first priority. These plans should be undertaken in a coordinated manner, based on realistic population projections and inclusive of detailed implementation action plans.

Equally important and linked with the preparation of the utility master plans will be planning and designing the ger areas to have access to basic infrastructure. The utility master plans should include plans and proposals for extending infrastructure to the ger areas, as well as strategies for financing and cost recovery. The actual provision of infrastructure will follow development of the plans as resources are mobilized.

Upgrading the heating supply system is considered by city officials to be an important priority. The pipelines are badly deteriorated contributing to losses and inefficiencies in the system, which are only now covered by electricity sales. While the system currently has sufficient capacity to meet demands of the formal built areas, it will require upgrading to accommodate city growth or expansion to the ger areas.

Closely linked with upgrades to the heating system are Darkhan's plans to develop low cost techologies and equipment to supply and maintain clean sources of energy. Currently, only a portion of Darkhan's power needs are supplied locally and the rest comes from Ulaanbaatar and a sub-station connected to the Eastern Siberia power grid of the Russian Federation. This program will reduce dependence on outside, foreign energy sources, reduce pollution and increase sustainability of energy supplies.

Finally among the city's infrastructure/service delivery priorities is improving the solid waste management system, particularly in ger areas. Currently there is no collection service in the ger areas; waste disposal is undertaken by individual households. A waste management system that integrates the ger areas with the formal built environment and which includes new technologies for more efficient and effective waste management is required.

# **Priority Project Proposals**

After prioritizing projects and programs within each Strategic Initiative, the city selected 16 priority projects from the short list. These 16 projects represent the key development priorities of the city as determined through a participatory, iterative planning process. Proposals were prepared for each of the 16 projects with input from the Working Group. The project proposals follow.

- 1. Development of a Free Economic Zone with emphasis on the production of construction materials for national and regional distribution;
- 2. Design and plan ger housing areas to have access to basic infrastructure;
- 3. Preparation of professionals that meet the demand of market economy requirements and generate employment;
- 4. Update the city's utility infrastructure master plans;
- 5. Implementation of the Protect Darkhan from Sand Drift Program and work to reforest the city;
- 6. Develop strategy to strengthen municipal finance;
- 7. Develop a safe and sufficient heating supply system;
- 8. Development of economical technologies and equipment to supply and maintain clean sources of energy;
- 9. Promotion of smokeless stoves and more efficient fuel for heating/cooking;
- 10. Development of urban farming and animal husbandry in ger areas;
- 11. Improve solid waste management in ger areas;
- 12. "Student-centered Specialized Training" Program;
- 13. Reduce industrial pollution by encouraging clean technologies;
- 14. Remediation of environmental damages from mining activities;
- 15. Development of program to ensure healthy and safe living environment for the population and prevention of diseases; and
- 16. Apartment roof repair project.

Project Title	Development of a Free Economic Zone with emphasis on the production of construction materials for national and regional distribution					
Sector	Urban Development Sector Project Duration: 10 years					
Project Location	Darkhan					
Type of Project	Feasibility study or Survey Package Programs Development project Other; Policy Paper Institutional Building					
Summary of Project Objectives	Develop a marketing strategy for Darkhan City to develop trade with other regions and nations; develop the city by using its strengths and opportunities to participate in external markets; and establish the production of construction materials for Mongolia.					
Project Description	<ul> <li>Study marketing strategies and estimate economic efficiencies for trade;</li> <li>Develop the necessary legal framework for the free economic zone;</li> <li>Conduct surveys of new techniques and technology at the international level (e.g. for building material production, agro-processing, construction finishings etc.);</li> <li>Survey raw materials and construction material reserves at the national, regional and local levels;</li> <li>Plan and develop infrastructure for the free economic zone;</li> <li>Set up management structure and advertise zone through mass media.</li> </ul>					
Relation to Development Plans	(1) Concept of Regional Development of Mongolia, (2) Energy Sector Strategy, (3) Construction and Housing Sector Strategy, (4) Regional Development Project, (5) Master Plan of Darkhan, and (6) Industrial Park Operation Program; and (7) Altanbulag Free Zone Project.					
Expected Benefits / Targeted Beneficiaries / Outputs	Increased export of manufactured products per worker in Darkhan. Expanded cooperation with foreign companies, full functioning of the economic free zone and increased employment.					
Key Assumptions / Project Conditions	Creation of a clean and healthy industrial environment. Development of a strong local economy based on small and medium enterprises, well-educated and intelligent residents and adequate access to infrastructure and information technology for all households;					
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy All initiatives Sector Linkages: All sectors.					
Estimated Investment Required	Estimated project start up cost: US\$ 700,000 Estimated annual cost of operation and maintenance:					
Implementing Agency/ Body	Governor's Office, Administration Department of the Governor's Office, Sector Ministries and Government of Mongolia.					
Relevant Agencies to be Coordinated	All divisions and departments at all levels of administration. Construction sector institutions. Ministry of Trading Industry.					
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance Fund Other					
Private Sector Participation	Undertake surveys, provide recommendations and comments and generate employment and investment.					
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:					
Environmental Considerations	Introduce and replicate environmentally sound infrastructure and technology in the economic free zone and in developing construction materials.					
Special Considerations						

Project Title	Design and plan ger housing areas to ha	ave access to basic infrastructure
Sector	Construction, Urban Development and Infrastructure	Project Duration: 1 year
Project Location	Ger Areas in Darkhan City	
Type of Project	☐ Institutional Building	sing Area Action Planning
Summary of Project	Properly plan the location and layout of ger hou	
Objectives	infrastructure. Develop plans and documents fo	r the restructuring of existing ger areas.
Project Description	standards of the residents.	d sewage in Ger areas; restation and vegetation process in Ger er areas in conformity with market and living
Relation to Development Plans	(1) Concept of Regional Development of Mongo Strategy; (3) Regional Development Project; (4)	
Expected Benefits / Targeted Beneficiaries / Outputs	Improved planning; Ger areas will be settled in developing infrastructure in ger areas.	orderly patterns; Increased opportunity for
Key Assumptions / Project Conditions	Community willingness to participate in the plan	
Project and Other Sector Linkages	Project Linkages: Land Cadastre and Registrati of Mongolia, Strategy Initiatives 2 and 5 Sector Linkages: Land management, Environment	
Estimated Investment Required	Estimated project start up cost: US\$ 10,000 Estimated cost of annual operation and mainter	
Implementing Agency/ Body	Governor's Office; Design and drawing service of Planning and Policy Implementation Department	nt of the Province
Relevant Agencies to be Coordinated	Ministry of Construction and Urban Developmer Land Office of Province	
Provisional Funding Scheme		Sector y Organized Fund 
Private Sector Participation	Undertake surveys, provide recommendations a	and comments;
Necessary Inputs/ Arrangements	Revised national level legislation and policic City/aimag government initiative Improved institutional arrangements at the Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:	local level
Environmental Considerations	Develop solutions to reduce smoke in Ger areas Develop recommendations to plant trees Ger ar Develop solutions to protect ger areas residents	reas; and s from flood.
Special Considerations	Coordinate with Land Cadastral Mapping progra Classify Ger areas as housing areas with certain keeping of livestock.	

Project Title	Preparation of professionals that meet the demand of market economy requirements and generate employment.
Sector	Education Project Duration: 3 years
Project Location	Central Region, Darkhan city and Darkhan aimag
Type of Project	F/S Study or Survey Packaged Program Development Project Other: Institutional Building
Summary of Project Objectives	Generate the employment in commiance with market conditions and opportunity, prepare alified professionals and promote the employment.
Project Description	<ul> <li>Conduct a study of the demand for qualified professionals and develop curriculums of professional schools based on results from the study;</li> <li>Establish a new base for specialized training and develop and implement special training programs for tutors;</li> <li>Establish a broadcasting station named "Education" to improve opportunities for continuing education and create self–learning condition boths at work and home; and</li> <li>Set up a multidiscipline, combined practice and theory school at the regional level;</li> </ul>
Relation to	(1) Concept of Regional Development of Mongolia; (2) Central Regional Development
Development Plans	Project; (3) Master Plan of Darkhan City; and (4) programs and projects in education sector.
Expected Benefits / Targeted Beneficiaries / Outputs	Factories and service sectors will be provided with professionals and unemployment rate will be reduced.
Key Assumptions / Project Conditions	
Project and Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 3.7 Sector Linkages: All economic sectors including agriculture, construction and mining.
Estimated Investment	Estimated project start up cost: US\$ 30,000
Required	Estimated annual cost of operation and maintenance:
Implementing Agency/ Body	Education and Culture Department of Darkhan Uul aimag, Employment generation office, Universities and Colleges, Specialized training centers
Relevant Agencies to be Coordinated	Ministry of Education, Culture and Science, Ministry of Social Affair and Labor and Employment Unit.
Provisional Funding Scheme	Local Government Private Sector Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	dertake surveys, provide recominendations and comments, investment and funding
Necessary Inputs/ Arrangements	Revised national level legislatical and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations Special	
Considerations	

Project Title	Update the city's utility infrastructure master plans
Sector	Construction, Urban Development, Public Utility and Energy Project Duration: 4 years
Project Location	Darkhan
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other: ☐ Institutional Building
Summary of Project Objectives	Improve the relationship between planning and existing planning documents and standards; develop the city for the future; establish the necessary legal framework; and modify the Master plan for infrastructure networks in the city.
Project Description	<ul> <li>Improve the planning of dam and drainage in compliance with advanced and modern standards;</li> <li>Reduce heating losses of buildings in the city and reform the technologies;</li> <li>Assess current condition of physical networks and introduce new technologies that determines the qualityof pipeline;</li> <li>Establish strong entities through restructuring utility organizations and creating different types of ownership;</li> <li>Develop proposals for restructuring of utility agencies, amend legislation in connection with privatization of apartments;</li> <li>Renovate roofing of apartment buildings and develop metholodical recommendations on extension of life of roofing;</li> <li>Develop area action plan, network plan and related documents.</li> <li>(1) Concept of Regional Development of Mongolia; (2) Construction and Housing Sector</li> </ul>
Relation to Development Plans	Strategy; (3) Regional Development Project; (4) Master Plan of Darkhan; (5) Land Plan and (6) Infrastructure Master Plan
Expected Benefits / Targeted Beneficiaries / Outputs	To bring method of urban planning into conformity with modern standards and level of quality; provide citizens with sufficient services and protect them from natural disasters including flood etc.
Key Assumptions / Project Conditions	
Project and Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1and 2 Sector Linkages: Road, Tourism, Communication
Estimated Investment	Estimated project start up cost: US\$ 35,000
Requirement	Estimated annual cost for operation and maintenance:
Implementing Agency/ Body	Governor's Office, Environment Unit, Strategic Planning and Policy Implementation Department, Citizen Representatives Khural of Aimag and soum, Entities engages in infrastructure services
Relevant Agencies to be Coordinated	Professional Monitoring Department and Land Office of Province, International Organizations
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:
Private Sector Participation	Obtain information; undertake surveys.
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental	Vegetation and tree planting within city
Considerations	
Special Consideration	Develop and implement drawings of network improvement for the next stage.

Project Title	Implementation of the "Protect Darkhan from Sand Drift" program and work to reforest the city
Sector	Environment and Urban Development Sectors  Project Duration: 6 years
Project Location	Darkhan
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other; Policy Paper ☐ Institutional Building
Summary of Project Objectives	Establish a research institution to: (1) investigate ways to protect the city from soil erosion; and (2) take continuous action to develop programs and projects that will protect the city from soil erosion, drifting sand and dust storms.
Project Description	<ul> <li>Undertake analysis on the surrounding environment and geology;</li> <li>Coordinate city development and environmental protection programs and projects;</li> <li>Establish a research institution to protect the city from soil erosion;</li> <li>Develop and implement programs and projects to protect against soil erosion, dust storms and sand drifting; and</li> <li>Undertake incremental forestation of the city and its surroundings.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Environmental Strategy: (3) Construction and Housing Sector Strategy; (4) Regional Development Project: (5) Master Plan of Darkhan and (6) Land Use Plan.
Expected Benefits / Targeted Beneficiaries / Outputs	Increase city green areas to stop the desertification process and increase the proportion of residents living in an ecologically safe environment.
Key Assumptions / Project Conditions	Clean and healthy living conditions will be established and sustained.
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1,2 4, 6 Sector Linkages: Urban Development, Environment
Estimated Investment Requirement	Estimated initial project cost: US\$ 150,000 Estimated annual cost of operation and services:
Implementing Agency/ Body	Governor's Office, Environment Unit, Strategic Planning and Policy Implementation Department, Ministry of Environment.
Relevant Agencies to be Coordinated	Professional Monitoring Department and Land Office of Province, International Organizations
Provisional Funding Scheme	□ Local Government       □ Private Sector         □ Central Government       □ Specially Organized Fund         □ International Assistance fund       □ Other:
Private Sector	Obtain information, develop projects and programs, undertake incremental activities, provide
Participation	investment and funding
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	<ul> <li>Development of sub-programs on protection of the city area from soil erosion;</li> <li>Development of sub-programs on protection of the city area from sand drifts;</li> <li>Development of sub-programs on protection of the city area from dust storms.</li> </ul>
Special Considerations	<ul> <li>Implementation of projects and programs protecting from desertification, sandstorm and sand drifting incrementally.</li> </ul>

Project Title	Develop strategy to strengthen municipal finance						
Sector	Finance Project Duration: 6 months						
Project Location	Darkhan						
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other: Policy Paper ☐ Institutional Building						
Summary of Project Objectives	Develop a strategy for Darkhan City to strengthen its municipal finance, increase own-source revenues and fund capital improvements from local budget						
Project Description	<ul> <li>Conduct study to clearly define fiscal problems at city level and make recommendations for improvements to policy framework and local capacity for budgeting and expenditure</li> <li>Reform national level policies to enable fiscal decentralization and give authority to local level for taxation and capital investments</li> <li>Build local institutional capacity for local revenue generation (setting tax rate and structures), budgeting and expenditure management</li> <li>Implement budget and expenditure software, prepare guidelines and organize trainings.</li> <li>Develop framework for prioritization and structuring of city programs and a monitoring mechanism for effective and efficient implementation.</li> </ul>						
Relation to Development Plans	Relates to all existing national and local development plans, including (but not limited to): (1) Concept of Regional Development of Mongolia, (2) National Government Action Plan, 2004-08, (3) Construction and Housing Sector Strategy, (4) Master Plan of Darkhan.						
Expected Benefits / Targeted Beneficiaries / Outputs	All city residents will benefit form municipal finance reforms. The city will become self-sufficient and able to invest in capital improvements that will benefit the entire community.						
Key Assumptions / Project Conditions	GoM will adopt reforms and local institutions will be strengthened to effectively manage municipal finances						
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, All Strategic Initiatives Sector Linkages: All sectors.						
Estimated Investment Required	Estimated project cost: US\$100,000 Estimated annual cost of operation and maintenance: N/A						
Implementing Agency/ Body	Governor's Office, Finance Department of the Governor's Office, Ministry of Finance and Parliament						
Relevant Agencies to be Coordinated	All divisions and departments at all levels of administration						
Provisional Funding Scheme	□ Local Government       □ Private Sector         □ Central Government       □ Specially Organized Fund         □ International Assistance Funds       □ Other						
Private Sector Participation	Provide recommendations and comments on favorable local tax conditions						
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:						
Environmental Considerations							
Special Considerations							

Project Title	Develop a safe and sufficient heating supply system					
Sector	Construction, Urban Development, Public Utility and Energy  Project Duration: 4 years					
Project Location	Darkhan					
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other ☐ Institutional Building					
Summary of Project Objectives	Provide residents with adequate heating to ensure a living environment for apartment buildings and ger area residents. Create a friendly environment for the establishment of small and medium scale production of the heating supply.					
Project Description	<ul> <li>Reduce losses of heating pipelines and networks;</li> <li>Increase the capacity of existing power stations; and</li> <li>Replace existing heating pipes, establish secondary sources of energy;</li> </ul>					
Relation to Development Plans	<ul><li>(1) Concept of Regional Development of Mongolia; (2) Construction and Housing Sector Strategy: (3) Regional Development Project; (4) Master Plan of Darkhan; (5) Land Use Plan;</li><li>(6) Infrastructure Master Plan; (7) Energy and Heating Loss Reduction Project.</li></ul>					
Expected Benefits / Targeted Beneficiaries / Outputs	Provide the city with sufficient heating, encourage conducive environment for developing small and medium production centers for all residents of the city. Enable the city to be provided with adequate source of energy.					
Key Assumptions / Project Conditions						
Project and Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1and 2 Sector Linkages: Road, Tourism, Communication					
Estimated Investment Requirement	Estimated project start up cost: US\$ 50,000 Estimated annual cost for operation and maintenance:					
Implementing Agency/ Body	Governor's Office, Environment Unit, Strategic Planning and Policy Implementation Department, Energy organizations of aimag and soum					
Relevant Agencies to be Coordinated	Ministry of Fuel and Energy, Professional Monitoring Department and International Organizations					
Provisional Funding Scheme	Local Government Private Sector Central Government Specially Organized Fund International Assistance fund Other:					
Private Sector Participation	Obtain information; develop programs, development actions, investment and funding.					
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:					
Environmental Considerations						
Special Considerations						

Project Title	Development of economical te maintain clean sources of ene	echnologies and equipment to supply and ray
Sector	Energy Sector	Project Duration: 2.5 years
Project Location	Darkhan	
Type of Project	Feasibility Study or Survey Development Project Institutional Building	<ul><li>□ Package Programs</li><li>□ Other Policy Papers</li></ul>
Summary of Project Objectives	production of energy; reduce the pro-	npetitiveness in the local energy sector; increase the oduction cost and price of energy; increase the use of neasures to protect the environment.
Project Description	<ul> <li>and international levels;</li> <li>Obtain comments from profess</li> <li>Coordinate city development p</li> <li>Ensure that new energy measu</li> <li>Pilot test new and advanced te</li> <li>Develop new sources of energ</li> </ul>	
Relation to Development Plans	Construction and Housing Sector S Plan of Darkhan, and (6) Industrial I	
Expected Benefits / Targeted Beneficiaries / Outputs	environment and increase the local the city's population and businesses	·
Key Assumptions / Project Conditions	and medium enterprises related to e	nd for energy will encourage the development of small energy. Sufficient access to infrastructure and information lop new, state-of-art approaches to the supply of energy.
Project and Other Sector Linkages	Project linkages: City Strategy Project 1.2, 2, and 4. Sector Linkages: Urban Developme	ect for Secondary Towns of Mongolia, Strategy Initiatives ent, Environment and Justice.
Estimated Investment Requirement	Estimated project start up cost: USS Estimated cost of annual operation	\$ 45,000
Implementing Agency/ Body		ent of the Province (Energy Service Companies). lination Department of the Province; private sector
Relevant Agencies to be Coordinated	Professional Monitoring Departmen	t and Land Office of the Province
Provisional Funding Scheme	Central Government International Assistance Fund	Private Sector Specially Organized Fund Other
Private Sector Participation	Undertake surveys and provide recontests; document results.	ommendations and comments; provide financing for pilot
Necessary Inputs/ Arrangements	Revised national level legislation City/aimag government initiative Improved institutional arrangem Local level financing International financial assistance International financial assistance Private sector participation and Maximum utilization of local technical assistance International technical assistance Other:	e nents at the local level ce (grant) ce (loan) financing chnologies ce
Environmental Considerations	Build knowledge base about enviror international experience; replicate b	nmentally friendly technologies from local and est practices in pilot activities.
Special Considerations		

Project Title	Promotion of smokeless stoves and more efficient fuel for heating/cooking	
Sector	Environment and Energy Sector Project Duration: 1 year	
Project Location	Darkhan (ger areas)	
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other Environment Protection Subprograms ☐ Institutional Building	
Summary of Project Objectives	Reduce air pollution and improve ecological and conditions and hygiene for ger area residents.	
Project Description	<ul> <li>Set up means to monitor the local environment;</li> <li>Coordinate city development programs and projects with environmental protection;</li> <li>Study modern advanced technology for stoves and fuels;</li> <li>Determine sources of finance to promote use of smokeless stoves among the poor; and</li> <li>Promote the local production of smokeless stoves and fuel.</li> </ul>	
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Energy Sector Strategy; (3) Construction and Housing Sector Strategy; (4) Regional Development Project; (5) Master Plan of Darkhan City	
Expected Benefits / Targeted Beneficiaries / Outputs	Improvements in air pollution, living conditions and health for ger area residents. Mitigation of atmospheric greenhouse gases. Small scale enterprise and employment generation through the production of fuel briquettes and other smokeless fuels in small local factories and workplaces.	
Key Assumptions / Project Conditions	Darkhan's economy will be strong enough to encourage the formation of small and medium size enterprises and sustain their activities. Local demand will be adequate for smokeless stoves and fuel.	
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1,3;5;6 Sector Linkages: Urban Development, Environment	
Estimated Investment Requirement	Estimated project start up cost: US \$15,000 Estimated annual cost for operation and maintenance:	
Implementing Agency/ Body	Governor's Office, Energy Department of Province (Energy Service companies), Strategy Planning and Policy Implementation Department of Province	
Relevant Agencies to be Coordinated	Professional Monitoring Department and Land Office of Province	
Provisional Funding Scheme	□ Local Government □ Private Sector □ Central Government □ Specially Organized Fund □ International Assistance Fund □ Other	
Private Sector Participation	Undertake surveys and provide comments and recommendations.	
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in funding Maximum utilization of local technologies International technical assistance Other:	
Environmental	Undertake environmental assessment.	
Considerations		
Special	<ul> <li>Consider the possibility of establishing briquette factory;</li> </ul>	
Special Considerations	Study stove technology;	
Considerations	Assess impacts on living standards and affordablity of population.	

Project Title	Development of urban farming and animal husbandry in ger areas.
Sector	Urban Development and Agriculture Sector Project Duration 5 years
Project Location	Ger areas and sub-urban ger areas of Darkhan city (Bags I; II; III; XV)
Type of Project	☐ F/S Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other ☐ Institutional Building
Summary of Project Objectives	Assist ger area households in developing farming through digging wells and growing vegetables to improve the living environment of Ger areas and establish cooperation.
Project Description	<ul> <li>Review marketing and management of agriculture situation;</li> <li>Coordinate developed programs and projects of city development;</li> <li>Grow vegetable and dig wells;</li> <li>Plant and produce fodders;</li> <li>Establish small-scale poultry; and</li> <li>Establlish demo agricultural farms.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Central Regional Development Project: (3) Master Plan of Darkhan City; (4) Mid-Term Development Program of Central Region; (5) Short Term Implementation Objectives for Agriculture.
Expected Benefits / Targeted Beneficiaries / Outputs	Poverty Reduction; Economic Growth; Increase in real household incomes; and Improvement of living standards;
Key Assumptions / Project Conditions	
Project and Other Sector Linkages	Urban Development, Land Management, Industry Sector, City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1;2; and 5;
Estimated Investment	Estimated project start up cost: US\$ 150,000
Required	Estimated cost of annual operation and maintenance:
Implementing Agency/ Body	Governor's Office, Small and Medium Entities, herders and farmers.
Relevant Agencies to be Coordinated	Aimag, Soum Citizen Representatives Khural, Governors, Administration Department of Aimag and Soum Governor's Office, and Community Organizations
Provisional Funding Scheme	□ Local Government       □ Private Sector         □ Central Government       □ Specially Organized Fund         □ International Assistance fund       □ Other:
Private Sector Participation	Contribution to the funding and implement the project.
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Animal husbandry in ger areas may produce negative environmental impacts which should be mitigated in project design.
Special Considerations	

Project Title	Improve Solid Waste Management in Ger Areas
Sector	Environment and Public Utility Sector Project Duration: 4 years
Project Location	Darkhan (ger areas)
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other
Summary of Project Objectives	Create clean and healthy living environment; reduce air, soil and ground water pollution; improve hygienic conditions in ger housing areas; and protect population from contagious diseases.
Project Description	Conduct environmental monitoring; Coordinate city development with environmental protection programs and projects; Investigate, introduce and pilot new technologies for waste collection, removal and disposal; Assess establishment of a waste recycling facility.
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Energy Sector Strategy; (3) Construction and Housing Sector Strategy; (4) Regional Development Project; (5) Master Plan of Darkhan City
Expected Benefits / Targeted Beneficiaries / Outputs	Air, soil and ground water pollution in ger areas will be reduced and everyday living environment of ger area residents will be improved. Residents will participate in cleaning the environment of the city
Key Assumptions / Project Conditions	Willingness of ger area residents to participate in cleaning up the environment. Provision of solid waste collection bins, trucks and personnel through private sector participation. Strong local economy conducive to the establishment of small and medium sized enterprises.
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives; Sector Linkages: Urban Development, Environment and Justice
Estimated Investment Requirement	Estimated total cost for project implementation: US\$ 35,000 Estimated annual cost for operation and maintenance:
Implementing Agency/ Body	Governor's Office, Energy Department of Province (Energy Service Companies), Strategic Planning and Policy Implementation Department of Province
Relevant Agencies to be Coordinated	Professional Monitoring Department and Land Office of the Province
Provisional Funding Scheme	□ Local Government □ Private Sector □ Central Government □ Specially Organized Fund □ International Assistance fund □ Other
Private Sector Participation	Undertake surveys and provide recommendations and comments;
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Conduct environmental assessment; Identify means to restore the environment.
Special Considerations	Investigate possibility of establishing waste recycling facility; Improve waste management; Conduct health surveys.

Project Title	"Student-centered" Specialized Training Program
Sector	Education Project Duration: 1.5 years
Project Location	Darkhan (Central Region and Darkhan-Uul Aimag)
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other: ☐ Institutional Building
Summary of Project Objectives	Develop and promote the establishment of specialized schools, encourage frequent specialization training programs and ensure whole population apply of computer
Project Description	<ul> <li>Reform curricula and teaching methodology of general education schools;</li> <li>Develop and implement Student-centered program at all level of education;</li> <li>Coordinate with programs and project in city development;</li> <li>Ensure adequacy of English language and computer training program to population, establish training and information centers by proving with sufficient base;</li> <li>Expand operation of specilased training centers.</li> </ul>
Relation to Development Plans	<ul><li>(1) Concept of Regional Development of Mongolia;</li><li>(2) Central regional Development Project;</li><li>(3) Master Plan of Darkhan City;</li><li>(4) Education sector programs and projects</li></ul>
Expected Benefits / Targeted Beneficiaries / Outputs	The number of reformed and expanded schools/ all level of population, work-age students/ / the number of english language tutors per students, computers, and equipment will be increased.
Key Assumptions / Project Conditions	
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 3.8 Sector Linkages: All economic sector including agriculture, construction and mining
Estimated Investment Required	Estimated project start up cost: US\$ 15,000 Estimated annual cost of operation and maintenance:
Implementing Agency/ Body	Education and Culture Department of Darkhan Uul aimag, Universities and Colleges, Specialized training centers
Relevant Agencies to be Coordinated	Ministry of Education, Culture and Science, Ministry of Social Affair and Labor and Employment Unit.
Provisional Funding Scheme	☐ Local Government ☐ Private Sector ☐ Central Government ☐ Specially Organized Fund ☐ International Assistance fund ☐ Other:
Private Sector Participation	Undertake surveys, provide recommendations and comments
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement s at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	
Special Considerations	

Project Title	Reduce industrial pollution by encouraging clean technologies
Sector	Environment, Industry Project Duration: 3 years
Project Location	Darkhan
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other; Policy Paper ☐ Institutional Building
Summary of Project Objectives	Encourage clean technologies; conduct environmental impact analysis of heavy factories; establish a laboratory to control and monitor the pollution caused by the factories and impose fees for violations.
Project Description	<ul> <li>Undertake analysis of local environmental conditions and constraints;</li> <li>Coordinate city development with environmental protection programs and projects;</li> <li>Initiate and draft laws to encourage clean technology through tax exemption incentives;</li> <li>Develop programs to reduce industrial pollution and establish pollution monitoring laboratory; and</li> <li>Provide training and safety equipment for environmental monitors and remediators working with hazardous materials.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Environment Strategy; (3) Construction and Housing Sector Strategy; (4) Regional Development Project; (5) Master Plan of Darkhan, and (6) Land Use Plan.
Expected Benefits / Targeted Beneficiaries / Outputs	Produce environmentally sound products by introducing ecologically clean technology.  Ensure safe and healthy conditions for food production and distribution. Provide healthy living environment for the population. Increase the proportion of city residents living in an ecologically safe environment.
Key Assumptions / Project Conditions	Clean and healthy living conditions can be established and sustained. Darkhan will be developed as a leading city in Mongolia with a strong economy built on small and medium enterprises, well-educated and intelligent residents, and adequate access to infrastructure and information technologies.
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1,2, 4 and 6 Sector Linkages: Urban Development
Estimated Investment Requirement	Estimated project start-up cost: US\$ 150,000 Estimated annual cost of operation and maintenance:
Implementing Agency/ Body	Governor's Office, Environmental Unit, Strategic Planning and Policy Implementation Department, Ministry of Environment.
Relevant Agencies to be Coordinated	Professional Monitoring Department and Land Office of the Province, International Organizations
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	Obtain information, develop projects and programs, incremental actions, investment and funding
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in funding Maximum utilization of local technologies International technical assistance Other:
Environmental	
Considerations	
Special Considerations	

Project Title	Remediation of environmental damages from mining activities	
Sector	Environment Project Duration: 6 years	
Project Location	Darkhan	
Type of Project	☐ Feasibility study or Survey ☐ Package Programs ☐ Development project ☐ Other; Policy Paper ☐ Institutional Building	
Summary of Project Objectives	Upgrade mining facilities; reforest and green city and surrounding environment; develop irrigation system.	
Project Description	Undertake analysis of surrounding environment, land morphology and soil conditions; Coordinate city development and environmental protection programs and projects; Re-use restored land; Reforest entire area on incremental basis; Establishment irrigation system.	
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Environment Strategy; (3) Construction and Housing Sector Strategy: (4) Regional Development Project; (5) Master Plan of Darkhan and (6) Land Use Plan.	
Expected Benefits / Targeted Beneficiaries / Outputs	Carry out land restoration on continuous basis to ensure equilibrium of ecology and increase the proportion of residents living in an ecologically safe environment.	
Key Assumptions / Project Conditions	Clean and healthy living conditions will be established and sustained. Willingness of the population to participate.	
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1,2 4, 6 Sector Linkages: Urban Development, Public Utility	
Estimated Investment Requirement	Estimated project start up cost: US\$ 150,000 Estimated annual cost of operation and services:	
Implementing Agency/ Body	Governor's Office, Environment Unit, Strategic Planning and Policy Implementation Department, Ministry of Environment.	
Relevant Agencies to be Coordinated	Professional Monitoring Department and Land Office of Province, International Organizations	
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other	
Private Sector Participation	Develop projects and programs, incremental actions, investment and funding	
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in funding Maximum utilization of local technologies International technical assistance Other:	
Environmental	Identify affordable methods of environmental remediation;	
Special Considerations	Identify different approaches to forestation in and around the city.  Establishment of irrigation system, and implementation of complex projects; Incremental afforestation of areas (30-100 percent): Forestation upto 30 percent of the area within 1.5 years after implementaion of the project; Forestation upto 70percent of the area within 4 years after implementaion of the project; Forestation upto 100 percent of the area within 6 years after implementaion of the project.	

Project Title	Development of program to ensure healthy and safe living environment for the population and prevention of diseases.	
Sector	Health Sector Project Duration: 1.5 Years	
Project Location	Darkhan	
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development project ☐ Other Policy Paper ☐ Institutional Building	
Summary of Project Objectives	Study the structure of the city's population, link it to urban planning activities and take action to ensure a healthy and safe living environment for the population that protects them from disease.	
Project Description	<ul> <li>Study the structure of population by different demographic criteria (age, sex, health and living standards, poverty etc)</li> <li>Coordinate with others programs and projects in city development;</li> <li>Obtain comments from professional institutions and specialists;</li> <li>Ensure that project is consistent with Mongolian legislation.</li> </ul>	
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Health Sector Strategy; (3) Regional Development Project, and (4) Darkhan Master Plan	
Expected Benefits / Targeted Beneficiaries / Outputs	The number of residents living in healthy conditions will be increased. General living conditions will be improved for all citizens.	
Key Assumptions / Project Conditions	A clean and healthy living environment will be created to benefit all of the city's residents.	
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 4 and 5 Sector Linkages: Urban Development, Environment and Justice	
Estimated Investment Requirement	Estimated project start up cost: US\$ 15,000 Annual operation and services:	
Implementing Agency/ Body	Governor's Office, Administration Department of Governor's Office, Health Department of Province, Professional Monitoring Department	
Relevant Agencies to be Coordinated	Education and Cultural Department, Police Department of Province	
Provisional Funding Scheme	□ Local Government □ Private Sector □ Central Government □ Specially Organized Fund □ International Assistance Funds □ Other	
Private Sector Participation	Undertake surveys and provide comments and recommendations.	
Necessary Inputs/ Arrangements	Revised national level legislation and policies; City/aimag government initiatives Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other	
Environmental Considerations	Include preventive actions of flood; Provide recommendations on taking care of planting and afforestation	
Special Considerations	Street lighting in Ger areas; Development of road and pavement of Ger Areas;	

Project Title	Apartment Roof Repair Project			
Sector	Construction and Urban Development	Project Duration: 2 years		
Project Location	Darkhan			
Type of Project	☐ Feasibility Study or Survey ☐ Packaged F☐ Development Project ☐ Other			
Summary of Project Objectives	Repair roofs of 500 block apartment houses with during 1962-1990.	h total area of 150, 000 square metres built		
Project Description	<ul> <li>Study new technology in construction mate</li> <li>Make a study of raw material and reserves         Central region</li> <li>Select the repair material and make financi</li> <li>Repair the roofs</li> </ul>	of construction material in Mongolia and ial estimation;		
Relation to Development Plans	(1) Action Plan of the Almag and Soum Governi Housing Sector Strategy; (4) Central Region De Darkhan City			
Expected Benefits / Targeted Beneficiaries / Outputs	Favorable living environment for residents living	in apartments		
Key Assumptions / Project Conditions	Select the high quality and low cost material. Im	plement the project through bidding process.		
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secor Sector Linkages: Public Utility Service Sector			
Estimated Investment Requirement	Estimated total cost for project implementation: Estimated annual cost for operation and mainter			
Implementing Agency/ Body	Governor's and Mayor's Office			
Relevant Agencies to be Coordinated	City, soum and aimag's all departments, all cons	struction institutions		
Provisional Funding Scheme		Sector y Organized Fund		
Private Sector Participation	Undertake surveys and implement;			
Necessary Inputs/ Arrangements	Revised national level legislation and policie City/aimag government initiative Improved institutional arrangements at loca Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:			
Environmental Considerations				
Special Considerations				

# Annex A. Working Group Members and Workshop Participants

# **Steering Committee Members**

- 1. Hayanhirvaa, City Mayor and Governor of Darkhan Uul Aimag
- 2. Gunchin, Speaker of Local Parliament (Citizen's Representative Committee)
- 3. Vice Governor of Darkhan Uul Aimag

# **Working Group Members**

- 1. Kh. Baast Head of Governor's Office
- 2. D. Maidar Head, Mayor's Office
- 3. G. Erdenbat Head, Strategy planning, policy implementation coordination department
- 4. B. Lhasuren Head, Ecological Department
- 5. T. Tumurkhuu Head, Public Transportation Department
- 6. A. Adia Head, Telecommunication Department
- 7. Yo. Enkhtuya Chief Engineer, Heating Plant share holding
- 8. Z. Munkhbat Head, Land Agency
- 9. E. Batsaikhan- Darkhan Nekhii, sheep skin processing factory
- 10. A. Purevdorj Chief Engineer, "Water Supply" state share holding
- 11. Sh. Zorigtbaatar- Chief Engineer, PUSO
- 12. Ye. Lhundev Chief Engineer, Electricity Delivery Network SSH
- 13. Ch. Boldbaatar- Head, Legal Issues Department
- 14. P. Batjargal Head, State Governance and Social Policy department
- 15. A. Amgalan Head, Education and Culture Department
- 16. A. Gurbazar Officer, Infrastructure
- 17. M. Enkhbayar Officer, Commerce and Industry
- 18. Nansalmaa Officer, Budget and Investment
- 19. Sh. Gendenjamts Head, Statistical department

# Visioning Workshop Participants January 17, 2005

- 1. L. Gunchin, Speaker of the Local Parliament
- 2. D. Erdenebayar, Housing Finance Project Coordinator
- 3. D. Togjil, Bag 7 Leader
- 4. Ts. Naymbuu, Bag 7 CBO Director
- 5. D. Bayaraa, PUSO Director
- 6. Sh. Alzahgui, Darkhan Nabuk Company Director
- 7. D. Jargalsaihan, Officer, Governor's Office
- 8. L. Zolboot, Head of Health Department
- 9. R. Otgonjargal, Specialist, Sustainable Livelihood Project
- 10. T. Altangerel, Manager, Public Transportation Office
- 11. Kh. Solongo, DBS TV reporter
- 12. Ts. Tungalag, DBS TV camerawoman
- 13. P. Yura, Governor of Darkhan Soum
- 14. Z. Tsengelsaikhan, Head of Governor's Administration Office
- 15. G. Erdenebat, Head of Strategic and Policy Coordinating Department
- 16. S. Mendkhuu, Executive Director, Chamber of Commerce and Industry
- 17. T. Sugar, resident of Darkhan

- 18. D. Maidar, Chief Architect, Darkhan
- 19. Sendenkhorol, Executive Director, Darkhkan Flour Co.
- 20. Enkhbayar, Governor's Office specialist
- 21. Enkhchimeg, Auditor, Itgelt Audit Company
- 22. Nansalmaa, Governor's Office specialist
- 23. Gurbazar, Governor's Office specialist
- 24. Lhamsuren, Darkhan Wool Cooperative
- 25. Bathuu, Director, Damon Trade Company
- 26. Tsevegmid, Executive Director, Darkhan Food Company
- 27. Ch. Chunag, Executive Director, Sergelen Company
- 28. O. Bolormaa, Executive Director, Urtuuchin Company
- 29. D. Tsegmid, Inspector, Professional Inspection Department
- 30. B. Battsetseg, Chief Engineer, Communication Office
- 31. Lhasuren, Head of Environmental Office
- 32. G. Bold, Bag 1 Leader
- 33. B. Ganzorig, Darkhan Builder's Association
- 34. S. Elbegbayan, Executive Director, Darkhan Water Company
- 35. B. Purevdorj, Department Head, Darkhan Water Company
- 36. Yo. Lhundev, Head of Department, Darkhan Selenge Electricity Delivery Company
- 37. N. Oyuntsetseg, Human Resource Manager, Mongol Alt Company
- 38. D. Jambaldori, Chief Engineer, PUSO
- 39. Yo. Enkhtuya, Chief Engineer, Darkhan Heating Network Company
- 40. Ch. Tsendsuren, Governor's Office, Head of Strategic Planning and Policy Coordination Department
- 41. T. Chimgee, Bag Leader
- 42. B. Batjargal, Production Department Head, Meat Expo Company
- 43. Namjildorj, Mayor of Tsetserleg City
- 44. A. Zulgerel, Executive Director, MAUC
- 45. Ya. Nasandelger, Mayor, Choibalsan city
- 46. B. Ulziisaikhan, Mayor, Khovd city

# Strategy Session Participants February 2, 2005

- 1. D. Maidar, Chief Architect, Darkhan
- 2. B. Lhasuren Head, Ecological Department
- 3. Altangerel Specialist, Public Transportation Department
- 4. Yo. Enkhtuya Chief Engineer, Water Network Co.
- 5. Z. Munkhbat Head, Land Agency
- 6. S. Gankhuyag Chief Engineer, Electricity Delivery Network
- 7. P. Batjargal Head, State Governance and Social Policy Department
- 8. D. Gurbazar Infrastructure Officer, Governor's Office
- 9. M. Enkhbayar Officer, Commerce and Industry
- 10. B. Ganzorig Head, Builders Association of Darkhan
- 11. S. Gendenjamts Head, Statistical Department
- 12. P. Buyanjargal Head, Health Department
- 13. Ch. Boldbaatar Head, Legal Department
- 14. D. Jargalsaikhan Officer, State Governance and Social Policy Department

- 15. Battsetseg Chief Engineer, Telecommunication Office
- 16. H. Olonbayar Specialist, Mayor's Office
- 17. S. Mendkhuu Head, Chamber of Commerce and Industry

# Strategy Workshop Participants March 25, 2005

- 1. D.Tojil Bag 7, leader
- 2. G.Erdenebat Head of Strategical and Policy coordinating Department
- 3. Gurbazar Governor's Office specialist
- 4. Lhasuren Head of Environmental Office
- 5. D.Jargalsaihan Governor's office officer
- 6. B.Batjargal Meat expo company, Production Department head
- 7. L.Zolboot Head of Health department
- 8. D.Bayaraa PUSO director
- 9. P.Baatarhuu chief engineer, PUSO
- 10. H.Baast Head of Mayor's Office
- 11. H.Olonbayar Officer, Mayor's Office
- 12. D.Nyamhuu Head, Financial and Policy Coordination Department Aimag Government,
- 13. L.Sarangerel economist, Darkhan station, UB Railway JV
- 14. B.Amarjargal CHF, business consultant
- 15. Z.Munhbat- Head, Land Affair Office
- 16. Ch.Boldbaatar Head of Department, Aimag Government
- 17. J.Baljinnyam Head of Transportation Department
- 18. S.Bayartsetseg Specialist, Environmental Office
- 19. D.Tsegmid National inspector, Professional Control Office
- 20. D.Bayarsaihan- Head 12 bag
- 21. Lhagvasuren Director, Technical University
- 22. J. Uranchimeg Specialist, DMP

# Final Workshop Participants July 6, 2005

- 1. Mr. Hayanhyarvaa, City Mayor and Darkhan-Uul Aimag Governor
- 2. Mr. Erdenebat, Director, Strategy Planning and Policy Coordination Dept.
- 3. Mr. Baast, Head of Governor's Office
- 4. Mr. J.Mijiddorj, Agricultural Institute
- 5. Mr. Gunchin, Speaker of Local Parliament
- 6. Mr. Lhasuren, Director, Environment Department
- 7. Mr. Maidar, Head of Mayor's Office
- 8. Mr. Batsaihan, Director, Sheepskin Factory LLC

# **Annex B. SWOT Analysis**

At the Visioning Workshop, held on January 17, 2005, participants were asked to identify the city of Darkhan's key strengths, weaknesses, opportunities and threats. Numbers in the table indicate the number of times the response was given by participants.

STRENGTHS	WEAKNESSES
Infrastructure – 19 Infrastructure, roads and transportation – 13 Heavy production machinery - 7 The location – 6 Production of construction materials – 5 Labor force resources – 4 Mineral resources – 2 Construction, apartments – 2 High intellectual capacity – 2 Relations with the northern and the southern neighbors – 2 Clean and healthy environment – 2 Very stable, aware of its responsibilities and goals – 1 Food production – 1 Trade and service industry – 1 Economic growth - 1 The farming region – 1 Dense population – 1 Relatively young city - 1 Urban development – 1	WEAKNESSES  Ecological issues (soil erosion, sand drift) – 13 Unemployment - 8 Out-dated technology of both construction and production of construction materials – 6 Administration – 4 Ger communities – 4 Poverty – 4 Conversion of the city to the soum was a mistake – 3 There are no future oriented productions capable of influencing the city economy positively – 3 Small population – 3 Roads – 3 The location – 2 Large number of unused buildings – 2 Narrow business environment – 2 Limited territory – 1 Flood protection dams are insufficient – 1 Land usage – 1
OPPORTUNITIES	THREATS
Industrialization – 12 The pillar center of a region - 6 Roads and transportation – 5 Market – 5 Connections to the northern and the southern neighbors – 3 Location – 3 Construction and construction materials resources – 4 Free economic zone – 1 Green house -1 Possible to reduce the poverty -1 Efficient use of the land – 1 Use of labor force resources – 1 Development of equipment and technologies – 2 Start using unused buildings – 1 Obtain city status -1 Faster than today development – 2	Soil erosion - 12 Environmental pollution and changes (disasters) – 11 Flood threat – 10 Economic crisis – 7 Poverty – 2 In-migration – 2 Unemployment – 1 Number of the uneducated - 1 Use of utility service networks – 1 Wild fires -1 Lack of lands – 1 Lack of human resources -1 Depends on external power supply - 1 Density of the population - 1 Migration to UB - 1

Change the social lifestyle based on the economic and technological changes -1	
Metallurgical plant – 1	
Education - 1	
Merger of Darkhan-Uul and Selenge Aimags-1	
Apartment provision (affordable) – 1	

# **Annex C. Project Prioritization**

During the Strategy Workshop held on March 25, 2005, participants were asked to rank each project or program idea according to five criteria in order to systematically prioritize projects. The criteria, chosen from among those used by Ulaanbaatar and other cities around the world for preparation of their City Development Strategies, included:

- 1. Relevance to development policies
- 2. Financial viability and economic returns
- 3. Environmental benefits
- 4. Social benefits
- 5. Implementation capacity

Participants worked in small, thematic groups based on the six strategic initiatives to rank the projects on a scale of 1 to 5 (1=none, 5=significant) for each criteria, and presented the results of their deliberations to the whole group for discussion and verification.

# Strategic Initiative 1. Improve the business environment to encourage the development of small and medium businesses.

Sman and medium businesses.						
Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Provide enabling environment for small and midsize businesses; (e.g. loan rebates, flexible taxation policy, get involved in projects and programs, open up markets, new training and advertising centers, etc.)	5	4	2	4	3	18
2. Define what the "Free economic zone" is and develop marketing strategy of Darkhan city for regional, domestic and international relations	4	4	3	4	4	19
3. Supply the most economical equipment, machinery and technologies and maintain clean power sources	4	4	5	4	3	20
4. Carry out "One village-one product" project	4	4	3	4	4	19
5. Expand the business environment by merging aimags and soums and enlargement of the administrative units	5	4	4	5	4	22

Strategic Initiative 2. Improve living conditions of the ger communities.

Properly reorganize and prepare development of ger communities for access to infrastructure (Prepare development maps and structural charts for existing ger communities)	5	3	5	4	4	21
2. Provide infrastructure to ger communities, always provide utilities prior to construction of any structure; (E.g.: Prepare policies for potable water supply increase and sanitation, keep streets and common yards clean, create "Neighborhood Associates" which provide control and keep responsibilities for those streets and yards and provide adequate lighting in plots and streets)	5	3	4	5	3	20
3. Upgrade solid waste management in ger communities	5	3	4	4	4	20
4. Use smokeless fuel for heating, provide smokeless stoves to every household	5	4	5	5	4	23
5. Construction of new wells, provision of conditions for planting of vegetables and cooperative enterprises in order to improve the living conditions of the ger communities	5	4	4	4	4	21

Strategic Initiative 3. Develop human resources capable of meeting the existing and future

job market requirements.

Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Arrange professional and student oriented classes and support schools that train qualified personnel and perform professional training, focus on language and computer literacy skills	4	5	2	5	4	20
2. Train qualified human resources which can meet real needs and requirements of businesses accordingly	4	4	2	5	4	19

Strategic Initiative 4. Improve urban development and land management systems.

Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Prepare and realize a development program for safe and sufficient heating supply of the city	5	4	3	4	4	20
2. Improve synchronization of the city Master Plan, Land Management Master Plan, regional development planning and other related documents, maps and projects	5	4	4	5	4	21

3. Develop a participatory strategic planning process, establish workgroups and review strategic documents	5	4	3	4	3	19
each quarter						

**Strategic Initiative 5. Protect the Environment.** 

Strategic initiative 3. Protect the Environment.						
Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Encourage clean technologies (via taxation policy and other), impose fines on industries that negatively impact the environment; monitor impacts of heavy industries on the environment, provide environmental protection officers/ inspectors with proper working conditions and equipment	5	4	5	5	4	23
2. Establish a research facility aimed at protecting the city from desertification and implement the "Let's protect Darkhan city from sand drift" project	5	4	5	5	5	24
3. Make the mining industries complete land restoration works, get high quality forest restoration work done by professional facilities in surrounding areas, create green zones, protect them and equip them with irrigation systems.	5	5	5	5	5	25

Strategic Initiative 6. Improve human development and social welfare policies.

Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Study the city population and create a program that will provide conditions for a healthy and secure urban environment	4	4	5	4	4	21
2. Build a regional diagnosis and healing center	5	4	4	5	5	23
3. Implement a self education, trainings and lectures as a program	4	4	4	4	4	20

# Annex D. Darkhan City Profile



# City Development Strategies for Mongolia's **Secondary Cities**

# **Darkhan City Profile**

# **Current population status**

#### **Darkhan-Uul Aimag**



#### Aimag territory is 327,500 hectares

- Darkhan soum 10.315 hectares
- Sharyn Gol 253,338 hectares
- Khongor soum 47,787 hectares • Orkhon soum - 16,060 hectares

#### 4 soums and 24 baghs with:

- 20,100 households



- 86,500 people



# Darkhan

#### 16 bags of Darkhan soum are in Darkhan city



- Darkhan has 73,408 residents, or: -3% of the Mongolian population;
- -16.5% of the regional population;
- -85% of the aimag population.

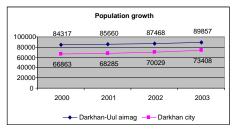


-17.0% of regional households; and -80.0% of aimag households.





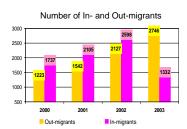
# Migration



Annual population growth is:

2.0% in Darkhan-Uul

3.2% in Darkhan city



Number of out-migrants has steadily increased in recent years. By 2003, they outnumbered in-migrants by 1,414, decreasing population growth by

# Social infrastructure

	Planned	Actual		% of
Infrastructure	capacity	capacity	Demand	Demand Met
Schools, pupils	15022	22036	22,022	68.2
Kindergartens, children	2209	2559	7,340	30.0
Hospitals, beds	486	421	588	82.6



# Housing





62.6% of Darkhan population lives in apartments. Living area per person is 3.37 m<sup>2</sup>, which is more than 50% less than national standards.

#### On-going housing activities

The plans for increasing density of the 2<sup>nd</sup> apartment block and for improving conditions of ger community in the 7th bag within the boundaries of ADB MOH 1847 project are under way.

#### The plan for densifying the 2<sup>nd</sup> apartment block.



The plan for improving ger community in the 7th bag



In 2003, in ger communities there

- 444 hectares of land
- 3,749 plots
- 4,605 households
- 27,400 people.

Land privatization rate is 11.0%



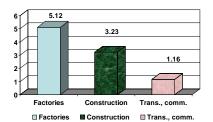
# City Development Strategies for Mongolia's Secondary Cities



# **Darkhan City Profile**



#### · City Productivity



Parameter	Measurement units	Real figures
GDP	₹ / person	394,245
Factories	₹ / employee	5,124,604
Construction	₮ / employee	3,226,291
Transportation and telecommunications	₮ / employee	1,164,172

In 2003, GDP per capita for Darkhan-Uul Aimag was MNT 394,245, an increase of 2.5% from the previous year. Darkhan-Uul contributes 2.6% of the national GDP.

#### Fastest Growing Commodities

Product	2001	2002	2003	Growth %
Iron prefabricates	9699	15595	39113	303%
Lime	4	6	17	295%
Milk and milk products	20	49	64	216%
Cast iron	7248	10404	20621	185%



Many sectors of Darkhan economy can provide stable economic growth and city development.

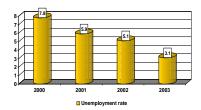
Transportation, financial services and real estate sectors have grown most significantly.

# Unemployment

Number of employed was 28,400 in 2003, an increase of 22.9% over previous year.

The labor force involvement rate was 73.25% in 2003, which is higher than the national average by 8.75 percent.

Employment rate was 71%, which is higher than the national average by 8.8 percent.



Registered unemployment rate is 3.1 percent, which is 2.8 percent less than previous year.

## Poverty

The poverty line for Central region is 20,600 MNT and there are 2,000 households under that line in Darkhan, of which 1,875 live in ger communities.

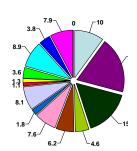
Average household income in Darkhan is:

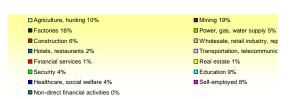
- 110,000 MNT in apartment blocks;
- 56,000 MNT in ger communities, which is 30-60% lower than the national average.

# • Manufacturing in 2003 15% 34% 10% 8% 10% 8% Publishing Coal mines Sesuing Permissi Production Coal mines Coal mi

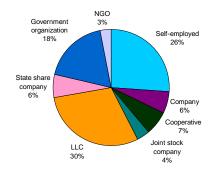
#### • Employment by Sectors in 2003

As the majority of the population work in limited liability companies (LLCs), a shift from state-owned to private businesses can be seen.





### • Employment by Organization Type in 2003



Number of LLC employees has grown by 5 times between year 2000 and 2003.

Even though NGO employees are only 3 percent of total, their number has increased 5 times in the last 3 years.



# City Development Strategies for Mongolia's Secondary Cities



# Darkhan city profile

# Infrastructure

#### Water supply

The city water supply and sewage are operated by one local entity – "Darkhan Us Suvag" Joint Stock Company. 50,000 residents of the apartment buildings and over 600 enterprises are provided with water supply and sewage services. Over 22,000 residents of ger communities are supplied with potable water through 30 water kiosks. The water loss level has reached **30.0%** due to deteriorated pipelines.

**Utility services** 



Darkhan is connected to Ulaanbaatar by 236 km of roads and to Erdenet by 180.6 km of roads. It is connected to Ulaanbaatar and to Erdenet by 246 km and 180 km railroads, respectively.

#### · Heating supply

#### **Darkhan Thermo Power Plant**

The plant supplies only a portion of Darkhan city's power needs.

**80%** of total revenues comes from power sales and 20% from heating sales. Heating losses are covered by profits from power sales.

#### "Darkhan Heating Network" LLC.

State-owned enterprise that supplies Darkhan city users with hot water, steam and heating and is responsible for their delivery, distribution and for a pumping station. Built areas of the city are fully supplied with heating.



# Proposed Infrastructure Investments (From Master Plan)

Proposed actions	Required investments (billion ₹)
Current water usage level will be increased by <b>1.5</b> times by year <b>2010</b> and water supply pipelines will be expanded.	1,162
By year <b>2020</b> , there will be 133.48 km of roads.	2,1
By year 2020 the capacity of the Thermo Power Plant will be increased by 28.0 Giga-calories per hour and the pipelines will be expanded.	8,454.0
Present flood protection facilities will be restored and improved according to the plan.	15.0
After <b>2010</b> several power sub-stations and depots will be required.	





#### Power supply

Some of Darkhan's power needs are supplied by the Thermo Power Station of the city and the rest by Ulaanbaatar and a sub-station connected to the Eastern Siberia power grid of Russian Federation;

Power distribution organization was privatized in 2003:

The station distributes and supplies electricity to Darkhan-Uul and Selenge aimags and to some soums and towns of The Central aimag;

**5%** of total revenues are from households, **70%** from factories and enterprises, and **15%** from services. 10% of revenues are not collected.

#### Flood Infrastructure

Flood protection dams and trenches have deteriorated and are in need of renovations and repairs to adequate protect against future flooding.



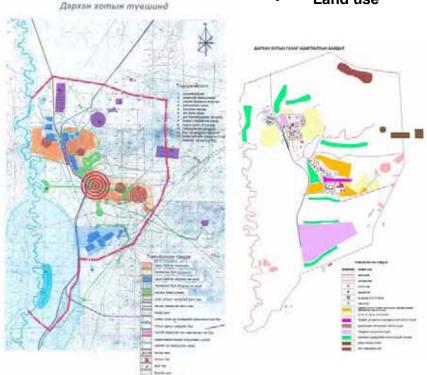


# City Development Strategies for Mongolia's Secondary Cities



# **Darkhan City Profile**





Nº	Classification	hectares	%
1	Agricultural	232,853	71.1
а	Pasturelands	122,480	52.6
b	Hay fields	12,807	5.5
С	Crop fields	39,585	17.0
2	Forest reserves	73,360	22.4
3	Water reservoir	2,109	0.64
4	City, village and other settlements	11,561	3.53
а	Building lands	515	4.45
5	Roads, pipelines and networks	2,620	0.8
6	Reserve lands	4,913	1.5
	Total	327,500	100.0

11,600 hectares of Darkhan-Uul aimag's territory are city and village lands and 514.7 hectares are occupied by buildings.

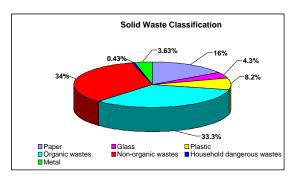
Soum	Total area (hectares)	Building lands (hectares)	Percentage
Darkhan	10,315	283.6	2.75
Khongor	253,338	98	0.04
Orkhon	47,787	10.1	0.02
Total	327,500	514.7	0.15

Vacant lands with complete access to utility services are available between "old" and "new" Darkhan. Although the Master Plan proposes new settlement lands, there are no means for implementation.

#### Environment







Air pollution level is high in the city and surrounding areas.

The flow and direction of Kharaa river started to change because forests and river embankments are being destroyed.

Kharaa river pollution exceeds permitted level by 2.5 - 4.0 times.

Pollution and erosion of 1  $\rm m^2$  of land has reached **30.0** percent and the rate of erosion is high.

Forest reserves are declining. Some **65** years worth of tree growth were cut in a 10 year period between **1985** and **1995**. Of **73,600** h of destroyed forests, **7,3**00 were destroyed by fire.

City solid waste is removed by Public Utility Service Organization (PUSO), "Uuliin Jim" LLC, by other enterprises and individuals. On average, **70-74 m³** of waste is disposed of at 2 official dump sites every day.

Waste is not sorted at collection points.

Waste removal fees are not completely paid by households.

In ger areas, waste collection is primarily undertaken by households on a voluntary basis.

# ERDENET City Development Strategy

In April 2004, the city of Erdenet began a participatory planning process to develop a **City Development Strategy**—a vision and strategies for the future development of the city and priority projects to realize that vision. After months of analysis and deliberation among city officials and administrators, local business owners and community leaders, Erdenet's first strategic plan is complete.

The future city vision has been developed with input from the city residents, private enterprises, state organizations and NGOs as follows:



#### **Erdenet Vision**

A model city with healthy and highly educated residents, a balanced environment, a strong, export-oriented economy based on information technology and manufacturing and the center of regional development.

To achieve this vision, Erdenet developed six key strategic initiatives:

- 1. Develop Erdenet as the center of development of the Khangai Region:
- 2. Improve the business environment to diversify the economy and encourage the development of a) information technology; b) production industries; and c) tourism;
- 3. Develop an efficient urban planning and land management system;
- 4. Develop human and cultural resources;
- 5. Manage natural resources and protect the environment; and
- 6. Improve living conditions in ger area communities.

A set of projects and programs designed to meet the objectives of each Strategic Initiative were proposed and subsequently assessed and prioritized according to a set of criteria, including: a) relevance to development policies; b) financial viability and economic returns; c) environmental impacts; d) social benefits; and e) implementation capacity. The results of the prioritization exercise are included in Annex C.

The Working Group then reprioritized these 26 projects, and preliminary proposals were developed for the 13 highest ranked projects.<sup>1</sup> These projects form the core of Erdenet's CDS. They represent the development priorities of the city within the framework of a larger vision for the city's future.

The CDS is a living document to be used in everyday decision-making, revisited on a regular basis and updated as the city grows and changes. It complements the city's Master Plan by prioritizing

<sup>&</sup>lt;sup>1</sup> A list of Working Group members and participants of the workshops is included in Annex A.

key projects and programs outlined in the Master Plan and providing an action plan for implementing the projects.

# **Introduction to Erdenet**

Erdenet city was founded as a new industrial center when the joint Russian and Mongolian Erdenet Copper Mine Factory was built in 1975 at Erdenet hill copper and molybdenum quarry. It has developed as one of the major keys to economic growth of the country. The Copper Mine produces 14 percent of national GDP and 69.3 percent of Orkhon aimag GDP.

In 2004, 78,882 people lived in Erdenet in 19,266 households, which is 3.2 percent of the national population and 96.2 percent of Orkhon aimag population. The population of Erdenet has been growing at an average annual rate of about 4 percent since its establishment. However, the city still suffers losses of individuals migrating primarily to Ulaanbaatar—out-migrants have outnumbered in-migrants on average over the last 3 years.

Orkhon aimag, which is essentially the territory and population of Erdenet, produces 20.7 percent of total national products, 8.6 percent of GDP and 33.3 percent of sales. Skewed by the Mine's revenues, Orkhon aimag's GDP per capita is just over 3 billion MNT, which is substantially higher than the national average.<sup>2</sup>

Despite the dominance of the Copper Mine, Erdenet's economy shows signs of diversification. The Copper Mine only employs 19 percent of the labor force, and has downsized in recent years, rather than creating new jobs; and yet 6,661 new jobs have been created in the last three years. Over 5,000 people found new jobs through a job placement agency. The estimated total unemployment rate dropped from 11.6 percent to 6.6 percent between 2000 and 2003. A total of over 1,000 factories, wholesale centers, food and convenience markets and other enterprises operate in Erdenet.

The city is well connected with paved roads and railways to Ulaanbaatar and Darkhan. Feasibility studies and engineering designs have also been completed for the construction of a 153.5 km paved road in the direction of Bulgan and Khuvsqul aimags.

Erdenet's infrastructure is relatively well developed, and notably, about 71 percent of the population, or 56,120 people, live in apartments with access to full utility services, which is higher than all other aimag centers. However, the current state of networks and pipelines is poor due to lack of funding for maintenance and repair. Even though Erdenet is relatively wealthy because of revenues generated by the Copper Mine and it is able to cover its local operating expenses unlike most aimag centers, it is just as limited as the other aimag centers in its lack of authority to spend local resources on capital investments to improve infrastructure and services.

Water supply is particularly complicated in Erdenet, because it is supplied to the city by the Copper Mine at a rate twice the national average. The sewage treatment plant is 1.25 times over capacity and sewerage pipes are also overrun, which is adversely impacting the environment.

For the 29 percent of the population living in ger communities, potable water is supplied by four trucks and distributed via 33 water kiosks. There are no centralized water supply and sewage systems in ger communities and solid waste removal services are inadequate. Potable water needs of ger community residents grew by 10 percent between 2002 to 2003 alone.

More detailed data and information on Erdenet is compiled in the City Profile, included in Annex D.

<sup>&</sup>lt;sup>2</sup> Gross Domestic Product (GDP) data is not available at the city/soum level. The national GDP per capita (2004) is 713, 750 MNT.

# **Erdenet Strategic Initiatives**

Erdenet developed six key strategic initiatives which represent priority areas of investment for achieving the city's future vision. The objectives of each strategic initiative will be met by a series of priority projects and programs. The projects included in the CDS represent a short list of initial project ideas, which were prioritized at the Strategy Workshop held on March 26, 2005.

## **<u>Strategic Initiative 1:</u>** Develop Erdenet as the center of development of the Khangai Region.

Erdenet was designated as one of two pillar centers of the Khangai Region, in accordance with the Regional Development Concept (RDC), adopted by Parliament in 2001 and the Medium Term Strategy on Regional Development (2001-2010) (MTSRD), approved in June 2003, which aim to eliminate social and ecological inequity in the territories of Mongolia and accelerate economic and social progress of the nation.



One of the major objectives of the MTSRD is to create urban development and infrastructure networks that are capable of linking the different regions to each other and to international markets. In addition, the Strategy calls for strengthening inter-relations and economic integrity among administrations and territorial units.

Erdenet is defined in the MTSRD not only as a pillar center of the Khangai region, but as a key strategic asset for the region's development as its main industrial center. Orkhon aimag revenues exceeded its local expenditures beginning in 2002, while expenditures of all other aimags in the region exceeded their local revenues by 2 to 3 billion MNT. This illustrates the advantage Orkhan aimag, which essentially comprises Erdenet city, has for leading the development of the Khangai region and building on its current advancements in economic and social development.

To become a viable center of development for the region, Erdenet proposes the following projects.

- 1. Development of a Free Economic Zone (FEZ) of Khangai Region with emphasis on information technology sector;\*
- 2. Develop a regional IT center;
- 3. Develop progressive technologies for intensive farming;
- 4. Develop a leading industrial and technological park to serve the region; and
- 5. Improvement of energy supply and establishment of hydroelectric power station.\*

<sup>\*</sup> Indicates projects that have been selected among the 13 highest ranked projects for which more detailed proposals have been prepared.

# <u>Strategic Initiative 2:</u> Improve the business environment to diversify the economy and encourage the development of a) information technology; b) production industries; and c) tourism.

Erdenet's economy is heavily dependent on the Copper Mine—mining contributes almost 70 percent of the aimag's GDP. The city recognizes the need to create a more favorable business environment that will enable its economy to diversify. There are already positive trends towards diversification, which lay the ground for continued growth in information technology, production industries and tourism.

A total of over 1,000 factories, wholesale centers, food and convenience markets and other enterprises operate in Erdenet; the largest among these include the Erdenet Mining Factory, Erdenet Carpet, Chinese and German invested Erdenet Progress and Mongema meat factories, Fightat braiding factory, Erdenet Chandmani sideway tile factory, Erdenet Food, Petroleum Production oil refinery, Erdenet Metal and Metal Industrial



metal processing factories, Erdmin pure cathode copper factory and Erdenet Cashmere. Fifty-two new factories were built between 2001 and 2003.

34.7 percent of all enterprises operate in manufacturing, 20.5 percent in wholesale and retail trade, 20.3 percent in infrastructure and 17.5 percent in agricultural sectors. They produce a total of over 200 billion MNT in products and services.

In 2002, 8.3 billion MNT in loans were issued to supplement household incomes and to support small business development, of which 3.2 billion supported the creation of new jobs.

In the last three years, 6,661 new jobs have been created in Erdenet. The estimated total



unemployment rate dropped from 11.6 percent to 6.6 percent between 2000 and 2003. Also, 22.2 million MNT has been spent in the last three years from the local budget to provide professional training for 5,210 unemployed youth.

To build on these positive trends to improve the business environment and meet the objectives of Strategic Initiative 2, the city of Erdenet proposes the following priority projects.

- 1. Develop a business information and support center;
- 2. Development of Erdenet tourism network:\*
- 3. Development of export-oriented industrial park with emphasis on agricultural and environmentally-friendly production;\* and
- 4. Develop policies in support of export.

# Strategic Initiative 3: Develop an efficient urban planning and land management system.

The Master Plan of Erdenet city was completed in 2000 and updated in 2003 after Erdenet was designated as a pillar center of the Khangai Region. The Master Plan is an illustrated site plan, which prescribes targeted uses for specific sites and includes a series of planned improvements for infrastructure networks, which are not prioritized or coordinated and lack implementation plans.

Within the current framework, planning and land/construction management are separate and distinct



activities, carried out by different agencies and organizations. Without mechanisms to link the processes, urban planning lacks purpose, and development of the city will continue in an ad hoc, piecemeal way.

Of the 19,686 people originally scheduled to privatize their lands in Orkhon aimag, 6,206 live in ger areas. A land inspection revealed that 1,641 of those ger area land parcels are located in areas planned for roads, buildings and structures or in high voltage line areas, consequently making it impossible to grant land titles. Of the remaining 4,565 ger area residents eligible for land privatization, nearly 780 people have applied and 514 applicants were granted ownership of the land parcel they occupied. Over 6,000 applications for new land parcels have been received this year and so far, 255.3 hectares have been granted to 3,252 people. The existing Master Plan does not respond to this new situation of private land ownership, which will only continue to grow.

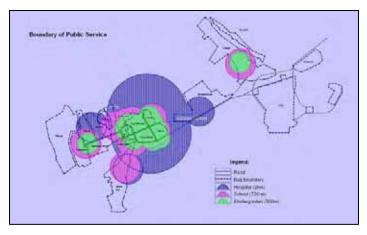
The city is also faced with deteriorating infrastructure networks and complicated service delivery arrangements. Water supply is a particularly challenging issue for the city. The water source is located 64 km from the city and the pumping stations are owned by the Erdenet Copper Mine, which sells water to the city for twice the national average rate for water. Heating is also a problem, because the city's Thermo Power Plant capacity is not sufficient to meet the needs of Erdenet's residents, supplying just 80 percent of the formal residential area with heat.

Even though the city generates enough local revenues to cover local operating expenses, it is constrained by national policies limiting its ability to generate substantial own-source revenues, and prohibiting it from spending local revenues on capital improvements. The city requires a strategy to improve its financial situation in order to plan, finance and manage urban infrastructure and other investments.

The following projects are proposed to achieve the objectives of Strategic Initiative 3.

- 1. Prepare composite plans for land management and urban development;
- 2. Implement a housing program;
- 3. Establish a crematory;\*
- 4. Upgrade and expand the water supply network;\*
- 5. Expand the capacity of the city Thermo Power Plant, power distribution equipment and heating supply pipelines; and
- 6. Develop a strategy to strengthen municipal finance.\*

# Strategic Initiative 4: Develop human and cultural resources.



The city does not have the required authority or capacity to support the development of social services. Hospitals and schools are run by the central government and policy decisions regarding healthcare and education are made at the national level. While the professional quality of social services may be better controlled by this arrangement, it makes the social services system unresponsive to local needs.

# **Social Infrastructure Capacity**

	Unit	Planned capacity		Required capacity	
Schools	pupils	11,286	20,526	23,220	68.5
Kindergartens	children	3,010	4,158	7,888	51.0
Hospitals	beds	646	646	710	91.0

Kindergartens and schools are only meeting 51 to 68.5 percent of demand. The city Master Plan includes projections for demand of social services and plans for the construction and siting of any new facilities that might be required, but it is merely a schematic facilities plan. It does not address personnel requirements, curriculum development, healthcare equipment or technology needs.

The following priority projects and programs are proposed by the city in order to meet the objectives of Strategic Initiative 4.

- 1. Establishment of training and scientific research complex;\*
- 2. Establish a Regional Health Diagnosis Center;
- 3. Open a scientific IT park;
- 4. Establish a regional professional training center for teachers;
- 5. Create a recreation zone to improve athletic activity of residents;\*
- 6. Steadily increase health education of residents;
- 7. Modify Doll Theater and Children's Palace into a Children and Youth Center; and
- 8. Open a kindergarten and school in ger area.

## **<u>Strategic Initiative 5:</u>** Manage natural resources and protect the environment.

The Copper Mine and other industries in the city have contributed significantly to water, air and soil pollution. There are about ten rivers and streams, three springs and one mineral spring on the territory of Orkhon aimag. The Khangal and Chingel rivers are the largest bodies of water, and the main source of water for livestock in the aimag. Because herdsmen spend summers in the river valleys, the rivers are polluted by organic and non-organic wastes. Monthly analysis shows that the Khangal River is polluted at its beginning by copper, molybdenum, limestone and other heavy metals. When measured at three different points, pollution rates of surface waters exceed allowable quantities.

Nine wells and two lakes have dried out and eight streams have gone underground in the last years due to global warming and human impact. Sogoot and Shuvuut rivers have been disrupted and water levels of the Khangal River have dropped as there are many agricultural farms along its banks which use trenches for irrigation.

According to a 2001 land inspection of the aimag:

- 21,560 hectares are in normal condition;
- 1,655 hectares have been destroyed by off-road vehicles;
- 3 hectares are covered by gorges and eroded by floods;
- 2 hectares are polluted by household wastes;
- 16,541 hectares have eroded. Eroded lands can be classified by their erosion level as follows:
  - 2,593 hectares or 15.6 percent eroded at medium level; and
  - 13,948 hectares or 84.4 percent eroded significantly.
- 41.6 percent of total pasturelands are eroded and 4.2 percent affected by other negative impacts.

Some 26.1 hectares of forest were illegally cut for fuel and manufacturing purposes in the northern and northeastern areas of Bayan-Undur mountain in 2003. Harmful tree insects and diseases are also spreading in this region.

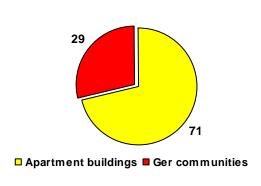
According to the environmental analysis laboratory study, the industrial area of the city is heavily polluted with non-organic wastes. Its flora layer shrunk and the entire area is suffering from soil erosion, making it prone to dust storms. White dust from the tailings pond of the Erdenet Copper Mining Factory and incompletely combusted fuel from ger communities contaminate pastures downwind particularly during the windy, dry spring and fall seasons.

To improve the natural environment and protect it from further industrial damage, Erdenet proposes the following priority projects and programs.

- 1. Implement natural restoration project including reforestation and the development of an irrigation system;
- 2. Mitigate environmental impacts of Erdenet Copper Mine;\*
- 3. Protect biological species and improve the living environment;
- 4. Improve land management; and
- 5. Conduct a survey of natural and mineral resources.

## **<u>Strategic Initiative 6</u>**: Improve living conditions in ger area communities.

Almost 30 percent of Erdenet city population lives in ger communites. No plan or management has been provided for organized settlement of in-migrants causing the rapid expansion of unplanned, haphazardly settled ger communities. Ger communities doubled in the last four years and an entirely new ger community named Denj has been established.





There are no centralized water supply and sewage systems in ger communities and solid waste removal services are inadequate. Potable water for ger area residents is supplied by four trucks and distributed via 33 water kiosks.

The number of unauthorized and disorderly trash dumping sites in gorges, streets and squares is increasing as the number of ger area residents and population density increases, which pollutes the environment and adversely affects the health of residents.

By comparison with other aimag centers, the proportion of residents in ger areas in Erdenet is relatively low. However, given the relatively small territory of the city and efforts to privatize land, it is necessary to plan for rational, organized development of the ger communities. The city realizes that continued settlement and land privatization in unplanned ger communities with irrational plot boundaries and no provisions for roads and pipelines will negatively impact the city's ability to supply utility services to ger areas residents in the future.

To improve living conditions in ger areas, the city of Erdenet proposes the following priority projects and programs.

- 1. Promotion of smokeless stoves and more efficient fuel for heating/cooking;\*
- 2. Development of plans, designs and drawings for provision of services in ger areas;\*
- 3. Upgrade and expand ger area water supply and heating;
- 4. Establish a sanitation system in ger areas;
- 5. Introduce solid waste management system in ger communities;\* and
- 6. Launch commerical centers in ger areas.

# **Priority Infrastructure Projects**

Seven infrastructure projects are included in Erdenet's CDS. Some of these projects are included in the city Master Plan; however, they have not been prioritized. Through the CDS, the city has prioritized these infrastructure improvements as follows:

- 1. Upgrade and expand the water supply network;
- 2. Improvement of energy supply and establishment of a hydroelectric power station;
- 3. Expand the capacity of the city Thermo Power Plant, power distribution equipment and heating supply pipelines;
- 4. Development of plans, designs and drawings for provision of services in ger areas;
- 5. Upgrade and expand ger area water supply and heating;
- 6. Establish a sanitation system in ger areas; and
- 7. Introduce solid waste management system in ger communities.

Water source and supply network problems are the highest ranked priority among infrastructure projects in Erdenet. Erdenet's main water source is located 64 km from the city. The water distribution network has undergone magnetic and material aging since 1990 and breaches and leaks are common. Moreover, the Copper Mine owns the the water pumps and therefore controls water distribution.

To improve water supply, the city would like to access a new and closer water source, consolidate and establish a single water distribution enterprise



and strengthen its real assets; increase the number of water kiosks in ger areas and connect them to the city's centralized system; and equip end-users with meters.

The second infrastructure priority for the city is to improve power supply and heating networks. The city has proposed two projects—establishing a hydroelectric power station and expanding the capacity of the existing thermopower station, in addition to upgrading heating and power distribution lines. Feasibility studies should be conducted to determine the most viable options for improving power and heating of the city.

With almost 30 percent of the population and growing the next priority for Erdenet is to plan for infrastructure provision in the ger areas and then upgrade and expand water supply and heating networks to reach ger area residents, develop a viable sanitation system and introduce solid waste management.

# **Priority Project Proposals**

After prioritizing projects and programs within each Strategic Initiative, the city selected 13 priority projects from the short list. These 13 projects represent the key development priorities of the city as determined through a participatory, iterative planning process. Proposals were prepared for each of the 13 projects with input from the workgroup. The project proposals follow.

- 1. Development of Free Economic Zone with emphasis on the information technology sector;
- 2. Upgrade and expand the water supply network;
- 3. Mitigate environmental impacts of Erdenet Copper Mine;
- 4. Development of plans, designs and drawings for provision of services in ger areas;
- 5. Establish a crematory;
- 6. Development of export-oriented industrial park with emphasis on agricultural and environmentally-friendly production;
- 7. Introduce solid waste management system in ger communities;
- 8. Create a recreation zone to improve athletic activity of residents;
- 9. Establishment of training and scientific research complex;
- 10. Promotion of smokeless stoves and more efficient fuel for heating/cooking;
- 11. Development of Erdenet tourism network;
- 12. Improvement of energy supply and establishment of hydroelectric power station; and
- 13. Develop strategy for strengthening municipal finance.

Project Title	Development of Free Economic Zone with emphasis on the information technology sector
Sector	Urban Development Project Duration 10 years
Project Location	Erdenet
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other Policy Papers ☐ Institutional Building
Summary of Objectives	Encourage foreign investment, particularly in the IT sector, through the establishment of a favorable tax environment; generate employment and increase GDP per capita of the city; contribute to advancement of Mongolia's IT development.
Project Description	<ul> <li>Study marketing strategies and estimate economic efficiencies for IT development;</li> <li>Develop the necessary legal framework for the free economic zone;</li> <li>Conduct surveys of new techniques and technology in the IT sector at the international level;</li> <li>Survey supply of skilled IT workforce at the national, regional and local levels;</li> <li>Plan and develop infrastructure for the free economic zone;</li> <li>Connect to high speed internet;</li> <li>Set up management structure and advertise zone through mass media.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia, (2) Energy Sector Strategy, (3) Construction and Housing Sector Strategy, (4) Regional Development Project, (5) Master Plan of Erdenet, and (6) Industrial Park Operation Program; and (7) Altanbulag Free Economic Zone Project.
Expected Benefits / Targeted Beneficiaries / Outputs	Generation of employment which will lead to increased GDP and household incomes and improved living conditions for residents. Contribution to the continued development of Mongolia's IT sector.
Important Assumptions / Conditions for the Project	Development of a strong local economy based on small and medium enterprises, well- educated and intelligent residents and adequate access to infrastructure and information technology for all households;
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy All initiatives Sector Linkages: All sectors.
Estimated Investment Requirement	Estimated project start up cost: US \$950,000 Estimated annual operation and maintenance:
Implementing Agency/ Body	Governor's Office, Administration Department of Governor's Office, Sectorial Ministries and Government of Mongolia
Relevant agencies to be coordinated	All administration levels of city, aimag and soum; Information, Communication and Technology Department; Information, communication and technology service companies; universities and colleges; community organizations and Public utility and infrastructure service providers
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Others
Private Sector Participation	Undertake surveys, provide recommendations and comments and generate employment and investment
Necessary Inputs/ Arrangement	Revised national level legislation and policies Initiative of city/aimag government Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Introduce and replicate environmentally sound infrastructure and technology in the economic free zone

Project Title	Upgrade and expand the water supply network		
Sector	Urban Development Project Duration 5 years		
Project Location	Erdenet		
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development project ☐ Other Policy Papers ☐ Institutional Building		
Summary of Objectives	Meet the current and future population needs for potable water; improve quality and access to potable water		
Project Description	<ul> <li>Conduct surveys to identify a new water source located closer to the city;</li> <li>Coordinate projects in city development and environment protection field;</li> <li>Prepare plans for improving the water supply network in compliance with urban planning standards and demand;</li> <li>Identify financing sources for improvements; and</li> <li>Upgrade network in staged implementation phases.</li> </ul>		
Relation to Development Plans	(1) The Concept of Regional Development of Mongolia; (2) Construction and Housing Sector Strategy; (3) Khangai Regional Development Project; (4) Master Plan of Erdenet.		
Expected Benefits / Targeted Beneficiaries / Outputs	Access to water provided for residents in existing ger areas and new housing areas; Favorable environment created for factory and business operation.		
Important Assumptions / Conditions for the Project	Water services will be affordable to residents and service provider will be able to recover costs.		
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1,2,4,5 and 6  Sector Linkages: Land Cadastral, Registration and Management, Environment		
Estimated Investment Requirement	Estimated project start up cost: US\$120,000 Estimated annual operation and maintenance:		
Implementing Agency/ Body	Governor's Office, City Maintenance Company, Strategic Planning and Policy Implementation Department, Energy organizations of aimag and soum		
Relevant agencies to be coordinated	Ministry of Construction and Urban Development, Professional Monitoring Department and International Organizations		
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other		
Private Sector Participation	Obtain information; develop programs, actions, investment and funding.		
Necessary Inputs/ Arrangement	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:		
Environmental Considerations			
Special Considerations			

Project Title	Mitigate environmental impacts of Erdenet Copper Mine		
Sector	Environment Project Duration 6 years		
Project Location	Erdenet		
Type of Project	Feasibility Study or Survey Package Program Development Project Other Institutional Building		
Summary of	Reduce pollution of air, water and soil caused by mining industry; reduce illness and disease		
Objectives	associated with pollution		
Project Description	<ul> <li>Conduct assessment of environmental impacts of mining;</li> <li>Prepare environmental remediation program to mitigate environmental damages;</li> <li>Coordinate with other city development and environment protection programs and projects;</li> <li>Conduct study of new techniques and technologies for environmentally sound copper mining practices;</li> <li>Pilot the new technologies to reduce future pollution;</li> <li>Establish system for environmental monitoring.</li> </ul>		
Relation to Development Plans	(1) The Concept of Regional Development of Mongolia; (2) 21 <sup>st</sup> Century Development Program of Orkhon Aimag; (3) Environment Sector Strategy; (4) Regional Development Project; (5) Master Plan of Erdenet City; (6) Land Management Plan; and (7) Environmental protection programs of factories.		
Expected Benefits / Targeted Beneficiaries / Outputs	Negative impacts to environment, ecology and health of residents and livestock will be reduced.		
Important Assumptions / Conditions for the Project	GoM/Parliament will adopt and enforce environmental regulations for mining companies		
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1 1-4; 6 Sector Linkages: Mining, Economy, Health		
Estimated Investment Requirement	Estimated project start up cost: US\$150,000 Estimated cost of annual operation and services:		
Implementing Agency/ Body	Erdenet Mining Company, Governor's Office, Strategic Planning and Policy Implementation Department, and NGOs		
Relevant agencies to be coordinated	Ministry of Environment, Ministry of Trade and Industry		
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Other		
Private Sector Participation	Take lead; develop programs and actions and provide investment and financing		
Necessary Inputs/ Arrangement	Revised national government legislation and polices City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:		
Environmental Considerations			
Special Considerations			

Project Title	Development of plans, designs areas.	and drawings for provision	n of services in ger
Sector	Urban Development	Project Duration	1 year
Project Location	Erdenet City (ger areas)	1110,000 2010 011011	· J • • ·
Type of Project	Feasibility Study or Survey	Packaged Program Other: Housing Area Action Plan	(HAAP)
Summary of Objectives	Completion of required planning pre poverty in ger areas through provision infrastructure (schools, kindergarten	on of services, including basic util	
Project Description	<ul> <li>Coordinate with projects/prografields;</li> <li>Develop recommendations on pareas;</li> <li>Develop plan for adequate wate</li> <li>Establish incentives for forestate</li> <li>Develop plans for construction identified needs.</li> </ul>	surveys to identify priority needs; ams in urban development and erpreparatory actions for provision of the error and sewerage supply in ger are tion and on-plot gardening in ger of schools, kindergartens and here	nvironmental protection of infrastructure in ger eas; areas; and alth clinics to meet
Relation to Development Plans	(1) Concept of Regional Developme Strategy; (3) Khangai Regional Deve and Network Program of Erdenet	elopment Project; (4) Master Plar	n of Edenet; (5) Energy
Expected Benefits / Targeted Beneficiaries / Outputs	Improved planning process; incorpor city; preparation for future investmen		
Important Assumptions / Conditions for the Project	Ger areas will be settled in accordar	nce with policies and plans.	
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Initiatives 2 and 4 Sector Linkages: Land Cadastre, Re Sector		_
Estimated Investment Requirement	Estimated cost for project completion Estimated cost of annual operation a		
Implementing Agency/ Body	Governor's Office, Erdenet Us Comp Construction and Urban Developme	pany, Planning and design compa nt,	•
Relevant agencies to be coordinated	Professional Monitoring Department Planning and Policy Implementation of energy issue, Ministry of Educatio and Tourism.	Department, relevant department	nt and agency in charge
Provisional Scheme for fund procurement	Local Government Central Government International Assistance fund	Private Sector Specially Organized Fund Other	
Private Sector Participation	Obtain information; undertake surve	ys and recommendation, investm	nent and funding
Necessary Inputs/ Arrangement	Revised national government leg City/aimag government initiative Improved institutional arrangeme Local level financing International financial assistance International financial assistance Private sector participation in fina Maximum utilization of local techn International technical assistance Other:	(grant) (loan) ancing nologies	
Environmental Considerations			

Project Title	Establish a crematory
Sector	Public Utility Project Duration 1.5 years
Project Location	Erdenet
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development project ☐ Other ☐ Institutional Building
Summary of Objectives	Alleviate pressure of the existing city cemetery which is full to capacity and lacks space for expansion. Reduce soil pollution and improve hygiene in accordance with the planning standards of the city.
Project Description	<ul> <li>Determine the location of the crematory and carry out a study on technology and demand for cremation services among resident; and</li> <li>Establish cremating place in Erdenet.</li> </ul>
Relation to Development Plans	(1) The Concept of Regional Development of Mongolia; (2) Environment Strategy; (3) Construction and Housing Sector Strategy; (4) Khangai Regional Development Project; and (5) Master Plan of Erdenet.
Expected Benefits / Targeted Beneficiaries / Outputs	Soil pollution and pressure on land will be reduced; the customs of different ethnic groups will be unified; and advanced funeral ceremonies will be held.
Important Assumptions / Conditions for the Project	There will be demand among residents for cremation services over burial
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1,3 5 and 6 Sector Linkages: Urban Development, Environment, Health
Estimated Investment Requirement	Estimated project start up cost: US\$150,000 Estimated annual operation and maintenance:
Implementing Agency/ Body	PUSO
Relevant agencies to be coordinated	Governor's Office, Health Department of Aimag, Environment Unit, Strategy Planning and Policy Implementation Department, Land Management Unit
Provisional Scheme for fund procurement	☐ Local Government ☐ Private Sector ☐ Central Government ☐ Specially Organized Fund ☐ International Assistance fund ☐ Other
Private Sector Participation	Take over operation and maintenance
Necessary Inputs/ Arrangement	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	
Special Considerations	

Project Title	Development of export-oriented industrial park with emphasis on agricultural and environmentally-friendly production
Sector	Industry & Trade Project Duration 4 years
Project Location	Erdenet
Type of Project	Feasibility Study or Survey Package Programs Development Project Other Policy Papers Institutional Building
Summary of Objectives	Create favorable environment for the operation of employment generating, environmentally sound industries that take advantage of agricultural resources surrounding Erdenet.
Project Description	<ul> <li>Conduct study of industrial park operations at the national and international levels;</li> <li>Conduct surveys on new techniques and technology for agro-processing and environmentally-friendly production at the regional and international level;</li> <li>Undertake analysis of livestock in the region;</li> <li>Establish legal and operational framework for the industrial park;</li> <li>Develop infrastructure of the industrial park;</li> <li>Attract private sector investment in suitable industries in the Park, including: agricultural and raw material (meat, diary, skin) processing; and bio-technology;</li> <li>Promote the development of meat and dairy intensified farms in Jargalant and Baruunburen soums;</li> <li>Establish certified laboratory for meat products in compliance with international standards; and</li> <li>Introduce portable slaughtering equipment and technology.</li> </ul>
Relation to Development Plans	(1) The Concept of Regional Development of Mongolia; (2) Construction and Housing Sector Strategy; (3) Regional Development Project; (4) Master Plan of Erdenet; and (5) Industrial Park Operation Program.
Expected Benefits / Targeted Beneficiaries / Outputs	Increased export of agricultural products per worker in Erdenet; Expanded cooperation with foreign companies; full functioning of the industrial park and increased employment; increased supply of environmentally-friendly products at local and regional markets.
Important Assumptions / Conditions for the Project	Creation of a clean and healthy industrial environment. Development of a strong local economy based on agro-industrial processing.
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1 and 4 Sector Linkages: Agriculture, Environment, Urban Development, Foreign Relations
Estimated Investment Requirement	Estimated project start up cost: US\$350,000 Estimated cost of annual operation and maintenance:
Implementing Agency/ Body	Administration Department of Governor's Office, Citizen Representative Khural, Ministry of Trade and Industry, Ministry of Agriculture, Erdenet Copper Mine, Small and medium enterprises and Chamber of Commerce,
Relevant agencies to be coordinated	Government of Mongolia and Parliament
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Others
Private Sector	Undertake surveys, provide recommendations and comments and generate employment and
Necessary Inputs/ Arrangement	investment  Revised national level legislation and policies  City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance

	☐ Other:
Environmental	Introduce and replicate environmentally sound infrastructure and technology in the industrial
Considerations	park
Special Considerations	

Project Title	Improve Solid Waste Management in Ger Areas
Sector	Environment and Public Utility Sector Project Duration 4 years
Project Location	Erdenet (ger areas)
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other: ☐ Institutional Building
Summary of Objectives	Create clean and healthy living environment; reduce air, soil and ground water pollution; improve hygienic conditions in ger housing areas; and protect population from contagious diseases.
Project Description	<ul> <li>Conduct environmental monitoring;</li> <li>Coordinate city development with environmental protection programs and projects;</li> <li>Investigate, introduce and pilot new technologies for waste collection, removal and disposal; and</li> <li>Assess establishment of a waste recycling facility.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Energy Sector Strategy; (3) Construction and Housing Sector Strategy; (4) Regional Development Project; (5) Master Plan of Erdenet City
Expected Benefits / Targeted Beneficiaries / Outputs	Air, soil and ground water pollution in ger areas will be reduced and everyday living environment of ger area residents will be improved. Residents will participate in cleaning the environment of the city
Important Assumptions / Conditions for the Project	Willingness of ger area residents to participate in cleaning up the environment. Provision of solid waste collection bins, trucks and personnel through private sector participation. Strong local economy conducive to the establishment of small and medium sized enterprises.
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia;  Sector Linkages: Urban Development, Environment and Justice
Estimated Investment Requirement	Estimated cost for project implementation: US\$35,000 Estimated cost for annual operation and maintenance:
Implementing Agency/ Body	Public Utility Company, City Maintenance Service Unit, Public Utility Department of Aimag, Environment Unit and Strategy Planning and Policy Implementation Department of Aimag
Relevant agencies to be coordinated	Professional Monitoring Department of Aimag, Ministries of Environment, Construction and Urban Development, and Health and local businesses and residents.
Provisional Scheme for fund procurement	□ Local Government □ Private Sector □ Central Government □ Specially Organized Fund □ International Assistance fund □ Other
Private Sector Participation	Undertake surveys and provide recommendations and comments, sort out solid waste, management, investment and funding
Necessary Inputs/ Arrangement	<ul> <li>National government improvement</li> <li>□ City/aimag government initiative</li> <li>□ Improved institutional arrangements at local level</li> <li>□ Local level financing</li> <li>□ International financial assistance (grant)</li> <li>□ International financial assistance (loan)</li> <li>□ Private sector participation in funding</li> <li>□ Maximum utilization of local technologies</li> <li>□ International technical assistance</li> <li>□ Other:</li> </ul>
Environmental Considerations	Undertake Environmental Assessment; Remediate environmentally damaged areas. Conduct health surveys and monitor improvements

Project Title	Create a recreation zone to improve athletic activity of residents
Sector	Health and sport Project Duration 1.5 years
Project Location	Erdenet
Type of Project	Feasibility Study or Survey Package Programs Development project Other Policy Papers Institutional Building
Summary of Objectives	To study the city population structure and coordinate with urban planning activities, develop and organize programs on the improvement of health at the regional level, establish regional diagnostic centre and provide with diagnostic equipment
Project Description	<ul> <li>Study the city population (age, gender, living condition, health and poverty) and determine major health issues to be addressed;</li> <li>Coordinate with projects and programs prepared for city development;</li> <li>Create a regional health diagnostic center;</li> <li>Create a mobile diagnostic center;</li> <li>Establish an herb plantation and an herbal medicine manufacturer; and</li> <li>Prepare professionals and conduct trainings</li> </ul>
Relation to	(1) The Concept of Regional Development of Mongolia; (2) Health Sector Strategy; (3)
Development Plans	Khangai Regional Development Project; (4) Master Plan of Erdenet.
Expected Benefits / Targeted Beneficiaries / Outputs	<ul> <li>Reduce illness and health problems among the population</li> <li>Export of the herbal medicine will be increased</li> </ul>
Important Assumptions / Conditions for the Project	
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1,2,4 and 6  Sector Linkages: Urban Development, Environment
Estimated Investment Requirement	Estimated project start up cost: US\$25,000 Estimated annual operation and maintenance:
Implementing Agency/ Body	Governor's Office, City Administration, Health Department, Sport Department, Professional Inspection Department
Relevant agencies to be coordinated	Ministry of Health, National Olympic Committee
Provisional Scheme for fund procurement	☐ Local Government ☐ Private Sector ☐ Central Government ☐ Specially Organized Fund ☐ International Assistance fund ☐ Other
Private Sector Participation	Participate in the research and give their comments
Necessary Inputs/ Arrangement	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	
Special Considerations	

Project Title	Establishment of Training and Scientific Research Complex
Sector	Education Project duration 3 years
Project Location	Erdenet (Khangai Regional Project)
Type of Project	Feasibility Study or Survey Packaged Program  Development Project Other  Institutional Building
Summary of Objectives	Prepare qualified professionals (scientists, engineers, etc.); Strengthen capacity and skills of local residents; Meet demands of local employers for labor; Attract private businesses with skilled labor force and thereby generate employment.
Project Description	<ul> <li>Conduct survey of skills and product demand among local and regional employers and skills and capacities of residents;</li> <li>Conduct study of combined research, training and production facilities at the international level and make recommendations based on best practices and adaptability to the region;</li> <li>Design the complex according to recommendations and assessment of market demand; and</li> <li>Develop an associated primary/secondary school for academically gifted young students of the region.</li> </ul>
Relation to Development Plans	(1) The Concept of Regional Development of Mongolia; (2) Khangai Regional Development Project; (3) Master Plan of Erdenet City; and (4) programs and projects in the education sector
Expected Benefits / Targeted Beneficiaries / Outputs	Erdenet's business sector will have access to local pool of qualified professionals, scientific research and related products; Unemployment will be reduced; Migration of qualified professionals to Ulaanbaatar for education will be reduced
Important Assumptions / Conditions for the Project	Supply of appropriately skilled labor force and capacity for scientific research and product development will attract private sector business development and expansion in the city and region.
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives 1 and 2, Sector Linkages: Economic
Estimated Investment Requirement	Estimated project start up cost: US\$30,000 Estimated cost of annual operation and maintenance:
Implementing Agency/ Body	Culture and Education Department of Orkhon Aimag, School of Technology, University of Agriculture, Mongolian National University
Relevant agencies to be coordinated	Ministry of Education, Culture and Science, Ministry of Social Affair and Labor and Employment Unit, Specialized training schools and universities and colleges
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Other
Private Sector Participation	Obtain information; contribute to development of curriculum programs, investment and funding.
Necessary Inputs/ Arrangement	Revised national government legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	
Special Considerations	

Project Title	Promotion of smokeless stoves and more efficient fuel for heating/cooking
Sector	Environment and Energy Sector Project Duration 1 year
Project Location	Erdenet (ger areas)
Type of Project	Feasibility Study or Survey Packaged Program Development Project Other: Environment Protection subprograms Institutional Building
Summary of Objectives	Reduce air pollution and improve ecological conditions and health of residents.
Project Description	<ul> <li>Set up means to monitor the local environment;</li> <li>Coordinate city development programs and projects with environmental protection;</li> <li>Study modern advanced technology for stoves and fuels;</li> <li>Determine sources of finance to promote use of smokeless stoves among the poor; and</li> <li>Promote the local production of smokeless stoves and fuel.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Energy Sector Strategy; (3) Construction and Housing Sector Strategy; (4) Regional Development Project; (5) Master Plan of Erdenet City.
Expected Benefits / Targeted Beneficiaries / Outputs	Improvements in air quality, living conditions and health for ger area residents. Mitigation of atmospheric greenhouse gases. Small-scale enterprise and employment generation through the production of fuel briquettes and other smokeless fuels in small local factories and workplaces.
Important Assumptions / Conditions for the Project	Erdenet's economy will be strong enough to encourage the formation of small and medium size enterprises and sustain their activities. Local demand will be adequate for smokeless stoves and fuel.
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategy Initiatives 1, 2.3; 5 and 6; and domestic and donor-funded projects and programs at Ministry of Environment, Ministry of Fuel and Energy.  Sector Linkages: Urban Development
Estimated Investment Requirement	Estimated project start up cost: US\$15,000 Estimated cost of annual operation and maintenance:
Implementing Agency/ Body	Governor's Office, Energy Department of Province (Energy Service companies), Strategy Planning and Policy Implementation Department of Aimag
Relevant agencies to be coordinated	Professional Monitoring Department and Land Office of Aimag
Provisional Scheme for fund procurement	Local Government Central Government Specially Organized Fund International Assistance fund Other  Other
Private Sector Participation	Undertake surveys and provide recommendations and comments;
Necessary Inputs/ Arrangement	Revised national government legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Undertake environmental assessment.
Special Considerations	Consider possibility of establishing briquette factory; Study stove technology; and Assess impacts on living standards and affordablity of population.

Project Title	Development of Erdenet Tourism Network
Sector	Tourism Project Duration 6 years
Project Location	Erdenet, Khangai Region
Type of Project	☐ F/S Study or Survey ☐ Packaged Program ☐ Other ☐ Institutional Building
Summary of	Develop an integrated tourism network for domestic and foreign tourists, which will contribute
Objectives	to the local economy, generate employment and increase GDP.
Project Description	<ul> <li>Conduct study on tourism market demand;</li> <li>Conduct study on international tourism and eco-tourism best practices;</li> <li>Develop travel routes and itineraries based on cultural, historical and natural resources of the region (focus on more extreme and wild natural tourism);</li> <li>Promote and support the establishment of fully-serviced tourist camps in appropriate locations;</li> <li>Improve local road network;</li> <li>Develop marketing strategy and public advertising campaign (domestic and international);</li> <li>Develop a transit-tourist center in the northern region; and</li> <li>Establish a national wildlife park.</li> </ul>
Relation to Development Plans	1) The Concept of Regional Development of Mongolia; 2) Construction and Housing Sector Strategy; 3) Khangai Regional Development Project; 4) Master Plan of Pillar City of Khangai Region; and 4) Tourism and Resort Development Project.
Expected Benefits / Targeted Beneficiaries / Outputs	The organizational structure of the tourism sector in Erdenet will be strengthened. The number of tourists and revenues will increase; employment in tourism sector will be created.
Important Assumptions / Conditions for the Project	Tourism in Mongolia will continue to grow, and Erdenet will be able to capitalize on both the domestic and international markets.
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiative 1 Sector Linkages: Environment and Infrastructure
Estimated Investment	
	Estimated project start up cost: US\$150,000
Requirement	Estimated annual operation and maintenance:
Implementing	Governor's Office, Erdenet Chamber of Commerce and Industry, Private sector tourism
Agency/ Body	industry Ministry of Road, Transportation and Tourism, Department
Relevant agencies to be coordinated	Millistry of Road, Transportation and Tourism, Department
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	Investment, Management and Implementation
Necessary Inputs/ Arrangement	Revised national level legislation and policies  City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Increased impacts on natural environment by tourists must be mitigated through eco- and natural tourism principles.
Special	natural tourism principles.
Considerations	

Project Title	Improvement of Energy Supply Station	y and Establishment of Hydro	pelectric Power
Sector	Energy Sector	Project Duration	2 years
Project Location	Erdenet		
Type of Project	Development Project Institutional Building	Packaged Program Other	
Summary of Objectives	Provide the city with a sufficient sou development of small and medium s	scale production and tourism.	
Project Description	<ul> <li>electric supply networks with re</li> <li>Expand the existing power stati</li> <li>Establish hydroelectric power s</li> <li>Establish factory that produce g</li> </ul>	tation; and gases from fuels;	emand
Relation to Development Plans	1) The Concept of Regional Develop Strategy; 3) Regional Development		
Expected Benefits / Targeted Beneficiaries / Outputs	The city will be provided with sufficience created for development of small an	ent heating and energy, and favora	
Important Assumptions / Conditions for the Project			
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategy Initiatives 2,3 and 6 Sector Linkages: Road, Transportati		-
Estimated Investment Requirement	Estimated project start-up cost: US\$ Estimated annual operation and mai	550,000	,
Implementing Agency/ Body	Governor's Office, Energy Departm Planning and Policy Implementation	ent of Province (Energy Service c	ompanies), Strategy
Relevant agencies to be coordinated	Professional Monitoring Department		
Provisional Scheme for fund procurement	Local Government Central Government International Assistance fund	Private Sector Specially Organized Fund Other	
Private Sector Participation	Undertake surveys and provide reco	ommendations and comments;	
Necessary Inputs/ Arrangement	Revised national level legislation City/aimag government initiative Improved institutional arrangeme Local level financing International financial assistance International financial assistance Private sector participation and fi Maximum utilization of local technical International technical assistance Other:	grant) (loan) nancing nologies	
Environmental Considerations			
Special Considerations			

Project Title	Develop strategy to strengthen municipal finance			
Sector	Finance Project Duration: 6 months			
Project Location	Erdenet			
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other: Policy Paper ☐ Institutional Building			
Summary of Project Objectives	Develop a strategy for Erdenet city to strengthen its municipal finance, increase own-source revenues and fund capital improvements from local budget			
Project Description	<ul> <li>Conduct study to clearly define fiscal problems at city level and make recommendations for improvements to policy framework and local capacity for budgeting and expenditure</li> <li>Reform national level policies to enable fiscal decentralization and give authority to local level for taxation and capital investments</li> <li>Build local institutional capacity for local revenue generation (setting tax rate and structures), budgeting and expenditure management</li> <li>Implement budget and expenditure software, prepare guidelines and organize trainings.</li> <li>Develop framework for prioritization and structuring of city programs and a monitoring mechanism for effective and efficient implementation.</li> </ul>			
Relation to Development Plans	Relates to all existing national and local development plans, including (but not limited to): (1) Concept of Regional Development of Mongolia, (2) National Government Action Plan, 2004-08, (3) Construction and Housing Sector Strategy, (4) Master Plan of Darkhan.			
Expected Benefits / Targeted Beneficiaries / Outputs	All city residents will benefit form municipal finance reforms. The city will become self-sufficient and able to invest in capital improvements that will benefit the entire community.			
Key Assumptions / Project Conditions	GoM will adopt reforms and local institutions will be strengthened to effectively manage municipal finances			
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, All Strategic Initiatives Sector Linkages: All sectors.			
Estimated Investment Required	Estimated project cost: US\$100,000 Estimated annual cost of operation and maintenance: N/A			
Implementing Agency/ Body	Governor's Office, Finance Department of the Governor's Office, Ministry of Finance and Parliament			
Relevant Agencies to be Coordinated	All divisions and departments at all levels of administration			
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance Funds Other			
Private Sector Participation	Provide recommendations and comments on favorable local tax conditions			
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:			
Environmental Considerations				
Special Considerations				

#### **Annex A: Working Group Members and Workshop Participants**

#### **Working Group Members**

- 1. G. Sharhuu, City Mayor and Governor Orkhon Aimag
- 2. K. Dauletbai- former Mayor and Governor, Orkhon aimag
- 3. D. Oyunbat- former Vice Governor, Speaker of Local Parliament
- 4. S. Narangerel Officer, Strategic Planning Department (Erdenet CDS Coordinator)
- 5. T. Otgon- Head, Governance and Legal Issues Department
- 6. L. Huchitbaatar- Member, Citizen's Representative Committee
- 7. B. Adia Head, Mayor's Office
- 8. P. Purevlhagva- Head, Finance, Economy and State Fund Department
- 9. P. Lhagvasuren Head, Strategy planning, policy implementation coordination department
- 10. D. Tsagaach Member, Citizen's Representative Committee
- 11. D. Erdenechimeg- Head, Statistical Department
- 12. Enkhtaivan Head, Telecommunication Department
- 13. G. Purevdorj- Director, Erdenet- Bulgan electricity delivery network
- 14. J. Havdlashim Director, Erdenet Thermo Power Plant
- 15. Z. Ganbaatar- Vice Director of Production, Erdenet Copper Mine
- 16. B. Boldbaatar Vice Director of Economic Issues, Erdenet Copper Mine
- 17. T. Batsukh Director, Erdenet- Water- Heating delivery network
- 18. M. Tsagaach President, Chamber of Commerce and industry
- 19. M. Ganaa Chairman, Trade Union
- 20. D. Nansalmaa Head, Health Department
- 21. Ts. Ariunaa Head, Education and Culture Department
- 22. S. Dashsambuu Director, Mongolian National University Branch
- 23. L. Bayandalai Head, Land Agency
- 24. B. Jigdengombo Governor, Bayan- undur Soum
- 25. B. Purvee Governor, Jargalant Soum

#### **Steering Committee Members**

- 1. Sh. Ganbat CRC Chairman of Aimag
- 2. S. Tsegmed CRC Secretary
- 3. H.Naranhuu, Erdenet Copper Mine
- 4. H.Ganbold, Head of Governor's Office
- 5. Ts.Sanjii, CRC Member
- 6. S.Davaanyam, Director of Technological University
- 7. Ch.Dorjpalam, Legal Adviser, Professional Control Agency
- 8. D.Togooch, Vice Director, Erdenet Copper Mine
- 9. D.Chagnaadorj, Head of Department, Agricultural University

#### Visioning Workshop Participants January 13, 2005

- 1. G. Sharhuu, Mayor of Erdenet and Governor, Orkhon Aimag
- 2. D. Oyunbat, Speaker of Local Parliament
- 3. L. Khuchitbaatar, Head of Titem international Co., Itd.
- 4. A. Zulgerel, Executive Director of MAUC
- 5. N. Dima, Ministry of Construction and Urban Development
- 6. S. Narangerel, Officer, Strategic Planning Department (Erdenet CDS Coordinator)
- 7. L.Altantsooj, Dean, Agricultural University

- 8. Sh. Odonchimeg, Professor, Agricultural University
- 9. T. Erdenetsetseg, Margad College
- 10. Ts. Erdenechuluun, Margad College
- 11. M. Battsooj, Head of Erdenet Trade Union
- 12. M. Battuvshin, Head of the Central Clinic
- 13. T. Batsukh, Director, Erdenet Water Company
- 14. M. Delgertsetseg, Reporter, Public Info Center
- 15. S. Purevsuren, Reporter, Public Info Center
- 16. Ch. Oyunchuluun, Engineer-in-Chief, Erdenet Progress Company
- 17. M. Urtnasan, Professor, National University, Erdenet branch
- 18. D. Munkhtsetseg, Professor, National University Erdenet branch
- 19. G. Byambajav, Accountant, State Management Department
- 20. Ya, Ijilkhuu, Erdenet Carpet Company
- 21. Sh. Sarantungalag, Erdenet Branch Manager, USAID-CHF Ger Initiative
- 22. T. Azzaya, Executive Director, Gravy Savings and Credit Cooperative
- 23. B. Odonjchimeg, Chief Accountant, Erdenet Carpet Company
- 24. T. Otgonchimeg, Director, Mongol Bank Erdenet branch
- 25. Sh. Luvsmaa, Uurkhaichin Bag Leader
- 26. Sh. Enkhamgalan, Director, Atar Urguu Company
- 27. Ts. Ariunaa, Head of Education Department
- 28. N. Dorjpalam, Member of Local Parliament
- 29. D. Gombo, Head of Environment Department
- 30. L. Lhagvaa, Director, Sutain Undarga Company
- 31. D. Batbold, Director, Taliin Nuur Company
- 32. M. Tugsjargal, Governor of Jargalant Soum
- 33. D. Delgerbayar, Head, Social Insurance Department
- 34. G. Gaasankhuu, Senior Officer for Health Issues, Governor's Office
- 35. G. Badarch, Head of Food and Agriculture Department
- 36. M. Tsagaach, President of the Chamber of Commerce and Industry Erdenet branch
- 37. B. Odgerel, Engineer, Mayor's Office
- 38. P. Lhagvasuren, Head of Department, Governor's Office
- 39. A. Enkhtaivan, Communication Office, Director
- 40. A. Tuvshinjargal, Tsagaan Chuluut Bag Leader
- 41. T. Otgon, Department Head, Governor's office
- 42. Sh. Ganbat, Head, Erdenet Branch of Mongolian People's Revolutionary Party (MPRP)

# Strategy Session Participants February 3, 2005

- 1. D. Oyunbat Head, Citizen Representative Committee
- 2. S. Narangerel Officer, Strategic Planning Department (CDS Coordinator)
- 3. D. Erdenechimeg Head of Statistical Office
- 4. G. Batsukh Head of Public Utility Service Organization (PUSO)
- 5. Kh. Khavdmashim Thermo Power Plant
- 6. Ts. Ariunaa Head of Educational Department
- 7. G. Baasankhuu Officer at the Health Department
- 8. M. Tsagaach President of the Chamber of Commerce
- 9. B. Odgerel (on behalf of B.Adya) Mayor's Office
- 10. N. Bulgamaa (on behalf of Dalai)- Land Affair Office
- 11. T. Otgon Head of State Management and Administration Department
- 12. N. Battsooj Head of the Trade Union

#### Strategy Workshop Participants March 26, 2005

- 1. S.Narangerel CDS secretary in Erdenet
- 2. T.Batsukh Erdenet Water company, Director
- 3. G.Byambajav- State Management Department, accountant
- 4. B.Odonchimeg Gravy SCC, Executive Director
- 5. Ts.Ariunaa- Head of educational department
- 6. M. Tugsjargal Governor of Jargalant Soum
- 7. Sh.Ganbat Deputy director, Technological University
- 8. G.Zorigt Vice Governor, Orkhon Aimag
- 9. D.Ganbold Erdenet CMP, LAN specialist
- 10. R.Narantsatsaralt Chief engineer, Telecommunication Office
- 11. Ts.Tsolhuu Chief engineer, railway station
- 12. G.Batbaatar Social policy coordination department Head
- 13. Ch.Zulbaatar Head, Sport committee
- 14. G.Baasanhuu Governor's Office, senior officer for health issues
- 15. D. Purevjav Coordinator, Aimag Trade Union
- 16. S.Chuluuntsetseg Secretary, HLSP Erdenet branch
- 17. S.Davaanyam Director, Technological College
- 18. Ts.Erdenechuluun "Margad" College
- 19. T.Burmaa Deputy head Health Department
- 20. D.Chuluunbat Director, Agricultural University Orkhon branch
- 21. J.Khavdlashim- Ex.Director, Erden et Thermo Power Plant
- 22. D.Bayantsogt chief engineer, Erdenet Water
- 23. Ts. Hyag- Head, Transportation Department
- 24. B.Adia chief architect, Erdenet
- 25. B.Baatarchuluun Head of Mayor's Office
- 26. Z.Norson Chief veterinar, Ag. And Food Department
- 27. B.Zorigtbaatar "Erdenet" CMP
- 28. D.Erdenechimeg Head of Statistical Office
- 29. L.Baatarhuu Head of Distribution Department, Erdenet water
- 30. B.Tsogtsaihan Metal Industrial Co., Ltd.
- 31. B.Boldtsetseg Expolitation engineer, Erdenet water
- 32. D.Chagnaadori Director for Scientific Research, Margad College
- 33. H.Munkhbat Head of Environmental Department
- 34. B.Odonchimeg accountant, "Gravy" SCC

#### Final Workshop Participants July 6, 2005

1.	G. Sharhuu	City Mayor and Orkhon Aimag Governor
2.	S. Narangerel	Officer, Strategy Planning and Policy Coordination Dept.
3.	B. Baatarchuluun	Head of Governor's Office
4.	P. Erdenetsogt	Deputy Director of Development, Erdenet Copper Mine
5.	D. Jadambaa	Director, Erdkon Engineering LLC
6.	Director	Erdenet Water LLC
7.	S. Munkhtsetseg	Executive Director, Chamber of Commerce
8.	L. Gansukh	Officer for Infrastructure and Tourism
9.	L. Tsedensodnom	Director, Erdenet Cashmere LLC
10.	Ts. Erdenechuluun	Director, Margad College
11.	G. Dugeree	Director, Orkhon Group LLC

12.	A. Namjilsuren	Director, Erh LLC
13.	L.Ganbat	Director, Ih erin LLC
14.	D. Adia	Director, Uuls Impex LLC
15.	G. Sergelen	Director, Antilas LLC

### **Annex B. SWOT Analysis**

At the Visioning Workshop, held on January 13, 2005, participants were asked to identify the city of Erdenet's key strengths, weaknesses, opportunities and threats. Numbers in the table indicate the number of times the response was given by participants.

STRENGTHS	WEAKNESSES
Infrastructure – 20 Well developed production – 5 Erdenet Mining Factory/Mining and Mineral Resources – 6 Roads – 4 Workforce resources – 3 Good market capacity - 2 Good cooperation between residents, enterprises, organizations and the city administration - 1 Location -2 Comfortable economic and production environment – 1 Export products – 1 Processing of mineral resources into final products – 1 Youth – 1 Fresh air - 1	Small territory – 12 Lack of water resources – 5 Repair and maintenance of the roads - 4 Not sufficient City planning - 4 Weak city administration – 3 Sewage treatment plant causes pollution – 2 Lack of jobs – 2 Chaotic ger communities – 2 Lack of trained personnel in the mining industry – 2 Environmental disasters – 2 Utility service networks – 2 International relations - 1 Solid waste - 1 Lack of small and medium production -1 Poverty - 1 High water fees - 1 Industrial pollution - 1
OPPORTUNITIES	THREATS
Opportunities for jobs and development of industries – 7 Pillar center of the Khangai region – 5 The market – 3 Applying new ideas – 2 Educated workforce – 2 Final metal products -2 Clean environment and usable territories -2 Take a leading role in carpet production of Mongolia - 1 Population growth - 1 Well-educated population - 1 Improvement of the workforce - 1 Funds spent by Erdenet Copper Mine for needs of residents and urban development under government policy - 1 Development of construction materials production -1 Expansion of the territory/merger with Bulgan Aimag - 1 Production of pure copper – 1 Density - 1 International relations - 1 Upgrade of production technology – 2 Progress and changes in lifestyle -1	Mining Factory is polluting city air and environment-12 Depletion of Erdenet Copper Mine reserve will have negative impacts, such as increase of poverty, unemployment, unpleasant political and economical condition-9 Increase of poverty caused by economic decline-8 Human activity creates water and air pollution and damages forest and pastureland-4 Continued migration will exacerbate water supply issues-4 Flood dam is in poor condition and will not prevent flooding - 2 Global warming is causing desertification- 2 Pollution of Khangal river will adversely affect health of residents -1

### **Annex C. Project Prioritization**

During the Strategy Workshop held on March 26, 2005, participants were asked to rank each project or program idea according to five criteria in order to systematically prioritize projects. The criteria, chosen from among those used by Ulaanbaatar and other cities around the world in preparation of their CDS included:

- 1. Relevance to development policies
- 2. Financial viability and economic returns
- 3. Environmental benefits
- 4. Social benefits
- 5. Implementation capacity

Participants worked in small, thematic groups based on the six strategic initiatives to rank the projects on a scale of 1 to 5 (1=none, 5=significant) for each criteria, and presented the results of their deliberations to the whole group for discussion and verification.

Strategic Initiative 1. Develop Erdenet as a center of development of Khangai region.

	•				0 0		
	Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1.	Create a free economic zone of Khangai region in Erdenet	5	5	1.5	4.75	4.75	21
2.	Develop a leading industrial and technological park in the region	4.5	3.75	1.5	3.75	4.5	18
3.	Build a regional IT center	4.5	4.5	1.5	5	4.5	20
4.	Develop a regional combined tourism network	3.5	4.5	1	3.5	3.5	16
5.	Build up new, progressive technologies for intensive farming	4.5	4.75	1.5	4.25	4	19
6.	Build a hydro power plant at Egiin river	4.5	3.5	1	4	2.5	15.5
7.	Establish a regional supply and service center of water supply and sanitation equipment	3.5	3	1.25	3.5	3.25	14.5
8.	Establish a regional production and trade network	4	4	1.5	4	4	17.5
9.	Arrange a labor force flow in the region	3.25	2.5	1	3.75	3	13.5
10.	Make changes to the administrative unit and expand the territory	4.75	4.5	2.75	4.5	4	20.5

Strategic Initiative 2. Improve the business environment to diversify the economy and encourage the development of a) information technology; b) production industries; and c) tourism.

the development of a mormation technology, b) production matistres, and c) tourism.							
Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total	
<ol> <li>Maintain production of agricultural products, produce and export ecologically clean products</li> </ol>	4.8	3.8	1.3	4.8	3.8	18.5	
2. Support export	4.5	3.8	1	4.5	3.8	17.6	
Prepare and execute Erdenet tourism network project	5	3.5	1.3	5	4	18.8	
Develop business economic information	5	4.1	1	4.5	4.5	19.1	

Strategic Initiative 3. Develop an efficient urban development and land management system.

	or minute of Develop an emercial arban					Terre by b	
	Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1.	Prepare composite plans for land management and urban development	5	3	4.8	4.6	4.6	22
2.	Compose land cadastral mapping and registry systems for the whole region	5	2.4	4.2	3.8	4	19.4
3.	Renovate water pipe network	5	3.2	3.6	4.8	4	20.6
4.	Identify a new potable water source and renovate water pipe network	4.8	3.4	2.4	4.8	3.2	18.6
5.	Expand the city Thermo Power Plant capacity, power distribution equipment and heating supply pipelines	5	4	1.4	4.8	4.4	19.6
6.	Plan for expansion of ger communities down wind from center city	5	1.8	2.2	3.8	4	16.8
7.	Utilize body cremation technology	4.2	4.2	4.6	4.2	4	21.2
8.	Implement housing program	5	3.6	4.2	4.6	4.2	21.6

Strategic Initiative 4. Develop human and cultural resources.

Strategic Initiative 4. Develop human and cultur	ral resou	irces.				
Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Education:					ı	I
Build a regional professional training center for teachers	4.6	3.8	1.8	4.6	3.8	18.6
2. Open a scientific IT park	4.6	4	1.4	4.8	4.2	19.0
3. Open a kindergarten and school compound in ger communities	4.3	3.2	1.4	4.3	4.0	17.2
4. Build a research and training complex	4.9	3.9	2.1	4.7	4.5	20.1
Culture:						
5. Develop Erdenet song and dance ensemble at professional level	3.9	3.3	1.1	3.8	3.4	15.5
6. Modify Doll Theater and Children Palace as a children and youth center	4.6	3.6	1.3	4.4	4.0	17.9
7. Create information centers in all districts to fulfill increasing demand for books and different types of information	3.8	3.8	1.2	3.8	3.4	16.0
Health:				•		•
8. Steadily increase health education of residents	4.1	3.5	2.2	4.3	3.9	18.0
9. Establish Regional Diagnosis Center	4.9	3.9	1.5	4.9	4.4	19.6
10. Equip family clinics with necessary medical instruments	4.3	3.3	1.4	4.1	3.5	16.4
Sports and Recreation:						
11. Create a recreational zone to improve athletic activity of residents	4.4	3.5	2.8	4.2	3.5	18.4
12. Develop athletic programs which have more opportunities to succeed in international tournaments	3.7	3.3	1.2	3.3	3.7	15.2
13. Establish a sport secondary school with dormitory	4.1	3.5	1.1	3.8	3.8	16.3
14. Launch and develop sport and athletic halls, gymnasiums	4.1	3.3	1.1	3.7	3.9	16.1
15. Widely develop public sport and common sport games	4.0	3.2	1.3	3.6	3.8	15.9

Strategic Initiative 5. Manage natural resources and protect the environment.

Strategic findative 3. Manage natural resources and	protect	me en	ипоши	ent.		
Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Improve land management	4	3.8	2	4.2	4.2	18.2
2. Conduct survey on natural and mineral resources	4.6	4	1.6	3.6	4.2	18.0
3. Carry out nature restoration project	4.6	3.6	4	4.2	4.2	20.6
Upgrade the water supply of Erdenet city and improve rationalization of water usage	3.4	2.6	2.8	3.6	2.8	15.2
5. Protect biological species and improve living environment	4	3.2	4.2	4.4	3.2	19
6. Implement the "White Dust" project to reduce air pollution created by the Copper Mine	5	3.2	4.2	4.6	3.4	20.4

Strategic Initiative 6. Improve living conditions in ger areas.

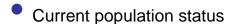
printegre initiative or improve in ing containing in g						
Programs/Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Introduce a comprehensive solid waste management system in ger communities	5	3	4.5	4.5	4	21
2. Launch commercial centers in ger areas	5	4	4	5	5	23
3. Create smokeless fuel	5	5	5	5	5	25
4. Define development trends of ger areas	5	3	4	5	4	21
5. Extend utility services/infrastructure to ger areas	5	3	5	4	4	21
6. Implement a project on upgrading ger area water supply and heating	5	3	4.5	4	3.5	20
7. Estabish a sanitation system in ger areas	5	4	5	4	4	22

### Annex D. Erdenet City Profile



### City Development Strategies for Mongolia's **Secondary Cities**

### **Erdenet City Profile**





#### Orkhon aimag



Territory - 84,360 hectares

- Bayan-Undur soum 20,799 h
- •Jargalant soum 63,561 h

#### Total of two soums

- 19,962
  - households - 82.018
  - persons

### Migration

#### **Erdenet city**

15 of 16 baghs of Bayan-Undur soum are located in Erdenet city.

The City has 78,882 residents, or: - 3.2% of the Mongolian population;

-96.2% of the aimag population.

There are 19,266 households, or: -3.3% of Mongolian households;

-13.6% of regional households; and

- 96.5% of aimag households.

-14.3% of the regional population; and







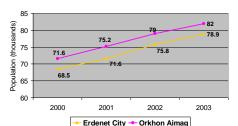






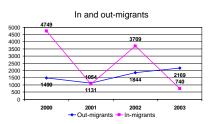


- Legend: Disabled Elderly (above 70 years old
- Children under 16 vears Labor age students
- Labor age unemployed Labor age employed Labor age Total Total Residents



The average annual population growth rate has been about 4.0% since the establishment of Erdenet city 25 years ago.

The average household size is 4.09 people.



Even though out-migrants outnumbered in-migrants over the last 4 years, the population has increased by means of natural growth; In 2003 the population increased by approximately 3,000

### Social infrastructure

Infrastructure	Planned capacity	Actual capacity	Demand	Percent of Demand met
Schools, pupils	11286	20526	23220	68.5
Kindergarten, children	3010	4158	7888	51.0
Hospitals, beds	646	646	710	91.0

Schools and kindergartens are 30-70% over capacity.



### Housing



#### ■ Apartment ■ Ger communities

71.0% of the population live in apartment buildings with utility services and the rest--29.0%--live in ger communities.

#### Planned Improvements to **Apartment Blocks**

#### 1. Increase density in the 11th apartment block.



#### 2. The plan for the 7th apartment block

Over 1,000 new apartments are planned in the 7th apartment block of Erdenet city in the near future; following investments are

- 2.17 billion MNT for utility service lines;
- 21.07 billion MNT for construction of apartments and public buildings.

Residents expressed preference for living in one or two story small houses with backyards.

Drawings and plans have been prepared for 11th apartment building block of Erdenet city to develop into small house block with full access to utility services. Over 60 houses have been built so far.



Ger communities of Erdenet city have doubled in the last 4 years. Because the earlier ger communities are laid out rationally, it is easier to furnish them with utility services, which is more difficult for new ger communities being developed haphazardly.

Land privatization increases the cost of relocation of the ger communities.





### **City Development Strategies for Mongolia's Secondary Cities**

### **Erdenet City Profile**



#### **Economic characteristics**

- GDP by Economic Sectors (2003)
- 0%

  - □ Agriculture, hunting, forestry 3.2%
     Processing industry 5.1%
     Construction -0.4%
     Hotels and restaurants 0.3%
     Hotels and restaurants 0.3%
     State administration, defence 1%
     Social welfare, healthcare 10.6%
     Non direct financial services -0.8%



- 5%0% 6% 3% 7% 19% 0% 1% 2% 13% 3% 30% 3%

• Employment by Sector (2003)

- □ Agriculture, hunting, forestry 6%
   Processing industry 13%
   Construction 3%
   Holtes, restaurants 2%
   Financial services 1%
   State administration, defence 4%
   Healthcare, social welfare 3%
   Non direct financial services 0.1%
- Mining 19%
  Power, heating and water supply 3%
  Trade, repairs 29%
  Transportation, storage, telecommuni
  Real estate 0.4%
  Education 7%
  Public and indinvidual services 5%

Unemployment and poverty



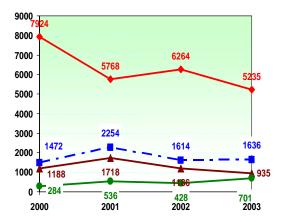
Registered unemployment rate of Erdenet city is 4.9%.

Year 2000	5.2 %
Year 2001	7.6 %
Year 2002	5.3 %
Year 2003	4.9 %

31% of total population is living below the Khangai region poverty line of 20,600 MNT.

Of those, 13,058 people in 2,802 households are extremely poor.

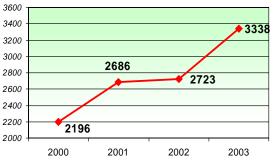
As population grows, number of poor and very poor grows too.



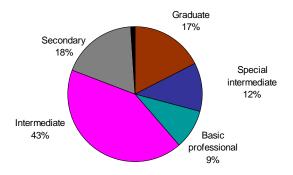
- Total Unemployed
- Registered unemployed
- Registered unemployed with work experience
- Registered unemployed seeking jobs for the first time

	Po	or	Very poor		
	Households	Population	Households	Population	
2000	5,188	19,377	2,126	8,939	
2001	5,160	19,253	2,097	8,919	
2002	5,920	23,147	2,762	12,906	
2003	6,156	24,482	2,802	13,058	

#### Job Vacancies



#### **Unemployment by Education** Level (2003)





### **City Development Strategies for Mongolia's Secondary Cities**

### **Erdenet City Profile**





**Transportation Connections** 

Erdenet is connected to Ulaanbaatar by 409 km of railroads and 400 km of paved roads and to Darkhan by 180.6 km of railroads. A new 153.5 km paved road to Bulgan and Khubsugul has been initiated with funding from Kuwait Fund.

#### · Heating supply

Two plants in Erdenet supply heating. There are 2 different usage areas:

- The settlement area of the city; and
  - The mining factory area.

The Erdenet Thermo Power Plant supplies 80.0% of the city needs in the settlement area.

The Thermo station of the Erdenet Mining Factory meets only the factory needs.

#### · Power supply

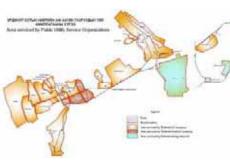
The Erdenet Thermo Power Plant is responsible for supplying Erdenet with heating and the Central Region Power System with power.

Erdenet Thermo Power Plant produces 116.0 million kilowatts of electricity annually, of which it distributes 90.0 million kilowatts to consumers and uses the rest for own purposes. Extra electricity is received from T9L-IV of Ulaanbaatar and from the Russian Federation.

The plant produces 8.0 percent of all electricity produced in Mongolia, or 25.0-30.0 percent of the Central region.

#### · Plans for Upgrading Infrastructure

- Upgrade The Erdenet Thermo Power Plant with one 12 MW turbine;
- Lay down 5.3 km long power line in 5th and 6th apartment blocks;
- Install new sub-stations and put new power lines in both apartment blocks and ger communities;
- Build a new 3.1 km long and 700 mm diameter heating pipeline by the year 2010;
- Build expansion pumping stations in 7th and 7Ath apartment blocks;
- Equip end-users with meters;
- All above is included in a "Power and power grid plan" of Erdenet city and is planned to be financed from the state budget, Erdenet Mining Factory's assets, foreign aid and loans and from assets of local organizations and individuals.







Two enterprises are responsible for heating supply of the city:

"Erdenet -Water and Heating Distribution Network" PJS Company,

Three enterprises are responsible for water supply of the city:

"Erdenet -Water and Heating Distribution Network" PJS Company "Erdenet Amidral" LLC

"The power department" of the Erdenet Copper Mine

Two enterprises are responsible for sewage pipelines of the city:

"Erdenet -Water and Heating Distribution Network" PJS Company "Erdenet Amidral" LLC

Two enterprises are responsible for power supply of the city:

- "Erdenet-Bulgan" branch of the "Central area distribution company
- "Erdenet-Bulgan power distribution network" Joint Stock Company

#### Water supply

Main water source—Selenge River—is located remotely, or 64 km from Erdenet.

On average, 72,000-86,300 m<sup>3</sup> of water are distributed

- 15.0 million m<sup>3</sup> or 66.4 % of all water was distributed to factories in 2003:
- 1.8 million m<sup>3</sup> or 8.3 % to enterprises;
- 7.5 million m<sup>3</sup> or 25.3 % to apartment residents.

Water is supplied to residents of ger communities by 4 trucks and distributed through 33 kiosks.

There are 36 deep wells in the city, 11 of them used for drinking water.

#### · The sewage treatment plant

A sewage treatment plant (STP) capable of processing 24,000 m³ of wastewater per day is operating.

The STP is 1.25 times over capacity.

An upgrade after which the plant would have be capable of handling 48,000 m3 of wastewaster per day was stopped in 1991 due to lack of financial resources.

#### Public utility service fees in Erdenet (₹)

	Erdenet-Water and heating distribution network		Ero	Erdenet amidral		Copper Mine Power	The Th	ermo pow	er plant	
	Apartments	Enterprises	Budget organizations	Apartments	Enterprises	Budget organizations	Apartments	Apartments	Enterprises	Budget organizations
Heating	184	241.5	218.5	184	241.5	218.5	391	160	210	190
Equipped with meters		16209.25	i		16209.25	5			14095	•
Pure water	1169	385	385	1063	385	385				
Liquid wastes	341	112.5	112.5	311	112.5	112.5	135			
Hot water	509	2843	2843	506	2843	2843		440	2472	





# City Development Strategies for Mongolia's Secondary Cities





### Land use

#### Classification of Orkhon Aimag Land

	Category	Area in thousand hectares
1	Urban lands	21,0
а	Lands occupies by buildings and facilities	0,59
b	Public lands	1,4
С	Industrial areas	0,12
d	Mining sites	5,4
е	Ger communities	0,9
2	Roads and communications	0,96
а	Roads	0,15
b	Railroads	0,3
С	Air transportation	0,09
d	Supply network lands	0,48
3	Forest funds	14,0
4	Water reservoirs	0,22
а	Rivers	0,20
b	Creeks, streams	0,02
5	Agricultural lands	46,5
а	Pasturelands	39,7
b	Hay fields	1,4
С	Crop fields	4,9
d	Formerly cultivated fields	0,4
е	Agricultural buildings and facilities	0,013
6	Special purpose lands	1,7
а	Natural reserves	1,6
b	State defense lands	0,14
С	Foreign diplomatic office	0,002
d	Meteorological fields	0,0004
	Public usage lands	84,38



#### **Classification of Erdenet City Land**

		Area in
No	Category	thousand
		hectares
	Urban	20,8
1	Lands occupied by buildings and facilities	0,5
2	Public lands	13,9
а	Public recreational lands	0,0038
b	Lands occupied by streets, squares, roads	0,0043
С	The Sewage plant	3,374
d	Cemetery	0,0016
е	Trash site	0,00
f	Free lands in stock	10,378
3	Industrial area	0,11
4	Mining site	5,42
а	Mineral resources mining fields	5,027
b	Lands for factory buildings and facilities	0,323
С	Settlement area	0,00
5	Ger communities	0,85
Tota	l lands	20,7

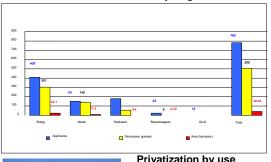
#### Aimag lands owned and in use:

There are total 5,955.5 hectares of land owned by 180 enterprises and 637 individuals

10,765.8 hectares of land are in use by 170 enterprises and 892 individuals

48 enterprises and 654 individuals use 5,332.4 and 581.6 hectares, respectively, of total agricultural lands of the aimag.

#### Land Privatization by Bagh



Filvalization by use						
	PI	ots		nercial se		
	Q-ty	Q-ty Hectar		Hectar es		
Enterpri ses	-	-	-	-		
Individu als	3809	348.8	8	0.27		

#### Land privatization by soum

Soums	Applications	Granted	Area (hectares)
Jargalant	168	161	38,6
Bayan-Undur	2171	1408	104,0
Total	2339	1569	142.6

#### Environment

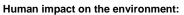
#### Environmental status and impact of Bayan-Undur Soum

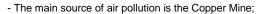




The following results were obtained by land inspection in 2001:

- 21,560 hectares are in normal condition;
- 1,655 hectares have been destroyed by off-road vehicles;
- 3 hectares covered by gorges and eroded by floods;
- 2 hectares polluted by household wastes;
- 16,541 hectares eroded. Erosion levels are:
  - 2,593 hectares or 15.6% eroded at medium.
  - 13,948 hectares or 84.4% eroded significantly.
  - 41.6% of total pasturelands eroded and 4.2% affected by other impacts.





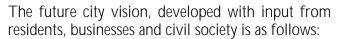
- Air pollution is also caused by use of various fuels in ger communities;
- Farms and pasture lands are polluted by exhausts of down-wind factories;
- Khangal river is polluted by wastes of Erdenet Mine and other industries.





### KHOVD City Development Strategy

In January 2005, the city of Khovd began a participatory planning process to develop a **City Development Strategy**—a vision and strategies for the future development of the city and priority projects to realize that vision. After months of analysis and deliberation among city officials and administrators, local business owners and community leaders, Khovd's first strategic plan is complete.





#### Khovd Vision

A green city developed as a model Free Economic Zone based on intensified manufacturing and information technology, whose citizens are hard working, intelligent and optimistic, and where the traditions and customs of multiple ethnic groups are preserved and celebrated.

To achieve this vision, Khovd developed six key strategic initiatives:

- 1. Improve the business environment and support the growth of small and mediumsize businesses:
- 2. Expand hunting and fishing tourism and travel-related business initiatives;
- 3. Develop planning, service provision and land management systems;
- 4. Improve environment of ger communities;
- 5. Protect the environment: and
- 6. Develop human, cultural and social resources.

Khovd proposed a set of projects and programs designed to meet the objectives of each Strategic Initiative. They prioritized the projects within each Strategic Initiative according to a set of criteria, including: a) relevance to development policies; b) financial viability and economic returns; c) environmental benefits; d) social benefits; and e) implementation capacity. The results of the prioritization exercise are included in Annex C.

The Working Group then reprioritized these 22 projects, and preliminary proposals were developed for the 11 highest ranked projects.<sup>1</sup> These projects form the core of Khovd's CDS. They represent the development priorities of the city within the framework of a larger vision for the city's future.

The CDS is a living document to be used in everyday decision-making, revisited on a regular basis and updated as the city grows and changes. It complements the city's Master Plan by prioritizing key projects and programs outlined in the Master Plan and providing an action plan for implementing the projects.

<sup>&</sup>lt;sup>1</sup> A list of Working Group members and Workshop participants is included in Annex A.

#### **Introduction to Khovd**

Located 1,425 km west of Ulaanbaatar, Khovd city was founded in 1762. With a population of 30,479 residing in 12 districts, Khovd city is the center of Khovd aimag. Its population is 33.4 percent of the total aimag population. In accordance with the Regional Development Concept passed in 2001, Khovd city was selected as a pillar center of the Western Region.

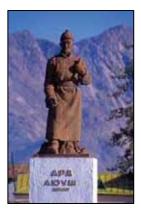
As a result of administrative reforms in 1992, Khovd was accorded the status of a soum—Jargalant soum—rather than a city. Like most of the aimag centers of Mongolia, Khovd city governance is also that of Jargalant soum. The lack of official status as a city has limited Khovd's ability to manage urban development generate its own revenues and invest its own resources in capital improvements.



Khovd is distinguished by its multi-cultural population. It is home to more than 17 nationalities and ethnicities. The main ethnic groups are the Khalkh—comprising 27.5 percent of the population; Zahchin—24.9 percent; Kazakh—11.5 percent; Torguud—8.1 percent; Uriankhai—7.6 percent; Uuld—7.5 percent; and Durvud—6.0 percent. Each of these groups has its own distinct traditional dwelling and settlement pattern, dress and other cultural distinctions.

During the Socialist period, Khovd supplied construction materials for Mongolia's western aimags. Currently only one factory produces construction materials, but the construction sector, along with light industries, primarily in food and sheepskin processing, have shown some growth in recent years. The agricultural sector contributes significantly (67 percent) to the aimag's GDP, indicating that the city is not yet a strong economic force for the province. Khovd aimag's total GDP in 2004 was 31.2 billion MNT, and its GDP per capita was 355,000 MNT, which is about half of the national GDP per capita.

Khovd is accessible by air from Ulaanbaatar, and its international airport is an uncommon asset among Mongolia's aimag centers. Earthen roads link the city to Ulaanbaatar, Uvs and Bayan-Ulgii aimags. Despite Khovd's favorable location neighboring China, Russia and Kazakhstan, which was cited as one of its main strengths, it has not benefited from its proximity to these trading partners, because the borders open just four times a year for a short period of time.<sup>3</sup>



The infrastructure in Khovd is deteriorated and not sufficient to meet the basic service needs of the population. The city has centralized water supply and sewage systems, but only 10.7 percent of residents live in apartments with access to these utility services. The heating plant has not had any major repairs or upgrading since it was built in 1986. The system is plagued by frequent interruptions and breakdowns that occur because the pipelines and boilers are old and deteriorated. Khovd city is currently dependent on Russia for its power supply. This problem will be solved by a hydropower plant, planned for completion in 2007, which will supply Khovd and some other soums with domestic power.

More detailed information on Khovd is compiled in the City Profile, included in Annex D.

<sup>&</sup>lt;sup>2</sup> Gross Domestic Product (GDP) data is not available at the city/soum level.

<sup>&</sup>lt;sup>3</sup> Results of the participatory S.W.O.T. analysis undertaken at the Visioning Workshop are included in Annex B.

#### **Khovd Strategic Initiatives**

Khovd developed six key strategic initiatives, which represent priority areas of investment for achieving the city's future vision. The objectives of each strategic initiative will be met by a series of priority projects and programs. The projects included in the CDS represent a short list of initial project ideas, which were prioritized at the Strategy Workshop held on the May 4, 2005.

# <u>Strategic Initiative 1</u>: Improve the business environment and support the growth of small and medium-size businesses.



Currently the construction sector is the only sector that has seen growth in the number of small and medium-size enterprises. To encourage further small and medium-size business development in Khovd city, there is a great need for reliable infrastructure, particularly heating and electricity. In the last several years the deficits in heating and power have not been recovered, and service delivery has suffered as a result. Frequent disrruptions make it difficult to operate a business.

In Khovd city, like in other semi-urban centers, ger area households subsist primarily through onplot farming and crop production. The city sees intensive development of this sector as an important component for increasing manufacturing of agricultural end-products. A few projects are currently being implemented to support small and medium-size business development in the agriculture sector, including the Support Agricultural Development Project and the Agricultural Business Development Project, implemented by Mercy Corps.

Khovd city is one of the largest financial centers of the western aimags and for the last few years new branches of Mongolia's main commercial banks have been opening. However these banks do not provide long-term loans with low interest rates. There is a need to create new banking services to provide capital for new business start up and expansion of existing businesses.

To meet the objectives of Strategic Initiative 2, the city of Khovd proposes the following priority projects.

- 1. Establish an e-government system to increase transparency and accountability;
- 2. Upgrade power plant machinery and pipeline networks to provide reliable operation;\*
- 3. Build an indoor food and goods market; and
- 4. Issue long-term and low-interest rate business loans.\*

<sup>\*</sup> Indicates projects that have been selected among the 11 highest ranked projects for which more detailed proposals have been prepared.

# Strategic Initiative 2: Expand hunting and fishing tourism and travel-related business initiatives.



Khovd city is located in a high mountain range area with a dry and warm climate. Mountains and peaks surrounding the city are home to numerous species of wild game, which attract hunters, both domestic and international. Khovd aimag has beautiful natural scenery and neighbors one of Mongolia's main tourist destinations—Bayan Ulgii aimag. The unspoiled, wild nature offers an opportunity for the development of extreme or eco-tourism, targeting both domestic and international tourists.

In addition to its rugged, natural beauty and abundant wildife in the surrounding area, the city boasts several

significant historic sites, including Sangiin herem (San Castle) built in 1762 in the center of the city and Baatar Hairhan mountain scripts. It is also home to many different ethnic groups whose cultural traditions the city would like to preserve and promote.

Khovd's historic, cultural and natural assets are all significant advantages for developing tourism. However, one of the main challenges for tourism development in Khovd aimag and Khovd city is poorly developed infrastructure. No paved roads go to Khovd. It is remote from the capital city and central Mongolia, and there has been no concerted marketing effort undertaken to promote Khovd to tourists. Moreover, currently the quality of basic tourist services is low and there are no local tour companies.



To achieve the objective of Strategic Initiative 2, the city of Khovd proposes the following priority projects.



- 1. Establish a nature park;
- 2. Build tourist camps and bases that meet modern standards:
- 3. Establishment of pillar tourism centers based on multinational cultures and customs (e.g. kazakh yurt, eagle, uriankhai epos, kheemii);\*
- 4. Train travel industry employees; and
- 5. Connect to existing travel networks.

#### Strategic Initiative 3: Develop planning, service provision and land management systems.



One of the most pressing infrastructure needs for Khovd city is the improvement of power supply and energy sector management. The city relies on imported electricity from Russia. The supply is unreliable and subject to frequent interruptions. In order to supply the city using a domestic power source, a 12 MWt Durgunt hydropower plant is scheduled for completion in 2007.

Khovd city's centralized heating supply system does not come close to meeting the needs of the city. Because heating and hot water are so unreliable, many businesses and organizations have obtained their own individual boilers and sales of the heating company are declining accordingly. Meanwhile, only 10.7 percent of the population lives in dwellings connected to the central water supply and sewage systems.

The city's Master Plan updated in 2003, includes plans for improving these infrastructure networks, but it neither prioritizes them nor explains how to implement the improvements. The Plan also targets specific uses for particular land parcels as if still operating under the Socialist system in which the central government would make all urban investments, rather than the private sector or local government.

Notably, the Plan includes the creation of a park on lands currently occupied by ger communities.



The city must revisit such plans for resettlement and for central government investment and develop a system for planning that is more responsive to private landownership and market principles.

An important component for improving the planning and development of the city will be the development of a sound municipal finance system, which allows the city to generate its own revenues and invest its own resources in capital improvements.

To meet the objectives of Strategic Initiative 3, Khovd city proposes the following priority projects.

- 1. Upgrade water supply network and make it accessible to all residents;
- 2. Develop a rational city road network in accordance with Master Plan;
- 3. Acquire domestic and dependable power sources;\*
- 4. Prepare Land Management Master Plan of Khovd city;
- 5. Develop and implement a city beautification plan; and
- 6. Develop a strategy for strengthening municipal finance.\*

#### Strategic Initiative 4: Improve environment of ger communities.

Khovd city ger area occupies 570.09 hectares or 7.1 percent of the city and is home to almost 90 percent (more than 6,000 households) of the population, which means that an overwhelming majority of the city does not have access to basic services. Electricity is the only service that reaches every household, and an ADB loan assisted in expanding public bathhouses, which are widely used by ger area residents. The residents do not have piped water, sanitation or solid waste collection services. Coal, which is used for heating and cooking, is the main source of air pollution during the long cold season.

The ger areas also lack basic social services. Schools, kindergartens and health clinics are primarily located in the downtown. Additionally, commercial services, such as barber shops, laundry, etc., are scarce in ger areas.



Khovd city ger areas are distinguished by cultural and ethnic diversity. As home to 17 nationalities and ethnic groups, the city's ger areas reflect diverse dwellings and settlement patterns. There is a distinct ger district for each of the three main ethnicities represented in the city—Kazakh, Zahchin and Khalkh. Further research on how to integrate these areas while perserving the cultural traditions of each settlement will be required to plan for upgrading and making service improvements.



To address the main problems in the ger areas, the city proposes the following priority projects.

- 1. Issue land title to every eligible household and encourage landscaping of plots;
- 2. Introduction and handling of briquette and LPG fuel manufacturing and technologies;\* and
- 3. Improvement of power, water supply and street lighting networks in ger areas.\*

#### **<u>Strategic Initiative 5</u>**: Protect the environment.



Air pollution of the city has been steadily increasing since 1990, primarily as a result of household stoves and the individual boilers of businesses and organizations for heating and hot water.

Coal is only available from distant locations, pricing it out of reach of many poor residents. As a result, trees and other foliage surrounding the city have been destroyed for use as fuel, which has increased soil erosion.

Water pollution has also increased in recent years. Water in the nearby Buyant river, Ulaan bogoch springs and hand wells is highly polluted. The water purification facility does not function properly, and 10 percent of water wells and kiosks and 30 percent of water storage tanks of residents are polluted.

An ADB loan financed the construction of a sewage treatment plant in 2001 using Swedish technology. However, the capacity of the sewage treatment plant is not sufficient to meet the needs of the current population and contaminates from the treatment pool are leaching into the soil.

A total of 50,000 tons of solid waste and ashes are generated each year in the city and there is no system for solid waste management. Residents undertake over 80 percent of waste removal activities on their own. Haphazard dump sites scattered around the city take up about 300 hectares of land.

Industrial facilities potentially harmful to the environment have not undergone thorough environment impact assessments. Central markets



are poorly planned, lacking public facilities such as restrooms and garbage cans, leading to the degradation of these areas and creating an unhealthy environment for buyers and sellers.

About 65 percent of toal infections registered in Khovd aimag occurred in the city, which only has about 30 percent of the aimag population. To protect the environment and decrease associated health problems among the population, the city of Khovd proposes the following projects.

- 1. Effective management of solid waste and recycling plant;\*
- 2. Upgrade sewage treatment plant;\*
- 3. Raise public awareness about environmental health risks and environmental protection;
- 4. Analyze standards and quality of drinking water in wells and strictly follow the standards; and
- 5. Soil erosion and pollution prevention, construction of flood protection trenches and elimination of parallel roads.\*

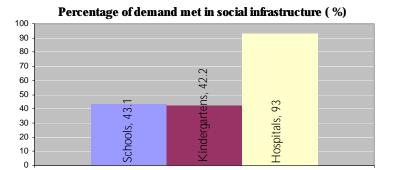
#### Strategic Initiative 6: Develop human, cultural and social resources.

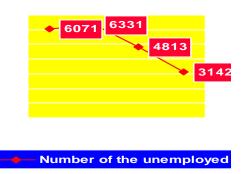


Migration to Khovd city has increased in recent years. However, the aimag is losing population overall, which means that the migrants to the city are coming from rural areas within the aimag.

One of the main reasons for in-migration is access to higher education. As the western region is far remote from the centre of the country, it is less expensive for students from the region to attend universities and colleges in Khovd than in Ulaanbaatar (living costs, transportation, etc.). About 2,050 students study in the

branches of a number of universities located in Khovd, including the Mongolian State University (1,361 students), Agricultural Institute (453), Erdem Private Institute (216) and University of Education (20).





High quality secondary education in Western region is being provided by Bayan-Ulgii Turkish school. Therefore, most wealthy families send their children to study in this aimag. There is just one private secondary school in Khovd. In fact, the secondary schools and kindergartens in Khovd meet less than half of the current demand.

The number of employed individuals in Khovd city reached 8,300 in 2003, which is 43 percent of the working age population, and an increase of 24.8 percent over the previous year. However, it is not clear from the available data which sectors are creating these new jobs.

To meet the social and cultural needs of the city, Khovd proposes the following priority projects.

- 1. Improve healthcare services and encourage preventive care;
- 2. Provide an environment conducive to study;
- 3. Provide conditions for learning, inheriting and developing traditional cultures and customs:\*
- 4. Initiate youth development and after-school programs; and
- 5. Create favorable conditions for global education for residents.

### **Priority Infrastructure Projects**

Seven projects related to infrastructure development were included in Khovd's CDS. Many of these same projects are included in the city Master Plan. However, the Master Plan does not prioritize the infrastructure improvements. Through the CDS the city has prioritized these infrastructure improvements as follows:

- 1. Upgrade power plant machinery and pipeline networks to provide reliable operation;
- 2. Acquire domestic and dependable power source;
- 3. Improvement of power, water supply and street lighting networks in ger areas;
- 4. Upgrade water supply network and make it accessible to all residents;
- 5. Upgrade sewage treatment plant;
- 6. Effective management of solid wastes and recycling plant; and
- 7. Develop a rational city road network in accordance with Master Plan.

In the prioritization of infrastructure projects for Khovd, heating and power supply require the most immediate attention. The heating needs of the city are not currently being met due to frequent disruptions in supply and breakdowns, which occur because pipelines and equipment are old and deteriorated.

The thermo power plant has not had any major repairs or upgrading since it was originally constructed, and there is no redundant backup boiler in cases of emergency. The main raw material input to the thermo power plant—coal—is brought from remote locations and is very costly. It comes from Khar Tarvagatai (208 km away) and Khushuut coal mines (202 km away) by private





Moreover, the city is dependent on Russia for its electricity. This problem, will be solved, at least in part by the construction of a hydropower plant, which is planned for completion in 2007.

Improving infrastructure in the ger communities is also among the top infrastructure priorities. Almost 90 percent of the population lives in ger areas without

access to basic services. It is therefore critical to improve services in the ger areas to support the future development of the city, including increasing access to electricity and potable water, and installing street lighting.

Despite the use of ADB loan funds to upgrade the sewage treatment plant in 2001, it is now over-capacity and in need of expansion to meet the current and future needs of the city. As demand for sewage service increases with the planned construction of several new apartment buildings, the need to upgrade the plant will also increase.

Finally, the city proposes improving the solid waste management system and the road network. While important for achieving Khovd's future development vision, these are not the most pressing infrastructure needs for the city. Improving the road network will also be addressed as part of the ger area upgrading activities through reblocking and rationalization that will be required to provide services.

### **Priority Project Proposals**

After prioritizing projects and programs within each Strategic Initiative, the city selected 11 priority projects from the short list. These 11 projects represent the key development priorities of the city as determined through a participatory, iterative planning process. Proposals were prepared for each of the 11 projects with input from the Working Group. The project proposals follow.

- 1. Upgrade power plant machinery and pipeline networks to provide reliable operation;
- 2. Issue long-term and low-interest rate business loans;
- 3. Acquisition of domestic and dependable power sources;
- 4. Improvement of power, water supply and street lighting networks in ger areas;
- 5. Upgrade sewage treatment plant;
- 6. Soil erosion and pollution prevention, construction of flood protection trenches and elimination of parallel roads;
- 7. Provide conditions for learning, inheriting and developing traditional cultures and customs;
- 8. Establishment of pillar tourism centers based on multi-national cultures and customs (e.g. kazakh yurt, eagle, uriankhai epos, kheemii);
- Introduction and handling of briquette and LPG fuel manufacturing and technologies;
- 10. Effective management of solid wastes and recycling plant; and
- 11. Develop a strategy for strengthening municipal finance.

Project Title	Upgrade power plant machinery and pipeline networks to provide reliable operation						
Sector	Construction, Urban Development, Public Utility Service and Infrastructure	Project duration: 5 years					
Project Location	Khovd						
Type of Project	☐ Feasibility study or Survey ☐ Package p☐ Development project ☐ Other☐ Institutional building						
Summary of Project Objectives	Complete technological upgrade, repair and maintenance of the Khovd City thermo power plant to operate reliably; explore new coal mines; develop ways to achieve a consistent supply of heating to commercial and residential facilities; establish a business friendly and comfortable environment for the population.						
Project Description	<ul> <li>Improve heating supply technology;</li> <li>Improve management and organization of</li> <li>Develop technologies for improved used of possibilities of developing new mines;</li> </ul>	coal mines in the aimag and explore					
Relation to Development Plans	(1) Strategy for Regional Development of Mong Development Strategy; (3) Western Region Dev City.	velopment Project; (4) Master Plan of Khovd					
Expected Benefits / Targeted Beneficiaries / Outputs	Improved utility service supply situation of the city; Infrastructure for new commercial and residential buildings and structures; Development of comfortable living environment for the population; Formation of a comfortable business environment.						
Key Assumptions / Project Conditions	Resolve the Thermo Power Plant privatization issue at both national and local government levels.						
Project and Other Sector Linkages	Sector Linkages: Land Management; Nature an	d Environment					
Estimated Investment Requirement	Estimated project start up costs: US\$ 700,000 Estimated costs for annual maintenance and re	pair:					
Implementing Agency/ Body	City Mayor, City Architect and construction companies, Public Utility Service Department, Badamlakh Dul LLC, aimag and soum governors and Strategy Planning and Policy Coordination Department.						
Relevant Agencies to be Coordinated	Ministry of Construction and Urban Developmen						
Provisional Funding Scheme		Sector y Organized Fund 					
Private Sector Participation	Undertake surveys and provide recommendatio	ns and comments;					
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in funding Maximum utilization of local technologies International technical assistance Other:						
Environmental Considerations	Coordination with other city development and na	ature related programs and projects.					
Special Considerations							

Project Title	Issue long-term and low interest rate loans for businesses				
Sector	Banking	Project duration: 15 years			
Project Location	Khovd				
Type of Project	☐ Development project ☐ Other: Fill ☐ Institutional building	programs nancial aid for development support			
Summary of Project	Increase flow of money within Khovd city econo				
Objectives	the number of projects and jobs provided by small and medium size factories.				
Project Description	<ul> <li>Improve business management and organization;</li> <li>Determine loan conditions, interest rates and repayment terms;</li> <li>Build up a loan fund;</li> <li>Grant loans based on potential high repayment considerations;</li> <li>Monitor loans and their repayments and raise other financial resources.</li> </ul>				
Relation to	(1) Strategy for Regional Development of Mong	olia; (2) Agenda of the Government of			
Development Plans	Mongolia.				
Expected Benefits / Targeted Beneficiaries / Outputs	Development of small and medium-sized industries with significant new employment; Growth of local business incomes; Diversification of goods and services; Increased volumes of production; Larger tax base for local budget revenues; Formation of a positive business environment.				
Key Assumptions / Project Conditions	Integrate the project into the Government's agenda and provide full support.				
Project and Other Sector Linkages	Sector Linkages: Finance and Business				
Estimated Investment	Estimated project start up costs: US\$0000				
Requirement	Estimated annual costs for operation and maint				
Implementing Agency/ Body	Aimag and Soum Governors; Bank of Mongolia; Commercial Banks				
Relevant Agencies to be Coordinated	Ministry of Finance, Professional Monitoring De	partment.			
Provisional Funding Scheme	☐ Local Government ☐ Private S ☐ Central Government ☐ Speciall ☐ International Assistance fund ☐ Other:	y Organized Fund			
Private Sector Participation	Undertake surveys and provide recommendation	·			
Necessary Inputs/ Arrangements	Revised national level legislation and policies  City/aimag government initiatives Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:				
Environmental Considerations					
Special Considerations					

Project Title	Acquisition of domestic and dependable power sources					
Sector	Energy sector Project duration: 3 years					
Project Location	Khovd					
Type of Project	☐ Feasibility study or Survey ☐ Package programs ☐ Development project ☐ Other: Strategy documents for policy making ☐ Institutional building					
Summary of Project Objectives	Reliable supply of the city with power and development of manufacturing and tourism pleasant environment.					
Project Description	<ul> <li>Coordinate the current and planned capacities of power sources and distribution networks into major solutions embodied in the city Master Plan;</li> <li>Perform a supply level evaluation;</li> <li>Create a local source of power and build 110 kWt line;</li> <li>Build a hydro power plant;</li> <li>Acquire, install and test new machinery and technologies;</li> <li>Provide legislative environment for the creation of new power sources.</li> </ul>					
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) earliest goals of energy sector: (3) Construction and Housing Sector Strategy; (4) Regional Development Project and (5) Master Plan of Khovd city.					
Expected Benefits / Targeted Beneficiaries / Outputs	Reliable energy production will be increased by ensuring adequate cost recovery; City population will be supplied with an independent, domestic and reliable source of energy; New power sources will be incorporated into the system that use environmentally friendly technologies.					
Key Assumptions / Project Conditions	Ministry of Fuel and Energy initiates new plan to supply the western aimags with domestic power sources and have it adopted by Parliament. Construction of Durgun hydro power plant is completed according to its program.					
Project and Other Sector Linkages	Sector Linkages: Urban Development, Nature and Environment and Justice.					
Estimated Investment	Estimated Project start up cost: US\$ 450,000					
Requirement	Estimated annual operation costs, maintenance and repair:					
Implementing Agency/ Body	City Mayor, Power Department of the Aimag (power industry companies), Power Grid of The Western Region and The Office of Aimag Governor.					
Relevant Agencies to be Coordinated	Professional Monitoring Agency of the aimag; Land Management Agency of the aimag.					
Provisional Funding Scheme	□ Local Government       □ Private Sector         □ Central Government       □ Specially Organized Fund         □ International Assistance fund       □ Other:					
Private Sector Participation	Investments, organization and project implementation					
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:					
Environmental Considerations						
Special						
Considerations						

Project Title	Improvement of power, water supply and street lighting networks in ger areas						
Sector	Infrastructure	Project duration	1 year				
Project Location	Khovd						
Type of Project	☐ Development project ☐ Other Pol☐ Institutional Building	☐ Development project ☐ Other Policy Paper					
Summary of Project Objectives	Fully supply ger area communities with water a	nd power supply.					
Project Description	<ul><li>programs and projects;</li><li>Expand the existing power and water netw</li><li>Provide necessary equipment and build ne</li></ul>	programs and projects;  Expand the existing power and water networks as necessary;					
Relation to Development Plans	(1) Master Plan of Khovd City; Domestic and in	nternational funded proj	jects and programs.				
Expected Benefits / Targeted Beneficiaries / Outputs	City air pollution will decline; new briquette, LPC be created; new jobs will be created; fuel supply	y will improve.					
Key Assumptions / Project Conditions	Willingness of esidents and communities to pay for at least part of the infrastructure.  Operation and maintenance assured by public utility companies.						
Project and Other Sector Linkages	Sector Linkages: Urban Development; Nature and Environment						
Estimated Investment Requirement	Estimated Project start up cost: US\$ 15,000: Estimated annual cost of operation and maintenance:						
Implementing Agency/ Body	Offices of aimag and soum governors, Power grid of the Western Region and Shim Us LLC.						
Relevant Agencies to be Coordinated	Citizens, enterprises, local communities, Ministr Construction and Urban Development and Ministr						
Provisional Funding Scheme	Local Government Private Sector Central Government Specially Organized Fund International Assistance fund Other:						
Private Sector Participation	Organization, implementation and technical ope	erations					
Necessary Inputs/ Arrangements	Revised national level legislation and policies  City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:						
Environmental Considerations	Safe and proper installation of networks.						
Special Considerations							

Project Title	Upgrade Sewage Treatment Plant	
Sector	Infrastructure Project duration: 1.5 years	
Project Location	Khovd	
Type of Project	☐ Feasibility study or Survey ☐ Package Programs ☐ Development project ☐ Other Policy Paper ☐ Institutional Building	
Summary of Project Objectives	Increased capacity of the sewage treatment plant with corresponding decrease in the city's soil and water pollution.	
Project Description	<ul> <li>Coordinate with other city development and environmental protection programs and projects;</li> <li>Evaluate resources and determine the capacity increase required for the sewage treatment plant;</li> <li>Execute necessary repairs and expansions to the sewage treatment plant.</li> </ul>	
Relation to Development Plans	(1) Master Plan of Khovd City.	
Expected Benefits / Targeted Beneficiaries / Outputs	Capacity of the sewage plant will increase; equipment and technologies will be updated; improved sewerage services will provide cleaner environment for the construction of new buildings and structures and expansion of the city.	
Key Assumptions / Project Conditions	Expansion of sewage treatment plant will enable the incorporation of new, more efficient technologies; existing and new sewer lines will be brought up to international standards.	
Project and Other Sector Linkages	Sector Linkages: Infrastructure; Public Utility Service Projects and Programs.	
Estimated Investment Requirement	Estimated project start up cost: US\$ 150,000 Estimated cost of annual operation and services:	
Implementing Agency/ Body	City Mayor, Offices of aimag and soum governors and Shim Us LLC.	
Relevant Agencies to be Coordinated	Corresponding ministries, agencies, projects and programs.	
Provisional Funding Scheme	☐ Local Government ☐ Private Sector ☐ Central Government ☐ Specially Organized Fund ☐ International Assistance fund ☐ Other	
Private Sector Participation	Investments and logistics.	
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:	
Environmental Considerations	Effluent from sewage treatment plant will meet acceptable standards.	
Special Considerations	Cost of operation and maintenance of sewage treatment plant will be recovered through the water and sewer rates.	

Project Title	Soil erosion and pollution prevention, construction of flood protection trenches and elimination of parallel roads.		
Sector	Nature and Environment	Project duration: 6 years	
Project Location	Khovd		
Type of Project	☐ Feasibility study or Survey ☐ P ☐ Development project ☐ C ☐ Institutional Building	Package Programs Other Policy Paper	
Summary of Project Objectives	Slow down desertification and dust poll disasters.	ution, reduce soil erosion and prevent natural	
Project Description	projects;  Establish a research institution for  Undertake land restoration based  Expand the city's vegetation and g  Layout and pave new road networ  Restore existing flood protection d	ment and environmental protection programs and protection against urban desertification; on soil erosion studies and evaluations; greenery; ks; lams and build new ones.	
Relation to	(1) Master Plan of Khovd City; (2) Mast	er Land Management Plan.	
Development Plans			
Expected Benefits / Targeted Beneficiaries / Outputs	safe and healthy environment.	y expanded; increased number residents living in a nealthy conditions for living and working.	
Key Assumptions / Project Conditions	Adequate vegetation material can be for	ound, planted in key areas and protected.	
Project and Other Sector Linkages	Sector Linkages: Urban Development;	Land Development	
Estimated Investment	Estimated project start up cost: US\$ 15		
Requirement	Estimated cost of annual operation and		
Implementing Agency/ Body	Department and traffic police.	gency, Strategy Planning and Policy Coordination	
Relevant Agencies to be Coordinated		aimag, Land Management Office of the aimag, , Ministry of Construction and Urban Development and	
Provisional Funding Scheme		Private Sector Specially Organized Fund Other:	
Private Sector Participation	Information access, preparation of proje	ects and programs, investments and funding.	
Necessary Inputs/ Arrangements	Revise national level legislation and City/aimag government initiative Improve institutional arrangements a Local level financing International financial assistance (gradinational financial assistance (loperivate sector participation and finar Maximum utilization of local technology International technical assistance Other:	at local level  rant)  ran)  ncing  ogies	
Environmental	Use of natural features to control floodi	ng	
Considerations			
Special Considerations	Cost recovery mechanisms for the gree	ening of the city.	

Project Title	Provide conditions for learning, inheriting and developing traditional cultures and customs.
Sector	Education and culture Project duration: 3 years
Project Location	Western Region, Khovd aimag and Khovd city
Type of Project	Feasibility study or Survey Package Programs Development project Other Policy Paper Institutional Building
Summary of Project Objectives	Nurture and transmit traditional cultures and customs to the younger generation.
Project Description	<ul> <li>Prepare education programs based on the traditions of various ethnic groups;</li> <li>Provide new education materials and learning environment for traditional culture;</li> <li>Prepare and implement a professional training program for teachers of traditional cultures;</li> <li>Create a regional center for traditional customs and cultural heritage that include a mobile unit.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Western Region Development Project; (3) Education related projects and programs.
Expected Benefits / Targeted Beneficiaries / Outputs	Younger generation will learn ethnic group customs and traditions and be able to apply this knowledge to their everyday lives; tourist industry will gain positive benefit from displaying traditional culture to tourists and from training tourism specialists.
Key Assumptions / Project Conditions	Citizen willingness to devote time and effort into the documentation and dissemination of traditional, ethnic cultures. Facilities provided to adequately house and archive traditional art and information.
Project and Other Sector Linkages	Sector Linkages: Culture; Arts; Tourism; International Relations
Estimated Investment Requirement	Estimated project start up costs: US\$  Estimated annual cost of operation and maintenance:
Implementing Agency/ Body	Education and Culture Department of the aimag, youth organizations and universities.
Relevant Agencies to be Coordinated	Ministry of Education, Culture and Science, Office of Khovd Aimag Governor
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:
Private Sector	Conduct surveys; make comments and recommendations, place orders, investments and
Participation	funding.
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Traditional relationships between ethnic groups and their environment are presented.
Special Considerations	Collaboration with national and international level museums and folk art centers is developed.

Project Title	Establishment of pillar tourism centers based on multi-national cultures and customs
Sector	Tourism and Urban Development Project duration: 6 years
Project Location	The Western Region, Khovd aimag and Khovd city
Type of Project	☐ Feasibility study or Survey ☐ Package programs ☐ Development project ☐ Other ☐ Institutional building
Summary of Project Objectives	Establish pillar tourist centers for the promotion and demonstration of multi-national customs and traditions among domestic and international travelers.
Project Description	<ul> <li>Establish tourism centers with high quality service and comprehensive display of multinational customs, traditions, culture, clothes and items such as Uriankhai tales, kheemii, Khazakh yurt, and eagle and tea ceremony of western Mongolia;</li> <li>Celebrate a Kheemii Festival on an annual basis;</li> <li>Train guides, translators and other tourism employees;</li> <li>Educate tourism specialists at Khovd University;</li> <li>Establish a connection to the central tourism network and acquisition of necessary equipment and gear.</li> </ul>
Relation to Development Plans	(1) Strategy for Regional Development of Mongolia; (2) Construction and Urban Development Strategy; (3) Western Region Development Project; (4) Master Plan of Khovd City, (5) Master Project for Development of Tourism and Resorts in Mongolia.
Expected Benefits / Targeted Beneficiaries / Outputs	Development and clarification of the structure, organization and place of the tourism industry in the city's development; Growth in tourism revenues from increases in the number of tourists; Competition among providers and improved access to services; Gathering and publication of customs and traditions of ethnical groups in a single place; Promotion of aimag and local communities; Availability of an adequate numbers of tourism professionals; and Promotion of Khovd City at the international level by joining international tourism networks.
Key Assumptions / Project Conditions	Restoration of the ancient "Sangiin kherem" stronghold by the local government and its conversion into the customs and traditions center for multi ethnic groups that occupy the Khovd aimag and western Mongolia;
Project and Other Sector Linkages	Sector Linkages: Nature and Infrastructure Sectors
Estimated Investment	Estimated project start up cost: US\$ 0000
Requirement	Estimated annual operation costs, maintenance and repair:
Implementing Agency/ Body	Aimag and Soum Governor Offices, enterprises and Ministry of Transportation and Tourism.
Relevant Agencies to be Coordinated	Ministry of Transportation and Tourism, its departments and agencies; Domestic and International Companies that conduct similar activities; Ministry of Construction and Urban Development.
Provisional Funding Scheme	□ Local Government □ Private Sector □ Central Government □ Specially Organized Fund □ International Assistance fund □ Other:
Private Sector Participation	Investments, organization and project implementation
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:

Project Title	Introduction and handling of briquette and LPG fuel manufacturing and technologies	
Sector	Fuel and energy Project duration: 1 year	
Project Location	Khovd	
Type of Project	☐ Feasibility study or Survey ☐ Package Programs ☐ Development project ☐ Other Policy Paper ☐ Institutional Building	
Summary of Project Objectives	Development of low cost, less polluting sources of fuel with corresponding decline in air pollution.	
Project Description	<ul> <li>Coordinate with other city development and environmental protection programs and projects;</li> <li>Establish demand for proposed fuel sources and identify optimum system for their distribution;</li> <li>Determine availability of fuel making materials, labor skilled in producing it and basic equipment that is required;</li> <li>Establish briquette and LPG fuel manufacturing facilities.</li> </ul>	
Relation to Development Plans	(1) Regional Development Project; (2) Master Plan of Khovd City; (3) domestic and international funded projects and programs.	
Expected Benefits / Targeted Beneficiaries / Outputs	Decrease in the city's air pollution; generation of local job opportunities due to establishment of factories to produce briquettes, LPG fuel and smokeless stoves; better performing and cheaper household fuel heating and cooking.	
Key Assumptions / Project Conditions	An adequate demand for briquettes and LPG fuel exists among households. Sufficient quantity of basic materials can be found locally to create the fuel to meet demand and produce reductions in costs.	
Project and Other Sector Linkages	Sector Linkages: Urban Development; Nature and Environment	
Estimated Investment Requirement	Estimated project start up costs: US\$ 15,000 Estimated cost of operation and maintenance:	
Implementing Agency/ Body	City Mayor, Offices of aimag and soum governors, citizens, enterprises, organizations and communities.	
Relevant Agencies to be Coordinated	Ministry of Fuel and Energy, Ministry of Construction and Urban Development and Ministry of the Nature and Environment.	
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other	
Private Sector Participation	Sort various fuel types, arrange and supply livestock originated fuel.	
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:	
Environmental	Removal and treatment of briquette making wastes; safe handling of potentially hazardous	
Considerations	materials.	
Special Considerations	Local production versus the importation of basic equipment.	

Project Title	Effective management of solid wastes and recycling plant				
Sector	Urban Development and the Nature and Environment Project duration: 4 years				
Project Location	Khovd city				
Type of Project	Feasibility study or Survey Package Programs Development project Other Policy Paper Institutional Building				
Summary of Project Objectives	Improvement of solid waste management and construction of recycling plant.				
Project Description	<ul> <li>Implement city wide environmental assessment for solid waste;</li> <li>Coordinate with other city development and environmental protection programs and projects;</li> <li>Prepare solid waste improvement projects and programs and their management;</li> <li>Establish and equip waste sorting centers;</li> <li>Assess new equipment and technologies and pilot test new technologies;</li> <li>Build a recycling plant.</li> </ul>				
Relation to	(1) Master Plan of Khovd City				
Development Plans					
Expected Benefits / Targeted Beneficiaries / Outputs	Decrease in city air pollution and soil erosion; Management of solid wastes and city clean-up will be improved; City environment will become clean and healthy.				
Key Assumptions /	Office of the Aimag Governor is able to develop rules and regulations for the sorting of solid				
Project Conditions	wastes including the best location for sites, worker salaries and public involvement.				
Project and Other	Sector Linkages: Urban Development; Environment: Health				
Sector Linkages					
Estimated Investment Requirement	Estimated project start up cost: US\$ 35,000 Estimated annual cost for operation and maintenance:				
Implementing Agency/ Body	City Mayor, Nature and Environment Agency and Offices of aimag and soum governors.				
Relevant Agencies to be Coordinated	Citizens and enterprises				
Provisional Funding Scheme	☐ Local Government ☐ Private Sector ☐ Central Government ☐ Specially Organized Fund ☐ International Assistance fund ☐ Other:				
Private Sector Participation	Sort out, organization and investments				
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing; International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:				
Environmental	Management of land fill site to be improved.				
Considerations					
Special Considerations	Community education about solid waste programs and the need to reduce pollution to be pursued.				

Project Title	Develop strategy to strengthen municipal finance						
Sector	Finance Project Duration: 6 months						
Project Location	Tsetserleg						
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other: Policy Paper ☐ Institutional Building						
Summary of Project Objectives	Develop a strategy for Tsetserleg City to strengthen its municipal finance, increase own- source revenues and fund capital improvements from local budget						
Project Description	<ul> <li>Conduct study to clearly define fiscal problems at city level and make recommendations for improvements to policy framework and local capacity for budgeting and expenditure</li> <li>Reform national level policies to enable fiscal decentralization and give authority to local level for taxation and capital investments</li> <li>Build local institutional capacity for local revenue generation (setting tax rate and structures), budgeting and expenditure management</li> <li>Implement budget and expenditure software, prepare guidelines and organize trainings.</li> <li>Develop framework for prioritization and structuring of city programs and a monitoring mechanism for effective and efficient implementation.</li> </ul>						
Relation to Development Plans	Relates to all existing national and local development plans, including (but not limited to): (1) Concept of Regional Development of Mongolia, (2) National Government Action Plan, 2004-08, (3) Construction and Housing Sector Strategy, (4) Master Plan of Darkhan.						
Expected Benefits / Targeted Beneficiaries / Outputs	All city residents will benefit form municipal finance reforms. The city will become self-sufficient and able to invest in capital improvements that will benefit the entire community.						
Key Assumptions / Project Conditions	GoM will adopt reforms and local institutions will be strengthened to effectively manage municipal finances						
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, All Strategic Initiatives Sector Linkages: All sectors.						
Estimated Investment Required	Estimated project cost: US\$100,000 Estimated annual cost of operation and maintenance: N/A						
Implementing Agency/ Body	Governor's Office, Finance Department of the Governor's Office, Ministry of Finance and Parliament						
Relevant Agencies to be Coordinated	All divisions and departments at all levels of administration						
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance Funds Other						
Private Sector Participation	Provide recommendations and comments on favorable local tax conditions						
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:						
Environmental Considerations							

## Annex A. Working Group Members and Workshop Participants

### **Working Group Members**

- 1. G.Nyamdavaa, Aimag Governor
- 2. B.Ulziisaihan, Jargalant soum Governor
- 3. P.Bataa, Aimag Strategy Policy Implementation and coordination Department Head
- 4. N.Bataa, Aimag State Fund Department Head
- 5. U. Batzaya, Aimag Social and Labor Security Department Head
- 6. D. Davaasambuu, Aimag Statistic Department Head
- 7. J.Natsagdorj, Aimag Education, Culture and Art Department Deputy Head
- 8. O.Enkhtuya, "Badamlakh Dul" LLC engineer
- 9. A.Dashnyam, "Shim Us" LLC chief engineer
- 10. B.Ganbold, "Electricity Transmission Network" LLC Director
- 11. B.Batchuluun, Police Department Head
- 12. P.Erveehei, Western Region Health and Diagnostic Centre Director
- 13. L.Ganbold, Transportation Coordination Department Head
- 14. Tserendamdin, "AZZA" LLC Director
- 15. U.Tuvdendorj, "Buyant Katun" LLC Director
- 16. Ts.Ariunjargal, Aimag Trade Union Head
- 17. T.Baasandorj, "Khovd" University Director
- 18. Z.Umurtai, Aimag Chief architect
- 19. S.Budee, Aimag Land Affair specialist
- 20. T.Bayarsaihan, "Lut-Ochir" LLC Director
- 21. T. Yadamsuren, Telecommunication Department Head
- 22. B.Gantulga, Jargalant soum Parliament Speaker
- 23. Ya. Sengedorj, Deputy Soum Governor
- 24. N.Battulga, City Mayor Office
- 25. Kh.Bayarlakh, Environmental inspector
- 26. Ts.Ganchimeg, Children and Youth Department Head
- 27. Ch.Chinbat, City Beautification Department Head
- 28. N.Damba, Aimag Parliament Secretary
- 29. Z.Dashzeveg, Hovd University Lecturer
- 30. Ch. Tumendemberel, Environmental Department Head
- 31. D.Shirendev, Department of Justice and Law Head
- 32. D.Batchuluun, Mongol Bank branch Head
- 33. L.Batbayar, Aimag Association for Customer's Right CEO
- 34. D.Nyamlhagva, Erdem Institute Director
- 35. D.Enkhbold, Aimag Governor's Administration Head
- 36. I.Baatar, "Tsast Altai" Complex School

## Visioning Workshop Participants January 27, 2005

- 1. B.Ganzorig Lieutenant Colonel, Disaster Preparedness Division
- 2. Ch.Chinbat Director, City beautification affair
- 3. Ch.Jadambaa Secretary, the Local Parliament

- 4. B.Gantulga Speaker, the Local Parliament
- 5. P.Bolormaa Bailiff, Jargalant soum
- 6. Ya.Sengedorj Deputy Mayor of Khovd city
- 7. P.Oyuntungalag Leader , Bugat bag
- 8. Ch.Dashzeveg Dean, Khovd University Geographical Department
- 9. P.Erveekhei Director, Regional Diagnostic Center
- 10. R.Tsetsegjargal- Methodologist, Red Cross Committee of Khovd
- 11. J.Natsagdorj Deputy head of the Aimag's cultural and educational department
- 12. L.Bazarsad Editor- in-Chief of Khovd News newspaper
- 13. Ch.Baatar Director of "Tsast-Altai" school
- 14. Kh.Dashtseren Property registration specialist
- 15. T.Bayarsaikhan Director of "Lut-Ochir" company
- 16. U.Tuvdendorj Director of "Western Mongolia International" company
- 17. D.Basbish Director of "Oyu Mandal" company
- 18. O.Enkhtuya Chief Engineer, "Badamlakh Dul" company Heating Plant
- 19. D.Khureljee Senior engineer, Western region electricity transmission company
- 20. Z.Umirtai Chief Architect, Khovd aimag
- 21. Ts.Davaasuren Inspector, Professional Inspection Office
- 22. N.Battulga General manager of the Kkhovd city
- 23. S.Budee Specialist, Land Affair office
- 24. T.Yadamsuren Director of the Khovd Telecommunication Office
- 25. L.Ganbold Head of the Department
- 26. D.Narandorj Head of Public policy coordination department
- 27. L.Batbayar Officer for labor and insurance
- 28. N.Bataa Head of Financial and economical policy coordination department
- 29. P.Bataa Head of Industry, infrastructure, environment department
- 30. N.Damba Secretary, Local parliament
- 31. D.Davaasambuu- Head of statistical department
- 32. N.Sukhee Director of the Agricultural university
- 33. R.Tsagaantsooj Chief engineer, Meterelogical Centre
- 34. Ts.Gantulga Specialist, environmental office
- 35. Kh.Bayarlakh Environmental control national inspector, Jargalant Soum
- 36. Kh.Tserendorj Director of veterinary office
- 37. B.Ulziisaikhan Mayor of Khovd city

# Strategy Workshop Participants May 4, 2005

- 1. P.Lhagvasuren, "Buyant Katun" CO.,LTD, Executive Director
- 2. T.Bayarsaihan, "Lut-Ochir" CO.,LTD., Director
- 3. D.Ganbold, "Anod" Bank, Director
- 4. O.Davaadorj, "OOJ Van" CO.,LTD, Director
- 5. Ts. Gandanpovroon, "Nomin-Hovd", Manager
- 6. B.Ganbold, "Lut-Ochir" CO., LTD, Manager
- 7. Tsagaanhishig, Hovd city government, Head of Administration
- 8. D.Davaasambuu, Aimag Statistic Department, Head
- 9. P.Bolormaa, Hovd city government, Land registor
- 10. N.Bataa, Aimag Government Adminstration Department Head

- 11. Ts.Jaltsav, Aimag Government Adminstration Officer
- 12. B.Batchuluun, Police Department Head
- 13. B.Ulziisaihan, Mayor Hovd city
- 14. Z.Umirtai, Aimag Government Adminstration Chief Architect
- 15. S.Budee, Aimag Land Office Land Manager
- 16. B.Tserendamdin, "Hovd Azza" SHC Director
- 17. Ch.Chinbat, Hovd City Beautification Head
- 18. D.Hureljee, Western region Power transmission network, Hovd branch Chief engineer
- 19. N.Battulga, Jargalant soum / Hovd city government Senior Officer
- 20. B.Gantulga, Jargalant soum / Hovd city parliament Speaker
- 21. B.Amgalanbaatar, Jargalant soum / Hovd city government Bag leader
- 22. H.Bayarlah, Jargalant soum / Hovd city government State environmental inspector
- 23. Ch.Jadambaa, Jargalant soum / Hovd city parliament Secretary
- 24. Ya. Sengedorj, Jargalant soum / Hovd city government Deputy governor
- 25. H.Dashtseren, Land Office Inspector
- 26. R.Enkhsuren, local business owner
- 27. Ch. Tumendemberel, Environment Department Head
- 28. D.Tulganyam, Food and Agriculture Office Head
- 29. D.Tsetsegdari, Zoos Bank Director
- 30. Ch.Dashzeveg, Hovd University Faculty dean
- 31. L.Byambatseren, Hovd complex school Manager
- 32. Yu. Doljinsuren, Agricultural University, Agrobiology sector Head of methodology department
- 33. Ts.Baasandori, Hovd University Director
- 34. J.Natsagdori, Department of Education and Culture Deputy Head

# Final Workshop Participants July 6, 2005

1.	Ulziisaihan	City Mayor and Jargalant Soum Governor
2.	Sengedorj	Deputy Soum Governor
3.	Tuvdendorj	Director, Buyant Katun LLC
4.	Bavarsaihan	Director, Lut-Ochir LLC

5. Tsendayush Officer, Strategy Planning and Policy Coordination Dept.

## **Annex B. SWOT Analysis**

At the Visioning Workshop, held on January 27, 2005, participants were asked to identify the city of Khovd's key strengths, weaknesses, opportunities and threats. Numbers in the table indicate the number of times each response was given by participants.

## **Annex C. Project Prioritization**

During the Strategy Workshop held on May 4, 2005, participants were asked to rank each project or program idea according to five criteria in order to systematically prioritize projects. The criteria, chosen from among those used by Ulaanbaatar and other cities around the world for preparation of their City Development Strategies, included:

- 1. Relevance to development policies
- 2. Financial viability and economic returns
- 3. Environmental benefits
- 4. Social benefits
- 5. Implementation capacity

Participants worked in small, thematic groups based on the six strategic initiatives to rank the projects on a scale of 1 to 5 (1=none, 5=significant) for each criteria, and presented the results of their deliberations to the whole group for discussion and verification.

# Strategic Initiative 1: Improve the business environment and support the growth of small and medium-size businesses.

und interioris dize budinesses.						
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Make urban planning and utility service infrastructure maps open	5	4	4.5	5	4.5	23
To make transparent land auction and privatization activities for residents	5	5	2.5	4.6	4.2	21.3
Renovate the heating supply network urgently	5	4.5	4.5	4.7	3.3	22
To maintain and improve road network inside the city	5	2	3.3	5	3.3	18.6
Increase the public awareness of licence and allowance issueing activities and improve trainings.	4.2	4.2	2.3	4.6	4.2	19.5
To distribute the permission to locate street boards and land for free	4.8	4.2	2.7	2.7	3.8	18.2
Increase the Mayor's power	4.6	3.3	3	3.1	4.1	18.1
Build not that less than 2 indoors food and goods markets	5	5	3.8	4.9	3.8	22.5
Long term mortgages	5	5	4.5	4.8	2	21.3
Issue long term and low interest rate loans	4.8	4.5	3.2	4.8	4	21.3

# Strategic Initiative 2: Expand hunting and fishing tourism and travel-related business initiatives.

Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Build tourist camps and bases which can meet modern standards	4.7	4.1	2.6	3.3	2	16.7
Improve the environment for tourism development	4.3	3.6	2.3	2.4	2.1	14.7
Get connected to travel networks	4.7	3.6	1.5	3.3	2.3	15.4
Improve infrastructure	4.7	3	2.6	3	1.5	14.8
Set the tourism route and get connected to the National tourism network	4.7	3.1	2.2	2.7	2	14.7
Launch tourism info network	4.6	2.8	2.2	3.1	2.4	15.1
Build a multi ethnical group base camp (e.g. kazakh yurt, eagle, uriankhai epos, kheemii)	4.6	3.3	2	3.1	3.4	16.4
Establish a place where beautiful natural features and rare animals can be seen	4.1	3.9	3.1	2.7	3	16.8
Train travel industry employees	4.6	3.6	1	3.6	3.4	16.2
Support international and domestic tourism	4.6	3.6	1	3.2	2.3	14.7

Strategic Initiative 3: Develop planning, service provision and land management systems.

Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Prepare the Master Plan of Khovd city land management done at 10-15km range and then supply the necessary scaled maps	5	2	3.6	3.6	4.2	18.4
Acquire a reliable power source and become not dependant on others	4.8	3.2	2.8	4.2	3.6	18.6
Improve the heating technology of the stove and increase the capacity	4.2	3	3	3.8	3	17
Upgrade the water supply and sewage pipeline networks and make them accessible to the residents	4.4	3.6	3.6	3.8	3.4	18.8
Improve telephone communication network operation, create an opportunity for land line in ger area, activate pay phone operation	4.2	3.4	2	3.6	3.2	16.4
Create a road network according to the master plan and land management master plans of the city, arrange its maintenance and build inter block roads in the near future	4.6	3.4	3.2	3.8	3.6	18.6
Plan city beautification activities in synchronization with Master Plan and HAAp and define planting areas	4.8	3.2	2.6	3.8	3.4	17.8

Strategic Initiative 4: Improve environment of ger communities.

Strategic inflative 4. Improve environment of ger communities.						
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Produce a solid waste removal and transportation management, find financial resources and build a recycling factory	4.2	2.9	4.8	3.3	3.5	18.
Maintain pit latrines in ger area to meet hygienic requirements	3.7	1.6	3.7	3.3	3.5	15.8
Generate awareness and consciousness of relation between the environment and health in people's minds	4.7	2.6	4	4.2	4	19.5
Smokeless stove project; resolve fuel problems by increasing the use of fuel briquettes and gas stoves	3.8	3.4	4.8	3.8	2.8	18.7
Improve water and power supplies of households and street lighting conditions	4.8	3.5	2.5	3.5	3	17.3
Locate services close to residents	3.8	3.2	2	3.7	3.3	16
Provide with low-cost construction materials and support	4.5	3.3	2.5	4	3	17.3
Issue land to every household and get not less than 10 percent of each land piece covered with grass and bushes	4.33	3.5	4.33	3.5	3.5	19.16
Develop public transportation	4	3.5	2.5	2.8	2.7	15.5
Improve the security of residents (decrease the crime, launch play gardens for kids, yard for aged people)	3.34	2.83	2.5	4	2.83	15.5

Strategic Initiative 5: Protect the environment.

Define Time of Tiotect the city in time						
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
Conduct a multi-stage nature protection training among citizens	4.6	2.2	4.6	3.6	3.4	18.4
Define the environmental profile of the city	3.8	2.6	4	3.2	3.4	17
Decrease the air pollution	4.8	2.4	4.6	4.4	3.2	18.2
Define the desertification rate and stop the take measures to resist sand movement	3.8	2.6	4.2	4.2	2.6	17.4
Analyze standards and quality of drinking water in wells and strictly follow the standards	4.2	2.8	3.4	3.8	4.2	18.4
Evaluate soil erosion and pollution levels and dig flood water trenches (solve the problems related to branch roads)	4.6	2.4	4.4	3.6	3.4	18.4
Build a recycling factory for city household and industrial solid wastes	4.8	3.4	4.6	4.6	2.4	19.8

Increase the public awareness on environmental laws and monitor their implementation	3.4	2.2	4	3.6	3	16.2
Fully involve all projects in environmental impact assessments	3.6	2.4	4	3	2.2	15.2
Define the size of city area for planting and establish a governmental agency to control it	4	3.2	4.2	3.8	1.8	17
Upgrade the sewage system capacity	4.8	3.2	4.4	4.4	2.4	19.2

Strategic Initiative 6: Develop human, cultural and social resources.

Strategic Initiative 6: Develop human, cultural and social resources.							
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total	
Provide an environment for study	4.6	4	2.4	4.6	3.2	18.8	
Provide conditions for a healthy living of the population	4.4	4	4	4.4	3.8	20.6	
To create favorable condition to develop all available talents	3.6	3.2	2.8	4.4	2.8	16.8	
Provide conditions for learning, receiving and developing traditional culture and customs	4	2.4	3	4.2	4.2	17.8	
To create favorable condition to collect, process and exchange information	4.4	3	2	4	3.4	16.8	
Create favorable conditions to get global education	4.2	3	2.6	4.4	3.2	17.4	
Build an environment for a comfortable and proper time spending of the youth	4	3.4	2.6	4.4	3.4	17.8	
To increase economical opportunity to develop.	4	3	2.6	3.8	3	16.4	
Increase opportunity to find a job	3	3.2	2.2	3.6	2.8	14.8	
Create favorable condition to believe in any religion	3.2	2.6	3.6	3.6	3	16	

## Annex D. Khovd City Profile



## City Development Strategies for Mongolia's **Secondary Cities**

## **Khovd City Profile**



## Population

## Khovd aimag

Territory - 76,000 hectares

There are 17 soums and 85 baghs in the aimag with

- 19,243 households

- 91,175 people



### Khovd city

There are 12 baghs in Khovd city (Jargalant soum).







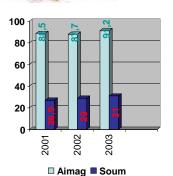




The city has 30,479 residents, or:

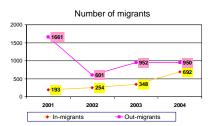
- -1.2% of Mongolian population; -7.5% of the regional population; and -33.4% of the aimag population.
- There are 6,440 households, or:
   -1.1% of Mongolian households;
- -6.7% of the regional households; -33.5% of aimag households.





Population of Khovd aimag and Jargalant soum increased by 3.8 percent and 6.4 percent, respectively, in 2002 and 2003. The average family consists of 4.09 members.

Working age residents prevail in the population followed by **children**. structure.



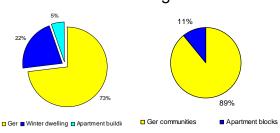
In 2004, there were 27.2% more outmigrants than in-migrants. In 2001, the difference was 7.6 times greater. While in-migration has been increasing in the last years, in-migrants are still outnumbered by out-migrants.

## Social infrastructure

	Planned capacity	Actual use	Demand	% of demand met
Schools, students	3844	8924	9100	43.1
Kindergarte ns, children	850	1038	2015	42.2
Hospitals, beds	330	330	355	93.0



## Housing



89.3 percent of the city population lives in ger communities; 1,400 of them live in regular winter dwellings and 4,700 households live in gers. In other words, 68 percent of total

households (6,911 households) live in gers.

Schools and kindergartens do not meet over 55 percent (56.9 to 57.8 percent) of required needs. During the transition period new structures were not built.

In Khovd city, 3,093 people live in 811 apartments furnished with utility services, which is only 10.7 percent of the city population. The average apartment area per person is 8 m<sup>2</sup> and the average usable area per person is 10.85 m<sup>2</sup>.



80 single-family dwellings were built in 2003, 52 of which have 1-2 rooms, 24 dwellings have 3 rooms, and 4 have 4 or more rooms. In comparison, 18 dwellings were built in 2002, two of which have 1-2 rooms, 14 have 3 rooms and 2 have 4 rooms.



# City Development Strategies for Mongolia's Secondary Cities

## **Khovd City Profile**



## Economy

#### · Growth Industries

Factory, products	Unit	2002	2003	Growth
Altain Buyan, food production	Tons	3.8	4,5	18.4 %
Power manufacturing	Thousand kWt/hr	10482.6	11907.3	13.6 %
lbol, felt ands felt boots production	Thousand meters	2.1	8.6	309.5 %

Production of New Leider, Jinma, and Memo Mongolia companies which had been growing halted in 2002 and production of Shand company decreased significantly (by 55.3 percent).

A majority of Khovd city's industrial products were produced by food manufacturers, Altain Buyan and Shand, heating producer, Badamlah Dul, construction materials manufacturer Tulga, two agricultural companies, New Leidor and Jinma, and a felt manufacturer, Ibol. The only production increases in 2003 were of bakery products of the Altain Buyan company, and power production from high voltage lines and felt production of Ibol.



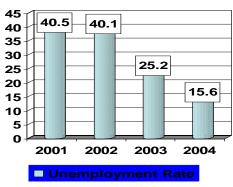
Even though many enterprises halted their operations in 2002, construction contractors have been steadily growing. In 2004, their production reached 2.9 billion ₹ compared to 1.4 billion ₹ in 2000.

## Unemployment and poverty



The unemployment rate in Khovd city is 15.6 percent, which is 9.6 percent lower than the previous year.

Number of unemployed decreased considerably between 2002 and 2004.



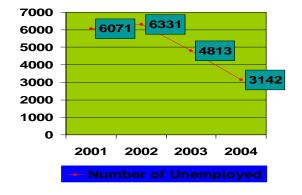
#### **Major Plans**

- Establishment of The Industrial Park of the Western region in Khovd city, which is to manufacture finished products for export, is incorporated in the Sector Development Plan through 2006 for the following types of factories:
  - -Skin and leather processing;
  - -Wool and cashmere processing; and
  - -Meat processing.
- In construction manufacturing:

The Master Plan proposes the construction of: Cement factory, Concrete products factory, Light concrete factory, Vacuum window and door factory, Synthetic wood products factory, LPG enterprise, Briquette fuel factory and Color tile factory. However, the Plan does not include a strategy for attracting the private sector construction industry.

#### Employment

	2001	2002	2003
Number of working age people	14992	15808	19072
Number of working age employed	5100	6220	8272
Employed as percentage of working age population	34,0	39,4	43,3





# City Development Strategies for Mongolia's Secondary Cities

## **Khovd City Profile**



## Infrastructure

#### Roads



Khovd city is 1,425 km west of Ulaanbaatar. There are improved earthen roads linking it to Ulaanbaatar, Uvs and Bayan-Ulgii aimags.

The city has an international airport.

#### Power supply

The power grid has supplied the city with electricity imported from Russia since October 1997 through a 35/6 kW substation.

A diesel power plant works as a backup.

Preliminary steps for privatization of the Power Grid LLC are under way.

#### **Planned Improvements**

Capacity of the existing power generator at the "Khovd" substation will be upgraded before 2020.

Nine closed and 8 open air substations are planned to be built before 2010. The existing open air substations will be converted to closed ones.

Investments required - 480 million MNT.

Master Plan of Western Region Pillar Center, Khovd City, developed by Ulaanbaatar Institute of Urban Development and Design, 2003.

#### Flood Protection

Existing dams do not meet required standards.

The existing flood protection structures need to be completely restored.

Investments required - 2.0 billion MNT.

#### **Utility service infrastructure**

#### · Heating supply

Khovd has a centralized heating supply system, supplied by Badamlah DUI LLC.

Over 80 buildings and structures are supplied with heating from the Thermo Power Plant. The rest buildings are supplied by three boilers.

A total of 9 Central Heating Points supply users with hot water.

The network must be rehabilitated or replaced because it is old and deteriorated, and its throughput rate is very low.

#### **Planned Improvements**

Convert the open system to a closed mode that separate water for heating and hot water for consumption.

Maintain the current pipelines and supply heating to the planned buildings via new lines.

Stock the existing and newly planned central heating points with modern high heating ratio boilers. Investments required – **2.9 billion MNT**.

Source: Implementation Plan of the Master Plan of Western Region Pillar Center, Khovd City, developed by Ulaanbaatar Institute of Urban Development and Design, 2004.

#### Water Supply

Khovd city population is supplied with water using the centralized water supply and trucked water. 10.7 percent of the city population lives in dwellings connected to the water supply and sewage systems.

Shim LLC is responsible for water supply and sanitation services in the city.

#### **Planned Improvements**

Water sources for potable water and water for industrial needs are to be separated.

The water source for industrial area needs must be determined.

A water tank with 8,000 m<sup>3</sup> capacity is required.

Investments required - 1.38 billion MNT.

Source: Implementation Plan of the Master Plan of Western Region Pillar Center, Khovd City, developed by Ulaanbaatar Institute of Urban Development and Design, 2004.

#### Sewerage System

Wastewater from the city center flows to pumping stations through 200-350 mm diameter pipes.

The wastewater removal pumping stations pump wastewater to the city sewage treatment plant via a 200 mm diameter pressurized pipe. The sewage treatment plant is 4 km away from the pumping stations and the total length of the central sewage lines is about 18 km.

The wastewater pumping station is equipped with two CT-160\30 pumps.

The sewage treatment plant was upgraded in 2001 by a Swedish firm with an Asian Development Bank (ADB) loan. However, it is already over-capacity and contaminates from the treatment pools are leaching into the soil.



# City Development Strategies for Mongolia's Secondary Cities

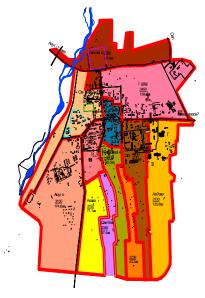


## Khovd City Profile

## •Land management

#### **Classification of Aimag territory**

No	Classification	Area (hectares)
1	Residential area	443,41
2	Public buildings	69,94
3	Green installations	40
4	Transportation area	3,68
5	Special purpose area	52,5
6	Streets	61,62
7	Water protection area	1,2
8	Industrial area	94,20
9	Other	199,75
	Total	966,3



#### Classification of Khovd city territory

N	Classification	Area (hectares)
1	Buildings and structures	274,7
2	Public lands	6182,93
3	Industrial lands	39,8
4	Ger communities	570,09
5	Roads and network lands	224
6	Forest reserves	132,1
7	Water resources	25,72
8	National special purpose lands	550,66
	Total	8000

There are a total of 8,000 hectares of land in Khovd city and 22 hectares of land are owned by 196 households as per 2003. For 2005, it is planned to offer another 131.75 hectares. The new residential areas are located to the southwest of the city. No cadastral map has been made for the city. Land management is done according to outdated maps.

#### Nature and environment

## The adverse impact of human activities on the nature and environment of Khovd city

Businesses operate their own small heating plants and consequently contribute to air pollution, because the Thermo Power Plant can not produce the heating needed. The air pollution level has been growing steadily since 1990.

Coal imported from distant locations is costly, which has led to the destruction of trees and other foliage surrounding the city for use as fuel, thus increasing soil erosion.

Buyant river, Ulaan Bogoch springs and hand well waters are highly polluted.

Facilities potentially harmful to the environment have not undergone thorough environmental impact assessments.

Central markets are poorly planned, lacking public facilities such as restrooms and garbage cans, leading to the degradation of these areas and creating an unhealthy environment for buyers and sellers.





#### Solid waste

50,000 tons of solid waste and ashes are generated each year in the city.

There is no centralized removal of solid waste; Over 80 % of the waste is removed by residents by an administrative order.

The total land area covered with solid waste has reached 300 hectares.

Donkey carts have been used for removal of wastes since 2002.

63.3 to 67.8 percent of total infections registered in Khovd aimag occurred on territory of Jargalant soum

•Report by Khovd city Mayor's Office, 2005.

# CHOIBALSAN City Development Strategy

In April 2005, the city of Choibalsan began a participatory planning process to develop a **City Development Strategy**—a vision and strategies for the future development of the city and priority projects to realize that vision. After months of analysis and deliberation among city officials and administrators, local business owners and community leaders, Choibalsan's first strategic plan is complete.

The future city vision, developed with input from residents, businesses and civil society is as follows:



#### Choibalsan Vision

The pillar center of the Eastern Region and a gateway to Northeastern Asia, with a healthy and secure environment, well-developed infrastructure, and a manufacturing-based and exportoriented, strong economy.

To achieve this vision, Choibalsan developed three key strategic initiatives:

- 1. Provide a favorable environment for investment and economic development;
- 2. Develop human and cultural resources; and
- 3. Improve housing and infrastructure conditions and increase access to basic services.

Choibalsan proposed a set of projects and programs designed to meet the objectives of each Strategic Initiative. The city prioritized the projects within each Strategic Initiative according to a set of criteria, including: a) relevance to development policies; b) financial viability and economic returns; c) environmental benefits; d) social benefits; and d) implementation capacity. The results of the prioritization exercise are included in Annex C.

The Working Group then reprioritized these 22 projects, and preliminary proposals were developed for the 11 highest ranked projects.<sup>1</sup> These projects form the core of Choibalsan's CDS. They represent the development priorities of the city within the framework of a larger vision for the city's future.

The CDS is a living document to be used in everyday decision-making, revisited on a regular basis and updated as the city grows and changes. It complements the city's Master Plan by prioritizing key projects and programs outlined in the Master Plan and providing an action plan for implementing the projects.

<sup>&</sup>lt;sup>1</sup> A list of Working Group members and Workshop participants is included in Annex A.

#### **Introduction to Choibalsan**

With a population of 36,142, Choibalsan is the fourth largest city in Mongolia. Established in 1938 as Bayantumen city and renamed Choibalsan in 1941, it is located approximately 650 km east of Ulaanbaatar in Dornod aimag, which borders both Russia and China. Designated as one of the two pillar centers of the eastern region, the city comprises about 50 percent of Dornod aimag's total population. The city's location near international borders was cited as one of its main strengths.<sup>2</sup>

Choibalsan has a domestic airport at a former Russian army base and planes travel back and forth to Ulaanbaatar two to three times per week. Dornod aimag has a road network totaling 2,536 km; 60 km of which is within Choibalsan city and its surrounding area, and approximately 370 km of internal railway network, which connects Asia and Europe. Within the framework of the Tumen River Area Development Project (TRADP) a preliminary feasibility study is being conducted for construction of a railway between the Arshaant border point with China and Bayantumen soum, located adjacent to Choibalsan.<sup>3</sup>

During the Socialist period, Choibalsan city was the center of mineral processing factories in the eastern part of the country. Its population was more than 50,000 and approximately 10 percent of its residents were foreign citizens from Russia and other countries. Since then, the city has suffered significant population decline and an increase in unemployment and poverty. Despite a steady increase in in-migration since 1995, out-migration still dominates, outnumbering in-migrants almost by a factor of 2 to 1. As of 2003, 16,700 residents in 3,868 households, or almost 44 percent of the city's population, were living below the poverty line (23,800 MNT per month in Eastern Region).

Today, the production of mining and raw material processing comprises only 1.3 percent of the aimag's GDP, while wholesale and retail trade contributes about 21.3 percent, which is comparatively higher than the other aimags.<sup>4</sup> As of 2004, GDP per capita in Dornod aimag was estimated at 400,271 MNT, which is considerably higher than most other aimags in Mongolia. Revenues of light industries, primarily in the food processing sector, as well as power production have noticeably increased.

While Choibalsan's infrastructure is relatively more developed than other cities, it is still in need of upgrading and expansion. However, the city is constrained by national policies that limit its ability to generate local revenues and its authority to spend local resources on capital investments in infrastructure. It lacks official status as a city and is dependent on aimag and national government transfers for both local operating expenses and capital improvements.

Although substantially less than many other aimag centers, about 55 percent of the population lives in ger areas without access to basic services. The power station that supplies the city with heat and electricity has not been upgraded since 1982, and is in need of maintenance and repair work. The city's sewage treatment plant, which employs a biological treatment process, has the capacity to process 10,000 m³ of wastewater per day, but survey results showed that its water purification rate was only about 44 percent in December 2003.

More detailed information on Choibalsan is contained in the City Profile in Annex D.

\_

<sup>&</sup>lt;sup>2</sup> Results of the participatory S.W.O.T. analysis undertaken at the Visioning Workshop are included in Annex B.

<sup>&</sup>lt;sup>3</sup> The TRADP is a 20-year, \$30 billion UNDP project involving China, North Korea, South Korea, Russia, Mongolia, Japan to transform the Tumen River area into the transportation and trading hub.

<sup>&</sup>lt;sup>4</sup> Gross Domestic Product (GDP) data is not available at the city/soum level.

## **Choibalsan Strategic Initiatives**

Choibalsan developed three key strategic initiatives, which represent priority areas of investment for achieving the city's future vision. The objectives of each strategic initiative will be met by a series of priority projects and programs. The projects included in the CDS represent a short list of initial project ideas, which were prioritized at the Strategy Workshop held on April 7, 2005.

# <u>Strategic Initiative 1:</u> Provide a favorable environment for investments and economic development.

While Choibalsan has adequate infrastructure to support new industrial development, particularly manufacturing, incentives at the local level to promote new businesses or business expansion are very limited. The fact that agriculture is a fairly dominate economic sector of the aimag, contributing 45 percent to its GDP, suggests that the city does not play as significant a role in the economy of the province or region as it could.



In addition to sufficient infrastructure, the city also has a substantial labor force—60 percent of the population is working age. The city's location near international borders also affords opportunities for increased trade and commerce.

To take advantage of these strengths and achieve the objectives of Strategic Initiative 1, the city proposes the following projects.

## **Proposed Priority Projects:**

- 1. Develop intensive agricultural production and farming in areas surrounding the city;\*
- 2. Establish an industrial park with emphasis on natural resources (crude oil, uranium, and coal) processing;\*
- 3. Decentralize authority to allow independent local development;
- 4. Develop strategy to strengthen municipal finance;\*
- 5. Support the development of small and medium-size manufacturing enterprises;
- 6. Initiate "One village one product" project;
- 7. Construct a paved road to connect the city with Russia, China and Undurkhaan along horizontal and vertical axis of Millennium Road;
- 8. Construct a second railway that connects Asia and Europe; and

<sup>\*</sup> Indicates projects that have been selected among the 11 highest ranked projects for which more detailed proposals have been prepared.

9.	Establishment of tourism center and advertisement and network).	l improvement	of tourist	services	(information,

### **<u>Strategic Initiative 2:</u>** Develop human and cultural resources.

If Choibalsan is to become a pillar center of the Eastern Region, it is necessary to establish administrative and service centers in the city, which can serve the region, including universities, health clinics and diagnostic centers, regional tour operators and whole sale centers. However, currently social services are inadequate to meet even the city's demand, particularly schools and kindergartens, which benefit just 53 and 76 percent of their target populations.

While the city Master Plan includes projections for demand of social services and plans for the construction and siting of any new facilities that might be required, it is merely a schematic facilities plan. It does not address personnel requirements, curriculum development, healthcare equipment or technology needs.

Social Infrastructure C	apacity
-------------------------	---------

	Unit	Planned capacity	Actual Use	Required Capacity	% of Demand Met
Schools	Pupils	5,600	10,382	11,100	52.9
Kindergartens	Children	1,375	1,808	2,525	76.0
Hospitals	Beds	339	339	350	93.0

About 1,350 students study in the branches of a number of universities located in Choibalsan, including Mongol Medleg University, the Training Center of the Agricultural School, the Agriculture University and the University of Education. However, participants in the CDS planning process identified a mismatch between available skills and labor market demand, specifically a deficiency in the number of skilled professionals in the eastern region in the fields of mining and tourism. A labor market demand study



would enable the city to address employment needs and create jobs through targeted training programs, both "on-the-job" programs as well as specialized training schools.

To meet the objectives of Strategic Initiative 2, the city proposes the following priority projects.

#### **Proposed Priority Projects:**

- 1. Expansion and consolidation of specialized training schools and establishment the University of East;\*
- 2. Provide conditions for on-the-job training after graduation;
- 3. Establish a Winter Recreation Resort;\*
- 4. Establish an Arts and Cultural Complex to preserve traditions and customs;
- 5. Build a horse racing center;
- 6. Establish a recreation park near Enkh Zuslan along Kherlen river; and
- 7. Double the number of schools and kindergartens.

## <u>Strategic Initiative 3</u>: Improve housing and infrastructure conditions and increase access to basic services.

About 44.5 percent of the city's population live in serviced apartment buildings, which is a comparatively higher percentage than the other aimag centers. However, than 3.000 more apartment units have not been thev renovated since were constructed 20 to 30 years ago. Condominium associations are too organizationally and



financially, and are unable to borrow funds to maintain the buildings. The city does not have a housing strategy for maintenance of existing shelter, construction of new housing, or improvements to ger area housing. The lack of building maintenance has also led to increases in utility costs.

The city of Choibalsan stretches out along the Kherlen river and there is a significant amount of open space and vacant buildings (former Russian military facilities) in the city. These brownfield sites—over 400 hectares of land in need of remediation—offer opportunities for redevelopment, which will help to rationalize land management and increase the efficiency of utility services.

While Choibalsan's infrastructure is in better condition than many other aimag centers, the networks are in need of upgrading and repair. The ADB Provincial Towns Project is constructing additional water kiosks in ger areas and conducting maintenance and upgrading to the sewage treatment plant. A survey revealed that the purification rate of the sewage treatment plant is just 44 percent.

Choibalsan's Thermo Power Station has sufficient capacity to supply the entire region with power. To do so, it must be connected to the central power grid, and to reduce the costs and negative environmental impacts of power production, the city proposes to explore new, alternative technologies for power.

To achieve the objectives of Strategic Initiative 3, Choibalsan proposes the following projects.

## **Proposed Priority Projects:**

- 1. Improve housing supply by constructing 5,000 new apartments;
- 2. Improvement of planning and management of land and infrastructure to reduce sprawl and create a more compact city;\*
- 3. Create an Apartment Capital Repair Fund;\*
- 4. Improve the water supply network;\*
- 5. Implement Trolleybus project in the city;
- 6. Introduction of solid waste management system;\*
- 7. Increase green space of the city;\*
- 8. Connect to the central power network, introduce new advanced technology and reduce energy costs;
- 9. Improve city road network—connect secondary road with main city road;\* and
- 10. Encourage construction using traditional building designs and technologies.

## **Priority Infrastructure Projects**

Six projects related to infrastructure development are included in Choibalsan's CDS. Many of these same projects are included in the city Master Plan. However, the Master Plan does not prioritize the infrastructure improvements. Through the CDS, the city has prioritized these infrastructure improvements as follows:

- 1. Improve city road network—connect secondary road with main city road;
- 2. Improve the water supply network;
- 3. Introduction of solid waste management system;
- 4. Construct paved road to connect the city with Russia, China and Undurkhaan city along horizontal and vertical axis of Millennium Road;
- 5. Construct a second railway that connects Asia and Europe; and
- 6. Connect to central power network, introduce new advanced technology and reduce the energy cost.

Compared to Mongolia's other aimag centers, Choibalsan's infrastructure networks are in fairly good condition and capable of meeting the current service demands, exclusive of the ger areas. However, the expansion of infrastructure and improvement of existing pipelines are required if the city is to become a pillar center of the eastern region and improve its economic situation.

Improving the city's road network is considered the most important infrastructure project. To increase mobility and access in the city and to create a more favorable environment for businesses by reducing transportation costs, the city proposes the construction of an 11 km paved road that will connect the city's secondary roads with the main thoroughfare of the city. This relatively minor investment will have significant, visible benefits for the city.

Of secondary concern is the city's water supply network. While the capacity of the existing water source and pumping stations is sufficient, renovation of both the water supply and sewage pipelines is required, and the sewage treatment plant and quality of the treatment process must be improved. Some of these improvements are being made through the ADB Basic Services in Provincial Towns Project.

Choibalsan's solid waste system is also in need of improvement, because access and affordability of the service among ger area residents, where more than half the population lives, is low. The system also suffered financial difficulties over the transitional period from which it has not recovered, and the equipment and facilities are outdated and overused.

The city is eager to take advantage of its location near international borders. The construction of a railway that connects Asia and Europe through Choibalsan, as well as a paved road connecting the city with Russia, China and Undurkhaan city along horizontal and vertical axis of Millennium Road could position the city for more intensive international trading opportunities. The feasibility of these transportation projects and their economic impacts on the city and nation should be explored.

And finally, the city would like to explore the possibility of connecting its thermo power station to the central grid so that it can supply the entire region with power, while simultaneously exploring more efficient energy supply options, such as hydro, wind or solar power, which could reduce costs and negative environmental impacts.

## **Priority Project Proposals**

After prioritizing projects and programs within each Strategic Initiative, the city selected 11 priority projects from the short list. These 11 projects represent the key development priorities of the city as determined through a participatory, iterative planning process. Proposals were prepared for each of the 11 projects with input from the Working Group. The project proposals follow.

- 1. Development of intensive agricultural production and farming in areas surrounding the city;
- 2. Develop Apartment Capital Repair Fund;
- Improvement of planning and management of land and infrastructure to reduce sprawl and create a more compact city;
- 4. Increase green space of the city;
- 5. Improvement of the city road network—connect secondary road with main city road;
- 6. Develop a strategy to strengthen municipal finance;
- Establishment of an industrial park with emphasis on natural resources (crude oil, uranium, coal) processing;
- 8. Expansion and consolidation of specialized training schools and establishment of University of East;
- 9. Establishment of Winter Recreation Resort;
- 10. Improvement of the water supply network; and
- 11. Introduction of solid waste management system.

Project Title	Development of intensive agricultural production and farming in areas surrounding the city		
Sector	Agriculture Project Duration 4 years		
Project Location	Choibalsan, Dornod Aimag		
Type of Project	Feasibility Study or Survey Package Programs Development Project Other Policy Papers Institutional Building		
Summary of Objectives	Develop advanced and intensified agricultural farms; Supply residents of the city with locally grown food products; Develop small and medium-scale production to process agricultural products; Reduce unemployment and poverty rate.		
Project Description	<ul> <li>Carry out studies of new techniques and technologies for intensive farming at international level;</li> <li>Undertake a diagnosis of livestock and evaluate soil and planting conditions in the region;</li> <li>Develop a pilot farm that produces ecologically clean agricultural products;</li> <li>Promote the establishment of small and medium-size agricultural and raw material (meat, diary, skin) processing factories; and</li> <li>Introduce portable slaughtering equipment and technology;</li> </ul>		
Relation to Development Plans	(1) The Concept of Regional Development of Mongolia; (2) Eastern Regional Development Project; (3) Master Plan of Choibalsan city, the pillar city of Eastern region; (4) Industrial Park Operation Program; and (5) Short-term objectives of the Government Action Plan of Agricultural sector.		
Expected Benefits / Targeted Beneficiaries / Outputs	Increased volume of production of small and medium scale agro-processing enterprises; employment generation and increased economic growth; increased supply of ecologically clean products at local markets.		
Important Assumptions / Conditions for the Project	Land will support intensification of agriculture		
Project Linkages / Other Sector Linkages	Environment, Trade and Foreign Relations		
Estimated Investment Requirement	Estimated project start up costs: US\$350,000 Estimated annual operation and maintenance:		
Implementing Agency/ Body	Governor's Office, Administration Department of Governor's Office, Citizen Representatives Khural of aimag and soum, Ministry of Trade and Industry, Ministry of Agriculture, Entities and Chamber of Commerce,		
Relevant agencies to be coordinated			
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Others		
Private Sector Participation	Undertake surveys, provide recommendations and comments and generate employment and investment		
Necessary Inputs/ Arrangement	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:		
Environmental Considerations			
Special Consideration			

Project Title	Develop Apartment Capital Repair Fund		
Sector	Construction and Urban Development	Project Duration	5-10 years
Project Location	Choibalsan		
Type of Project	Feasibility Study or Survey Development Project Other Institutional Building	<sup>o</sup> rogram	
Summary of Objectives	Develop a special fund for repair and maintenar been renovated in 20-30 years to improve the liv		
Project Description	<ul> <li>Undertake an assessment of old apartment and determine the phasing and costs of rer</li> <li>Create a favorable legal framework for estatement of the coordinate with the Master Plan and housing Undertake renovation—initially 1500 apart repair and renovation savings. Remaining a phase of the project.</li> </ul>	novations; ablishment of the fund; ing area action plan of tment units within 5 yea apartment units will be	the city; ar period by creating repaired in second
Relation to	(1) Concept of Regional Development of Mongo		
Development Plans	Strategy; (3) Master Plan of Choibalsan City; an		ent Plan.
Expected Benefits / Targeted Beneficiaries / Outputs	Improved living environment; increased value of	f apartment units.	
Important	Collaboration of the Ministry of Construction and	d Urban Development	and the local
Assumptions /	government to develop regulations, including ta		
Conditions for the	the Condominuium Associations that have been		unds under the 40,000
Project	Houses Program of the Government Action Plan		
Project Linkages /	Project Linkages: City Development Strategies f	for Secondary Cities, F	Projects 4.1, 4.2, 4.4;
Other Sector	Eastern Regional Development Project		
Linkages Estimated Investment	Sector Linkages: Public Utility and Energy	<u> </u>	
Requirement	Estimated cost for project implementation: US\$6 Estimated cost of annual operation and mainten		
Implementing Agency/ Body	Governor, Administration Department of Kherler Khural of Aimag		zen Representative
Relevant agencies to be coordinated	The Government of Mongolia, Ministry of Constr Organizations	ruction and Urban Dev	relopment, International
Provisional Scheme for fund procurement	Local Government Private S	Sector y Organized Fund	
Private Sector Participation	contribute expertise, investment and financing; u	undertake rehabilitation	n
Necessary Inputs/ Arrangement	National government improvement Initiative of city/aimag government Improved institutional arrangements at local Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:	level	
Environmental Considerations			
Special Considerations			

Project Title	reduce sprawl and create a mor		rastructure to
Sector	Urban Development	Project Duration	4 years
Project Location	Choibalsan		
Type of Project		Packaged Program Other	
Summary of Objectives	Improve the density, design and efficing Develop and implement adequate regrill development and more efficient us density in the city center; Reduce cost capacity of the city.	gulations on land allocation and se of existing infrastructure netwo	utilization; Promote in- orks and increase
Project Description	<ul> <li>Introduce new technologies to an Conduct an assessment of the dicity;</li> <li>Select and implement the most of Develop and institutionalize methologies planning process;</li> <li>Build institutional capacity at the and implementing urban developed promote in-fill, private sector devaccordance with revised planning Initiate the "100 Houses Program</li> </ul>	lesign and quality of each infrast efficient options for improving the hodological recommendations for local government and community of the projects; welopment of commercial and reg documents; and n."	e utilization of pipelines; or improving the urban ity levels for planning sidential property in
Relation to	(1) The Concept of Regional Develop		
Development Plans	Strategy; (3) Regional Development I		
Expected Benefits /	Modern requirements of market econ		
Targeted Beneficiaries /	urban planning methods; Services will Access to basic services will be incre		
Outputs	Costs of doing business in Choibalsa		ces will be reduced,
Important	Amendments to the Master Plan of C		entral government and
Assumptions / Conditions for the Project	included in the Action Plan of Aimag houses program" will be undertaken a	Governor. Construction of hous	es under the "100
Project Linkages /	Project Linkages: City Development	Strategies for Secondary Cities.	Strategic Initiatives 1
Other Sector	and 3; ADB Improvement of Basic Se		
Linkages	Sector Linkages: Environment, Energ		
Estimated Investment	Estimated project start up cost: US\$9		
Requirement	Estimated cost of annual operation a	nd maintenance:	_
Implementing	Governor's Office, City Maintenance		d Policy Implementation
Agency/ Body	Department, Energy organizations of		
Relevant agencies to	Ministry of Construction and Urban D	evelopment, Professional Monit	oring Department and
be coordinated	International Organizations  Local Government	Private Sector	
Provisional Scheme	Central Government	Specially Organized Fund	
for fund procurement	International Assistance fund	Other	
Private Sector	Obtain Information, develop the proje		
Participation	Columnia manifestation, develop the proje	ot, invocation and randing	
Necessary Inputs/ Arrangement	National government improvemen City/aimag government initiative Improved institutional arrangemen Local level financing International financial assistance ( International financial assistance ( Private sector participation in finar Maximum utilization of local techn International technical assistance Other:	grant) loan) ncing	
Environmental Considerations			

Project Title	Increase green space of the city
Sector	Environment Project Duration 3 years
Project Location	Choibalsan City
Type of Project	☐ F/S Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other Institutional Building
Summary of	Develop green spaces in the city in order to create healthy and friendly living environment for
Objectives	residents and to reduce soil erosion.
Project Description	<ul> <li>Prepare plan for greening the city;</li> <li>Seek expert advice of landscape designers and biologists to ensure appropriateness and quality of designs and foliage selections;</li> <li>Establish gardens and city parks;</li> <li>Undertake landscaping along streets and other public spaces;</li> <li>Train staff in maintaining plantings;</li> <li>Establish tree farms and greenhouses; and</li> <li>Establish incentive system by local government for residents to participated actively in planting trees and flowers in their ger plots.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Regional Development Project; (3) Master Plan of Choibalsan City
Expected Benefits / Targeted Beneficiaries / Outputs	Air pollution and soil erosion will be reduced; Healthy living environment will be created.
Important Assumptions / Conditions for the Project	
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategies for Secondary Cities, Strategic Initiatives 1, 2 and 3 Sector Linkages: Urban Development, Public Utility
Estimated Investment	Estimated project implementation cost: US\$10,000
Requirement	For annual operation and maintenance:
Implementing Agency/ Body	Tsetserlegt Tohijilt Company, Administration Department of Aimag and Soum Governor, and other Entities
Relevant agencies to be coordinated	Ministry of Environment, Ministry of Constriction and Urban Development, domestic and foreign companies
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	Investment, management and funding
Necessary Inputs/ Arrangement	□ National government improvement □ Initiative of city/aimag government □ Improved institutional arrangements at local level □ Local level financing □ International financial assistance (grant) □ International financial assistance (loan) □ Private sector participation in funding □ Maximum utilization of local technologies □ International technical assistance □ Other:
Environmental	Undertake Environmental Assessment
Considerations	
Special Considerations	

Project Title	Improve city road network—connect secondary road with main city road
Sector	Road and Transport Project Duration 5 years
Project Location	Choibalsan
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other: Road construction ☐ Institutional Building
Summary of Objectives	Increase mobility and access in the city; Create a favorable environment for businesses, reducing transportation time and costs
Project Description	Connect secondary road with main road by constructing 11 km long paved road; Coordinate with projects and programs in city development and infrastructure supply field as well as Millennium Road sub-projects
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Construction and Housing Sector Strategy, and (3) Master Plan of Choibalsan City
Expected Benefits / Targeted Beneficiaries / Outputs	Favorable environment for business will be created; Operational life of ambulance cars and water trucks will be extended.
Important Assumptions / Conditions for the Project	Aimag Governor will include the proposed project in his Action Plan
Project Linkages / Other Sector Linkages	Road Improvement Project, Eastern Regional Development Project Urban Development Land Cadastre, Registration and Management
Estimated Investment Requirement	Estimated cost of project implementation: US\$120,000 Estimated annual operation and maintenance:
Implementing Agency/ Body	Governor's Office, Design and Drawings institutions, Construction companies, company Strategic Planning and Policy Implementation Department, Energy organizations of aimag and soum and Ministry of Road Transportation and Tourism
Relevant agencies to be coordinated	Ministry of Construction and Urban Development, Professional Monitoring Department and Land management unit of aimag
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	Undertake surveys and provide recommendations and comments,
Necessary Inputs/	Revised national government legislation and policies Initiative of city/aimag government Improved institutional arrangements at local level Local level financing International financial assistance (grant)
Arrangement	☐ International financial assistance (loan) ☐ Private sector participation in funding ☐ Maximum utilization of local technologies ☐ International technical assistance ☐ Other:
Environmental Considerations	
Special Considerations	Coordinate with Tumen River Project which is being implemented in the northeastern region.

Project Title	Develop strategy to strengthen municipal finance	
Sector	Finance Project Duration: 6 months	
Project Location	Choibalsan	
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other: Policy Paper ☐ Institutional Building	
Summary of Project Objectives	Develop a strategy for Choibalsan to strengthen its municipal finance, increase own-source revenues and fund capital improvements from local budget	
Project Description	<ul> <li>Conduct study to clearly define fiscal problems at city level and make recommendations for improvements to policy framework and local capacity for budgeting and expenditure</li> <li>Reform national level policies to enable fiscal decentralization and give authority to local level for taxation and capital investments</li> <li>Build local institutional capacity for local revenue generation (setting tax rate and structures), budgeting and expenditure management</li> <li>Implement budget and expenditure software, prepare guidelines and organize trainings.</li> <li>Develop framework for prioritization and structuring of city programs and a monitoring mechanism for effective and efficient implementation.</li> </ul>	
Relation to Development Plans	Relates to all existing national and local development plans, including (but not limited to): (1) Concept of Regional Development of Mongolia, (2) National Government Action Plan, 2004-08, (3) Construction and Housing Sector Strategy, (4) Master Plan of Darkhan.	
Expected Benefits / Targeted Beneficiaries / Outputs	All city residents will benefit form municipal finance reforms. The city will become self-sufficient and able to invest in capital improvements that will benefit the entire community.	
Key Assumptions / Project Conditions	GoM will adopt reforms and local institutions will be strengthened to effectively manage municipal finances	
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, All Strategic Initiatives Sector Linkages: All sectors.	
Estimated Investment Required	Estimated project cost: US\$100,000 Estimated annual cost of operation and maintenance: N/A	
Implementing Agency/ Body	Governor's Office, Finance Department of the Governor's Office, Ministry of Finance and Parliament	
Relevant Agencies to be Coordinated	All divisions and departments at all levels of administration	
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance Funds Other	
Private Sector Participation	Provide recommendations and comments on favorable local tax conditions	
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:	
Environmental Considerations		
Special Considerations		

Project Title	Establish an industrial park wit uranium, coal) processing	h emphasis on natural resou	urces (crude oil,	
Sector	Industry	Project Duration	4 years	
Project Location	Choibalsan			
Type of Project	☐ Feasibility Study or Survey ☐ Development Project ☐ Institutional Building	Package Programs Other Policy Papers		
Summary of Objectives	Increase industrial production; utilize manufacturing and exporting end-pro		ealth potential by	
Project Description	<ul> <li>Survey natural resources</li> <li>Conduct studies of new techniques and technology at international level (e.g. for mineral processing and related industries);</li> <li>Study marketing strategies and estimate economic efficiencies for trade;</li> <li>Plan and develop infrastructure for the industrial park;</li> </ul>			
Relation to Development Plans	The Concept of Regional Developme Master Plan of Choibalsan city, the p Program	oillar city of Eastern region, Indust	rial Park Operation	
Expected Benefits / Targeted Beneficiaries / Outputs	<ul> <li>Population income, volume of produincreased as well as employment will.</li> <li>Revenue to local budget will be increased.</li> <li>Household income will be increased poverty and unemployment rate will be.</li> <li>Natural resources will be sold at do.</li> <li>Weight in GDP will be increased;</li> </ul>	Il be generated and economic gro reased;-; d, the living standard of population be reduced; mestic and foreign markets; and	wth will be increased; n will be improved and	
Important Assumptions / Conditions for the Project	- Private sector activities will result from	om establishment of industrial pa	ark.	
Project Linkages / Other Sector Linkages	Environment, Trade and Foreign Rel	ations		
Estimated Investment Requirement	For project implementation in total: U 1) by city/soum government: 2) by aimag government: 3) by national government: For annual operation and maintenance			
Implementing Agency/ Body	Governor's Office, Administration De Khural of aimag and soum, Ministry Urban Development, Entities and Ch	of Trade and Industry, Ministry of		
Relevant agencies to be coordinated	Government and Parliament of Mong			
Provisional Scheme for fund procurement	Local Government Central Government International Assistance funds	Private Sector Specially Organized Fund Others		
Private Sector Participation	Undertake surveys, provide recomme investment	endations and comments and ger	nerate employment and	
Necessary Inputs/ Arrangement	National government improvement Initiative of city/aimag government Institutional arrangement at local Institutional arrangement at local Institutional financial building at local International financial assistance International financial assistance Private sector participation in functional maximum utilization of local technical international technical assistance Other:	nt level level (grant) (loan) ding nologies	otation guerranadia a the	
Environmental Considerations	- Remediation of damage from minin mining sites	y lactories, anorestation and vegi	ciation Surrounding the	

Project Title	Expansion and consolidation establishment of University of	<u>-</u>	zed training schoo	ls and
Sector	Education		Project Duration	3 years
Project Location	Choibalsan		•	•
Type of Project	Feasibility Study or Survey Development Project Institutional Building	Packaged Other:	Program	
Summary of Objectives	Prepare qualified professionals to m Attract private sector investment wit employment.			
Project Description	<ul> <li>Conduct a study on demand of professional schools based on</li> <li>Establish a new base for special training programs for tutors and</li> <li>Cooperate with foreign and do restructure management and of Establish University of East.</li> </ul>	assessmen alized training d trainers; mestic educ organization	it; ng and develop and im ational and research in of training system;	nplement special
Relation to Development Plans	(1) The Concept of Regional Develor Project; (3) Master Plan of Choibals sector.			
Expected Benefits / Targeted Beneficiaries / Outputs	Choibalsan's business sector will ha Unemployment will be reduced; Sur professionals (in agriculture and oth Migration of qualified professionals the region.	rounding ru er relevant	ral areas will have acc sectors) that meet labo	ess to qualified or market demand;
Important Assumptions / Conditions for the Project	Supply of appropriately skilled labor and expansion in the city and region	٦.	·	·
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Proj Sector Linkages: All economic sector		,	•
Estimated Investment	Estimated project start up costs: US	\$\$30,000	-	<u> </u>
Requirement	Estimated annual cost of operation			n Office Heistersities
Implementing Agency/ Body	Education and Culture Department and Colleges, Specialized training of	•	imployment Generatio	in Office, Universities
Relevant agencies to be coordinated	Ministry of Education, Culture and S Employment Unit.	Science, Min	•	, Labor and
Provisional Scheme for fund procurement	Local Government Central Government International Assistance funds	Other	y Organized Fund	
Private Sector Participation	Undertake surveys, provide recomm curriculum development, investmen			uired skills, assist in
Necessary Inputs/ Arrangement	Revised national level legislation and policies  City/aimag government initiative  Improved institutional arrangements at local level  Local level financing  International financial assistance (grant)  International financial assistance (loan)  Private sector participation in financing  Maximum utilization of local technologies  International technical assistance  Other:			
Environmental				
Considerations				
Special Considerations				

Project Title	Establishment of Winter Recreation Resort
Sector	Sport and Health Project Duration 1.5 years
Project Location	Choibalsan, Dornod Aimag
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other ☐ Institutional Building
Summary of	Increase health and fitness among population, reduce illness and disease and associated
Objectives	costs of healthcare and loss of productivity; attract tourists
Project Description	<ul> <li>Conduct in-depth demographic study (age, sex, health and living standards, poverty etc);</li> <li>Conduct study on demand and ability to pay for winter resort activities and services;</li> <li>Select appropriate site for resort;</li> <li>Coordinate other programs and projects in urban development sector;</li> <li>Package project for private sector financing;</li> <li>Provide infrastructure as necessary to resort site; and</li> </ul>
	Establish winter recreation resort.
Relation to Development Plans Expected Benefits /	(1) The Concept of Regional Development of Mongolia; (2) Health Sector Strategy; (3) Perspectives of Sport and Physical Health sector; (4) Regional Development Project; (5) Master Plan of Choibalsan City  Increased health and fitness among population; reduced illness and disease and associated
Targeted Beneficiaries / Outputs	costs of healthcare and loss of productivity; Increased number of tourists and tourism-related revenues; Increased employment opportunities
Important Assumptions / Conditions for the Project	There will be sufficient local demand to support operations of the winter resort
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, Strategic Initiative 1 and 3 Sector Linkages: Urban Development and Environment
Estimated Investment Requirement	Estimated project start up cost: US\$25,000 Estimated cost of annual operation and services:
Implementing Agency/ Body	Governor's Office, Administration Department of Governor's Office, Health Department of Aimag, Sport and Physical Culture Department, Professional Monitoring Department
Relevant agencies to be coordinated	Ministry of Health and Olympic Committee
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Other
Private Sector Participation	Financing and implementation of the project
Necessary Inputs/ Arrangement	Revised national government legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in financing Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	
Special Considerations	

Project Title	Improve the water supply network
Sector	Urban Development, Public Utility Project Duration 2 years
Project Location	Choibalsan
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other ☐ Institutional Building
Summary of Objectives	Improve water supple network in order to provide citizens with water that meets health and hygiene requirements; Install water meters to increase efficiency of system and reduce losses.
Project Description	<ul> <li>Assess current condition of the network and introduce technology to assess the quality of pipelines;</li> <li>Coordinate water supply pipelines with Master Plan and housing area action plan of the city;</li> <li>Increase the number of filters;</li> <li>Install water meters at all piped water access points; and</li> <li>Establish a water meter fund.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Construction and Housing Sector Strategy; (3) Master Plan of Choibalsan City; (4) Land Management Plan; (5) Infrastructure Sector Plan.
Expected Benefits / Targeted Beneficiaries / Outputs	Decrease in number of illness and disease related to unsanitary water; Reduction in water losses.
Important Assumptions / Conditions for the Project	The local government and Public Utility Agency should work closely to initiate incentives for installation of water meters.
Project Linkages / Other Sector Linkages	Project Linkages: City Development Strategies for Secondary Cities, Strategic Initiatives 1, 2 and 3; Eastern Regional Development Project; ADB Eight Towns Project
Estimated Investment Requirement	Estimated project start up cost US\$10,000 Estimated cost of annual operation and maintenance:
Implementing Agency/ Body	Governor, Administration Department of Aimag Governors Office, Infrastructure Service Companies
Relevant agencies to be coordinated	Condominium Associations, International Organizations, Citizen Representative Khural of Aimag,
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	Provide comments and recommendations.
Necessary Inputs/ Arrangement	□ National government improvement   □ Initiative of city/aimag government   □ Improved institutional arrangements at local level   □ Local level financing   □ International financial assistance (grant)   □ International financial assistance (loan)   □ Private sector participation in financing   □ Maximum utilization of local technologies   □ International technical assistance   □ Other:
Environmental	
Considerations	
Special Considerations	

Project Title	Introduction of solid waste management system
Sector	Environment and Public Utility Project Duration 4 years
Project Location	Choibalsan
Type of Project	☐ F/S Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other ☐ Institutional Building
Summary of Objectives	Create clean and healthy living environment; reduce air, soil and ground water pollution; improve hygienic conditions; and protect population from contagious diseases.
Project Description	<ul> <li>Conduct environmental monitoring;</li> <li>Coordinate city development with environmental protection programs and projects;</li> <li>Investigate, introduce and pilot new technologies for waste collection, removal and disposal; and</li> <li>Assess establishment of a waste recycling facility.</li> </ul>
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Energy Sector Strategy; (3) Construction and Housing Sector Strategy; (4) Regional Development Project; (5) Master Plan of Choibalsan City
Expected Benefits / Targeted Beneficiaries / Outputs	Air, soil and ground water pollution will be reduced and everyday living environment of residents will be improved. Residents will participate in cleaning the environment of the city
Important Assumptions / Conditions for the Project	Willingness of residents to participate in cleaning up the environment. Provision of solid waste collection bins, trucks and personnel through private sector participation. Strong local economy conducive to the establishment of small and medium sized enterprises.
Project Linkages / Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia;  Sector Linkages: Urban Development, Environment and Justice
Estimated Investment Requirement	Estimated cost for project implementation: US\$35,000 Estimated cost for annual operation and maintenance:
Implementing Agency/ Body	Public Utility Company, City Maintenance Service Unit, Public Utility Department of Aimag, Environment Unit and Strategy Planning and Policy Implementation Department of Aimag
Relevant agencies to be coordinated	Professional Monitoring Department of Aimag, Ministries of Environment, Construction and Urban Development, and Health and local businesses and residents.
Provisional Scheme for fund procurement	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other
Private Sector Participation	Undertake surveys and provide recommendations and comments, sort out solid waste, management, investment and funding
Necessary Inputs/ Arrangement	National government improvement  City/aimag government initiative  Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in funding Maximum utilization of local technologies International technical assistance Other:
Environmental Considerations	Undertake Environmental Assessment; Remediate environmentally damaged areas.
Special Considerations	Investigate possibility of establishing waste recycling facility; Conduct health surveys and monitor improvements

## **Annex A. Working Group Members and Workshop Participants**

## **Working Group Members**

- 1. J.Enkhtstseg -Director of Aimag Strategic planning and policy implementation and cooordination Department
- 2. Ya.Nasandelger-Kherlen soum Governor and Mayor of Choibalsan city
- 3. D.Doljin Director, Aimag Healthcare Department
- 4. M.Ayushkhorloo-Director, Aimag Education and Culture Department
- 5. D.Enkhbaatar Director, Aimag Statistical Department
- 6. B.Ulambayar -Officer, Aimag Strategic planning and policy implementation and cooordination Department, and Chief Architect
- 7. D.Ganchimeg -Officer, Aimag Strategic planning and policy implementation coordination Department
- 8. D.Damdintsoo-Officer, Aimag Strategic planning and policy implementation coordination department
- 9. D.Khandsuren Mayor's Office, Officer for city beautification and servicing
- 10. B.Bolormaa Kherlen Soum, Land Manager
- 11. G.Borgil -Kherlen Soum Administration, Officer
- 12. B.Batjargal "Electro-communication" Joint Stock Venture Company, Chief Engineer
- 13. B.Erdenechimeg-"PUSO" Joint Stock Venture Company, Chief Engineer
- 14. B.Batjargal "Eastern Region Power System" Joint Stock Venture Company, Director of heating network department
- 15. Ts.Enkhtur "Eastern Region Power System" Joint Stock Venture Company, Director of power network department
- 16. Ch.Lkhaqvasuren-Construction design company "DOZT" Head
- 17. Yu.Lutbaatar "Aduunchuuluun" Joint Stock Venture, Chief Engineer
- 18. L.Enkhbold Ulaanbaatar railway "Bayantumen" Branch Head
- 19. L.Chimedtseren-"Auto road" JSV, CEO
- 20. D.Dorjjugder Head of Aged Committee

## Visioning Workshop Participants April, 6, 2005

- 1. Ya.Nasandelger- Governor and Mayor Kherlen soum Administration
- 2. Ts.Shinebayar Speaker Aimag Parliament
- 3. B.Ulziibayan Vice governor Aimag Government Administration
- 4. N.Khurelbaatar- Head Aimag Government Administration
- 5. Sh. Erdenebileg General prosecutor Aimag, Prosecutor Office
- 6. L.Sukhbaatar Advisor Dornod Aimag, Democratice Party branch
- 7. D.Enkhbaatar Head Aimag Government Administration Statistic Department
- 8. J.Tserenjav Head Aimag Tax Office
- 9. J.Enkhtsetseg Department Head Aimag Government Administration
- 10. L. Tuvdennyam Department Head Aimag Government Administration
- 11. G.Saran Department Head Aimag Government Administration
- 12. B.Batjargal Chief engineer Aimag Telecommuniocation Office
- 13. Kh.Lkhamdorj Chief Land surveyor "Aduunchuluun" JSV

- 14. L.Enkhbold Head UB railway "Bayantumen" branch
- 15. G.Otgonbaatar Head "Eastern Region Power System" JSV
- 16. D.Sukhbaatar General Manager "Dornod PUSO" JSV
- 17. B.Batjargal Department Head "Eastern Region Power System" JSV
- 18. L.Chimedtseren- CEO "Autoroad" JSV
- 19. D.Damdinbazar- Head Aimag, Land Office
- 20. B. Ulambayar Aimag Chief Architect Aimag Government Administration
- 21. Ch.Lkhagvasuren- City Architect Kherlen soum Administration
- 22. G.Tsend-Ayush- Economist Kherlen soum Administration
- 23. D.Khandsuren Officer for city beauitification and servicing Kherlen soum Administration
- 24. B.Bolormaa Land Manager Kherlen Soum Administration
- 25. R.Zorigtbaatar Officer Aimag Government Administration
- 26. Ts.Ganbat Medical doctor and Director Central Clinic
- 27. D.Doljin Head Aimag Government Administration, Health care department
- 28. A.Nansalmaa Head National Children Centre
- 29. B.Tungalag Secretary Aimag , Sustainable Household Livelyhood Capacity Support Council
- 30. D.Dagvasuren Project Coordinator
- 31. Sh.Ganbat Head Environment Office
- 32. T.Dorjjugder Head Aged People Committee
- 33. Ch.Battulga Officer Local parliament
- 34. B.Jadamba Head Aimag Government Administration, Department of Food and Agriculture
- 35. D.Ganchimeg Officer Aimag Government Administration
- 36. D.Mungentsetseg- Department Head Aimag Government Administration

# Strategy Workshop Participants April, 7, 2005

- 1. J.Enkhtstseg Department Head Aimag Government Administration
- 2. Ya.Nasandelger- Governor and Mayor Kherlen Soum Administration
- 3. Ts.Shinebayar Speaker Aimag Parliament
- 4. L.Tsevelsuren Inspector Aimag Tax Office
- 5. Da.Ganchimeg Officer Aimag Government Administration
- 6. L.Sukhbaatar Former Aimag Governor Private sector
- 7. Sh. Tumursukh Officer for Education and Culture Aimag Government Administration
- 8. G.Borgil Officer for Social policy Kherlen Soum Administration
- 9. D.Damdintsoo Officer for population and labor Aimag Government Administration
- 10. B.Tungalag Secretary Aimag Sustainable Household Livelihood Capacity Support Council
- 11. L.Erdene Speaker Kherlen Soum Parliament
- 12. Kh.Ehkhbold Head Choibalsan City Bautification department
- 13. D.Doljin Head Aimag Government Administration, Health care department
- 14. R.Zorigtbaatar Officer for Sport and healthcare Aimag Government Administration
- 15. Sh.Ganbat Head Environmental Office
- 16. B.Dugarmaa Officer Aimag Government Administration
- 17. D.Bolorsukh Director "Olikhon" LLC
- 18. D.Enkhbaatar Head Aimag Government Administration, Statistical Department

19. B.Batjargal - Head, heating department "Eastern Region Power System" JSV

20. B.Batjargal - Chief engineer Aimag Government Administration, Communication Office

21. L.Enkhbold - Head Ulaanbaatar Railway "Bayantumen" Branch22. B.Ulambayar - Aimag Government Administration Chief Architect

22. B.Ulambayar - Aimag Government Administration Chief Al23. L.Sukhbaatar - Advisor Aimag Demjocratic Party Branch

24. Ch.Lkhagvasuren- City Architect Kherlen soum Administration

25. D.Khandsuren - Officer for City Beautification Kherlen soum Administration

# Final Workshop Participants July 6, 2005

1. Ya. Nasandelger City Mayor and Kherlen Soum Governor

J. Enkhtsetseg
 B. Sukhbaatar
 Director, Strategy Planning and Policy Coordination Dept.
 Former Governor and Head of local Democratic Party

4. L. Ulambayar Chief Architect

5. Bolorsukh

# **Annex B. SWOT Analysis**

At the Visioning Workshop, held on April 6, 2005, participants were asked to identify the city of Choibalsan's key strengths, weaknesses, opportunities and threats. The results are compiled below.

Strengths	Weaknesses
-Clean air	-The city is disperse, lots of ruined
-Reserves of fuel, water, minerals, raw	construction remains;
materials;	-Weak planning, coordination and
-Close to national border with Russia and	organization;
China. Connected with roads and railway,	- Infrastructure network and road are
-Industrialized	outdated and in poor condition;
-Designated as Pillar Center of Eastern	- Lack of job opportunities, high poverty,
Region;	capacity of professionals is low;
-Young, educated labor force;	-Businesses are not willing to invest in crop
-Apartments and houses are well built;	production, economic opportunities to
-Resident have access to cultural resources	restore industry is low;
(theater, music, dance)	-Because of chaotic ger areas it is complicated
	to plan the engineering network;
	-The soil erosion badly effects to city
	beautification activities;
	-Solid waste removal activities, Kherlen river
	bush planting are not sufficient
Opportunities	Threats
-Opportunity to connect the railway with	-Economic crisis can lead to out-migration,
Chinese railway network and become a	poor education, poverty and unemployment
commercial and industrial center	-Huge number of herder families in the city
- To develop international relations;	can create ecological disbalance;
-To be developed as a centre of eastern	-Soil erosion, desertification, drought, wind,
region, involved in Tumen river project and	increase of steppe fire threat;
establish free trade zone;	-Flod protection is poor as well as the
-City has enough enery resources to develop	protection of Kherlen river;
small and medium industry, particularly	-Insecure food supply can lead to an increase
processing industries, and restore	in infectious desases, particularly burdensome
construction material producing industries	for poor households; The price of main stanle goods are
built before 1990.	-The price of main staple goods are
-To use renewable energy and briquette fuels;	comparatively higher than in neighboring aimags;
-Enough area for new construction and ability to expand (non-seismic);	Initiality, Increase of water and air pollution;
-To plant fruit and berries, trees, and develop	-No protection from strong winds and cold
tourism;	because there are no mountains.
-People are relatively adapted to settled living.	because there are no mountains.
- To join Bayantumen soum with Choibalsan	
and develop intensive farming	
-Milennium Road through Choibalsan.	
-windhinani Noau through Cholbalsan.	

# **Annex C. Project Prioritization**

During the Strategy Workshop held on April 7, 2005, participants were asked to rank each project or program idea according to five criteria in order to systematically prioritize projects. The criteria, chosen from among those used by Ulaanbaatar and other cities around the world for preparation of their City Development Strategies, included:

- 1. Relevance to development policies
- 2. Financial viability and economic returns
- 3. Environmental benefits
- 4. Social benefits
- 5. Implementation capacity

Participants worked in small, thematic groups based on the three strategic initiatives to rank the projects on a scale of 1 to 5 (1=none, 5=significant) for each criteria, and presented the results of their deliberations to the whole group for discussion and verification.

Strategic Initiative 1: Provide a favorable environment for investments and economic development.

Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Support the development of the region by providing customs and tax relief policy and by accepting a suitable legislative environment;	4.5	3	1	3.5	3.5	15.5
2. Develop a strategy for strengthening municipal finance and increasing the local budget income;	5	3.5	1	5	5	19.5
3. Decentralize authority to local and regional levels;	5	4	1	5	5	20
4. Expand and develop banking and financial services;	4.5	2.5	1	2.5	4.5	15
5. Support the development of small and medium manufacturing;	5	4.5	1	4	4.5	19
6. Develop intensive agricultural production and farming in areas surrounding the city;	5	4.5	3	4.5	4.5	21.5
7. Build an agricultural production processing factory;	4.5	3	1.5	4.5	3	16.5
8. Establish an international trade network;	4	3	1	4	4	16
9. Establish an industrial park with emphasis on natural resources (crude oil, uranium, coal) processing;	5	5	3	4	4	21
10. Initiate "One Village–One Product" Project;	4.5	4	2	4	4	18.5
11. Establish the second route to and from Asia and Europe by connecting the existing railroads to Russia and China;	4.5	3.5	3	3.5	3	17.5
12. Construct a paved road to Russia, China and	4	3.5	3.5	4	3	18

Undurkhaan along the horizontal and vertical axis of the						
Millenium Road; and						
13. Establish a travel and tourism center (information and						
advertising service, network) and improve quality of service	3	4.5	3.5	3	3	17
of tourism sector.						

Strategic Initiative 2: Develop human and cultural resources.

Suategic imuative & Develop numan and cuitu	1000	TIT COST		1		
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Double the number of existing schools and kindergartens;	4.8	1.2	4.2	5	2.8	18
2. Expansion and consolidation of specialized training schools and establishment of University of East;	5	4.4	3.8	4.8	4.8	22.8
3. Provide conditions for on-the-job training after graduation;	5	4	3.8	4.8	4.4	22
4. Build nutrition treatment resorts for children and the elder;	3.8	2.4	1	3.6	3	13.8
5.Build health resorts;	3.6	2.4	2.4	3.2	3	14.6
6. Carry out expansion of the regional treatment and diagnosis center building according to applicable codes;	3.4	2.2	2	4.6	2.8	15
7. Establish an information and publicity center for professional training of doctors and other employees and for promoting of healthy living life style among citizens on the basis of the regional treatment and diagnosis center;	4.4	2.2	1	4.2	3.2	15
8. Establishment of a winter recreation resort;	5	4	3	4.6	5	21.6
9. Build a racecourse center;	4.2	4.2	3.2	4	4.8	20.4
10. Establish an Arts and Cultural Complex to preserve traditions and customs;	5	4	3	4.4	4.6	21
11. Build a recreation place near Enkh zuslan along the Kherlen river; and	4	4	2.6	3.6	3.4	17.6
12. Organize large art, cultural and sporting events on a regular basis.	4.2	3.4	2.4	3.6	3.4	17

# Strategic Initiative 3: Improve housing and infrastructure conditions and increase access to basic services.

Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Sort streets and lanes and provide access to utility services and driveways for every household according to the yard mapping of ger communities;	4	2.5	4.5	4	3	18
2. Introduction of solid waste management system;	4.5	3.5	5	4	3.5	20.5
3. Connect to the centralized power grid, upgrade existing technologies and reduce the cost of electricity;	4.5	4.5	3	4.5	3.5	20
4. Estatblish a single telecommunication line to each household (Internet, phone, radio);	4.5	3	3	4	3.5	18
5. Connect to China, Russia, Bayantumen and international airport via fiber optics cable network;	4.5	3	3	4.5	4	19
6. Prepare the city development and land management master plans and increase economic potential of land;	4	3.5	4	4	3.5	19
7. Improve housing conditions by building 5,000 new apartments;	5	5	5	5	5	25
8. Improvement of planning and management of land and infrastructure to reduce sprawl and create a more compact city;	5	5	5	5	5	25
9. Create an apartment capital repair fund;	5	5	5	5	5	25
10. Improve the water supply network;	5	5	5	5	5	25
11. Implement a "Trolleybus" project along Kherlen river;	5	5	5	5	5	25
12. Encourage the construction of buildings and structures featuring Mongolian architecture;	5	4	3	4.5	3	19.5
13. Increase green space of the city;	5	1.5	4.5	4.5	4.5	20
14. Dig a flood protection trench along Kherlen river; and	3.5	2	4	4	3	16.5
15. Improve city road network-connect secondary road to main city road.	5	4	3	4	3.5	19.5

Annex D. Choibalsan City Profile



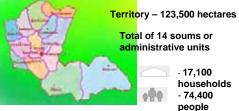
# City Development Strategies for Mongolia's Secondary Cities

# **Choibalsan City Profile**



# Population status

## **Dornod Aimag**





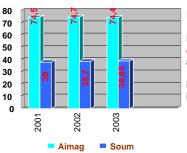
### Choibalsan

There are 10 baghs in Choibalsan city (Kherlen soum)

- 36,142 residents, which is:
- -1.4% of the national population; 1727 2241 -17.9% of the region's population; -48.6% of the aimag's population.
- 8,313 households, which is:
- -1.4% of total households in Mongolia; -17.3% of the region's households;
- -48.6% of the aimag's households.



12107 3973 10242 7100 21794



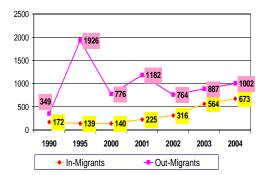
Population of

Dornod aimag has been decreasing by 0.4 percent in average; and

Kherlen soum has been increasing by 0.4 percent.

# Migration

Despite a steady increase in inmigration since 1995, out-migration still dominates, outnumbering inmigrants almost by a factor of 2 to 1.



## Social Infrastructure

Infrastructure	Planned capacity	Actual capacity	Required capacity	% of Required Capacity Met
Schools, students	5,600	10,382	11,100	52.9
Kindergartens, children	1,375	1,808	2,525	76.0
Hospitals, beds	339	339	350	93.0

Over 350 students attend the Agricultural Training Center and branches of Mongol Medleg University, The Agricultural University and Educational University.





Housing

Ν	Land classification	Hectares	Percentage
1	Agricultural lands	17550	62.5
2	Cities, towns and other settlement	s <b>7844</b>	27.9
3	Roads, supply network lands	1912	6.8
4	Water tanks	565	2.0
5	National reserve lands	31	0.1
	Total territory	28084	100

The price of one hectare of land in Choibalsan city is



There are 66 apartment buildings in Choibalsan city with a total area of 91,324 m² and 3,900 household capacity. Some 44.5 percent of households live apartment buildings, while the rest—

55.5 percent live in ger communities.

In 2003, there were:

- 444 hectares of land;
- 3,749 plots;
- 4,413 households; and
- 28,120 people in ger communities.

The land privatization rate is 11.0 percent.



# **City Development Strategies for Mongolia's Secondary Cities**



# **Choibalsan City Profile**

# **Economy**

### City Productivity

		Unit	Real numbers	Percentage of national total
Total manufactu	ıring	Million MNT	80802.1	2.2
Sales		Million MNT	75241.8	5.5
Households with	n livestock	Household	1543	5.2
Total livestock		Head	81942	1.0
Planting	potato	Hectare	113	0.74
	other vegetables	Hectare	35	
Gathering	potato	Ton	837	8.1
	other vegetables	Ton	239.4	8.5
Hay		Ton	5100	0.24
Other livestock feeds		Ton	4.8	1.65

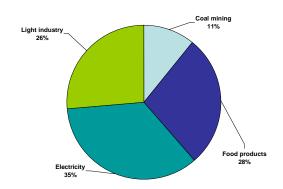
City industries manufactured goods worth 80802.1 million MNT in 2003 compared to 50801.5 million MNT in 2002 an increase of 59 percent. Sales also increased from 50703.1 million MNT to 75241.8 million MNT or by 48.3 percent.

GDP growth of Dornod Aimag was 2.5 percent in 2003, and totaled 2.6 percent of national GDP. GDP of Choibalsan city contributes significantly to the aimag's GDP, but the city GDP is not disaggregated by the National Statistical Office.

### Growth Industries

Factory	Unit	2003	2004	Growth in percent
Power Grid of the Eastern Region Joint Stock, power	Thousand kWt/	33478.8	34273.8	2.4
Heating	Th. Gcal	151.8	154.5	1.8
Dornod JS, sausage	Ton	4.1	5.2	26.8
Onhoodoi, bakery	Ton	265.5	283.5	6.8
Kheremkhen, milk	Tho. Liter	4.2	5.5	31.0
Kheremkhen, ice-cream	Tho. Liter	10.5	12.9	22.9
Kheremkhen, yogurt	Tho. Liter	1.7	2.0	17.6
Wooden products	Thousand m <sup>3</sup>	0.7	0.9	28.6

Manufacturing, 2003



#### Sales of manufacturing products, thousand MNT

	Total pro	duction	%		Sales		%	
	2003	2004	Growth	Growth	2003	2004	Growt h	Growth
Coal mining	863578.5	774320.0	-10.3	-89258.5	695564.4	774320.0	11.3	78755.6
Food products	2244121.7	2762282.1	23.1	518160.4	1953611.8	1049217.2	-46.3	-904394.6
Electricity	2806394.0	2947959.9	6.3	141565.9	2169664.5	2405500.0	10.9	235885.5
Light industry	2119443.0	642733.4	-69.7	-1476709.6	2119443.0	642733.4	-69.7	-1476709.6
TOTAL	8033537.2	7127295.4	-11.3	-906241.8	6938283.7	4871820.6	-29.8	-2066463.1

- - A majority of Choibalsan's population is of working age, providing the economy with a substantial work force;
  - There is a tendency for light industries to grow, including food production, small and medium factories;
  - The number of unemployed as well as out-migrants has been declining, which is a positive trend.

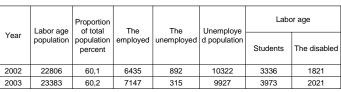
# Unemployment and poverty

- Number of the registered unemployed in Choibalsan has decreased by 577 people since the last year and is 315 people.
- Number of the unemployed reduced rapidly during 2002 and 2003.

10400 -		
10300	10322	
10200		
10100		
10000		9927
9900		3321
9800		
9700 +	-	
	2002	2003
	Number of the	o unomployed

or to our roll in our

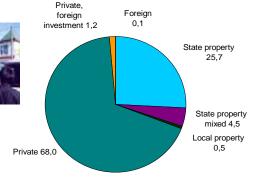
• Employment Percentage by Ownership Type, 2003



- 43.9 percent of the city population or 3,868 households and 16,700 residents live below the poverty line.
- Number of poor households increased between 2001 and 2003.

3900 —			
3850 3800		3856	3868
3750	3787		
3700 🗕		ı	
	2001	2002	2003

Number of Poor		
Household	Population	
3,787	16,400	
Poverty line is 19600 MNT		
3,856	16,200	
Poverty line is 20100 MNT		
3,868	16,700	
Poverty line	is 23800 MNT	
	Household 3,787 Poverty line 3,856 Poverty line 3,868	



The majority of workers of Choibalsan city and Dornod aimag are employed by the private sector.



# **City Development Strategies For Mongolia's Secondary Cities**



# **Choibalsan City Profile**

# Infrastructure

### Roads and transportation



Choibalsan city is 656 km east of Ulaanbaatar; there is an air route from Ulaanbaatar to Choibalsan; 370 km of railways connect Choibalsan to the border of Russia (main destination: the city of Chita, just over the border).

#### Heating Supply

Choibalsan city has a centralized heating supply system. The heating supply system operated at 130\*c radius and 150/70\*c mode in 1991 but it has declined by 35.0 Gigacalories per hour since that time. This decline resulted from the loss of several main industrial consumers, including the flour, wool and brick factories and the construction manufacturing base.

### · Infrastructure Planned Improvements

	Туре	Actions
1	Roads and transportation	•370 km of railways link Choibalsan to Russia. Also, under the "Tumen Area Project" preliminary studies are under way for connecting Bayantumen railways to Arshaant station in China, 450 km away.
2	Water supply	Water sources are sufficient until 2020 according to the Master Plan;     Construction of new water distribution points in ger communities, connecting them to existing pipelines and installing new lines will be implemented under the ADB Provincial Towns project.     Maintenance and upgrade works of the city sewage plant and pumping stations will be implemented under the ADB Provincial Towns project.
3	Heating supply	Expand major heating supply pipelines in accordance with new developments proposed for the city.     Put 6.73 km lines at the new western center.     Diameter of supplementary lines to be widened
4	Power supply	•The aim is a connection to the Central Power Grid in the future.

### Utility service infrastructure

#### Power Supply

The main source of power is Choibalsan Thermo Power Plant, with a capacity of 36 MWt. It began operation in 1969 and after additional turbo generators were installed in 1977-1980 its capacity reached 24 MWt. Since 1982, when the last upgrade was made, it has been running with 36MWt capacity.

The plant was linked to the center of Sukhbaatar aimag in the year 2000 by 186 km of high voltage lines and has been supplying two aimag centers and soums with power since then.





#### Water Supply

There is a centralized water supply and sewage system in Choibalsan city. 10.7 percent of city's total population lives in dwellings with utility service infrastructure.

Dornod PUS LLC is in charge of the city water supply and sewage operations. The main sources of city water supply are 8 artesian wells equipped with ten 160-110 pumps and which are located 3-3.5 km to the south west of the city center in the Basin of Kherlen River.

There are 24 water distribution points in ger communities, 17 of them are supplied with trucked water.

#### Sewage System

There is a centralized sewage system in the city, which includes main and supplementary wastewater removal pipelines and an artificial biological treatment plant. The main sewage treatment plant is capable of treating 10,000m³ of water per day and is located 7 km from the city on the eastern bank of the Kherlen River at 7km.

The purification rate of the sewage treatment plant is 44 percent as of December, 2003.







# City Development Strategies for Mongolia's Secondary Cities





### Land management



#### Hectare Percentage Land classification Agricultural lands 17,550 62.5 Cities, towns and other settlements 7,844 27.9 Roads and supply network lands 1,912 6.8 Water tanks 565 2.0 National special reserve lands 31 0.10 Total territory 28,084 100,00

### • Choibalsan city territory is 28,450 hectares

N	Purpose	Applications to Privatize Land		
		2001	2002	2003
1.	Plots	54	152	189
2.	Residential Apartment Bldgs	42	40	45
3.	Commercial	14	102	1
4.	Industrial	13	24	1
5.	Special purpose	-	-	2
	Total	123	318	238

The city has vacant land resources with complete utility service access.

### Nature and the environment





#### · Air pollution

Air pollution rate of the city is high.

There are 6,800 sources of air pollution; 4,508 of them are stationery (factories, ger plots, etc.) and the remaining 2,292 are vehicles.

Radioactive Radon (Rn) escapes from Aduun chuluun coal mine, coal self-combustion and from the power plant, contaminating the environment.

The dosage of radon radiation residents receive from the air is 2.33 times higher than the world average.

### Soil pollution and erosion

Over 400 hectares of land in the center of Choibalsan, which were occupied by 11 Soviet military facilities, require remediation. The remaining buildings and structures are beyond rehabilitation.

Land is not restored after mining excavations, which has led to an increase in soil erosion and a decrease in soil productivity. An increase in the number of vehicles and lack of paved road network has led to numerous dirt tracks, which also contributes to increasing erosion.

#### · Solid waste

There are several massive dump sites in Dornod aimag left from the former Soviet army units. The designated dump site of the aimag center, called Tavan khonkhor, is located 3 km from the airport, 2 km southeast of the railway and 3 km east of the aimag center. Compared to other aimags, this dump site is well-ordered and situated down wind so its impact on the environment and health is relatively low. However, the area of the site is expanding and it will be necessary to develop new waste management solutions.

# TSETSERLEG City Development Strategy

In February 2005, the city of Tsetserleg began a participatory planning process to develop a **City Development Strategy**—a vision and strategies for the future development of the city and priority projects to realize that vision. After several months of analysis and deliberation among city officials and administrators, local business owners and community leaders, Tsetserleg's first strategic plan is complete.

The future city vision, developed with input from residents, businesses and civil society is as follows:



## Tsetserleg Vision

A clean and green city, respectful of its beautiful natural assets and traditional culture and customs, whose citizens are healthy, educated and creative, and where tourism and manufacturing develop rapidly.

To achieve this vision, Tsetserleg developed five key strategic initiatives:

- 1. Expand the manufacturing base and encourage growth of small and medium-size businesses;
- 2. Develop appropriate urban planning, infrastructure and land management systems and improve living conditions in ger communities;
- 3. Restore historical, cultural and traditional customs and encourage tourism development;
- 4. Improve human resource development and social welfare services; and
- 5. Protect the environment.

Tsetserleg proposed a set of projects and programs designed to meet the objectives of each Strategic Initiative. The city prioritized the projects within each Strategic Initiative according to a set of criteria, including: a) relevance to development policies; b) financial viability and economic returns; c) environmental benefits; d) social benefits; and e) implementation capacity. The results of the prioritization exercise are included in Annex C. The city's Working Group then reprioritized these 26 projects, and preliminary proposals were developed for the 11 highest ranked projects.<sup>1</sup> These projects form the core of Tsetserleg's CDS. They represent the development priorities of the city within the framework of a larger vision for the city's future.

The CDS is a living document to be used in everyday decision-making, revisited on a regular basis and updated as the city grows and changes. It complements the city's Master Plan by prioritizing key projects and programs outlined in the Master Plan and providing an action plan for implementing the projects.

<sup>&</sup>lt;sup>1</sup> A list of Working Group members and Workshop Participants is included in Annex A.

## **Introduction to Tsetserleg**

Tsetserleg was established at the end of the 16<sup>th</sup> Century when French architects, invited to restore the famous Erdenezuu monastery in Uvurhangai aimag, established a small monastery at the present location of the city. In 1922, the city became known as Tsetserleg.

Tsetserleg is located in the central part of the country in Arkhangai aimag, and has a population of just over 18,000 people or 0.7 percent of the total population of Mongolia (2004). It is 490 km west of Ulaanbaatar. The first 360 km of road from Ulaanbaatar to Kharkhorin are paved, but the remaining 130 km are merely dirt tracks. There is also no air route or railway, making it difficult to access the city.



2

Like the other aimag centers in Mongolia, Tsetserleg does not have the legal status of a city—in 1992 it was designated as Erdenebulgan soum, and, therefore, does not have significant taxation or decision-making authority. National policies limiting own-source revenues and prohibiting the investment of local resources in capital improvements make Tsetserleg dependent on aimag and national government fiscal transfers for local operating and capital expenditures.

Agriculture is the prevailing economic sector of Arkhangai aimag, contributing 77.8 percent to the province's GDP.<sup>2</sup> This figure underscores the rural nature of the aimag (only 17.6% of the aimag population lives in Tsetserleg) and the fact that Tsetserleg does not play a significant economic role in the province or region. The GDP per capita of the aimag is just 351, 949 MNT, about half of the national GDP per capita.

Tsetserleg has suffered population loss and an increase in poverty. The population has been decreasing by 0.6 percent on average over the last two years as a result of out migration. In fact, out migration has been increasing at an average annual rate of about 20 percent since 2001. In 2003, 58.4 percent of the population was living below the poverty line (22,800 MNT per month in Khangai region). Of these, almost half were considered extremely poor. The average monthly household income in Tsetserleg is 123,020 MNT and the average expenditure is 120,091 MNT, which are less than the national averages by 10 to 20 percent.

There are central sewage and water supply systems in Tsetserleg city, but just eight percent of the city population lives in apartment buildings with access to basic utility services. Water from two wells located 4 km to the southwest of the city on the Taruu River supplies the formal built environment, while two trucks deliver water via nine kiosks in ger communities. The majority of businesses and state budget organizations are connected to the central sewage network of Tsetserleg city which sends wastewater to two filtering fields. Although a biological treatment facility capable of processing 2,700 m<sup>3</sup> of wastewater daily exists, it has not functioned since it was built in 1995 and requires major rehabilitation.

Tsetserleg is one of eight aimag centers currently receiving donor financing (ADB loan no. 1907-MON) for improved and sustainable water supply, sanitation, solid waste management, public bathing, heating, and hot water supply facilities.

More detailed data and information on Tsetserleg is compiled in the City Profile in Annex D.

<sup>&</sup>lt;sup>2</sup> Gross Domestic Product (GDP) data is not available at the city/soum level.

## **Tsetserleg Strategic Initiatives**

Tsetserleg developed five key strategic initiatives which represent priority areas of investment for achieving the city's future vision. The objectives of each strategic initiative will be met by a series of priority projects and programs. The projects included in the CDS represent a short list of initial project ideas, which were prioritized at the Strategy Workshop held on May 13, 2005.

# <u>Strategic Initiative 1</u>: Expand the manufacturing base and encourage the growth of small and medium-sized businesses.

Currently the business climate in Tsetserleg is not favorable for economic growth. One of the main weaknesses cited in the SWOT analysis was the lack of significant production and services capable

of positively influencing the city economy.<sup>3</sup> Manufacturing, which has been declining, contributed less than 1 percent to the aimag's GDP in 2003.

While unemployment in Tsetserleg is declining, it is still high. The unemployment rate was 17.7 percent in 2003, which is 4.8 percent less than it was in 2000. GDP per capita of Arkhangai aimag is 351,949 MNT, which is less than half of the national GDP per capita.



There is a need to create an environment for business development which creates jobs and increases incomes. Although the populations of Arkhangai aimag and Tsetserleg city have been decreasing, a majority of the population is working age, which can supply various industries with a labor force. The city can take advantage of some of the raw material inputs available in the aimag and region, including wood and livestock to develop manufacturing enterprises.

There are currently no city or donor initiatives to improve the private sector business environment. The development of a Free Economic Zone is one possibility for encouraging private sector growth. The concept, currently being tested in Altanbulag, is a new one for Mongolia, which provides preferential tax conditions, easy registration procedures and simplified entrance/exit procedures for businesses.

To achieve the objectives of Strategic Initiative 1, Tsetserleg proposes the following projects.

- 1. Promote the production development of construction materials and wooden products;\*
- 2. Support the introduction of cost effective and innovative technologies and equipment and machinery into manufacturing processes;
- 3. Development of urban farming and orchards for berries and fruit in the city and its satellite towns;\*
- 4. Develop strategy to strengthen municipal finance and reduce dependence on subsidies from the state budget;\* and
- 5. Establish a Free Economic Zone of Khangai region or as the pillar center of Khangai region by improving links and cooperation between Western and Central regions.

<sup>&</sup>lt;sup>3</sup> Results of the participatory SWOT analysis conducted at the Visioning Workshop are included in Annex B.

<sup>\*</sup> Indicates projects that have been selected among the 11 highest ranked projects for which more detailed proposals have been prepared.

# <u>Strategic Initiative 2:</u> Develop appropriate urban planning, infrastructure and land management systems and improve living conditions in ger communities.

An overwhelming majority of the city's residents—92 percent— lives in ger communities, without access to basic services. Power is supplied to 2,400 households in ger areas and two trucks provide potable water via nine kiosks, but these residents lack piped water, sanitation, heating and solid waste services.

Tsetserleg is the only one of the five cities participating in the Secondary Cities CDS Project that was not designated



as a pillar center, and therefore does not have a new Master Plan. The last Master Plan was prepared in 1984. The city is in the unique position of having a CDS, which outlines its strategic priorities and can form the basis of a new Master Plan to be more responsive to the development needs of Tsetserleg.

Land parcels have been issued in accordance with a land management plan that corresponded to the old city Master Plan. According to this plan, the city has been issuing long-term lease land certificates for 15-60 year periods. In total, 2,389 individual households, 204 commercial enterprises and 36 state budget organizations hold these certificates. Since passage of the Land Privatization Law in 2001, only 126 individual households have privatized their land for residential use.

Under ADB loan 1907-MON, water kiosks in the ger areas are being connected to the central water supply network, bathhouses are being built, the sewage treatment plant is being rehabilitated and a solid waste management system will be developed.<sup>4</sup> However, unless tariffs are increased, the service delivery organization (PUSO) will not be able to pay the interest on the loan, which commences in 2005, let alone the principal, which commences in 2010.

The heating supply facility of the city is privately owned. Eight small boilers supply government organizations, enterprises and apartment buildings with hot water. Six of them are connected to the water supply network but there are no coal sources nearby. In addition to causing air pollution during the long winter season, the network losses are high due to low temperatures and deteriorated pipelines. The city is located about 40 km from two hot springs and is interested in exploring the use of geothermal energy to heat the city. To achieve the objectives of Strategic Initiative 2, the city proposes the following priority projects and programs.

- 1. Improve solid waste management;\*
- 2. Upgrade the water supply system and connect ger communities to water and sewage systems;
- 3. Introduction of advanced technology to utilize underground energy sources and hot springs for heating supply:\*
- 4. Expansion of city pipelines and assurance of safe network operation;\*
- 5. Improve city road network (pave, install traffic lights and paint signs and markings on the roads):
- 6. Develop a renewed Master Plan of the city in close synchronization with the City Development Strategy and Land Management Plan;\* and
- 7. Build kindergartens, schools and health clinics in ger communities.

<sup>&</sup>lt;sup>4</sup> The Ministry of Construction and Urban Development and the ADB are exploring the feasibility of connecting selected individual households in the ger areas to the central water supply network.

# <u>Strategic Initiative 3</u>: Restore historical, cultural and traditional customs and support the development of travel and tourism.

Tsetserleg currently has a burgeoning tourism industry, including both domestic and international tourist markets, which has the potential to help fuel the city's economic growth. Its beautiful natural setting, historic heritage and location attract tourists, primarily in the summer season. The local museum attracts 10,000 visitors on average each year, about 2,000 of which are international travelers. In addition, the Drama Theater stages at least four new performances each year, reaching an audience of more than 8,000 people and collecting two to three million MNT in revenues.

The city is strategically located between the Western and the Central regions, 490 km west of Ulaanbaatar. However, it is not easily accessed. The first 360 km from Ulaanbaatar to Kharkhorin are paved, but the remaining 130 km from Kharkhorin to Tsetserleg are just dirt track. There is no air route or railway, so one of the main priorities to spur tourism development is to pave the road from Kharhorin to Tsetserleg.

The city also currently lacks adequate tourist facilities to accommodate an increase in the number of tourists. But the city's proximity to other tourist attractions means that it has the opportunity to



develop its tourism sector based on multiple destination routes that include Kharhorin, Erdenezuu Monastary, and Khar uul ruins, for example.

The city also expressed interest in developing a tourism complex based on the history, culture and customs of the central Khalkh enthnic group and their relationship to Bulgan Mountain. Such a complex would not only attract tourists, but it would also contribute to the preservation and promotion of traditional Mongolian culture.

To achieve the objectives of Strategic Initiative 3, Tsetserleg proposes the following priority projects and programs.

- 1. Broaden and encourage tourism-related business initiatives (hotels, restaurants, tour guides, etc...);
- 2. Development of a complex for history, culture and customs of the central Khalkh enthic group based on Bulgan Mountain;\*
- 3. Develop the cultural tourism sector, prepare routes and renovate exhibits:
  - a. Ulaanbaatar Hushuutsaidam Kharkhorin- Erdenezuu Great Empire memorial –Tuvkhun monastery ;
  - b. Tsetserleg city Taikhar stone-Bulgan mount- Ereen mod –Tariat temple Tsahar ovoo –Khar uul ruins.
- 4. Pave the road from Tsetserleg to Kharkhorin; and
- 5. Develop ad campaign and establish networks for domestic and international tourism (CD, photographs, video).

## <u>Strategic Initiative 4</u>: Improve human resource development and social welfare services.

The education and healthcare needs of Tsetserleg's population are not currently being met. Kindergartens are particularly in short supply. There are, however, several higher education opportunities in the city. Some 410 students study at Gurvan Tamir College, Arkhangai Information Technology College and Bulgan College. Another 760 students study at the Teacher's College and 400 students study at the Professional Training Center. There is also the opportunity to establish a Buddhist school at the local monastery.

### **Social Infrastructure Capacity**

	Unit	Actual Capacity	Required Capacity	% Demand Met
Schools	Pupils	5835	6483	90.0
Kindergartens	Children	833	1830	45.5
Hospitals	Beds	275	345	79.7

Despite these educational opportunities, there is a sense among city administrators and local businesses that the local labor demand is not being met. A study of labor market demand and skills training should be undertaken to understand human resource needs and to develop a strategy to increase employment and incomes among the population. The average household income in Tsetserleg city is 123,020 MNT and the average expenditure is 120,091 which are 10 to 20 percent lower than the national averages, and while the poverty rate has decreased since 2001, it is still high, with just over 58 percent of the population living below the poverty line (22,800 MNT per month) in 2003.

Ninety eight thousand people receive medical services in the soum clinic annually, including 8,670 hospitalized patients. A traditional medicine clinic, Tungalag Tamir, also operates in Tsetserleg with average revenues of 10 million MNT per year. The resident to doctor ratio in Arkhangai aimag is far worse than the national average. There are 46 doctors in Tsetserleg and the central aimag hospital combined, which means that there are 475 people per doctor, while the national average is 385 people per doctor. In other words, the aimag rate is 33.3 percent higher than the national average, and the need for more medical professionals is acute. In addition to human resources, the health care facilities are also in need of better, updated medical equipment to meet the needs of the population.

To achieve the objectives of Strategic Initiative 4, Tsetserleg proposes the following projects.

- 1. Prepare and implement a city strategy for reduction of unemployment and poverty;
- 2. Evaluate the city population and improve social infrastructure to correspond to resident needs;
- 3. Strengthening the material base of specialized training and production centers, colleges and universities and develop and implement a program that meets local demand:\*
- 4. Prepare and implement a city program for cultural, arts and religious heritage preservation and development; and
- 5. Supply central hospital and clinics with modern equipment.\*

## **<u>Strategic Initiative 5</u>**: Protect the environment.

The main environmental problems facing Tsetserleg relate to heating. Because the heating system of the city is not adequate, a majority of households—92 percent—use coal, wood or dung-burning stoves for both heating and cooking, which pollute the air, particularly during the cold seasons.

A significant amount of forest land around the city, including on Bulgan Mountain, Khavtgai mod, the shores of Tamir River, Bayanbulag, Urt bulag and Ongon, has been destroyed in the last 3 years primarily as a result of the use of trees for commercial and household fuel purposes. Wild fires, harmful insects and tree infections, climate change and the use of the land for livestock pastures have also contributed to the forest degradation. As a result of deforestation near springs and wells, the flow of two springs—Jamgan and Gants mod—has decreased and Avkhain spring has run completely dry.



The exploration of two nearby hot springs, located 40 and 45 km from the city, as an alternative heating source to remedy the heating problems of the city is a priority project under Strategic Initiative 2.

Solid waste is also an environmental problem for Tsetserleg. Control of solid waste removal was transferred from the Erdenebulgan soum administration to the PUSO, but the PUSO does not have sufficient capacity to manage solid waste properly. The city has one authorized dump site, located 7 km from the city, but because of its remoteness, trash is illegally dumped in a number of unauthorized sites in gorges and pathways in the ger areas. Under ADB loan 1907-MON, a solid waste management system will be designed and implemented for the city.

To achieve the objective of Strategic Initiative 5, the city of Tsetserleg proposes the following priority projects and programs.

- 1. Evaluate environmental impacts of urban development;
- 2. Create small recycling plants for recycling solid waste, plastic bags and paper;
- 3. Establishment and protection of a green zone, forestation inside the city area and installation of an irrigation system;\* and
- 4. Initiate campaign to encourage residents and businesses to reduce air pollution and plant trees collectively.

## **Priority Infrastructure Projects**

Five infrastructure projects are included in Tsetserleg's City Development Strategy. The city has prioritized these projects as follows:

- 1. Improve the water supply system of the city and connect ger communities to the central water supply and sewage systems;
- 2. Introduction of advanced technology to utilize underground energy sources and hot springs for heating supply;
- 3. Expansion of city pipelines and assurance of safe network operation;
- 4. Upgrade roads within the city (pave them, install traffic lights, signs and markings); and
- 5. Pave the road to Kharkhorin.

Water supply and heating are the top two infrastructure priorities for the city of Tsetserleg. Almost the entire city population—the 92 percent living in ger areas, does not have access to piped water or sanitation. It is therefore critical for the city's future development to address these needs and find viable water supply and sanitation options for the city's residents. In addition, it is essential to develop a more viable heating system. The pollution and deforestation resulting from the use of individual household stoves will continue to have adverse impacts on the population's health and the environment.

To improve the water supply system, a new well is required, complete with machinery and pipelines. It is also necessary to rehabilitate the two existing wells with new power supply equipment, new machinery, repair of the operator's room at the first well and installation of a telemetry system connected to the upper water tank. Additional upgrades include restoring the first lift station's collector pipeline and concrete supports; doubling the existing single 250 diameter, 4,025 m pipeline which goes from the first lift station to the high water tank and further to the circular network of the city; constructing a 500 meter long flood protection dam at the main pipeline; repairing one of the two 1,000 m³ tanks which is used currently, adding a *trocket* inside it and connecting it to the telemetry system of the first lift station.

In order to improve water supply in the ger areas of Tsetserleg city the existing water kiosks that are not connected to the central system must be repaired and connected to it and two more kiosks must be built. The second lift station at the First School should be upgraded and expanded to improve water supply of ger communities in the eastern part of the city, and because the X and III kiosks can not be connected to the central system they should be supplied with potable water by trucks.

To improve heating and hot water supply, the city would like to explore the feasibility of using geothermal springs located approximately 40 km from the city. The current system includes eight small, manually operated boilers that supply hot water just once a week, in addition to heat to 45 end-users, including 17 apartment buildings. The system is plagued by outdated technologies and deteriorated pipelines.

## **Priority Project Proposals**

After prioritizing projects and programs within each Strategic Initiative, the city selected 11 priority projects from the short list. These 11 projects represent the key development priorities of the city as determined through a participatory, iterative planning process. Proposals were prepared for each of the projects with input from the Working Group. The project proposals follow.

- Development of urban farming and orchards for berries and fruit in the city and its satellite towns;
- Develop a renewed Master Plan of the city in close synchronization with the City Development Strategy and Land Management Plan;
- 3. Supply central hospital and clinics with modern equipment;
- 4. Introduction of advanced technology to utilize underground energy sources and hot springs for heating supply;
- 5. Expansion of city pipelines and assurance of safe network operation;
- 6. Develop strategy to strengthen municipal finance and reduce dependence on subsidies from the state budget;
- 7. Promote the production of construction material and wooden products;
- 8. Improvement of solid waste management;
- Development of a complex for history, culture and customs of the central Khalkh enthic group based on Bulgan Mountain;
- 10. Strengthening the material base of specialized training and production centers, colleges and universities and develop and implement a program that meets local demand; and
- 11. Establishment and protection of a green zone, forestation inside the city area and installation of an irrigation system.

Project Title	Development of urban farming and orchards for berries and fruit in the city and its satellite towns			
Contar	Urban Development and Agriculture Project Duration: 5 years			
Sector Project Location	Tsetserleg City			
Type of Project	Feasibility study or Survey Package Programs Development project Other Institutional Building			
Summary of Project Objectives	Provide residents of the city and region with ecologically healthy agricultural products and increase their living standards.			
Project Description	<ul> <li>Conduct a marketing and management study for urban farming and husbandry;</li> <li>Coordinate projects/programs with city development plans and activities;</li> <li>Provide preparatory work for establishing farms and small-scale urban cooperatives;</li> <li>Establish two pilot combined agricultural farms;</li> <li>Establish 2000 m² of greenhouses</li> </ul>			
Relation to	(1) Khangai Regional Development Project; (2) Mid-term Development Program of Khangai			
Development Plans	Region; (3) Short-term Objective of Agriculture			
Expected Benefits / Targeted Beneficiaries / Outputs	Economy of the city will grow by increasing and promoting intensified urban agriculture and greenhouses; Usable income of households and their living standards will increase with corresponding reductions in poverty; Development of fruit and berry orchards will contribute to the greening of the city and produce revenues and food for households.			
Key Assumptions /	Encourage individuals and entities to expand their activities in agricultural field by developing			
Project Conditions	regulations to reduce applicable taxes.			
Project and Other Sector Linkages	Sector Linkages: Land Management, Industry; Environment			
Estimated Investment Requirement	Estimated project start up costs: US\$ 50,000 Estimated cost of annual operation and maintenance:			
Implementing Agency/ Body	Small and medium size enterprises; Farmers and Herders; Agriculture Department of aimag.			
Relevant Agencies to be Coordinated	Citizen Representatives Khural of the aimag/soum, aimag/soum Governors, Administration Department of aimag/soum governors' office, Community Based Organizations,			
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:			
Private Sector Participation	Contribution to the funding and implementation			
Necessary Inputs/ Arrangements	Revised national level legislation and policies: City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:			
Environmental Considerations	Access to ger area plots by animals needs to be carefully considered. Treatment of animal and agricultural wastes should be controlled. Location of greenhouses needs to be determined.			
Special Considerations	Demand and marketing of agricultural products from urban farming and husbandry.			

Project Title	Development of renewed Master Plan of the City		
Sector	Urban Development Project Duration: 1 year		
Project Location	Tsetserleg City		
Type of Project	☐ Feasibility Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other ☐ Institutional Building		
Summary of Project Objectives	Develop and approve the City Master Plan following the new socio-economic approach incorporated into Tsetserleg's City Development Strategy;		
Project Description	<ul> <li>Determine the Terms of Reference for developing the new Master Plan;</li> <li>Provide preparatory work for developing the Master plan in accordance with the City Development Strategy Project (determine engineering-geological conditions, develop basic structure plan etc.);</li> <li>Take steps to implement the City Development Strategy;</li> <li>Recommend action plan and implementation arrangements; and</li> <li>Approve Master Plan and coordinate with other relevant projects.</li> </ul>		
Relation to Development Plans	(1) Tsetserleg City Development Strategy Plan; (2) XXI Sustainable Development Program of Arkhangai aimag; (3) Khangai Regional Development Project; (4) Mid Term Development Strategy; (5) Action plan of Governor; (6) Development of Tsetserleg City until 2010 Sub-Program,		
Expected Benefits / Targeted Beneficiaries / Outputs	Development of the city will be structured and directed in an effective manner; Location of construction and new infrastructure networks will be planned properly and investment efficiency will be increased.		
Key Assumptions / Project Conditions	The Administration Department of Governor's office should announce a bid among professional institutions to development the city's Master Plan.		
Project and Other Sector Linkages	Project Linkages: Tsetserleg City Development Strategy Project of Secondary Cities of Mongolia, Strategy Initiatives, Sector Linkages: Public Utility, Construction and Urban Development, Environment, Road, Transport and Tourism, Trade and Industry, Education, Science, Infrastructure, Finance		
Estimated Investment Requirement	Estimated project start up cost: US\$ 45,000 Estimated cost of annual operation and maintenance:		
Implementing Agency/ Body	Governor, Administration Department of Aimag Governors Office, Public Utility institutions		
Relevant Agencies to be Coordinated	Ministry of Construction and Urban Development; Ministry of Environment; Ministry of Road, Transport and Tourism; Ministry of Trade and Industry; Individuals and entities etc,,,		
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:		
Private Sector Participation	Comment, Recommendation and surveys		
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:		
Environmental Considerations			
Special Consideration			

Project Title	Supply Central Hospital and Clinics with Modern Equipment		
Sector	Health Project Duration: 1.5 years		
Project Location	Tsetserleg City		
Type of Project	☐ Feasibility study or Survey ☐ Package Programs ☐ Development project ☐ Other; ☐ Institutional Building		
Summary of Project Objectives	Improve medical services and assistance to population; provide diagnosis and treatment equipment; strengthen institutional capacity of hospitals.		
Project Description	<ul> <li>Study the structure of the city's population by age, sex, health, living standards, poverty etc.;</li> <li>Coordinate health initiatives with other city development programs and projects;</li> <li>Improve human resource capacity in clinics and hospitals,</li> <li>Provide special ambulances;</li> <li>Provide surgical equipment and facilities;</li> <li>Supply computers and tomography apparatus;</li> <li>Establish herbal and bio medical facilities;</li> <li>Establish herbal plantation;</li> <li>Provide access to health information and train professionals;</li> </ul>		
Relation to	(1) Concept of Regional Development of Mongolia; (2) Health Sector Strategy; (3) Regional		
Development Plans	Development Project,		
Expected Benefits /	Improved quality of local medical services;		
Targeted	Improved quality of diagnosis and treatment		
Beneficiaries /			
Outputs	Adams to train ad a consequence of an arranged in broadth care consists		
Key Assumptions / Project Conditions	Adequate trained personnel are engaged in health care services.		
Project and Other Sector Linkages	Sector Linkages: Health,		
Estimated Investment	Estimated project start up cost: US\$ 25000		
Requirement	Estimated cost of annual operation and maintenance:		
Implementing	Mayor; Aimag/soum Governors; Administration Department of Aimag/Soum Governors'		
Agency/ Body	Office; Health Department of Aimag		
Relevant Agencies to	Ministry of Health		
be Coordinated			
Provisional Funding Scheme	□ Local Government □ Private Sector □ Central Government □ Specially Organized Fund □ International Assistance fund □ Other:		
Private Sector	Undertake surveys, provide recommendations and comments		
Participation			
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government initiative Improve institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:		
Environmental			
Considerations			
Special Considerations			

Project Title	Introduction of advanced technology to utilize underground energy sources for heating supply		
Sector	Infrastructure	Project Duration: 4 years	
Project Location	Tsetserleg	, , , , , , , , , , , , , , , , , , , ,	
Type of Project		ckage Programs her	
Summary of Project Objectives	Supply the city with low cost and environ	mentally friendly heating.	
Project Description  Relation to	<ul> <li>Develop new heating supply projects based on proper research and surveys;</li> <li>Coordinate projects and programs with future development, perspectives and projects of the city;</li> <li>Introduce new heating technologies;</li> <li>Construct necessary pipeline and network expansion; and</li> <li>Supply the city with reliable and low cost heating.</li> <li>Tsetserleg City Development Strategy project: (2) Scientific Research Institutions; (3)</li> </ul>		
Development Plans	Pilot projects and programs		
Expected Benefits / Targeted Beneficiaries / Outputs	City will be provided with low cost heating Environmental pollution will be reduced; Production and services will be improved.	g, d and better living condition will be created.	
Key Assumptions / Project Conditions	Underground energy sources will provide	e more efficient, less polluting heating technologies.	
Project and Other Sector Linkages	Sector Linkages: Public Utility; Urban De	velopment; Environment and Science	
Estimated Investment Requirement	Estimated project start up costs: US\$ 60 Estimated cost for annual operation and	maintenance:	
Implementing Agency/ Body	Governor's Office, Administration Depart Utility companies, Scientific Research Ins	tment of Governors' office, Environment unit, Public stitutions	
Relevant Agencies to be Coordinated	Public Utility Agency, Individuals, Entities		
Provisional Funding Scheme	Central Government S	Private Sector Specially Organized Fund Other:	
Private Sector Participation	Management and Investment		
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:		
Environmental Considerations			
Special Considerations			

Project Title	Expansion of city pipelines and assurance of safe network operation	
Sector	Infrastructure Project Duration: 2 years	
Project Location	Tsetserleg	
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other ☐ Institutional Building	
Summary of Project Objectives	Expand pipelines and provide the safe operation of the network	
Project Description	<ul> <li>Develop particular projects based on proper research and survey;</li> <li>Coordinate projects and programs with future development, perspectives and projects of the city;</li> <li>Introduce new technologies;</li> <li>Construct necessary expansion of pipelines and networks; and</li> <li>Supply the city with reliable and low cost infrastructure services</li> </ul>	
Relation to Development Plans	(1) Tsetserleg City Development Strategy Project: (2) Development Sub-program of Tsetserleg for 2010; (3) Public Utility Improvement projects.	
Expected Benefits / Targeted Beneficiaries / Outputs	Transmission capacity of pipelines will be increased; Networks will be expanded and renovated; Safety of the system will be maintained.	
Key Assumptions / Project Conditions		
Project and Other Sector Linkages	Sector Linkages: Public Utility, Urban Development and Environment	
Estimated Investment Requirement	Estimated project start up cost: US\$ 0000 Estimated cost of annual operation and maintenance:	
Implementing Agency/ Body	Governor's Office; Administration Department of Governors' Office; Environment Unit; Public Utility Companies; Scientific Research Institutions.	
Relevant Agencies to be Coordinated	Ministry of Construction and Urban Development; Ministry of Energy; Ministry of Road Transport and Tourism; Public Utility Agency; Individuals; Entities	
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:	
Private Sector Participation	Management and Investment	
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:	
Environmental Considerations		
Special Considerations		

Project Title	Develop strategy to strengthen municipal finance		
Sector	Finance Project Duration: 6 months		
Project Location	Tsetserleg		
Type of Project	☐ Feasibility Study or Survey ☐ Package Programs ☐ Development Project ☐ Other: Policy Paper ☐ Institutional Building		
Summary of Project Objectives	Develop a strategy for Tsetserleg City to strengthen its municipal finance, increase own- source revenues and fund capital improvements from local budget		
Project Description	<ul> <li>Conduct study to clearly define fiscal problems at city level and make recommendations for improvements to policy framework and local capacity for budgeting and expenditure</li> <li>Reform national level policies to enable fiscal decentralization and give authority to local level for taxation and capital investments</li> <li>Build local institutional capacity for local revenue generation (setting tax rate and structures), budgeting and expenditure management</li> <li>Implement budget and expenditure software, prepare guidelines and organize trainings.</li> <li>Develop framework for prioritization and structuring of city programs and a monitoring mechanism for effective and efficient implementation.</li> </ul>		
Relation to Development Plans	Relates to all existing national and local development plans, including (but not limited to): (1) Concept of Regional Development of Mongolia, (2) National Government Action Plan, 2004-08, (3) Construction and Housing Sector Strategy, (4) Master Plan of Darkhan.		
Expected Benefits / Targeted Beneficiaries / Outputs	All city residents will benefit form municipal finance reforms. The city will become self-sufficient and able to invest in capital improvements that will benefit the entire community.		
Key Assumptions / Project Conditions	GoM will adopt reforms and local institutions will be strengthened to effectively manage municipal finances		
Project and Other Sector Linkages	Project Linkages: City Strategy Project of Secondary Towns of Mongolia, All Strategic Initiatives Sector Linkages: All sectors.		
Estimated Investment Required	Estimated project cost: US\$100,000 Estimated annual cost of operation and maintenance: N/A		
Implementing Agency/ Body	Governor's Office, Finance Department of the Governor's Office, Ministry of Finance and Parliament		
Relevant Agencies to be Coordinated	All divisions and departments at all levels of administration		
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance Funds Other		
Private Sector Participation	Provide recommendations and comments on favorable local tax conditions		
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangement at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:		
Environmental Considerations			

Project Title	Promote the production of construction materials and wooden products		
Sector	Industry, Urban Development Project Duration: 5 years		
Project Location	Tsetserleg City		
Type of Project	☐ Feasibility study or Survey ☐ Package Programs ☐ Development project ☐ Other ☐ Institutional Building		
Summary of Project Objectives	Develop the production of local construction materials for the region; Provide residents of Tsetserleg City and southern part of Khangai region with wood based products;		
Project Description	<ul> <li>Survey new techniques and technologies at the international level for construction and wood materials (production of construction materials; fabrication of wooden products etc);</li> <li>Conduct surveys of raw material sources and reserves at local and regional levels;</li> <li>Establish a construction material factory for the region;</li> <li>Establish wood processing and wooden products factory; and</li> <li>Advertise locally made products through the mass media.</li> </ul>		
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Regional Development Project; (3) Industrial Park Operation Program.		
Expected Benefits / Targeted Beneficiaries / Outputs	Western and Khangai region will be supplied with construction materials; Regional population will be provided with usable wood products; The quantity of wood products will be increased and employment generated; Production of wood products will contribute to local tax revenues.		
Key Assumptions / Project Conditions	The construction material factories and production of wood products in Tsetserleg City will contribute to the implementation of the Government's 40,000 houses program. The local government should provide certain incentives through tax exemption policy to encourage this production.		
Project and Other Sector Linkages	Sector Linkages: Environment		
Estimated Investment	Estimated project start up costs: US\$ 000		
Requirement	Estimated cost of annual operation and maintenance:		
Implementing	Governor's Office, Administration Department of Governor's Office and Chamber of		
Agency/ Body	Commerce		
Relevant Agencies to	Construction companies, Environment institutions; Ministry of Environment, Ministry of		
be Coordinated	Construction and Urban Development and Ministry of Trade and Industry.		
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance funds Others:		
Private Sector Participation	Undertake surveys, provide recommendations and comments and generate employment and investment		
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government initiative Improve institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation in funding Maximum utilization of local technologies International technical assistance Other: Community fund that engage in construction and environment protection;		
Environmental	Introduce environmentally friendly technologies for the construction sector;		
Considerations	Develop solutions for the efficient utilization and protection of forest resources;		
Special Considerations	Ensure cooperation with Western and Central regions and develop a proposal for establishing a free trade zone in the Khangai region.		

Project Title	Improvement of solid waste management		
Sector	Environment and Public Utility Project Duration: 4 years		
Project Location	Tsetserleg		
Type of Project	☐ F/S Study or Survey ☐ Packaged Program ☐ Development Project ☐ Other ☐ Institutional Building		
Summary of Project Objectives	Improve solid waste management of the city		
Project Description	<ul> <li>Conduct environmental monitoring;</li> <li>Coordinate city development and environmental protection programs and projects;</li> <li>Develop projects and improve management of solid waste operations;</li> <li>Establish waste sorting points;</li> <li>Conduct a study of different solid waste technologies, pilot some of the most promising technologies;</li> <li>Strengthen solid waste management practices; and</li> <li>Establish waste recycling facility.</li> </ul>		
Relation to Development Plans	(1) Development of Tsetserleg City until 2010 Sub-program; (2) Public Utility Projects		
Expected Benefits / Targeted Beneficiaries / Outputs	Cleaner and more healthy environment in and around the city, Efficient and environmentally located solid waste collection and disposal points; and Established small-scale waste recycling facilities.		
Key Assumptions / Project Conditions	Administration Department of Aimag Governor's Office shall develop a regulation on sorting solid waste along with the location of facilities, fees to be imposed and level of community participation.		
Project and Other Sector Linkages	Sector Linkages: Urban Development and Public Utility		
Estimated Investment Requirement	Estimated project start up costs: US\$ 35,000 Estimated annual cost of operation and maintenance::		
Implementing Agency/ Body	Public Utility Company, City Maintenance service unit, Public Utility Department of Aimag, Environment Unit and Strategy Planning and Policy Implementation Department of aimag		
Relevant Agencies to be Coordinated	Individuals and Entities		
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:		
Private Sector Participation	Sort and recycle solid waste, management, investment and funding		
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:		
Environmental	Efficient location and management of solid waste pickup points. Pick up trucks and transport		
Considerations	routes to be identified.		
Special Considerations	Ultimate use and/of disposal of waste products. Recyling opportunities.		

Project Title	Development of a complex for history, culture and customs of the central Khalkh enthic group based on Bulgan Mountain					
Sector	Tourism sector Project Duration: 3 years					
Project Location	Tsetserleg City					
Type of Project	☐ Feasibility study or Survey ☐ Package Programs ☐ Development project ☐ Other; ☐ Institutional Building					
Summary of Project Objectives	Establish ethnic group centers for "Candle Holiday", "Central Khalkh Games", "Art of Central Khalkh" that can benefit foreign and domestic tourists.					
Project Description	<ul> <li>Develop a complex for the history, culture and custom of the central Khalkh enthic group based on Bulgan Mountain</li> <li>Connect local tourism to the national level and integrate it with the tourism network;</li> </ul>					
Relation to Development Plans	(1) Concept of Regional Development of Mongolia; (2) Khangai Regional Development Project; (3) Tourism and Resort Programs of Mongolia.					
Expected Benefits / Targeted Beneficiaries / Outputs	Structure of tourism sector will be improved and the number of tourists will be increased; Local revenues from tourism activities will increase; Opportunities will be addressed to promote aimag and local areas both nationally and internationally.					
Key Assumptions / Project Conditions	Administration Department of Governor's office, in collaboration with religious customs, will advertise days that candles are to be put for Bulgan Mountain in order to attract the tourists.					
Project and Other Sector Linkages	Sector Linkages: Environment, Infrastructure; Culture					
Estimated Investment Requirement	Estimated project start up costs: US\$ 0000 Estimated cost of annual operation and maintenance:					
Implementing Agency/ Body	Governor's Office; Ministry of Roads, Transport and Tourism; Administration Department of Aimag Governor's Office; Entities					
Relevant Agencies to be Coordinated	Road, Transport and Tourism, its agencies, departments, Religious centersm, and Ministry of Construction and Urban Development					
Provisional Funding Scheme	Local Government Private Sector  Central Government Specially Organized Fund International Assistance fund Other:					
Private Sector Participation	Investment, management and funding					
Necessary Inputs/ Arrangements	Revised national level legislation and policies City/aimag government initiative Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:					
Environmental Considerations	Environment of Bulgan Mountain is to be preserved.					
Special Considerations	Private tourism and folklore groups are to be supported.  Administration of tourism complex needs to be developed.					

Project Title	Strengthening the material base of specialized training and production centers, colleges and universities and develop and implement a program that meets local demand								
Sector	Education	Project Duration: 1.5 years							
Project Location	Tsetserleg City, Arkhangai								
Type of Project	☐ F/S Study or Survey ☐ Packaged F☐ Development Project ☐ Other: ☐ Institutional Building								
Summary of Project Objectives	Strengthen the material base for specialized tra universities by improving the quality of educatio developing and implementing a program that me	n, increasing the number of study fields, and							
Project Description	<ul> <li>colleges and universities;</li> <li>Undertake a detailed survey on required que programs;</li> <li>Coordinate specialized training with city de</li> <li>Organize tutors for specialized training;</li> </ul>	<ul> <li>Undertake a detailed survey on required qualified professionals and develop training programs;</li> <li>Coordinate specialized training with city development projects;</li> </ul>							
Relation to Development Plans	(1) Concept of Regional Development of Mongo Project; (3) Perspectives , Projects and Progran								
Expected Benefits / Targeted Beneficiaries / Outputs	Number of students and nature of courses pres and universities will be increased; Education level of the population will be improve Human resource capacity will be improved.								
Key Assumptions / Project Conditions	Education centers and private sector agree on f	ocus areas for specialized training.							
Project and Other Sector Linkages	Sector Linkages: Agriculture, Construction, Mini	ing							
Estimated Investment Requirement	Estimated project start up cost: US\$ 15,000 Estimated annual cost of operation and mainter	nance							
Implementing Agency/ Body	Education and Culture Department of Darkhan Universities and Colleges, Specialized training of	Uul aimag, Employment generation office,							
Relevant Agencies to be Coordinated	Ministry of Education, Culture and Science, Min Employment Unit.	istry of Social Affair and Labor and							
Provisional Funding Scheme		Sector y Organized Fund 							
Private Sector Participation	Provide recommendations and comments,								
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government initiative Improved institutional arrangements at loca Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:								
Environmental Considerations									
Special									
Considerations									

Project Title	Establishment and protection of a green zone, forestation inside the city area and installation of an irrigation system					
Sector	Environment and Urban Development Project Duration: 3 years					
Project Location	Tsetserleg					
Type of Project	Feasibility study or Survey Package Programs Development project Other; Institutional Building					
Summary of Project	Reduce environmental pollution within the city and create a healthy living environment for its					
Objectives	inhabitants.					
Project Description	<ul> <li>Develop a plan for city forestation;</li> <li>Develop areas for planting trees and vegetation;</li> <li>Establish irrigation system;</li> <li>Plant trees in selected city areas;</li> </ul>					
Relation to	(1) Regional Development Project; (2) Mid Term Development Program					
Development Plans						
Expected Benefits /	Reduced air and soil pollution within the city;					
Targeted	More comfortable urban living environment;					
Beneficiaries /	Restored forest area; and					
Outputs /	Greener city.					
Key Assumptions /	Windblown dust and desertification will be reduced through strategic plantings in sensitive					
Project Conditions	areas.  Project Linkages: City Development Strategy Project of Secondary Cities of Mongolia,					
Project and Other Sector Linkages	Strategy Initiatives 1.2 Sector Linkages: Land Management, Agriculture					
Estimated Investment	Estimated project start up costs: US\$ 50,000					
Requirement	Estimated cost of annual operation and maintenance:					
Implementing Agency/ Body	Governor's Office, Administration Department of Governors' office, Environment unit					
Relevant Agencies to be Coordinated	Individuals, Entities and community organizations.					
Provisional Funding Scheme	☐ Local Government ☐ Private Sector ☐ Central Government ☐ Specially Organized Fund ☐ International Assistance fund ☐ Other					
Private Sector Participation	Contribute for the investment and funding.					
Necessary Inputs/ Arrangements	Revise national level legislation and policies City/aimag government initiate Improved institutional arrangements at local level Local level financing International financial assistance (grant) International financial assistance (loan) Private sector participation and financing Maximum utilization of local technologies International technical assistance Other:					
Environmental Considerations						
Special Considerations						

# **Annex A. Working Group Members and Workshop Participants**

## **Working Group Members**

- 1. S.Purevdorj -Head of Aimag Strategic Planning and Policy Department;
- 2. D.Namjildorj Erdenebulgan soum governor, Tsetserleg city mayor;
- 3. P.Dorjgotov Economic consultant Aimag Government;
- 4. E.Dashzevge -Aimag Government Legal consultant;
- 5. Ts.Samdan -Head of Statistic Department;
- 6. D.Danaasuren -Speaker of the Erdenebulgan soum;
- 7. R.Gandiimaa -Deputy head of Aimag health department;
- 8. Ts.Enkhtaivan -Chief engineer of Aimag Communication Office:
- 9. N.Gombosuren -Central Power System Distribution Company Director;
- 10. M.Tserennadmid-Bank of Mongolia Director;
- 11. S.Nyamdorj "Undarga" PUSO company Director;
- 12. Ch.Usukhbayar "Ilch" heating company Director;
- 13. L.Baasanchuluun-"Auto road" company Director;
- 14. D.Munkhbat -Head of Aimag Land Affair Office
- 15. Ts. Dorjdagva Head of Environment Department;
- 16. Yo.Enkhbold -Inspector and architect, Aimag Professional Inspection Office;
- 17. D.Altangerel -Officer, Department of Culture and Education Aimag Government,
- 18. Ch.Munkhbat -Director "Hasu-Mandal" Company;
- 19. U.Enkhtuya -Officer; Aimag Government Administration
- 20. R.Suglegmaa -Officer; Aimag Government Administration

## Visioning Workshop Participants February 18, 2005

- 1. J.Nergui -Aimag Parliament speaker
- 2. J.Khurelsukh -Aimag Governor
- 3. S.Namjildorj Mayor of Tsetserleg and Governor of Erdenebulgan soum
- 4. S.Purevdorj -Aimag Government, Department Head
- 5. D.Munkhbat -Aimag Land Affair Department Head
- 6. Yo.Dandarvanchig-Aimag Government Department Head
- 7. A.Sharavsambuu-Aimag Government, Social Policy officer
- 8. S.Baraanasan Mongolian Radio Reporter
- 9. S.Sandagdori Erdenebulgan soum, Head of the Administration
- 10. Ts.Otgontsetseg -Aimag Government Statistic Department specialist
- 11. B.Lhagvasuren -Aimag Land Affair Department, registrator
- 12. Ts. Dorjdagva Aimag Environmnetal Department Head
- 13. D.Ganbaatar "DGBS" LLC director
- 14. N.Dorjpalam Telecommunication Department Head
- 15. S.Shaqdarsuren "Humuun" complex (Secondary school) director
- 16. D.Khurelsukh -Assistant to the Mayor
- 17. B. Nerguibayar Soum Government Land surveyor
- 18. D.Chilkhaasumberel-"Buyant" LLC- director
- 19. G.Dash "JUST" LLC- director
- 20. S.Ouynsuren "Mungut Oyu" LLC director
- 21. B.Tumenjargal "Gal Naran" LLC director
- 22. J.Gurvantamir "Tsahiurjav" LLC director
- 23. N.Sukhee "Ilch-Arkangai" LLC-chief engineer
- 24. S.Nyamdorj "Undarga" LLC director

25. B. Uuriintsolmon- Erdenet – Bulgan Electricity Transmission Comapny engineer

26. Ts.Jamsran
27. O.Khurelbaatar
28. D.Uurtsaikh
29. D.Sambuu
30. Ch.Davaakhuu
Aimag Chief architect
"Avto Road" LLC-director
"Tsagaan sumber" LLC-director
"Avto Road" LLC-accountant
Aimag Health Department PR officer

31. Kh.Kharaanijid -"Humuun" complex teacher
32. N.Narangerel -"Esun zul" LLC - director
33. Ts.Tserendulam -"Tansag trade" LLC - director
34. P.Enkhtaivan -"Hoyor oyu" LLC - director
35. T.Munkhburen -Music and Drama Theatre director

36. R.Suglegmaa -Aimag Government officer

37. D.Altangerel -Aimag Education, Culture and Art Deaprtment officer

38. A.Byambajav -Aimag Tax Office specialist

39. U.Enkhtuya -Aimag Government Crop productiona, food and water officer

40. P.Dorjgotov -Aimag Governor's advisor41. Sh.Ouynchimeg -Deputy Mayor of Tsetserleg city

# Strategy Workshop Participants May 11, 2005

1.P.Enkhtaivan - Director "Hoyor Oyu" company 2.B.Tumenjargal - Director "Naran Taij" Company

3.B.Gantulga - Director "Erdenebulgan hairhan" Company

4.S.Davaanyam - Director Betta design group

5.Ch.Monkhbat
 6.A.Gerelmunkh
 7.Ts.Tserendulam
 Director "Hasu-Mandal" shareholding
 Manager "Esun zul" Company
 Director "Tansag trade" Company

8.U.Enkhtuya - Officer for food and farming Department of Food and Agriculture 9.D.Namjildorj - Governor and mayor Soum/City Government Administration

10.D.Hurelsuh - Assistant to Mayor

11.Ts.Erdenechimeg
 12.G.Ninjee
 13.M.Purevhuu
 14.B.Nerguibaatar
 Leader of the 4th Bag Soum/City Government Administration
 Leader of the 4th Bag Soum/City Government Administration
 Land registrator Soum/City Government Administration

15.M.Shaqdarsuren - Director Secondary school 1

16.S.Sandagdorj - Head of Soum/City Government Administration

17.J.Chagnaadorj - Head of the branch Department of education and culture

18.Ch.Bajiidaasuren - Officer Local Parliament

19.P.Dorjgotov - State Finance and Economy Department Aimag Government Administration

20.A.Dashhorol - Teacher Secondary school 1 21.Dalkhsuren - Deputy head Police department

22.Enkhbold - Construction control inspector Aimag professional Inspection Office

23.T.Badamjunai - Teacher "Humuun" Complex school

24.Jigjidsuren - Book-keeper Department of education and culture

25.S.Shagdarsuren - Officer Department of environment

26.D.Hatanbaatar - Head of Legal Department Aimag Government Administration

27.O.Tsevegjav - Representative National human right committee

28.D.Ariunjargal - Head of Social Department
29.B.Bayasgalan - Journalist Information Centre
30.D.Naranzul - Journalist Information Centre
31.Ch.Jargalsaihan - Head of the branch NIK Company
32.D.Ulziisaihan - Division head Central Hospital

33.U.Enkhtuya - Officer for Food, Water and Crop Production Department of Food and

Agriculture

34.B. Lhagvasuren - State property registration Land Affair

35.A.Byamba-jav - Head of Tax office

36.S.Altai
 Senior accountant Children's organization
 37.G.Munasukh
 Officer Department of Environment
 38.I.Uurtsaih
 Director "Us-Arkhangai" SHC

39.N.Batsaihan - Specialist Centre for education and culture 40.S.Nyamdorj - Director "Undarga - PUSO" Company

41.N.Nyam-osor - Deputy Governor Aimag Government Administration - Department head Aimag Government Administration

43.D.Danaisuren44.H.OrgilerdeneEngineer Road construction Company

# Final Workshop Participants July 6, 2005

1. Mr. Namjildorj City Mayor and Erdenebulgan Soum Governor

2. Mr. Nyamdorj Director, PUSO

3. Mr. Purevdorj Director, Strategy Planning Department

4. Mr. Munkhbat Director, "Hasu-Mandal" LLC

# **Annex B. SWOT Analysis**

At the Visioning Workshop, held on February 18, 2005, participants were asked to identify the city of Tsetserleg's key strengths, weaknesses, opportunities and threats. Numbers in the table indicate the number of times each response was given by participants.

STRENGTHS	WEAKNESSES				
-Beautiful landscape-8	-No significant production and services				
-Infrastructure-7	capable of influencing the city economy-12				
-Geographic location-7	-Infrastructure is not well developed-7				
-Labor resources-7	-City land resources are limited-5				
-Clean water resources-3	-No Master plan present-3				
-Connection to the central power grid-3	-Lack of adequate solid waste management				
-Natural resources-2	system-3				
-Hot thermal spring resources close to the city -	-Lack of initiative among residents-3				
Landadak tha mad badka a ta tha matama	-Unemployment level is high-2				
-Located at the road leading to the western	-High level of air polluiton-1				
aimags -1	-Lack of basic services in ger communities-1				
-Production is on the rise-1	-No survey conducted on water and mineral resources-1				
	-Small population-1				
	-Sman population: 1 -No access to international markets-1				
	-Weak administration and management-1				
OPPORTUNITIES	THREATS				
	-Floods-10				
-Opportunities to develop travel and tourism					
and to serve as center for regional entertainment such as Naadam and other	-Population shrinkage due to out-migration-8 -Natural disasters-6				
festivals-18	-Natural disasters-0 -Soil erosion-5				
-Millennium road will connect city-3 -Opportunities for exploitation of natural	-Ecological changes-4 -Increase in poverty due to lack of jobs -4				
resources -3	- No coal in the aimag-3				
-Turn into a model city of the central region-1	-No possibility for city expansion-2				
- Expansion of production and services -1	-Economic depression-1				
-Dormant water reservoir could be tapped to	-Dependence on the state budget-1				
increase city water supply-1	Dependence on the state budget 1				
-Projects planned by the Government and					
donors -1					
-Thermal springs provide opportunity for					
alternative heat supply for city -1					
arear and adopty for only					

# **Annex C. Project Prioritization**

During the Strategy Workshop held on May 11, 2005, participants were asked to rank each project or program idea according to five criteria in order to systematically prioritize projects. The criteria, chosen from among those used by Ulaanbaatar and other cities in preparation of their City Development Strategies, included:

- 1. Relevance to development policies
- 2. Financial viability and economic returns
- 3. Environmental benefits
- 4. Social benefits
- 5. Implementation capacity

Participants worked in small, thematic groups based on the five strategic initiatives to rank the projects on a scale of 1 to 5 (1=none, 5=significant) for each criteria, and presented the results of their deliberations to the whole group for discussion and verification.

# Strategic Initiative 1: Expand the manufacturing base and encourage the growth of small and medium-sized businesses.

Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1.Develop strategy to strengthen municipal finance and reduce dependence on subsidies given to Arkhangai aimag and Tsetserleg city from the state budget;	4.875	4.375	4.5	4.875	4.375	23
2.Create favorable condition for devlopment of businesses and services;	2.875	2.25	2.6	3	2.875	13.6
3.Establish Tsetserleg as a Free Economic Zone of Khangai region or as the pillar center of Khangai region's development by improving links and cooperation between Western and Central regions;	4.5	4.375	4.25	4.75	4.875	22.75
4. Conduct trainings for business people and launch information center in order to support industrilization and service;	3.25	3	2.875	2.5	2.5	14.125
5.To create favorable condition and decentralization;	3.4	2.6	3.25	3.25	2.9	15.4
6.Support the introduction of cost effective and innovative technologies and equipment and machinery into manufacturing processes;	4.875	4.875	4.75	4.75	5	24.25
7. Develop and establish farming based on green houses and watered plantation in satellite towns of the city;	4.6	4.4	4.6	4.4	4.25	21.25
8. Development of urban farming and orchards for berries and fruit in the city and its satellite towns;	4.75	5	4.5	4.6	4.9	23.7
9.Promote the production development of constuction material and wooden products;	4.875	4.875	4.5	5	5	24.25

Strategic Initiative 2: Improve urban planning, infrastructure and living conditions of ger communities and develop a proper system of land management.

communics and develop a proper system						
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Develop a renewed Master Plan of the city in close synchronization with the City Development Strategy and Land Management Plan;;	5	3.3	3.2	2.7	3.3	17.5
2.To create data base for Land management Master plan and cadastral map	3.5	2.2	3.3	3	3.3	15.3
3.Expansion of city pipelines and assurance of safe network operation;	4.6	3.7	3.2	3.8	3.8	19.1
4. Upgrade the water supply system and connect ger communities to water and sewage systems;	4.5	3.5	4.5	3.5	3.5	19.5
5.Introduction of advanced technology to utilize underground energy sources and hot springs for heating supply;	4.3	3.2	4.7	3.2	3.6	19
6.Build kindergartens, schools and health clinics in ger communities;	4.6	2.8	4	2.7	3	17.3
7.Improve solid waste management;	4.8	2.8	5	3.3	4.2	20.1
8.Improve city road network (pave, install traffic lights and paint signs and markings on the roads);	4.3	3.3	2.5	4	4	18.1
9.Conduct city beautification activies stage by stage (Street lights, light decoration, traffic light, appearance of constructions, water fountain)	4	2.9	2.8	3	2.8	15.5

Strategic Initiative 3: Restore historical, cultural and traditional customs and support the development of travel and tourism.

Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1. Develop traditional and historical handcraft art	3	3.9	3.3	4.1	3.4	17.7
2.Restore existing religious heritages and develop as a centre of Buddism	4.2	3.6	3.7	3	3.1	17.6
3.Broaden and encourage tourism related business initiatives (hotels, restaurants, tour guides, etc);	4.6	4.8	3	4.2	3.9	20.5
4. Develop ad campaign and establish networks for domestic and international tourism (CD, photographs, video);	4.7	4	2.9	3.7	4	19.3
5.Development of a complex for history, culture and customs of the central Khalkh enthic group based on Bulgan Mountain;	4.6	4.2	4	4.1	3.3	20.2
6.Create a web site called "Tsetserleg city-nature, history, customs and culture" and print brochures.	4	3.6	3.4	3.4	3.9	18.3

7.Develop the cultural tourism sector, prepare routes and renovate exhibits: a. Ulaanbaatar-Hushuutsaidam-Kharkhorin-Erdenezuu- Great Empire memorial Tuvkhun monastery; b. Tsetserleg city-Taikhar stone-Bulgan mount-Khavtgai mod-Tariat temple-Tsahir ovoo-Khar uul ruins;	3.7	4.2	4.1	3.7	4.1	19.8
8.Pave the road from Tsetserleg to Kharkhorin;	4	4.6	3.5	4	3.5	19.6

Strategic Initiative 4: Improve human resource development and social welfare services.

Strategie initiative il improve numun reso					1	
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1.Prepare and implement the city strategy for reduction of unemployment and poverty;	4.8	4.7	4.5	5	4.7	23.7
2.Improve the coordination of projects for poverty and unemployment	4.5	4	4.1	4.7	4.2	21.5
3.Improve the quality of the trainings and run a policy on keeping the gender balance of students and pupils;	3	2.7	2.3	3.2	3.5	14.7
4.Improve the leadership capacity and human development;	4.8	4.7	2.8	4.7	4.5	21.5
5. Evaluate the city population and improve social infrastructure to correspond to resident needs;	5	3.5	5	4.9	4.7	23.1
6.Supply central hospital and clinics with modern equipment;	5	4.4	3.2	4.8	4.5	21.9
7.Properly coordinate the number of schools and kindergartens, their capacity in accordance with the population number and density;	4.8	3.5	3.5	4.7	4.5	21
8.Launch family education centers and assist them to sustain;	4.5	4.2	4.3	4.8	4	21.8
9. Prepare and implement a city program for cultural, arts and religious heritage preservation and development;	4.7	4	4.8	4.2	4.3	22
10.Strengthening the material base of specialized training and production centers, colleges and universities and develop and implement a program that meets local demand;	5	4.7	3.5	4.5	4.5	22.2

Strategic Initiative 5. Protect the environment.

Strategic Initiative 5. Protect the environm	ient.					
Projects	Relevance to development policies	Financial validity and economic returns	Environmental benefits	Social benefits	Implementation Capacity	Total
1.Evaluate environmental impacts of urban development;	4.8	4.4	4.6	4.8	4.8	23.4
2.Clean the surrounding environment around the creeks and springs. Define the protection area;	4.2	3.2	4.6	3.8	4.4	20.2
3.Initiate campaign to encourage residents and businesses to reduce air pollution and plant trees collectively;	4.8	3.8	4.4	4.4	4.8	22.2
4.Restore Budist methods on protecting environment and increase the public awareness of it;	2.8	3.2	4.4	3.4	4	17.8
5. Establishment and protection of a green zone, forestation inside the city area and installation of an irrigation system;	5	4	4.6	4.6	4.2	22.4
6.Support existing and newly established tour operators and conduct trainings on environment protection	4	3.2	3.8	3.4	4	18.4
7.Create small recycling plants for recycling solid waste, plastic bags and paper;	5	4.4	4.4	4	4.6	22.4
8.Make changes in coal stove waste disposal management;	3.8	4	4.4	4.4	4.2	20.8
9.Improve the dam operation or build a new one;	4.2	3.8	3.4	3.8	4	19.2
10.Restore a fountain in Buhbilegt's garden;	4	3	3.7	4	3.5	18.2
11.Bring city roads to order;	5	4	3.7	4.5	4.2	21.4
12. Give the surrounding area land of Bulgan mountain for ownership to residents.	4.25	4	4.5	4.25	4	21

Annex D. Tsetserleg City Profile



# **City Development Strategies for Mongolia's Secondary Cities**

# **Tsetserleg City Profile**

# Current population status

### Arkhangai aimag

# Territory - 55,000 km<sup>2</sup> Total 19 soums - 24,672 households - 94,629 people

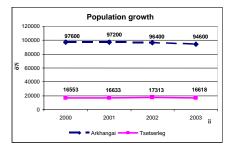
Tsetserleg city

There are 6 baghs in Tsetserleg city (Erdenebulgan soum).

- The city has 16,618 residents, or:
  - 0.7% of the Mongolian population; - 3.0% of the regional population; and
  - 17.6% of the aimag population.
- There are 3,869 households, or:
- 0.7% of Mongolian households; - 2.7% of regional households; and
- 15.2% of aimag households.

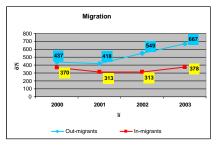


# Migration



Populations of **Arkhangai** aimag, **Erdenebulgan** soum and **Tsetserleg** city decreased by **2.1** percent, **0.6** percent and **4.2** percent respectively between 2002 and 2003.

There are 4.3 members in the average family.



Out-migrants outnumber in-migrants; and the number of out-migrants has increased since 2001 at an annual average rate of about 20 percent.

### Social infrastructure

	Actual Capacity	Required Capacity	Percent of Demand Met
Schools (no. of students)	5835	6483	90.0
Kindergartens ( no. of children)	833	1830	45.5
Hospitals (no. of beds)	275	345	79.7

Name of College	Number of students
Gurvan Tamir University	174
The Pedagogical College	760
Arkhangai IT University	160
Bulgan University	76
The Professional Training Center	403
Total	1573







# Housing

Only 8.0 percent of the population lives in apartments with access to utility services and the remainder-92 percentlives in gers areas.

Some 1,674 people in 372 households live in apartments, while 6,344 people in 1,236 households live in gers and 8,600 people in 2,261 households live in singlefamily dwellings in Tsetserleg.

There are 126 privatized plots within the city.

Additionally, 1,210 people in 326 households—mainly herder families-live in areas surrounding the city within Jargalant soum.







6%

1%

0%

# **City Development Strategies For Mongolia's Secondary Cities**

# **Tsetserleg City Profile**

# **Economy**

Arkhangai Aimag GDP by sector, 2003

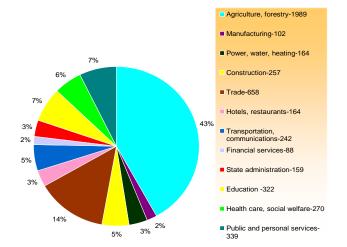
Agriculture, hunting, forestry-16023,2 Fishing-13.6 1% ■ Processing factories-150.4 3% Power, heating and water supply-125,1 3% Construction-300,2 Wholesale and retail industry, home appliance repair-1368,9 3% Hotels and restaurants-74.6 Transportation, storage, communications-433,8

70%

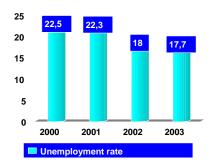
Financial activities-650,4 Business activities-120,8

State administration, defense-758.5 ■ Education 1720.3

■ Health care, social welfare 754,0 ■ Public and personal services -158,6 Arkhangai Aimag Employment by Sectors, 2003



# Unemployment and poverty

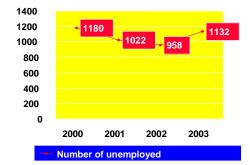


unemployment rate Erdenebulgan soum is 17.7 percent which is 4.8 percent less than it was in 2000.

In 2003, there were 2,210 households and 9,706 residents living below the poverty line of 22,800 MNT Arkhangai region. Some residents in 987 households were extremely poor.

The average income of a Tsetserleg city household is 123,020 MNT, while the average expenditure is 120,091 MNT; which is less than the national average by 10 to 20 percent.

In 2003, there were 10,395 working age people. Of these, 4,754—or 45.7% were employed. This ratio has stayed approximately the same for the last 3 years.



#### **Poverty**

	Poor		Extremely	Poor	
	households	people	households	people	
	2123	8916	1100	4458	
2000	Pover	ty line	13,800 MNT		
	2695	12178	1141	5240	
2001	Pover	ty line	18,600 MNT		
2002	2592 11937		1084	4958	
	Pover	ty line	19,100 MNT		
	2210	9706	987	4466	
2003			22,80	0	

As can be seen from the table to the left, as the national poverty line has been increased annually, the number of the poor and very poor increased as well in 2000 and 2001; it is assumed that reduction of this number in 2002 and 2003 was due to unemployment rate decline, population loss and growing sales.

The city's economic growth, which was behind the national growth rate has been leveling with it in recent years.



# City Development Strategies for Mongolia's **Secondary Cities**

# **Tsetserleg City Profile**

### Infrastructure

# Utility service infrastructure

### Roads and transportation



Tsetserleg city is 490 km away from Ulaanbaatar. About 360 km of roads from Ulaanbaatar to Kharkhorin are paved and the remaining 130 km to Tsetserleg are earthen tracks. There is no air route. Intercity transportation and public transportation within the city is conducted by private buses, vans and taxis.

#### Power Supply

The power grid of the city was connected to the central power grid in 1987. There are 36 substations, 45 km of cable lines and 3,600 users, 2,400 of them are in ger communities.

The city power distribution network is divided mainly into two parts: ger community network and downtown network.

#### Improvement Plans

	Required jobs	Implementing Agency		Obstacles				
1	Decrease losses in 0.4kWt line	Local government		Local government		Local government		
2	Replace the wooden legs of 0.4kWt lines with concrete legs	Local government				No financing for purchase of legs and cables		
3	Change 0.4kWt lines to insulated cables	Donor assistance		No financing				
4	Add low power transformers in ger communities (18 – 20 pcs)	Donor assistance		Donor assistance		Facing financing and resource difficulties		
5	Renovate some parts of ger community cable networks		Need to locate u	users				

Source: Erdenet and Bulgan Electricity Distribution System Joint Venture, Arkhangai Branch, Introduction

#### Water Supply

A PUSO company - Undraga LLC is responsible for Tsetserleg city water supply and sewage systems.

The central sewage and water supply systems of Tsetserleg city began operating in 1987 and 2000 respectively.

Government agencies, public, cultural and service organizations, enterprises, apartment buildings are all supplied with water via the central water supply system.

There are 9 water distribution points in ger communities, none of which are connected to the central system or water tanks, but they are supplied with water by two trucks.

#### Heating Supply

The heating supply facility of Tsetserleg city is privately owned.

Eight small, manually-operated boilers supply hot water once a week to end-users on a schedule, in addition to supplying heating.

There are 45 users, 17 of them are apartment buildings.

Due to out-dated technologies and aged pipelines there is not sufficient heating; because of this and of high costs some users acquire independent heating and hot water sources.

#### **Improvement Plans**

Completely replace the heating supply network;

Replace the existing boilers with boilers that meet the national standards or exceed them;

Completely refurbish the existing hot water supply network and supply hot water on a daily basis:

Extend lifetimes of boilers and network lines by using simple water mitigating equipment.



### Sewage System

The central sewage network of Tsetserleg city was commissioned in 1987; it drives wastewater through pumping stations to two filtering fields. The majority of city businesses and state budget organizations are connected to the network.

#### Sewage Treatment Plant

Although the construction of a biological treatment facility capable of processing 2700 m<sup>3</sup> of wastewater daily began in 1989 and was completed in 1995, it was never put into operation because water tests were not conducted.

Now it requires rehabilitation because it has not been used for 10 years.

#### **Improvement Plans**

Build an extra well at the water source;

Fully upgrade machinery and technologies of the two existing wells:

Repair and put into operation the water tank at Khalzan 2x1000m3 water tanks which is not being used;

Connect some of the ger community water distribution points closest to the city network to it;

Repair the water supply network of the city and replace nearly 5 km pipelines;

Upgrade the pumping stations pump wastewater to the sewage plant.



# City Development Strategies for Mongolia's Secondary Cities

# Tsetserleg city profile

### Land management

80 70

#### Classification of Erdenebulgan soum land

N	Classification	Hectares
1	Agricultural lands	29480.7
2	Cities, towns and other settlements	1735
3	Roads and network	221
4	Water tanks	1.6
5	Forest reserves	22169
	Total	53607.3

# 

Land ownership by bagh

The city administration issues "long-term lease" land certificates for 15-60 year periods; In total, 2,389 individual households, 204 commercial enterprises and 36 state organizations hold these certificates. Since passage of the Land Privatization Law in 2001, 126 individual households have privatized their land for residential use.

#### **Land Certificates**

	N	Specification	Plo	ts	Crop fields		
			Number	Hectare	Number	Hectare	
	1	Individual	2515	125	269	44,5	
	2	Commercial Enterprise/State Organization	240	74	23	33,5	



#### Human impact on the environment

Air pollution increases heavily during the cold season because there is not a sufficient central heating system in the city.

A significant amount of forest land around the city, such as Bulgan Mountain, Khavtgai mod, shores of Tamir River, Bayanbulag, Urt bulag and Ongon, has been destroyed in the last 3 years due to the use of trees for commercial and household fuel purposes, wild fires, harmful insects and tree infections, climate change and use of the land for livestock pastures.



### Nature and Environment



As a result of deforestation near springs and streams, the flow of Jamgan spring and Gants mod spring decreased and Avkhain spring dried out altogether.

### Solid waste

There are ten unauthorized and one authorized dump site in Tsetserleg city.

Because the authorized dump site is located far from the city (7 km), non-authorized dumping sites are frequently created inside and outside the city.

Therefore, it is necessary to maintain the city dump site, conduct training and public awareness campaigns amongst citizens and enterprises, create points for collection of recyclable items and find financial resources to improve the overall solid waste management system.



# **Response to World Bank Comments on the Draft Final Report**

The World Bank review of the Draft Final Report brought to light four main observations and recommendations about the CDS-2 effort for consideration in attempting to strengthen the implementation of recommended actions and/or to improve the design of future CDS activities. While fully endorsing the accomplishments of CDS-2, the World Bank also suggested that more attention be paid to:

- Thematic and cross-cutting analysis and presentation;
- Economic and urban spatial analysis as a means to place CDS cities within a larger urban dynamic based on the likely evolution of their roles and functions;
- Issues related to macro economic conditions, intergovernmental finance and municipal finance; and
- Clearly defined selection criteria for priority projects.

All of these suggestions are well appreciated and can be addressed, at least in part, as follows.

### 1 Thematic and Cross Cutting Analysis and Presentation

The overarching objective of the CDS-2 Project was for each participating city to prepare its own City Development Strategy based on the determination of conditions and priorities through broad-based, participatory planning. The Draft Final Report was organized by city and translated into Mongolian in order to provide separate working documents for each city. This format allowed individual sections of the report to be reproduced and distributed to participating working group members, local decision makers, other stakeholders and interested investors. The presentation of separate strategy documents in the Mongolian language for each city was considered essential in order to: 1) solidify local ownership of the participatory planning process; 2) educate city decision makers about their city and the use of a state-of-the-art planning approach to guide its future development, and 3) adequately reflect the efforts put forth by CDS-2 participants in each city. Such a locally oriented attitude towards the CDS approach has been instrumental in achieving its success throughout the world.

Participatory, strategic planning is a new concept in Mongolia and potentially an effective and affordable planning method for smaller cities that lack the financial and technical resources to elaborate traditional Master Plans. The value of the CDS process is to have a simple methodology and professionally sound planning approach for each city to develop and call its own. The acceptance and adoption of the CDS approach by a wide range of stakeholders in each city was a primary goal and a key factor for success. Armed with the resulting CDS documents, each city can now develop the necessary financing and implementation strategies for its priority projects and programs.

A simple comparative matrix for the five CDS-2 cities based on themes suggested in the World Bank comments is presented in the following Table. The themes for each city are described in relation to those for the other cities and provide a comparative image of local conditions for CDS implementation.

City	Decentralization	Service Provision	Capacity Development	Poverty	Accountability
Erdenet	While responsibilities have devolved to the local level, resources remain under central government control. Local government has limited authority to secure and mobilize financial resources and lacks administrative skills to carry out functions.	Infrastructure networks are on the whole better than in all other CDS cities. Infrastructure was cited as key strength at Visioning Workshop and 71% of the population (those living in apartments) have access to piped water, sanitation and heating.	Current activities to build local capacity include the USAID Ger Initiative which is building capacity of small and medium enterprises in ger areas. Local government requires decision-making and resource mobilization support.	24,482 residents in 6,156 households or about 31% of Erdenet's total population was living below the Khangai region poverty line of 20,600 MNT in 2003.	Formalized mechanisms for maintaining local government accountability are lacking.
Darkhan	While responsibilities have devolved to the local level, resources remain under central government control. Local government has limited authority to secure and mobilize financial resources and lacks administrative skills to carry out functions.	Infrastructure networks are better than in most aimag centers. 62.6% of the population (those living in apartments) have access to piped water, sanitation and heating.	Current activities to build local capacity include the USAID Ger Initiative which is building capacity of SMEs in ger areas and the ADB Housing Sector Finance Project which is supporting the development of a CBO in Bagh 7. Local government requires decisionmaking and resource mobilization support.	About 30 percent of Darkhan's total population, or approximately 22,000 residents were living below the Central region poverty line of 20,600 MNT in 2003.	Formalized mechanisms for maintaining local government accountability are lacking.
Tsetserleg	While responsibilities have devolved to the local level, resources remain under central government control. Local government has limited authority to secure and mobilize financial resources and lacks administrative skills to carry out functions.	Infrastructure networks are poorly developed and have not been maintained. Only 8% of the population lives in apartments with access to piped water, sanitation and heating.	Current activities to build local capacity include the ADB "Eight Towns" Project, which is strengthening the PUSO to improve service delivery. Local government requires decisionmaking and resource mobilization support.	9,706 residents in 2,210 households or about 58 % of Tsetserleg's total population were living below the Arkhangai region poverty line of 22,800 MNT in 2003.	Formalized mechanisms for maintaining local government accountability are lacking.
Khovd	While responsibilities have devolved to the local level, resources remain under central government control. Local government has limited authority to secure and mobilize financial resources and lacks administrative skills to carry out functions.	Infrastructure networks are deteriorating and 10.7% of residents live in apartments with access to piped water, sanitation and heating.	There are currently no ongoing capacity building activities in the urban sector. Previously, the ADB Western Aimags project assistance to build capacity of the PUSO to improve service delivery. Local government requires decisionmaking and resource mobilization support.	Almost 90% of the population lives without basic services, which is a meaningful indicator of poverty in Khovd. Moreover, less than half (about 43%) of the working age population was formally employed in 2003.	Formalized mechanisms for maintaining local government accountability are lacking.
Choibalsan	While responsibilities have devolved to the local level, resources remain under central	Infrastructure networks are in fairly good condition compared to other	Current activities to build local capacity include the ADB "Eight Towns"	16,700 residents in 3,868 households or about 46% of Choibalsan's total	Formalized mechanisms for maintaining local government

government control.	aimag centers, but	which is	population were	accountability are
Local government	only 44.5% of the	strengthening the	living below the	lacking.
has limited authority	population lives in	PUSO to improve	Eastern regional	
to secure and	apartments with	service delivery.	poverty line of 23,800	
mobilize financial	access to piped water,	Local government	MNT.	
resources and lacks	sanitation and	requires decision-		
administrative skills	heating.	making and resource		
to carry out		mobilization support.		
functions.				

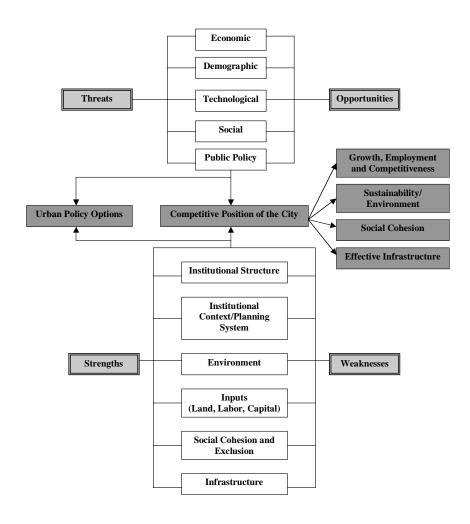
### **2** Economic and Urban Spatial Analysis

A more detailed economic and urban spatial analysis of the five CDS-2 cities would have been useful in developing the five city profiles during the early stages of the project. All the cities except Tsetserleg are pillar cities within the Government's new approach to regional organization and development. The effort to obtain the necessary data to accomplish such a more detailed analysis, however, would have been substantial. The level of effort and scope of work in the Project Terms of Reference, as well as the work plan in PADCO's proposal and Inception Report, emphasized the need to maximize local community participation for each of the five CDS-2 cities in order to gather their inputs and to create a sense of local ownership of the process. It was understood that the CDS effort, in a former centralized planning country such as Mongolia, should focus more on changing planning attitudes and processes than on the depth of detail in the analysis results. The objective was to provide each city with an adequate level of decision-making data to help them set out reasonable development strategies for the near future. The intention was to involve participants in the planning process to the greatest possible extent, to build knowledge and understanding about strategic planning and the value of citizen participation and to instill a sense of ownership over the end product that would lead to implementation. The CDS process was very much a bottom-up, locally driven planning process.

As a result, greater emphasis was given to stakeholder input through interactive workshops in which participant's views were openly shared, discussed and validated. SWOT analysis proved to be particularly effective and relevant as a participatory, and ultimately, analytical tool. Most of all, it allowed for the expansion and incorporation of the local knowledge base into the analysis and planning process. Particular efforts were made to involve members of the local business community in the process, whose contributions helped to shape the strategy around private sector concerns and aspirations. The incorporation of the private sector into the planning process was considered to be essential as Mongolia continues to develop a market economy.

Although the SWOT analyses conducted in each of the cities generated a considerable amount of enthusiasm and participation, they could have been better structured to produce specific comparative results. As shown in the following figure, these results could have centered around five main, external drivers for change (i.e. economic, social, technological, and public policy). These drivers of change give rise to threats and opportunities that affect the competitive position of the city, including its economic performance, labor market performance, cohesiveness and sustainability. The inherent strengths and weaknesses in each city's industry and economic activity, its institutional and policy structure, the availability, quality and cost of productive inputs, the business and social infrastructure and the degree of social cohesion and exclusion condition the extent to which threats are effectively resisted or overcome and opportunities exploited.

**Example of a SWOT Analysis Framework** 



Source: PACED (1999)

CDS-2 project design called for the initial planning focus to be given to Erdenet and Darkhan and for their CDSs to be completed. The CDSs for Tsetserleg, Khovd and Choibalsan were to be started and then completed using other resources. By working closely with the MAUC and all five cities from the start of the project, all five CDS documents were completed, based on the participatory approach.

## 3 Macro Economic Conditions, Intergovernmental Finance and Municipal Finance

Cities in Mongolia are almost completely dependent on central government transfers. These transfers average from 80 to 90 percent of the budgets for CDS cities except for Erdenet. Since 2003, four types of local taxes, at a minimum, are remitted to the state: personal income tax, corporate income tax, VAT and excise tax. Additionally, "other taxes" are also remitted. In most cases, these other taxes are not significant; however, in the case of Erdenet, this amount totals 3,472.2 million MNT, due in large part to the taxes collected from the Copper Mine. The total remittances for each type are shown in the following table. In 2003, this amount varied significantly

among the five cities, from a low of 19.6 million MNT in Khovd, to a high of 3634.6 million MNT in Erdenet. The remittances amounted to between 47.9 percent and 75.6 percent of total local revenues.

Proceeds from the four main taxes are reallocated to the aimags according to the new budgeting process, with the VAT depending on population size. The central funds returned to the local budgets come from two sources:

- State transfers, which cover local expenditures; and
- State budget expenditures of Portfolio Ministries, which cover the local expenses related to their associated budget organizations.

These figures are also highlighted in the following table. The ratio of "local funds remitted" to "central funds returned" ranges from a high of .70 in Erdenet to .01 in Khovd, where just 19.6 million MNT are sent from local revenues to the state and 3395.2 million MNT are returned.

The city budgets are not projected to shift over time along strategic priorities. This is one of the key bottlenecks identified through the CDS process, and one that is cited as a main priority to be addressed in each city's strategy. Local governments are not able to fund capital improvements from their own budgets, making them unable to plan for or implement any proposed infrastructure investments. Both policy reforms and technical assistance are required to enable resource mobilization at the local level.

### 4 Clear Selection Criteria

The project selection criteria used for this project were those that have been used and tested as part of the Cities Alliance CDS methodologies. They included:

- Relevance to development policies;
- Financial viability and economic returns;
- Environmental benefits:
- Social benefits: and
- Implementation capacity.

The selection process was intended to be participatory in nature, and therefore criteria used had to be comprehensible by the stakeholders involved. The criteria were designed to allow the city participants, rather than the consultants, to define their priorities. Other criteria, such as those suggested by the World Bank comments, could also be used, but they must be able to distinguish among projects within a particular city. In the case of CDS, financing for projects is not guaranteed nor will a single source of funds be able to finance all proposed projects. Once again, the value of the CDS approach is that it enables local decision makers to engage city participants in the critical thinking about tradeoffs.

	Tsetserleg	Khovd	Choibalsan		Darkhan
LOCAL BUDGET REVENUE	2003 Actual	2003 Actual	2003 Actual	2003 Actual	2003 Actual
. TOTAL REVENUE	32.0	40.9	233.9	,	1,318.0
CURRENT REVENUE	32.0	40.9	193.0	4,810.1	1,318.0
TAX REVENUE	24.1	37.7	165.8	4,694.4	1,130.5
Income Tax	21.1	11.5	34.4	59.8	60.
Personal income tax	21.1	11.5 0.0	34.4	59.8	60.1
Income tax of economic entities and organization			0.0	0.0	0.0
Property Tax Product and services tax	0.6	1.6 16.6	4.3 43.3	932.2 230.2	244.5 398.5
VAT	0.0	0.0	0.0	102.6	296.
Excise tax	0.0	0.0	0.0	0.0	0.
Transport and vehicle tax	0.0	16.6	43.3	127.6	102.
Other taxes	2.4	8.1	83.7	3,472.2	427.
Nontax revenues	7.9	3.1	27.2	115.8	188.
Capital revenue	0.0	0.0	40.8	0.0	0.
Sales revenue of state property	0.0	0.0	40.8	0.0	0.
Privatization revenue	0.0	0.0		0.0	0.
TOTAL REVENUE (except privatization)	32.0	40.9	233.9	4,810.1	1,318.
Total Local Revenue Remitted to State	23.4	19.6	118.2	3,634.6	784.
Percent of Total Local Revenue Remitted to State	73.4%	47.9%	50.5%	75.6%	59.5%
LOCAL BUDGET EXPENDITURE					
					4.00
I. TOTAL EXPENSES	73.8	337.4	223.4	1,563.4	1,065
CURRENT EXPENSES	73.8	245.8	153.0	812.0	900.
Output - Service Expense Payroll and premium	71.5	243.9	152.7	789.2	887
, ,	21.1	51.7 13.6	37.5 9.8	129.2 34.9	225.
Social insurance expense	5.6 44.9		105.4	625.1	55.
Other output expense Subsidy and Current Transfers	2.2	178.6 <b>2.0</b>	0.3	22.8	606 <b>13</b>
Electricity subsidy	2.2	2.0	0.3	22.0	13.
Public transportation subsidy					
Other subsidies and transfers					
Transfers to households	2.2	2.0	0.3	22.8	13.
Capital Expenditure	0.0	91.6	70.5	751.3	164
Domestic investment	0.0	91.6	70.5	491.5	129.
Budget investment	0.0	16.0	13.0	297.3	0.
Road Fund investment					
Own source investment					
Local investment, rehabilitation					
Local road foundation investment	0.0	75.6	57.5	194.2	129
Food fund for livestock	0.0	0.0	0.0		0.
Expenditure for planting trees	0.0	0.0	0.0		
Capital transfer	0.0	0.0	0.0	259.8	35
Budget organization rehabilitation	0.0	0.0	0.0	259.8	35.
FUNDS TO FINANCE EXPENDITURE:	70.0	337.4	223.4	1,599.5	1,070
Road fund	0.0	0.0	57.5	0.0	0
Health insurance fund	0.0	0.0	0.0	0.0	0
Operating revenue	7.2	3.6	0.0	1.6	35
Revenue from other activities	0.0	0.0	0.2	0.0	7
Budget (local budget and state transfers)	62.9		165.7	1,597.9	1,027
Local Budget Revenue	8.5	21.3	115.7	1,175.5	534
State Transfers for local expenses	54.3	312.5	50.0	422.4	493
STATE BUDGET EXPENDITURE OF PORTFOLIO MIN				4=	
II. TOTAL EXPENSES	778.5	_	1,451.3		6,923
TOTAL CURRENT EXPENSES	778.5	2,933.8	1,438.7	4,704.6	6,796
Capital Expenses	0.0		12.6	90.2	127
FUNDS TO FINANCE EXPENDITURE:	778.5	3,082.6	1,451.3	<b>4,795.2</b>	7,052
Health Insurance	7.5	319.3	0.0	396.1	497
Operating revenue	0.0	124.6	53.7	113.5	952
Revenue from other activities	32.0		13.3	70.3	175
Public education fund	730.0	0.0	0.0	0.0	370
Budget V. TOTAL STATE AND LOCAL BUDGET	739.0	2,638.7	1,384.3	4,215.3	5,056
EXPENDITURE DISBURSED FOR LOCAL (II+III)	852.3	3,420.0	1,674.7	6,358.2	7,988
		3,379.1	1,440.8	1,548.0	6,670
	820.4				
V. TOTAL EXPENDITURE FINANCED BY STATE BUDGET FOR LOCAL (IV-I) PERCENT OF EXPENSES FINANCED BY STATE		000/	0007	0.407	000
BUDGET FOR LOCAL (IV-I) PERCENT OF EXPENSES FINANCED BY STATE BUDGET (V/IV)	96%	99%	86%	24%	839
BUDGET FOR LOCAL (IV-I) PERCENT OF EXPENSES FINANCED BY STATE BUDGET (V/IV) Total State Funds Returned to Local Government	96% 832.8	3,395.2	1,501.3	5,217.7	7,545
BUDGET FOR LOCAL (IV-I) PERCENT OF EXPENSES FINANCED BY STATE BUDGET (V/IV)	96%				