

## EXECUTIVE SUMMARY (SUMMARY CEA)

### Building on Past Involvement

Preparation of a new Country Strategy and Program (CSP) should be backed by knowledge and experience of ADB's past support for Mongolia's environmental management, broadly defined. Its main phases and components have been the following:

- (i) Initial emphasis on stand-alone technical assistance
  - EIA procedures and capacity building in the Ministry of Nature and Environment (MNE), advisory assistance on several aspects of energy efficiency
- (ii) Early lending with significant environmental content
  - Power sector (energy conservation, power rehabilitation, heat rehabilitation), roads development (Road Master Plan, roads upgrading).
- (iii) Environmental elements of program lending
  - Agriculture Sector Program (emerging topics of pasture degradation, land use reform, environmental impacts of agriculture privatization).
- (iv) Environment and natural resource management (ENRM) activities at the turn of the decade
  - Upgrading of provincial urban towns and environmental services, continued support to land use reforms, Agriculture Sector Development Program and its environment-related elements.
- (v) Recent technical assistance and regional ENRM initiatives
  - Renewable Energy Development in Small Towns and Rural Areas, PREGA, Control of dust storms.
- (vi) Recent poverty alleviation and environment activities
  - Improving living environment in the poor *gher* areas of Mongolia's cities.

### Main Developments Since 2001

Environmental management in Mongolia and ADB's role were extensively reviewed in 2001, and again in 2002 as a component of Country Assistance Program Assessment (CAPE). The 2001 review formulated an approach to ADB future involvement in Mongolia that maximizes positive environmental impacts through integrating environmental considerations into mainstream development activities. This broad approach remains valid. More specific recommendations made this time reflect changes that have taken place during the last two years.

The new institutional developments include (i) strengthened policy role of Ministry of Nature and Environment (MNE), (ii) improved environmental governance (de-linking of compliance activities from MNE, improved MNE internal structure), (iii) legislative amendments targeting land, water, solid waste, and natural resource management, (iv) more active inter-sectoral consultation, and (v) improved structure of land management (unification of land administration in a single agency). Few doubt the Government's genuine concern about

continued pressures on the environment and a desire to apply effective remedies and safeguards.

The developments under principal areas of environmental concern have been the following:

(i) **Pasture degradation, desertification, deforestation**

- A viable model (UNDP/GTZ/others) built around herder groups, income diversification options and wells-rehabilitation is emerging. Policies are finally being harmonized but more patient work is needed. Some conflicts with the provisions of the Mining Law have emerged. At the same time, deforestation continues. Policy for forest management outside protected areas is weak and actual forest management is weaker still. There is no agreed approach on dealing with illegal forest output (two thirds of the total).

(ii) **Water**

- New water policy makes river basins the focus of management. The policy seeks to increase the use of surface water relative to groundwater. The implications of the policy for irrigation rehabilitation, hydro-power development and nature conservation have not been fully explored. Institutional capacity to implement the new policy is weak.

(iii) **Urban Environmental Management, Industrial Pollution Control**

- Ulaanbaatar continues to attract migrants. The capital's population now exceeds 800,000 and the demands for urban infrastructure, especially water and solid waste management in suburban areas, multiply. Huge differences in water use between apartment dwellers and the rest persist. Water pricing and cost recovery need continuous attention. Significant amount of preparatory work has been undertaken on new approaches to wastewater management but implementation continues to lag behind. Vehicular pollution in the capital is increasing, and the use of unleaded gasoline is cause for concern. Industrial and investment policy containing environmental incentives may be needed. Development and application of sectoral EIA guidelines is underway.

(iv) **Energy and Climate Change**

- While the main thermal energy segment is still "digesting" de-regulation and struggling with cost recovery, increased donor support has been given to renewable energy and decentralized energy. Few generalizations have emerged so far about the right model (models) to be applied country-wide and the most appropriate role for the Government. Fuelwood is wrongly being omitted from renewable energy debate. The economic case for hydro- and mini-hydro power would merit a review and hydro-power projects need to be integrated with the new water policy. Mongolia has not yet ratified the Kyoto Protocol and this has slowed down the preparations for tapping the Clean Development Mechanism (CDM) to tackle local energy inefficiency.

(v) **Mining**

- The industrial mining sector has further gained in prominence. The new Minerals Law is considered sound (despite some conflicts with other laws) and conducive to further expansion of exploration and production. Rehabilitation of mining areas and conditions of mine tailings are the principal environmental concerns. A new and rapid expansion of poorly regulated or unregulated small-scale gold mining has taken place in the last few years. Over 100,000 people are now involved, changing the dynamics of rural employment and patterns of settlements. Environmentally benign production methods in placer area co-exist with highly damaging methods of extracting gold (using mercury) used in hard-rock mining, making this a major public health issue.

(vi) **Environment and Public Health**

- Greater recognition should be given to the work of the Ministry of Health on environmental health impacts, sanitation, and urban issues. A less opportunistic interpretation is needed by donors and sectoral interests of existing public health data in support of various environmental initiatives. Among MOH's priorities are back-up power systems for *soum* hospitals, safe disposal of hospital waste, and consideration of health impacts in EIAs.

The Ministry of Nature and Environment has increased its profile recently but it faces a number of challenges. Centralization of all GEF-related activities in MNE has added to the Ministry's coordination workload as most GEF activities are strongly cross-cutting in nature. Several key policies not to be better developed and articulated (e.g. forests). Some National Action Plans need to gain more support outside MNE. Greater role given to MNE in water and land management is well ahead of its institutional capacity, especially at the local level.

Environment *is* being "mainstreamed" in Mongolia. The principal mechanisms used to facilitate cross-sectoral co-ordination are the National Council for Sustainable Development (NCSD), National Coordination Committees (for most natural resources, land reform, public health, and all international environmental conventions, etc.), and *ad hoc* working groups. The Committees are headed by different ministries (MNE, MFA, MOH) according to the underlying concern. The effectiveness of the Committees varies, their work often stopping short of substantive policy issues. Main integration challenges remain in industrial pollution control, urban environmental issues, and energy. The National Council for Sustainable Development has played a major and positive public awareness role but has rarely gone beyond a generalized support of sustainable development (SD) rather than promoting any tightly-argued version of SD. Areas of persisting weakness across the whole spectrum of environmental concerns include legislative drafting and weak economic content of policies.

Donor funding continues to underwrite a substantial portion of MNE's and other ministries' "upstream" activities as well as much of MNE field activities in protected areas. The knowledge of the flow of resources into Mongolia's "environment" is incomplete, the funding by international NGOs the least well documented. Greater disclosure of financial information would be a plus. Financing of local environmental management continues to be poorly understood and a review (and probably a reform) of existing natural resource taxation supported by economic analysis could improve environmental outcomes.

Despite absence of a donor thematic or working group on environment, donor and

international finance institutions' coordination has improved of late, in particular in rural development, Ulaanbaatar City development and integrated river basin management. Calls for closer donor coordination in the aftermath of the 2003 Consultative Group Meeting are beginning to run into capacity and time constraints on the *donors'* side. To this day, there is no reliable information clearance mechanism in Mongolia that could say who is doing what, by environmental themes. For that to happen, more than desk- and internet-based work is needed.

## **Recommended ADB Strategy**

The overall ADB's support to environmental management in Mongolia should retain the broad direction recommended in 2001, with only some modifications. That means that ADB should favor an integrated approach to environmental problems rather than stand-alone interventions. Environmental improvements as a by-product of income generating activities should be the preferred directions of assistance. Environmental safeguards accompanying job and income creation should also have a place in ADB's strategy. The recommended approach calls for attention to cross-sector coherence and greater use of existing national coordination mechanisms.

There are good possibilities to address environmental concerns through a combination of lending and technical assistance. In both cases, ADB should actively seek bilateral or GEF co-financing. Such co-financing should be based on the meeting of minds, not merely on administrative and financial convenience.

## **Potential Areas of Involvement**

The following are environment-related activities most suitable for consideration during CSP formulation. They are organized by themes first, and assistance modality (loan or AOTA), second.

### Theme 1: Environment Management Capacity

*Improved financing of local environmental management* (AOTA, largely unchanged from the same proposal made in 2001).

In Mongolia, local environmental management depends on resource-related fees. At present, these are under-priced or unpriced. Better resource valuation could increase the amount of resources potentially available to local authorities for environmental management. The ramifications of PSFML for local environmental budgets are yet to be explored. There are a number of related specific concerns: Policies on eco-tourism and hunting are currently not supported by hard data about the revenues generated, subsequent use of the revenues and the economic costs and benefits of these activities. Choices involving grazing, mining, eco-tourism and hunting need to be better informed by appropriate economic valuation of each of these conflicting or complementary options. Here, Mongolia has yet to emulate work done in a number of other eco-tourism and hunting-dependent economies.

### Theme 2: Urban Environmental Concerns

2.1 Implementation of wastewater management strategy in Ulaanbaatar City (PPTA and a loan).

Considerable amount of preparatory work on wastewater management along the Tuul (the

recipient of all discharges from Ulaanbaatar) has been completed with bi-lateral funding. New wastewater discharge policy and legislation are being readied. Implementation has been slow and piecemeal. In the meantime, operations of several dozens of small-scale tanneries in the city are creating serious environmental problems. These industries match Mongolia's comparative advantage yet they are among the most polluting anywhere. Offering the existing and prospective tanneries the option to relocate to an industrial estate equipped with a pre-treatment facility could dramatically improve the industry's prospects *and* the pattern of pollution in the Tuul river. ADB's assistance could demonstrate the effectiveness of combining incentive-with enforcement approaches to environmental management and drive "green" industry promotion policies. Opportunities exist to extend the scope of the project to municipal wastewater treatment, either in areas already connected to centralized treatment plants or in *gher* areas not yet connected to the centralized network.

## 2.2 Formulation of strategy on phasing out of leaded gasoline (AOTA)

Using successful examples from other DMCs, the assistance would generate a menu of existing options for phasing out leaded gasoline together with their likely cost. With Russia being the principal source of automotive fuels at present and refinery modifications in Russia possibly the least cost option, the conduct of such a project may either have to await Russia's membership in ADB or require a pattern of co-financing (e.g. with UN ECE, UN ESCAP) that overcomes the current procedural obstacles to implementing the project in part outside the ADB procurement area.

## 2.3 Solid and hazardous waste management in Ulaanbaatar (PPTA and a loan)

The unsatisfactory state of solid waste disposal in Mongolia's capital is well known as is the absence of any facilities for hazardous (e.g. hospital) waste treatment/disposal. Besides the day-to-day operations and the functioning of the truck fleet, the problem extends to unsafe, inappropriately located and inadequate principal disposal sites. New, environmentally safe, disposal site(s) need to be created, together with a hazardous waste treatment facility. Construction of such facilities would be an opportunity for introducing improved mechanisms of waste disposal financing.

## Theme 3: Mining-related Issues

*Environmental, health and social safeguards in small-scale mining* (AOTA or PPTA plus loan with bilateral co-financing and/or JFPR component)

Use of mercury by a segment of the mushrooming informal small-scale gold mining sector in the last few years has created a major public health hazard (threat of the "Minamata disease"). Nevertheless, small-scale gold mining has become something of a savior of the rural economy and a poverty escape route recently. Its environmentally less damaging segment (placer mining) needs light-hand regulation and government support (e.g. delivery of social services closer to the mining areas). The environmentally damaging segment (hard-rock mining) should be phased out and the existing practitioners re-directed towards placer areas. This process is likely to be gradual and health monitoring is needed in all areas affected. Rules and mechanisms of co-existence between the small-scale miners and industrial operators are badly needed as is development of environmental safeguards to small-scale mining operations.

## Theme 4: Water Management

### 4.1 Strengthening of capacity for water management (AOTA)

The new government water policy is structured around integrated river basin management. This management approach is new in Mongolia and little or no experience with its application exists. Development of policy details and regulations is needed as is training of government staff at both central and river basin level.

### 4.2 Irrigation and water conservation

Attempts to rehabilitate portions of the old irrigation network were sporadic during the last decade and frustrated by the continuing uncertainty about the ownership structure of the former state farms. More recently, that structure has become clearer and the new land legislation has created conditions under which rehabilitation of parts of the former irrigation network could be viable. There is a greater willingness on the part of MFA to approach irrigation rehabilitation in a pragmatic manner and in a way that would divide the cost between the government and the water users. ADB assistance could spearhead this process.

## Theme 5: Land Degradation/Forest Management

### *Dry Ecosystem Land Management* (PPTA, loan with GEF co-financing)

A generalized class of projects aimed at lessening of degradation or desertification pressures on pasturelands that border the globally important ecosystems enjoying some degree of protection status. (e.g. transboundary watersheds). Such projects would be prepared following the procedures and mechanisms developed under CACILM or ADB/GEF Partnership for Land Degradation in PRC, the experience of which and possible applicability to Mongolia should be closely followed.

## Theme 6: Energy, Climate Change

### Use of CDN in support of greater energy efficiency (AOTA, GEF co-financing)

It would be possible and desirable to build on the substantial amount of work funded by ADB (ALGAS, PREGA) and others to develop proposals for financing energy efficiency activities in Mongolia under the Clean Development Mechanism. The work would have to be conditional on the ratification of the Kyoto Protocol by Mongolia and fulfillment of certain institutional prerequisites, including an improved linkage between UNFCCC-sponsored activities and those of MOI.