



A Visit to Mongolia

Report for ACHR

02-05 June 2005

Preamble

The Mongolia visit was made in co-ordination with UN-ESCAP which has initiated a housing and infrastructure support programme in Ulaanbaatar. What is written below is from what I have learnt by attending the National Dialogue on Housing the Poor in Urban Economies, a site visit to government built housing barracks, a visit to a “ger” settlements in Ulaanbaatar, and discussions with government and NGO representatives and residents of the barracks and the ger housing communities. There are strong similarities between conditions in Ulaanbaatar and Almaty in Kazakhstan where I have worked with local communities and NGOs.



2. The Situation in Ulaanbaatar

With the collapse of the communist system in Mongolia, state run factories and many research and development institutions have closed down. This has created unemployment and housing problems. Previously, the state enterprises built housing for their employees. The maintenance of this housing was also the responsibility of the state enterprises. The state can not more maintain these buildings and nor can it develop new housing. The private sector now develops housing and this housing is unaffordable to the poor which comprise the overwhelming majority of the population. Two issues emerge from this state of affairs.





i. The old housing is not maintained any more. It is in a bad state and in many cases the open spaces between the barracks have been occupied. In the case of high-rise buildings, water and plumbing systems have collapsed and in the absence of municipal controls people on the ground floor have expanded their homes and those on the floors above have extended their balconies and rooms. In the absence of employment and the removal of state support, heating in the long winter months has become a serious problem.

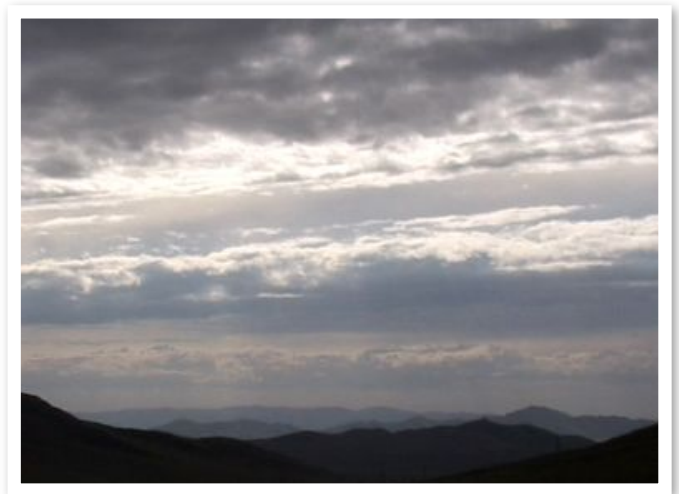


ii Since no new housing is being built, the state had allowed families to occupy 700 square metres of land for housing themselves.



On this plot families put up the traditional Mongolian "tent" called ger and start living on it. Slowly, they construct their houses. What exactly is the house building process and who are the actors in it, is not really clear. However, most of these houses are badly constructed and are poorly insulated for the Mongolian winter. The result is that people very often prefer to live in the ger in winter and use their houses only during the summer season. Apart from electricity, there is no municipal infrastructure for these settlements. Toilets consist of a simple pit away from the house and water supply is either through tanker or is purchased of from neighbourhood tube wells installed by the state or the private sector. Carting water from the tube wells to the homes is usually done by children and in winter it is a very difficult task.





3. Climate and Related Issues

The Mongolian winter is long (seven months) and temperatures fall well below minus 30 degrees centigrade. Due to this a number of issues arise. These are given below.

- i) **Infrastructure:** Sewage and water lines have to be at least three to four metres below ground level so as to prevent frost heave. This makes the cost of infrastructure unaffordable to communities and to the state. In addition, since the plots in the ger settlements are large, infrastructure cost per capita increase considerably. In my estimation, the ADB funded infrastructure projects will not be feasible in economic terms and hence not replicable. There has to be an alternative.

- i) **Insulation:** Currently, people building homes in the ger settlements use earth as insulation on the roof. This adds to the weight on the structure and increases costs. The walls are usually of timber lattice work plastered over with a mud and straw mix which gives poor insulation as compared to felt, glass wool or thermopol. As a result, people spend huge amounts on coal and timber for heating and in spite of this have very uncomfortable in-door winters. Energy efficient stoves can reduce the consumption of coal and timber and increase the heat generated. However, we have been told by our Mongolian friends that the better stoves are unaffordable for the ger settlement families.



iii Toilets: Conventional septic tanks and pour flush toilets freeze in winter and alternatives to them is simply the pit toilets which is unhygienic. Either suitable alternatives need to be developed or improvements for the pit toilets need to be researched and implemented. Also, if shallow subsoil aquifers are to be tapped for drinking water, the pit latrines may not be the best solution as they may pollute the aquifer.

iv Water Availability: From what I gather the subsoil aquifer in Ulaanbaatar can be tapped through hand dug wells. However, before encouraging or supporting this process it is necessary to understand its repercussions and subsequent management requirements otherwise the aquifer might be depleted or polluted by pit latrines. Private entrepreneurs have also established tube wells and sell water to their neighbouring settlements. This could be encouraged through loans to individual entrepreneurs or to communities organized around savings.





4. Possible Directions

Given conditions in Ulaanbaatar there are two possible directions.

- i) **Old Housing:** ESCAP has chosen a site consisting of barracks which previously belonged to a state enterprise. The people living in the barracks have been given individual ownership of the rooms in which they live. Since there is no organisation to collectively maintain the buildings, they are in a terrible state of disrepair. Their toilets are also badly maintained and solid waste disposal is not effectively managed.

Through initiating a savings process ESCAP feels that it can bring people together for maintenance and management of the barracks. Similar work has been done successfully by Baspana in Almaty. However, research is required to improve toilet design, cheaper and improved stoves and roof and wall insulation.

- ii) **Housing and Infrastructure in Ger Settlements:** Conventional sewage and water infrastructure is unaffordable both for the residents and for the state. Alternatives to it have to be researched and introduced to the community through an extension programme.



Thousands of houses have been constructed in the ger settlements. The housing solution is starving us in the face. There is a need to understand the sociology, economics and technology of the housing process, identify its weaknesses and strengths and then to develop a programme that overcomes the weaknesses and support the strength. In this process, it is important to understand the actors in the housing drama, their relationships and the problems they face. This can only be done if participatory research leads to the establishment of a "housing clinic", which gives people advice on how to build and estimates on costs. The housing clinic can eventually become a community managed commercial enterprise. Similar work has been done by Baspana in Almaty, by the OPP-RTI in Karachi and a lot of research and extension work on the same lines has been done by the Building And Construction Improvement Programme (BACIP) of the Aga Khan Foundation in Northern Areas of Pakistan where climatic conditions are similar (though not so extreme) as in Mongolia.



5. ACHR's Role

The ACHR can play the following role in the promotion of better housing in Ulaanbaatar.

- i) It can initiate the savings process in the barracks identified by UNESCAP. This can be done by arranging visits of the community members to Bangkok and Bombay and/or arranging visits of CODI staff to Ulaanbaatar. The process can be transferred to other communities.
- ii) Initiate a research programme on the sociology, economics and technology of the housing process in the ger settlements. This research programme needs to be organised around a local NGO and supported by ACHR resource persons. The Centre for Human Rights and Development can be the local NGO. The research cell needs only three people: a young architect, a local activist from the ger communities and a person for secretariat and logistic support. Understanding of the existing housing process will require in-depth interviews with the actors (owners, builders, material suppliers, government officials etc) followed by 50 questionnaires each in old, not so old and new ger settlements. This process was followed in Almaty and the questionnaires and their results are given in my book "Housing Crisis in Central Asia". The process can be completed in two months.
- iii) Based on the above research, appropriate designs for toilets, stoves, insulation materials for infrastructure pipes and housing can be developed along with house designs which individual households can use.



- iv) The research cell can then convert itself into a housing clinic and employ artisans and management staff that it identifies during the research period. The housing clinic will give technical advice, managerial guidance and tools to individual families who wish to build their houses and to a cluster of houses that wish to develop their infrastructure. It can over a two year period become self-sustaining by transforming itself into a commercial enterprise that is affordable to poor families.
- v) The research team and community members could visit the OPP-RTI (Karachi), BACIP (Gilgit) and Baspana (Almaty) for orientation.





Resource Persons

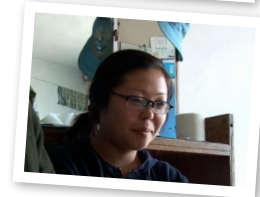
External resource persons and/or organisations for the technical and managerial issues related to house and infrastructure research, improvement and extension are given below.

i) Sjoerd Nienhuys
(Dutch citizen. I cannot locate him but the Dutch government knows him very well. He is an engineer and has worked on many Dutch funded projects in the Third World.)

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