## Big opportunity but a big challenge

Everyone in Mongolia is expecting that the GDP would be doubled or tripled from exploration of the big mineral deposits. But not everyone might be aware that quite different nature of stresses on the society can be associated with the possible so called "resource curse".

## **Resource curse risk**

Mongolia has been struggling to find a way toward a more accelerated development in its path of history as a nation during the last several decades. Current development is indicating that Mongolia may not be able to avoid failures experienced by many other socalled "resource rich" developing countries who tend to "enjoy" an easy way to development relying on their natural wealth, particularly, mineral resources, rather than their human capacity.

• One of major concern is related to the cultivation of attitudes among population to live off the unearned income, such as "Grant of Motherland" or " Share of Treasure" etc. which are the very popular election promises made by politicians regarding the possible future dividends from the major mining explorations.

# Can everyone in Mongolia benefit from the mining "boom"?

The police makers in Mongolia today are talking about two "Tolgoi" (copper, gold and coal hills) which might significantly increase its GDP. In fact these mining explorations can provide certain job opportunities, however might not contribute too much to the improvement of everyone's life in this country as it is widely believed and expected.

# Does Mongolia need risky alternatives for source of income?

Very risky and dangerous attitude is being nurtured by certain commercial minded people in this country to make easy money sacrificing the very life basis of the future generations by renting out the most fertile lands just for profit, by agreeing to store, bury in Mongolia toxic chemicals and nuclear waste generated outside of its borders.

## **Concluding Remarks**

 At present Mongolia is facing multiple challenges in relation with the current and expected climate conditions. Human activities are making an increasing contribution to the destabilization of ecosystems in Mongolia.

#### Modern science and traditional knowledge

 Science based policy is needed in respect to a development paradigm of the country in order to prevent any collapse level degradation in ecosystems due to interference effect of human and natural systems.

 Mongolia has certain advantages, since it can benefit from its ecosystem services thanks to the dominance of natural and semi-natural ecosystems in the country and its people's unique lifestyle based on human mobility in the form of classical pastoralism.

**Response option to climate change** Traditional pastoralism, enriched by the advancement of modern technology and knowledge and diversified, involving cropping, ecological tourism, and other income source related activities in complimentary and environmentally sound manners, can be the best possible option in the adaptation efforts to climate change strategy in order to minimize stress on society caused by global warming.

#### Handling the globalization impact

Globalization related stresses might have a more disturbing impact on Mongolian society in comparison with the effects of global warming, due to Mongolia's long lasting isolation in the past from a broad and wide spectrum of cultural domain in the world. Therefore, globalization induced changes in society need to be harmonized with natural capital and traditional cultural values to help avoid possible "shocks" that might trigger negative "domino effect" like consequences on local eco- and social systems.

#### **Concluding remarks on adaptation strategy:**

• High priority should be given to the near and mid term incremental changes with special focus on high impact events, such as change in precipitation patterns with the increase of its winter proportion and lesser frequency but higher intensity rains in summer.

 In the midterm plan, a focus has to be made on possible long-lasting aridity in some parts of the territory of Mongolia, with increased deficit of water for livelihood and production activities.

## Adaptation strategy In the long term plan:

Some uncertain or low probability but high impact events should be kept in the field of vision, i.e., a complete shift of climate zones with intensified rate of desertification, which result in dramatic social consequences like mass displacement of people within and beyond their national border, including flow of people in both direction as ecological refugees.

 International cooperation is needed to identify the "tipping points" in relation with the aerosol impact on regional climate system due to intensified land use change. In some parts of Mongolia, focus of the study should be made on the role of the so called black carbon or other albedo effective aerosols in acceleration of glacier melting and its matching rate with possible above 'normal" accumulation of snow in winter season.

## **Additional remarks**

 Mongolia has more than enough renewable and non exhaustible natural resources (land space with necessary attributes, natural beauty, solar and wind energy sources etc.) to support human life on a modern level of demand if it can mobilize its highly capable human resources. The available and profitable mineral resources can be explored for infrastructure development and additional capacity building in society.

- Traditionally, life in Mongolia was sustained on the tireless efforts of every member of society, on contribution of every member of family, both juniors and seniors. People in Mongolia had a saying that "Every new family member will add own portion to family foodstuffs".
- In order words, life unsustainability in family, in community and in society was not linked to the number of human beings, to increase of population.

## What is a guarantee for sustainability of life?

• Well maintained function of every single unit of society, starting from every individual household, had been a primary guarantee for sustainability of life in Mongolia through its long history.

•Revitalization and pursuing of this life sustaining principles would help Mongolia to avoid resource curse and determine its proper way toward to the sustainable path of development.

# Would what happens in Mongolia have any regional implications?

Mongolia does not have enough economy potential, military "muscle", political influence and other classical factors to be a real power or active player in the region. But Mongolia can be the best indicator of what is going on in Asia and even in the world due to its geopolitical position. This summer in August in just 1-2 week time many high ranking officials, including some heads of states visited Mongolia.

 These countries were China as direct emerging super economy neighbor, ROK as an active trade and investment partner, Finland as one of the most prospering members of the EU and USA as world leading economy power. Successes or failures of Mongolia in dealing with the above mentioned emerging challenges would reflect the cooperation policy trend of the partners of Mongolia, particularly, Russia and China as direct neighbors and USA, Japan, ROK, EU members as third neighbors in accordance with the Mongolian foreign policy concept.

## <u>Mongolia's ownership is key in dealing</u> with the named challenges

Mongolia itself should be able to be the key actor in this exercise earning maximum dividends from its capable human resources, from its rich natural wealth and from favorable international cooperation, from synergy of all supporting factors in coping with newly emerging named

challenges.



### Final word of acknowledgement

I would like to express my deep appreciation to the Host of this Conference, namely, the Science Council of Japan and other fine co-organizers for the opportunity to speak here and to listen and learn many wisdoms from every participant of this great event.

Thank you very much for your kind attention!

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