

ENSURE THE CONTINUITY OF INTEGRATED RIVER BASIN MANAGEMENT FOR KHOVD-BUYANT IN THE ALTAI SAYAN REGION WESTERN MONGOLIA

Environmental context

The Khovd-Buyant river basin is situated in Western Mongolia and is part of the Altai-Sayan Ecoregion and still a relatively pristine area. The Khovd river is about 640 km in length, the Buyant river (near the city of Khovd) is a contributory river basin in the Khovd basin. The Khovd river basin is an inland basin, water comes in from precipitation from clouds. The river basin comprises as well high mountain area with more than 30 glaciers, middle mountains with permafrost and a lower mountain and steppe and desert landscape (connected to the Gobi desert) with fresh water and wetlands and salt water lakes (the endpoint of the surface water).

Climate change impact

Global climate change leads to increasing temperature rise next decennia. Studies show that the prognosed temperature increase (and evaporation) is stronger in the Khovd-Buyant region than the world average. The hot summer months will become hotter and dryer. The melting of glaciers and permafrost will accelerate. Till now a lot of water is stored in the glaciers and permafrost at the higher altitudes and a limited groundwater reserve in the riverbed sediments in the river valleys. Severe surface water shortage will occur in the lower (and probably middle) parts of the basin in the form of longer dried out river beds and lakes. The climate is harsh with low temperatures, ice covered rivers and minimal precipitation in winter and hot and dry summers with rain. Melting glaciers release more water in summer. Pristine area with high human pressure from irrigation and overgrazing. The Khovd-Buyant river basin is not densely populated (less than 200.000 inhabitants in an area of 500x500 km, 1 inhabitant per km²). Main livelihood is nomadic herding. There are two main cities (provincial aimag centres) Khovd and Ölgii with each about 30.000 inhabitants. The impact of overgrazing of pastureland and forestland (2% coverage, in riparian forest in riverbeds and in the mountain forest) and the unregulated extraction of surface water for irrigation of crop fields, hayfields and city greening leads to dried out riverbeds. Near Khovd city at the Buyant river a large irrigated crop field area for potatoes, vegetables and fruits is situated. Crop farming has been done here for centuries. The number of inhabitants is and will not exceed 200.000 in the next decennium, there is limited growth, only in the aimag centre and especially Khovd. The number of livestock seems to have exceeded the carrying capacity of the environment, due to the zud in winter 2009/2010 livestock numbers have decreased, but are still too large. The composition of the livestock has changed in larger numbers of goats (up to herds of 2.000). Decreasing livestock numbers is a difficult issue. Industry and mining (gold, silver, tungsten, coal) are still limited and seems to have limited impact on the water quantity use, but in future mining can have a larger impact. Drinking water can largely be derived from groundwater. The main cities Khovd and Ölgii have nearby a sufficient groundwater reserve of good quality. The extraction of groundwater from wells can be optimized.

Water quality

On the basis of limited samples the water quality seems fresh and good with little human influence. Near the two provincial cities the river water quality is negatively affected by household waste and waste water from the cities. The two water treatment plants build in Russian time are dismantled. Also near some soum settlements the water quality is negatively influenced by household waste and waste water and livestock waste accumulated in the river flood plain.

Legal environment

The State of Mongolia retains ownership of pastures, forests, subsoil and water resources, thus making private ownership of these resources impossible. Agricultural cropfields can be leased from the government.

RBC and IRBM Khovd and Buyant river basin

In 2004 the Mongolian Water Law was approved, which made the installation of a RBC possible. WWF started a project for supporting the RBC and IRBM for the Hovd and Buyant river basin in Western Mongolia: The formation of the RBC's was proposed and supported; Two secretaries, a chairman and an office were financed; Due to the political situation the RBC for the Hovd river basin and the RBC for Buyant river basin was delayed and was installed in March 2009 by the Minister of Environment.

In May 2009 international experts of DHV made (with the RBC-secretaries) a field visit to the Khovd-Buyant area and talked with the RBC-members and local people; On the basis of that an outline for the IRBM was made and a TOR for the IRBM-development. In ..2009 a Mongolian translation was made of the Handbook for IWRM of the Global Water platform; In June 2009 the RBC had a training course near Ulaanbaatar; The presentation are summarized in a booklet; In September 2009 the RBC made a field visit in the river basin; In September 2009 the baseline studies started by a team of Mongolian experts under supervision of three teamleaders: mr Bakir, mr Dawa and Mr Dolsuren; the summaries are summarized in a booklet. In April 2010 the RBC gathered in a 2 day-meeting with the teamleaders of the baseline study, WWF and DHV to discuss the outcome of the baseline study, the outcome of the soum consultation and proposed list of objectives and measures. In May 2010 the draft-IRBM will be ready, in May 2010 the proposed objectives and measures will be used for consultation with government agencies and soum/aimag council members.

Situation of financing RBC and IRBM

End of 2010 the IRBM will be ready for governmental approval. In December 2010 the financing by the WWF-project will be ended. There is yet no governmental financing available for the Mongolian RBC's.

RBC organisation -financing

The Mongolian Water Law of 2004 makes the installation of RBC possible. The law however lacks a financing mechanism for RBC's. WWF has made suggestion for an amendment on the Water law, which may pass autumn 2010 in parliament, which makes basic financing of an

RBC (chairman, secretary) possible. There are positive signs, this process can however also be delayed and the outcome is not sure..

RBC-projects

A law from 1997 on financing from payments of use of natural resources, creates the possibility of 35% repayment for rehabilitation of natural resources (including wateruse). In 2010 the Ministry of Nature and Environment made an agreement with the local governments, that the local tax offices may collect that fee. However a lot of discussion is still needed with the Minister of Finance and State Tax Office on the implementation of this law. The law makes also a distinction between consumers (for first needs for drinking, animals/livestock, households; primary use is free) and users (using water for income/production, not < 1 hectare, they must be charged). This makes tax collection difficult, because many waterusers will state they are consumers (free of charge) instead of users (charged). And farmers are not used to pay for irrigation or water use fees for cropland or hayfields. Charging pastureland (water)use is seemed as not yet feasible. A second financing source can be payments for water pollution (and exhausting water resources). This is also only feasible for large activities, not households and small herders/farmers/enterprises. A third financing source voor RBC-projects forms the state government budgets for f.i. irrigation, energy, agriculture, environment or economic development. Projects will be proposed and executed by aimag and soum governments. This is why the RBC has to closely cooperate with soum, aimag and state government for realization of the IRBM-measures/projects.

Enforcement and importance of community involvement

There are many good laws and regulations in Mongolia. But law enforcement in the field is assessed as very weak and lacking knowledge and capacity. In the remote vast areas (like the riverbasin of Khovd and Buyant) inspection, control and law enforcement of small scale activities is almost impossible to execute. Like illegal woodcutting, poaching, water extraction via channel diversions or wells, waste disposal, building and overgrazing in protected areas, etc

Objectives and measures of the RBC and IRBM can only be realised and successful when the local community (herder groups, farmer groups, bag, soum) are involved and their issues and problems are addressed. Like alternative income, alternative location or alternative fuel resources. For instance a local riparian forest island near a soum centre can only be rehabilitated or protected when all soum inhabitants believe and are aware of the importance and function of it, else it will be cut by some in bad times for fuel wood or grazing ground for livestock.

Summarized situation

For Khovd-Buyant the RBC (actually 2, for each river separate) is installed, started in 2009 and functions. The RBC is supported by a chairman and secretary. The RBC-secretary actively works on communication, awareness and stakeholder participation (in the soums). In the RBC issues are shared and discussed on a basin level from source to salt lake, this can be seen as a major advantage. A comprehensive baseline study has been executed for the IRBM, which has

integrated and structured the data and enlarged the understanding of the different aspect of the river basin (especially the water and socio-economic part). A draft-IRBM with objectives and measures is in preparation and will be ready by mid-May 2010. Due to the financing of WWF and SDC the functioning of the RBC and comprehensive IRBM are made possible, whilst other RBC's are in lack of finance and no progress is realized. Due to the special character of the Khovd-Buyant river basin (inland basin, variation from glacier source to salt lake; low number of inhabitants (200.000; 1 inhabitant/km²), minimal industry and mining-impact) plus the impact climate change on glacier and permafrost resources, special emphasize/support for strengthening integrated river basin management is a well done investment. The first phase of the project is in sight, but the RBC is not financially and organizationally self supporting at the moment. The project was successful, but needs continued support, before it can be self supporting.