

Schoderer, Mirja; Dombrowsky, Ines

Research Report

Forums, fees and data flows: Coordinating mining and water policy in Mongolia

Briefing Paper, No. 20/2020

Provided in Cooperation with:

German Institute of Development and Sustainability (IDOS), Bonn

Suggested Citation: Schoderer, Mirja; Dombrowsky, Ines (2020) : Forums, fees and data flows: Coordinating mining and water policy in Mongolia, Briefing Paper, No. 20/2020, Deutsches Institut für Entwicklungspolitik (DIE), Bonn, <https://doi.org/10.23661/bp20.2020>

This Version is available at:

<https://hdl.handle.net/10419/242603>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>



Joint project with:



U N I K A S S E L
V E R S I T Ä T



and with partner organisations in six case study regions

Forums, Fees and Data Flows: Coordinating Mining and Water Policy in Mongolia

Summary

This Briefing Paper presents one of six analyses of cross-sectoral coordination challenges that were conducted as part of the STEER research project and on which separate Briefing Papers are available.

The extraction of minerals and metals comes with a large water footprint, both in terms of water needed for extraction itself and in terms of wastewater discharge and the potential pollution of water resources. Thus, coordination between the mining and water sectors is key. A number of instruments to that end have been devised, which aim to mitigate the negative impacts of mining on water resources and on water-resource dependent communities. Among these are environmental impact assessments (EIAs), stakeholder involvement within these processes and within river basin management, and payment schemes that incentivise wastewater treatment at the mine. Whether and how these instruments are implemented depends on the national, provincial and local context, since each instrument involves a number of preconditions. Assessing the effectiveness of these instruments thus requires a sound analysis of the governance system within which they operate.

In this Briefing Paper, we focus on Mongolia as an example case study and look at stakeholder involvement and incentivising wastewater treatment as two key strategies to increase coordination. We assess how these strategies are translated into policies and how they are implemented on the ground in two adjacent river basins. In doing so, we pay particular attention to the human and financial capacities of lower-level administrative entities, as well as to the availability of water-related information, as essential prerequisites for effective natural resource governance.

We find that the Mongolian governance system stipulates the implementation of stakeholder involvement through multiple processes, most importantly through River Basin Multi-Stakeholder Platforms (RB-MSPs) and community consultation within the EIA procedure. In practice, however, the RB-MSP in the study area has yet to diversify its membership from mostly lower-level administrative staff, and community consultations rarely take place. In terms of incentivising wastewater treatment, Mongolia passed amendments to its Water Pollution Fee Law in summer 2019 and is now working on implementation guidelines. Challenges here relate to the collection of data for a baseline on water quality and to guarantees for adequate sampling and analysis. This is tied to the limited human and financial capacity of lower-level administrative entities, which struggle to access or evaluate relevant data.

We recommend that:

- the diversity of stakeholders in RB-MSPs is increased to better include the private sector and civil society, with sensitivity to differences in socioeconomic standing to ensure equitable access to and deliberation within the platform;
- the enacting of public consultations as part of EIAs is ensured and governmental procedures (i.e. mining licensing and approval of EIAs) are made more transparent and accountable;
- public availability of water data is increased;
- the Water Pollution Fee Law is implemented swiftly to provide incentives for the treatment of mining wastewater before discharge;
- funding and institutional capacity development for lower-level administrative bodies are increased and funding for RB-MSPs is provided to enable them to fulfill their mandates.

Background

Since its transition to a market-based economy in the 1990s, Mongolia has relied heavily on mining for economic development. The boom in mining activities, along with rapid urbanisation, has led to water resource pollution and overuse. This is problematic since most of the country’s semi-nomadic herders rely on these resources to water their animals and for household needs. Herding is the primary occupation in rural areas, where poverty rates are higher than the country average and access to public services is limited. The link between mining and elevated levels of heavy metals in surface water resources, as well as bioaccumulation in fish species, has also been established (e.g. Karthe et al., 2017; Kaus et al., 2017).

Over the last few years, Mongolia has passed several laws to mediate the negative impacts of mining, among them the Water Law, the Environmental Impact Assessment Law and, most recently, the Water Pollution Fee Law. According to the legislative framework, the granting of mining licences is handled by the Ministry of Mining and Heavy Industry and its implementing agency, the Mineral Resources and Petroleum Authority of Mongolia. The approval of EIAs, which is a mandatory prerequisite for a mining licence, as well as water governance in general, falls under the purview of the Ministry of Environment and Tourism at the national level. At the basin level, River Basin Authorities (RBAs) are in charge of creating management plans for their respective basins, which then go through an approval process at the ministry.

The Water Law also stipulates the creation of RB-MSPs, which bring together stakeholders from local administrations, the private sector, civil society and academia to comment on river basin management plans and negotiate priorities, as well as assess the work of the RBA. Provincial and local authorities play

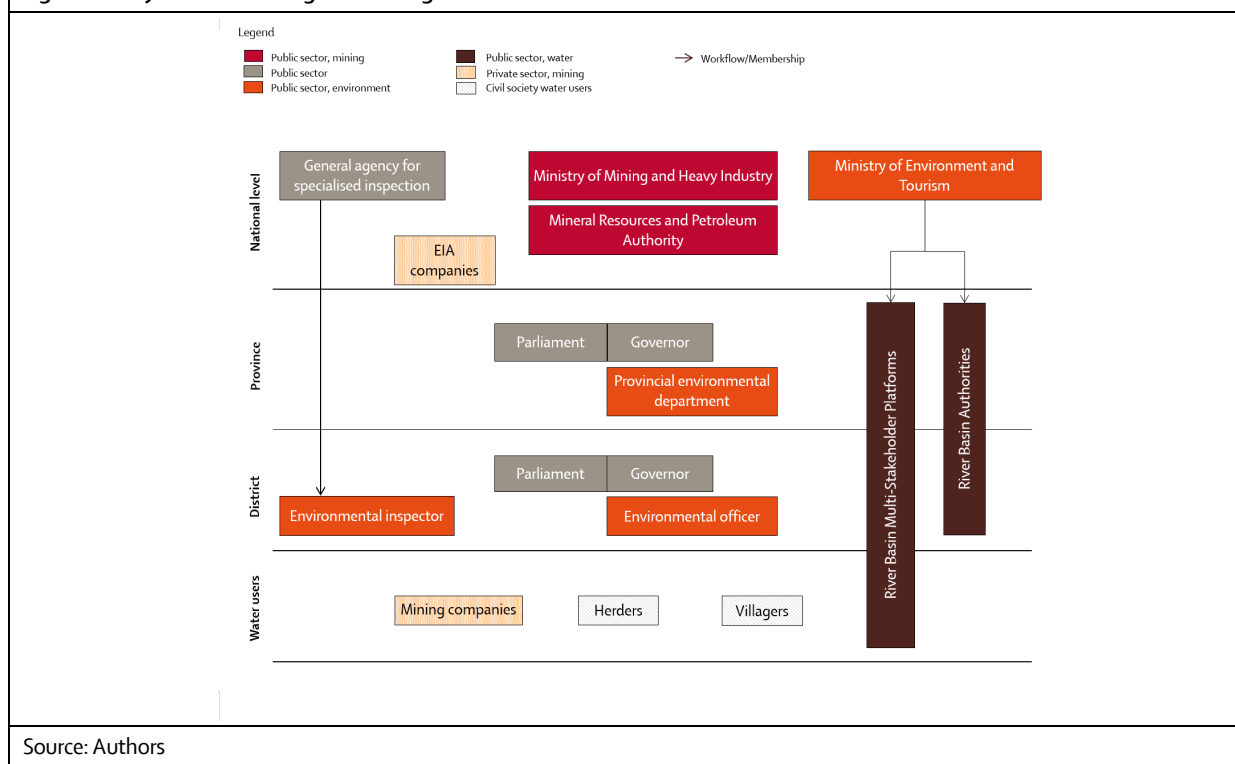
a role in collecting water use fees and in enforcing environmental protection legislation. Figure 1 provides an overview of the key actors involved in water and mining governance.

Between 2017 and 2020, the transdisciplinary research project “Increasing Good Governance for Achieving the Objectives of Integrated Water Resources Management (STEER)”, funded by the German Federal Ministry of Education and Research (BMBF), examined intersectoral coordination challenges related to water in six river basins worldwide. In Mongolia, we focused on factors that facilitate or hinder coordination between the water and mining sectors. Through a series of workshops and roughly 50 interviews (with academics, government officials from various levels, civil society representatives and governmental consultants) coordination challenges and potential solution strategies were identified and refined iteratively. Research activities focused on the Kharaa and the Yeroo river basins in the north of Mongolia, which span five administrative provinces (*aimag*) and a number of districts (*sum*). The challenges and recommendations presented in this Briefing Paper were discussed with representatives of the water and mining sectors at a workshop in Ulaanbaatar in October 2019.

Coordination in theory and in practice

The Mongolian legal framework stipulates several coordination instruments to limit externalities between the mining and water sectors. In practice, however, not all of these instruments are implemented as stipulated. While vertical coordination within the public water sector works quite well (e.g. between RBAs and the Ministry of Environment and Tourism) coordination across sectors remains rather poor.

Figure 1: Key actors in mining and water governance



1. Licensing and EIAs

One key instrument is the licensing procedure for mineral and metal extraction. It involves a mandatory EIA that includes public consultations with affected communities. It also entails the creation of environmental management plans, which are to be updated yearly. Their implementation is controlled by an inspection team that can bring temporary injunctions against the mining company in cases of non-compliance with the management plan or the law in general.

In practice, however, the licensing procedure for mineral and metal resource extraction has been criticised for being opaque and providing insufficient quality control for EIAs. Public consultations rarely take place within the EIA procedure and when they do, they reportedly centre more on imparting information on planned mining activities, rather than providing an opportunity for affected communities to raise concerns and express opinions. In fact, several interviewees said that decisions on mining projects were taken further up the governmental hierarchy without much regard to the opinions of local officials or citizens. These interviews alluded to practices of rent-seeking behaviour that hinder the effective enforcement of environmental protection measures, such as mine inspections and temporary injunctions. In general, these practices lead to a low level of public trust in the effectiveness of governmental processes. This lack of transparency also pertains to the approval procedure for EIAs. Decision-making takes place in a committee, whose meeting records are not publicly available. Thus, it is hard to judge to what extent quality criteria are applied or whether private interests prevail. Similarly, the results of mine inspections, as well as the mining and water use licences granted in a river basin, are not publicly available. Lower-level public authorities also report that a lack of funds constrains their effectiveness, for example by limiting access to fuel and thereby the number of mines they are able to visit.

2. River basin planning and multi-stakeholder fora

At the river basin level, management plans are supposed to identify the state of water resources and to lay out measures to safeguard their quality and quantity. RB-MSPs representing various water users are supposed to comment on these plans and to receive updates on their implementation.

In practice, Mongolia struggles with data scarcity. While steps have been taken to increase the capacity of laboratories at the provincial level, not all sub-catchments are monitored and a number of relevant parameters, such as heavy metals, are not tested for on a regular basis. This provides an obstacle to the creation of river basin management plans that aim to identify necessary measures based on reliable and comprehensive water quality data. In addition, the central database that holds such data is updated very slowly and citizens struggle to get hold of up-to-date information on water quality in their areas.

The composition of RB-MSPs varies across basins and the joint Kharaa and Yeroo RB-MSP, for example, consists almost exclusively of lower-level government officials. While this is beneficial to coordination within the public sector, it also renders the RB-MSP incapable of providing a

discussion platform for diverging interests among water users. In light of this, a new guideline (A/157) was adopted in 2019 that provides quotas for different water user groups. However, the guideline has not yet been implemented in the Kharaa–Yeroo basin. Furthermore, it does not address two other areas of challenge for RB-MSPs: funding and the large area that they cover. RB-MSPs receive no fixed funds from the public sector, and thus depend on voluntary financial support from provincial governors or development agencies to fund their meetings (Dombrowsky, Lkhagvadorj, & Schoderer, 2018). Due to the large geographical area of the river basins, coupled with the bad state of public roads, some RB-MSP members have to travel several hours and incur comparatively large costs to join a meeting.

3. Levying fees

The current legislative framework includes the levying of fees for water use. These fees are partly earmarked to finance environmental protection measures. As water use fees tend to be rather low, their effectiveness in incentivising efficient water use has been questioned. While companies already pay a general fee for discharging water, this does not factor in the load of contaminants that the discharge contains. In order to increase overall funds while also incentivising wastewater treatment at the mine, the Water Pollution Fee Law was adopted in 2019. Policy-makers struggle, however, with how to operationalise its requirements – for example, how to organise sampling in a way that is trustworthy and comprehensive without putting a major strain on lower-level officials or exceeding the capacity of provincial laboratories.

In summary, the most important challenges to improving coordination between the mining and water sectors that we have observed relate to a lack of: (i) stakeholder involvement, (ii) water and environmental data availability, (iii) transparency of governmental procedures, (iv) incentives for wastewater treatment and efficient water use, and (v) funding and training for lower-level officials working in the water sector. However, steps have been taken to address some of these challenges, in particular through the adoption of quotas for the membership of different water user groups in RB-MSPs and the adoption of the Water Pollution Fee Law.

Recommendations

1. Licensing and EIAs

With regard to stakeholder participation within the EIA procedure, it is important that some legal clarification is provided on (i) who should participate (e.g. in how large a radius of the planned mine), (ii) at what point within the EIA procedure the consultation is supposed to take place (e.g. at the end versus early in the process), and (iii) the degree to which opinions and concerns of citizens have to be reflected in the final EIA (e.g. in an annex that shows how specific comments were addressed in the final version of the EIA). It is also important that quality control of the EIAs is improved (e.g. by submitting the minutes of public consultations as proof of consultations having taken place) and that meeting records of the EIA approval committee are made available in order to increase the legitimacy of and public trust in governmental procedures.

2. River basin planning and multi-stakeholder fora

The adoption of membership quotas represents a major step forward in increasing stakeholder participation in river basin management, which is important to ensure ownership of local actors over measures delineated in management plans. However, when increasing the representation of the mining sector and civil society, attention needs to be paid that these processes do not create new inequalities – for example, by excluding participants from more remote areas. In addition, the mining sector holds significant economic and political power, which might translate into power imbalances in the RB-MSP. Thus, implementing the quota requires a careful consideration of the meeting set-up and procedure, regarding how opportunities to speak are allocated and moderated in order to increase stakeholder participation in an equitable manner. Regarding water data, lack of funds remains a major constraint to monitoring activities. Government officials agreed that faster data processing is needed for the joint database that collects information from local-, provincial- and river basin-scale databases, but they also voiced concerns about automatic synchronisation since this limits the possibility to check the quality of data entered by lower-level officials. Representatives from different national-level governmental bodies have, however, voiced an interest in increasing data sharing among their departments. Regarding the public availability of environmental performance records (e.g. inspection results or information on the specifics of a mining licence), concerns exist surrounding the protection of trade and industry secrets. This could be addressed by removing sensitive information from these documents before making them available to the public.

3. Levying fees

The adoption of the Water Pollution Fee Law takes an important step in incentivising the treatment of mining wastewater before it is discharged. Here, the challenge will be how to make pollutants of diverging degrees of harmfulness comparable, and moreover, to contend with the limitations

placed upon monitoring and testing by low laboratory and financial capacity. A potential solution could be to translate pollutant loads into harmfulness units and to assign fees per harmfulness unit. The second challenge could potentially be answered by having companies calculate initial harmfulness loads for their wastewater and then conduct periodic, unannounced inspections to verify these claims. To combat the existing shortage of funds for lower-level water governance bodies and environmental protection measures, revenues from the Water Pollution Fee Law should be earmarked for these purposes.

In summary, we recommend the following:

- The quota for stakeholder groups in the RB-MSPs should be implemented with an eye to mitigating power imbalances. The provision of fixed funding for this body should be considered to ensure that, at the minimum, travel costs for meetings are covered.
- The public consultation procedure within EIAs should be specified, providing clarification on who has to be consulted, when, and to what extent their opinions need to be addressed. Quality control of EIAs should be improved and proof of consultations required.
- Databases from different governmental departments should be merged to increase the speed with which information from different administrative levels is fed into the national-level water database. Information should be made easily accessible and understandable for regular citizens.
- The Water Pollution Fee Law should be swiftly implemented, earmarking revenues for water-related measures and for organisations that are involved in water and/or environmental governance.
- Funding and capacity development should be provided for lower-level administrative entities in water and environmental governance.

References

- Dombrowsky, I., Lkhagvadorj, A., & Schoderer, M. (2018). *River basin management and fiscal decentralisation: Mutually supportive or counterproductive? A case study of Mongolia* (Discussion Paper 10/2018). Bonn: German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).
- Karthe, D., Hofmann, J., Ibsich, R., Heldt, S., Westphal, K., Menzel, L., ...Malsy, M. (2015). Science-based IWRM implementation in a data-scarce central Asian region: Experiences from a research and development project in the Kharaa River basin, Mongolia. *Water*, 7(7), 3486-3514.
- Kaus, A., Schäffer, M., Karthe, D., Büttner, O., von Tümpling, W., & Borchardt, D. (2017). Regional patterns of heavy metal exposure and contamination in the fish fauna of the Kharaa River basin (Mongolia). *Regional Environmental Change*, 17(7), 2023-2037.
- The research project "STEER" was funded by the Federal Ministry of Education and Research (BMBF) as part of the funding measure "Water as a Global Resource" (GRoW).*

Mirja Schoderer
 Researcher
 "Environmental Governance"
 German Development Institute /
 Deutsches Institut für Entwicklungspolitik (DIE)

Dr Ines Dombrowsky
 Head of Programme
 "Environmental Governance"
 German Development Institute /
 Deutsches Institut für Entwicklungspolitik (DIE)

DOI: 10.23661/bp20.2020



This Open-Access-Publication is free to read (<https://www.die-gdi.de/publikationen/briefing-paper/>), share and adapt under the terms of the CC BY 4.0 license.