Copper, Coal, and Conflicts
Resources and Resource Extraction in Asia
Heinrich-Böll-Stiftung

The Heinrich Böll Foundation is a publicly funded institute that is closely affiliated with the German party Bündnis 90/Die Grünen. From our headquarters in Berlin and 29 overseas offices, we promote green ideas and projects in Germany, as well as in more than 60 countries worldwide. Our work in Asia concentrates on promoting civil society, democratic structures, social participation for all women and men, and global justice. Together with our partners, we work toward conflict prevention, peaceful dispute resolution, and search for solutions in the fight against environmental degradation and the depletion of global resources. To achieve these goals, we rely on disseminating knowledge, creating a deeper understanding between actors in Europe and Asia, and on a global dialogue as a prerequisite for constructive negotiations.

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Introduction

The global demand for fossil fuels, metals, minerals, wood, and agricultural products has almost doubled in the last 30 years. And during the same time period, international trade in those raw materials has actually increased by 150 percent. The advancement of the large emerging economies in Asia is one reason for that dramatic growth.

A large share of the resources exploited in Asia is still used to supply international markets, and to manufacture consumer goods in the factories of China, India, and Southeast Asia for export to the industrialized countries. But those regions – China, India, and Indonesia in particular – not only have substantial reserves of natural resources in their territories, they also need more and more energy and raw materials domestically to develop infrastructure and to supply their growing populations. That is why, for instance, China rose to become the world’s second-largest importer of raw materials (after the United States) in 2011.

Asia’s increasing demand has serious repercussions for global raw materials markets, world trade, and international economic and security policies. But it is the people in the countries of origin who feel the effects of this rising demand most directly.

Although the emerging middle-class in Asia takes as its model the resource-intensive lifestyle of the industrialized world, the bulk of Asia’s population has only limited access to the commodities and profits that the exploitation of natural resources in their own countries produce. Especially far from dense, urban centers and in the very places where coal, ore, and minerals are mined, the local populations are largely dependent on direct access to land and to clean water. Mining and plantation agriculture lead to a scarcity of water and land, and they pollute the environment, which time and again leads to conflicts between local residents and the private or state companies that run those operations.

In this issue, our authors report on conflicts stemming from coal and copper mining in Afghanistan, India, and Myanmar. The articles on Cambodia and on Inner Mongolia in China illustrate how the traditional economic models and ways of life of indigenous populations suffer from the unrestrained exploitation of raw materials.

The utilization of already scarce water resources also leads to an increasing number of conflicts, often even to cross-border disputes. Articles by contributors from India and Pakistan explore potential methods of dealing with such transnational conflicts.

A wealth of natural resources can offer the world’s poorest countries in particular an opportunity for development, and a potential path out of poverty and dependency on international benefactors. Articles from Afghanistan, Thailand, and Myanmar illuminate the aspirations that come along with the commercial use of natural resources, but also the risks and the mistakes.

Contributors from China explore the attempts that have been made to counteract the dramatic environmental impacts, and analyze the efforts to develop standards and guidelines for the domestic commercialization of natural resources, as well as for foreign investment in the raw materials sector.

The articles in this first issue of Perspectives – Political Analysis and Commentary from Asia employ examples from select Asian countries to cast a revealing spotlight on the complex interactions and conflicts of interest that arise in connection with natural-resource extraction projects. What becomes clear is that the problems that are concomitant with the exploitation of raw materials play out time and again, despite varying economic and political contexts – a lack of risk and impact assessments, insufficient transparency, and the failure to involve the local populations in the planning process. But it is, above all, a deficiency of management and supervision by governments and independent institutions that exacerbates existing conflicts and pushes already marginalized sections of the populace further to the economic fringe.

Our aim with this issue is to draw attention to the pressing problems that confront investors, governments, and local populations in connection with large-scale mining and agricultural projects in Asia, as well as to provide insights into the issues under debate in the region. We hope this will serve to heighten awareness of the risks; contribute to discussions about legislation, planning, and implementation of vast natural-resource extraction projects; and even jump-start a reexamination of the limits of our commercialization of raw materials.

Perspectives will be published bimonthly in English and German. Looking to the future, the magazine is intended to provide a German and European readership with an understanding of Asian perspectives, as well as an analysis of global trends and greater insights into developments across the Asian region.

Katrin Altmeyer
Head of Asia Department
Danger Zone: The Politics of Natural Resources in Afghanistan

Renard Sexton

The first thing that you notice about Afghanistan is the panorama of imposing mountains. Traveling through the country, it is hard not to marvel at the variety of snow-capped peaks, deep, river-cut ravines, and wide-open grazing areas, buttressed against treeless, rocky landscapes that would seem appropriate on the moon. Afghanistan’s natural endowment is complicated. On one hand, most of the country is poorly suited for agriculture, but on the other hand, subsoil mineral resources, hydropower potential, and high-value illicit crops can be very lucrative. Most Afghan people rely on this natural endowment of their nation for survival. Key livelihoods include growing wheat, animal husbandry, rice cultivation, and fruit and nut production. As war has gripped the country for three decades, the cultivation of opium poppies and cannabis has become more important. As the US-led NATO occupation ends and Afghanistan moves into a new phase, the way in which the natural resources sector is managed will be highly influential on the trajectory of the country.

Many international players and Afghan elites have touted natural resources – particularly industrial mining and hydrocarbons production – as the key to a prosperous future for the country. While there is great potential for economic and social progress, past experience indicates that technical efforts to develop and improve the natural resources sector are bound to fail if the underlying politics are not adequately addressed.

Afghanistan’s natural resource base can be divided into four main categories: water, land, minerals, and renewable extractives. These categories are not mutually exclusive; indeed, many resources are interrelated. For example, a substantial portion of the value of land for crop agriculture in Afghanistan is determined by the quantity and consistency of irrigation water it receives. Nonetheless, for the purposes of this overview, the above subdivision is functional.

Water

As a landlocked country, Afghanistan’s surface water supply is restricted to rivers and streams. There are five major river basins in the country, each of which has mountain headwaters. Each spring, melting snowpack floods the nation’s riverbeds, which are practically dry all winter. Afghanistan is a major river-water exporter: the mighty Helmand, Harirod, Kunar, and Panj rivers flow into neighboring Iran, Pakistan, Tajikistan, Uzbekistan, and Turkmenistan, providing valuable irrigation water to each of those countries. With limited freshwater in the region, these countries have expressed concerns at efforts to bolster Afghan water infrastructure, particularly dams, for fear of a reduction in river water.

The Salma Dam project in the western province of Herat provides an example of this issue. In 2004, the Afghan government announced plans to rehabilitate the dam, located on the Harirod River, with financial and engineering support from the government of India. The government of Iran strongly opposed the move, concerned that reduced flow from the Harirod would irrevocably damage agricultural production downstream in Iran and Turkmenistan. From 2007 to 2011, an intense conflict over the dam site and the surrounding area nearly derailed the project, but joint US and Afghan military operations finally put down the local insurgency. Indian, Afghan, and US intelligence sources independently indicated an Iranian role in the conflict.

Land

Afghanistan has very limited arable land – an estimated 12 percent of its total area – and accordingly, good agricultural land is quite valuable. A large proportion of the country, approximately 46 percent, is classified as rangelands, which usually implies sparsely vegetated mountainsides or deforested hills. Both nomadic and sedentary communities rely on rangelands to support livestock production that is key to Afghan food security.

While disputes over croplands are common, competition over access to the best rangelands is particularly intense. As snow cover recedes during the spring season, settled communities and nomadic herdsmen move their flocks to the newly exposed rangelands. In some cases, political, economic, and ethnic differences provoke conflicts that can escalate to all-out militia battles.

The highest-profile example of this type of conflict has been between the settled Hazara communities of the central highlands and Pashtun (Kuchi) nomads who ascend from the lowlands each spring to try and graze their sheep and goats. The politics are thick, with verifiable historical grievances that go back to the late 19th century and contemporary political entrepreneurs seeking to score political points in the present. Since 2004, dozens of militants, civilians, and others have been killed in seasonal clashes in Hazarajat over rangeland access.

Land in urban areas has become an important resource in Afghanistan’s quickly growing cities, especially Kabul, Kandahar, Mazar-e Sharif, and Lashkar Gah. In suburban zones, land along newly constructed asphalt roads typically skyrockets in value, sometimes provoking scrambles for control.

Mining

Afghanistan’s mining sector has received a great deal of coverage in the international media, most of it related to large-scale industrial mining projects. High-profile investments by public and private companies from India and China have headlined the development of the extractives industry, especially the Aynak copper mine, the Haji-gak iron deposit, and the northern Amu Darya oil and gas fields.

Regardless of the scale, the mining sector is faced with a complex web of conflict, natural resources, and international development. He has worked and written for the United Nations, NGOs, and for journalistic publications, including The New York Times’ Blog, FuelFirstlight and The Guardian. He is presently carrying out his doctoral studies at New York University. His areas of research include civil conflict, natural resources, and political methodology.
Renewable extractives

Most recent international attention has been focused on the minerals side of the extractive industries equation, yet Afghanistan is also endowed with substantial non-mineral, renewable extractable natural resources. In particular, hardwood timber, opium, cannabis, and nascent export-oriented commercial agriculture are important segments of the Afghan natural resource base.

Opium production has received a great deal of attention in the context of efforts by the International Security Assistance Force (ISAF) and UN to reduce Afghanistan’s major contribution to the global heroin trade. But with high prices and extended supply- and value chains, the opium industry is simply too lucrative to give up for many in Afghanistan. From poor rural cultivators, to smugglers, to political figures, and international cartels, the illicit crop represents a dangerous but valuable livelihood – one that generates an estimated 50 percent of Afghanistan’s GDP.

The most important considerations in the natural resources sector going forward will likely be whether Afghanistan’s upcoming political settlements secure natural resources, benefits-sharing, and ownership in a functional way. To put it concretely, the central state and regional powerbrokers will have to make credible commitments to each other in order for resources to be developed – with particular emphasis on the mining industry.

The central government does not have the technical skills or capital to convince Afghanistan’s neighbors to invest in major industrial projects, or to produce those advanced development benefits for the Afghan people. Dams, small and large, have the potential to produce electricity and better irrigation control. Even the threat of dam construction should be sufficient to convince Afghanistan’s neighbors to provide side payments that reimburse Afghans for the forgone income and development benefits that dams would provide.

The type of talks that would be required to achieve this should be similar to those ongoing between the central government and insurgent groups like Hezb-e Islami and the Taliban. In exchange for political preferences being implemented, and promises of non-interference, anti-government actors can be integrated into the new transitional state. On the natural resources side, regional powerbrokers would agree on authority and revenue-sharing that reflects the de facto distribution of power in the country and gives players on both sides an interest in supporting a stable state.

Moving forward

The second key challenge regards the way in which the international community has engaged and continues to engage in the extraction sector during the NATO-led occupation and current transition period. Most interventions, whether by international aid agency, bilateral donors, or NGOs, have focused on technical, legal, and engineering improvements, leaving politics typically unacknowledged and addressed accordingly. To begin with, the lack of any real governance priorities always dominates. In addition, the public apparatus, whether the formal state or informal governance structures, is often quite limited, meaning that individual interests are infrequently balanced with the interests of the broader public.

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From a normative perspective, this type of deal-making may seem distasteful. Human rights violators, war criminals, and those who promote extremist policies would be effectively welcomed back into the fold of formal governance. For some, this flies in the face of a decade of painstaking work in the fields of women’s rights promotion, transitional justice, human rights, and the rule of law. A sober analysis of the circumstances on the ground in Afghanistan confirm, however, that without a functional political settlement that ensures some semblance of security and peace, these advances will be quickly lost. Sacrificing some, rather than all, of the progress seems to be a tolerable, though unfortunate, bargain.

Moving beyond mining, the water sector requires serious work as well. The top priority will be to negotiate international water agreements between Afghanistan and Iran, Afghanistan and Pakistan, and Afghanistan with its Central Asian neighbors. Afghanistan has a privileged position as the upstream neighbor on each of its major waterways, something that should be producing financial and development benefits for the Afghan people. Dams, small and large, have the potential to produce electricity and better irrigation control. Even the threat of dam construction should be sufficient to convince Afghanistan’s neighbors to provide side payments that reimburse Afghans for the forgone income and development benefits that dams would provide.

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Resource Extraction as a Danger to the State of Security in Afghanistan?

An interview with Mussa Mahmoodi

Neelab Hakim

In the wake of the discovery of Afghanistan's mining potential, hopes for a source of profitable economic revenue are high, but are the fears of flawed mining contracts that exclude the needs of local communities as well as fears about the cultural heritage that would be affected by the mining sites. Civil society activists have been addressing the need for an active inclusion of citizens in the process of appraising and commissioning projects in their localities. The issue of compensation and resettlement for families that lose their land as a result of mining projects has been raised and widely discussed, but the implementation has so far lagged in terms of transparency. Neelab Hakim, Program Coordinator at the Heinrich Böll Foundation in Afghanistan, has interviewed Mussa Mahmoodi, a civil society activist from Logar province, where Mahmoodi has been working extensively toward the improvement of the transparency of mining contracts and the inclusion of local citizens.

Neelab Hakim: There has been a lot of discussion about compensation for the resettlement of local communities of Logar province. What does this compensation look like in reality?

Mussa Mahmoodi: I have talked to many people around the mining area. They told me that they were not given any voice in the decision for signing the mining contract, nor have they been directly informed about the compensation. They only learned through the media that the contract had been signed and that the community's resettlement will be compensated by the government.

The compensation, in fact, still remains a mere promise by the government. While the media paint a bright picture, in reality the affected communities have not received proper compensation. Only a few of those affected have received some money for their land and property; however, the prices offered are far below the actual market value in Afghanistan and unprofitable for the people. Moreover, some of those who received money were people of influence and power in the area, so it is important to ask if these payments are justified.

In my point of view, it is not enough for the government to compensate only for the monetary value of property and land. They should look far beyond the material impacts. What about the social and environmental aspects of mining? How will they be compensated for?

The social effects of the resettlement on the local population are numerous. The people not only lose their land but also their attachment to the area. They lose grazing land for their animals and their entire livelihoods. These people have lived in the area for many gen-

Further reading


For more information see Sexton, 2012:
1. Case Study 2.
2. Ibid, Case Study 5.
3. Ibid, Case Study 6.
4. Ibid, Case Study 7.
5. Ibid, Case Study 7.
The environmental effects of mining in Logar will be immense if not managed properly. Our main concern is that the waste resulting from mining will pollute the Logar River, which is connected to the Kabul River and also passes through Laghman and Nangarhar provinces. In the case of a polluted Logar River, adverse health and livelihood effects would spread to many other provinces. This could have negative effects on both the big water dams of Daronta and Sorobi as well as the hydropower system in Logar.

Do the citizens in Logar address their concerns and are there mechanisms in place to deal with complaints?

The Heinrich Böll Foundation in Kabul recently funded an environmental awareness program in Logar that includes members of the local council, women, and youth. They are now coordinating public complaints related to the effects of mining in the area and directing them to the Ministry of Mines, the Parliament, and the president of Afghanistan. This is a promising initiative, as payments have already been offered to the affected community – hopefully they will be made. Previously, there was no real mechanism for the public to voice their concerns and grievances. Complaints could, of course, be forwarded by letter, but this proved to be too time-consuming and ineffective.

What positive outcomes do you expect will result from the mining for the communities in Logar in the long term?

In my point of view, the main positive impact of mining in Logar should be the creation of jobs for the local population. Also, mining offers great potential for Afghanistan to move toward economic self-sufficiency. The economic opportunities are evident, however the proceeds from the mining need to be channeled properly for the development of infrastructure in Afghanistan, such as roads, water supply, electrical grids, telecommunications, and railway networks.

Unfortunately, so far people have not seen many profitable results coming from the mining business that give them enough reasons to be optimistic. Initially, the hopes were high that the people in Logar would directly benefit from the new job opportunities. It was even publicly announced by a parliamentarian that at least 70 percent of newly created jobs would be reserved for people from Logar. So far, this promise has not been kept. As the citizens of Logar are the ones who are directly affected by the developments, they should receive a fixed share so that their livelihood standards can be secured, and even improved, under the new conditions.

There are also claims that the consultation process for the copper extraction at the Mez Aynak site has not been transparent because the local population was not previously consulted. As long as the government does not distance itself from this intransparency, people will remain skeptical and distrustful toward these projects.

The people in Logar also fear the potential negative impacts that intelligence agencies of Afghanistan’s neighboring countries could have on the security situation around the mining projects. From the reports of the residents, the area around Logar was fairly peaceful before the mining started, whereas it is now classified as one of the unsafe provinces in Afghanistan. All these aspects contribute to a negative attitude by the people toward new mining projects.

What are the implications of Chinese investment in Afghanistan?

This question not only applies to Afghans – in fact, mining contracts with the Chinese company Metallurgical Corporation China (MCC) have been signed in many countries. Afghanistan highly appreciates and welcomes foreign investments from any country, including China, but the people are concerned about transparency of the deals and accountability for the citizens.

We will face many problems if deals are made that remain unclear or turn out to be false. There is now evidence, for example, that not all resources were mentioned in the contract with MCC, such as gold. I am also deeply concerned about what will happen with the historical sites that have been discovered around Mez Aynak, which is one of Afghanistan’s most important archeological sites.

Aynak is home to ancient Buddhist sites, remnants of the area’s role as a transit route for the spread of Buddhism to Central Asia and China 2,000 years ago. It was identified as an archeological site in the 1960s, but it was not until 2004 that a team from the Institute of Archaeology of Afghanistan began to study the area. At least three sites, including six monasteries and numerous artifacts, have been identified within or adjacent to planned mining operations. The Aynak contract, however, makes no provision to address the possibility of archeological discoveries. With that in mind, we are extremely worried about losing our cultural heritage to the new Chinese investment.

How is the security situation of Logar impacted by the resource extraction at Mez Aynak?

As I mentioned earlier, the war in Afghanistan – from what I can see – is driven by the intelligence services of Pakistan and Iran, which do not want Afghanistan to grow to be self-sufficient and economically stable. There are clear indications that they want Afghanistan to fail in its reconstruction phase. Unfortunately, the issue of mining is a guarantor for conflict, and this has also become true for Bamyan province. Bamyan used to be one of the safer provinces until two years ago, but since mining started at the Hajigak iron ore deposit, the security situation has deteriorated. Last year, for instance, there were several beheadings of representatives of the Bamyan provincial council, and there have been similar incidents in Logar, too, after the resource-rich Mez Aynak came to the world’s attention.

Were environmental and social impacts of mining in Logar assessed before the resource extraction started? And how was the local population of Logar included in this process?

Actually, there was neither involvement by the citizens of Logar, nor the civil society groups in any sort of assessment before the contract was signed. Even the district and provincial councils were not informed about the mining contract – we all heard about it through the media.

An environmental impact assessment was carried out in 2009, but it was not approved by the National Environmental Protection Agency due to some problems with the mitigation measures and the environmental management plan.

I have worked as a civil society activist in Logar since 2004, but it was only recently that I was introduced to Afghanistan’s Extractive Industries Transparency Initiative multistakeholder group, which
helps in promoting the efficient and effective management of revenues received from extractive resources. The Heinrich Böll Foundation in Kabul is providing an important platform for civil society organizations to meet and exchange experiences on a regular basis. This network of activists is a very positive development – together we will hopefully be able to extend our outreach and raise awareness about the risks that mining implies for our still fragile country.

The Aynak copper mine is located in Logar Province, which is south of Kabul. Logar is surrounded by the Nangarhar, Paktia, Kabul, Wardak, and Ghazni provinces. The province covers an area of 3,955 sq. km, more than one-third (37 percent) of which is mountainous or semi-mountainous terrain, and more than half (58 percent) of the area is made up of flatlands. Logar has a total population of 322,704 within 44,209 households, which on average have eight members.

Logar is an agricultural province, rich with minerals such as copper and chromite. In terms of industry, there is one textile and one copper factory (Aynak copper mine) operating in the province. The majority of commercial activities in Logar are related to agriculture, livestock products, trade, and services.

The transport infrastructure in Logar is reasonably well developed, with 78 percent of the roads in the province able to handle car traffic in all seasons, and 17 percent able to handle it during some seasons. However, in a small part of the province (5 percent) there are no roads at all. The main road through Logar links Kabul and central Afghanistan with the border region of Quetta.

The Aynak Copper Project involves the development of a copper mine in Logar province and the transportation of refined copper to Torkham, which borders Pakistan, for export.

The project developer is MCC-JCL Aynak Minerals Company Ltd. (MJAM). MJAM was founded through joint capital contributions from the China Metallurgical Group Corp. and Jiangxi Copper Company Ltd. through a share ratio of 70 percent and 25 percent, respectively. MJAM holds 100 percent of the Aynak exploration license.

The country’s two biggest mining sites – the Aynak copper mine and the Hajigak iron ore mine – are expected to generate an average of $900 million per annum until 2031.

The Aynak copper mine is estimated to be worth $43 billion, whereas the Hajigak mine is thought to be worth as much as $350 billion. It is the nature of copper that it contains some gold, but the amount extracted would not generate much income because a copper mine has a very small percentage of gold.

In addition to bringing in around $541 million a year from 2016 onwards for the Afghan government, the Aynak mine could generate up to 5,000 jobs for the Afghan people, including in the exploitation of minerals at project sites and the construction and maintenance of railroads and water supplies.

Ahmad Samim Hoshmand is currently working as an ecology consultant with the Heinrich Böll Foundation in Afghanistan. In 2012 he graduated from Kabul University with a degree in the field of Environmental Protection and Disaster Management. Since 2010 Hoshmand has been working for several governmental organizations and nongovernmental organizations, including Afghanistan Investment Support Agency, Green Club Afghanistan, and The Union of Afghanistan Youth.
Total water consumption for the project is estimated to be 584,000 cubic meters per day for the first 16 years and 573,000 cubic meters per day thereafter. If there is no proper environment management, not only Logar but also Kabul and the surrounding areas will face a water crisis because the underground water levels will decrease.

According to recorded interviews, the Afghan government has compensated 300,000 Afghanis ($35,500) for the purchase of 2,000 sq. km of land. According to recorded interviews, the Afghan government has compensated 300,000 Afghanis ($35,500) for the purchase of 2,000 sq. km of land.8

The Ministry of Mines in Afghanistan will spend a total of about $4.5 million for resettlement and development projects such as roads, schools, mosques, water supply, and parks for the Aynak people. The ministry began this project in 2011 and it will be ongoing for some time.9

The general budget for the conservation of archaeological sites is estimated to be around $11 million, of which $6 million is provided by the World Bank and the remainder is provided by the developmental budget of the Ministry of Mines.10 Aynak is home to ancient Buddhist sites – remnants of the area’s role as a transit route for those spreading Buddhism to Central Asia and China 2,000 years ago. It was identified as an archaeological site in the 1960s, but it was not until 2004 that a team from the Afghan Institute of Archaeology began to first study the area. At least three sites – including six monasteries and numerous artifacts – have been identified within or adjacent to planned mining operations. The Aynak contract, however, makes no provisions to address the possibility of archaeological discoveries, and the China Daily has reported that the consortium was not aware of the local history when it entered into the contract.11

For more than 50 years, the Indus Waters Treaty has helped India and Pakistan – despite their mutual hostility – to successfully keep the peace, at least on the water front.

Islamabad – For most of the year the Ravi River, also known as the River of Lahore, runs dry. The people of Pakistan’s second largest city seem resigned to that fact, simply shrugging their shoulders and saying, «The Indians steal our water.»

Like most simple explanations, that one is not entirely untrue. But the reality of the situation is far more complex. In fact, India has the right to exploit the waters of the Ravi – as part of an agreement with Pakistan. In 1960, the two countries signed the Indus Waters Treaty (IWT), a pact brokered by the World Bank that continues in force to this day despite hostilities.

After the bloody partitioning of British India in 1947, which involved the migration of millions of people, the new state of Pakistan, and India itself, had to find a way to divide up water-use rights to the six rivers of the Indus system, which flow through both countries. It was no easy task. The waters of the Indus basin begin in the Indian Himalayas, so that India could theoretically cut off the source and leave Pakistan more or less dry and dry. For the two enemy nations, which have already fought three wars with each other, the division of resources was more than a minor problem – and one that was later exacerbated when both became nuclear powers.

But the Indus Waters Treaty established clear guidelines. Pakistan got the rights of utilization to the three abundant western rivers – the Indus, Jhelum, and Chenab – whereas India was allotted use of the Eastern Ravi, Beas, and Sutlej rivers. However, because of India’s intensive use of the waters, the lower reaches of those rivers, which flow through Pakistani territory, have since run dry. Pakistan was allocated financial help to build canals and help divert water back to Pakistan. So the IWT is regarded internationally as a successful example of conflict resolution.

Nonetheless, the Indus Waters Treaty is frequently subject to pressures from various political factions. A newly industrialized India is hungry for energy, and diverse large-scale hydroelectric projects are part of its planned energy strategy. Pakistan is wary of those plans. Climate change has also aggravated South Asia’s water supply problems. In recent years, there has been a measurable increase in extreme weather events such as heavy flooding, storms, and prolonged droughts. As a result, populists, particularly in Pakistan, have intensified their demands for a renegotiation of the Treaty.

We asked two experts – one from India and one from Pakistan – to give us their views on the Indus Waters Treaty. Their responses were reassuringly similar; both said the treaty is a good foundation, but that additional measures were needed in the future to foster mutual trust.

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For more than 50 years, the Indus Waters Treaty has helped India and Pakistan – despite their mutual hostility – to successfully keep the peace, at least on the water front.

Britta Petersen

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Archaeologists at Buddhist excavation site in Mir Aynak.
Leave the Treaty Alone!
A Pakistani Perspective
Feisal H. Naqvi

Water is an inherently disputatious subject, and one that has had the greatest potential to form the basis of yet more squabbling. Despite all sinister omens, Pakistan and India have managed to navigate the 50 plus years since the signing of the Indus Waters Treaty in 1960 in relative calm.

The discord and strife that greeted the 1947 Partition of British India into India and Pakistan was abandoned because not just India and Pakistan, but also the World Bank officials mediating the Treaty negotiations, realized that any mechanism based upon continued agreement was doomed to failure. It is for this reason that the Treaty states very clearly that the water of the three eastern rivers belongs to India, to do with as India sees fit; the water of the three Western Rivers belongs to Pakistan and it is stated that India shall let flow these waters without hindrance (except to the limited and precise extent specified in the Treaty itself).

In Pakistan, the ranks of the ideologists can be subdivided further. On the one hand, we find those blithe souls who are convinced that replacing the Treaty with a cooperative arrangement will produce better results. On the other hand, there are still some bitter souls aghast over the fact that Pakistan sold its rights to half of the rivers in the Indus Basin. Both of these groups are horribly mistaken. The optimists are mistaken because they have simply no idea of the passions that inform India-Pakistan relations and the degree to which any attempt at scientific rationality can be overwhelmed by nationalism. Their views should instead be characterized as a textbook example of the road to hell being paved with good intentions. The dead-enders, on the other hand, are equally wrong because they ignore the fact that Pakistan received a reasonably good deal out of the Treaty. Yes, Pakistan was only granted control of the water of three rivers, but those rivers account for 75-80 percent of the water flows in the Indus Basin.

The simple conclusion regarding the Treaty is that we should leave well enough alone. Yes, there have been certain disputes regarding interpretations of the Treaty, but those disputes are being resolved under the Treaty in accordance with the mechanism provided in the Treaty. Note also that water disputes remain one of the very few areas in which India has agreed to binding, independent dispute-resolution mechanisms. If Pakistan chooses to step outside the bounds of the Treaty or seeks to expand its rights, which force could make India acquiesce to our demands? Pakistan certainly lacks both the economic clout and the military might to bend India to its will. Why then would India agree to amend the Treaty in Pakistan’s favor?

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A closer look at the disputes that have arisen under the Treaty also shows no basis for revising or reviewing the Treaty. The only dispute to be adjudicated under the Treaty so far is that of the Baglihar project. Irrespective of what Pakistan feels about the decision, that dispute is now over. To the extent that the decision of the neutral expert in the case regarding the ability of India to drawdown water levels is debatable, it is now sub judice before a seven-member Court of Arbitration. Whatever Pakistan or India feels about that issue, the fact is that the Court of Arbitration’s judgment in the Kishenganga matter (expected later this year) will conclusively end debate on the matter, one way or another. So far as the other disputes are concerned, those are all one-off issues that will also be decisively resolved. The other portion of the Kishenganga dispute, for example, relates to a diversion issue that simply cannot arise in any other location. Similarly, if and when the Wular Barrage dispute is adjudicated, it will dispense with a festering thorn in Indo-Pak relations, but will not change much in terms of rights under the Treaty.

This is not to say that there is no scope for confidence-building measures when it comes to water-related issues. Instead, let it be noted clearly that there is ample scope for such developments. For example, India and Pakistan can easily agree to collaborate further on sediment-related problems...
and how to tackle sedimentation through increased upstream environmental protection measures. However, it is extremely important that any such collaborative discussions are held on the basis of the Treaty and not to substitute it.

There is another old saying that «the best is the enemy of the good.» Those who seek to improve the Treaty should first realize that they are dealing with issues that evoke incredibly strong emotions on both sides of the border. The Treaty has served both India and Pakistan well during the past five decades by negating the possibility of a war over water. There may be a time in the future when the express protections of the Treaty and the «good fences make good neighbors» approach evidenced therein can be replaced by a more cooperative approach. But that time is certainly not now.

The Treaty has settled the water-sharing dispute, and it has managed to survive four wars. In that sense it must be regarded as a success. Dividing the river system into two segments was perhaps not the best thing to do; the better course might have been for the two countries jointly to manage the entire system in an integrated and holistic manner. However, given the circumstances of Partition and the difficult relationship between the two newly formed countries, it would have been naïve to expect that such a joint, integrated, cooperative approach would work. If the best course is unavailable, then we have to settle for the second best – that is what the Treaty represents. The Treaty is essentially a partitioning agreement, not a grand instrument of inter-country cooperation. The land was partitioned in 1947, and the waters were partitioned in 1960.

Technical differences over projects

The water-sharing has been settled, but differences over certain design and engineering features of Indian projects on the western rivers have continued to arise. The Treaty allows India limited use of the waters of those rivers, but the use is subject to fairly stringent technical conditions and stipulations to safeguard Pakistan's interests. Thus, the Treaty is both permissive and restrictive toward Indian projects – particularly big projects – on the western rivers. India tries to use the permissive provisions to the fullest, whereas Pakistan tries to apply the restrictive provisions stringently. The two countries are thus pulling in two opposite directions. This leads to a permanent tug
of war in the Indus Commission. As the lower riparian on the Indus system, Paki- stan tends to look with anxious eyes at any attempts by India to build structures on the western rivers that may enable India either to reduce water flows or to release stored waters and cause floods. Pakistan’s objec- tions are thus partly water-related and partly security-related. The Indian position is that the security fears are misconceived because India cannot flood Pakistan without flooding itself first; that its capacity to reduce flows to Pakistan is very limited; and that the record of the last half-century gives no basis for any such apprehensions.

An important political dimension to these differences is that the projects are – or will be – located in Jammu and Kashmir. Pakistan can hardly be enthusiastic about facilitating Indian projects in what it regards as disputed territory.

Where do we go from here?

Abrogation of the Treaty, occasionally advocated by some, does not merit serious discussion. Should there be a renegotiation of the Treaty, as is often urged in both countries? It is difficult to envisage an outcome that would be better than before, from the points of view of both countries. Unfortunately, water-sharing is a zero-sum game: One side cannot increase its share without diminishing that of the other. The best course would perhaps be to leave things as they are and hope that, with improving political relations, a more reasonable and constructive spirit on both sides toward the operation of the Treaty will prevail in the future.

Until a few years ago, while there were arguments about certain Indian projects on the western rivers and their conform- ity to the provisions of the Indus Treaty, no one in Pakistan talked about water as being a major issue between their country and India. From early 2010 onwards, Pakistan has been projecting water as being a major issue between the two countries, indeed as a new «core issue» that is as important as Kashmir, if not more so.

Why has it decided to do so? We can only guess. Focusing public attention on the water issue may act as a powerful mobilizing factor and rally the people as a whole behind the government and/or the army. The government of Pakistan perhaps hopes to distract attention from bit- ter inter-provincial water-sharing disputes within its own country. Raising water as a new core issue may also be a counter move in response to the focus that India has been maintaining on terrorism.

The view seems to be widely held that if Pakistan faces a present or imminent water crisis, India is an important factor in that development. This could have a serious impact on India-Pakistan relations, even at the people-to-people level.

Some Pakistani concerns

Leaving aside popular misconceptions in Pakistan, let us take note of some of the concerns expressed in Track II meetings by thoughtful, well-informed members of Paki- stani civil society and academia, including those who want good relations with India.

(i) Popular perceptions or misperceptions about the diversion of water by India seem to receive unwarranted corroboration in reported findings by Pakistani scholars of a trend of reduction in the flows in the western rivers. The tendency is to assume that the upper riparian must be responsible for that reduction. The only answer to this is to institute a joint study by experts from both countries to determine whether the fact of reduced flows in the western rivers have diminished, and if so, to identify the factors responsible.

(ii) Other popular beliefs in Pakistan are: that the Indus Waters Treaty never envisaged the construction of a large number of major projects by India on the western rivers; that what was intended to be a minor concession has been stretched by India unduly; and that because of this stretching, every Indian project on the western rivers is in violation of the Treaty. These accusations arise from a misreading of the Treaty, which clearly envisages major Indian projects on the western rivers, as documented by the mas- sive annexes to the Treaty. So long as India conforms to the stringent restrictive provi- sions of the Treaty, it cannot be charged with stretching or violating the Treaty.

(iii) A third point on which much anxiety is expressed is the cumulative impact of a large number of projects on the western riv- ers. India might argue that if each project conforms to the Treaty, there can be no such thing as the «cumulative impact» of a large number of projects. However, Paki- stan apprehensions on this score cannot be lightly dismissed. Many in India have been worried about the cumulative impact of a large number of hydroelectric projects on the Ganges River, and studies have been commissioned to address the issue. What applies to the Ganges applies equally to the Indus system. The issue needs to be care- fully considered. Here again, a joint study by experts from both countries seems desirable.

(iv) In recent years, pleas have been made for a holistic, integrated management of the entire system, joint watershed manage- ment, etc. These are unexceptionable ideas, but a completely different «holistic» Treaty will have to wait for better times. Current concerns such as environmental impacts, minimum or ecological flows, etc., are as applicable to the Indus system as to other systems, and demands for them should not be brushed aside merely because the Indus Treaty did not foresee them. Presumably, environmental impact assessments are being made for each of the hydroelectric projects that are being planned on the west- ern rivers. Environmental impacts do not stop at the border; a project on the Indian side can have impacts across the border, and a project on the Pakistani side – for instance the Neelum Jhelum hydroelectric project that Pakistan is planning – may have impacts on the Indian side of the border.

Conclusion: The Indus Waters Treaty in an age of climate change

Global climate change and its possible impact on water availability in the Indus river system are matters of vital concern, and the two countries must begin imme- diately to work together on these. There has already been a measure of cooperation between them during international nego- tiations on climate change, but this must go beyond the limited issue of emission reduc- tions. This cannot be brought within the ambit of the Indus Waters Treaty but must be a separate exercise. Summing up, agreed solutions can be found for the differences that have arisen during the course of operation of the Treaty,
The rapid growth of the mining industry in India’s mineral-rich states has escalated the decades-long battle between the state and a Maoist insurgent movement. To effectively address this security threat, India must not only use a law-and-order approach to fight insurgents. It must also address—the through mining and environmental regulation—the grievances caused by the exploitation in mining areas of tribal and lower-caste locals, who serve as the insurgency’s base.

The Naxalites, a violent radical communist group born out of a 1967 rebellion, have long been ignored by India’s central government. But a spate in attacks in recent years has led the government to take them more seriously. By some estimates, 15–20 percent of Indian land is currently affected by Maoist rebels, who inhabit what is called the “Red Corridor,” an area that stretches from West Bengal to Karnataka.

The Maoists are responsible for attacks on both civilians and police officers. The insurgents also threaten India’s booming economy, as attacks on mining and railway infrastructure threaten the access to deposits of iron ore, coal, bauxite, and manganese that is worth close to $80 billion. Although the presence of natural resources and the burgeoning mining industry were not the original sources for the conflict, related environmental stresses have become significant drivers of violence and have contributed to the outbreak of the conflict and the financing of it. Iron ore, coal, and other minerals in parts of India have become conflict resources. Furthermore, tribes live in conditions of extreme poverty, and rather than improve their economic situation, recent industrialization in the area has exacerbated their problems by polluting land and making fresh water for local villages unusable. The resulting displacement of tribal villages has also frustrated local populations, making them increasingly vulnerable to the insurgents’ calls to arms. Also, poor implementation of national forestry laws has allowed local officials to harass forest-dwelling tribes, who depend on the wooded areas for their livelihoods, by evicting them from their land and lodging criminal complaints against them for collecting resources from the forest.

Although these grievances have served to mobilize a support base for the movement, the Maoists have recently moved away from fighting against the exploitation of the poor and turned into plunderers themselves. While claiming to fight the mining companies, they also extort money from those same companies in the form of bribes and protection money. Meanwhile, some mines have resorted to paying paramilitary groups to work as security forces. Rebels also steal explosive material, RDX, from the mines, using some of it themselves and allegedly selling the rest through-out South Asia, yielding millions in revenue.

Any approach to resolving the Naxalite conflict therefore must address the role that natural resources and mining play in the continuation of violence. India’s mining, environmental, and development policies are vital tools in the country’s strategy for addressing its internal instability. Former Minister of Environment and Forests (MoEF), Jairam Ramesh, devised a controversial “Go/No-Go” plan, denying mining clearances in nearly 35 percent of the country’s coal areas due to ecological concerns. As part of this policy, the government halted several high-profile mining ventures due to environmental concerns. Criticized by many for being too arbitrary a policy, the “Go/No-Go” plan was dismissed after Jayanthi Natarajan became Minister of Environment and Forests in 2011 and is currently in the process of being newly defined. This may result in a more objective classification of natural habitats into “inviolate areas” or “involate areas.” Involate areas are supposed to be pristine forests where any mining activity would lead to “irreversible” damage, and hence the need for their protection. The current report by the Committee to Formulate Objective Parameters for Identification of Inviolate Areas, which was appointed by MoEF and published in January 2013, states that on the basis of the recommendations “MoEF will finalize the list and maps of inviolate areas in each state/UT (Union territory) and will notify them under the Environment (Protection) Act, 1986.” These areas will hopefully become legal entities to ensure ecological preservation and restrict mining activities. The described policy, if implemented, could represent an important step not only for the environment; such actions by the government could also be one vital piece in winning back trust—and belief in the rule of law—in Naxal areas.

Critics have said the halt in mining permits will only serve to keep development from reaching areas where it is badly needed, thus prolonging the underdevelopment of mineral-rich areas that are also at risk for insurgency. Yet practical linkages between mining and diversified economic development are weak. However, the latest Mines and Minerals (Regulation and Development) Bill of 2011 represents a significant milestone in addressing this issue. Approved by the Union Cabinet in September 2011, it aims at strengthening measures to fight illegal mining and tackle corruption in the mining sector, while requiring mining companies to share profits with the local people affected by the projects: 26 percent in the case of coal operations, and the amount equivalent to their royalties in other mineral-producing businesses. The bill also calls for the creation of District Minerals Foundations to govern mining surpluses in local area development. However, questions remain about the implementation of these laws in areas where issues concerning transparency and governance exist. It is a matter of establishing transparent mechanisms, which need to be put into place to ensure that the funds actually reach the people affected by mining projects. The complex nature of the mining industry makes it difficult to identify the right communities. Furthermore, some tribal rights groups also say that financial assistance cannot compensate for displacement, and that strong forest laws mean that the tribal population should never be displaced.

These strengthened mining and environmental regulations do not substitute the need for law and order. Security in villages and in mining areas is necessary to eliminate the stream of weapons and funding to the Naxal rebels, as well as to allow development programs to take root. However, security alone will not solve the Naxalite problem. Only by addressing the root causes of the disenfranchisement of tribal people—much of which stems from environmental and mining-related grievances—can the government find a long-term solution to the insurgency.
Asia is a net exporter of resources to Europe

The illustration above depicts the direct and indirect flow of resources between Asia and Europe, whereby Asia includes the Middle East and Russia. An input-output model was created to identify the statistics, which combine data on the extraction of raw materials in Asia and Europe with data on the use of raw materials in the various sectors, and on trade between the sectors. The results of the analysis show both the direct flow of resources between Asia and Europe and the indirect flow of resources, in the form of what can be called «precursor materials», meaning raw materials that were needed along the value-added chain to manufacture a product. Precursor elements – including raw materials used in developing the infrastructure necessary for export (i.e., construction material for roads, rail, or harbors), as well as raw materials such as, for instance, metals and rare earth elements used in the manufacture of devices destined for export – have been included on a prorated basis.

The arrows illustrate this combined direct and indirect flow of trade in the four most important groups of resources: minerals (i.e. sand, gravel etc.), metals (i.e. iron, aluminum, rare earth metals, etc.), biomass (i.e. wheat, palm oil, wood, etc.), and fossil fuels. It is evident that Europe is dependent on Asian imports in all the raw materials groups. In the minerals group alone – the group with the largest volume of trade by mass – the ratio of import to export is 3:1, whereby the preponderance of that is construction materials used indirectly in Asian export sectors.

The large imports of fossil fuels come predominantly from the Middle East and Russia. China plays an important role in the resources trade between Europe and Asia, however it is increasingly being overtaken by states such as India (in mineral trade, for instance) and Indonesia (metal ores).

Of particular note is a comparison of direct and indirect exports from Asia to Europe with the total volume of material extracted in Asia. We can see that the greatest share of these raw materials is consumed in the region itself. However, in parallel with an extraction of resources in Asia that has more than doubled in the last 30 years, direct and indirect exports from Asia to Europe are also increasing. So the challenges are created by an overall increase in resource consumption, and by Europe’s heavy dependency on Asia.

China’s raw material imports

The illustration on the right shows the origin of the resources that comprise China’s direct and indirect (as precursor materials) imports. What is notable is that the bulk of raw material imports to China – some 1.5 billion tons – comes from Asia itself in all material groups except metal ores. In second place, but trailing far behind, are imports from Latin America, from which China gets primarily metal ore. North America and Oceania as origin regions are in third and fourth place. Despite a growing import trade from Africa, especially in minerals, metals, and wood, raw materials imported from Africa comprise only a small portion of overall direct and indirect imports to China. What the map does not tell us is whether, and to where, these imported resources might be exported again in the form of processed goods such as electronic devices.

Stephan Lutter and Stefan Giljum, Sustainable Europe Research Institute (SERI).
Flow of resources within Asia

Resource flow within the Asian region has grown enormously in the last few years. The illustration above depicts a regional comparison of the scale of the direct and indirect flow of resources between the individual countries. China, for instance, exports large amounts (a total of 500 million tons) of raw materials to Japan, with more than half of that (300 million tons) falling into the minerals group, whereas India imports 26 million tons of metals from Indonesia. Japan is a country poor in natural resources, but home to large industries such as paper, metal, and electronics. That, along with its highly developed service sector, makes Japan a key import player. The same applies to Thailand, which imports 37 million tons of minerals from China. While exports from less-developed countries tend to be concentrated in raw materials (i.e., direct trade flow), we can see that a large portion of exports from the emerging nations are indirect resources. The electronics sector is a good example of that. The amount of metals in an electronic device (such as a mobile telephone) can be very small, but extracting and processing those metals in other countries can be extremely resource-intensive.

Chinese Foreign Direct Investments on the Rise

Wang Zhile

Due to the rapid economic development of the past years and the ever greater need for resources, foreign direct investments (FDIs) have become a key component of Chinese business strategy and are being supported by the government accordingly. The «going out» policy is an important instrument for the support of Chinese companies’ foreign investments, in particular investments in the exploitation of resources and new sources of energy.

The «going out» policy as an element of economic globalization

The introduction of the reform policy and the open door policy in 1978 allowed the People’s Republic of China to join the «third wave» of economic globalization. Alongside the expansion of international trade, the development of new technologies, and the utilization of foreign capital, new forms of international cooperation were also established. China’s economic growth was thus increasingly tied to the development of the international market and to its integration into the global economy. In the first 20 years of the open door policy, the People’s Republic of China allowed international financial capital into the country to close the «double gap» in savings and currency that appeared over the course of China’s economic development. At the same time, outbound foreign investments were limited to prevent this «double gap» from becoming any greater.

However, this changed as China’s export trade was the introduction of the «going out» policy, officially ratified in October 2000 as part of the «Proposal for the Tenth Five-Year Plan for National Economic and Social Development.» This policy incorporates many types of foreign investments. These include market-oriented FDIs meant to stimulate export, in particular by promoting the relative strength of Chinese companies abroad—especially in the manufacturing sector.

Commodity-based FDIs are another important building block of China’s economic strategy. As a result, Chinese companies are motivated to cooperate more often with foreign firms and governments. These outbound investments should aid the exploitation of those resources that are scarce in China. Alongside market- and commodity-oriented FDIs, technological investments are also important. Chinese companies invest in research and development abroad in order to gain state-of-the-art innovations and technologies for their own industry.

Within the framework of the «going out» policy, China’s accession to the World Trade Organization in 2001 led to substantial changes in Chinese foreign trade, anchoring the place of the People’s Republic within the global economy. Chinese firms have thus been able to increase their foreign investments substantially in the past few years.

China Flow of Resources between Asia and Europe

All numbers in million tons

Concept and source: Stephan Lutter and Stefan Giljum, Sustainable Europe Research Institute (SERI).
China Chinese Foreign Direct Investments on the Rise

Chinese foreign investments on the rise

The growth of the Chinese economy in the past few years has led to a significant increase in Chinese foreign direct investments (FDIs). For this reason, commodity investments are of the essence for Chinese enterprises and receive massive state support.

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Trade, anchoring the place of the People’s Republic within the global economy. Chinese firms have thus been able to increase their foreign investments substantially in the past few years. Chinese foreign investments have increased by an average of 44.6 percent between 2002 and 2011. Since 2011, the Chinese government has made efforts to further increase its FDIs and has integrated this aim in its 12th Five-Year Plan. According to the plan, «China will pay equal attention to both foreign investments in China and Chinese investments abroad in order to increase safe and effective use of the two markets and their resources.» Both Chinese foreign investments and foreign investments in China must be promoted to aid the gradual and, more importantly, harmonious development of China’s economy.

Investments in foreign commodities

The lack of resources within China and concurrent energy supply interruptions have greatly hemmed the growth of the Chinese economy in the past. For this reason, commodity investments are of the essence for Chinese enterprises and receive massive state support. Statistics from China’s Ministry of Commerce show that in the past few years, Chinese enterprises have greatly increased their investments in foreign commodity and energy markets. Transnational fusions and takeovers in the mining and energy sectors deserve particular mention. In 2011, 19.1 percent of all mergers and acquisitions abroad were in these sectors – their total value was $14.72 billion. This is a 63 percent increase and accounts for 52.4 percent of the financial value of all mergers and acquisitions in 2011. In the first three quarters of 2012, Chinese foreign investments totaled $52.2 billion. Mergers and acquisitions in the energy and commodity sectors accounted for 29 percent of all mergers and acquisitions in this period and accounted for 68 percent of the period’s trading volume. The first three places on the list of China’s largest foreign investors are all held by oil companies: Sinopec, China National Petroleum Corporation, and China National Offshore Oil Corporation. Increasingly, private companies are also making foreign investments alongside state-owned companies. However, their investment volume remains small.

Legal and administrative management of Chinese foreign investments

In the past years, the Chinese government has continually relaxed the regulations for foreign investments. Depending on the type of company and the size of the investment project, different legal guidelines apply. For example, the National Development and Reform Commission (NDRC) is responsible for the approval of FDI projects, whereas the Ministry of Commerce oversees business start-ups in foreign countries. The «Interim Measures for the Administration of Foreign Exchange and Approving Foreign Investment Projects,» ratified in 2004, are among the most important documents for the administration of FDI projects. One condition of these guidelines is that resource exploitation projects with an investment volume between $30 and $200 million must be approved by the NDRC. If the volume is greater than $200 million, the project must also be approved by the State Council. Projects under $30 million do not need to be approved, but do need to be registered with the NDRC.

Regarding the acquisition of foreign investment projects and national calls to tender, the 2009 measure stipulates that binding agreements and proposals for bids and participations must be submitted to the government for examination before applications are officially filed. Before international calls for projects are approved, all documents must be presented to the NDRC and registered at the appropriate division of the State Council.

The administration of FDI projects, on the other hand, is the responsibility of the Ministry of Commerce. Here, too, the authority to approve projects is contingent upon the sum of the investment volume. If the project volume exceeds $100 million, the State Council must also approve the project.

Also of importance are the State Administration of Foreign Exchange’s (SAFE’s) «Regulations on Foreign Exchange Administration of Overseas Direct Investments by Domestic Institutions,» issued in 2009. These allow Chinese institutions to use their own foreign currency holdings for FDIs as well as domestic foreign loans, renminbi holdings, commercial goods, intangible assets, and other sources of foreign currency approved by SAFE. All profits made by Chinese institutions through their investments may remain overseas and be reinvested there. At the same time, SAFE has developed a registry system for Chinese foreign investments and the resultant profits and legal interests. However, this registry does not function as a monitoring system.

Alongside the NDRC, the Ministry of Commerce, SAFE, and local administrations, there are further institutions involved in the approval and administration of Chinese foreign investments. For example, the Ministry of Finance, the Assets Supervision and Administration Commission of the State Council, the Ministry of Industry and Information Technology, the Bank of China, the China Banking Regulatory Commission, and the China Insurance Regulatory Commission. The Ministry of Finance,
the Assets Supervision and Administration Commission of the State Council, and the Ministry of Industry and Information Technology are responsible for state investments, whereas the Bank of China, the China Banking Regulatory Commission, and the China Insurance Regulatory Commission are responsible for the administration of investments by financial institutions. The NDRC is responsible not only for the approval and administration of FDIs, but also, together with the China Exim Bank, for financial grants. Every year the China Exim Bank grants loans at preferential rates to promote FDIs. Since 2005, private enterprises may also be the recipients of these loans. In the main, foreign investment projects in the commodities sector are supported in the areas of macro monitoring, bilateral and multilateral trade policy, foreign policy, financial policy, taxation, currency exchange, duties and tariffs, information about resources, loans, insurance, as well as bilateral and multilateral cooperation projects and foreign policy agendas.

The experience of Chinese enterprises

Chinese companies can look back on no more than 30 years of experience with foreign investments. Direct investments in the commodities sector in particular have often had negative consequences, which is why future investments must take many things into consideration. First and foremost is the diversification of Chinese investment strategies as well as furthering an understanding of the need for cooperation. Private enterprises in particular, as well as Chinese joint ventures with foreign corporations, must be motivated to invest in the exploitation of overseas resources. At present, this is almost exclusively in the hands of state-owned companies. Although state-owned Chinese companies usually respect prevailing market mechanisms, they have a reputation of being «political» in the foreign press. This feeds the stereotype of a «Chinese threat» or the notion that Chinese foreign ventures are neo-colonialist. Private companies and joint ventures can help eradicate this impression because they are not state-owned.

Alongside diversification, investors must also increase their understanding of risk mitigation. To this end, transparent, long-term management strategies and control mechanisms are needed that are in accordance with global standards. Not until Chinese companies have a deep understanding of their own management practices as well as of their human and financial resources will they be able to make responsible economic policy decisions in their foreign investments and keep risks at a minimum.

Especially in the area of resource exploitation, it is important to accept social responsibility and ensure that management acts in a compliant manner. Not only should the company profit from revenue earned but the local population must also share in this wealth. It is equally important to safeguard the environment.

Finally, to optimize Chinese foreign investments, a better risk-management strategy is needed because Chinese companies are often active in volatile regions. Instable political conditions and prolonged conflicts make these regions a risk for Chinese investments because Chinese companies and their employees are always dependent on local conflicts. It is therefore important not to underestimate the importance of risk assessment for investments. Chinese companies that make outbound investments therefore not only owe it to the local population to see that their projects are grounded in social and environmental responsibility, they also have a commitment to their own employees to ensure that their safety is ensured.

As a rule, Chinese foreign direct investments (FDIs) contribute to the good relations between China and other countries. However, large projects led by Chinese companies have come under fire. The reasons for this criticism vary greatly, but one of them is certainly the often severe environmental impacts of some Chinese FDI projects. Many Chinese companies assume that the environmental compatibility of their investments is assessed by the recipient countries’ state agencies in the preliminary stages of approval and is thus not their responsibility. Recipient country governments, in contrast, place responsibility in the hands of the investors. These diverging opinions often lead to misunderstandings between Chinese companies that make outbound investments and the government and populations of the recipient countries.

Chinese investors’ insufficient sense of responsibility can be seen not only in the area of environmental impact, but also in assessing and accepting responsibility for the social implications of their projects. This is particularly problematic when Chinese companies become involved in conflicts of interest in the regions in which they have invested. In these cases, Chinese companies often find themselves in a dilemma. When they cooperate with corrupt governments that often do not represent the needs of the local populations, and sometimes even exacerbate conflicts of interest, Chinese firms are often accused of not acting in a socially viable manner. If, however, they take the interests of the local populations into account, it sometimes hinders cooperation with the governments of the recipient countries. This makes it difficult for Chinese companies to act in accordance with social responsibility and not damage their reputations as conscientious and accountable actors. Both the environmental and social impacts of Chinese investments must be a consideration for future investments if Chinese companies are to act responsibly and sustainably in foreign countries. This means not only conducting environmental and social compatibility analyses, but also making the results of these assessments open to the public. It is also necessary to provide local populations with information about investment projects that will affect them, and to allow them to participate in the projects. The local populations must be able to monitor and openly criticize planned projects.

Also essential to a sustainable strategy for Chinese investments is the integration of international standards. The recent release of the «Guidelines for Environmental Protection in Foreign Investment and Cooperation» by the Chinese Ministry of Commerce and the Ministry of Environmental Protection is a positive sign that these crucial steps are being taken. The guidelines will hopefully provide Chinese companies with a better understanding of their responsibilities and of the possible consequences of foreign investments.

Yu Xiaogang is the director of the Chinese nongovernmental organization Green Watershed. Until 2004 he also worked with the Yamen Academy of Social Sciences and carried out research on the environment and development in ethnic minority areas. In 2006 he initiated a network of nongovernmental organisations that advocates green financing and requires banks to consider environmental and social impacts and-show sensitivity when making decisions on financing and investment.
Criticism accepted only with difficulty

The government of the People’s Republic of China often has difficulty accepting foreign criticism of Chinese investment projects. No small number of government officials believe that this criticism stems from people who are fundamentally opposed to the Chinese government and only want to disparage Chinese companies. The Chinese government sees criticism of China’s investment policy as proof of the envy of foreign competitors whose only interest is in thwarting China’s economic growth. For this reason, the Chinese often see the international commodities market as nothing but a kind of combat arena, with China and foreign countries on opposing sides. They therefore see no reason to take criticism seriously, believing it is better to politely ignore it.

It is not only foreign criticism that the Chinese government tries to evade, it also shuns the press and the public eye at home. For fear of complications, neither positive nor negative aspects of investment projects are discussed.

However, as the world’s second-largest economy, China should face this criticism and take responsibility rather than permanently bury it in the sand. International standards and regulations must be integrated into the strategies of Chinese firms and become part of their mission. If this does not happen, it will be difficult to design Chinese projects so that all stakeholders are convinced of their social responsibility and environmental sustainability.

Governmental control and lack of transparency

Before making an across-the-board criticism of Chinese foreign direct investments, one should know the actors involved and the regulations they must adhere to. There are different kinds of Chinese enterprises that make outbound investments. One the one hand, there are state-owned companies subject to the control of the central and provincial governments. On the other hand, large and medium-sized private enterprises also invest in foreign projects.

Just as the forms of these companies differ, so too do the regulations governing FDIs. The establishment of the «going out» policy in recent years has become ever more important in the area of foreign investments. It has not only contributed to the increased intermingling of aspects of foreign and economic policy, but has also resulted in better integration of international regulations and standards in Chinese investment strategies.

The government plans to expand the «going out» policy in the coming years and to further encourage state-owned companies to make foreign investments. In particular, large state-owned companies have a very good financial basis and act with a corresponding self-assurance (some Chinese might say: «It is impossible for them not to behave arrogant even if they so desired»). This seemingly arrogant demeanor often leads to the misconception that Chinese FDIs have been arranged from above. But it is not only the government that should be made responsible for the misconception that all Chinese foreign investments are state-controlled. Individual companies also add to this mistaken belief by acting under different names and playing either the state card or the market card at their discretion. These companies want to profit from such an exchange, but all stakeholders.

To achieve this, all Chinese actors abroad must play with an open hand and allow more transparency. Naturally, company secrets must be protected, but information relevant to social or environmental impacts should be made accessible. Many Chinese companies still operate under a cloak of secrecy. They hope to thus create competitive advantages and greater profits. Almost none have realized that upholding regulations, responsible actions, and transparency might be the modern weapons to secure commercial success.

Not until Chinese companies have integrated this idea into their middle- and long-term strategies will they be able to act both successfully and responsibly.

Establishing «green credit» guidelines

Chinese banks play a key role in financing the foreign direct investments of Chinese companies. Currently, they are responsible not only for establishing creditworthiness, but also for assessing the companies’ management of environmental and social risks. At present, China Exim Bank, China Development Bank, Industrial and Commercial Bank of China, Bank of China, Bank of Communication, and China Merchants Bank are financing foreign investment projects. The strictness of their control measures varies. Some of the most well-known control mechanisms are the guidelines for «green credits,» introduced by the China Banking Regulatory Commission on February 24, 2012. The key section of this document is paragraph 21, which covers social and environmental risks. This paragraph includes a directive stipulating that Chinese companies that make foreign investments should adhere not only to domestic regulations, but also to the local standards of the recipient country. Financial institutions that act as banks should promote environmental and health-risk management in all foreign investments and ensure that the recipient country’s environmental standards are upheld, as well as health and security regulations.

Official channels must make certain that international standards are maintained.

The «green credit» guidelines are important because they mark the first time China has recognized the potential environmental and social risks of foreign investments as well as the correlating need to integrate upholding the relevant standards into the extension of credit. To professionalize this process, banks that give credit to companies that want to make foreign investments should create separate divisions to monitor whether beneficiaries follow the regulations and evaluate the program. At the same time, a procedure for incentives and penalties should be instituted to ensure that the standards are actually upheld. Despite the introduction of «green credits,» there is still no standard procedure for choosing beneficiaries or for the allocation of credits. Many banks still make decisions at their own discretion and use their own evaluation and monitoring mechanisms. In this way, it is possible at the lending stage to make decisions about the sectors in which foreign investments should be made and the branches that should be promoted.

Toward a sustainable investment strategy

As second-largest economy, today more than ever China is at the center of international attention and is being observed closely. The strategy «keep a low profile and wait for the right time» has long failed to reflect today’s demands on a major economic power. China must take on its role as a major economy and act in accordance with international standards and best practice procedures. To this end, genuine exchange is necessary on an international level. It is not only the foreign business of Chinese companies that would profit from such an exchange, but all stakeholders. To achieve this, all Chinese actors abroad must play with an open hand and allow more transparency.
Furthermore, China must not only accept more responsibility, it must also be allowed to actively help create international frameworks. To this end, the government must take leave of hackneyed phrases in its public appearances. To create space for a real exchange of arguments, reliable information is necessary as well as well-founded arguments and discussions among equals. Individual opinions must be permitted and companies should no longer be functionalized as government mouthpieces.

Finally, my hope for the future is that Chinese companies not only behave in a more transparent, responsible, and «green» manner, but that they also be more tolerant and learn to allow external criticism. This should not be limited to phrases such as «win-win» and «common development.» The interests of the companies, governments, and peoples of the countries in which China invests must be taken into account, as must those of the Chinese government and society. The Chinese government and society expect the foreign direct investments of Chinese companies to bring economic, social, and environmental sustainability alongside minimal investment risks. They also expect these investments to have a positive impact on China and on the recipient country. Stakeholders in the recipient countries, for their part, hope that Chinese investments will stimulate the local economy, that investments adhere to international norms, and that there will be no negative environmental or social impacts. For this reason, strategic decisions about Chinese foreign investments must be based on tolerance and incorporate proposals from groups in both countries, despite their diverse interests and needs. It is not easy to achieve this balancing act, but only if the Chinese government tries to meet this challenge can it hope to gain a reputation as a responsible and rewarding international partner and help design international standards.

China’s economic growth is first and foremost the result of globalization processes that turned China first into the world’s workbench, and ultimately into the largest export country in the world. There has been a corresponding, dramatic increase in China’s demand for resources and energy. The People’s Republic not only supplies the industrial nations with cheaply produced consumer goods; it increasingly uses global raw materials to develop the country’s own infrastructure and to manufacture products for its domestic market. The attendant hunger for energy and raw materials has led to an expansion of Chinese business activity not only abroad, but also on the periphery of China itself. That has had an enormous impact on China’s western provinces, which were far removed from the booming coastal regions in the south and east for a long time.

Until recently, exploitation of the western provinces’ raw materials was financially unattractive, due to the area’s distance from the important consumer centers coupled with China’s poor transport infrastructure. However, in light of the rising demand for energy and raw materials, the Chinese government is now systematically advancing the development of mining and its ancillary industries in that region.

Inner Mongolia is an example of this trend. It is one of China’s five autonomous regions. With an area almost twice as large as France, Inner Mongolia has a population of 25 million.1 The extensive grasslands found here are some of the largest in the world, famous for animal herding. But the area also has vast coal reserves, which has insired the greed of the coal industry. So far, some 40 billion tons have been uncovered – representing about 14 percent of Inner Mongolia’s deposits. Almost all of it is brown coal. In the past, the coal was not mined because there was very little local demand for it and no economically viable way to transport it to the centers of commerce. But as reserves decline in other coal production regions, mining is gaining in importance in Hulunbei’er.

These changes are particularly noticeable in Hulunbei’er.2 The grasslands here were once one of the most fertile regions in the world, famous for animal herding. But the area also has vast coal reserves, which has inspired the greed of the coal industry. So far, some 40 billion tons have been uncovered – representing about 14 percent of Inner Mongolia’s deposits. Almost all of it is brown coal. In the past, the coal was not mined because there was very little local demand for it and no economically viable way to transport it to the centers of commerce. But as reserves decline in other coal production regions, mining is gaining in importance in Hulunbei’er.

1 In such cases, however, local committees of party and government bodies are also involved in the investment projects – a fact of which many Chinese companies (at least smaller companies) are not always aware.

2 The «keeping a low profile and waiting for the right time» (4匿以明, 8匿以明) was laid out by Deng Xiaoping. At the end of the 1980s, Deng established «hide brightness, nourish obscurity» and «common development.» The interests of the companies, governments, and peoples of the countries in which China invests must be taken into account, as must those of the Chinese government and society. The Chinese government and society expect the foreign direct investments of Chinese companies to bring economic, social, and environmental sustainability alongside minimal investment risks. They also expect these investments to have a positive impact on China and on the recipient country. Stakeholders in the recipient countries, for their part, hope that Chinese investments will stimulate the local economy, that investments adhere to international norms, and that there will be no negative environmental or social impacts. For this reason, strategic decisions about Chinese foreign investments must be based on tolerance and incorporate proposals from groups in both countries, despite their diverse interests and needs. It is not easy to achieve this balancing act, but only if the Chinese government tries to meet this challenge can it hope to gain a reputation as a responsible and rewarding international partner and help design international standards.

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China’s 12th Five-Year Plan (2011–2015) sets out the construction of mining zones of gigantic proportions. The goal is to reach an annual output of 150 million tons, which is three times the amount produced by the Garzweiler surface mines in Germany’s Rhineland. The plan also includes large-scale facilities for converting the coal to electricity. The planned power plants would expand Hulunbeier’s capacity by 2015 by 7.55 terawatts, approximately 400 times the capacity of Three Gorges Dam. The overall capacity of the coal-fired power plants would then be 15 terawatts, with an annual output exceeding 50,000 terawatt hours. In addition to the power plants, there is planned investment in high-voltage lines, such as the 500-kilovolt DC line from Hulunbeier to Shenyang.

Environmental impact: Threatened desertification of grasslands

Economic growth based on coal has drastic consequences for the environment, for traditional ways of life, and for societal coherence. A fall in the water table, acidification and heavy metal contamination of water; dust loading, destruction of grazing lands; and the pollution of rivers are only a few of the effects of coal mining. Another problem is the enormous amount of water needed to wash the coal – a process used to separate the mined coal from other rock and contaminants. This is a particularly urgent issue for the arid region of Inner Mongolia, where the environmentally valuable grasslands are already threatened by encroaching desertification.

Although Hulunbeier has quite a bit of water compared to the rest of Inner Mongolia, it is still dry in comparison to the national averages. The dramatic consequences of the coal mining industry’s immense water consumption can already be seen in many places in Inner Mongolia. The village of Dongming in Hulunbeier is one example of this. Largely shaped by animal husbandry, the village today is completely surrounded by coal mines and coal-processing operations. Just two scant kilometers east of the village, the Baotuixile surface mine, which is owned by the Shenhua state energy company, extracts 30 million tons of coal per year. Next to the mine is a coal-fired power plant, co-owned by Shenhua and the Guoxiu company, with a capacity of 1.2 gigawatts. North of the village is the smaller Dongming surface mine, producing 4 million tons of coal annually. And south of the village, chemical plants have grown up that use the locally mined coal as a raw material.

As a consequence of those developments, the water table in the village of Dongming has dropped continuously. Every household originally had a well – some 30 meters deep – with a motorized pump – that supplied enough water for the animals and the household. But Dongming is not the only place where the water crisis is making itself felt. According to an article in the party newspaper, People’s Daily, seven rivers in Hulunbeier have dried up as a result of damage to the water system in the wake of excessive coal mining.6 One of these is the Yinim river, which has its source in Hulunbeier and plays an important role in keeping the grasslands supplied with water. The waters of the Yinim were dammed up to form a reservoir – which interrupted the flow of the river – in order to supply water to a power plant operated by the Huaneng company. This could have unforeseeable consequences for the Hulunbeier grasslands ecosystem.

Interference with the water table leads to damage to the land. Analyses have proven that the grasslands in the Hulunbeier region have shrunk considerably and large sections have been rendered arid and over-salted. Currently, approximately 2 percent of the grassland disappears each year. It must also be mentioned that the growing population and past overgrazing practices have also contributed to this development. At this point, however, interruptions to the aboveground water flow by the mining industry are the primary cause of the expanding desertification.

Mining intensifies social conflict

The loss of grazing land and of water, and the direct environmental damage caused by the mines are not only threats to the environment and human health, they also represent the loss of livelihoods for the local farmers and herders. The animals are more frequently and the farmers suspect that the illnesses are connected to toxins in the wastewater and dust coming from the chemical factories. Nor do the mines and the chemical industry provide much of a viable alternative source of income for the local population. Very few of the people here have the necessary training, and many of the technical personnel are recruited in other provinces. That means that, despite the dramatic economic growth in Hulunbeier, the actual income of the local population is dropping. So the animal farmers are paying the price for the mining operations, while the coal industry and the local government reap the profits.

The herders have tried to defend their interests, but the local authorities have turned a deaf ear to their concerns. Although environmental impact assessments are mandatory for all projects and the involvement of citizens is compulsory, the investigations are often no more than a formality. Citizens are granted only two weeks to examine the planning documents,
Conflicts over the destruction of pasture-land by coal mining companies had been smoldering for a long time until a group of Mongol herdsmen attempted to obstruct the advance of a coal truck and one of them was run over and killed. His death ignited mass protests in several cities, including the provincial capital, Hohot. The provincial government sent in the tactical police to suppress the riots; some public buildings, such as schools, were on lockdown for days. In the end, the mine in question was shut down temporarily and the driver of the truck that killed the herdsman was sentenced to death. But the deeper causes of the conflict have so far not been adequately addressed.

Government measures

The central and provincial governments are aware of the problems that unrestrained development of the coal industry brings with it and they have not remained entirely inactive. China has a comprehensive – albeit not perfect – set of laws governing environmental protection and industrial safety. Although the laws contain very few stipulations intended specifically for the production of mineral raw materials, there are a variety of regulations that can be applied to coal mining. As an example, in the last few years, the ministries of natural resources and of the environment have both issued regulations for environmental protection in mining practices.

Emissions reduction

The Ministry of the Environment in Beijing last set new standard levels for wastewater and emissions in the coal industry in 2006. Regional environment authorities prohibit the extraction of coal deposits with a sulfur content higher than 3 percent. Coal companies in Hulunbei’er often dispose of their wastewater without permits, thereby violating the existing emission standards. In 2010, the environmental agency of the autonomous region of Inner Mongolia fined the Dongneng chemical factory near the village of Dongming for disposing of wastewater in contravention of the rules. However, the fines levied by the environmental authorities are far too low to deter the industry. Enforcement of environmental laws fails due to the close entanglement of the (state) coal companies and the local bureaucracies. The power of the party secretaries in the upper echelons of the national coal and energy companies usually reaches further than that of the functionaries in the local environmental agencies.

Rehabilitation of surface-mining sites

The authorities have also recently begun making efforts to reclaim the sites of former surface mines. Since 2006, a national state rule obligates mining companies to provide compensation payments for the loss of grazing land are administered by the local authorities. The money is often paid out only after protracted negotiations or highly forceful protests. And the payments are often so low that they are insufficient to make up for financial losses; of course, they do nothing to alleviate the health impairments that result from the coal mining operations.

This situation has not yet led to violent protests in Hulunbei’er, however in May 2011, tensions between the herdiers and mine operators in the region’s southwestern Xilin Gol Grassland erupted into the worst unrest in Inner Mongolia in years.
a security deposit commensurate with the cost of reclamation. But implementation of the rule varies from province to province.

A concrete plan for rehabilitating the mining areas has existed in Inner Mongolia since 2011. In Hulunbeir, there are seven projects to reclaim 33 sq. kilometers. The Baorixile mines in Hulunbeir are one focus of this. Together, the central and local governments have spent a total of some 60 million yuan renminbi to deal with the damage left behind by the Baorixile mines. The measures include filling in the mining cavities, laying a 30-centimeter layer of fertile soil, and replanting the area. Those reclamation measures are necessary to make the surface viable for use in other economic ventures. However, it should be taken into account that there are a number of imponderables that could make further use difficult. Many of the problems are not being addressed at all, for instance the sinking water table, or the possibility of groundwater acidification from the overburden and waste heaps left behind. So those measures can be expected to redress only a portion of the damage caused. In addition, the data for Inner Mongolia shows that the area subject to reclamation measures is considerably smaller than the new area that coal mining operations are utilizing — or will utilize.

Shutting down the dirtiest mines

The government also hopes to mitigate the consequences of mining by eliminating the worst forms of mining, on the one hand, and building model mining operations on the other. Under China’s industrial policies, small business is considered inefficient and prone to pollution. As far as coal mining goes, this is somewhat accurate, since the many small and illegal mining operations do not invest enough in either operational safety or environmental protection mechanisms. So the central government has mandated a minimum capacity for underground brown coal mining of 3 million tons annually and 5 million tons annually for surface mining operations. The government also shuts down several hundred mining operations each year that do not fulfill the regulations.

Beginning in 2009, the central government also established a network of pilot mining ventures, called «green mines.» The goal of the program is to invest in environmentally-friendly production and pollution-abatement technology, as well as detailed impact assessments, to bring mining operations in line with the goals of «sustainable development.» In response to the mass unrest in 2011, the Inner Mongolia region has also instituted a project called «harmonious mines» – a reference to the concept of the «harmonious society» propagated by the Communist Party of China. This includes the presentation of a plan for Hulunbeir called a «Work Draft for the Construction of Harmonious Mining Zones» by 2015. The planned measures include analysis of environmental and social compatibility for new projects; initiatives to increase income for farmers and herders; mechanisms for conflict resolution between herders and mine operators; boosting corporate responsibility; compensation payments; and improved oversight of standards and practices. Since these programs have only just begun, it is too early to evaluate their effectiveness. However, the «harmonious mines» concept does not go much beyond existing regulations, and it remains questionable whether the program will really lead to greater enforcement of existing laws and standards. There are no verifiable indicators to measure success for either the «green» or the «harmonious» mines. Above all, there is a lack of clear stipulations for public participation in the planning and oversight of mining projects.

Green instead of black

The current trend in Inner Mongolia and Hulunbeir indicates that the environmental and social consequences of the exploitation of coal reserves will continue to get worse. The measures undertaken by the national and local governments to more closely regulate the coal industry seem like halfhearted attempts to apply the brakes to a train that is thundering through the landscape at a stupendous speed. It is the central government itself that has dictated the route — Inner Mongolia’s coal reserves will ensure that China’s future energy needs are met. So the environmental repercussions are no coincidental side effects, but rather an integral component of this development model, one that is accepted and can — at most — be minimized with investment in environmentally friendly technology. In essence, a development model that began in eastern China 30 years ago is now being repeated in Inner Mongolia.

The difference is that in Inner Mongolia, those developments impact the Mongol animal herders — a group that is already marginalized by virtue of its economic system and its status as a minority. Further expansion of mining operations could intensify cultural tensions and call the entire development model into question.

If the Chinese government wants to find solutions to these issues, at a minimum it must take the following steps: It should commission a structural environmental impact assessment of the coal industry’s water utilization in Inner Mongolia, based on that report, it should reconsider the scale of mining operations in the area. It should establish mechanisms for genuine public participation and create transparency so that residents of the grasslands have a way to advocate their interests. And finally, it should authorize independent arbitration bodies to mediate between the mining companies and the local citizens.

1 That is about 20 inhabitants per square kilometer. Almost 80 percent of those are Han Chinese, while some 17 percent are Mongol. The remaining people are distributed among 47 additional ethnic groups.
2 China’s energy demand continues to be fed largely by coal. It makes up 70 percent of the primary energy consumption in the country overall and almost 90 percent in Inner Mongolia.
3 The Mongol name of the region is Hulunbuir. It is at the northeastern end of Inner Mongolia.
4 China’s largest coal and electric industries have a presence in Hulunbeir, including State Grid, Shenhua, Huadian, Yuntian, and Datang.
5 Research Center on Development in Hulunbeir. Summary of the 12th Five-Year Plan for the economic and social development of the city of Hulunbeir (May 29, 2012); website of the Hulunbeir city government.
8 The government has already undertaken a great deal of action to reduce pollution caused by mining in Hulunbeir. It has mandated a minimum capacity for underground brown coal mining of 3 million tons annually and 5 million tons annually for surface mining operations. The government also shuts down several hundred mining operations each year that do not fulfill the regulations.
9 The government also shuts down several hundred mining operations in line with the goals of «sustainable development.» In response to the mass unrest in 2011, the Inner Mongolia region has also instituted a project called «harmonious mines» – a reference to the concept of the «harmonious society» propagated by the Communist Party of China. This includes the presentation of a plan for Hulunbeir called a «Work Draft for the Construction of Harmonious Mining Zones» by 2015. The planned measures include analysis of environmental and social compatibility for new projects; initiatives to increase income for farmers and herders; mechanisms for conflict resolution between herders and mine operators; boosting corporate responsibility; compensation payments; and improved oversight of standards and practices. Since these programs have only just begun, it is too early to evaluate their effectiveness. However, the «harmonious mines» concept does not go much beyond existing regulations, and it remains questionable whether the program will really lead to greater enforcement of existing laws and standards. There are no verifiable indicators to measure success for either the «green» or the «harmonious» mines. Above all, there is a lack of clear stipulations for public participation in the planning and oversight of mining projects.
Myanmar’s Natural Resources
Blessing or Curse?

David Allan and Rainer Einzenberger

Myanmar’s progress since the 2010 general elections has been astounding, with political transition greatly encouraging citizens and international diplomatic and investment communities. The diplomatic climate for Myanmar has changed dramatically as a result and sanctions have been eased progressively. Not surprisingly, many international investors have cast their eyes on Myanmar’s abundant natural resources for commercial exploitation. This has prompted international pundits and commentators to speak about a “gold rush” unfolding in the country formerly known as Burma. Other experts clearly state that there is “no treasure trove waiting to be released here,” and highlight the difficulties facing investors due to the lack of high-quality geological and geophysical data.

Since ancient times, the land known today as Myanmar has been famous for its wealth in natural resources of all kinds. The Sanskrit name Suvarnabhumi, meaning “Golden Land,” has been associated with Myanmar for over two millennia. Today, Myanmar’s natural resources include oil and gas, various minerals, precious stones and gems, timber and forest products, hydropower potential, etc. Of these, natural gas, rubies, jade, and timber logs are the most valuable and currently provide a substantial proportion of national income. To date, while there has been a very low level of systematic exploration of Myanmar’s natural resources due to lack of modern survey techniques.

Although all resource sectors have different development strategies, an overall strategy – particularly in the energy sector – might be described as “more and quickly.” Since it was clear that reform was in process after the 2010 election, potential investors have flocked to Myanmar looking for opportunities, particularly in the energy and mining sectors. Late in 2012, a new foreign investment law was finally passed, after much debate on the extent of possible foreign ownership and investment restrictions. The 1994 mining law has yet to be reformed, and many investors consider that a change of signature bonuses and the terms of production-sharing contracts will be necessary before investment can be attractive in this sector.

Foreign direct investment in the extractive sector

According to official data, recent foreign direct investment in Myanmar has been concentrated in the oil/gas and hydropower sectors, with mining coming in third position by value. Investment commitments made in the 2010/11 financial year were approximately 30 times the rate of commitments made on average for the previous 22 years. The main investors by country were Myanmar’s neighbors China (including Hong Kong) and Thailand, followed by South Korea, Singapore, and others. While the vast majority of people in the national workforce are subsistence farmers, the gas industry and the precious/semi-precious stone-mining industries have provided the revenue to operate.

The $3.4 billion official figure is believed to vary between $5.5 and $15 billion, but quality data is scarce. Myanmar’s energy ministry lists proven crude oil reserve estimates of 3.2 billion barrels and gas reserves of 11.8 trillion cubic feet (placing it about eighth in the world), yet the numbers are open to debate. Myanmar is one of the world’s oldest oil producers, having first exported its first barrel in 1853 while under British colonial rule. Oil and gas exploration activity has been at its highest and most advanced levels in recent years. Large-scale gas development started in the 1990s, and the first natural gas pipeline to Thailand was finished in 1998. At that time, the pipeline was one of the world’s most controversial natural gas development projects, and human rights organizations accused the military government of “serious and widespread human rights abuses committed by pipeline security forces on behalf of the companies.” Foreign currency earnings from gas sales since around 2000 have likely prevented Myanmar’s economy from experiencing a disaster and helped the military junta survive despite international sanctions.

Despite a shortage of natural gas for the domestic market, most of the natural gas is exported. Currently all gas exports go to Thailand. Yet, a new 1,800-kilometer-long pipeline – which will cross the whole country, from Kyauk Phyu in Rakhine state to Kunming, China – will commence later in 2013. Gas production is projected to more than double in the next six years. However, it is not clear yet how the gas and revenues will be used for the benefit of the Myanmar population.

Public protests against hydropower development

The hydroelectric power development sector is currently the second-largest investment recipient after the oil/gas sector. However, this sector may well become the largest investment sector in Myanmar in the foreseeable future. Sixteen projects that are currently under construction and scheduled to be completed by 2015 will generate 3,478 MW (demand in 2011 was 1,588 MW). Development of these projects is in the planning stages. After installation, the generated electricity will amount to much more than the actual projected demand. But as in the case of natural gas exploration, most of the electricity is intended for export, mainly to China, but exports to Thailand and India are also being considered. Hydropower retains high prominence in the revised energy plans for the country that were prepared by the Asian Development Bank. The bank has resurrected previous estimates of the hydropower potential, which was said to have the potential to provide more than 100,000 MW of energy. This estimate includes many mainstream dam projects, such as the Myitsone Dam on the Irrawaddy River and the Haingyi Dam on the Salween River, that would not meet the guidelines of the World Commission on Dams, which advocates for the consideration of dams with lower impacts on tributary rivers.

While the vast majority of people in the national workforce are subsistence farmers, the gas industry and the precious/semi-precious stone-mining industries have provided the largest incomes, with gas earning of $3.6 billion for 2011–2012 and precious stones earning of approximately $3.4 billion in 2010 from auction sales.
Mining and land conflicts

Myanmar is geologically very rich, and mining is significant as a large-scale industry and also in small-scale artisanal forms. Mineral occurrences cover all sectors, including base metals (gold, copper, silver, lead, zinc, tin, antimony, iron, etc.), industrial minerals, energy sources (mainly coal), gems (jade, rubies, sapphires, etc.), as well as rare earth minerals. Myanmar is perhaps best known for natural resources, Myanmar's citizens are among the poorest in Asia and lag behind their ASEAN neighbors in all aspects of human development.

Despite being blessed with an abundance of natural resources, Myanmar’s citizens are among the poorest in Asia and lag behind their ASEAN neighbors in all aspects of human development.

Workers prepare to launch the China section of the Myanmar-China oil and gas pipeline inanning in southwest China's Yunnan province on September 10, 2010.

The state is currently aiming to control and manage all aspects of production and sale of jade and gems, but in this sector, as well as in the gold sector, large informal and illegal industries exist.

The mining sector operates both through granting concessions or leases to investors, and through state-owned mining enterprises. The current mining law (Mining Law of 1994) protects companies involved in mining, and gives very few rights to landholders. This law has no provisions for Environmental Impact Assessments, Social Impact Assessments, or community consultation, although the focus in this respect is rapidly changing, and new guidelines are being developed at a rapid pace. As in many other places, the road to successful implementation will be long. Mining companies currently have broad regulatory freedoms to do as they please. An agreement between Myanmar mining authorities and China’s Ministry of Land Resources resulted in six major projects by 2008. Three major new or expansion projects are currently in progress. The case of the Monywa copper project by Wanbao Mining – a subsidiary of the Chinese arms manufacturer Norinco – caught international attention in late 2012. Local communities had protested against land confiscation and environmental destruction in connection with the mining project. The protests, led by Buddhist monks, were forcibly crushed by local security forces, causing public outrage across the whole country.

Myanmar has not yet clarified land use priorities and mechanisms for resolving conflicts regarding competing uses of land. However, as in other developing countries in Southeast Asia, it is expected that a Hydrocarbons and Mining Trumps Everything policy may apply, which is considered far from satisfactory. Land conflict cases in Myanmar have exploded since 2011, and not only in relation to the extractive or mining industries.

Conflicts over resources

Despite being blessed with an abundance of natural resources, Myanmar’s citizens are among the poorest in Asia and lag behind their ASEAN neighbors in all aspects of human development. Myanmar’s natural resources were managed in unsustainable and nontransparent ways during decades of military rule. Lack of transparency in the past has raised many questions about potential misappropriation. Revenues were used for state needs, among them being military expenses to ensure the military’s control. While natural resources were being sold to neighboring countries, the local population was left empty-handed.

Yet, citizens are well-aware of the large revenues being obtained from gas, gems, timber, and minerals sales and exports and want to see these clearly translated into revenues in the national budget, as well as to see consideration and planning for the management of the wealth of the country in a way that will take them on the pathway out of poverty.

Many of the deposits of natural resources are located in ethnic areas of the country where long-running ethnic conflicts have often generated war economies to sustain decades of armed resistance against the central government. Investment projects in these areas have a lot of potential for conflict and for harming the fragile processes toward peace. Many observers agree that the ongoing Kachin conflict is basically about competition for local resources. In all areas, benefit-sharing models with ethnic groups – and, more importantly, matters of project control and autonomy – remain unresolved, not agreed, and unsatisfactorily legislated.

Such discussion items are central to the political discussions that ethnic groups hope become part of the much desired peace processes.

Current unprecedented levels of investment in the natural resources sector will massively increase pressure on natural resources, communities, and the country’s ability to manage developments in a responsible and sustainable manner. Due to the current weak regulatory framework, foreign investment has the potential to add significant extra pressure to a system already under immense strain.

Progress toward improved extractives transparency and accountability

In line with other wide-ranging political and economic reforms in Myanmar in 2012, major progress has also been made toward transparency and accountability improvement. Various supporting statements for more transparency with regards to resource management have been made by senior figures, including President Thein Sein, who publicly announced in July 2012 that “[t]he most important thing is to have completely transparent financial accounting to ensure everyone knows where the revenues from these extractive industries are going.”

In December 2012 the president established an “EITI Lead Authority” confirming the government’s intention to increase its transparency.

Several civil society organizations in Myanmar support the initiative toward more transparency in the natural resources sector and have lobbied the government to continue in this direction after having taken very positive initial steps. If the impacts of investments in the natural resources sector can be properly assessed and managed, and the revenues can be dealt with accountably and transparently, the potential benefits could be enormous. Wealth from natural resources could fund a substantial part of Myanmar’s transition, if managed properly. Unfortunately, the track record for this internationally is quite low, with few countries having succeeded in avoiding resource curse issues. However, much has been learned about how to avoid the pitfalls. At present many previously unavailable oil and gas blocks are out for tender. The process for these may be a key indicator of how successfully lessons from elsewhere have been learned. Can Myanmar avoid the mistakes of many others and turn its resource curse into a blessing?”
In Monywa, Myanmar, something remarkable is happening after decades of rule under an oppressive military regime: The people are finding their voices, and it is making a difference. It started with a series of protests against a copper mine in the Letbadaung Mountain area, protests that then consolidated into a grassroots movement and the formation of Save the Letbadaung Committee (SLC). SLC is comprised of a group of concerned citizens fighting for their own community rights in a copper mining area that, until recently, had always been controlled by the government and outside investors, the most recent of which are from China. On December 7, 2012, the group sent a letter to the President of the People’s Republic of China, raising their concerns about the mining project and suggesting that an immediate shutdown was needed to preserve the friendship between China and Myanmar. They wrote, “This copper mine at Letbadaung [the other side of Monywa] has caused a lot of environmental problems among some 26 villages, giving people mountains of trouble in their livelihood, health, and other social problems.”

We, the people of Monywa, value Letbadaung as the most precious gift of nature and as the most beautiful scenic spot of our town. We can’t lose the Letbadaung mountain in its entirety. We don’t want any mining project there, regardless of who may run it. We don’t want the mountain to get destroyed. We want always to have it as it is. We can’t exchange our beautiful mountain for money or gold or development. The copper mines rob the people of Monywa of their most treasured jewel.”

SLC raised several key points in framing their concerns about the Chinese mine:

- The Chinese are not the first to invest in resource extraction in this area. In fact, locals witnessed what Ivanhoe, a Canadian-owned mining company, did to their environment in the 1990s. However, under the military regime at that time, public outcry of any degree was impossible, regardless of how destructive the mining activity was. Now with democracy taking hold, locals are being given a chance to raise their own voices. The protests that have emerged against the investors and their government associates are the very first of their kind in this part of Myanmar.

Natural resources in the Monywa region

The Monywa region has long been known for its rich natural resources, especially high-quality minerals such as copper. The British started exploring the area for minerals as early as the 1930s; in the 1950s, the Myanmar government invited Yugoslavian counterparts to conduct a survey in order to confirm the volume of copper deposits. The Myanmar Socialist government under Ne Win started mining in 1984 at a production rate of 8,000 tons per day. Large-scale extraction was started 10 years later, when Myanmar Ivanhoe Copper Co., Ltd. (MICCL) was established through a 50/50 joint venture between the Canadian-owned Ivanhoe Mines Ltd. and the state-owned Mining

Nwet Kay Khine

Nwet Kay Khine works currently as project coordinator for the Heinrich Böll Foundation in Yangon. She has extensive experience in the media and nonprofit sector, both as a journalist for various Burmese newspapers and as a trainer for development NGOs. For her master’s in International Development Studies in Chulalongkorn University, Bangkok, she won a scholarship from the Heinrich Böll Foundation Southeast Asia. Khine also holds an Erasmus Mundus master’s degree in Journalism and Media within Globalisation from Hamburg University, where she mainly focused on the transition in Myanmar and the new role of the media.
Enterprise-1. MICCL’s extraction concentrated on the Sabetaung and Kyisintaung mountain areas, which are about a 40-minute drive from Monywa.

During the project term agreed to by the military government, Ivanhoe also sought the right to develop the deposit at Letbadaung, which is only 6 km away from the Sabetaung-Kyisintaung Mine. In a 2007 report, Ivanhoe estimated that the ore and mineral reserves in the previously untouched Letbadaung deposit were more than 200 times greater than the reserves of the Sabetaung deposit. However, increased tension with the Myanmar military government prevented the company from exploring the new area. According to a diplomatic cable from the American embassy in Yangon, which was released by WikiLeaks in 2011, communications between the MICCL and the Myanmar Ministry of Mining had been deteriorating since early 2000. Due to a disagreement on profit allocation, outside pressure from pro-sanction exile communities, and a lack of compromise from the Myanmar Ministry, Ivanhoe decided to divest its shares in 2006. Ivanhoe eventually revealed to the US embassy that Tay Za – one of the closest allies of former military leader Senior General Than Shwe – brokered negotiations with Wanbao Copper Mining Company, a Chinese-owned company and subsidiary of the Chinese state-owned arms and machinery manufacturer Norinco, which won the bidding process to purchase the shares of MICCL.

In 2010, Wanbao formed a new joint venture with Myanmar Economic Holdings Limited, which was the economic arm of the former military government. As soon as the Chinese company started operations in Letbadaung, which was still largely untouched by the previous investors, voices of discontent from the public sphere began to get louder. Since mid-2012, grievances against the government and Chinese company have steadily grown as demands have gone unheeded by investors. The local people claimed that 7,800 acres of land were unlawfully confiscated, affecting the livelihood of people from 26 villages. Human rights violations were also reported as people were forcefully relocated by the authorities. In addition to the lost land, the dumping of large amounts of contaminated soil on unclaimed land – raising concerns over the project’s environmental and health impacts – also contributed to the anger fermenting among the people.

Local protests against the mining project

Many rounds of protests supported by diverse civil society groups from all across Myanmar have taken place since June 2012. Authorities had been persistently trying to avoid the worst-case scenario: suspension of the project. Some parts of the government and regardless of the difficulty posed in controlling the community’s social movements – gave priority to protecting the project site, as requested by the Chinese embassy in Yangon. The local government of the Sagaing Division tried to prevent local community members from accessing the occupied land by enacting Section 144 of the Criminal Procedure Code, a law which is used as a regulation to prohibit villagers from accessing their farmlands and pastures.

In late November, in response to a parliamentary proposal to conduct an independent investigation into the impacts of mining on local communities, and despite the threat of huge financial losses for the investors, the government decided to suspend mining activities. However, before any investigation had been started, the government declared that all demonstration camps be demolished by midnight, November 30.

In the early morning of November 29, at 3 a.m., the government decided to implement violent crackdown methods against its own people. Although the grassroots demonstrations were peaceful, riot police used means of control designed only for violent crowds, such as the use of tear gas and water cannons. Local media reported that the tear gas fired was not sufficient to cause the burnings in the demonstration camps, leading many to suspect that the government had used phosphorus bombs. People were arrested under the criminal code and some 50 locals, including Buddhist monks, were badly injured when the demonstration camps were set alight. The Letbadaung protests have grown to become a national cause with the public sphere hosting a lively debate questioning the responsibility and accountability of the government members who initiated this project. An investigation committee led by Daw Aung San Suu Kyi was formed as an immediate response in the aftermath of the crackdown. Despite the opposing voices from the local community and environmentalists, the investigation committee recommended the continuation of this controversial project. Ecodev, a leading local environmental organization, finds the report is weak in measuring the environmental and social impact on the community. Mr. Win Myo Thu from Ecodev said the recommendation of the commission failed to respect the community rights.

After the $1 billion dollar project was suspended, regional media have questioned why this investment in particular has been repeatedly challenged by local communities when similar projects have been carried out in the past without protest. What contributes to the instability of Chinese commercial interests in Myanmar, especially when it comes to investing in the resource-extraction sector?

Dimensions and problems of Chinese investments

Firstly, Chinese investments in meg-projects – such as the gas pipeline linking the western coast of Myanmar to the Yunnan province of southwest China; the suspended Myitsone Dam; and now the Letbadaung mining project – were realized with the agreement of a de facto government rather than a de jure government. When the Myanmar government started to transform itself into a democratic government, the old safeguards for Chinese business interests began to fall away. Because parts of the government had adopted a reformist stance, China lost many loyal friends inside the government. People are also more curious about the terms and conditions of old contracts made between investors and the government. The old methods of unfair resource exploitation are not tolerated anymore, as people are demanding greater fairness and transparency. In the past, and under the iron heel of the military, no one was there to monitor the deal made between the former military government and the Chinese investors. When newly-found freedom blossomed in Myanmar, people were eager to use all the space available to demand transparency from the government, whose decisions impact their daily lives.

Moreover, none of the hasty Chinese investments, including the copper mine, conducted a proper environmental or social impact assessment. At the same time, local people were never properly informed, and
Developing and Electrifying Myanmar
Lessons Learned from Thailand

Chuenchom Sangarasri Graecen

Myanmar is at a major crossroad. After decades of heavy-handed military rule and international sanctions, the country has recently opened up to international aid, trade, and investments. Although it is endowed with rich mineral resources, oil and gas, as well as significant hydropower potential, Myanmar is ranked among the poorest countries (161 out of 180) by the International Monetary Fund and ranked 149th out of 187 countries by the United Nations in the Human Development Index. Only 26 percent of its 60 million people had access to electricity in 2011.

With development and bilateral aid institutions as well as corporations, businesses, and tourists flocking to the country, the Chinese have a rather unfavorable image within Myanmar, resulting in a strong sense of caution when it comes to Chinese investments, without distinguishing between the government, the people, or the businesses, and especially when it damages local livelihoods and local security. In the Letbadaung case, no compensation was great enough for the people to allow their whole landscape to be marred by the demolition of a religious site – an important part of their cultural heritage – and the dumping of radioactive soil on the community’s land and river. U Soe Thein, Chairman of the Myanmar Investment Commission, publicly admitted that the government was not aware that the project site contained massive farming areas and local residences, and that allowing this investment was a huge mistake. The next steps for the Myanmar government are to consider how they can remedy this mistake, heal the wounds embedded in the minds of the people, and more importantly, how they can avoid repeating the same mistake in the future.

By most assessments, the development of Thailand’s power sector appears to be a great success story. In the 1960s, Cold War politics and the World Bank persuaded Thailand to choose a centralized electrification path by creating a monopoly of three state-owned utilities: Electricity Generating Authority Thailand (EGAT), which was in charge of generation and transmission grid; and Metropolitan Electricity Authority Thailand (MEA) and Provincial Electricity Authority (PEA), which distributed power to Bangkok and rural areas, respectively. The Thai power sector developed rapidly, with the electrification rate reaching 98 percent in three decades. Currently, the Thai power system has about 33,000 MW of installed capacity and continues to grow. On the surface, a centralized model for power system expansion would seem like the efficient way to lead the country toward prosperity.

Looking deeper, however, we notice that the «success» is not without its costs. Under a centralized monopoly, a number of community mini-grids powered by micro-hydro systems were forced shut upon the expansion of the national grid. Although it excelled at rapid expansion, centralized planning without proper checks and balances led to cycles of over-projection of demand, over-investment, and economic inefficiencies, particularly after Thailand’s electrification rate reached 98 percent in 1995. A former prime minister stated in 2003 that over-investments in Thailand’s power sector were estimated at 400 billion Baht (ca. 10 billion Euros and about 6.5 percent of its GDP). With implementing in-depth consultation with community members was largely nonexistent. Furthermore, civil society is now better equipped with information and resources, making it easier to raise community awareness. They try to provide the public with information regarding health and environmental risks associated with such a large mining project. In addition, they have seen some success in advocating for social justice. Finally, several decades of military rule taught them that government accountability is crucial for human security, and the time has come for them to exercise this knowledge in their fight for justice.

The letter to the Chinese president is merely an example of this small community’s efforts on the long road to justice. The people are fully aware that many Chinese investors associated with the junta – who ruled the country with arbitrary measures – for the sake of their own power and commercial interests. It is no surprise that the Chinese have a rather unfavorable image within Myanmar, resulting in a strong sense of caution when it comes to Chinese investments, without distinguishing between the government, the people, or the businesses, and especially when it damages local livelihoods and local security.

In the Letbadaung case, no compensation was great enough for the people to allow their whole landscape to be marred by the demolition of a religious site – an important part of their cultural heritage – and the dumping of radioactive soil on the community’s land and river. U Soe Thein, Chairman of the Myanmar Investment Commission, publicly admitted that the government was not aware that the project site contained massive farming areas and local residences, and that allowing this investment was a huge mistake. The next steps for the Myanmar government are to consider how they can remedy this mistake, heal the wounds embedded in the minds of the people, and more importantly, how they can avoid repeating the same mistake in the future.

1 The letter was sent to the Chinese Embassy in Yangon. There has not yet been an official reply from the Chinese side. However, the Chinese embassy has sought consultation with some local environmental NGOs and experts.
Problems of central planning in the power sector

With a surplus energy supply, there was no real incentive to promote energy-efficiency programs. Thailand's energy consumption was wasteful and unproductive, as indicated by the high energy intensity (ratio of energy consumption to GDP), compared to other comparable economies. Such inefficiency in consumption and investment also had an impact on Thailand's economic competitiveness.1

Another consequence of the monopoly model with an emphasis on power system expansion has been the marginalization of greener, cheaper options to meet electricity demand: energy efficiency, renewable energy, and distributed energy systems.

Energy efficiency has been shown – inter-nationally as well as in Thailand – to be the cheapest, greenest way to meet growing demand. Many countries prioritize renewable energy because of its domestic availability and its job-creation benefits.

Distributed energy, such as combined heat and power systems, is much more efficient than centralized generation and reduces the need for expensive transmission infrastructure. Despite clear benefits, Thailand's share of renewable energy (excluding large hydro) is only 1.5 percent, and the share of distributed energy is only 3 percent, compared to the world average of around 11 percent. Although Thailand has clear policies to support these distributed clean energy options, the policies have yet to be integrated into the planning process and treated as equal options to conventional centralized generation.

When greener, cheaper, and more efficient options are not prioritized, Thailand's power system must rely heavily on centralized generation that not only requires very capital-intensive investments but also creates significant social and ecological impacts. In addition, centralized generation wastes 40–70 percent of heat content (compared to 15 percent in a distributed combined heat and power application) into the atmosphere, rivers, or ocean and requires costly transmission infrastructure to transport power to where it is needed. Thailand has limited natural gas resources, but the overemphasis on large-scale power generation means precious gas is wasted instead of providing productive services for the economy, and this can cause impacts that surrounding communities would find hard to accept. Often, impacts and benefits are not distributed equally and evenly across the population. Pak Mun Dam, the World Bank-funded «run-of-river» project, displaced 1,708 families, decreased fish yields by 80 percent, and deprived 6,200 families of their livelihoods, all in exchange for barely enough electricity to power a megamall in Bangkok. Such inequality exemplifies the structural violence of the centralized power structure: It has also added fuel to the flame of political and social divisiveness (rural «peasants» vs. urban «elites») within Thai society.

Energy imports into Thailand

Heightened awareness of impacts from power projects has made the siting of new power plants in Thailand very challenging. To meet the growing electricity demand, central planners have increasingly been relying on energy imports. About 22 percent of total power consumption in 2018 was generated from imported gas (Myanmar), 7.7 percent from imported coal, and 4.5 percent from hydropower (Laos), meaning that combined imports comprised about 35 percent of total power consumption. This portion is expected to grow significantly as Thailand looks to its neighboring countries and beyond for untapped energy resources and sites for power plants that offer less opposition and less-stringent environmental regulations. From Thailand's perspective, energy imports not only help alleviate the problems of diminishing domestic supplies while exporting environmental and social impacts, but they also create lucrative investment opportunities for Thai companies through project development, construction, financing, as well as operation and maintenance.

But a heavy reliance on energy imports also makes Thailand vulnerable. Not having sovereign control over the energy resources that provide Thailand's energy security can be risky and costly to the Thai economy. A case in point is natural gas from Yadana and Yetagon, Myanmar. The gas comes through a single gas pipeline that feeds about 7,000 MW to power plants (more than 20% of total installed capacity) and accounts for about a third of the total gas supply consumed each year. This high level of dependence on this single source (pipeline) of fuel is a risk to Thailand's energy security. It has forced Thailand to up its planned reserve margin requirement from 15 to 25 percent and added cost burdens for consumers. Yet, the latest Power Development Plan still calls for centralized power plants to be fuelled by imported liquid natural gas, imported coal, as well as imported hydropower, aggravating the problems of energy dependence, security risks, and wasteful consumption while broadening the extent of impacts beyond Thailand's borders.

Costs of Thailand’s unsustainable energy supply

Clearly Thailand's energy development trajectory is not sustainable from energy and ecological perspectives. More importantly, it is not economically beneficial in the long term. Thailand's unproductive, inefficient consumption, which is fueled by increasing energy imports, is only made possible by borrowing from the past – plundering mineral and resource wealth – and from the future in the forms of massive debt and contractual obligations (such as 25-year power and gas purchase agreements), to be paid or fulfilled by current and future captive energy users. This debt-fueled-growth approach is not unique to the energy sector. Thailand's economy as a whole is also on steroid growth. Its precarious debt load is at unprecedented levels: government debt is more than 40 percent of GDP and average household debt is 20–23 percent of income and set to rise to 40 percent in the near future.
Thailand’s energy sector – a model for Myanmar?

In sum, Thailand’s economic and energy sector growth may appear enviable on the surface, but deep down, it is a sick system. Instead of healthy, sustainable economic development, the expansionist centralized approach has led Thailand toward energy obesity due to unhealthy consumption habits that are financed by debt. Is Thailand’s power sector and economic development path the model for Myanmar to follow? No. There are other, better ways. Instead of emphasizing centralized grid expansion, mini-grids – with a focus on efficiency and decentralized generation – can play a significant role, too.

In addition, Myanmar has its own unique challenges. Unlike Thailand, which is surrounded by resource-rich neighbors, Myanmar is «the last frontier.» Its development will depend upon reliance on its own resources. Even then, much of its mineral and resource wealth has already been «stolen» for. Despite the dire need to use natural gas in power generation to serve domestic electricity demand, most of Myanmar’s natural gas has already been «tapped» by Thailand and other energy-hungry countries. Myanmar will need to choose wisely what kind of industries or economic activities it supports (given investment privileges) based on energy consumption, environmental costs, and value to economy (e.g., local job creation, local content, value creation).

The challenge will be how Myanmar can leverage external resources while maximizing benefits for the locals without losing sovereignty. One strategy would be to integrate economic and energy policy planning with the goal of minimizing waste and maximizing efficiency and economic value (e.g., job creation, money circulating in local economy) for each precious dollar of energy investment. Another strategy would be to prioritize utilization of distributed renewable resources over non-renewable resources. To ensure a democratic outcome, the government should also allow participation by citizens, entrepreneurs, and communities in the planning and development of the power sector.

We Will Lead Them toward Progress in an Era of Globalization

Government Attitudes and Resource-pressure on Indigenous Communities in Cambodia

Maia Diokno

Eighty percent of Cambodia’s population lives in rural areas. Many of these people are small-scale farmers whose livelihoods depend on access to their fields. But a radical change has been carried out in recent years that many of them are defenseless against. The government is awarding large tracts of land to private investors who, often with the help of state security forces, drive the peasants off of their own land. Indigenous groups are especially affected and defenseless against these land grabs.

Meanwhile, 1.9 million hectares, which is more than half of the arable land of the country, has been granted to foreign and domestic investors from agro-industrial plantations. A similar picture emerges for the awarding of concessions to representatives from extractive industries (the land totals of which are also about 1.9 million hectares). Overall, more than 20 percent of the total land area of Cambodia is in the hands of private owners. The escalating conflict over resources has led to a broadening of protests, some of which have become more violent.

Indigenous peoples have long been acknowledged as the main protectors of the forests and its resources. It is in the culture of indigenous peoples to respect the land and its benefits, and to use land and resources that they have. It is now recognized that the greatest threats to forests and resources do not come from local communities and their traditional practices, but from commercial logging and concessions granted by the states in forest areas for various plantations, mining, and quarrying (WRM 2005). In fact, environmental groups in Cambodia now enlist local communities in patrolling and protecting the forests.

Over the years, indigenous peoples in Cambodia have been steadily losing their access to land, forests, and traditional natural resources. Land granted for developmental projects, such as economic land concessions, is often taken from indigenous peoples’ communal land that is used for growing rice and food crops. Economic land concessions have also been granted on forest lands that indigenous communities rely upon to supplement their food supply.

A basic legal and policy framework exists for the protection of indigenous peoples and their access to land and resources, but weak enforcement of laws contributes to violations of their rights. The continued loss of indigenous lands has led to the loss of livelihoods and increased levels of poverty. The indigenous group of the Bunong had traditional community conservation areas (religious areas, such as spirit forests, burial grounds, and non-timber forest products collection areas) encroached upon by migrants and economic land concessions. At the same time, they faced restrictions on resource-gathering imposed by the state authorities and some conservation organizations that work with indigenous communities. She is currently working in Cambodia as an independent consultant on legal and human rights issues, including indigenous rights.


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Government sees indigenous people as backward

Increasing resource-pressure on these communities is linked to the government’s long-standing attitude toward indigenous peoples, which has changed only slightly over the years. The attitude ranges from lack of knowledge to disinterest and to contempt. What is clear is that there is a lack of understanding – and sometimes a lack of willingness – to understand the indigenous culture and tradition.

The government’s view of indigenous peoples as being backwards and of no value goes back more than 20 years. An anthropologist who extensively studied indigenous issues in Cambodia described a meeting with government officials regarding the indigenous peoples (Khmer Loeu, meaning highlander), which took place in 1994:

> Representatives of a Phnom Penh Ministry, we met in 1994 stipulated proudly that «most of the Khmer Loeu are stupid, because they have no education and do not want to get any.» And these white-collar men add «that they are basically retarded and that it will be very difficult to lead them out of their lack of knowledge.» (Bourdier 2009)

This attitude is still prevalent more than a decade later. In January 2007, Minister of Agriculture H.E. Chan Sarun said that indigenous peoples would have to be «led toward progress» in culture, health, livelihoods, markets, and technology introduction, and that traditional farming practices should be discouraged. The minister added that concerns about the loss of traditional slash-and-burn practices leading to loss of the important identity of ethnic minorities were «inappropriate» and «production must be tailored to technology for increasing production. […] We should not leave our indigenous peoples technologically isolated and lonely and without the opportunity to know the evolution of this globalization era.»

Rights must be acknowledged

This approach contradicts the 1992 Convention on Biodiversity, which says in Art. 8(j) that states need to respect, preserve, and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity … It also ignores the 2007 Declaration on the Rights of Indigenous Peoples adopted by the UN General Assembly, which recognizes the rights of indigenous persons to maintain their own cultural, social, religious, and economic traditions and beliefs.

The author has personally encountered similar mindsets in meetings with provincial government officials over the years. In 1999, a deputy governor of a northeastern province complained that indigenous communities were uneducated and superstitious, and implied that they had to be dragged into the 21st century whether they liked it or not. In May 2008, a deputy governor of Mondulkiri said that language education in the province was aimed at increasing the use of the Khmer language and slowly phasing out reliance on indigenous languages. Later in the same year, the author asked a governor of another northeastern province why land concessions were being given on agricultural lands traditionally used by the communities. The governor replied that the only way for local indigenous communities to prosper was for an outside company to enter the province, establish a business, and hire the community members as workers. He added that they could then earn a regular salary, and could use the money they earn to buy things. The author could not help but wonder whether land was one of the things that the indigenous community members could buy.

The view that indigenous community members should become laborers is squarely against the culture of indigenous communities. Sui H’Vinh, an ethnic Jarai, said «the Jarai do not want to become laborers for someone else or shopkeepers. It is better to grow crops and sell any excess for profit.»

The author was present at a meeting between a rubber plantation company and the Bunong indigenous group in late 2009. The Bunong said much the same as the Jarai. The author could not help but wonder whether land was one of the things that the indigenous community members could buy.

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The lack of knowledge and understanding has led to the government’s blatantly ignoring the concerns of indigenous persons, as shown by its repeated failure to comply with the concept of «free, prior, and informed consent» before it begins development projects.
Jarai as a stupa erected to hold the ashes of deceased relatives is sacred to Khmers, was completely destroyed.

Indigenous people hardly have room for negotiating

This lack of knowledge and understanding has led to the government’s blatantly ignoring the concerns of indigenous persons, as shown by its repeated failure to comply with the concept of ‘free, prior, and informed consent’ before it begins development projects. Environmental and social impact assessments are required by law for any projects, and public consultation is part and parcel of these assessments. However, more often than not, indigenous communities first become aware of development projects in their areas when the companies involved start clearing land. Protests to local authorities often go unanswered. Villagers in Malik, Ratanakiri, belonging to the Tampuon indigenous group, said: «Commune and district [authorities] do not care. When they give approval to the company, they are on the side of the company. They do not care much about us small people, we just live in the forest.»

While the 2001 Land Law established a system for granting communal land titles specifically designed to protect indigenous populations and their access to resources, it took eight years before the government issued a Sub-Decree implementing the law. And to date, only three communal titles have been issued.

In December 2012, ethnic Jarai communities in Ratanakiri complained to a human rights organization that they were being forced by local officials to accept individual land titles rather than communal titles. They said officials had told them that if they did not accept private land titles, the land they were living on would be given to a Vietnamese company that had been granted an economic land concession.

As one of the most vulnerable groups in Cambodia, indigenous communities deserve extra protection. Their role in conserving the environment and natural resources should also be acknowledged by the government. It would be a good first step for all Cambodian government officials to learn more about these indigenous groups, their rich history, and their value in safeguarding Cambodia’s land and resources.

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References


1 There are 19 different indigenous groups that can be found in 15 of the 24 provinces of Cambodia. Out of Cambodia’s population of 14.9 million people, only around 1.34 percent (roughly 175,000) identify themselves as having an indigenous language as their mother tongue. No accurate figures exist, however, and the number of actual indigenous persons may be higher, as some no longer speak their traditional language, and others are hesitant in identifying themselves as being indigenous. From: «The Rights of Indigenous Peoples,» report submitted to the UN Committee on the Elimination of Racial Discrimination, 71st Session 2010 by the Indigenous People NGO Network.


3 Again echoing the words of the official quoted by Russell in 1998. The official said: «The people (TolBarRa) are happy about investment because they can work for the companies and buy a motorcycle, watch, etc.»

4 Ibid.
