Background: Indonesia produces over 300 million tons of coal annually, with the province of East Kalimantan being one of the largest suppliers. In East Kalimantan alone, there well over a thousand companies operating. These mining operations range in size from tens of hectares to tens of thousands of hectares.

Mining operations are governed by a series of regulations that have been passed by the Indonesian Ministry of Energy and Mineral Resources, Ministry of Forestry, and Ministry of Environment. Among other things, these regulations spell out how concession lands need to be rehabilitated following the cessation of mining operations. While, a small number of companies comply with these environmental regulations, a much larger number fail to meet their regulatory obligations entirely. This situation is having very detrimental environmental and social consequences in the region, as tens of thousands of hectares of mined land are simply abandoned with little, if any, rehabilitation.

One of the reasons for the poor quality of post-mining rehabilitation is the lack of technical capacity. Most coal mine companies, particularly the small and medium sized ones, lack knowledge about best-practices, even though there are some very good examples of successful mine rehabilitation in East Kalimantan. This situation is exacerbated by the fact that District level government regulators, who are responsible for advising these companies on such matters and evaluating their level of compliance, are sometimes even less well-informed than the companies themselves.
In order to begin building capacity on coal mining rehabilitation in East Kalimantan, Environmental Leadership and Training Initiative (ELTI), Tropenbos International Indonesia Program (TBI), Bogor Agricultural University (IPB), conducted a symposium on post-mine site rehabilitation in Balikpapan, East Kalimantan, Indonesia. Additional support for the symposium was provided by Mulyawarman University, PT. Berau Coal, PT Kaltim Prima Coal, PT Unitek Borneo, and Le Grandeur Hotel. The symposium was followed by a half-day steering committee meeting the next day.

**Course Objectives:** The objectives of the symposium and steering committee meeting were as follows:

- To inform participants of the government regulations that pertain to mine site rehabilitation,
- To provide participants with a technical understanding of the steps needed to achieve mine site rehabilitation,
- To showcase best practices related to forest restoration in existing mines, and,
- To provide a forum for discussing the opportunities, challenges, and obstacles to achieving better mine site rehabilitation, and to begin developing an action plan on how to move forward.

**Symposium Format:** Opening remarks for the symposium was provided by Dr. Petrus Gunarso, the Indonesia Program Director for TBI, who spelled out the rationale and aims of the symposium. Dr. H. Awang Farouk Ishak, the Governor of East Kalimantan, then provided an overview of the socio-economic and environmental conditions in East Kalimantan and emphasized the difficulties that he faces in regulating coal mining on account of the decentralization of authority to the District level. Welcome remarks were then provided by Ir. Syawaiudin Lubis from the Ministry of Energy & Mineral Resources and Dr. Ir. Bedjo Santoso from the Ministry of Forestry. The Opening Program concluded with the Keynote Address by Dr. David Mulligan, Director of the University of Queensland Center for Mined Land Rehabilitation, who discussed the regulations and practices related to post-mine rehabilitation of the coal industry in Australia.

The first session focused on Government Regulations. Ir. Mery G. Simanjuntak, MM from the Ministry of Forestry discussed the regulations that apply to mine site reclamation within the official forest estate. Ir. Sudjatmiko from the Ministry of Energy & Mineral Resources discussed regulations that pertain to all mines regarding reclamation and closure. Ir. Antung Deddy then discussed the Ministry of the Environment’s Regulations that have established a series of Criteria and Indicators for evaluating the level of compliance with the regulations. Important points raised by all three speakers were that post-mine site rehabilitation is required by all companies, that companies are supposed to develop rehabilitation plans before they begin operations, and that rehabilitation of mined areas is supposed to occur simultaneously as new areas are opened up. The panel discussion that followed the session was moderated by Dr. Chandra Boer, Dean of the Faculty of Forestry- University of Mulyawarman.

The second session focused on company best practices. Mr. Chandra Nugraha and Mr. Muhammad Masyhuri discussed the rehabilitation and revegetation strategies employed by PT Kaltim Prima Coal and PT Berau Coal, respectively. Mr. Rofinus Ligo of
PT UNITEK Borneo then discussed his 25 years of experience working on mine site rehabilitation and his current company’s approach to supplying a wide variety of products to assist companies in their rehabilitation efforts. Mr. Buhiran of PT Akar Bumi Langit then described the challenges to coal mine site rehabilitation and described his company’s efforts to help overcome these hurdles by conducting trainings and offering consulting. The succeeding panel discussion was moderated by Dr. Bambang Hero, Dean of the Faculty of Forestry - Bogor Agricultural University.

The third and final session focused on recommendations for better policy and practice. Dr. Petrus Gunarso described Tropenbos’ emphasis on Forest Landscape Restoration and the challenges posed by overlapping land claims and unclear tenure. Prof. Daddy Ruhiyat discussed the Kaltim Green agenda, which is aimed at reducing East Kalimantan’s carbon emissions, a significant percentage of which comes from land clearance for mining. Drs. H. Amrullah, MM. from the East Kalimantan Mining Department described the challenges that he and his staff face in regulating the large number of mine companies with limited human and other resources. Finally, Mr. Kahar Al Bahri from the Jaringan Advokasi Tambang Kaltim discussed the challenges posed by mining to local communities, and emphasized how local concerns needed to be integrated into any solution. The last of the panel discussions was moderated by Dr. Yadi Setiadi of the Bogor Agricultural University.

Dr. Petrus Gunarso provided the Closing Remarks for the symposium, which emphasized the importance of everyone working together to address these issues.

Participants: The symposium was attended by approximately 130 individuals from the Provincial and District-level government, mining companies, mine trade associations, NGOs, and local universities.

News Coverage: The symposium received significant coverage in regional newspapers:

- **March 1, 2012.** Australian Mine Reclamation Expert Attends in Balikpapan / Pakar Reklamasi Tambang Australia Hadir di Balikpapan
- **March 6, 2012.** Governor Recommends Having Authority to Give Sanctions / Gubernur Diusulkan Punya Kewenangan Beri Sanksi
- **March 6, 2012.** 724 Mining Concessions Still Overlap in East Kalimantan / 724 Usaha Tambang Masih Tindih di Kaltim
- **March 6, 2012.** Reclamation Funds in East Kalimantan not Clear / Dana Jambinan Reklamasi di Kaltim tidak Jelas
- **March 7, 2012.** Governor of East Kalimantan Requests Authority to Act against Mining Companies / Gubernur Kaltim Minta Otoritas Menindak Perusahaan Tambang
- **March 7, 2012.** East Kalimantan Questions Mine Reclamation Funds / Kaltim Pertanyakan Dana Reklamasi Tambang, Koran Kaltim
Steering Committee Meeting: As a follow up to this symposium, a steering committee meeting was held on the following day and was attended by 30 representatives from government, private sector, academia, and NGOs. Dr. Petrus Gunarso (TBI), Dr. David Neidel (ELTI), and Dr. Yadi Setiadi (IPB) started off the meeting by providing initial presentations about their organizational activities and how they could contribute to the effort to address mine site rehabilitation in East Kalimantan. An open discussion was then moderated by Dr. Romanus Ndau Lendong from the University Bina Nusantara to develop a common understanding about the current challenges to mine site rehabilitation, begin developing a common vision of needed changes, and formulate an action plan of follow up activities.

Outcome: The regulations developed by the Ministries of Forestry, Mining & Natural Resources, and Environment for the coal mining industry are already quite comprehensive. In order for those regulations to be implemented and enforced, however, training is needed to develop the knowledge and skills of the regulators themselves. Plans are currently underway to begin addressing those needs with a field training at KPC mine in May. During the steering committee meeting, it was also decided that it would be helpful if the pertinent regulatory requirements regarding post-mine rehabilitation were synthesized into a short booklet for wide dissemination. We are hoping to have a first draft of that booklet in time for the upcoming training. Other suggestions were also made during the steering committee meeting that will be considered as we assess how best to move forward.