

## Editorial

Around the world there is growing appreciation of the status of productive land as one of the planet's most important natural assets. The extent to which land can support primary production is linked to land quality and this is defined by a range of chemical, physical and biological parameters. Sustaining these parameters is essential in the context of feeding a global population that exceeded 12 billion people in 2012.

Where the productive status of land is impaired, then this land can be considered degraded. Degradation can result from poor land management, industrial land use, or as a consequence of the discharge of contaminants into soil. Degraded land is often synonymous with mining lands, especially in the developing world where environmental protection is often not a priority.

Indonesia is perhaps one country where the conflict between population, economic development and land degradation is very apparent. Indonesia is the world's fourth most populous country, yet it is the world's 15<sup>th</sup>-largest country in terms of land area<sup>1</sup>. Indonesia has some of the world's most pristine rainforest, yet also has the world's most populous island (Java)<sup>2</sup>; volcanic activity has endowed Indonesia with fertile soils that have historically supported high levels of agricultural productivity. Indonesia's economy has been a strong performer throughout the current decade, although poverty is widespread, especially in eastern Indonesia. Economic development and the exploitation of natural resources have seen significant pressure on land throughout the archipelago. Land degradation is today a major concern.

In 2012, the International Research Centre for the Management of Degraded and Mining Lands (IRC-MEDMIND) was officially opened during a ceremony at the University of Brawijaya, Malang, Indonesia. The Centre is a collaborative effort between The University of Brawijaya, The University of Mataram (Indonesia), Massey University (New Zealand) and the Institute of Geochemistry of the Chinese Academy of Sciences (China). The Centre

has a clear objective: to 'translate research outcomes into practices that will lead to the proper management of degraded and mining lands through working closely with communities, government, industry and NGOs.' The Centre is working on the subject of artisanal and small-scale mining as a key focus area. Artisanal gold mining on the Indonesian islands of Lombok and Sumbawa is today releasing mercury and cyanide into the environment. The discharge of contaminants and associated land degradation is affecting human health and food safety.

To support the Centre's work, IRC-MEDMIND has created the *Journal of Degraded and Mining Lands Management*, and it is my pleasure to write this first editorial for the journal. The first issue is a collection of eight papers presented during the 1<sup>st</sup> International Conference on Environmental, Socio-economic, and Health Impacts of Artisanal and Small-Scale Mining which was held in Malang during February 2012. These eight papers have been authored by leading scientists from South-East Asia and Australasia, and describe new initiatives in the management of degraded and mining lands.

On behalf of the *Journal of Degraded and Mining Lands Management* I thank you for reading this first journal issue of Volume 1. The editorial board invites you to support this journal and signals its intention to aspire to high standards of scientific and written excellence. As a result of the generous support of the University of Brawijaya, the *Journal* will have no page charges. The *Journal of Degraded and Mining Lands Management* therefore represents a new mechanism to present relevant, high quality and peer reviewed science and commentary to the international community.

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<sup>1</sup>CIA (2013). "World Factbook."  
<https://www.cia.gov/library/publications/the-world-factbook/rankorder/2147rank.html> retrieved 28 October 2013

<sup>2</sup>Calder, J (2007). "Most Populous Islands."  
[www.worldislandinfo.com/POPULATV2.htm](http://www.worldislandinfo.com/POPULATV2.htm) retrieved 28 October 2013.