

International Mining for Development Centre

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IMPLEMENTING PARTNERS



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Highlights

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- Energy and Minerals Institute The UWA Energy and Minerals Institute (EMI) is a network institute which draws together the energy and minerals industry related experience and expertise across the University's 10 faculties and more than 30 schools. EMI is a gateway for industry to engage with cutting-edge university research that is creating solutions to a broad range of complex resource related issues. EMI supports UWA as an important stakeholder in Western Australia's growth as a globally significant minerals and energy destination.
- Sustainable Minerals Institute The Sustainable Minerals Institute (SMI) is one of UQ's eight internationally significant research institutes. SMI is an initiative to boost capacity in research and education in sustainable development in the minerals sector. SMI aims to participate in the transition of global mining and minerals recovery to a new level of performance and societal acceptance by being a world leader in providing knowledge-based solutions to the sustainability challenges of the global minerals industry.

Message from the IM4DC Board



Tim ShanahanDirector Energy and
Minerals Institute



Professor Chris MoranDirector Sustainable
Minerals Institute

The University of Western Australia and The University of Queensland are proud to be partners in the International Mining for Development Centre, with the support of the Australian Government through AusAID.

As the centrepiece of Australia's mining for development initiative, IM4DC works closely with AusAID and other aid donors in building a coordinated suite of activities that make a lasting difference to the ability of resource-rich developing countries to make the most of their natural endowments for the benefit of their nations and peoples.

The Energy and Minerals Institute at UWA and the Sustainable Minerals Institute at UQ, which host IM4DC, are two parts of the extensive Australian capability network located across a number of institutions, focused on processes which support minerals and energy developments to deliver sustainable benefits.

IM4DC engages Australian and international institutions to share their expertise and experience in mining and governance to build capability within government, civil society and universities to maximise the opportunities from mining.

The objectives are to help developing countries do mining well; to protect the environment as they do so; to ensure that local communities benefit; to reduce poverty; and to maximise to developing nations the dividend that comes from the resources wealth in the ground.

Resources development must be managed well and this requires effective legislation, good governance frameworks, careful revenue management, sustainable environmental and community protection practices, adequate infrastructure and services, and a skilled workforce.

The IM4DC partners look forward to extending the mining for development capability network through collaboration with IM4DC alumni, universities and institutes around the world. By working together, we can collectively make a real improvement to the way in which mining is governed, and through this, help to ensure that the benefits of mining are substantial and sustainable.

"The mining for development initiative will allow us, Australia, to share our significant expertise and experience in mining to assist resource rich developing countries to maximise the benefits and opportunities of mining. This is the best kind of development assistance: assistance that builds sustainability, prosperity and wealth for the future."

The Hon Julia Gillard MP, Prime Minister of Australia



Director's message

The International Mining for Development Centre (IM4DC) presents its first report on behalf of joint venture partners, The University of Western Australia and The University of Queensland.

This report demonstrates the Centre's progress in helping resources rich developing countries leverage their minerals and energy endowments to grow their economies, reduce poverty and provide long-term economic and social benefits to their people.

IM4DC works closely with Australian universities and research institutions to build capacity in mining governance and sustainable development through transfer of world-leading knowledge to developing countries in Africa, Latin America and Asia. We do this through delivering courses, workshops, study tours and collaborative linkages with universities and research institutions in developing countries, hosting mining for development leaders through fellowships, and shaping knowledge and leadership networks.

Since commencing operations in October 2011, we have exceeded many of our progressive targets. To the end of June 2013, IM4DC will have delivered 30 courses, workshops and study tours over 5,000 participant training days, to more

than 900 people from 36 developing countries. We will also have commissioned 20 research projects, hosted 11 fellows and presented two international conference events for 700 delegates. Alumni feedback tells us we are on the right track and demand for our program is increasing.

There are other successes that are not as easily measured. Through projecting our collaborations with Australia's universities and research institutions to developing countries, IM4DC is building strong global recognition of Australia's expertise in mining governance, technology, operational excellence, and education and training. We are also demonstrating Australia's willingness to openly share all it has learned on its mining journey over the past 150 years – encouraging others to avoid pitfalls and to embrace the socio-economic benefits of transparent governance, and sustainable and inclusive policies and practices.

We are building strong global linkages with universities, research institutes and development agencies operating in mining for development fields. In several developing countries, we are growing our capacity building partnerships with universities and training institutions. In Indonesia, for example, IM4DC has signed an agreement with the training

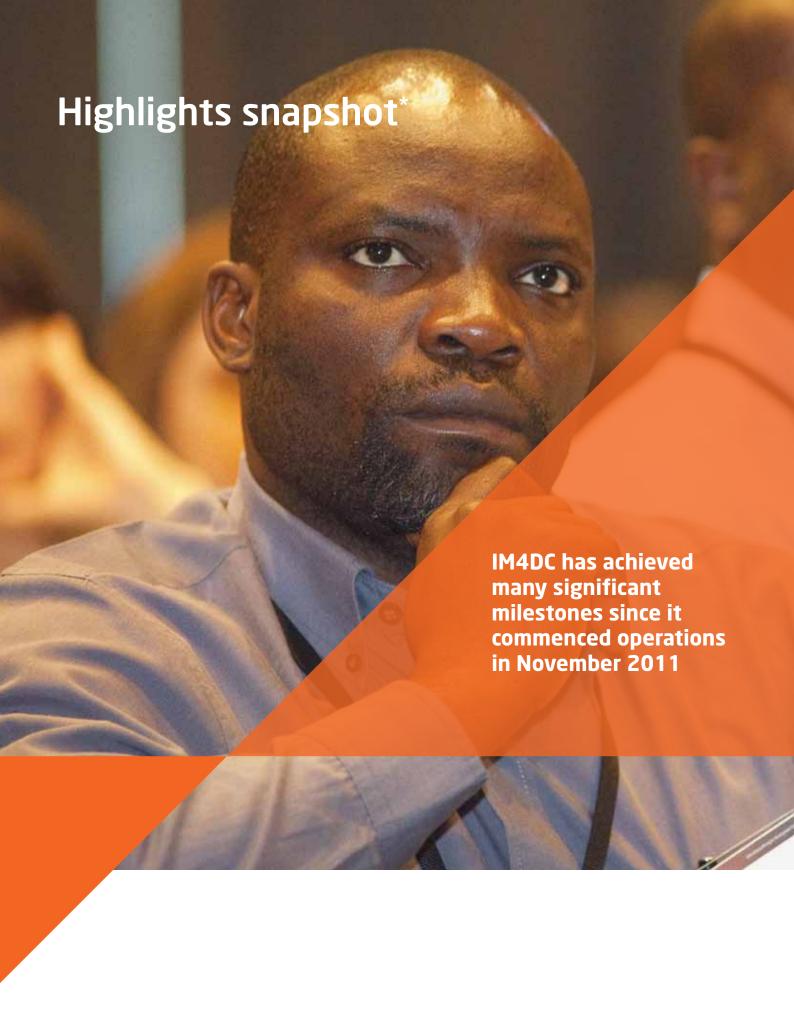
agency of the Indonesian Energy and Minerals Ministry to build mining governance capacity. In Zambia, we are collaborating with two local universities to deliver our course and research activities.

The engaging, enthusiastic and flexible approach of Australians works well in diverse environments and there is still much more to be achieved in collaboration with our partners. Cooperation with other institutions and mining for development donor bodies around the world will help to ensure that mining for development becomes a very successful approach to achieving growing economies and lifting people out of poverty.

I thank the IM4DC Board and the partner universities for their unwavering commitment and support. Thanks also to AusAID, all our Australian and international partners, client countries and donors. Finally, thanks to the IM4DC team, whose abundant energy, drive and passion are equalled only by the enthusiasm of our alumni, whose success will determine our own.

Ian Satchwell

Director, International Mining for Development Centre



30

short courses, workshops and study tours delivered in Australia and developing countries 900

participants from **36 developing countries**

30+

institutional linkages and partnerships created with Australian, overseas and international organisations

5,000

participant training days boosted mining for development knowledge and expertise

20

action research projects target priority needs

4

Guides to Australian Practice published

30%

female participation in the IM4DC program

fellowships hosted in Australia

700+

delegates attended two international conference events

*Delivered from November 2011 to June 2013

"The International Mining for Development Centre brings Australia's world leading expertise in mining to resource rich developing countries through education. The Centre is an example of Australian know-how that delivers global benefits." Senator the Hon Bob Carr, Australian Minister for Foreign Affairs

About IM4DC

IM4DC is a joint venture between The University of Western Australia (UWA) and The University of Queensland (UQ), and is funded by the Australian Government through AusAID.

IM4DC is a key element of Australia's mining for development initiative, which provides developing countries with access to Australian and international expertise and experience to develop their mining sectors and contribute to sustainable development outcomes for their nations and people.



Where IM4DC is working

Our purpose

Our purpose is to help developing countries use their mineral and energy resources to grow their economies, reduce poverty and deliver long-term economic and social benefits to their people.

Our goals

- To improve policies and practices in the governance and management of extractive industries, and their interactions with society and the environment.
- To improve the capacity to develop and implement legislative frameworks.
- To improve a country's knowledge of its resources base.
- To enable countries to continue to build local capacity in minerals governance.

What we do

IM4DC facilitates the transfer of Australian knowledge and experience, in all stages of the mining and petroleum cycles, to resource rich developing countries that want to use mining to grow their economies, reduce poverty and deliver benefits to their people and communities.

We collaborate with others to harness the intellectual capital existing in the Australian resources and higher education sectors to increase the knowledge, experience and skill levels of key personnel within governments, universities, research institutions and civil society organisations in developing countries.

Collaborative networks

Our success is dependent on collaborations and long term partnerships with an extensive capability network located across a number of institutions, primarily in Australia and also internationally, focused on capacity building to support resources development that contributes to sustainable development.

We also engage with developing country institutions and IM4DC alumni to develop collaborative linkages for education and research. This supports development of capability for ongoing capacity building by partner institutions and alumni who are potential change agents in their home country.

A key strength is bringing participants together from around the globe to share mining for development experience with each other, discuss challenges and learn from world-leading experts.

The IM4DC alumni program enables ongoing communication and knowledge-sharing well into the future.

A list of institutional linkages and collaborative partners is provided on page 23 of this report.

"The Centre will reinforce Australia's position at the forefront of best practice and innovative mining methods and technologies." Professor Paul Johnson, Vice-Chancellor, The University of Western Australia



Organisational structure



"I believe this initiative can contribute to lifting the quality of life in developing nations through more sustainable utilisation of minerals and energy resources." Professor Peter Høj, Vice-Chancellor and President, The University of Queensland

Building capacity in mining for development

IM4DC is collaborating extensively with others to build developing country capacity in mining for development, within a structured framework that leverages Australian expertise and resources. Our operations focus on three key themes that underpin our strategic program areas and activities, and target priority developing countries.

Australian Government

AusAID Mining for Development Initiative

The University of Western Australia Energy and Minerals Institute

IM4DC Board The University of Queensland

of QueenslandSustainable Minerals Institute

Delivery Partners

IM4DC

Governance and regulation

KEY THEMES

Community and environmental sustainability

Operational effectiveness

Strategic Program Areas

- Regional and local, economic and social development
- Sub-national governance of the mining sector
- Minerals policy, regulation and agreements
- Community engagement and consultation
- Health and safety of workforces and communities
- Environmental management and regulation

Activities

- Education and training
 - In-country short courses
 - Australian short courses, workshops and study tours
 - Tailored education and training
- Alumni program
- Action research
- Fellowships
- Advice to governments
- Annual Mining for Development Conference
- Institutional linkages
- Publications

TARGET OUTCOMES

IM4DC alumni and partner institutions achieving transformational change through leadership in mining for development

Improved governance and accountability through effective and transparent regulation and management of extractive industries.

Better economic, social and environmental outcomes from mining enabled through education and training, institutional strengthening and capacity building.

Implementation of policies and processes that ensure that resource developments result in substantial, inclusive and sustainable development.

IM4DC program delivered to key personnel and institutions of partner countries



Through a program of short courses, workshops, study tours, fellowships and publications, IM4DC is facilitating the transfer of mining for development expertise to developing country clients, in partnership with AusAID and others.

Building governance for safer work places

IM4DC is accelerating knowledge and expertise about occupational health and safety (OHS) governance and management through a partnership between UQ's SMI Minerals Industry Safety and Health Centre, UWA's School of Psychology and state government agencies in both Queensland and Western Australia.

An intensive four-week course and field trip was held in 2012 for 20 participants from 11 developing countries in Africa, Asia and Latin America. The course gave an overview of OHS management in the resources sector, focusing on systems, hazards and risks, emergency responses, regulatory frameworks, ergonomics, environmental management, safety leadership and culture, and included discussions with industry experts. Participants also prepared detailed return to work plans for implementation in their home countries.

IM4DC also delivered a hands-on occupational hygiene (OH) training program for 45 mining and labour inspectors in Mongolia. The program was delivered in collaboration with the Queensland Government and the German-Mongolian Technical Co-operation project, Environmental Protection in Mining.

The training provided a theoretical and practical understanding of OH, focused on hazards present in the mining industry. The hands-on training included walk-through surveys and site inspections at local operations.

"The cooperation and support shown at the regional sites is to be commended. They showed a willingness and openness that allowed the practical exercises to be meaningful and relevant to the inspectors' roles." Carmel Bofinger, SMI

The Environmental Protection in Mining project was jointly conducted by the BGR (Federal Institute for Geosciences and Natural Resources, Germany) and GASI (General Agency for Specialised Inspection, Mongolia), with which IM4DC partners.



"This course has added to, and improved, my OHS knowledge to such a level that I will be able to share it and contribute to my country's OHS development." Mr Beza Mwanza, Senior Technician, University of Zambia



IM4DC focus on regional development and mining

IM4DC is supporting local regions in developing countries to enhance the economic and social benefits they receive from mining.

A three-week course and study tour on mining and regional development was held in Australia for 19 international participants. It included regional field trips and engagement with local government, community representatives, the mining industry and local business.

The program focused on regional investment and governance, employment generation, enterprise development, infrastructure and service development. Participants also delivered presentations on regional development and governance in their country and developed action plans to achieve change in their regions.

Participants visited Perth, Kalgoorlie and Esperance, where they were able to compare and contrast approaches, successes and shortfalls in Australian regional development, with experience in their home countries. Participants noted that while there has been considerable success in leveraging the economic impacts of mining into regional development, Australian

stakeholders were open in sharing how local growth and sustainable benefits could be improved.

Workshop discussions at UWA and in the field linked regional development theory with the practicalities of application.

"I have seen how we can emulate the example of Australia in terms of economic and social success from mining. I can see how we can advocate for Ghana, so this is a good learning experience for me."
Mr Benjamin Boakye, Africa Centre for Energy Policy, Ghana

"On this visit there is a lot of linking of theory and practice. Resources can be a curse as well as a benefit. In Kenya, there is a lot of exploration and discovery going on and it is a good opportunity to learn and not repeat errors made elsewhere." Mr Patrick Ngumi, National and Economic Social Council, Kenya



Developing a local supply sector in Ghana

IM4DC is boosting knowledge and skills in how to develop local micro, small and medium enterprise (MSME) suppliers for the mining and energy sectors. A training course was delivered in 2013 in collaboration with Ghana's Sekondi Takoradi Chamber of Commerce and Industry and other partners, including Revenue Watch Institute, Building Markets, the SMI Centre for Social Responsibility in Mining, Sirolli Institute and Community Insights.

Participants focused on a range of key topics and developed local MSME supplier development strategies for their regions.

Themes included governance, selecting which sectors to develop, adapting industry procurement practice, linking buyers and sellers, and facilitating micro-enterprises.

Peru builds environmental sustainability

IM4DC is building knowledge of environmental sustainability in Peru. In partnership with the Peruvian Ministry of Energy and Mines, IM4DC delivered three one-day seminars on environmental management in mining to 148 participants from regional centres.

Focusing on mined land rehabilitation, the seminars covered governance and regulatory frameworks, land and water impact monitoring and management, mine closure and rehabilitation, and collaborative approaches for future work.

The seminars were delivered in 2012 by UQ's SMI Centre for Mined Land Rehabilitation and others from national and regional government agencies, universities and industry.



short courses, workshops and study tours delivered to **900 participants** from 36 developing countries

Study tours focus on governance and leading practice

IM4DC is offering study tours as a flexible and intensive learning experience for participants to gain knowledge and skills aligned to their priorities and needs.

A 12-day study tour provided 17 Latin American participants with an understanding of how Australia has dealt with issues relating to indigenous people and mining, particularly since the Native Title Act came into effect. The tour focused on the framework for negotiating agreements between resource companies and indigenous communities, Native Title and Northern Territory Land Rights, consultation and agreement-making processes, international guidelines, and open discussions of Australian case studies.

In parts of South America, such as Peru, there has been serious conflict during

"We hope that by observing the relationship between Australian Aborigines and mining companies, the South Americans will take lessons back to their home countries," said Professor David Brereton from UQ's SMI.

Mine closure

World-leading experts in mine closure partnered with IM4DC to deliver a 12-day course and study tour to participants from Ghana, Zambia, Indonesia, Mongolia, The Philippines and Uruguay. The 2012 course addressed both environmental and social aspects of mine closure from policy and technical perspectives. It also educated the group on key concepts and regulatory frameworks, and provided case study examples of mine closure.

"Mine closure plans are now being included in the screening of terms of reference for mining environmental impact assessment projects. I am also contributing in the review of sectoral guidelines on mining which will include life of mine," reported Mr Mashood Aliyu, Senior Environmental Scientist, Federal Ministry of Environment, Nigeria.

Bauxite mining and environmental practices

In partnership with the WA Department of State Development and others, IM4DC hosted a three-day workshop in Perth for 23 officials from the Laos government. The 2012 visit also included an extensive field trip hosted by Alcoa. Participants viewed mining, rehabilitation, alumina production, waste management, transport, and export facilities. The workshops and study tour promoted knowledge of the key priorities and approaches for bauxite mining, processing, social and environmental impact, and mining governance - a key issue in southern Laos.

Uganda extractive industries study tour

Twenty Ugandan parliamentarians and government officials, led by the Minister for Energy and Mineral Development, visited Australia in 2012 to explore the legislative and governance frameworks and infrastructure for Australia's extractive industries.

Hosted by the Australia Africa Partnerships Facility and IM4DC, the delegation visited Western Australia and the Australian Capital Territory and engaged in field trips and discussions with industry specialists, university experts and government officials.

The delegation met indigenous members of the Juluwarlu Group Aboriginal Corporation in Roebourne, in the Pilbara region of Western Australia.

"I thought that was extremely exciting. It gave us the idea that it was very important as we develop this industry to involve everyone. I'm looking forward to a closer partnership between our two countries. There's a lot that we can learn from Australia." Hon Irene Nafuna-Muloni, Uganda's Minister of Energy and Mineral Development

Advancing management of large volume waste facilities

Providing a sound understanding of design, management and monitoring principles for large volume waste facilities associated with mining operations was the aim of a course and study tour presented in 2012 for 16 international participants. The group produced return to work plans which highlighted areas for improvement and implementation in their home countries.

As a result of the response to the 12-day Australian program, another course on *Management of Large Volume Waste* was delivered in Zambia to 32 participants from five African countries. The course focused on the similar themes of life of mine management of waste rock dumps and tailings storage facilities.

Hosted by the University of Zambia and using alumni from the Australian course for organisation and facilitation, the course offered an opportunity to engage a wider audience on these important themes.

The courses were delivered jointly by the UWA School of Civil and Resource Engineering and the SMI Centre for Mined Land Rehabilitation.

"As a Division Chief, I was able to advise the establishment in our mineral processing zone to safeguard properly the disposal of mine waste. A correct structure on how to contain mine waste has been advised to our various gold processing establishments, in order to minimize the pollution discharge to water bodies."

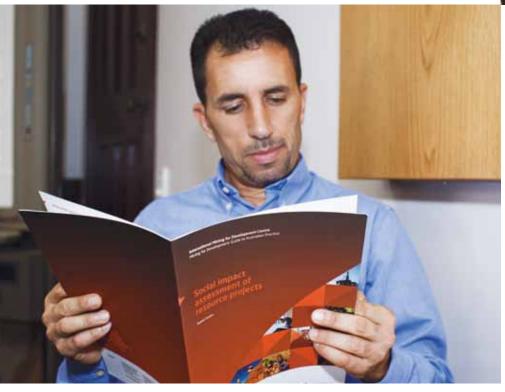
Mr Nonito Dela Torre, Division Chief of the Regulatory and Law Enforcement Division, Local Government of Tagum City, The Philippines

"I enjoyed all sessions as they were an eye-opener. Discussions were lively, interesting and pointed out short-comings in regulation and monitoring of mining activities." Professor Alfred Muzuka, The Nelson Mandela African Institute of Science and Technology

"Our annual safety mine audit, which did not include waste management facilities, will now include them, after sharing the safety issues that I learned in Brisbane." Mr Desmond Boahen, Inspector of Mines, Ghana Minerals Commission







IM4DC shares Australian experience in community relationships

IM4DC is equipping developing countries with knowledge and skills to better deal with the complexity of mining project governance and the many community relations issues it raises.

Participants attended a short course and field trip on *Community Aspects of Resource Developments*, delivered by UQ's SMI Centre for Social Responsibility in Mining in 2012. The course focused on how social issues are being addressed by industry at the local, national and international levels.

The open dialogue and sharing of issues and solutions contributed to deeper learning outcomes, with participants exploring themes such as employment, gender impacts, resettlement and community engagement.

IM4DC publishes guides to Australian experience

IM4DC has collaborated with experts to publish four Guides to Australian Practice to June 2013, which highlight Australia's approach to key aspects of resource governance. Topics relate to social impact assessment, occupational health and safety management, mineral royalties and mining-specific tax, and infrastructure development.

In addition, IM4DC has published six reports from action research projects on topics ranging from mined land rehabilitation in Sierra Leone, to Indonesian mining legislation.

Transferring GIS skills to West Africa

IM4DC is improving exploration management effectiveness in Africa through training in the use of cutting-edge geographic information systems (GIS) technology.

The 2012 GIS course was held in Burkina Faso for 24 participants from 11 African countries, and was presented by the Centre for Exploration Targeting, a joint venture between UWA and Curtin University.

The course covered a range of GIS techniques for integrating and working with exploration and mining data sets. Participants demonstrated their new knowledge by collecting and inputting data to the GIS system, and developed implementation plans.

In the second half of 2013, a similar course will be presented in Zambia, aimed at participants from southern and central African countries.

"We have applied my newly acquired exploration methods knowledge in geophysics in the exploration work and establishment of geophysical databases." Mr Tesfaye Kassa Mekonnen, Ministry of Mines, Ethiopia



Through a targeted program of action research, tailored advice, partnerships and institutional linkages, IM4DC is strengthening mining for development knowledge and governance within universities, research institutions and governments.

IM4DC fellows strengthen institutions

IM4DC is hosting Distinguished Fellow Dr Ousmane Wane, Head of the Department of Geology at the University of Sciences, Technical and Technology of Bamako (USTTB) in Mali, to undertake research in 2013 with the Centre for Exploration Targeting at UWA, Curtin University and CSIRO. USTTB trains the large majority of Malian geologists.

Dr Wane's focus is on enhancing research and training links between the universities, enhancing current approaches to analyse mineral systems in Mali, and developing a new Masters program for his university.

"As an IM4DC fellow, I will be in a position to strongly influence geoscience capacity building and the development of the next generation of Malian geoscientists for the resources industry in West Africa." Dr Ousmane Wane, Head of the Department of Geology, USTTB, Mali

Building governance in Afghanistan

IM4DC hosted six Development Fellows from the Afghanistan Ministry of Mines and Petroleum, who spent 12 weeks in Australia building their understanding of the logic and science behind governance and technical practice in the Australian mining sector.

The tailored program included visits to UWA, the WA School of Mines, Curtin University and UQ. The delegation also attended the IM4DC Mining for Development Conference and the EITI Global Conference in Sydney. The program was supported by the AusAID Afghanistan Program.

The 2013 program has enabled participants to critically analyse current Australian mining practices and assess its applicability to Afghanistan. It will also underpin future policy formulation and decision making within the Ministry.





11

fellowships hosted in Australia

IM4DC research targets country priorities

IM4DC will support 20 targeted action research projects to June 2013, strengthening the capability of developing countries to support mining for development. The following examples demonstrate the breadth of research undertaken by UWA and UQ researchers and PhD students.

Action research snapshot

An Open West Central African Geodata Information System (Centre for Exploration Targeting, UWA and Curtin University)

This project will deliver a web-based GIS mapping tool that will enable any individual with internet access to download information about geology, natural resources, geography and infrastructure. It provides governments with a tool to enhance management of natural resources and gives greater transparency of information to stakeholders, enabling more informed discussion and decision making about resources management.

Mining and Development in Indonesia: An overview of regulatory frameworks and policies (UQ's SMI Centre for Social Responsibility in Mining and Lab Socio, University of Indonesia)

This research identified current Indonesian regulatory frameworks and policies, and analysed their implications for mining. It examined the interface between national, provincial and local governments and investigated current development issues such as corporate social responsibility, and small scale mining.

Mining company-community conflict analysis: Case studies from Indonesia (UQ's SMI Centre for Social Responsibility in Mining)

Focused on governance and improving the processes used by industry and government to engage with local communities, this 2013 project will develop teaching materials on understanding and analysing company-community conflict.

Water issues associated with mining in developing countries (UQ's SMI Centre for Water in the Minerals Industry)

This project found that the social and community aspects of water management is the area of highest priority for mining operations in developing countries. It also sought to synthesise the operational and institutional barriers to addressing water issues, and identified water research priorities.

Mined land rehabilitation in Sierra Leone: Actioning the restoration of livelihoods and governance systems in a post-conflict setting (UQ's SMI Centre for Mined Land Rehabilitation)

This project provided advice to the Sierra Leone government and the United Nations Environment Program (UNEP) on the incorporation of mined land rehabilitation into program activities, the feasibility of large-scale rehabilitation of mining disturbed lands, and mine closure policy reform.

Facilitating accelerated development during mining for development short courses (Accelerated Learning Laboratory at UWA)

During the four-week intensive short course on Occupational Health and Safety leadership in late 2012, the Accelerated Learning Laboratory at UWA collected a large amount of diary-based data from each participant. This research project will conduct in-depth, rigorous analysis to understand what facilitates positive learning experiences and outcomes to aid future course design.

For a full list of IM4DC action research projects visit www.im4dc.org

30+

institutional linkages and partnerships created with Australian, overseas and international organisations

IM4DC fellowships support Ghana mines inspection leadership

IM4DC is hosting four Professional Development Fellowships for senior mines inspectors from the Ghana Minerals Commission to build knowledge and experience in leading practice in mines inspection administration.

The fellows will participate in an individually tailored, experience-based, six-week program in 2013, visiting WA and Queensland mine inspectorates, environmental agencies, mine sites and training institutions.

The program is supported by UWA's School of Psychology, UQ's SMI Minerals Industry Safety and Health Centre, and Curtin University's WA School of Mines.

Mozambique fellows examine regional planning approaches in Queensland

Following the inclusion of a visit to the Central Highlands Regional Council in Queensland by a group of IM4DC course participants, the council agreed to hosting internships for participants from developing countries. Working with the Australia Africa Partnerships Facility, IM4DC arranged a six-week fellowship program for two regional planners from Mozambique government departments. The council developed a customised and integrated program which focused on all aspects of the interactions between large scale mining and council strategic planning and management activities.



IM4DC supports Indonesian skills development

IM4DC is working with the Indonesian government's Education and Training Agency in the Ministry of Energy and Mineral Resources (ETAEMR) to deliver education, training and capacity building in mining, oil, gas and geology. IM4DC signed an agreement with the Indonesian government in 2012 to build capacity in its resources administration.

Over the next three years, IM4DC and ETAEMR are delivering advanced mines inspectors training, new competency standards, and train-the-trainer activities. This is enabling 1,000 Indonesian mines inspectors to be trained to oversee mining operations and administer new mining laws.

The program is increasing knowledge of modern mining and monitoring practices, and developing linkages with academic and training institutions in Bandung and mining provinces.

Land rehabilitation advice delivered to Sierra Leone

IM4DC is supporting land rehabilitation research in Sierra Leone. Researchers from the SMI Centre for Mined Land Rehabilitation visited the country in 2012 and examined mine closure plans and mined land rehabilitation needs to prepare a report for the Sierra Leone government.

The visit included audits on five large mine sites and three artisanal areas, followed by briefings to the Sierra Leone Environmental Protection Agency, United Nations Environment Program, and mining companies.

"The combination of SMI's expertise and UNEP's connections, convening power and track record in Sierra Leone made for an excellent collaboration and one which was very much appreciated by the government and civil society representatives." Mr Oli Brown, UNEP's Program Coordinator in Sierra Leone

Building Africa's negotiation capacity

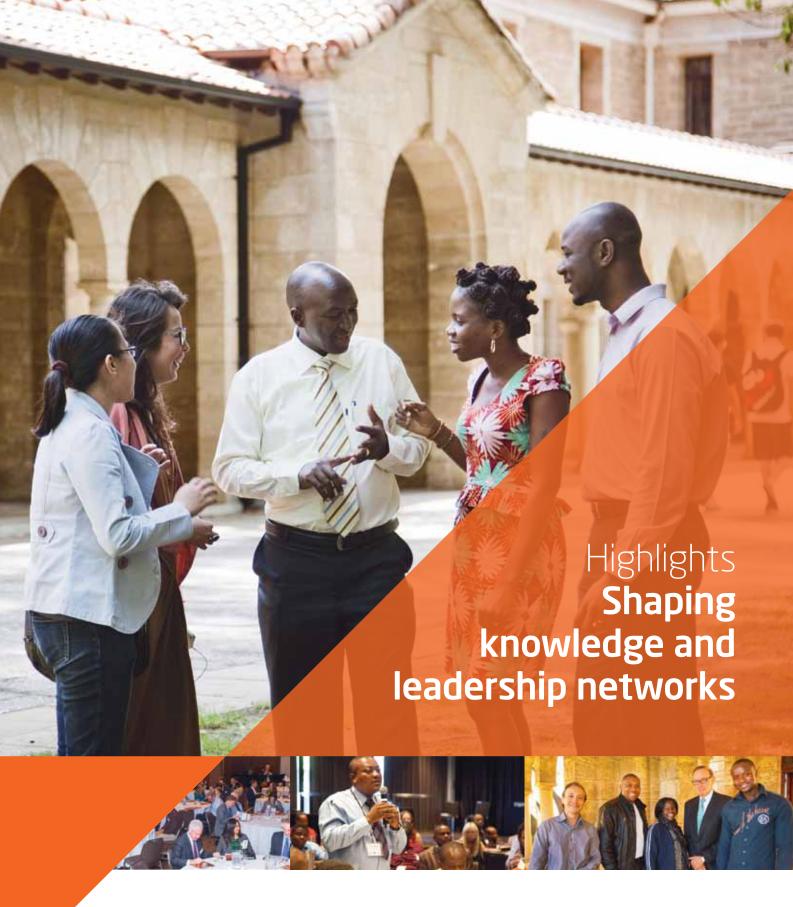
IM4DC is supporting negotiation capacity building for African governments in partnership with AusAID. IM4DC commissioned UWA's Law School to deliver in 2013 an options paper for an Extractive Industries Negotiation Skills Training Program for Africans in Africa.

The second phase of the project includes development of a negotiation skills training program, which will comprise a series of training and other capacity building activities with African governments and at African institutions, by African and other trainers. Priority will be given to developing long-term capacity of both participants and training institutions. In addition, medium-term twinning partnerships with one or more skilled and experienced non-African training institutions will be a priority.



5,000

participant training days boosted mining for development knowledge and expertise



IM4DC is actively shaping global knowledge networks and building leadership in mining for development through its conference events, alumni engagement, and partnerships with AusAID, international agencies, Australian universities and research institutions, and others around the globe.

Alumni program fosters leadership for positive change

IM4DC is creating a global knowledge network through its Mining for Development Community of Practice, supported by a purpose-built online alumni support system.

The network will provide alumni with the opportunity to actively support one another to implement their learning, gain ongoing access to leading practices and advice from Australian and international practitioners, and address mining for development issues in their home countries.

"Course participants consistently express their appreciation at the openness of Australian mining for development practitioners, who are prepared to share - good and bad - what they have learned over the past three decades or more." Ian Satchwell, IM4DC Director

IM4DC alumni networks shape the future

IM4DC's alumni reconnected and engaged in discussions on the developmental changes they are making in their home countries at a one-day alumni forum in May 2013. This forum was held alongside the Mining for Development Conference and the Global EITI Conference in Sydney.

IM4DC introduced its new mining for development community of practice tool and demonstrated how the technology can assist alumni to stay connected, to share their experience and knowledge, and support one another as they implement their mining for development goals.

Alumni also provided the forum with follow-up case studies, and participated in consultations on IM4DC's future program.



International leaders converge at Mining for Development Conferences

IM4DC is bringing together world leaders in mining for development to facilitate exchange of knowledge and experience at its Mining for Development Conference events.

More than 600 international delegates attended the two-day IM4DC Mining for Development Conference in Sydney in May 2013. An additional 135 attended the first conference, an IM4DC Roundtable event in August 2012.

At the conferences, delegates assess priorities for IM4DC activities and identify leading approaches to mining for development that can deliver sustainable socio-economic benefits.

The 2013 conference sessions tackled the critical issue of inclusive development and economic growth, including benefits to women and the disadvantaged, effective agreement making and conflict resolution. They also focused on building sustainable local enterprise and employment frameworks, strong governance, and developing human capacity and leadership to generate positive change.



African women in mining lead change

With a focus on mining governance, IM4DC programmed a 10-day *Women in Mining and Development* study tour in 2012 for 28 women who are mining for development leaders in Africa.

Strengthening their knowledge of Australia's mining governance and operational structures, the group explored principles, concepts and the experiences of women employed or engaged in mining and related development. They also focused on indigenous women's leadership in agreement making, business development, and achieving outcomes for traditional owners.

"I'm going to make proposals especially for the help and support of women who have children." Ms Grace Nassuna, Ugandan Ministry of Energy and Mineral Development Office 30%

female participation in the IM4DC program







Partnering with Africa Mineral Development Centre

IM4DC is developing a capacity building partnership with the African Minerals Development Centre (AMDC), which is being established to lead the implementation of the Africa Union's Africa Mining Vision and Action Plan.

IM4DC will support the AMDC leadership to achieve its mining for development goals and support the Africa Union's vision of 'transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development for the benefit of African nations and people.'

IM4DC expects a full linkage framework and partnership in place by late 2013.

Collaborating with Australia Africa Partnerships Facility

IM4DC is supporting AusAlD's Australia Africa Partnerships Facility (AAPF) by providing knowledge and capability networks, facilities, resources and programming for various study tours. These have included:

- African Women in Mining for Development Study Tour
- Mining Development Infrastructure Study Tour
- Australia Africa Local Supplier Development Forum
- Technical Vocation, Education and Training Forum
- Uganda Extractives Regulation Study Tour

"Collaboration with the IM4DC is critical to the success of the AMDC." Antonio M.A. Pedro, Director United Nations Economic Commission for Africa Sub-regional Office for Eastern Africa

Future directions

2011

- Launch in October 2011
- Building IM4DC capability and delivery capacity
- Implementation of initial activities

2012

- Full implementation of IM4DC program
- Engagement of representatives and institutions in government, civil society and education in all priority countries
- Building linkages and partnerships with Australian and overseas institutions

2013

- Refinement and consolidation of IM4DC program and activities
- Building a global capability network with Australian and international institutions to coordinate delivery of education, training, research and capacity building programs
- Strengthening linkages with developing country institutions to support enhancement of their capacity and collaborate in delivery
- Building a global IM4DC alumni network and community of practice in mining for development
- Development of partnerships with emerging centres of mining for development practice and influence

2014-2015

- IM4DC program and activities form part of a coordinated international network for education, training, research and capacity building in mining for development
- Developing country partners delivering education and research in mining for development
- IM4DC alumni leading change in mining for development in their home countries and regions
- Demonstrable improvements to capacity and effectiveness in mining governance in priority countries

IM4DC

Helping developing countries use their mineral and energy resources to grow their economies, reduce poverty and deliver long-term economic and social benefits to their people

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Institutional linkages and collaborative partnerships

IM4DC is collaborating with the following institutions in the delivery of programs and associated activities.

AUSTRALIAN INSTITUTIONS

The University of Western Australia

- The Energy and Minerals Institute
- Centre for Social Impact
- Faculty of Science
- School of Earth and Environment
- School of Psychology
- Accelerated Learning Laboratory
- School of Law
- Centre for Mining, Energy and Natural Resources Law
- Faculty of Engineering, Computing and Mathematics
- School of Civil and Resource Engineering
- School of Environmental Systems Engineering
- School of Mechanical and Chemical Engineering
- Centre for English Language Teaching

The University of Queensland

- The Sustainable Minerals Institute
 - Centre for Social Responsibility in Mining
 - Centre for Water in the Minerals Industry
 - Centre for Mined Land Rehabilitation
 - Minerals Industry Safety and Health Centre
 - Julius Kruttschnitt Mineral Research Centre
 - WH Bryan Mining and Geology Research Centre
- School of Geography, Planning and Environmental Management
- School of Law

Centre for Exploration Targeting (UWA and Curtin University)

Australian Centre for Geomechanics (UWA and Curtin University)

Curtin University

- Western Australian School of Mines
- Graduate School of Business

University of New South Wales

• Australian Centre for Sustainable Mining Practices

The University of Sydney

• Graduate School of Government

Australian Government

- Australia Africa Partnership Facility
- AusAID Country Mining for Development Programs
- AusAID Mining for Development Initiative
- Geoscience Australia

Government of Western Australia

- Department of Mines and Petroleum
- Department of State Development

Western Australia

• The Chamber of Minerals and Energy of Western Australia

Queensland Government

- Department of Natural Resources and Mines
- Safety in Mines Testing and Research Station

INTERNATIONAL ORGANISATIONS

- World Bank Sustainable Energy, Oil, Gas, and Mining unit (SEGOM)
- World Bank Institute
- World Economic Forum

AFRICA

- Africa Minerals Development Centre
- Ghana Institute of Management and Public Administration
- Ghana Minerals Commission
- Instituto Superior Politecnico De Tete, Mozambique
- Universidade Eduardo Mondlane, Mozambique
- Mali University of Sciences, Technical and Technology of Bamako
- Mines Safety Department, Zambia
- University of Zambia
- Copperbelt University, Zambia

CANADA

- Canadian International Institute for Extractive Industries and Development
- Canadian International Development Agency

GERMANY

- Federal Institute for Geosciences and Natural Resources
- German Agency for International Cooperation (GIZ)

MONGOLIA

- General Agency for Specialised Inspections (GASI)
- Minerals Resources Authority of Mongolia
- Mongolian University of Science and Technology

INDONESIA

- Indonesia Education and Training Agency of the Ministry of Energy and Mineral Resources
- University of Indonesia

UNITED STATES

Vale Columbia Centre

Selected publications

The Management of Occupational Health and Safety in the Australian Mining Industry, by Professor David Cliff, Director - SMI Mineral Industry Safety and Health Centre, UQ.

Social Impact Assessment of Resource Projects, by Daniel Franks, Senior Research
Fellow, SMI Centre for Social Responsibility in
Mining. UO.

Mineral Royalties and Other Mining-Specific Taxes, by Pietro Guj, Research Professor, Centre for Exploration Targeting, UWA.

Mining and Health in Development: An inventory of global resource industry health initiatives in developing countries, by LaBouchardiere, R, Harris, JD and Kirsch, P, SMI Minerals Industry Safety and Health Centre, UQ.

Integrated Sustainable Water Management in Mining for Development in The Philippines, by Dr Natasha Danoucaras, International Water Centre.

Economic Resource Corridors: Pilbara Case
Study (co-published with the World Bank).

Social and Economic Impact on the Resource Sector Job Stream in Papua New Guinea, by Colin Filer, Marjorie Andrew, Phillipa Carr, Benedict Imbun, Bill F Sagir, Rosemary Benjamin, Casper Damien, Jennifer Krimbu, Deane Woruba, Australian National University.

Mining and development in Indonesia: An overview of the regulatory frameworks and policies, by Bernadetta Devi, SMI Centre for Social Responsibility in Mining at UQ and Dody Prayogo Lab Socio, University of Indonesia.

Participating developing countries

Afghanistan Mongolia
Algeria Morocco
Bolivia Mozambique
Burkina Faso Myanmar
Colombia Niger
Cote d'Ivoire Nigeria

Democratic Republic Papua New Guinea of Congo Peru

of Congo Peru

Ecuador Republic of the Congo

Ethiopia Sierra Leone Gabon Solomon Islands Ghana South Africa Guinea South Sudan Indonesia Tanzania Kenya The Gambia Laos The Philippines Lesotho Uganda Liberia Uruguay Madagascar Zambia Malawi Zimbabwe Mali

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The Sustainable Minerals Institute

The University of Queensland St Lucia, Brisbane Queensland, Australia 4072 Tel: +61 7 3346 4003 Email: reception@smi.uq.edu.au

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