

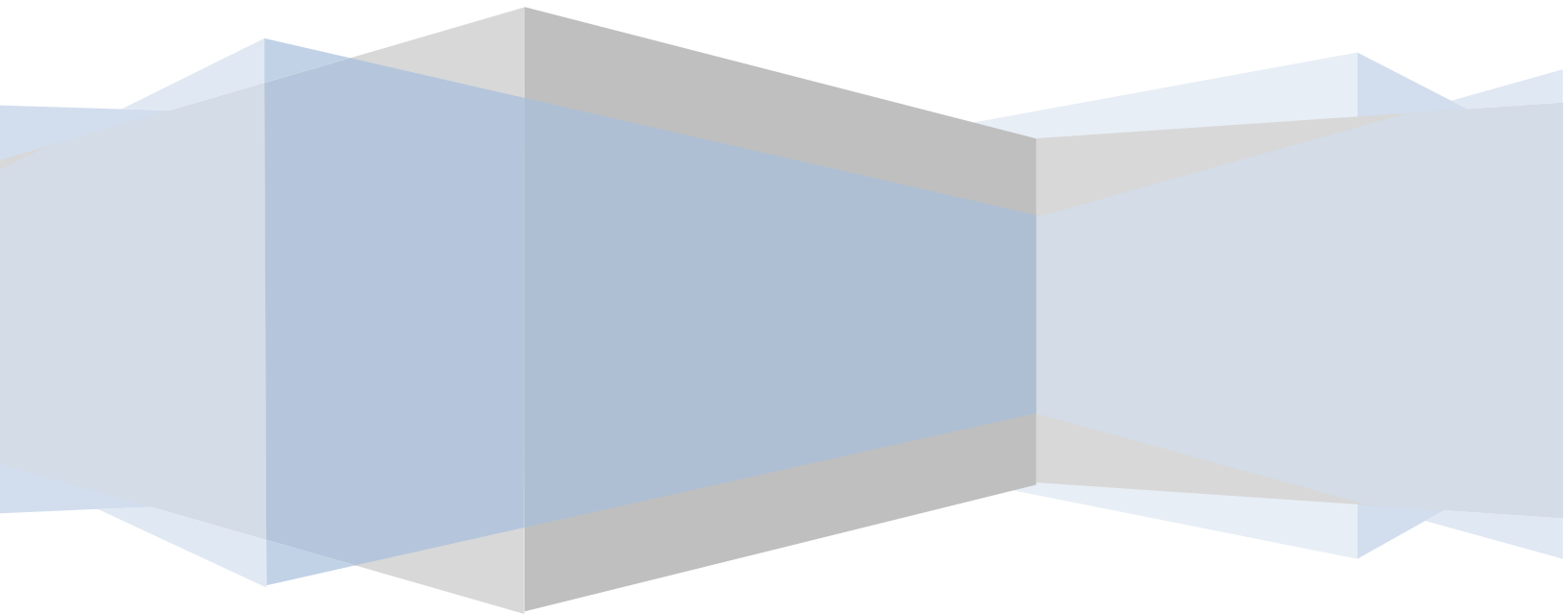
**WOMEN IN MINING MONGOLIA**



**PRELIMINARY FINDINGS ON THE WOMEN PARTICIPATION  
IN THE MINING INDUSTRY OF MONGOLIA**

**Ulaanbaatar city**

**March 08, 2016**



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## WOMEN IN MINING MONGOLIA (WIMM) NGO

Women in Mining Mongolia Initiative promotes and initiates dialogue with stakeholders on concerns and matters within the mining sector in Mongolia from a woman's point of view by educating, attracting and recruiting women into the mining sector, helping in the advancement of women, and coaching and mentoring to develop leadership and accountability skills. Since 2014 we have been working to improve diverse and inclusive decision-making practices within the mining sector in Mongolia. The balanced participation, environment and social responsibility are the WIM's core values.

### THE RESEARCH INITIATIVE

Our organization is carrying out this research on the role and contribution of Mongolian women in the country's extractive industry at own initiative and funding. The World Bank pointed out at scarcity of such data in Mongolia and it might be impacting the country's social and mining policies<sup>1</sup>. WIMM believes this comprehensive research can fill this data shortage. The research covered not only private and government owned companies engaged in various geological, technical, mining and services fields but the country's mining schools too. The comprehensiveness is also ensured by a number of people of the mining sector that have been counted for in this research which is 16,000 people. The preliminary findings of this survey carried out over eight months are presented below.

Data for this research was collected through following channels:

- Polling mining companies using the WIMM questionnaire:
  - The questionnaire was placed online<sup>2</sup> and sent out to mining companies electronically. In addition, WIMM's student interns collected written responses to the paper-based questionnaire by going "door-to-door" to mining companies.
  - For period of 2 months the questionnaire was available on the website of the Mining Resource Authority of Mongolia (<http://mram.gov.mn/>).
  - Upon preliminary arrangement, the questionnaire was sent out to members of the Mongolian National Chamber of Commerce and Industry ([www.mongolchamber.mn](http://www.mongolchamber.mn)) and National Mining Association ([www.miningmongolia.mn](http://www.miningmongolia.mn)). Also some organizations such as the American Mongolian Chamber of Commerce ([www.amcham.mn](http://www.amcham.mn)), Gold Producers Association of Mongolia ([www.mongoliagold.org](http://www.mongoliagold.org)), Mongolian Women Scientists Union ([www.wstem.mn](http://www.wstem.mn)) and Women Geologists Club played active roles in helping WIMM to get responses to the questionnaire from their members and supporters.
  - WIMM research team specifically contacted HR departments of larger Mongolian mining companies (Erdenet, Oyun tolgoi, Erdenes Tavan Tolgoi, Erdenes MGL, Bur-Undur, Altain Huder, MAK, MoEnCo, Energy Resource) with requests of their human resource data. We received their data in writing and also discussed their HR experiences.
- Annual labour data issued by Mongolian National Statistical Office (NSO) were analyzed and compared with the WIMM research numbers.
- WIMM team reached out to the professors and managers of the Geology and Geophysics Department of the Mongolian State University, University of Science and Technology and Mining Engineering School of Mongolian National University who not only provided their schools' gender data but also some helpful recommendations and insights.

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<sup>1</sup> <http://www.wimmongolia.org/resources-in-mongolian/1>  
<http://www.wimmongolia.org/resources-in-english/mongolia-gender-disparitiesin-labor-markets-and-policy-suggestions>

<sup>2</sup> See the questionnaire here: [https://docs.google.com/a/temugelaw.com/forms/d/1S7YMTolva4VJrmPd-YFW2ly1-wOmluWFgff92\\_qXK-w/viewform?c=0&w=1](https://docs.google.com/a/temugelaw.com/forms/d/1S7YMTolva4VJrmPd-YFW2ly1-wOmluWFgff92_qXK-w/viewform?c=0&w=1)

- Similar research papers and reports from various international organizations and think-tank companies have been analyzed and compared with the findings and numbers of the WIMM survey. The list of these reports and papers is attached.

|                                    |              |                 |                 |                   |                   |                    |
|------------------------------------|--------------|-----------------|-----------------|-------------------|-------------------|--------------------|
| Уул уурхайн ханган нийлүүлэлт      | 5            | 40              |                 | 0                 | 50                | 0                  |
| Эрэл, хайгуул                      | 35           | 6               | хөдөө явах, т   | 3                 | 3                 | 2                  |
| Уул уурхайн ханган нийлүүлэлт      | 14           | 60              | 0               | 0                 | 50                | 20                 |
| Эрэл, хайгуул                      | 10           | 10              |                 | 0                 | 10                | 0                  |
| Олборлолт                          | 27           | 18              |                 | 0                 | 0.07              | 0.11               |
| Үйлдвэрлэл                         | 1090         | 36              | 0               | 12                | 52                | 33                 |
| Эрэл, хайгуул                      | 22           | 45              | 0               | 50                | 50                | 20                 |
| Үйлдвэрлэл                         | 1493         | 7               | 34              | 45                | 1                 | 0.1                |
| Олборлолт                          | 6498         |                 | 32.5            |                   | 5.8               | 4.3                |
| Уул уурхайн үндэрдлага             | <b>total</b> | <b>16005</b>    | <b>27.40625</b> |                   | <b>17.0354166</b> | 0                  |
| Олборлолт                          |              |                 |                 |                   |                   | 1.4                |
| Уул уурхайн тоног төхөөрөмжийн худ | 389          | 23              |                 | 40                | 76                | 0                  |
| уул уурхайн сургууль               | 55           | 54              |                 | 50                | 60                | 40                 |
| Үйлдвэрлэл                         | 6498         | 32.5            |                 | 5.8               | 42.2              | 42.2               |
| <b>total</b>                       | <b>16005</b> | <b>27.40625</b> |                 | <b>17.0354166</b> |                   | <b>8.793958333</b> |

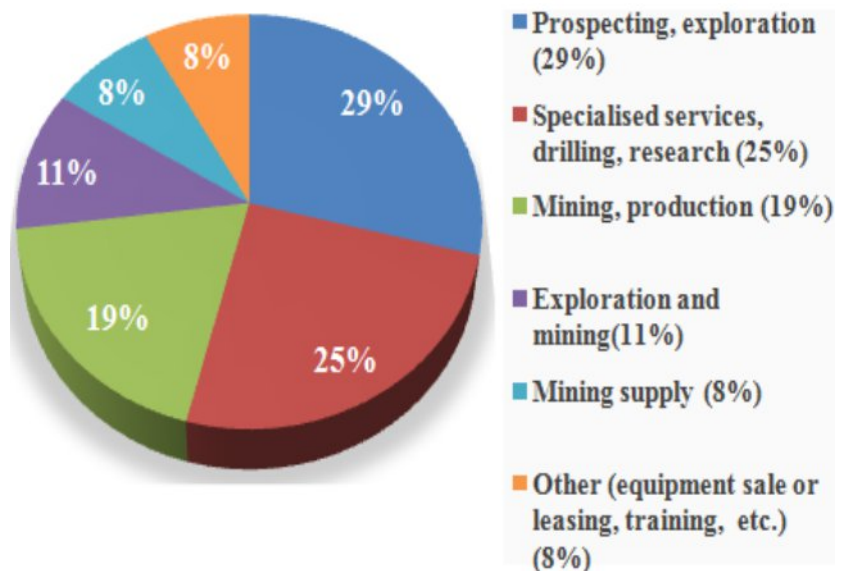
According to the National Statistics Office data, there were 37 thousand people working in Mongolia’s mining industry at the end of 2014. The total number of employees of the companies which participated in WIMM survey was 16000 people so we conclude that the survey has reached out to 35 percent of all workers of the country’s mining industry. This is why WIMM team is confident in our findings as being accurate and reflective of the current situation.

## FINDINGS OF THE RESEARCH

### I. Companies and organizations that participated in the poll

Of the polled businesses, the smallest company had 2 people and the largest had 6498 employees. Businesses engaged in specialized mining services, research or supply chain companies generally employ smaller number of people at 2-14 while businesses operating at extraction, production and processing level had around 380-2272 employees.

The average number of employees of companies operating in the mining industry was 116 (this average was extracted by excluding the top 3 companies with the largest number of employees). Here is the business and operational profiles of our survey respondents.



## II. Women working in the mining industry

As consequence of the global economic slowdown and plunge of minerals' prices of 2013-2014 the Mongolian extractive industry is now experiencing a stagnant period. The NSO data indicate that from December 2012, when the number of mining industry people was the largest, to December 2014, the number of mining employees declined some certain percentage but the number of women in mining sector has declined two-fold, thus, now making only 11 percent of the total number of employees.

Number of people working in the mining industry

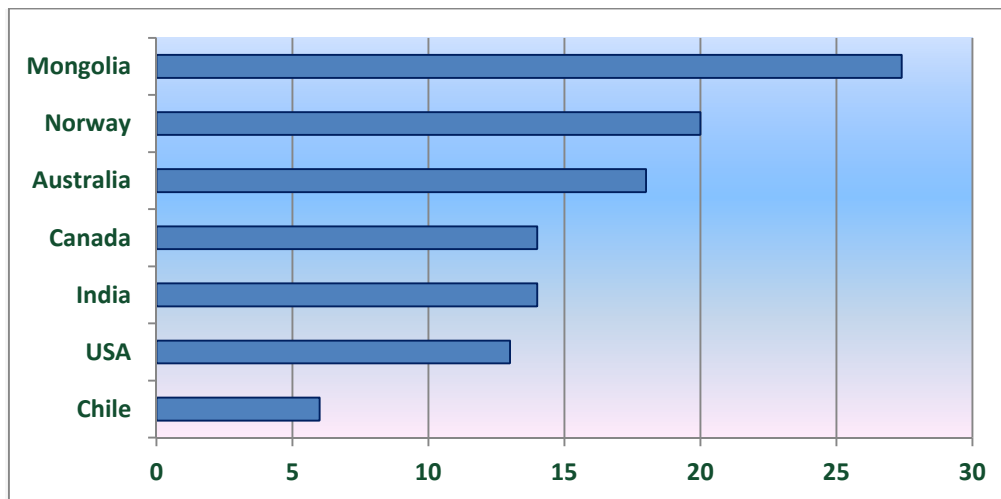


Percentage of women working in the industry



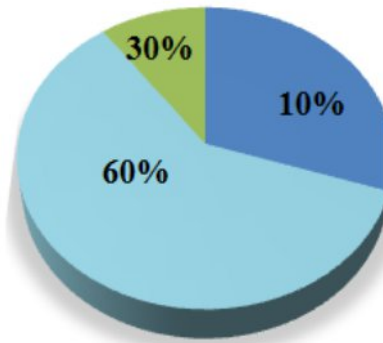
Source: National Statistics Office , [www.1212.mn](http://www.1212.mn)

Percentage of women employees of mining companies



However based on responses of the companies that participated in our survey the WIMM research team estimated that the share of women in the total number of employees of the extractive industry in the third quarter of 2015 was 27,4 (see above chart). This estimate is more than twice higher than the NSO's number. The WIMM team considers that our 27,4 is better reflective of the factuality because companies participated in our survey and answered the questionnaire voluntarily and no names of the companies have been recorded. Thus, this ensured riskless, accurate responses to the questions.

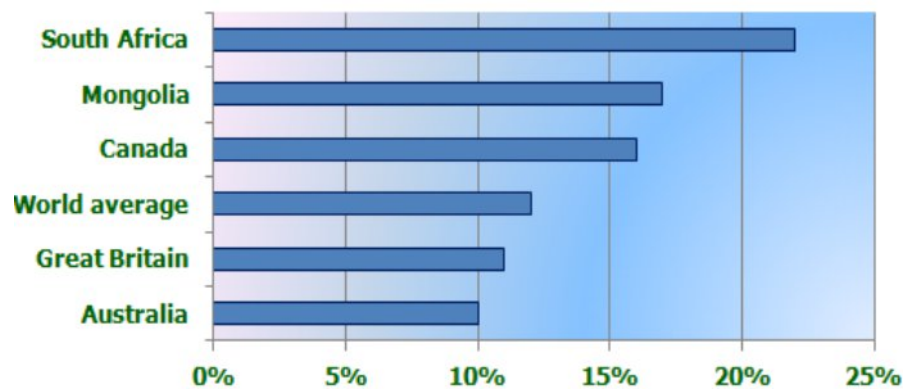
Out of all responders, 6 percent of companies responded to have no single female staff, and 2 percent responded that only up to 5 percent of their employees are women. The profiles of these companies show that they generally are very small businesses engaged in specific professional services and research offered to mining companies (for instance, gravity data analyses during the mining prospecting and exploration works). The responders explained the situation of having no or very few female workers with the following reasons: (see the chart)



- Most professionals with narrow mining-related speciality are men, so we had no chance to hire women
- We hire men because our work requires much physical strength and frequent travels to countryside
- We are a new business, had no chance to define our HR policies yet

Review of the World Economic Forum’s “The global gender gap report 2014” and several other research reports on the gender engagement gap<sup>3</sup> indicate that the country with the highest female membership in management boards of mining companies is South Africa (23% of board members are women) while the global average for such participation indicator is 12%. The WIMM’s survey found that almost 17 percent of all top managers of Mongolia’s mining companies are women. Compared to similar statistics in other countries and with the world mean number, the percentage of Mongolian women - top managers is encouraging as it is well above the global average of 12%. On the other hand, those reports<sup>4</sup> made by foreign researchers and relevant international organizations defined the “top management level” to include a decision making level manager, executive director or project manager as well as women sitting at various “boards of directors” and “management boards”, so they counted women at these positions. However in our survey the “management level” explicitly included and counted “executive directors, deputy directors, directors of departments, project managers, camp chief administrators, and other decision making persons of similar level” while female directors of boards of mining companies have not been counted. Had women directors of boards been asked about and counted, the number of 17 percent for female top managers of Mongolia’s mining companies might have been higher.

Percentage of women working in mining companies at the decision making level:



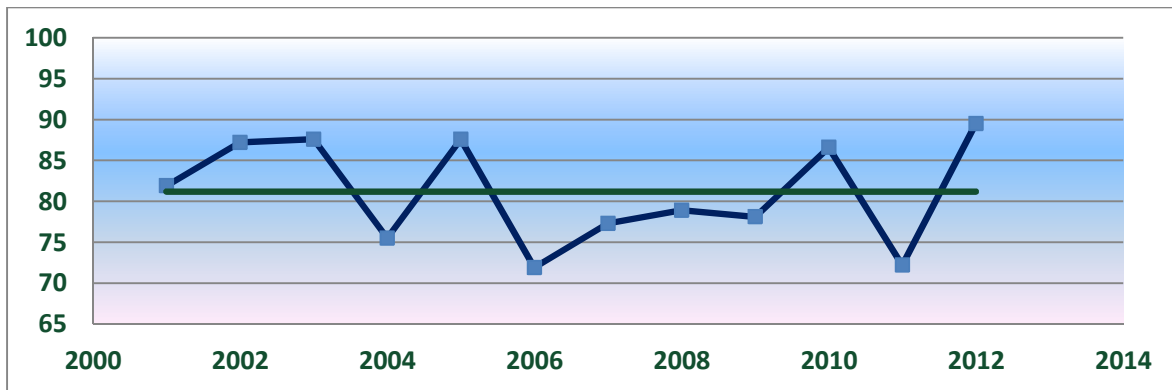
<sup>3</sup> Please refer to the attached list of reports analyzed and used for preparing this document

<sup>4</sup> For instance, this report: Mining for talent. A study of women on boards in the mining industry, WIM (UK) and PwC, 2014, [http://www.pwc.com/ua/en/industry/metal\\_mining/mining/publications/women-in-mining.jhtml](http://www.pwc.com/ua/en/industry/metal_mining/mining/publications/women-in-mining.jhtml)

### III. Wage gap

Generally, the disparity of wages of men and women is a centuries-old reality. The International Labour Organization explains that the more women enter the labour market the narrower this gap becomes. In fact, on today's globalized world market such wage disparity is the lowest in the history. Nevertheless, this phenomenon still exists in all the countries around the globe. For example, the UK Office for National Statistics reports that and the end of 2014 the men : women wage ratio was £1 : 91 pence, and this is the narrowest gap in the country's history. In Europe the country with the smallest gap is Slovenia (3%) and the largest gap is in Estonia (29%). Because in most of countries salaries in the mining sector is comparatively higher, the wage disparity is higher as well. The U.S. Bureau of Labor Statistics reports the ratio of \$1: 82,3 cents (as of 2014) in heavy equipment machinery and processing, in Belarussian extractive industry women receive 26,3 percent lower wages (as of 2011), and in the Australian mining, women get 13-27 percent lower wages depending on the work position level (as of 2014) and this disparity is gradually increasing over the recent years.

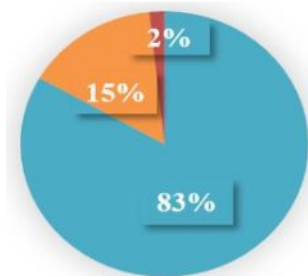
The gender wage difference in Mongolia's mining industry



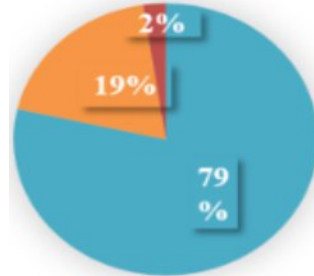
Source: National Statistics Office , [www.1212.mn](http://www.1212.mn)

WIMM team analyzed the gender wage difference in the Mongolian mining industry by comparing the data given by NSO for years of 2000-2012 (no NSO data is available for years beyond 2012). So the wage disparity was 18,8 percent, in other words for every 1000 tugrugs received by a man, a woman would receive 812 tugrugs. To a question “Is there a difference in wages/salaries of the man and a woman with the same educational background, years of work and work experience?” in our questionnaire 79-83% of respondents answered to have “no wage difference”, 10-19% - “slight difference” and 2% - “notable difference exists”.

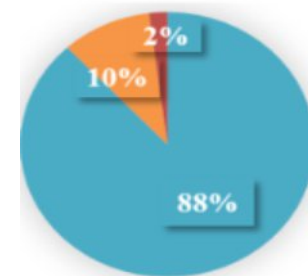
#### At management level



#### At professional executives level



#### At technical and support level



■ no wage difference

■ slight difference

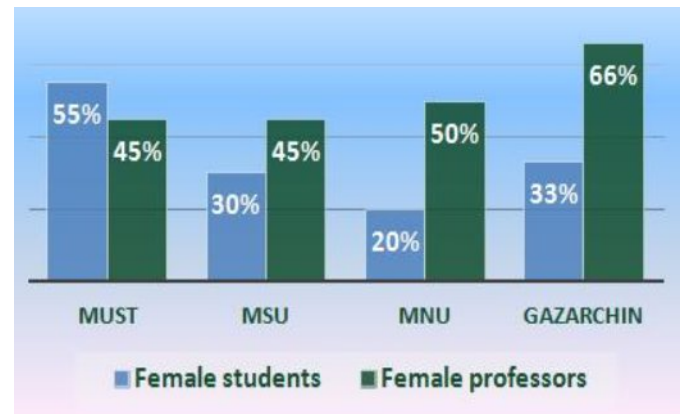
■ notable difference exists



#### IV. Professional training

The following universities and colleges train and provide specialists for the Mongolia's extractive industry: the University of Science and Technology of Mongolia in more than 10 majors, the Geology and Geodesy Faculty of State University of Mongolia in 5 majors, the Mining Engineering School of Mongolian National University in 3 majors and the Department of Mining Engineering and Technology of "Gazarchin" college - in 7 majors.

During discussions with professors of these schools they told:



- Before 1990 a number of female students majoring in mining related fields was not high, perhaps around 15%, starting from late 1990s and early 2000s the number continuously increased now reaching almost 60% in some majors.
- Female students choose to study mining management, minerals surveying, mining technology, processing. Girls in mining schools study comparatively well. Many female students entering mining classes are from rural areas.

#### FURTHER WORK

This is a report of the preliminary findings of the WIMM research on a role and contribution of women in the Mongolia's extractive industry. WIMM intends to expand the scope of this research outreaching the following:

- a. mining companies that are registered and operating in rural areas. Due to limited resources, the WIMM has not been able to closely work with a sufficient number of rural mining companies.
- b. a concerning phenomenon in Mongolia's extractive industry is artisanal mining where many miners are women. WIMM contacted and discussed the gender issues with Artisanal Mining Project ([www.sam.mn](http://www.sam.mn)) but more studies are needed and included in this report.
- c. larger state-owned companies that traditionally have been playing an important role in Mongolia's extractive sector. More work is needed for collaborating with these companies to reflect findings and recommendations of research in their charters, by-laws and decision-making processes to ensure better women participation and their career promotion.
- d. commercial banks: what is percentage of borrowers - mining companies are owned or run by Mongolian women? WIMM aims to work with all commercial banks for gender data of their borrowers - mining companies and if any gender discrepancy is indicated in their lending practice, discuss with them the way to improve their lending to women-miners.

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## Research team



N. Tumenbayar, lead researcher

- Chairwoman of WIMM; Board Member of Mongolian Women Lawyers Association
- Managing partner at TemugeLaw LLC engaged in mining litigations, acquisitioning and mergers ([www.temugelaw.com](http://www.temugelaw.com))
- previously, the legal advisor to Parliament of Mongolia and Economic Counsellor at the Embassy of Mongolia in Washington DC
- holds LLM (Moscow State University) and MPS (Cornell University) degrees



A. Namuun, support researcher

- Communications and PR Committee Director of WIMM
- Executive Director of Mongolia Market Partners (<http://mmp.mn/>), marketing consulting firm specialized in mining and construction.
- Independent researcher in mining and construction supply markets



D. Otgonchimeg, communications support

- Board Member of WIMM
- Chemical engineer, Saint-Petersburg Technological University, Russia, International Management of Resource and Environment, MBA, Mining Academia of Freiberg, Germany
- Engineering manager of energy and chemicals projects of 'Mongolyn Alt' (MAK) LLC
- National consultant, Extractive Industry projects, UNDP Mongolia



J. Tseveenjav, PhD, consultant

- professor and head of department at Mongolian University of Science and Technology ([www.guus.edu.mn](http://www.guus.edu.mn))
- Executive Director of Mongolian Drilling Association ([www.mda.mn](http://www.mda.mn)) and of Mongolian Society of Petroleum Engineers; Member of Mineral, Oil and Gas Resource Commission of Mongolia
- member of SPE (international) and AIDA (Australian Industry Drilling Association)

## References

**Women in business: the path to leadership**, Grant Thornton International Business Report 2015  
[http://www.fbk.ru/upload/images/ibr2015\\_wib\\_report\\_final.pdf](http://www.fbk.ru/upload/images/ibr2015_wib_report_final.pdf)

**Mining for talent. A study of women on boards in the mining industry**, WIM (UK) and PwC, 2014  
[http://www.pwc.com/ua/en/industry/metal\\_mining/mining/publications/women-in-mining.jhtml](http://www.pwc.com/ua/en/industry/metal_mining/mining/publications/women-in-mining.jhtml)

**Promoting gender equality in the mining industry**, 2014,  
<http://www.theguardian.com/sustainable-business/gender-equality-mining-industry>

**The global gender gap report 2014**, World Economic Forum,  
<http://reports.weforum.org/global-gender-gap-report-2014/>

**The gender wage gap by occupation, by race and ethnicity**, 2014, Institute for Women's Policy Research, Washington DC, <http://www.iwpr.org/>

**Gendering the field: towards sustainable livelihoods for mining communities**, Kuntala Lahiri-Dutt, ANU Press, 2011



**The Gender Wage Gap by Occupation 2014 and by Race and Ethnicity**, Ariane Hegewisch, Emily Ellis, April 2015, <http://www.iwpr.org/publications/pubs/the-gender-wage-gap-by-occupation-2014-and-by-race-and-ethnicity#sthash.X0UAJUT3.dpuf>

**Уул уурхайн салбарт эмэгтэйчүүдийн оролцоог нэмэгдүүлэх нь**, Дэлхийн банк, 2013

**A Study on the Career Advancement and Retention of Highly Qualified Women in the Canadian Mining Industry**,

Courtney Meaghan Hughes, 2012

[http://0302.nccdn.net/1\\_5/189/114/1e0/ubc\\_2012\\_fall\\_hughes\\_courtney.pdf](http://0302.nccdn.net/1_5/189/114/1e0/ubc_2012_fall_hughes_courtney.pdf)

**An Unmined-Resource: Female Participation within British Columbia's Exploration and Mining Industry**, APABC, AMEBC, MABC, 2012, [http://0301.nccdn.net/1\\_5/33c/1ce/227/Women---An-Unmined-Resource---A-Report-on-Female-Participation-within-BC-s-M.pdf](http://0301.nccdn.net/1_5/33c/1ce/227/Women---An-Unmined-Resource---A-Report-on-Female-Participation-within-BC-s-M.pdf)

**Changing the Face of the Canadian Mining Industry**, Mining Industry Human Resource Canada, <http://www.mihhr.ca/en/publications/index.asp>

<http://www.theguardian.com/sustainable-business/gender-equality-mining-industry>

In Chile, where Anglo American is one of the largest mining companies in the copper mining sector, an industry critical to the economy, women have historically had a very weak presence in mining – representing only 6% of all Chilean mining workers. Until 1996, legislation prohibited women from working in underground mines, which reinforced gender stereotypes in the industry.

<https://www.wgea.gov.au/media-releases/calls-more-women-mining-construction-utilities>

Currently women account for only 18% of the mining workforce, compared with 42% of the total Australian workforce. The numbers of women in operational roles is particularly low, with women comprising only 7% of the technical professional workforce and 3% of the site based workforce.

<https://www.ausimm.com.au/content/default.aspx?ID=94>

The AusIMM remuneration survey data shows that female minerals professionals earn an average of 27 per cent less per hour than male minerals professionals. AusIMM's data also shows that women are much less likely to be working in the most senior professional roles, a fact backed up by WGEA's stark statistic that only 2.7 per cent of mining CEOs are women.

[http://www.neg.by/publication/2014\\_09\\_05\\_18838.html?print=1](http://www.neg.by/publication/2014_09_05_18838.html?print=1)

Очень важно, что сняты ограничения на применение труда женщин на ряде работ в горнодобывающей промышленности. Реализация норм постановления № 35 будет способствовать не только расширению возможностей трудоустройства женщин, но и повышению уровня зарплат. В той же горнодобывающей промышленности зарплата на 30% выше среднего показателя по стране. А ведь у нас существенное гендерное неравенство в оплате труда по данным 2011 г. – 26,3%.

<http://barentsobserver.com/ru/biznes/2015/05/zhenshchiny-bolshaya-redkost-na-gornyh-predpriyatiyah-norvegii-12-05>

<https://www.wgea.gov.au/media-releases/calls-more-women-mining-construction-utilities>

[https://www.wgea.gov.au/sites/default/files/Gender\\_Pay\\_Gap\\_Factsheet.pdf](https://www.wgea.gov.au/sites/default/files/Gender_Pay_Gap_Factsheet.pdf)

<http://www.bls.gov/cps/cpsaat39.pdf>

<http://www.pwc.co.za/en/press-room/women-skills-mine.jhtml>

## Web sites for mining schools

ШУТИС <http://www.guus.edu.mnd>

МУИС <http://mnu.edu.mn>

МУИС <http://sas.num.edu.mn/>

“Газарчин” college <http://www.gazarchin.edu.mn/>