MERCURY ELIMINATION IN ARTISANAL AND SMALL SCALE GOLD MINING: PROGRESS AND BARRIERS IN IMPLEMENTING NATIONAL ACTION PLAN TO ELIMINATE MERCURY IN INDONESIA (CASE STUDY: BANYUMAS REGENCY)

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Abstract

The artisanal and small-scale gold mining (ASGM) sector is one of the main contributors of mercury emissions in Indonesia. As a result of participating in the Minamata Convention on Mercury, Indonesia established the national action plan (NAP) to eliminate mercury in ASGM that started in 2014 and ends in 2018. To date, there is no report or study that discusses the implementation progress of the NAP. The aim of this research is to investigate the progress of the NAP to eliminate mercury in ASGM in Indonesia. In addition, the study aims to identify barriers for implementation of the NAP.

The research in this thesis is a qualitative research that utilises a case study method, in order to gain a deep insight into how stakeholders implement the NAP. Banyumas regency is taken as the case study, since the area has extensive ASGM activities, which emit a high level of mercury into the environment. The primary data for this research is gathered through semi-structured interviews, while secondary data is obtained from institution reports, newspaper articles and government websites. The findings of this research have identified several action plans, for example: the establishment of a stakeholder’s forum at national level; a study on alternative technology; health effects and environmental tests; and training for the miners, which were all undertaken according to the NAP. However, other action plans, for example, regulations regarding formalisation of ASGM; a mercury database; alternative livelihood training; and mercury awareness included in the education curriculum are progressing slowly. In addition, there are four barriers that hinder the implementation of the NAP: institutional barriers (lack of resources, political will and poor coordination); policy barriers (lack of legal formalisation framework and policy support); technical barriers (lack of supporting tools, lack of information on ASGM and miners’ involvement, low level of trust in alternative technology and location difficulties) and socio-economic barriers (miners’ beliefs and social conditions).

This research proposes several recommendations to improve the progress of the NAP and to reduce barriers toward implementation, such as improvement in financial availability by
cooperating with other actors such as Bappenas, to secure the funding for the implementation of NAP and regulations improvement; strengthening the implementation of NAP by appointing leading ministries such as Coordinating Ministries of Maritime affairs to coordinate the implementation of NAP and adding participation of other actor such as academics to participate in the NAP; and developing approaches and tools to disseminate information.

**Keywords**: artisanal and small-scale gold mining, ASGM, mercury, national action plan, implementation, barriers, Indonesia.
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<th>Full Form</th>
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<tbody>
<tr>
<td>ASGM</td>
<td>Artisanal and small scale gold mining</td>
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<td>Bappenas</td>
<td>National Development Planning Agency</td>
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<tr>
<td>BPPT</td>
<td>Agency of Technological Research and Development</td>
</tr>
<tr>
<td>BPS</td>
<td>Central Bureau of Statistic</td>
</tr>
<tr>
<td>CIA</td>
<td>Criminal Investigation Agency</td>
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<tr>
<td>LIPI</td>
<td>Indonesian Institute of Sciences</td>
</tr>
<tr>
<td>MCSME</td>
<td>Ministry of Cooperative and Small - Medium Enterprise</td>
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<tr>
<td>MoCI</td>
<td>Ministry of Communication and Informatics</td>
</tr>
<tr>
<td>MoEC</td>
<td>Ministry of Education and Culture</td>
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<tr>
<td>MoEF</td>
<td>Ministry of Environment and Forestry</td>
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<td>MoEMR</td>
<td>Ministry of Energy and Mineral Resources</td>
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<td>MoHA</td>
<td>Ministry of Home Affair</td>
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<td>NAP</td>
<td>National Action Plan</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<tr>
<td>UI</td>
<td>University of Indonesia</td>
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<tr>
<td>WPR</td>
<td>People’s mining area</td>
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