

Public Health Issues in ASGM in Suriname

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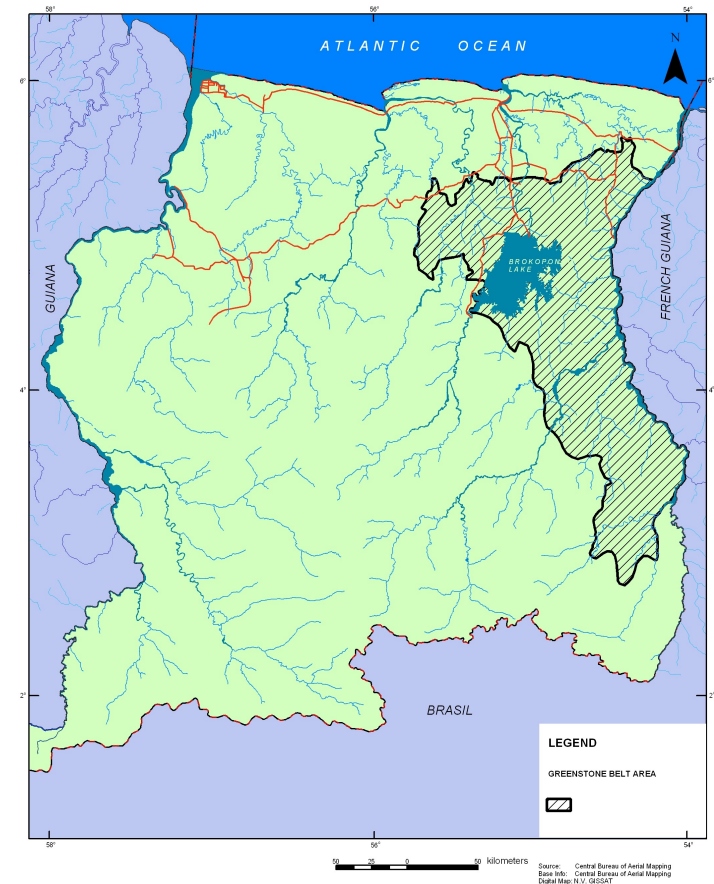


Characteristics Suriname - ASGM

NAP 2021 (draft)

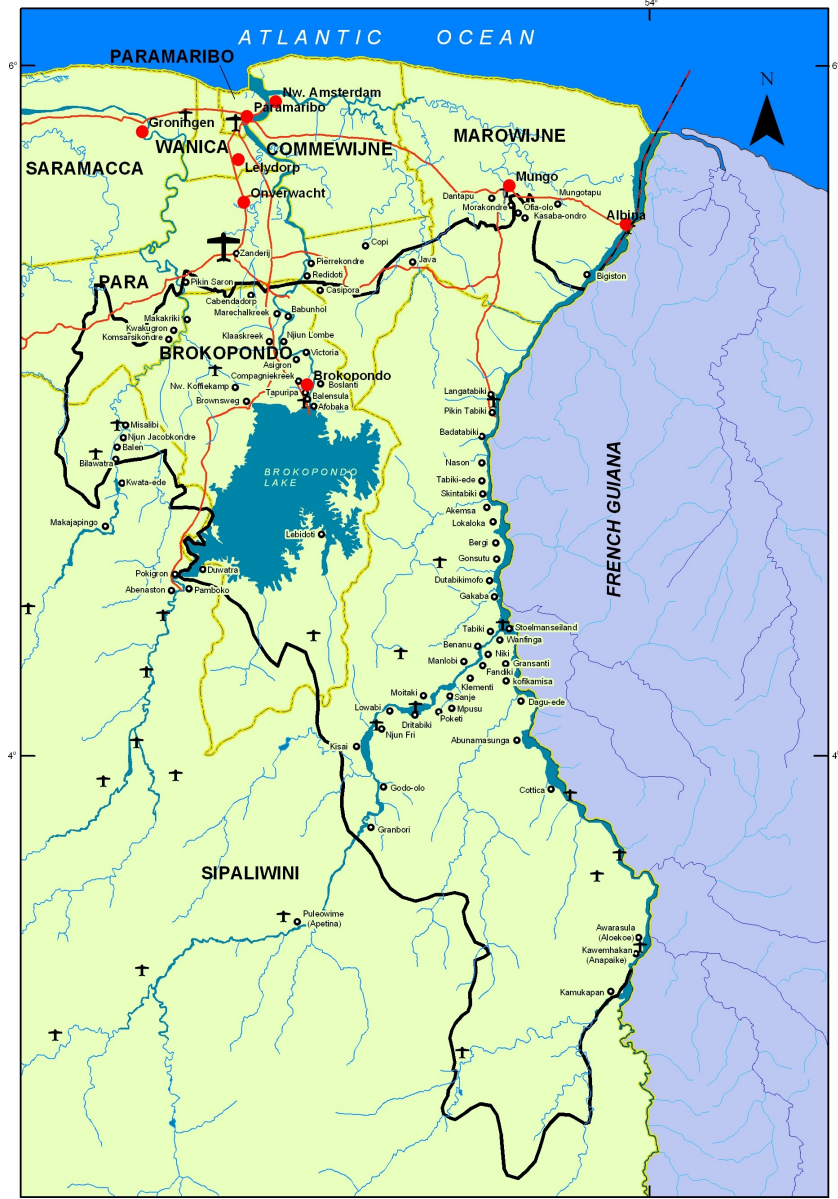
Total Population	583,200 (2017 estimate)	Population density	4 / km ² or 10 / mi ²
Forest coverage	93% (mainly tropical rainforest) (REDD+ Suriname)		
Gold Production 2019		Main export countries	
Large Scale	2 Multinational Mining Companies	21.3 M Tons	Order of importance: <ul style="list-style-type: none"> • Switzerland • UAE • Belgium • USA
ASGM		15.2 M Tons	
Total		36.5 M Tons	
Gold % of total export		78.4%	

GREENSTONE BELT REGIONAL ENVIRONMENTAL ASSESSMENT
LOCATION OF THE GREENSTONE BELT



GREENSTONE BELT REGIONAL ENVIRONMENTAL ASSESSMENT

SETTLEMENTS



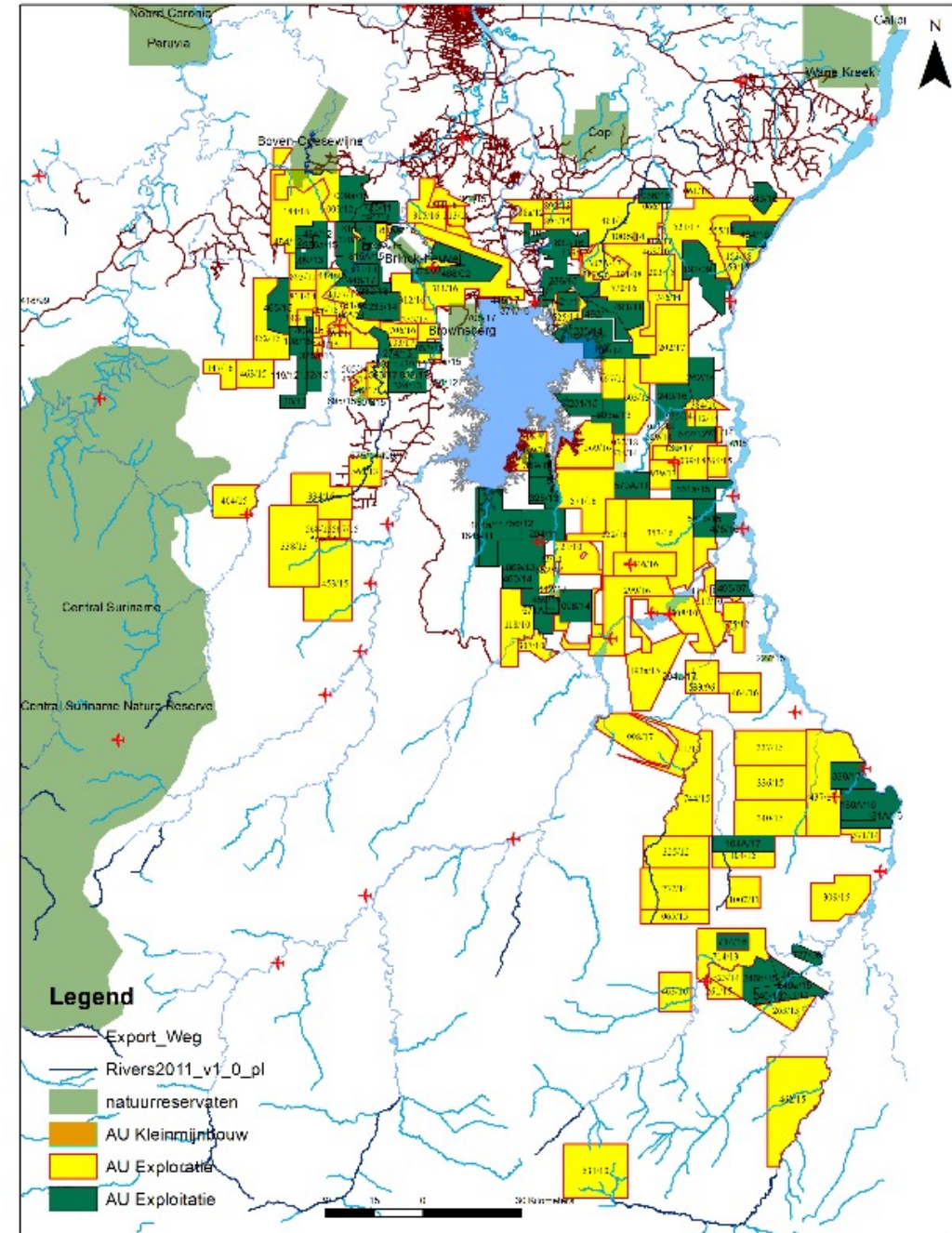
LEGEND

- Boundary of the GREA
- District Boundary

SETTLEMENTS

- INTERNATIONAL AIRPORT
- AIRFIELD
- AIRSTRIP
- CITIES / TOWNS
- IMPORTANT PLACES / VILLAGES

Source: Plan Atlas 1988
 Base Info: Central Bureau of Aerial Mapping
 Location of Airfields: Suriname Civil Aviation Authority
 Digital Map: N.V. GISAT



Legend

- Export_Weg
- Rivers2011_v1_0_pl
- natuureservaten
- AU Kleinmijnbouw
- AU Exploitatie
- AU Exploitatie



ASGM

Population and Demographic Estimates

Indicator	Number
ASGM population total, incl. service providers	20,000
ASGM population persons in mining process	10,000
Women in total ASGM population	20%
Number of children in ASGM work areas (nearly all not working), under 16	400
Number of children involved in ASGM in Suriname, teenagers 16-17	125
Average age women (range)	41 (22-68)
Average age men (range)	42 (16-70)
ASGM may provide income to % of population	9-13

ASGM Population

- Approximately 1/3 are Surinamese nationals and 2/3 are foreign migrants, primarily Brazilian “*garimpeiros*”.
- Also there are small but growing numbers of other migrants workers in Suriname’s ASGM sector.
- They are mainly women from the Dominican Republic, Cuba, Guyana and Venezuela; and from China predominantly men.
- The ASGM population is characterized by low levels of formal education.

ASGM

Access to Health Care and Information is Limited

- Some of the reasons are:
 - In the often isolated ASGM areas in the hinterland there are no health post or clinics.
 - The language barrier for migrants
 - The lack of health insurance
 - The level of trust in home remedies or informal networks

Quote NAP

“In recent years, a lack of government control, the lack of necessary mining skills and techniques, and poorly enforced regulation of ASGM have resulted in significant environmental and social impacts.

Among others, the uncontrolled use of mercury in ASGM and its negative effect on people, soil, rivers and inland waterways, has become a major source of concern in the country and needs to be dealt with involving all stakeholders.”

Draft NAP 2021

Lessons Learned

- Since the 1990s, several government, donor and industry driven initiatives have been developed to reduce mercury output from the ASGM sector.
- Most of these efforts were short-lived and did not reach the desired results.
- Obstacles included failure to convince gold miners of the benefits of alternative methods, lack of continuity in guidance and funding, and the absence of well-equipped governmental institutions to monitor, control and develop the sector towards sustainability

Public Health Issues

- Since the 1990s, studies have documented elevated levels of mercury in air, surface water, river sediment, fish and humans. In more recent studies;
- It was documented that pregnant women from interior communities have significantly higher concentrations of both total and methylmercury in hair compared with pregnant women from two urban coastal cities.
- It was demonstrated that diet and fish consumption largely govern mercury exposures in pregnant women in Suriname.
- Indigenous women in the interior are particularly vulnerable to mercury exposure and related adverse birth outcome.

- Within the Surinamese health sector, there is knowledge about health impacts of mercury. Generally there is not in depth and not within all organizations knowledge.
- Reference values for mercury levels in human and biological samples are not nationally defined.
- Suriname does not have a structural human biomonitoring program for mercury exposure among vulnerable populations.

The ASGM Puzzle

The logo for 'The ASGM Puzzle' features the title text in a light blue, sans-serif font. The letters 'A', 'S', 'G', and 'M' are partially obscured by a cluster of seven interlocking puzzle pieces in various colors: pink, orange, blue, purple, green, and cyan.

- We have collected several health data in recent years.
- At the moment there are several initiatives aimed at reducing ASGM sector environmental and health impacts, however there is lacking adequate coordination of these projects.

The logo features the text "The ASGM Puzzle" in a light blue, sans-serif font. The letters "A", "S", "G", and "M" are partially obscured by a cluster of colorful puzzle pieces in shades of pink, orange, blue, purple, green, and cyan. The text has a subtle reflection effect below it.

The ASGM Puzzle

- The next step is fitting the puzzle pieces together of data, lessons learned, initiatives, etc, that we have, for an evidence-based public health strategy on the mercury exposure among ASGM miners and their communities.
- Followed by a detailed implementation plan for the public health strategy.
- When working on this process we need to be realistic and keep in mind our limitations in terms of resources

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