



**University
of Victoria**

Graduate Studies

Notice of the Final Oral Examination
for the Degree of Master of Arts

of

ANTHONY PERSAUD

BA (York University, 2008)

**“Mercury Use and the Socio-Economic Significance of
Artisanal and Small-Scale Gold (ASGM) Mining in Senegal:
A Mixed-Methods Approach to
Understanding ASGM”**

Department of Geography

Wednesday, August 5 2015
10:00AM
David Turpin Building
Room B215

Supervisory Committee:

Dr. Maycira Costa, Department of Geography, University of Victoria (Co-Supervisor)
Dr. Kevin Telmer, Department of Geography, UVic (Co-Supervisor)
Dr. Michele Lee Moore, Department of Geography, UVic (Member)

External Examiner:

Dr. David Scoones, Department of Economics, UVic

Chair of Oral Examination:

Dr. Kin Fun Li, Department of Electrical and Computer Engineering, UVic

Abstract

Artisanal and small-scale gold mining (ASGM) continues to grow in more than 70 countries in the developing world, creating thriving local rural economies but also causing significant environmental contamination and health issues, with one particularly problematic issue involving the use of mercury in the gold extraction process. With the advent of the United Nations *Minamata Convention on Mercury* in 2009, a legally binding treaty aimed at reducing and where feasible eliminating mercury use, countries with significant ASGM populations require solutions for this sector. In April 2014, a mixed-methods rapid appraisal study was carried out over a three week period in the gold mining region of Kedougou, Senegal. During this time 80 structured interviews, 120 household surveys, physical measurements, observations and numerous informal interviews were utilized in conjunction with a comparative data analysis in order to create a national inventory of the ASGM sector for Senegal, to explore the sector's socio-economic contribution to rural development in Senegal, and to provide a basis for discussing policy approaches needed to improve the sector. The results of this study show a thriving ASGM sector composed of approximately 67,000 people, producing an estimated 4.5 tonnes of gold per year and releasing approximately 5.2 tonnes of mercury into the environment. The methodologies used to create these estimates also provide in-depth information that illustrates an ASGM sector that is highly inter-connected with customary tenure practices and traditional agrarian livelihoods, and that is important for rural inhabitants in Senegal and other countries. This information can be utilized by the Senegalese and other governments to inform the policies that are being developed for the ASGM sector as they implement the obligations created by the Minamata Convention.