

The Gold Marketing Chain in Suriname

World Wildlife Fund Guianas

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The Gold Marketing Chain in Suriname

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Glossary of terms and abbreviations¹

ADEK	Anton de Kon university of Suriname
Alloy	A solid mixture of two or more chemical elements, including at least one metal. In the case of gold, it is mixed with a baser metal or metals to lower the purity, influence the color or add durability.
Aqua Regia	a mixture of hydrochloric acid and nitric acid. It can dissolve gold, which single acids alone cannot do
ARM	Alliance for Responsible Mining
Assay	The testing of gold or silver to determine its fineness or purity.
Assay mark	The stamp by an assayer on a bar or piece of precious metal to guarantee its fineness.
ATM	Labor, Technology, and Environment, Ministry of
Bullion	The generic word for gold and silver in bar or ingot form
Bullion assay	Analysis of Gold and Silver in bullion using Proof-Corrected Fire Assay. Sample types include mine bullion, fine gold and jewelry as well as dental alloys.
Carat/Karat	A measure of the proportion of gold in a gold alloy, on the basis that 24 carat is pure gold, often expressed as K or k, e.g. 18k is 75% gold.
Consignment stocks	A bullion dealer may hold gold on consignment at a client's premises. It is the dealer's property until the client withdraws it and pays the prevailing price. Alternatively, it may be held by the dealer at local banks until the clients come forward to purchase and take delivery.
Convertible currency	Currencies that have immediate value on the foreign exchange market, and can be readily exchanged for other currencies.
Cupellation	A refining process for nonoxidizing metals, such as silver and gold, in which a metallic mixture is oxidized at high temperatures and base metals are separated by absorption into the walls of a cupel; a refractory pot or a small porous bowl made of bone ash.
Fineness	Gold purity, usually expressed in parts per thousand; thus 995 or two nines five is 995/1000 or 99.5% pure. 995 was for long the highest purity to which gold could be manufactured, but for very high technology applications now it is possible to produce metal of up to 99.9999% purity.
GMD	Geology and Mining Department (<i>Geologisch Mijnbouwkundige Dienst</i>)
Gold fixing	The London gold fixing (see: www.goldfixing.com) takes place twice daily -at 10:30 and 15:00h GMT- to set a price at which all known orders to buy and sell gold at the time of the fix can be settled. The fix is widely used as the benchmark for spot transactions throughout the market.

¹ Most terms were obtained from two web sites, namely the site of the South African Rand Refinery (<http://www.randrefinery.com/default.htm>), and the site of the World Gold Council (<http://www.invest.gold.org/sites/en/glossary/>)

Grain	One of the earliest weight units used for measuring gold. One grain is equivalent to 0.0648 grams.
Granules	Bullion, including its various alloys presented for sale in granulated form, often referred to as grain.
Grassalco	Grasshopper Aluminium Company N.V.
Green gold / Oro Verde (sp.)	Responsible sourcing of gold; whereby support is pledged that gold is produced in accordance with its human rights, social and environmental criteria. This is a guarantee that the gold being deposited was not produced at the expense of local communities, workers, and the environment.
GSR	Golden Star resources Ltd.
Hallmark	A mark or number of marks made on gold or silver jewelry and other fabricated products which indicate the producer and carat fineness
HI	Trade and Industry (<i>Handel en Industry</i>), Ministry of
IUD	Department of Import, export, and Currency Controle (Dienst der Invoer-, Uitvoer- en Deviezencontrole)
London Good Delivery	This an international standard in terms of which gold bars must have a minimum gold purity of 99.5%. Central banks normally hold gold in the form of these bars.
LBMA	London Bullion Market Association
KKF	Chamber of Commerce (<i>Kamer van Koophandel en Fabrieken</i>)
NCCR	National Coordination Center for Disaster Management (<i>Nationaal Coördinatie Centrum voor Rampenbeheersing</i>)
NH	Natural Resources (<i>Natuurlijke Hulpbronnen</i>), Ministry of
Ore	Originally from the Old English for crude or unwrought metal. It refers to any economic mineral deposit of precious or other metal.
porkknockers	Small-scale gold miners; term used in Suriname and Guyana
Refining	The separating and purifying of gold and silver from other metals.
Scrap gold	The broad term for any gold which is sent back to a refiner or processor for recycling
Standard bar	Gold bar weighing approximately 400 ounces of 12.5 kilogram and having a minimum fineness of 995 parts per 1,000 pure gold
Troy ounce	The standard weight in which gold is quoted in the international market, weighing 31.1035g. Named after the old French city of Troyes, where there was an annual trading fair in mediaeval days and where this was a unit of weight.
VCB	Volks Crediet bank

Glossary and translation of legal terminology in this document

NR	TYPE (ENGLISH/DUTCH)	REALIZATION
1.	Treaty <i>Verdrag</i>	When the treaty consists of rights and obligations that are directly binding for the citizens and the Government (f.e. Human rights), they prevail above the constitution and other national law. (Art. 106 Constitution). All others need to be transformed into national legislation.
2.	Constitution <i>Grondwet</i>	Highest national law
3.	Act/Law <i>Wet/Decreet²/Landsverordening³</i>	Jointly realized by Government and Parliament
4.	State Order <i>Staatsbesluit/Landsbesluit⁴</i>	A Government Order containing general binding rules, to implement an act or to regulate a subject not reserved to be regulated by an Act.
5.	District Ordinances <i>Districtsverordeningen</i>	Limited legislative power given by the Constitution to the District Council to regulate their district.
GOVERNMENT MANAGEMENT DECISIONS		
6	Presidential Order <i>Presidentieel Besluit</i>	A decision by the President as executive Head of State by virtue of the Constitution
7	Presidential Resolution <i>Presidential Resolutie</i>	A decision by the President by virtue of a law
8.	Ministerial Order <i>Ministeriele Beschikking</i>	A decision by a Minister, in the execution of a Ministerial task.

² Suriname was managed through Decrees during Military rule (1980-1987). These Decrees have the same status as laws.

³ The “landsverordeningen” are the “Acts” promulgated before the independence in 1975

⁴ The “Landsbesluiten” are the “State Orders” promulgated before the independence in 1975

Summary

This report presents the results of a study on the gold mining marketing chain in Suriname. Gold has historically played an important role in the economy and cultures of this small Amazon country. Gold is cherished as a fashion item and status symbol, and is a significant export product and source of foreign revenue for the Suriname government.

This study on the gold market is commissioned by WWF-Guianas, in the context of its Guianas Sustainable Resource Management Project (GSRMP) 2007-2011. Understanding gold trade markets is important in the context of efforts by WWF-Guianas to certify “responsible”, “clean” or “green” gold from Suriname. In this context, the objectives of this study are to:

1. Describe the routes by which Suriname gold enters the (jewelry) commercial market;
2. Investigate the origin of gold that is sold in Suriname jewelry stores;
3. Identify stakeholders and their roles in the various stages of gold marketing in Suriname;
4. Describe legal procedures for, and actual processes in, gold trade in Suriname
5. Investigate challenges and opportunities to the development of a market for green gold.

Table 1 lists the most important stakeholders and their function in the gold mining marketing chain. Additional, non-listed government Departments and Ministries that play a role include:

- the customs office --control on cross-border smuggle of gold;
- the Ministry of Justice and Police --Policy on and supervision of gold smuggle;
- the Ministry of Natural Resources --agreement with lam Gold, mining policy;
- the District Commissioner --issuance of licenses to jewelers and goldsmiths,
- the Geology and Mining Department --issuance of mining titles;
- Police --control on smuggle of, illegal possession of, and unlicensed trade in gold;
- Ministry of Health -- approval of gold shops that meet health standards;
- NIMOS --monitoring environmental safety and health,
- Ministry of ATM --policy on environmental standards; and the
- Security service --branding and determining quality standards for gold.

Additional non-government stakeholders include the Volks Crediet Bank (pawnshop); foreign companies and institutions; and Suriname customers and scientists.

The most important legal instruments with relevance to the gold market are:

- The 1986 Mining Decree;
- The Mineral Agreement and the Law Gross Rosebel (concerning Gross Rosebel mine);
- The Currency Regulation (*Deviezen Regeling*) and the Resolution on rules regarding extraction, processing and the transport of gold with regard to the Mineral Act;
- The Security Law (*Waarborgwet*); and
- The Nuisance Act (*Hinderwet 1929*).

Table 1 *The most important stakeholders and their function in the gold marketing chain*

Name	Function/Role/Interest
Miners, service providers, and concessionaries	Gold miners and other entrepreneurs in the mining fields who earn an income in gold, mostly sell to licensed gold buying shops (est. >95% of gold). Miners typically only sell to unlicensed buyers when they need rapid cash and are not near a formal buying house, or upon request from jewelers.
Licensed gold buyers	Eight Suriname firms have a license to buy gold. All but one (in Albina) are located in Paramaribo. Gold offered for sale to the buyer is melted to remove impurities (mostly residual mercury) and to determine fineness. After assaying locally, Suriname gold typically is 92 to 93 percent pure. Buyers pay the world market price of gold, minus 3 to 4 percent for royalty (1%) and overhead costs.
Gold exporters	Since 2002 the CBvS has delegated its task as gold exporter to private companies. Five of the eight gold buyers have an export license and one firm obtained a unique license to export gold in exchange for fabricated golden jewelry. Some stakeholders question the transparency and fairness of the issuance of export licenses. The exporters calibrate and weight their gold, and prepare it for export.
Informal gold traders	Maroons gold traders can be found at the waterfront in Albina and in front of the VCB bank in Central Paramaribo. In addition, some Chinese and other businesses in and near gold mining areas, including Albina, accept gold as a means of payment
Central bank of Suriname (CBvS)	The main tasks of the CBvS with regard to the gold market are (a) the registration of gold that is (mined and) exported from, Suriname and (b) making gold available (selling) to jewelers. The CBvS determines the purity and weight of gold for export and collects royalty payments of 1%. A customs officer oversees packaging and sealing of the gold. Gold for goldsmiths is sold in 24 K granules, which have been fabricated in the Royal Canadian Mint (in Canada), using the gold supply that this institution holds in consignment for the CBvS.
Currency Commission	The Currency Commission, which operates under the Ministry of Finance, is responsible for the administration of, and the issuance of licenses for, the export and import of gold.
Jewelers	Goldsmiths and jewelers need a business license from the DC. About one tenth of surveyed jewelers only sell readymade -mostly imported- jewelry, 42.9 percent makes and repairs jewelry, but does not sell prefabricates, and 46.4 percent sells both. When making jewelry, goldsmiths typically fabricate an alloy of gold with a baser metal or metals to lower the purity, influence the color or add durability.
Iam Gold	At present, Iam Gold is the only large-scale mining company that is actively mining gold in Suriname. All gold mined is exported to Canada. After refining to 24K, royalty payment of 2.25 percent of exported gold is placed in consignment at the disposal of the Suriname state in the Royal Canadian Mint.

Gold trade is legally regulated through:

- General Orders 1 and 5 of the Currency Committee⁵;
- The State Decree regarding the mailing of gold abroad through parcel post;
- The Bank Act; and
- The State Decree on Permits for Businesses and Occupations.

Evaluation of the legal framework related to the gold market shows that:

- (1) The existing laws contain omissions and ambiguities. For example, the law is ambiguous about whether or not goldsmiths may buy gold from gold buyers. Furthermore, legal provisions to prevent mercury emission at gold shops are insufficient.
- (2) Policy makers and executing bureaucrats maintain a policy of tolerance with regard to compliance with the laws that do exist. For example, by law goldsmiths are legally obliged to buy gold from the Central bank. However, goldsmiths are not controlled and those who buy gold directly from gold miners are not prosecuted.
- (3) Communication between the various government offices and departments is suboptimal. For example, high level government officials from different institutions disagree on whether or not gold buyers may sell gold.

Since partial liberalization of the gold market, most buying and selling of gold is documented and occurs through official channels. Yet not all flows of unprocessed gold and jewelry within Suriname and between Suriname and other countries are recorded by official institutions. The open borders with neighboring countries; limited law enforcement; and a lack of human and capital resources to execute stringent control where desired, allow for informal and unregistered gold trade. The data suggest that illicit gold trade does not occur on a large scale.

Jewelers need a valid business license and import documents in order to import jewelry. Suriname gold shops import jewelry from Italy (fashionable designs), China, Hong Kong (24 K jewelry), Dubai, the US, Colombia, and Brazil. A few large jewelers are responsible for most imports and smaller jewelers may buy ready-made jewelry from these large gold entrepreneurs. No single company or person has a license to import gold from Guyana or French Guiana, yet a considerable amount of gold is smuggled from these countries to Suriname. Reasons for gold smuggle are both financial (low royalties in Suriname) and political (tough control on illegal mining in French Guiana; registration system in Guyana).

Gold may only be taken out of Suriname with an export license though in practice, customs officers allow travelers to take an undefined amount of 'personal' jewelry with them. Unprocessed gold can, by law, never be taken abroad without the appropriate license. After

⁵ Published in the Governments Announcement paper (Gouvernements Advertentieblad, G.A.B.) of 1947 numbers 81 and 104.

(partial) liberalization of the gold market in 2003, gold exports rose annually with an average of 18.7 percent. In 2009, 28.5 tons of gold were exported. Small-scale gold miners produce the largest share of exported gold.

Goldsmiths are legally obliged to buy unprocessed gold at the CBvS but the grand majority (>75%) buys its gold elsewhere: mostly from gold buyers/exporters, gold miners, and the VCB pawnshop. These places offer a better price without bureaucratic hurdles. Many goldsmiths do not want to buy from small-scale miners. Such gold contains many impurities and goldsmiths have become more conscious about the health risks of burning gold in their shops. When goldsmiths and buyers melt impure gold, mercury is emitted in the air. Scientists disagree about the extent to which atmospheric mercury levels in Paramaribo present a public health threat.

The gold exporter, who typically also is the buyer, prepares the gold for export by melting it into bars, numbering the bars, and preparing the collecting sheets. Next the gold is taken to the CBvS, where it is assayed and weighted, and royalties are paid. After packaging, the customs officer seals the chests. The exporter prepares the paperwork for export and takes it to the Currency Commission, where the G-export is signed. Under the supervision of customs officers, the chests are taken to Zanderije airport and sent away by value transport (only KLM).

The study concludes that the production and marketing of green gold requires the development of a closed circuit between miner and client. This is challenging for several reasons, including:

- From the appearance of gold it is impossible to trace its origin;
- The number of licensed gold buyers and exporters is limited. Either a new clean gold buyer must be licensed or an existing buyer must be motivated to work with clean gold;
- Porous international borders and the absence of borders between mining areas complicate vigilance of gold trade routes;
- Minimal government control on gold mining and marketing allows for informal and unregistered trade in gold.

Another challenge is to create a market of customers interested in green gold and willing to pay more for a certified product. WWF can stimulate the development of such a market by employing activities to raise awareness about green gold among customers, goldsmiths and jewelers in Suriname and abroad - particularly Europe. It is recommended that WWF-Guianas works in close collaboration with other dedicated NGOs (e.g. Solidaridad, AMICHOCO) in the design and execution of efforts aimed at stimulating the development of a green or fair trade gold market.

1. Introduction

For many centuries gold has captured interests, sparked desires, defined social relations, and driven environmental rupture throughout the world. Gold is a chemical element with the symbol Au from the Latin word *aurum*, meaning "shining dawn". It has been a highly sought-after precious metal for jewelry, coinage, and other arts since the beginning of recorded history. And still today, gold is the single most cherished metal; serving many economic, symbolic, and other purposes in the lives of millions of people.

This is certainly true for the small Amazon country of Suriname, where golden jewelry has since colonial times been a popular fashion item and socio-cultural status symbol. The various migrant groups that came forced or voluntarily to Suriname must have valued the deep cultural meaning of gold in their homelands. At the gold coast, from where most African slaves were shipped, gold had for long been the metal of choice of local royalty (e.g. Ashanti kingdom). In the late 1800s, when gold was first mined and entered the market in Suriname, it soon became popular among Creoles. For manumitted slaves, golden jewelry was a symbol of freedom and the right to possess property, and therefore among the first items bought in freedom⁶. Yet also for the indentured laborers from India, golden ornaments were indispensable during weddings, other celebrations, and as a traditional form of savings⁷.

The interest in gold has only increased with today's exhilarated world price of gold, the upsurge of small-scale gold mining in the country's forested interior, and the rapid increase of the number of jewelers in the inner-city of Paramaribo. Due to the development of a large-scale gold mine at Gros Rosebel and the many small-scale gold miners, gold has become one of the main export products of Suriname⁸. Surinamers of all ethnic backgrounds wear golden jewelry as a symbol of love, fashion, and well-being. Among particularly the Maroons but also with other groups, golden teeth have become a popular fashion item. In addition, gold serves a form of savings and investment, and as collateral for (informal) loans. Few of these consumers question where the gold comes from, how it was mined, and what its real costs are: not in monetary but also in environmental and social terms.

Not only the Suriname government and its citizens are interested in gold, also research institutions and international organizations are increasingly looking at the gold sector – though for different reasons. These parties are particularly concerned about the environmental damage and public health threats caused by mining, including mercury contamination, water

⁶ Ms. Caprino, historian. Phone interview May 12, 2010

⁷ Still today, gold is incredibly important in Indian cultures for jewelry and savings, making India the world's largest gold buyer.

⁸ Data from this study demonstrate that more than half of the official gold production of Suriname is extracted by small-scale gold miners

turbidity, and deforestation. In addition, small-scale gold mining is associated with high levels of malaria because of the large pools of standing water it creates and the challenges to containing malaria in highly mobile mining populations.

This study on the gold market is commissioned by WWF-Guianas, in the context of its Guianas Sustainable Resource Management Project (GSRMP) 2007-2011. Understanding gold trade markets is important in the context of current efforts by WWF-Guianas to research possibilities to certify “clean” or “green” gold from Suriname. Such certified gold must be produced in such a fashion that it minimizes damage to the natural environment and respects ILO health and safety standards. We intend to find out to what extent the marketing chain may be controlled so that one can guarantee the quality of certified gold, and what actors in the gold marketing chain must be on board.

In the remainder of this report we will proceed as follows. This introduction will be followed with a brief background on Suriname and its gold sector; particularly intended for readers who are not familiar with this country. After a discussion of the methods used for data collection and analysis, we will present the results in chapters four through seven. Chapter four provides a historic perspective on the Suriname gold market; starting with the first gold rush (1880-1910) and ending with the early years of the current boom in mining activities (1990s). Next we present an overview of the stakeholders that are active in the Suriname gold market, focusing on their function, mandate, and interests (Chapter five).

Chapter six provides a juridical analysis of the gold market. It exposes the various laws and licenses that are applicable to different players in this market, and explains what actions and procedures are legally justified in the gold trade. In chapter seven we look at the routes of gold entering and leaving Suriname, and the movements of this precious metal within the country. We bring these data together in a visual presentation of international and national movements of gold in the conclusions. This section also synthesizes other findings, and looks at opportunities and possible complications in bringing certified gold to the market. The recommendations contain guidelines to WWF with regards to the marketing of such a certified product. Bulky data are placed in the Annexes. Interesting facts and explanatory notes are placed in shaded boxes throughout the text. Finally, gold trading jargon, strange/foreign terms, and abbreviations that are used in this report are placed in the glossary.

2. Background

Suriname is situated on the Northern tip of the South American continent and part of the larger Amazon region. The country (land surface: 163,820 km²) has a relatively small yet diverse population (492,829; ABS 2009). Suriname's national language is Dutch but many other languages are spoken, including the national lingua franca Sranantongo and languages pertaining to the various ethnic groups.

The large majority of Suriname's population lives in the coastal zone. The densely forested interior, which covers 80 percent of the country, provides a home and sustenance to various groups of Indigenous Peoples and Maroons. In the past two decennia other groups have entered the interior, primarily Brazilian *garimpeiros* (gold miners) and other people who directly or indirectly work in the gold mining industry.

Suriname is rich in natural resources and mining is the cornerstone of Suriname's developing economy. The export of minerals - bauxite, oil, and gold- represents more than 50 percent of the Gross Domestic Product (GDP; IMF 2007). Suriname's per capita national income is USD 4014/yr (11,267 SRD; ABS 2009). This figure excludes the country's informal economy, which according to national institutions contributes between 14.9 (Planbureau 2003) and 20.2 (ABS 2009) percent to the real GDP. We believe that the informal sector may even be more extensive, given the large share of people who obtain income from informal trade and services (*hosselen*), unregistered food and beverage production, support from overseas relatives, drugs trade, and small-scale gold mining. In past years, inflation has been on average 14.7 percent (ABS 2009).

In the past two decades, small-scale gold mining has boomed in Suriname's forested interior. At present, an estimated 14,000 people are working in the Suriname gold fields as miners or mining service providers (Healy 2009). A significant share of them (70-80%) are Brazilians and the remaining mine workers are mostly of tribal Maroon descent. The migration of thousands of foreigners to the rather isolated mining areas, the massive turn-over of soils on land and in rivers, the use of chemicals, the formation of novel mining communities, and the influx of money are having an incredible impact on the Suriname interior, and on the country as a whole.

Environmental impacts, economic benefits, and social change induced by small-scale gold mining have extensively been studied in the past years. We know quite a bit about what happens to the natural environment and human interactions during the mining process. We know little, however, about what happens with the gold once it leaves the hands of the gold miner. Nor are customers of jewelry shops informed about where the gold they seek to buy comes from. This report provides an answer to these and other questions related to the gold marketing chain

3. Methods

3.1 The research

Research was conducted between April and July 2010, in greater Paramaribo, Nickerie, and Albina and surroundings (incl. Moengo, Papatam, and St. Laurent). The research team consisted of the lead researcher - anthropologist (M.Heemskerk); a research assistant (P. San); and a juridical consultant (N. del Prado).

The research was commissioned by the WWF-Guianas Guianas Sustainable Resource Management Project (GSRMP) (Agreement No. KS-62). The GSRMP 2007 - 2011 is co-funded by the Dutch Government (DGIS), French Government (FFEM) and WWF-NL. The Gold Mining Pollution Abatement unit within WWF-Guianas facilitated the study.

3.2 Qualitative interviews

In-depth interviews with open ended questions were conducted with main stakeholders in the gold market. These stakeholders included representatives from relevant government offices such as the Currency Commission; the Central Bank of Suriname (CBvS); the Geology and Mining Department (GMD) of the Ministry of Natural Resources (NH); the Police Department (Albina and Nickerie); the Ministry of Trade and Industry (HI); and the customs offices at Albina, Nickerie, and Zanderije. Private entrepreneurs that were interviewed include (representatives of) gold miners, concessionaries, gold buyers, gold exporters, goldsmiths, and jewelers. In addition, we spoke to experts on gold market issues without direct involvement in this market. A list of interviewees is included as Annex A

Interviewees were typically first approached by telephone. During this first conversation, the consultant introduced herself and the research, and asked for permission to conduct a more in-depth interview. An endorsement letter from WWF-Guianas was presented to the interviewee to demonstrate the consultant's affiliation with this institution (Annex B). Conversations were continued in person and by e-mail.

3.3 Survey

A survey was conducted among 29 jewelers in greater Paramaribo (23) and Nickerie (6). We also looked for jewelers in Marowijne district. However, in Moengo there has not been any goldsmith for the past years and in Albina there used to be one goldsmith but he was nowhere to be found and had not been seen near his workshop lately. In three quarters of the places (75.9 percent) we spoke to the owner of the business, and in the other places to either an

associate (17.2%) or an employee (6.9%). The survey asked the jeweler or goldsmith about the type of products that he/she offered for sale (self-made or pre-fabricated jewelry) and where he/she was buying gold and jewelry. In addition, we asked specifically about the relation with the Central bank of Suriname, where jewelers are to buy their gold by law.

Because many jewelers are of Chinese descent and not all of them are fluent in Dutch, the WWF Guianas endorsement letter was translated into Chinese to accommodate this group.

Survey data were entered in an excel spreadsheet and analyzed using the statistical software package SPSS 17.0

4. History of the gold trade in Suriname

4.1 Rise and fall of the first gold rush (1880–1910)

Gold mining in Suriname predates the European conquest. The first recorded official exploration occurred in 1718. It was followed by various private and state efforts to explore and exploit Suriname's gold deposits (Bubberman 1977). Meanwhile free Creoles and Maroons extracted gold on a small scale. After the abolition of slavery (1863) the Dutch colonial government encouraged gold exploration to provide employment for former plantation workers (Egger 2009). In 1874 gold mining started on the Marowijne and a year later, the first bar of gold, weighting 500 gr, was sold to the Bank of Suriname.

These efforts sparked a gold rush at the turn of the century (1880-1910). Annual gold production climbed from 475 kg in 1879, to 670 kg in 1880, to more than 800 kg/yr in the 1890s, with a peak of 1200 kg in 1910. In 1915, gold worth more than 1.6 mln Dutch guilders was sold (De Beet and Thoden van Velzen 1977, in: Hoogbergen en Kruijt 2004). In those days it was difficult to work with heavy equipment in the interior, and various companies failed. The so-called *porkknockers* were more successful and did major findings.

About 5,000 men were working in the gold business. They were mainly Creoles who had left the plantations and were living in the country's only city of Paramaribo, where jobs were scarce (Egger 2009). In addition, Creoles from the British Caribbean colonies such as Belize and St. Lucia came to work in the Suriname gold sector (Hoogbergen en Kruijt 2004). The Maroons from the interior took little part in the exploitation of gold but they were active as boatmen, navigating people and goods across the rapids to the gold fields. In addition, both Maroon and Amerindian men were active as carriers, guides, and performers of other support services.

In response to the growing interest in gold, the Dutch colonial government drafted regulations concerning gold mining in the Act (*Verordening*) of 7 September 1882⁹ (G.B. No. 19), named the Mineral Act (*Goudverordening*) (Benjamins and Snellemans 1914-1917). This and other legislation from that period¹⁰ mostly stipulated the way in which the exploration, exploitation and transportation of crude gold should be carried out. Also the amount of taxes which would

⁹ *Mineral Act*, first published in G.B. 1882 no. 19. Last official text published in G.B. 1932 no. 40, this was last amended in G.B. 1959 no. 35. This Act was repealed in the Mining Decree of 1986, published in S.B. 1986 no. 28 and last amended in S.B. 1993 no. 61.

¹⁰ Like the *Act on the exploration of minerals in navigable creeks and streams and the Act of 1952 regarding prospect by the State on lands on which a license for exploration or concession to exploit minerals has been granted*, G.B. 1952 no.120).

be levied for this crude gold and the way in which the amount owed to the State would be determined was elaborately described in legislation.

Around the same time the Act on Gold Tax¹¹ (*Wet op Goudbelasting*) came into force and concentrated on the height of gold tax, how the amount of taxes owed would be determined and where and how it would be levied. (1894). It was an elaborate scheme in which crude gold mined in different areas in Suriname had to be brought to different places for weighing. Gold mined in Suriname had to be brought to Paramaribo, with the exception of gold mined in the Marowijne area which had to be brought to Albina and gold mined in the Corantijn area which had to be brought to Nieuw Nickerie. The Act on Gold Tax further stated that, in offering gold for sale to the authorities, a tax of 7 cent per gram of the total weight as determined by these authorities, had to be paid on the spot. Concessionaries working in navigable creeks and streams were obliged to pay an additional retribution of one percent of the raw value of the mined product. In order to determine the height of payment, the value of one gram of melted gold was, by law, determined at f1.50 and the value of a gram of unprocessed gold at f1.37 (Decree of 12 Oct. 1903; G.B. No. 42) (*ibid.*).

In order to obtain a license as gold buyer, one had to obtain permission from the Governor. Such permits were valid for one year, against an annual payment of f250.-. Regulations concerning the sending of gold abroad by parcel, were laid down in the Decree of 30 Mei 1895 (G.B. No. 17) (*ibid.*).

As soon as the gold tax was implemented (1894) gold miners began seeking out ways to avoid payment. They allegedly used *powisi's* (*Crax alector*) to hide their gold¹². These large black, white-bellied forest birds are attracted to shiny objects. The miners would catch a *powisi* in the forest and encourage it to pick up the (dust)gold together with other grains, to subsequently take it along the police posts. It is estimated that at least ten percent of produced gold was not declared in those days (SPS 2003: 13).

Also Maroons collected taxes on the extraction of resources from their territories (De Theije and Heemskerk 2010). The Aluku Maroon granman allegedly asked a gold tax from every boat of miners passing a certain point in the Lawa River.

¹¹ *Act on Gold tax*, G.B. 1945 no. 142, last amended in G.B. 1946 no. 15 and repealed by G.B. 1950 no. 56. The Act was repealed because the State considered the distressing times the gold mining industries were going through.

¹² This practice may have been in use until the 1940s

As soon as gold was being found and entered the Suriname market, goldsmith shops opened their doors in Paramaribo and Albina, which was then a gold center. Hindustani jewelers could be found across from the so-called flat bridge (*platte brug*) in the Watermolenstraat, as well as at the *Garnizoenspad* and the *Pad van Wanica*. Also several Chinese jewelers started their businesses in those years. The first Chinese had come to Suriname in 1853 to work as indentured laborers on the plantations after the abolition of slavery. After their contract period, many of them left the plantations and ended up in Albina and in Paramaribo (among others surroundings of '*Poelepantje*'). These Chinese did not work as laborers in the gold fields but were involved in the gold trade. Some also had come with goldsmith skills, and became more skilled while practicing this trade. Mr. Chin A Sen, president commissary of Cactus N.V. recalls that his father (born 1893) had started a jewelry shop at Albina in the early 1900s¹³. Around the 1950s, Chinese started to become more prominent among jewelers. Also several Creole jewelers had successful businesses in these years (1950-s-1960s, and up to the 1980s).

The gold industry collapsed after 1908 due to the lack of management expertise, ineffective exploitation, widespread illegality, tensions between workers and concession holders, and the freezing of the gold price on the world market (Dahlberg 1984). In subsequent years, Maroons were manually extracting gold, yet on a very small scale and typically for short periods of time, when they needed cash for a certain purchase. Gold production declined to less than 2 kg/yr by 1976 (Bubberman 1977).

During the 1940's additional regulations came in force which mostly centered on the monetary issues of gold. A well known and still used Act is the Currency Regulation (*Deviezen Regeling*), which is part of primary law in Suriname and amongst others stipulates the use of gold as Suriname's monetary reserve. Also stipulations on the purchasing and the many applications of crude gold were regulated during that period of time.

The abovementioned Mineral Act and the Act on exploration of minerals in navigable creeks and streams were repealed by the Mining Decree¹⁴ (*Decreet Mijnbouw*) of 1986. Also the *Act of 1952 regarding prospects by the State on lands on which a license for exploration or concession to exploit minerals has been granted* (G.B. 1952 no.120) was repealed by the Mining Act¹⁵. Before

¹³ Today there is still a Chin A San jeweler at the Steenbakkerijstraat and also Cactus N.V. incorporates two jewelry shops, Interview of 28 April 2010

¹⁴ For an explanation on the different names of legislation in Suriname refer to **Error! Reference source not found..**

¹⁵ *Bij het inwerking treden van dit het Mijnbouw decreet vervallen:*

a. de Delfstoffenwet (geldende tekst G.B. 1952 No. 28);

b. de Wet van 1 december 1894 betreffende de exploitatie van delfstoffen in bevaarbare kreek en stromen (geldende tekst G.B. 1952 No. 29);

the Mining Decree came in to force the regulations on mining was scattered over a number of laws. Also the exploration of minerals in navigable creeks and streams (G.B. 1895 no. 7, last amended in G.B. 1955 no. 26) was regulated through primary legislation.

Rapidly rising gold prices in the 1970s inspired renewed interest in the gold deposits of Suriname (Dahlberg 1979). In 1978, the Geological Mining Service of Suriname introduced small suction dredges on the Lawa River. However, a lack of employees and money hampered the continuation of exploration and exploitation. All governmental geological activity in the interior came abruptly to an end during the interior war (1986-1992). The interior became inaccessible, and the Jungle Command confiscated the governmental river dredges.

4.2 Onset of the second gold mining boom: 1990 – 1994

From about 1990 onwards, and particularly after the interior war (*binnenlandse oorlog*; 1986-1992), small-scale gold mining in Suriname has boomed from being almost non-existent to a significant economic sector, supporting thousands of local and migrant families. The local forces driving the Suriname gold rush include, among others, the impoverishment of interior communities, the socioeconomic exclusion of Maroons in Suriname society, and a lack of employment opportunities for young maroon men after a period of political instability (interior war, 1980-1992) (Heemskerk 2000). At the same time Brazilian *garimpeiros*, at home confronted with exhausting gold supplies, stricter environmental regulations, and prohibitions on mining in indigenous reserves, were seeking for new working areas (de Theije 2007). They swarmed out over the Guianas, where Suriname stands out as a country with relatively rich gold supplies, low government control on mining, and porous borders (Heemskerk & de Theije 2010).

Around the same time that *garimpeiros*, supported by Maroons, were rapidly modernizing and extending small-scale gold mining activities in the Suriname interior, Chinese jewelry shops mushroomed in Central Paramaribo¹⁶. These businesses, which still dominate the Maagdenstraat, were actively involved in gold buying. In addition, other businesses were buying gold or taking gold as payment for supplies. Both the Chinese jewelers and other gold entrepreneurs often illegally exported gold abroad, among others to the US (de Vries Robbé

c. de Wet van 23 december 1952 (G.B. 1952 No. 120) betreffende het onderzoek van Landswege naar de aanwezigheid van delfstoffen op terreinen, waarvoor vergunning tot onderzoek naar de aanwezigheid of concessie tot ontginning van delfstoffen is verleend;

d. artikel 11 lid 3 van de Agrarische wet (geldende tekst G.B. 1950 No. 87);

alsmede alle wettelijke voorschriften, vastgesteld ter aanvulling, wijziging of uitvoering van deze wetten

¹⁶ Various respondents link the onset of the current gold mining boom with the sudden increase in the number of Chinese jewelers, including the historian Ms. Caprino, and the Central Bank official Mr. Dorinnie

2004). There are no estimates on how much gold was sent abroad, yet the amounts must be considerate. An official from the Central Bank suggested that the Chinese jewelry shops at the time merely served as a blind for illicit international gold trade.

4.3 1994–2002

In 1994 (up to 2002) the Central bank of Suriname became the only official buyer of unrefined gold. One of the goals of buying gold was to sell it to jewelers, while another share was exported.

In the initial years after implementation of this policy, the Bank paid too much for the unrefined gold because vendors regularly mixed it with other metals such as copper and silver. The Dutch Anthropologist de Vries Robbé¹⁷ (2004) reports that some vendors even melted cutlery to mix it with gold they offered to the Central Bank for purchase.

Central Bank director Telting initiated the more structural purchase of gold. In 1996, twelve agents in and around Paramaribo city obtained an exclusive license to purchase gold from gold miners in name of the CBvS. Among them was the Brazilian gold buyer Ourominas, which was invited to Suriname by Telting because of its experience and expertise in the area of gold buying in Brazil. The agents, who were mandated through a so-called *lastgevingsovereenkomst*¹⁸, were obliged to sell all the gold they purchased to the Central Bank. Gold was melted and purified in the gold lab of the Central Bank.

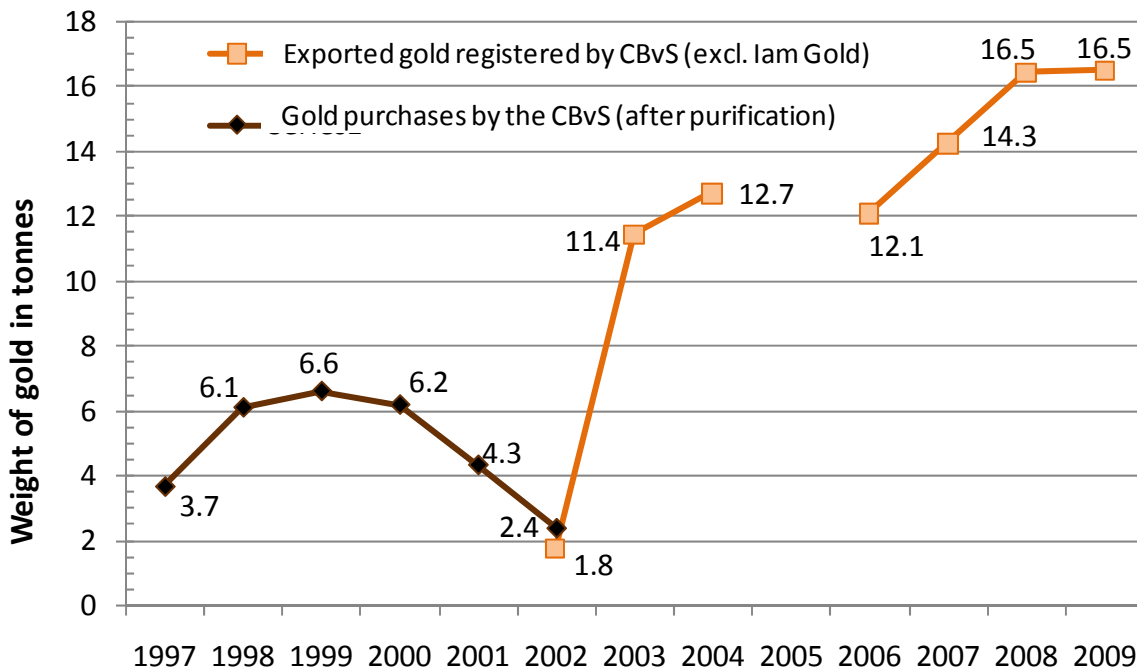
It is important to note that in order to collect royalties, the Bank purchased gold without consideration of the legal status of the gold miners or the origin of the gold (i.e. what country or what concession). In doing so, the Bank and the Suriname government de facto tolerated unlicensed mining (*gedoog beleid*). This system was criticized by the Auditor General (*President van de Rekenkamer*) who was of the opinion that this system endorsed illegality and uncontrolled gold mining (Pollack and de Rooy 2000, in: De Vries Robbé 2004). We will see later (Chapter 7) that the French government currently takes the converse approach; it aims to discourage illegal mining by preventing illegal miners to sell their gold to formal gold buying houses (*compte d'or*).

¹⁷ This MA student of cultural anthropology at the University of Utrecht was shortlisted for the 1994 National Thesis Price in the Netherlands for its thesis entitled: *Onverantwoord ondernemen. Een economisch-antropologische analyse van de informele, illegale en criminele economische activiteiten in Suriname*.

¹⁸ The *lastgevingsovereenkomst* is an agreement which provides a mandate to one person to perform legal acts for another person.

In 1997, the CBvS made an effort to stimulate the legal purchase of gold by lowering their provisions from three to one percent, thus elevating the price paid for gold by the legitimate purchasers (de Vries Robbé 2004). This policy led to a temporary increase of gold purchases (Figure 4.1). In 1998, 6.1 tons of gold were bought; an increase of ca. 65 percent in comparison with the previous year. At the time, a senior representative of the CBvS estimated that the Bank still only purchased 25% of the total amount of gold produced (estimate for 1997-1998; Heemskerk 2000). This figure is consistent with earlier findings of anthropologist M. Heemskerk among Maroon gold miners, of whom only a quarter (27%) said that they sold gold to legal dealers. Approximately a third of the gold miners reported selling to Chinese merchants in Paramaribo and St. Laurent (Fr. Guiana), and another third sold to any buyer who paid the highest price (ibid.).

Figure 4.1 Gold purchased and registered by the Central bank of Suriname



The Stichting Planbureau Suriname provides comparable figures regarding the share of gold production that ended up at the Central Bank in the late 1990s. This governmental planning institute estimates that 25 to 30 percent was sold to the Central Bank, while 15 percent was sold to local jewelers, and 60 to 65 percent was smuggled to French Guiana (SPS 2008). It explains the low purchase by the Central Bank by the fact that gold miners had to pay about six percent of their fee to the CBvS for insurance, transportation, and refining (5%) and royalties (1%) (ibid.). The large quantities of French Francs that were offered for exchange at Suriname exchange offices or *cambio's* support the thesis that a large amount of gold was sold in French

Guiana in these years (de Vries Robbé 2004). Other destinations for gold smugglers were Brazil, Europe, and the US.

An additional explanation for the low gold purchases by the CBvS may be sought in the limited availability of foreign exchange. SPS (2008) comments that in 2001, gold purchases by the CBvS dropped with 23 percent due to the Bank's lack of available convertible currencies.

The notorious Stanford affaire may have alerted the Suriname authorities with regard to the scale of gold smuggle. The arrest of this illegal exchange office holder at Zanderije airport was followed by an investigation, which revealed that on average 30 kg of gold was flown illegally to the US each week. In addition to Stanford, another 85 persons were involved in this case. An estimated total of 3600 kilo of gold and 47 million USD in foreign exchange has been exported by this group.

In these years before 2002, most jewelers bought their gold directly from the gold miners. Even though this practice was forbidden by law, there was no active prosecution of violators of the law. Gold was melted in the gold shops to remove impurities, including mercury.

Between 1994 and 2002, the CBvS was the only legitimate exporter of gold. The Royal Canadian Mint, a Canadian government gold institute, was the agent for these sales. In 2002 the CBvS stopped exporting gold.

4.4 Liberalization of the gold market: 2002- present

In 2002 the market was partially liberated. Five gold buying agents received an export license, allowing them to sell their gold abroad. In addition, in 2003, the regulation that buying agents had to sell to the Central Bank was abolished. As a result of these new regulations, the fee that gold miners pay in selling their gold has dropped to about three to four percent; one percent royalty and \pm 2-3 percent commission. Due to the high price offered for gold in Suriname, smuggling gold out of the country has become less profitable and smuggling gold to Suriname has become more attractive. These changes are visible in the much larger amounts of gold that are sold through legal channels and registered by the CBvS after 2002 (Figure 4.2).

Another consequence of the new gold market regulations is that buying agents without an export license have to sell their gold to buyers with an export license. In this situation it has become more difficult for buyers without an export license to be competitive and meet the obligatory minimum quantity of gold purchases stated in their mandate. At least two companies -Gold Suriname Resources (GSR) and Republic Gold- have lost their license this way,

and subsequently protested the withdrawal of their licenses in court (1996)¹⁹. Only two gold buying agents without an export license have managed to stay in the market. One of them is Ourominas, which has a long-lasting and reliable reputation among Brazilian gold miners and offers additional services, such as transferring money to Brazil. The other remaining buyer is Abrava.

The role of the CBvS has been limited to the registration, sampling, and determination of weight and purity of gold that is prepared for export. In the next chapter we will elaborate on the role of the Central bank and other stakeholders in the Suriname gold trade.

Finally, it is worth mentioning that also the jewelry industry changed. Creole and Hindustani, jewelers largely disappeared between the 1970s and '90s. Some may have left with the large migration to the Netherlands after independence in 1975. Others had sent their children to study in the Netherlands. Few of these youngsters have returned to take over the business. As a result, the jewelry and goldsmith market is left largely in the hands of Chinese jewelers. Among the newest Chinese migrants (since the 1990s) who have entered the gold business there are fewer traditional goldsmiths, and many import a large share of their (machine made) jewelry²⁰. Anno 2010, about 70 percent of gold- and silversmith licenses are in hands of Chinese descent businessmen and women²¹.

¹⁹ The case of Republic Gold is described in an article in the newspaper Dagblad Suriname (issue date: 11-01-2006); the case of Gold Suriname Resources (GSR) is described in the newspaper De West (issue date: 07-01-2006)

²⁰ Ms. Caprino, Suriname historian. May 12, 2010

²¹ This estimate was made on the basis of a list of new and renewed licenses issued to gold- and silversmiths across Paramaribo (from the ocean to Saramacca doorsteek and between the Suriname River and Kerkampweg-Zonnebloemstraat) by the District Commissioner of Paramaribo North-East.

5. Actors in gold marketing

5.1 Gold miners, mining service providers, and concessionaries

An estimated 14,000 people are making a living in the gold fields of Suriname (Healy 2009). This population estimate includes both gold miners and mining service providers such as cooks, All Terrain Vehicle-drivers, commercial sex workers, and others working in the mining areas – all of whom are paid in gold and need to sell this gold in order to pay for food, transportation, and other daily necessities. The figure excludes business(wo)men who are earning gold (in addition to cash) but are physically located outside of the mining areas in Paramaribo and Albina, such as concessionaries, sellers of mining equipment, grocery stores, gas stations, and providers of services such as lodging to miners. Among these people, the concessionaries may be most relevant in term of the amount of gold they are handling and selling. In 2010, 19 concessionaries were registered at the Chamber of Commerce.

The mining law stipulates that the holder of an exploitation right is obliged to sell his gold to the Central Bank of Suriname (CBvS). Since 2002, the CBvS has delegated this mandate to a handful of licensed buyers. Most gold miners and mining service providers, both locals and Brazilians, sell their gold to these licensed buying houses in Paramaribo. Particularly Brazilians are not likely to sell much to Chinese jewelers or merchants. They feel more comfortable at the gold buying houses where the staff speaks Portuguese, the price is set (no negotiations), and the transaction is transparent. Moreover, they do not want to risk getting into problems with the police.

Both Suriname and Brazilian miners and other in the mining business (concessionaries, service providers) tend to remain loyal to a particular buyer. It was commented that regular clients receive a better price, and this is motivation enough to return to the same buyer over and over again.

Only in the case that they need rapid cash, for example to pay a taxicab or plane ticket, workers and inhabitants of the mining areas may sell small amounts outside of formal channels. The reason to obtain cash money is that the ticket is more expensive when paid in gold. At Tabiki airport, for example, a €55- plane ticket to the city was selling for almost twice the price (€105-, or 3.8 g) when paid in gold (April 2010). Even though the local Chinese merchant will pay a relatively low price for the gold (€18-/g Au versus €20-22 or USD 31-/g Au in Paramaribo; April 2010) it is still more economical to obtain Euros for a slightly lower rate and buy the ticket in currency. The same is truth for Suriname gold entrepreneurs, of whom the large majority only sells to gold buying houses.

Workers in mining areas in the border region with French Guiana may sell some of their gold across the border. This occurs particularly in the south-eastern areas (Benzdorp, Antino), where people have easy access to the border town of Maripasoela. The rate paid at the *compte d'or* (gold buying shop) in Maripasoela tends to be somewhat lower than the rate paid in the capital city of Paramaribo, yet slightly higher than the price offered by Chinese merchants in the gold fields (~ 20 €/g in April 2010). Miners who are short on cash also may use their gold to purchase goods in and around Albina (incl. Moengo) but also in these cases the amounts tend to be relatively small.

5.2 Gold buyers (licensed)

Eight companies have a license to buy gold. Among them two are only buyers, five are buyers with an export license, and one is a company with a refinement license (*veredelingsvergunning*) which also is allowed to buy gold (Table 5.1). The current number of licenses is fixed, that is, no new licenses are being extended and the license is non-transferable. According to an official of the Currency Commission, which gives out the gold purchase and export licenses, the decision to issue an export license to no more than five businesses was a conscious choice and motivated by the wish to keep the market neatly organized²². Different informants argued that the Currency Commission (*deviezencommissie*) does not give out more gold purchasing/exporting licenses on the request of the current license holders, who fear tougher competition when more players enter the market.

Table 5.1 Gold buyers and exporters anno 2010

Company	Buying License	Export License	Refinement permit
Ourominas N.V.	Yes		
NV Edel (before: Abrava NV)	Yes		
Surmetex NV	Yes	Yes	
Amazon Gold NV	Yes	Yes	
Century mining NV	Yes	Yes	
Cactus NV	Yes	Yes	
Suriname Natural Stone NV (before: Orotrend)	Yes	Yes	
Chee's Trading NV ²³	Yes		Yes

Source: Currency commission, Ms. Nemelc, 9 April 2010

²² Ms. Nemelc, Currency commission, interview 9 April 2010

²³ In this case, a special license has been extended which permits the company to export gold in exchange for fabricated jewelry

All gold buyers are Suriname firms, though some of them work in partnership with Brazilian firms as a public limited company (*naamloos vennootschap*, N.V.) (WWF 2005). For security reasons, none of the gold buyers has a buying house in the interior. There used to be two gold buying houses in Papatam²⁴ but both were burned down, demolished, and robbed during the riots of December 2009²⁵. One *compra de ouro* (gold buying house), which buys in name of Cactus, recently reopened its doors in Papatam. Another gold buying office has been mostly rebuilt, but it is unclear whether it will re-open as a gold buyer. There is no single gold buying house in the urban centers of Moengo and Nickerie. Chinese supermarkets in Moengo, Albina, and various gold mining areas may take a small amount of gold as payment for groceries but are not typically buying gold as a business.

In 1996, Ourominas became the first gold buying agent for the Central Bank of Suriname. A year later, other buyers were allowed on the market, up to a total of twelve buyers. At that time, the buyers sold all their gold to the Central Bank.

Gold buyers must have a gold buying license from the Currency Commission, and a so-called hindrance act license (*hinderwetvergunning*). In order to obtain a gold buying license, the company has to present a business plan with a quota of the amount of gold that will be purchased each month. The contract with the Currency commission also stipulated to whom the buyers will sell their gold. The buying company has to submit monthly reports about their purchases and sales to the Currency Commission, which monitors whether the licensed buyers are meeting their annual quota. In addition, one annual report has to be submitted.

When the miner or other person selling gold presents his gold to the buyer, the gold is assayed under the eyes of the seller. The gold buyer burns the amalgam in his shops in order to remove mercury and other impurities and determines purity. Next the gold is weighted.

Buying houses are obliged to use condensers for mercury abatement when gold is melted in the shop (SuriMerc 2008). Nevertheless, they still may omit mercury into the air because of leakages and poor ventilation (see also 5.12). This fact was proven by measurements in the shop of a large gold buyer in Paramaribo using the LUMEX Hg spectrometer (2007). The shop had a fume hood with two large water tanks to wash exhausted gases. Because the water tanks were too large, they restricted the air flow and reduced the suction power of the fume hoods. In

²⁴ Papatam is a satellite village of Albina, and the main transportation hub for gold miners traveling by boat to the gold mining fields of East Suriname.

²⁵ On Christmas Eve of 2009, a personal fight between a Brazilian and a Maroon resulted in the death of the Maroon, after which hundreds of Maroons from Albina started to attack Brazilians and destroy and loot their enterprises in Papatam. The entire commercial centre of Papatam was burned down and the (migrant) population was abused, robbed, and (in the case of women) raped.

addition, the system was not properly ventilated because the fan was losing charge. As a result, mercury levels in the air inside the shop ranged from 30,000 to 65,000 ng/m³. Considering that the WHO guidelines suggest maximum level for worker's exposure working 8h/day 25,000 ng/m³ these levels of mercury were exceedingly high. The researchers report that: "The manager showed his concern and promised to change the exhaustion process increasing power of the fan and reducing the size of the ducts and water tanks." (UNEP Surimec report 2008)

Gold buyers themselves may determine the price they pay for gold offered to them. The price paid to gold miners depends on:

- The World Market Price (London bullion market)
- The purity of the gold (London price is determined for 24K)
- The overhead charges taken by the buyer (typically \pm 2%)
- Royalties that need to be paid to the CBvS (1%)

The world market price of gold changes constantly. The London gold fixing, which is a generally (in Suriname) used standard for world gold prices, occurs twice daily (see 5.11). In order to determine a buying price for the day, the buyer calls with the exporter and the two fix a price, depending on the LME price of that moment. The fixed price will be applied to a certain agreed weight in gold. For example, if the world market price is 20 USD/g Au, the buyer and the exporter may fix the price on 18 USD/g for one kilo. This procedure guarantees the buyer that he will be able to sell the next kilo of gold he buys to the exporter for the fixed price (in this example: 18 USD/g). Because of fluctuation in the world gold price, there is a continuous interaction between the buyer and the exporter. This situation allows buyers and exporters to speculate by stocking gold when the price is low and selling it when the price is high. In practice though, few companies have sufficient reserve to stock gold for more than 2 or 3 days.

In order to reach their quota, gold buyers establish relationships with certain gold miners, concessionaries, or businessmen, who they may tie to their business by offering a slightly better price. The gold buyers/exporters also may help one another to reach their respective quotas.

Whether or not gold buyers may also sell gold remains unclear. According to a senior official at the CBvS, the gold buyer's contract of mandate (*lastgevingsovereenkomst*) only provides a right to *buy* gold, and not to sell it to third parties other than those mentioned in the purchase/export license. Following this line of thought, selling gold to jewelers, which occurs regularly, is allowed by law. The consulted juridical team, however, was informed that licensed gold buyers may also sell gold to "natural persons" (that is; any individual), including jewelers (See Ch. 6). A representative of one of the gold buying houses said that they only sell to the exporter and not to individuals because it is "too much hassle" and not profitable to sell to

these small entrepreneurs²⁶. Another representative of another buying house said that they do sell to jewelers.

5.3 Gold exporters

Five of the eight gold buyers possess a license from the Currency Commission to export gold (Table 5.1). Interestingly, 12 companies are registered as gold exporters at the Chamber of Commerce (KKF). It is unclear who are the seven companies that are registered at KKF but have no license from the Currency Commission. Clearly, these seven “exporters” are not legally allowed to export gold.

The first gold export licenses were issued in 2002. Before that time, the CBvS was the only legitimate exporter of gold in Suriname (see Ch. 4). In addition to these five companies, the jeweler Chee’s Trading N.V. obtained a unique license to export gold in exchange for fabricated golden jewelry. Since 2002, there is a waiting list of companies wanting to acquire a gold export license.

According to one of the interviewees, three of the companies that were issued gold exporting licenses are in fact owned by one and the same person. A study on informal and illegal businesses in Suriname, confirms this information (de Vries Robbé 2004). My source referred to this group as a cartel of gold exporters. Also one of the Suriname newspapers has accused the Currency Commission from endorsing the formation of a trust cartel (De West, issue date: 14-01-2006).

The abovementioned study also casts doubts on the transparency and fairness of the issuance of export licenses:

“One of the smallest buyers was the first to obtain an export license, due to its close contacts with a member of parliament. Also, in 2003, a new gold buyer mysteriously received an export license. Established companies such as Bolex and Ourominas once again missed out.” (de Vries Robbé 2004: 86)

In the mandate (*beschikking*) from the Currency Commission, a minimum amount of gold that the exporters have to be able to export is defined. This minimum has been defined by the exporter himself at the time of application for the license. If the exporter fails to meet the quota, he will have to compensate this the next month. Repeated failure to meet the required amount of gold for export may result in loss of the export license. Furthermore, the export

²⁶ C. Isaacs, interview 27 March 2010

license is terminated by law if the license holder does not export anything for two executive months. The exporters are obliged to send the CvS a monthly report.

If a company has problems and foresees being unable to meet the standard, it can submit a request for dispensation, which typically will be granted. However, in the case that there has been no communication with the Currency Commission, the license will be revoked. To date, two companies have lost their licenses this way. The Currency Commission has implemented these regulations to ensure that the permit holder will actually work with the permit. If the company remains inactive, explained a senior staff member, we might as well transfer the license to someone else (Nemelc, 9 April 2010).

Most exporting companies buy gold themselves, but at least one of the exporters does not have a buying house and buys from other companies. Gold traded between the various buyers and exporters typically comes in the form of small bars.

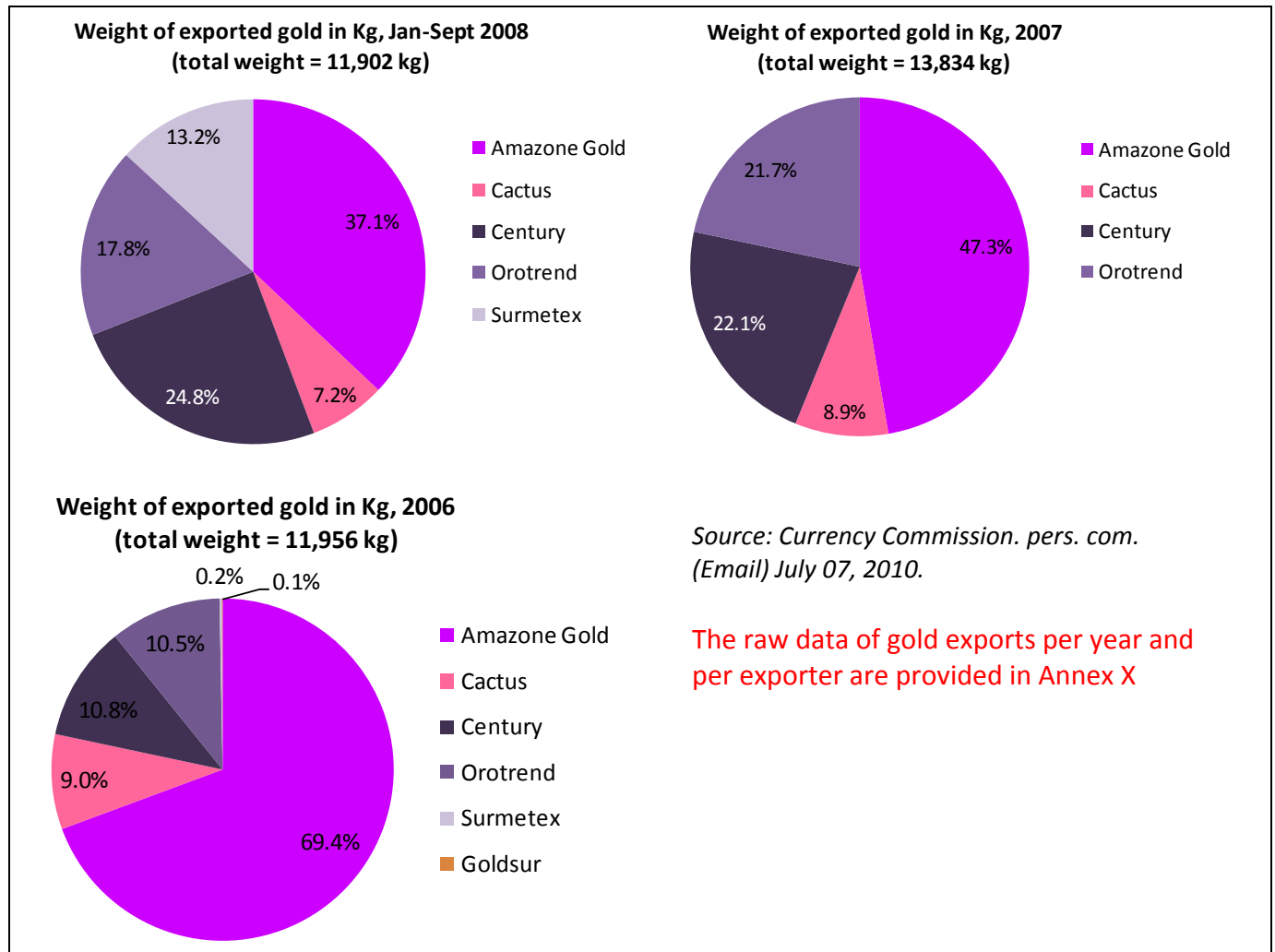
Gold that is bought is calibrated and weighted, and prepared for export. All exporters weigh gold using the below water surface method. All gold is transported with KLM, which is the only airline that has a facility for value transports. The exporter pays:

- Royalty of 1% to the Central Bank, directly
- Consent duty (*consentrecht*) of 0.1% to the tax office, directly, and
- Taxes such as income tax and profit tax per year or other time unit.

Gold exporters regularly get offers from brokers, wanting to buy their gold. However, according to the mandate, gold may only be sold to legitimate buyers and possible clients are subjected to a background check.

In the past few years, Amazon gold has been the largest gold exporter, though its market share has been decreasing between 2006 and 2008 (Currency Commission, pers. com July 2010; Figure 5.1). In 2007 and 2008, Century mining was the second largest exporter, and Orotrend became number three. Together, these companies represented 79.6 percent of the gold exporting market in 2008.

Figure 5.1. Gold exports per exporter in the years 2006 – Sept. 2008



5.4 Informal gold traders

In addition to the licensed gold buyers, there are various informal gold buyers and sellers active. We have been able to locate fixed locations where gold traders are active; at the waterfront in Albina, and in front of the VCB bank in Central Paramaribo. These traders are mostly of Maroon descent. The gold traders in Albina target people coming from the gold mining areas upriver and mostly buy unprocessed gold. The gold traders in Central Paramaribo mostly sell gold. In both sites, we have heard of cases where customers wanting to buy gold have been cheated with fake gold.

In addition, various Chinese and other businesses in and near gold mining areas, including Albina, accept gold as a means of payment. The fact that this gold will still contain impurities is

being compensated for with the price, which is typically about 13 to 15 percent below the LME (world market) price. One of the local entrepreneurs said that in the early days, they as traders bought about one kg gold per day from the miners. Yet nowadays, with the arrival of many buying houses who offer a competitive price, their clientele has dropped. It also happens that businesses in the mining areas buy small amounts of gold when a person needs cash money (e.g. to pay the plane ticket to the city).

5.5 Central bank of Suriname

The Central Bank of Suriname (CBvS) is the main government institution responsible for gold market affairs in Suriname. According to the Bank Law of 1958, *the Central Bank is the only institution that is legitimized to buy gold* from gold miners. Since 2002, the Bank has delegated its function as gold buyer to a few selected gold buyers (see above) and no longer purchases gold itself. As a result of this policy change, the share of gold that is being sold to legal buyers and registered by the CBvS has steadily increased (Figure 4.1).

At present the main tasks of the CBvS with regard to the gold market are:

- The registration of gold that is being (mined and) exported from, Suriname.
- Making gold available (selling) to jewelers

On Mondays, Wednesdays, and Fridays gold for export may be proffered to the Central Bank, which performs a quality control process. The Bank performs a bullion assay, weighs, and assay marks the gold.

In this process, a sample of each gold bar is taken to determine purity. Sampling occurs by drilling a small hole in the gold bar. One 2 g. specimen is obtained for each gold bar of 10 kg. After testing these specimens are returned to the exporter, who pays USD 55 per sample taken. The exporter receives an annual record of the average gold purity over the year. Generally, for Suriname gold, the level of purity is about 92 to 93 percent. Sampling and calibration occurs in the Central Bank lab. This high-tech lab was set up with assistance of Royal Canadian Mint (RCM), and uses the fire assay method to assay gold.

After determining purity and weight, the values are reported to the government and the lab calculates how much royalty must be paid. Royalties must be paid in convertible currency; not in gold or Suriname dollars. A representative of the exporter is present during this entire process. The export forms are prepared and checked by customs officers on the spot. Under the eyes of the customs officers, the gold is placed in a chest, which is bound with an iron band and sealed. The number code on the customs seal must be identical to the number on the export license. From the CBvS, the gold goes straight to Suriname's international airport at Zanderije.

The Central Bank of Suriname does not sample, assay, determine the purity, or weight the gold mined by Iam Gold. This large-scale mining multinational performs all these measures in its own lab.

Another function of the CBvS with regard to gold marketing is the sale of gold to jewelers and gold smiths for the fabrication of jewelry. In fact, the law dictates that gold may *only* be bought from the Central Bank.

Prior to the year 2000, part of the gold that the Central Bank bought from entrepreneurs in the mining industry was sold to jewelers. Since 2000, the CBvS only sells Suriname gold that has been abroad²⁷ to be purified to 24 K. The availability of 24 k gold was on the special request of goldsmiths. Gold for sale to goldsmiths is sold in granules (grains, or *grenailles*), which makes it easier to purchase a certain weight of gold. These granules have been especially fabricated in the Royal Canadian Mint (in Canada), using the gold supply that this institution holds in consignment for the CBvS. Hence the granules are Suriname gold, which has been abroad for purification. In 2000, after deciding to sell gold in this form, a considerable supply of 24 K granules was prepared and kept by the Central Bank. Gold that jewelers buy today is still from this 2000 supply, from which about 50-60 kg is left.

Regardless of what the law prescribes, our survey data show that the CBvS is not the most popular place to buy gold. When asked how often they go to the CBvS to buy gold, 82.8 percent of surveyed jewelers answered that they never go to this institution; 6.9 percent said they buy monthly, another 6.9 percent buys four times a year, and yet another 6.9 percent buys no more than once or twice a year. An official from the Central Bank noted that lately many Chinese businessmen have been at the gold purchasing desk to buy gold. He suspects that these people are speculating with the gold, profiting from the fact that the CBvS maintains an exchange rate of 2.80 SRD for 1 USD (the street value of the USD has risen to above 3.35 SRD/US dollar).

Other than controlling gold for export and offering gold for sale to jewelers, the role of the Central Bank in the gold market is minimal. According to the exporters' license, the CBvS has the right to buy 5% of the export against world market prices. To date it has never made use of this right.

²⁷ To Royal Canadian Mint in Ottawa, Canada.

Box 1 Gold assaying

Gold assaying is the process of melting down, stirring and separating the gold from other elements. There are two main ways to assay gold: (a) fire assay or (b) Aqua Regia technique.

Fire assay involves taking a small sample of the metal and wrapping it in lead foil with added silver and cupelling it in a furnace. In this process it removes all other base metals. The sample is mixed with a fluxing agent, fused at a high temperature and reduced. The mixture will then cool, leaving the agent at the bottom of the furnace.

It is possible to employ the more accurate Aqua Regia technique at lower levels, which allows for testing more elements of the sample at once. Aqua regia or aqua regis (Latin for royal water or king's water) is a mixture of hydrochloric acid and nitric acid. It can dissolve gold, which single acids alone cannot do.

5.6 Currency Commission

The Currency Commission operates under the Ministry of Finance. According to the currency law (G.B. 8 September 1947), the Currency Commission is “...charged with the execution [...] of arrangements concerning currency transactions as stipulated in this Act, with consideration of the regulations made by the governor” (Government of Suriname 1947). In the context of the gold market, the Commission has an administrative function and is responsible for the issuance of licenses for the export and import of gold.

Every export of gold passes by the Currency Commission, where the exporter has to show his paperwork. The gold export form (*G-uitvoer*) shows the purity and weight of the gold. An official of the Currency Commission signs this form, and records the weight. Records of the weight of exported gold are used to control whether the exporter meets the monthly quota set in the export license. Also gold buyers have to show monthly how much gold they have bought, to control whether they have met their quota.

The Currency Commission also administers gold exports by *Iam Gold*.

5.7 Suriname government

In addition to the Currency Commission, several other government departments and Ministries play a role in the gold market. These institutions and their responsibilities are summarized in Table 5.2.

Table 5.2 Government institutions with a role in the gold marketing chain

Ministry/Department	Function
Customs office	Executing control on movements of people and goods – including gold- across the borders with Guyana (South drain post), French Guiana (Albina post), and other countries (Zanderije post).
Ministry of Justice and Police	Policy on border control Policy on monetary crimes, including smuggle
Ministry of Natural resources (Natuurlijke hulpbronnen-NH)	The Ministry of NH has closed the agreement with Iam Gold and receives in name of the government the royalties from Iam Gold. In addition, the ministry of NH should exert control on compliance with the 1986 mining law
District Commissioner (DC)	Issues business licenses to gold- and silversmiths (through a mandate from the Minister of Trade and Industry)
Geology and Mining Department (GMD) (Within Ministry of NH)	Issuance of mining rights (exploitation and exploration)
Police	Executing control on smuggle of, illegal possession of, and unlicensed trade in gold, both within the country and across borders.
Ministry of Health	A license from this Ministry is required before a gold shop can obtain a business license from the DC
National Institute for Environment and Development in Suriname (NIMOS)	Monitoring environmental safety and possible public health threats imposed by businesses such as gold shops and gold buyers. Advise to the Currency Commission and other government institutions prior to the issuance of business licenses
Ministry of Labor, Technological development, and Environment (Arbeid, Technologische Ontwikkeling en Milieu -ATM)	Policy making about environmental standards (e.g. of gold shops) and control of these standards.
Security Service (Waarborg Dienst)	Division within the Ministry of HI, responsible for branding and determining quality standards for processed and unprocessed gold and silver

For many years, the Government of Suriname has been executing a policy of tolerance towards many aspects of the small-scale gold mining sector. Also the gold trade is not vigilantly controlled to the letter of the law. For example, the police controls hardly whether jewelers purchase gold from gold miners or gold buying houses. Only when there are additional reasons to keep an eye on a certain jeweler, there may be control. Also gold smuggle across the borders is not actively controlled and attacked by the customs department. Understaffing, a lack of resources, and the open nature of the Eastern and Western borders make the prevention of gold smuggle between the Guianas virtually impossible (see further Chapter 7).

5.8 Jewelers

In order to open a goldsmith's or jewelry shop, one needs a business license from the District Commissioner. The DC has been authorized by the Ministry of Trade and Industry (HI) to issue these licenses (Notification of the Ministry of HI, undated²⁸). The business license must be approved by the Ministry of Health. In the past three-and-a-half years (2007-up to July 2010) the District Commissioner of Paramaribo North-East issued 24 new licenses to gold- and silversmiths in Paramaribo²⁹ and renewed another 53 licenses (DC Landburg, pers. com. July 20, 2010).

At present, only 14 gold- and silversmiths are registered at the Chamber of Commerce (July 2010³⁰). In addition, 51 jewelers are formally registered at the Chamber of Commerce (registered as "gold shops" (*goudwinkeliers*))

There are jewelers and goldsmiths in different kinds. One out of every ten (10.7%) jewelers we interviewed are only selling readymade -mostly imported- jewelry (Figure 5.3). Almost half of the jewelry businesses (46.4%) sell both homemade and readymade products, and 42.9 percent makes jewelry and may perform repairs, but does not sell prefabricates.

Not all readymade jewelry is imported; several jewelers buy fabricated jewelry from Suriname goldsmiths - either long-term connections or goldsmiths who come along to sell. In some cases, the jeweler brings orders from clients to a goldsmith with whom he has a working relation. In addition, we encountered one goldsmith who is only doing repairs and polishing, and others who are primarily remelting old pieces to make new jewelry. In one jewelry shop, specialized in

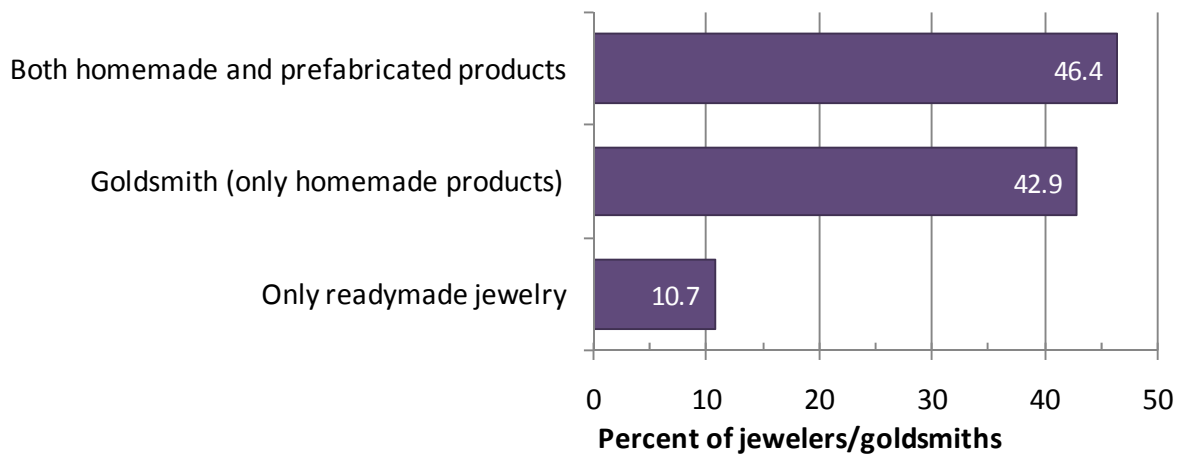
²⁸ Conform Decree E-24 of September 15 1981 (Decreet Vergunningen Bedrijven en Beroepen S.B. 1981) and State Resolution of 15 September 1981, concerning the execution of Art. 2 (No 1 and 2) of the Decree Licenses for Businesses and Professions (Decreet Vergunningen Bedrijven en Beroepen S.B. 1981, no 147), modified by SB 1985 no 40 and SB 1993 no. 51.

²⁹ From the ocean to Saramacca doorsteek and between the Suriname River and Kerkampweg-Zonnebloemstraat

³⁰ Chamber of Commerce, trade register. Pers. Com. 5 July 2010

Brazilian jewelry, broken and discolored jewelry is being sent back to Brazil. Two jewelry shops that are specialized in Colombian jewels sell gold-plated pieces rather than massive gold – which is rare in Suriname.

Figure 5.3 Share of goldsmiths and jewelers selling homemade or readymade jewelry (N=28; excl. 1 missing case)



Gold is a very soft and malleable metal and pure gold (24 K) is therefore not often used in jewelry. Hence gold smiths who buy from the CBvS, which sells 24K gold, usually fabricate an alloy of gold with a baser metal or metals to lower the purity, influence the color or add durability. For example, the addition of copper gives a reddish shine, while ‘white gold’ contains –in addition to gold- at least one white metal, usually nickel, manganese or palladium³¹.

Large jewelry shops have a continuous circulation of gold and jewelry, and order merchandize without knowing to whom they will sell. The smaller goldsmiths only buy gold when they have orders and hence just buy as much as they need.

Among the jewelers, Chee’s Trading N.V. has a special position. This company obtained a so-called refinement license (*veredelingsvergunning*), which allows it to export unprocessed gold and import golden jewelry of the same weight. Two to three times a year, the company sends away 10 kg of gold. At the refinery of the foreign buyer (Kaloti, Dubai) the Suriname gold is mingled and purified with other gold. In exchange, the same weight in jewelry is sent back to Chee’s, and offered for sale to customers in Suriname. The specific models of jewelry are selected by owner of Chee’s jewelry and watches, and fabricated in one of the Kaloti plants in

³¹ To obtain so-called ‘white gold’, the alloy also has to lay in a whitening bath of rhodium fluid so that the piece will become rhodium plated.

Dubai, Italy, or elsewhere. The proportion of foreign versus Suriname jewelry in the various Chee's jewelry shops is, respectively, 40 percent to 60 percent³². The gold to both send abroad and fabricate Suriname jewelry is purchased from the gold buying house owned by another family member.

Chee's Jewelry and Watches owns its own jewelry factory, which employs five goldsmiths. These goldsmiths mostly work manually and in some instances with machinery. This construction allows the company to make or copy certain models on the request of clients.

One of the other large players in the gold market with both a gold export license and gold shops, sends away gold to Dubai and imports jewelry from Hong Kong. Its jewelry shops also sell jewelry made from Suriname gold, particularly pieces made with small nuggets (*pitpits*).

With the high price of gold, jewelers are selling less and especially with the fierce competition of the Chinese jewelers, business for gold shops has gotten tough.

Box 2. Business is getting tough for gold shops

The story of S., a Hindustani gold smith, is telling. S and his wife run a gold smith's shop from home. Nowadays S. mostly melts down old jewelry from clients to make new pieces. Also jewelry that has been in the window for too long is melted to fabricate new pieces. Since the arrival of the Chinese, he laments, things have gotten difficult. Some years ago he had several laborers but nowadays he has none. In the mean time the gold prices keep rising. S. does not understand that the CBvS does not support the jewelers. He also laments the absence of an organization of goldsmiths. The Chinese borrow money from their own organizations against only 1 percent interest, he says, but he has to borrow money from the bank against high interest rates. He has taken out loans at different banks to survive, but it is difficult to pay back. In addition the tax service comes every four months to check his books. S. does not know how much longer he will be able to stay in business.

5.9 Volks Crediet Bank

The best-known and possibly only official place to pawn golden jewelry is the *Volks Crediet Bank* (VCB), which has branches in Paramaribo and Nickerie. People in financial need can raise a loan on their golden jewelry, which is assayed and weighted at the spot, after which the bank

³² Nancy Chee, director Chee's Jewelry and Watches, 23 April 2010

determines a maximum loan amount. It is possible to borrow money for less than this maximum.

The client has one year to pay back the loan with interest. If he or she fails to do so, the bank will send a warning notice. If the client still fails to pay back, the jewelry is sold on the auction, often far below its real value. The auctions are regularly visited by goldsmiths and jewelers. Only yellow gold is being considered for pawning.

According to a goldsmith who buys occasionally at the VCB auction, the gold is not being assayed before selling and sometimes it is less than 14K. In that case, the VCB gold needs to be melted and mixed with gold of a higher purity to fabricate 18K jewelry.

5.10 Iam Gold

Iam Gold has a separate arrangement with the Suriname government represented by the Ministry of Natural Resources and the Minister of Finance³³. This company refines and samples its own product, after which it is prepared for export. Produced gold is melted and molded into bars of about 1000 ounces per bar. The gold content or fineness of such a bar is about 93%.

Before the exploited gold leaves the company base, it is weighted and sealed in chests by a Suriname customs officer onsite. The amount to be exported is registered with the Currency Commission. The Central bank receives a monthly state with the amount of exported gold.

In the past five years, gold exports by Iam Gold have ranged from 7,962 kg (256 oz) to 12,099.25 (389 oz) (Table 5.3). The amounts have fluctuated and there is no clear trend line. *All* gold produced by Iam Gold is exported to Canada, where it is being administered, purified to 24 K, and stored at the Royal Canadian Mint.

Table 5.3. Gold exports by Iam Gold, 2005-2009

Year	*1000 ounces	kg
2005	351	10917.32
2006	304	9455.458
2007	256	7962.491
2008	330	10264.15
2009	389	12099.25

Source: Iam Gold public relations, 19 April 2010

³³ The legal basis for this arrangement is the Mineral Agreement of 1994 and its amendment of 2003 (March 13)

Iam Gold pays royalty to the Suriname government via the CBvS. 2.25 Percent of exported gold is placed at the disposal of the Suriname state after refining in the Royal Canadian Mint. In other words; the royalty payments of IAM gold are based on the pure gold value of the export, are paid in 24K gold and are stored in Canada. The state can access this gold any time, or ask the Royal Canadian Mint to sell it for them.

When the price of gold rises to more than USD 425,= /ounce, IAM Gold pays “Extraordinary Royalties” (*Buitengewone Royalty*) of 6,5% in money over the amount above this price³⁴. For example, now the gold price has risen to 1,200 USD/ounce, Iam Gold pays additional royalties of USD 50.38/ounce (6.5 %*USD 775).

Another tax (0.25%) is paid in gold and deposited in the REMIF foundation. This arrangement is part of an agreement between the government and Iam Gold regarding the return of profits to the sector. Other duties and taxes are related to the exploitation and daily operations and paid in money, such as concession duties, exploration rights and exploitation rights. In addition, Iam Gold pays income tax (*inkomstenbelasting*)³⁵, which currently is 36 percent of net profit, and 25 percent tax on wages (*loonbelasting*).

The Gross Rosebel mine employs 1260 people and has a projected mine life of 12 years (until 2022). However, the exploration potential is still high and it is expected that new mineral reserves will be added in the future

5.11 Other foreign companies and institutions

London bullion market

The London bullion market is a wholesale over-the-counter market for the trading of gold and silver. Trading is conducted amongst members of the London Bullion Market Association (LBMA), loosely overseen by the Bank of England. Most of the members are major international banks or bullion dealers and refiners.

At the London bullion market price of gold is determined through gold fixing by the members of the London Gold Market Fixing Ltd.. It is designed to fix a price for settling contracts between members of the London bullion market, but in practice the price set at London is used as a benchmark for pricing the majority of gold products and derivatives throughout the world's

³⁴ See: Government of Suriname, 2003. Overeenkomst inzake wijziging en aanvulling van de delfstoffenovereenkomst van 2 april 1994

³⁵ The first few years of operations the company could write off its investments and, as a result, had no net profits

markets³⁶, including the Suriname gold market. The five members of the fix 'meet' (by telephone) every working day at 10:30 and 3:00 GMT and commence the fix with a trying price. The fixing members' representatives relay the price down to their dealing rooms, who are in contact with as many bullion dealers as are interested (or who have interested clients) and these market members then declare how much metal, on a net basis, they want to buy or sell at that level³⁷.

The dealers are themselves in contact with their clients, who may change their order, or add or cancel an order, at any time. The position declared by the dealers is the net position outstanding between all their clients (i.e. if one bank has clients wanting to buy a total of two tons, and other clients wanting to sell a total of one ton, then he declares himself as a buyer of one ton). Each fixing member nets off the position and declares himself, as the representative of all those interested parties, as a net buyer or seller (and of how much), or to be in balance. If the market is out of balance with more gold required than offered, then the price will be adjusted upwards (and vice versa) until balance is achieved (because some clients will withdraw or amend their orders if the price does not suit them). At this point the price is declared fixed. On very rare occasions the price will be fixed when there is an imbalance, at the discretion of the chairman of the fix. The fix is thus entirely open and any market user may participate through his bank.

Royal Canadian Mint

The Royal Canadian Mint (RCM) is a Canadian Crown corporation. In addition to producing all of Canada's circulation coins and manufactory of circulation coins on behalf of other nations, the Mint also offers gold and silver refinery and assay services. Royal Mint holds gold in consignment, which means that the gold is kept in locker for a client, until he or she orders the sale of a certain quantity. The royalties that are paid by Iam Gold to the Suriname government are also kept in consignment for Suriname at the RCM. Furthermore, the RCM supervised the set up of a lab for gold assaying, purification, and weighting at the Central Bank

Kaloti

Kaloti is one of the world's largest gold traders and also one of the main companies that Suriname exporters and jewelers are doing business with. Its head quarters are in Dubai, but the company has branches in various other Middle Eastern states, as well as in Italy, Switzerland, Hong Kong, Turkey, and India. This means that tracing the destination of Suriname gold or the origin of jewelry sold in Suriname is virtually impossible.

³⁶ Source: Wikipedia encyclopedia: http://en.wikipedia.org/wiki/Gold_fixing

³⁷ Source: Official website of the London Gold Market Fixing Ltd.: <http://www.goldfixing.com/home.htm>

The Kaloti company consists of two enterprises: Kaloti Gold Refinery and Kaloti Jewellery International DMCC. Kaloti Gold Refinery is one of the few refineries worldwide that have a LME status of London Good Delivery, which means that they refine to 99.99% pure gold (24K). Meanwhile Kaloti Jewellery International recently was awarded the prestigious Dubai Good Delivery (DGD) status by Dubai Multi Commodities Centre Authority (DMCCA) for product adherence to international standards. The Kaloti Jewellery Group has a production capacity of just 200 kilos of gold jewelry annually, is has a turnover of 400 tons of bullion and jewellery gold every year.

For jewelers such as Chee's Jewelry and Watches, the reason to have jewelry fabricated in Dubai is that they have a wide variety of machines to produce pieces and an unequaled diversity of models and designs. Particularly some of very distinct and fine works cannot be produced in Suriname.

5.12 Suriname consumers, citizens, and researchers

As stated in the introduction, gold has a deep symbolic meaning to many Suriname population groups, is displayed as a status symbol, and is used as a form of savings. Few consumers question where the gold they are wearing comes from. Despite commentaries about mercury pollution and Brazilians destroying the interior, consciousness of the real price of gold (social, environmental) is low. Even though we have not researched consumer willingness to pay for sustainably mined gold, our general impression is that the grand majority of consumers are not ready to pay extra for 'green' or 'fair trade' gold.

Suriname citizens have expressed their concern about aerial mercury contamination caused by gold shops and gold buying centers. These worries were particularly fed by the results of a 2005 study on mercury contamination in the air in Central Paramaribo, by the US ecotoxicologist Peplow (Box 3). The authors estimated that gold shops released an estimated 1.2 metric tons of mercury into the air annually. Peplow concluded that the air at several sites in the inner city of Paramaribo contained levels of mercury that were potentially damaging to human health. These results caused a lot of upheaval and calls for more control on gold shops. Especially people living in the Prins Hendrikstraat were concerned about the presence of a gold buyer in their street.

Almost ten years earlier (1997), measurements performed in the context of the project "SuriMerc" (Strengthening Surinamese involvement in activities related to mercury pollution in

Suriname)³⁸ had similarly concluded that the concentrations of in the City of Paramaribo are significantly higher than the tropical background concentrations of mercury. This study, which was performed by Anton de Kom University of Suriname (ADEK) scientists, pointed at both registered and unregistered (mostly gold smiths) gold buyers as the main point sources of atmospheric mercury in the city. In contrast to Peplow, however, the ADEK researchers concluded that, at the time, mercury levels in air that were measured in Paramaribo did not exceed the limit for public exposure.

Box 3. American ecotoxicologist warns for mercury contamination in Paramaribo city

In 2005, the US eco-toxicologist Daniel Peplow used a Lumex RA915+ portable mercury analyzer to measure Hg levels in air in Central Paramaribo (Annex E). The purpose of the study was to provide data about Hg vapor emissions and the risks they pose to the surrounding population and environment. Based on his measurements, Peplow concluded that Air mercury levels in Paramaribo (Av: 551 ng/m³, range 0-37,790) exceeded the limit for public exposure and were potentially damaging to the central nervous system. He blamed goldsmiths who burn gold amalgam in their workshops in the center of town for these high levels of mercury in the air. Even though these goldsmiths often use a retorts and a suction system, he argued, there may be leakages and not all goldsmiths may possess and use adequate burning equipment.

After the publication of the results of his study in a national newspaper, Peplow was invited to a meeting at the ministry of ATM. During this meeting, the head of the Medical Bureau of this ministry expressed his discontent with the press release and the possible damage this news could do to Suriname's reputation abroad. A Ministerial Commission was also preparing a report on mercury contamination in the inner city at that time and according to Peplow, his results were challenging their report. Meanings are divided about what was exactly said during the meeting. Yet the result was that Peplow felt threatened by the language busied by the head of the Medical Bureau and took the first flight out of the country; without notification and in distress

Source: Suriname Indigenous Health Fund- <http://www.sihfund.org/newsletter.htm>; Peplow and Augustine 2006; and De West Tuesday 12 July 2005 and 19 July 2005

³⁸ This project was funded by the United Nations Environment Programme (UNEP) within the framework of "SUPPORTING COUNTRY EFFORTS TO TAKE ACTION ON MERCURY POLLUTION"

The Ministry of Labor, Technology, and Environment publically doubted the accuracy of the Peplow's measurements. Its representative feared that such negative publicity could harm Suriname, and argued that the results contrasted the results of the measurements its own Ministry was performing at the time. In 2005-6, an interdepartmental research commission "Oil pollution and gold processing shops in the inner city" (*Olieverontreiniging en goudverwerkingsbedrijven in de bebouwde kom*) supervised mercury measurements in Paramaribo-North. The results of this research have never been made public.³⁹

³⁹ Ivan Cairo. 2009. Ruim 200 vaten zoutzuur in 'chemisch' pand. Zorgen in Paramaribo over aanwezigheid chemicalien bij juweliers en goudverwerkingsbedrijven – Onduidelijkheid nog steeds over kwik uitstoot. De Ware tijd online. Donderdag 30 juli 2009.

6. Laws and regulations concerning the gold market⁴⁰

This chapter provides an overview of the legislation regarding Surinamese gold from the moment of its exploration to its sale⁴¹. A summary of relevant laws and regulations is provided in Annex F1, and a listing of relevant permits and licenses appears in Annex F2.

6.1 The route of gold in four stages

The route of gold from a mineral to an end product is subject to a number of regulations. The Mining Decree is the main act regarding exploration and exploitation of minerals in Suriname. This act classifies the minerals in Suriname in the following 5 categories:

- a. Bauxite
- b. Radio-active minerals
- c. Hydrocarbons
- d. Other minerals, exclusive of building materials,
- e. Building materials

Mineral gold is classified under category d “other minerals”.

Depending on the scale of the gold mining activities, different mining rights can be issued. When the activities can be classified as “small-scale mining”, a small scale mining right may be applied for⁴². A small-scale gold mining right contains rights to the reconnaissance, exploration and exploitation of gold. In large-scale gold mining, the rights to these different mining stages have to be applied for separately.

For the application of a mining right, the following procedure should be followed (art. 10):

1. The application should be written in Dutch in threefold;
2. It shall contain all necessary information regarding the applicant;
3. An excerpt of the civil registry in the case of natural persons or a certified copy of company articles in the case of legal person should be attached to the application.

For the specific rights of reconnaissance, exploration and exploitation the application shall be made in accordance with article 10 and other details specific to the rights.

⁴⁰ This chapter was written by legal consultants N. del Prado and G. Griffith

⁴¹ All legislation mentioned in this chapter is incorporated in the table at the end of this document.

⁴² Article 1(I) defines small scale mining as “*the reconnaissance, exploration and exploitation of a mineral deposit whose nature, mode of occurrence and quantity, warrants the economic mining by simple means and techniques*”. Nowadays this definition is no longer applicable to gold mining that has historically been known as small scale gold mining and was mostly done by the maroon people living in the interior. The heavy machinery that is being used to extract the gold now is a big contrast to earlier, simpler methods.

The applicable regulations will be described against the following stadia:

1. Reconnaissance and Exploration, this is when gold is considered a mineral;
2. Exploitation, this is the phase where the mineral gold is extracted and transported, including processing by the miner/concession holder;
3. Processing, this is when the gold is being processed by a third party, not being the miner/concession holder himself;
4. Trade and application, this is when the processed gold is being traded.

6.2 Reconnaissance and Exploration

The Mining Decree describes reconnaissance as: *“the search for mineral indications by means other than substantial drilling operations, earth or rock moving, or other work which causes changes in the natural form of the earth’s surface and/or in the state of the underground”*.

Exploration is described as: *“all activities to determine as accurate as possible the nature, quantity, mode of occurrence and the economic value of the mineral, as well as all other activities to determine the economical and technical feasibility of its exploitation.”*

According to article 7 both large and small-scale gold mining rights can be obtained by both State and private owned enterprises and also by natural persons. However, different institutions grant these rights. Rights to the different stages of a large scale gold mining (reconnaissance, exploration and exploitation) are granted by Presidential Resolution and small-scale gold mining rights are granted by Ministerial Order.

The right of reconnaissance and exploration are not transferable (art. 11) and the holder of such a right shall, within 30 days of the discovery of any mineral deposit, notify the Minister (art. 19). This notification shall hold all available information on the deposit discovered.

Under the right of reconnaissance the holder is entitled to carry out reconnaissance in or on the area for minerals to which his right relates, he can erect camps and other temporary buildings and more importantly he can collect samples as part of his reconnaissance activities. After approval from the Minister these samples may be taken abroad (art. 23). Under art. 24 (g) the holder is obliged to keep half of each sample available in Suriname.

When applying for the right of exploration the tribal communities living within the area should also be included in the information that is given to the Minister in the application (art. 25(b)). When exploring the holder must notify the Minister of a discovery within 30 days of the discovery, just as is the case with the right of reconnaissance. The holder of the exploration right must refrain from commercial production at all time during the term of his right. If the

holder wants to market products obtained as result of test production explicit approval from the Minister is required (art 29f).

6.3 Exploitation

If a gold deposit is assumed or it is discovered during exploration, large scale gold miners have to apply for the right to exploit these deposits. This is done in accordance with article 10 and 30 of the Mining Decree. The Minister does have the obligation, with regards to applications made by holders of exploration rights who discovered gold deposits and fulfill all obligations, to arrive at an agreement with the applicant on short term (art. 31).

In article 30 aside from the geographical coordinates and other topographical information on the location, the applicant should also give information on the nature of the mineral deposit, the proven probable and possible reserves and also a technological report on mining and processing possibilities (art. 30 (c)). In this article on of the few references is made to the environment. Art. 30(i) stipulates that the applicant should present a rehabilitation program for the mined out area when applying for the right of exploration.

In regards to the right to exploitation article 65 stipulates that holders of a right to exploitation or the right to small scale gold mining shall pay royalties to the State. The regulations regarding this topic are further elaborated on in the State order on Royalties for Small scale Gold mining and Exploitation of Building Materials⁴³ (*Besluit Royalties Kleinmijnbouw ter zake van Goud en Exploitatie Bouwmaterialen*). This law stipulates how much royalty must be paid for small-scale gold mining and mining of building materials. With regards to the royalties for small scale gold mining the Central Bank of Suriname is responsible for setting the height of the royalties. These royalties shall be paid in Surinamese currency. Within a general permit for exploitation of gold it is stipulated that the gold mined shall be sold to the Central Bank of Suriname only.

Regulations about royalty payments by small-scale miners differ from those for holders of large scale gold exploitation rights. For the latter, royalty payments are determined on a case to case basis through their specific agreement with the Republic of Suriname. At present, Iam Gold (Rosebel Gold Mines N.V.) is the only company that is mining with a large-scale gold mining exploitation right⁴⁴ issued by the Minister of Natural Resources. The rights and duties of Iam Gold with regard to Gross Rosebel, including the form and height of royalty payments, are laid

⁴³ S.B. 1989 no. 40 (last amended S.B. 1997 no. 43)

⁴⁴ The Alcoa Company (Suralco) also possesses a right to exploration of gold in the Nassau area, but is just now in the process of applying for a exploitation right to extract the gold. The exploitation will be done in cooperation with Newmont Gold and the Surinamese Government.

down in the “Suriname gold mining project Mineral Agreement Gross Rosebel”, in short named: the Mineral Agreement (*Delfstoffenovereenkomst*). This agreement has its legal basis in the “Law Gross Rosebel”⁴⁵ (SB 1994, no 22). Through this law, the State of Suriname has authorized the Minister of Natural Resources and the Minister of Finance to enter into an agreement concerning development of the gold industry in the Gross Rosebel area.

The Gross Rosebel concession was initially granted to the Canadian junior company Golden Star Resources Ltd. (GSR). In 2003, GSR sold its exploration and exploitation rights to Gross Rosebel to Cambior Inc., which started working under the name Rosebel Gold Mines N.V.. Subsequently, on 13 March 2003, the aforementioned Mineral Agreement was amended by the “Agreement concerning adjustment and amendment of the mineral agreement of April 7, 1994” (*Overeenkomst inzake wijziging en aanvulling van de delfstoffenovereenkomst van 7 April 1994*) between the Republic of Suriname –represented by the Minister of Natural Resources and the Minister of Finance-, Cambior Inc., and Grasshopper Aluminium Company N.V. (Grassalco). In 2006, Iam Gold took over the Gross Rosebel project through a merger with Cambior. At present Iam Gold owns 95 percent of interests in the mine and the remaining interests (5%) are held by the Republic of Suriname.

The explicit arrangements with Iam Gold concerning royalty and tax payments to the state were discussed in §5.10.

6.4 Processing

When considering the different stages where processing of gold is necessary the following legislation is applicable:

1. The Mining Decree;
2. The Currency Regulation (*Deviezen Regeling*) and the Resolution on rules regarding extraction, processing and the transport of gold in regards to the Mineral Act;
3. The Security Law (*Waarborgwet*);
4. The Nuisance Act (*Hinderwet 1929*);

⁴⁵ Fully named: “Law of March 22, 1994, concerning authorization to enter into the minerals agreement with Golden Stars Resources Ltd. and Grasshopper Aluminium Company N.V.”

The Mining Decree

According to his rights under the exploitation right as stipulated in the Mining Decree (art. 34) the mining title holder is entitled to process, transport and market the gold that he has mined within his concession (art. 34a). In return the holder is obligated to annually state the production and export estimates for the following year, the import quantities of raw and other materials, also the proven, possible and probable reserve still under his right and submit quarterly reports on the amount of mineral and/or mineral concentrate produced, processed, marketed and exported and stocks and composition of the mineral and/or mineral concentrate (art. 35d, f and g).

In older regulations⁴⁶ it was stipulated that gold miners (there was no distinction made between large and small-scale gold miners) were not allowed to sell, exchange, pawn, etc to anyone else than an authorized gold buyer. But nowadays other conditions are negotiated with the large-scale foreign gold miners. They are allowed to export their gold but must pay royalties.

The small-scale gold miners have a similar obligation under article 40a to submit quarterly reports on the amount of minerals mined. However there are no rules mentioned on the processing of these minerals, which in comparison to the exploitation right for large scale mining can be considered an omission on the part of the legislator.

The Currency Regulation

There is a Currency Committee whose purpose it is to implement and control currency traffic regulation⁴⁷ under auspices of the President of Suriname who is responsible for the national currency policy. As an instrument of the government this Committee gives permits for the use and possession of, amongst others, foreign currency and gold in Suriname (art. 11). The import and export of gold is prohibited other than with a permit of the Currency Committee (art. 17).

By Resolution⁴⁸ additional rules have come in force to further realize the goal of the Currency Regulation. These rules contain the definition of rough gold, which is: gold that is taken out of the ground pure or mixed with other elements, in dust form or in pieces, or incorporated in ore, quartz or stones or melted to a bar, block or any other form for any purpose like purification or

⁴⁶ Article 13 of the Act on Gold Tax, last official text published in G.B. 1945 no. 142 and last amended in G.B. 1946 no. 15. This Act was repealed by G.B. 1950 no. 56.

⁴⁷ Article 1.2 of the Currency Regulation.

⁴⁸ Resolution on rules regarding extraction, processing and the transport of gold in regards to the Mineral Act; G.B. 1947 no. 139, last amended in S.B. 1959 no. 35.

forwarding (art. 1). Article 2 contains a very important rule on the application of gold. It is forbidden to process gold by melting, refining or alloying. Only the Central Bank of Suriname and gold miners in the field are allowed by law. It is not stated in this Resolution if the term 'gold miners' refers to all gold miners, both large and small scale.

The Security Law

The Security Law contains rules on the value of processed and unprocessed gold and silver. Silver and gold can only be sold as such if their value is secured by this law (art. 2). This means that silver and gold being sold should be branded in such a way as described in this act. The branding is done by a division establishment by the Minister of Economic Affairs⁴⁹ (now known as the Ministry of Trade and Industry). This Division is named the Security Service (Waarborg Dienst). For gold the values are indicated as follows: 916, 833, 750, 585 thousandths which correspond with 22, 20, 18 and 14 carat gold. For silver the value is indicated by 925, 835 and 800 thousandths (art. 6). If works are of less value than 585 for gold and 800 for silver they are not considered gold or silver works by this law (art. 7).

All persons working as jewelers have to be registered at the Security Service before starting their work (art. 34).

The Nuisance Act

The Nuisance act stipulates rules on establishments that cause nuisance, harm or danger. This act is not applicable on all gold processing establishments due to the construction of this Act. The permit under this act is only necessary if the establishment is either explicitly named, if certain heavy equipment is used or if it can be placed under one of a few descriptions of activities which have been considered to be a nuisance and/or cause harm or danger (art. 1).

In this current constellation the District Commissioner, who is responsible for the granting of these permits, only issues such a permit if a gold processing establishment uses heavy equipment. For a more elaborate view of permit condition see Annex F2. It was not possible to obtain a Nuisance Act permit from the District Commissioner but some permit conditions have been derived from advice given by the National Institute for Environment and Development in Suriname (NIMOS)⁵⁰. The Nuisance Act permit stipulates requirements that gold processing establishments need to comply with, primarily concerning the structure of the buildings:

⁴⁹ Article 12 of the Security Law.

⁵⁰ Interview with mrs. Gina Griffith, lawyer at the Legal Office of NIMOS

1. With regards to mercury (which is known to be used by the small scale gold miners) it is recommended that exposing oneself to this substance is minimized;
2. Chemicals used need to be stored and used according to the Material Safety Data Sheets (MSDS);
3. Mercury and the remains thereof are not allowed to be drained into the environment, but instead need to be stored in specially designed tanks with a visible label of it's contents;
4. The working areas must be ventilated appropriately and the ventilation system should be connected to a filter system;
5. And entering the working area will not be allowed for unauthorized persons, namely children. There will be a sign on the door were this message is displayed.

Conditions on the sale of gold can be derived from the Banc Act, which was discussed above.

6.5 Trade

When discussing the trade aspects of gold the following laws apply:

1. The General Orders 1 and 5 of the Currency Committee⁵¹;
2. State Decree regarding the mailing of gold abroad through parcel post (*Staatsbesluit Verzending Goud naar het Buitenland met de Pakketpost*);
3. The Bank Act;
4. The State Decree on Permits for Businesses and Occupations.

General Orders of the Currency Committee

There are two General Orders (Algemene Beschikkingen) from the Currency Committee (Deviezen Commissie) which are of importance to this research. General Order no. 1 on rules for the deliverance and acquisition of gold and no. 5 on general permits to gold buyers.

General Order no. 1 stipulates rules and regulations on the import, export, acquisition and sale of foreign currency and gold in Suriname. The Currency Regulation also stipulates that it is forbidden to possess and or acquire gold without a permit. This General Order conveys how persons can apply for this permit. It also stipulates that non-citizens coming from abroad require a general permit to import gold.

⁵¹ Published in the Governments Announcement paper (Gouvernements Advertentieblad, G.A.B.) of 1947 numbers 81 and 104.

General Order no. 5 regards a general permit to gold buyers to sell crude gold for industrial and artistic purposes to the public. With this order, all gold buyers are allowed to sell their gold to the public for industrial and artistic purposes. This means that when selling crude gold for industrial and artistic purposes a special permit from the Currency Committee is not needed. Gold in this General Order is defined as crude gold in dust or nugget form.

State Order regarding the mailing of gold abroad through parcel post

When considering the mailing of gold through parcel post there is one applicable law which is the *State Order regarding the mailing of gold abroad through parcel post*. For the mailing of gold with parcel post certain acts have to be committed, such as:

- a written declaration of the mailing has to be delivered to the collector of taxes in Paramaribo, Nieuw Nickerie, Coronie or Albina while also submitting the gold in question and a receipt of payment of gold tax. In the application the following should be mentioned:
 - o Mentioning of the gold being mailed with parcel post;
 - o The number of packets and the weight of the gold that will be put in each packet;
 - o The destination of each packet of gold.
- immediately after weighing the gold, the public servant packs the gold, writes the address, and in red ink writes the words: Gold Suriname.
- After this is done the packet can be brought to the post office, where the weight is verified and then it can be posted.

The Bank Act⁵²

The Central Bank of Suriname has as main task to safeguard the stability of the value of the Surinamese currency (art. 9a). As the Monetary watchdog of the country, by law the CBvS is responsible for the circulation of paper money. Also when it comes to trade the CBvS⁵³ has a license to trade in precious metals (such as gold), convert gold into coins and to test and refine gold.

For a long time, the CBvS was the only authorized entity to refine gold. Since September of 2002, however, the Central Bank is no longer active when it comes to buying crude gold (See Chapter 4). A confidential document reveals that the government wanted to liberalize gold

⁵² This paragraph was completed with information obtained through an telephone interview with Mr. Mc Lean, Head of the Gold Laboratory of the Central bank of Suriname.

⁵³ Bank Act, art. 16h: *Behalve tot het uitgeven van bankbiljetten, is de Bank bevoegd tot het verrichten van de volgende werkzaamheden, voor zover noodzakelijk voor de uitoefening van haar in artikel 9 omschreven taak: h. de handel in edele metalen, het doen vermunten daarvan, alsmede het doen essayeren en affineren van edele metalen en van edel metaalertsen;*

buying with the intention to gain better control on exports. In line with this objective, the Currency Committee issued a special permit to export crude gold to a select group. There are 8 companies who have permission to buy gold and of these 8 (eight), 5 (five) are allowed to export and 1 (one) has a refinement permit⁵⁴. The companies with both buying and exporting permission are: Amazone Gold N.V., Century Mining N.V., Cactus N.V., Surmetex N.V., Suriname Natural Stone N.V.. Furthermore, Ourominas N.V. and N.V. Edel (formerly known as Abrava) only possess a buying permit. These companies are all registered at the Central Bank.

Chee's Trading N.V. is the only Surinamese company with a refinement permit. This is a permit that allows Chee's to export crude gold with the purpose of refining it and making it into gold jewelry. Chee's is not allowed to sell the gold once it has been exported and must bring the same amount of gold back into the country as jewelry. This jewelry must be sold on the local market⁵⁵.

Even though the Central Bank does not buy gold anymore, it is still the only legitimate place where gold smiths and jewelers can obtain unprocessed gold. If a person (or company) wants to operate as a jeweler/goldsmith in the country a license needs to be obtained from the Minister of Trade and Industry under the State Order on Permits for Businesses and Occupations. This licensing authority has been delegated by law to the Districts Commissioner⁵⁶. Upon receipt of the permit, the company needs to register at the Central Bank to buy gold. The Bank sells a maximum of 200 grams of gold grains (they are called grenailles and are 99.99% pure gold) per month to one jeweler.

Personal gold jewelry may be taken across the Surinamese borders, as long as the amount of personal jewelry does not exceed the amount that is considered 'normal' for personal jewelry.

Crude gold can only be sold to juridical persons who possess a gold buying license issued by the Currency Committee⁵⁷. The Central bank of Suriname is the supervisory authority when it comes to the observance of these rules. Since the Bank does not check every purchaser of gold, it is not certain that the law is 100 % complied with.

⁵⁴ Telephone communication Mrs. Vaseur of the Currency Commission on June 24, 2010 and personal interview with Mrs. Nemelc of the Currency Committee on July 15, 2010.

⁵⁵ Permit condition in the Special Permit issued to Chee's Trading N.V. This is a confidential document which cannot be publicized according to the requests of the permit holder.

⁵⁶ Article 2 of the State Order on Permits for Businesses and Occupations.

⁵⁷ Article 11.1 of the Currency Regulation: Het is verboden, anders dan krachtens een vergunning, te beschikken over: a. goud

The State Order on Permits for Businesses and Occupations

In accordance with the State Order on Permits for Businesses and Occupations, a goldsmith must have a permit to process and sell gold. As said earlier the authority to issue such a permit has been delegated to the District Commissioner. This act focuses on the economic side of gold trade and therefore does not say a lot about gold refinement. As is the case with the Nuisance Act permits, NIMOS is asked for advice on the environmental aspects of gold refinement.

Because of the rule that jewelers can only obtain their gold from the Central Bank, which only sells 99.99% pure gold, one may assume that certain chemicals and other hazardous substances will not be present within a jeweler's shop. Because it is suspected that jewelers also buy from sources other than the Central Bank, NIMOS advises that permits for jewelers and goldsmiths contain conditions comparable to those stated in the Nuisance Act.

6.6 Observations about the legal context of the gold market

The following observations can be made concerning the legal framework that regulates the gold market:

1. According to the Law:
 - a. Only companies who have the required permit from the Currency Committee gold are allowed to buy gold from gold miners
 - b. Jewelers and goldsmiths can only obtain gold from the Central bank.
2. Even though small-scale gold miners in Suriname use mercury, the regulations regarding small-scale gold mining in the Mining Decree do not contain regulations regarding the safe use of mercury.
3. The existing licensing systems serve to regulate the import and export of crude gold. There is no permit needed for bringing personal gold jewelry across the Suriname borders. However when the amount of personal jewelry worn exceeds an amount which is left to the arbitrary judgment of the Custom Officer (there is no fixed amount named anywhere), Customs can prohibit the transfer of this jewelry across the borders.
4. The Central Bank does not buy gold anymore, but holders of a gold exploitation right still have the obligation to sell their gold to the Central Bank. It is unclear if the inclusion of this condition in the exploitation right permit is an omission on the part of the Ministry of Natural Resources, i.e. the Geological and Mining Service (Geologische en Mijnbouwkundige Dienst, GMD) or if it is a matter of poor communications between the Central Bank and the

Ministry of Natural Resources. Even the Currency Committee admits this omission in the Exploitation rights permit but has no concrete answer as to what the current legal situation is⁵⁸. This merely one example of how the different government departments among themselves do not communicate about the changes made in legislation and policies.

⁵⁸ Information gathered from Mrs. Vaseur, employee of the Currency Committee and verified with Mrs. Nemelc, the Secretary of the Currency Committee.

7. Routes of gold to, out of, and within Suriname

Box 4. How much gold is there in the world?

In all of history, only 161,000 tons of gold have been mined. This is roughly equivalent to 5.175 billion troy ounces or, in terms of volume, about 8,333 cubic meters, or a 20.274m x 20.274m x 20.274m block; barely enough to fill two Olympic-size swimming pools. More than half of that gold has been extracted in the past 50 years. Now the world's richest deposits are fast being depleted, and new discoveries are rare.

Source: National Geographic January 2009 (author: Brook Larmer)

7.1 Gold entering Suriname

Anyone importing unprocessed or processed gold into Suriname needs a license. Theoretically, every gram of gold that is personal property or inherited needs to be accounted for at the border⁵⁹. In the case of suspicion, questions may be asked about the origin of the money to buy this gold and about the person's tax payments. In practice, customs officers handle more flexible in the case of jewelry. People wearing personal jewelry are generally not bothered as long as the amount of jewelry they are wearing is not excessive⁶⁰. For example: one or two necklaces are allowed but when a person is wearing 10 necklaces, 20 bracelets and several rings this is not considered being just personal jewelry. The amount that is considered 'normal' is highly dependent on the Customs officer who will make a judgment according to his own views. Unprocessed gold is more likely to be confiscated when noticed, even if small amounts are taken across the border.

No single company or person has a license to import gold from Guyana or French Guiana⁶¹. However, according to a gold expert at the Central bank of Suriname, the amount of gold that is smuggled from Guyana and French Guiana to Suriname is considerable⁶². Unprocessed gold enters Suriname from neighboring countries, for different reasons, which are discussed below.

⁵⁹ Mr. Mursing, Customs office Nieuwe Haven, March 24, 2010

⁶⁰ Sabajo, Western Police Commander, 31 March 2010

⁶¹ Ms. Nemelc, Secretary of the Currency Committee, 9 April 2010

⁶² Wolfram, CBvS, 27 May 2010

Gold transport from French Guiana to Suriname

Reasons to sell gold from French Guiana in Suriname are largely related to efforts by the French president Sarkozy to ban illegal gold mining activities in French territories, by means of the so-called operation Anaconda (Box 5).

Box 5. Operation Anaconda

In 2003, after ignoring the unregistered gold mining activities for several years, the French gendarmerie launched Operation Anaconda. This operation organizes about 100 raids a year of illegal mining sites - sometimes using Foreign Legion and military personnel (Bellos 2007)⁶³. When a site is discovered, all the motors and other equipment are destroyed, the guns and gold are seized, and unregistered men and women are sent back to their country of origin (mostly Brazil). In 2007, an estimated €18m of equipment found on site was destroyed. However, logistical obstacles mean the French authorities cannot be sure the mine workers do in fact go back to Brazil.

One of the regulations put in place is that of the *laissez passers*. This means that a person selling gold to the *Compte d'or* has to be able to indicate where the minerals are coming from, and show his or her license to mine on that concession. Illegal miners, who do not have such papers, are forced to sell their gold elsewhere. Suriname, where no questions are asked, is the most logical option.

The extent to which this regulation is effectively applied is questionable. At the gold buying house in the French Guianese interior town of Maripasoela, for example, anyone can sell gold without need for identification or submission of proof of legality⁶⁴. An inhabitant from Maripasoela added that especially when one is acquainted, no reports need to be filled in. According to Romain Taravella, the WWF Guianas Sustainable Natural Resources Management Project Officer in French Guiana, this system is legally in place throughout France, yet with the exception of the overseas department of *La Guyane*. According to his information, gold miners are able to sell without showing proof of legality. An international mining expert mentioned that the system is legally in place, but far from corruption proof. It even leads to uncontrolled trade with fake *laissez passers*, which are only issued to persons with a mining title⁶⁵.

Another action to hinder the access of illegal Brazilians to legal gold buyers in Cayenne consists of setting up road blocks on the road between St. Laurent and Cayenne. Because there is no

⁶³ <http://www.guardian.co.uk/environment/2007/dec/17/pollution.mining>

⁶⁴ Various gold miners and other workers in the gold fields told us that they sometimes sell at Maripasoela, and that no ID or other documentation is being asked.

⁶⁵ Michael Priester, Project Consult GmbH, March 2010

gold buying house in the border town of St. Laurent, all miners without French papers or visa working in the Western part of French Guiana are forced to sell their gold in Suriname. For miners in the Maripasoela area, traveling through Tabiki local airport to Paramaribo is the easiest way to an urban center without ID or passport checks. An additional benefit of selling in Suriname is that mining supplies (food, equipment, fuel) are cheaper in Suriname, which makes the trip to Suriname even more worthwhile.

Legal miners, on the other hand, cannot sell (all) their gold abroad because they have to be able to demonstrate what they have done with the gold mined on their concession. Hence at least a share of this gold needs to be sold to legal dealers, which will provide a receipt.

Control of the border between Suriname and French Guiana falls under the responsibility of the French *gendarmerie* and the Suriname police. Yet the border is so extensive that even their regular presence on the river cannot prevent the crossing of people and goods out of their sight. People with gold are seldom caught. The Suriname police holds patrols on the river every two days. During these patrols the police checks goods and trafficking. A consulted police officer at Albina reported that someone caught with a large supply of gold (jewelry or unprocessed gold) would be taken to the bureau for questioning as he/she may be involved in an economic crime. Yet in the past 1 ½ years, that has not happened.

A customs officer at Albina, on the other hand, said that he and his colleagues do not ask persons crossing the border with large and abundant jewelry about the origin of that jewelry. Even if they wanted to stop gold smuggle, this is virtually impossible with three staff members to guard the entire Eastern border from Galibi in the North to the Wayana territories in the South. Because the customs officers have to be present at the ferry dock to control the papers of people departing to and arriving from French Guiana, there is hardly any time to control the small informal taxi-boats that are continuously crossing the river. Only a few times a year, the customs officers will actively control on the river.

Gold transport from Guyana to Suriname

The Guyanese law prohibits the exportation of raw gold without the appropriate license⁶⁶. Yet according to different sources, Guyanese gold frequently finds its way to Suriname. There are three main reasons for miners in Guyana to sell their gold in Suriname:

1. *Better price.* In Guayana, gold miners and other workers in the mining areas pay a royalty of 5% of the value of the gold (after assay) plus a 2% compulsory tax. These fees (5% and 2%) are paid when the miner sells his gold to the licensed buyer in Guyana. By comparison, Suriname royalties are only 1 percent and hence the price fetched for gold in Suriname is higher.
2. *No gold tracing or other bureaucratic demands.* In Guyana, the seller of gold is obliged to state where the gold comes from and has to comply with several other legal requirements. As Vieira, WWF-Guianas officer in Guyana put it: "One cannot walk off the road and sell gold to the any dealer. There must be a clear trail with registered equipment, legal concessions and registered miners etc."⁶⁷
3. *Need for dollar or other foreign exchange.* Most buyers only pay G\$ (Guyanese dollar). So if the mining entrepreneur needs to import something he or she has to buy convertible currency against an unfavorable exchange rate. In Suriname, one may find USD, Euro, or SRD in buying houses.

Guyanese gold entrepreneurs with large amounts of gold for sale probably travel to Paramaribo to sell their product, as there are no gold buying houses in Nickerie. Miners sell small amounts directly to jewelers and goldsmiths in Nickerie, often through home delivery. When they have a specific need, local jewelers and goldsmiths also cross the border themselves to purchase gold in Guyana. According to an anonymous informant, Suriname buyers also travel to Guyana to buy gold to meet the quota established in their mandate.

In the district of Nickerie, policy makers have adopted a policy of tolerance (*gedoogbeleid*) vis-à-vis the purchase of gold from Guyanese *porknockers* (gold miners), explained the District Commissioner of Nickerie in an interview⁶⁸. After all, the goldsmiths and jewelers have to work, and without gold this is impossible. The Western Police Commander in Nickerie confirmed that there is no police control on the origin of the gold used and offered for sale by jewelers.

Controlling the Suriname-Guyana border is very difficult for both the Guyanese and the Suriname customs officers because the border, delineated by the Corantijn River, is long, densely forested, and sparsely populated. There are many small private boat landings and other

⁶⁶ R. Vieira, WWF-Guianas in Guyana

⁶⁷ Email conversation, 29 March 2010

⁶⁸ DC Shankar, District Commissioner Nickerie, 31 March 2010

natural places where small boats may dock. At the moment activities are illegal, explained the head of customs in Nickerie, smugglers use neither the Southdrain ferry nor the backtrack route⁶⁹. The backtrack route is an informal border crossing where boatmen with small boats bring passengers across. “Going backtrack” is illegal because one avoids customs, yet not actively prosecuted. The 300 to 400 people who travel daily across for family visits, shopping, and other personal affairs, are being tolerated (*gedoogd*).

Even controlling the backtrack landing is challenging without a formal post/checkpoint at the spot or vehicles in good condition⁷⁰. Moreover, as soon as backtrack boatmen spot the customs officers, they turn around. Because of the small scale of the community, customs officers are being recognized even when they wear civilian clothes. Police and military execute daily random controls of luggage at the backtrack landing. Excessive amounts of gold have never been found during such checks and in recent years, no-one has been arrested at the backtrack because of gold smuggle. At the moment, a modern, long boardwalk is being constructed at the backtrack landing, with locations for the police and customs.

The most effective way to catch gold smugglers is to control the land route, as there is only one road between Nickerie and Paramaribo. The Police hold regular road checks along this route to prevent the illegal entry of people, drugs, merchandize, money, and other valuables, including gold. The roadblocks are typically set up at Burnside, in the district of Coronie.

Traffickers and smugglers are occasionally caught at these roadblocks. In April/May 2010, for example, a Guyanese man was caught with 10 Kg of gold during a road check in Coronie. In March 2008, the police arrested three Guyanese men in the district of Saramacca, also with 10 kg gold (De Ware Tijd, March 2008). In such cases, the gold is being confiscated and handed over to the Central Bank. It is likely that a certain amount of gold manages passes these check points and is sold in Paramaribo.

Import of jewelry

Jewelers are allowed to import jewelry if they have a valid business license and the required documents for import (Nemelc, Secretary Currency Commission, pers. com 7 July 2010⁷¹). Taxes on gold imports are listed in the law on tariffs and import duties (*Wet Tarieven en Import Rechten*) and are 5 percent for unprocessed gold⁷². Duties on jewelry are 40 percent. Nationals from CARICOM member countries are exempted from these import duties on gold

⁶⁹ Dhr, Sarabdjitsingh, head Customs Office, Nickerie, 31 March 2010

⁷⁰ The customs office of Nickerie possess two vehicles, both of which were broken at the time of the interview.

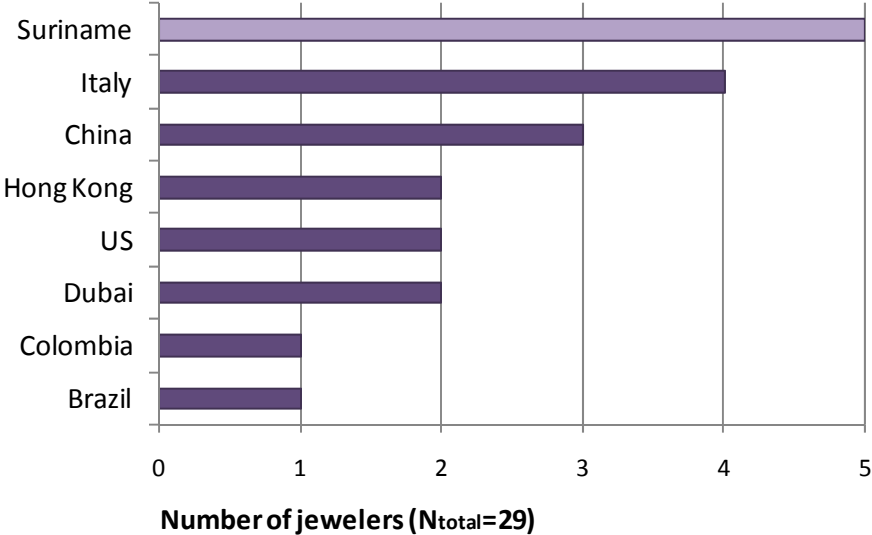
⁷¹ E-mail conversation of 7 July 2010

⁷² Mr. Sarabdjitsingh, head customs office Nickerie

(unprocessed and jewelry). In case gold is being imported from another Caricom member country (such as Guyana), one needs a Caricom certificate. The importer has to pay 10 percent sales tax (*Omzetbelasting*, OB) and 0.5 statistics duties (*statistiek recht*).

Suriname gold shops import jewelry from Italy, China, Hong Kong, Dubai, the US, Colombia, and Brazil (Figure 7.1). Italy remains the undisputed leader of fashionable and high quality jewelry design, and is the most popular country for import of jewelry. A reason to buy from Hong Kong is that golden jewelry from that country is usually 24K, which some customers prefer. Like Hong Kong, also other jewelry exporting countries tend to specialize in gold of a certain fineness (Karat) (Table 7.1). Box 6 explains the relation between karat and fineness of gold.

Table 7.1 Origin of ready-made and imported jewelry sold in Suriname jewelers shops (N=29)



A few large jewelers are responsible for most imports; including Johnny Chee, Dennis Lee, Chou Wing Wah, and Man Wah. Smaller jewelers may buy ready-made jewelry from the large Suriname gold entrepreneurs such as Johnny Chee. One jeweler imports gold for soldering from the Netherlands. By importing this gold he saves time because it is a lot of work to fabricate the alloy for soldering (with cadmium, silver, etc).

Table 7.1 *Fineness of gold jewelry from countries that export to Suriname*

Region	Typical caratage
Arabic countries, Far East (China, Hong Kong, Taiwan)	Majority is 24 carat "Chuk Kam" (99.0% min) ⁷³ New trend is "K-gold"; 18 carat gold with Italian inspired design
Arabic countries, Bangladesh, India, Pakistan & Sri Lanka	22 carat (91.6%)
Europe - Southern / Mediterranean, particularly Italy	18 carat (725.0%)
Europe – Northern	8*-18 carat (33.3 - 75.0%)
Saudi Arabia and the Gulf region, incl. Dubai	Traditionally 21 carat, but nowadays gold of 18, 21, 22 and 24 carat may be purchased.
USA	18, 14* or 10* carat (for Suriname, mostly 18)

* Anything below 18 carat is legally not considered gold

⁷³ Chuk Kam (足金) in Cantonese means pure gold, literally "exact gold". It is defined as 99.0% gold minimum with a 1.0% negative tolerance allowed. The quality of gold is guaranteed with a "Certificate of Gold" upon purchases in Hong Kong and Macau.

Box 6 Karat (Carat) and gold purity

The gold content of alloys is measured in karats (k). Pure gold is designated as 24k. The karat (K) is a measure of the purity of gold alloys. In Great Britain, the spelling carat is used. As a measure of purity, one karat is $\frac{1}{24}$ purity by mass, or in formula:

$$K = 24 * (M_g / M_m)$$

Where: K = Karat rating of the material
M_g is the mass of pure gold or platinum in the material, and
M_m is the total mass of the material

Therefore 24-karat gold is fine (99.9999% Au), 18-karat gold is 75% gold, 12-karat gold is 50% gold, and so forth. The karat system is increasingly being complemented or superseded by the millesimal fineness system in which the purity of precious metals is denoted by parts per thousand of pure metal in the alloy (Annex 2).

7.2 Gold leaving Suriname

Gold may only be taken out of Suriname with an export license. In practice customs officers allow travelers to take personal jewelry with them. There is no legally determined amount of jewelry that may be taken abroad without a license. According to a staff member of the currency committee, which supervises gold exports, the quantity of personal golden jewelry that is carried has to be “kept within bounds” (Nemelc, pers. Com. 9 April 2010). Yet what “within bounds” exactly means, explained a customs officer, depends largely on the particular officer at work that day. Unprocessed gold can, by law, never be taken abroad without the appropriate license.

Legal exports

After (partial) liberalization of the gold market in 2003, gold exports showed a steep rise (Figure 4.1). Today, local gold experts believe that most produced gold is registered and legally leaves the country. A listing of the total amount of gold exported by licensed exporters shows that in the past seven years for which data are available, gold exports have increased both in volume and in value (Table 7.2). In 2009, 16,5 tons of gold mined by small-scale and medium scale miners, with a value of 487 million dollar, were sent abroad.

Table 7.2 Gold exports in volume and USD value, 2002 - 2009 (excluding lam Gold)

Year	Weight (small-scale only) (GR.)	Value (small-scale only) (US\$)
2002	1,702,239.23	16,227,740.00
2003	11,710,651.50	128,161,150.40
2004	12,705,375.30	160,720,434.27
2005	11,655,156.50	159,205,548.74
2006	11,955,666.51	215,408,036.30
2007	13,833,515.90	301,454,465.27
2008	16,222,707.71	425,154,246.19
2009	16,486,613.01	486,676,796.75

Source: Currency Commission, 9 July 2010

Most of this gold goes to Dubai, which hosts the largest gold trading center in the world: the Dubai Multi Commodities Centre (DMCC). The main buyer in Dubai is the Kaloti refinery. One of the exporters sells its gold to a trader in Antwerp. This Antwerp gold firm does not have its own refinery and probably its gold is refined in Switzerland. This exporter used to work with Republic Metal Corp (\pm 8 years ago) in the US, but has stopped this collaboration. Another company that was mentioned as specializing in gold refining is the German firm Hafner⁷⁴. This company is specialized in the manufacture of alloys for solders and semi-finished products for soldering, dentistry, and technical applications.

As mentioned earlier, lam Gold has a separate agreement with the Suriname government, which allows it to export its gold itself, and without passing by the Central Bank. All this gold goes to Canada. When we add the amounts of gold mined by small-scale miners and the gold produced by lam Gold, we get at 28.5 tons of gold that were mined and exported in 2009. Between 2003 and 2009, the total volume of exported gold increased annually with on average

⁷⁴ For the home page of Hafner, see: <http://www.c-hafner.de/en/default.shtml>

18.7 percent. We find for all years that the largest share of exported gold has been produced by small-scale gold miners.

Table 7.3 Total gold exports from Suriname

Year	Export small-scale miners	Export lam Gold	Total gold exports	% official gold production by small-scale miners
	KG	Kg	kg	%
2002	1,702.24		1,702.24	100
2003	11,710.65		11,710.65	100
2004	12,705.38		12,705.38	100
2005	11,655.16	10917.32	22,572.48	51.6
2006	11,955.67	9455.458	21,411.13	55.8
2007	13,833.52	7962.491	21,796.01	63.5
2008	16,222.71	10264.15	26,486.86	61.2
2009	16,486.61	12099.25	28,585.86	57.7

Unlicensed gold transport out of Suriname

Even though the largest share of gold mined in Suriname leaves the country legally, it is possible that smaller amounts of jewelry and unprocessed gold are taken illicitly out of the country.

Recently a Brazilian was arrested at Zanderije international airport with a large amount of jewelry. In the mentioned case, the customs officers sent the Brazilian to the currency commission. This commission explained the regulations concerning the export of gold to the Brazilian. The staff member of the currency commission who provided this information could not tell whether the gold was taken into custody by the customs office⁷⁵.

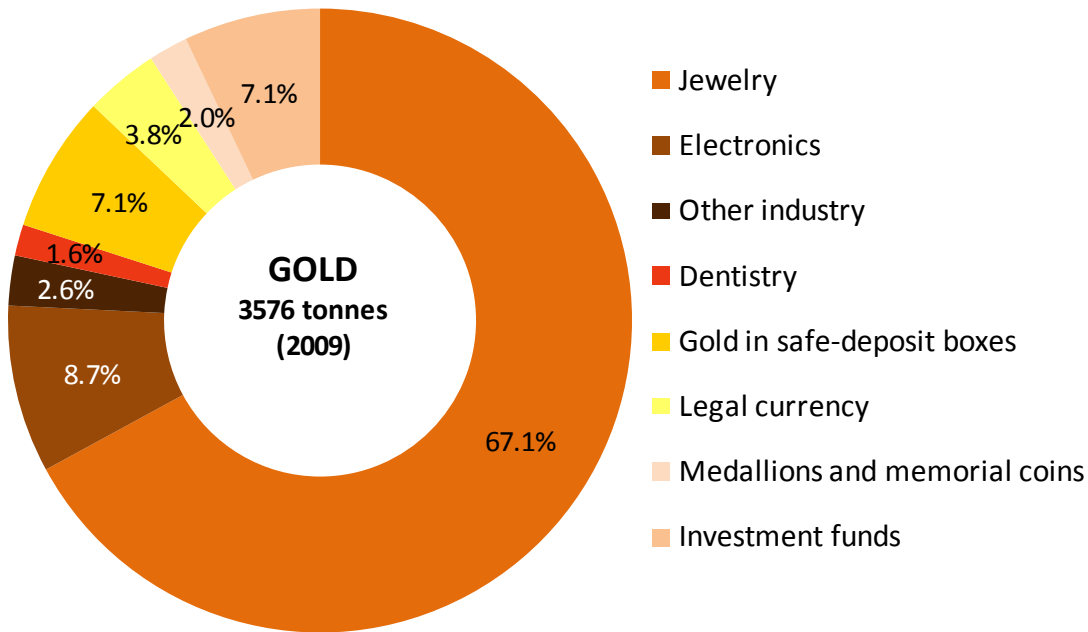
Given the large number of Brazilians working in the small-scale gold mining business, we expect that most gold that illicitly leaves the country is carried by Brazilians, in unprocessed form and as jewelry. In addition, it is likely that some gold leaves the country unrecorded to the Netherlands and the United States, among others with tourists as personal jewelry. We have no evidence of such transports though, and it is impossible to say how much gold leaves the country this way.

⁷⁵ Ms. Nemelec, Secretary of the Currency Commission 9 April 2010

Where does the gold finally end up?

Because trade routes are not clear cut and Suriname gold is mixed with gold from many other countries along the way, it is impossible to track the final destination of locally produced gold. Worldwide, most gold is being turned into jewelry. In 2009, jewelry accounted for a total of 2398.7 tons of gold (Figure 7.2).

Figure 7.2. Destination of gold worldwide, 2009



Source: National Geographic, January 2009

7.3 Gold cycles within Suriname

Selling gold from the gold fields

Gold miners and other entrepreneurs in the mining fields mostly sell their gold to the legal gold buyers. These buyers pay the world market prices of gold, minus 3 to 4 percent for royalty (1%) and overhead costs. Large miners and concessionaries typically sell to one specific buyer/exporter with whom they have established a trade relation. Reasons to select a specific buyer include: personal/family relations, good price, trustworthiness, and good service. One concessionary added as an additional benefit that he has a personal account with the buyer and can borrow fast money under favorable financial conditions⁷⁶.

⁷⁶ Personal communication, 8 July 2010

Few gold miners sell their gold in Albina, because the gold buying house in Albina pays about 5% less for the gold than the various buyers in Paramaribo. Moreover, the Transamerica gold buying house in Albina (Papatam) only pays in Suriname dollars, while the gold buyers in Paramaribo pay upon request in USD or Euro. Those who sell their gold in Albina are mostly gold miners who only stay for a day or two at the coast, need to buy their supplies, and are in too much of a hurry to travel all the way to Paramaribo.

Gold sold by miners and concessionaries is partially cleaned, but further cleaning (up to 92 to 93 percent) occurs at the buyer's desk. We do not know of any miners or concessionaries who purify their own gold in the city. The longer gold is kept in one's possession, explained concessionary and miner Naarendorp⁷⁷, the larger the risks, and hence the gold is immediately transported from the concession to the buyer.

Buying gold for jewelry

By law, jewelers are obliged to purchase their gold from the CBvS⁷⁸. Gold can be bought on Wednesday mornings (9-12 am) in multiples of 50 g., with a maximum weight of 200 g./month⁷⁹. The gold price for Wednesday 9 June 2010 was set at Srd 12.777,76 for a 100 grams of gold. Jewelers wishing to buy gold from the CBvS need to register with the Bank. To enter this procedure, prove of inscription with the Chamber of Commerce (KKF) is required. This KKF form and an ID card must be shown when purchasing gold. Fourteen gold- and silversmiths and 51 gold shops comply with this requirement.

Our survey results suggest that only one out of every five goldsmiths (19.2%; Figure 7.3) buys from the CBvS. Even this figure may be an overestimate because it is possible that some goldsmiths who are aware of the law in this matter gave the socially desirable answer. One reason to not buy from the CBvS is the high price of its gold. Almost half (44.8%) of jewelers were of the opinion that CBvS gold was more expensive than gold from other sources. One out of every six jewelers (17.2%) said that this was not the case, and the remaining 37.9 percent did not know because they never buy at the CBvS. One jeweler estimated the difference at 10 to 15 percent.

According to our own calculations, the price difference between gold offered for sale by the CBvS and the world market price is about 13.5 percent. On May 12, 2010, jewelers paid 46.13 USD/g Au at the CBvS (including administrative costs). The gold price on the London Metal Exchange (LME) was 1,241.25 USD/oz, which corresponds with USD 39.91/g Au. On that same

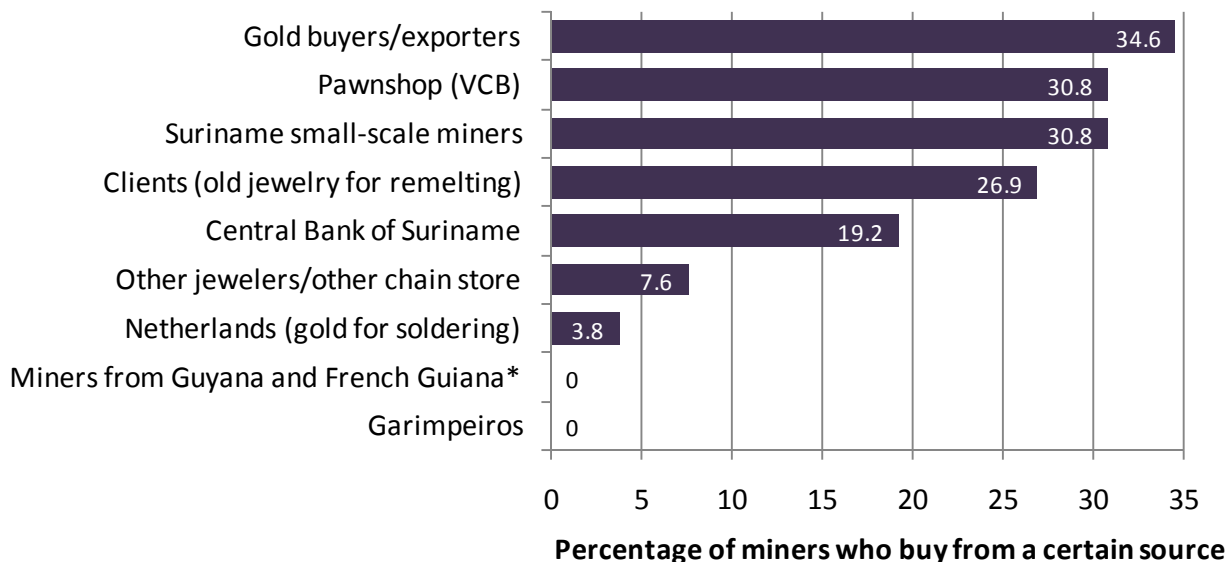
⁷⁷ Naarendorp is director of Nana Resources, interview 8 July 2010

⁷⁸ In Nickerie, CBvS money transactions are being executed by De Surinaamse Bank (DSB), however, this office is not authorized to perform gold transactions in name of the CBvS.

⁷⁹ Ms. Densville, Central Bank gold desk. pers. com May 12 2010

day, jewelers were able to purchase gold from gold exporter Cactus for 36.50 USD/g Au. Part of this difference may be explained by the fact that the CBvS and the LME price quote concerns 24K gold, and that from the buyer is typically about 22K. Still, also compensating for the difference in purity, CBvS gold is much more expensive than gold bought from other sources.

Figure 7.3 Where do goldsmiths buy their gold? (N=29)



Yet more than the price, the bureaucratic procedures constitute a main reason for not buying from the CBvS (Table 7.4). Furthermore, goldsmiths from Nickerie said it is too much of a bother to travel all the way to Paramaribo to buy gold⁸⁰. Notwithstanding, these same goldsmiths did not mind traveling to Paramaribo to buy gold at the pawnshop or from a Chinese jeweler. Reasons to buy from the CBvS were the fact that it is a legal requirement (4 persons; 16%⁸¹) and that the Bank is trustworthy (2 persons) (Table 7.4). Many goldsmiths are poorly informed about the function of the CBvS in selling gold. They commented that the CBvS is no longer selling gold and that the CBvS gold contains too many impurities. The authorities do not (regularly) check where jewelers obtain their gold⁸².

⁸⁰ At the time of the research there were not any active gold smiths in Moengo and Albina. There are goldsmiths in satellite towns of Paramaribo (e.g. Lelydorp) yet for them the trip to Paramaribo would not be too much of a hassle.

⁸¹ Excluding three gold shops that are only selling readymade jewelry and one goldsmith who did not answer the question.

⁸² Mr. Mc. Lean, Head of the Gold Laboratory of the Central bank of Suriname.

Table 7.4 Motivations to buy from specific selling points

Source	Reasons to buy from this source	Reasons not to buy
Central bank of Suriname	<ul style="list-style-type: none"> • Only place from where gold may legally be bought • Trustworthy • Easier reporting to the tax office 	<ul style="list-style-type: none"> • The process is lengthy and bureaucratic (Sur: “<i>langa-bere</i>”)/ a hassle • The Central Bank is far away (from Nickerie) • Gold from the Central Bank is more expensive • The CBvS is not selling anymore⁸³ /does not want to sell • Person is not registered at the Chamber of Commerce/does not have a license
Small-scale gold miners working in Suriname	<ul style="list-style-type: none"> • Can buy small amounts • Flexibility; no bureaucratic hassle • Time efficient • Good price 	<ul style="list-style-type: none"> • Gold contains impurities; you don’t know what you get • Person does not want to burn gold in his own workshop because of the mercury fumes • Security; fear for robbery
Gold buying houses	<ul style="list-style-type: none"> • The price is better (than of the Central Bank) • They are trustworthy • The gold is clean (no mercury) • Good service; good quality gold can be bought at any time, and at least one even offers home delivery • They are flexible; the shop owner can send a representative to buy whereas with the Central Bank the owner has to go in person. 	
Gold miners from Guyana	<ul style="list-style-type: none"> • Easy, good service, including home delivery (for jewelers in Nickerie) 	
Other jewelers	<ul style="list-style-type: none"> • Good price 	
Pawn shop (VCB bank)	<ul style="list-style-type: none"> • The gold is ready to work with (14K or 18K); it only needs to be melted down. • Good price 	
Private sources/ Customers	<ul style="list-style-type: none"> • Good price • Special requests for remelting of old pieces • Is specialized in remelting and repairs 	

⁸³ One person mentioned the CBvS stopped selling gold in 2005/6

The most important suppliers of gold to jewelers are the gold buyers/exporters (Figure 7.3). Jewelers like to buy gold in these places because they are trustworthy and offer good service. Moreover, the gold is already burned so mercury and most other impurities have been removed (Table 7.4). The buyers are also flexible and there is little or no bureaucratic hassle involved. There is inconsistency among the sources in whether jewelers are legally allowed to purchase gold from gold buyers. According to the consulted juridical expert, “natural persons” are allowed to buy gold from licensed gold buyers. According to the law, however, the Central Bank is the only institution that is authorized to sell unprocessed gold (See Chapter 6).

When gold is sold by gold miners and other entrepreneurs in the mining areas to buying houses the gold is melted to remove impurities. The operators of this shop melt the gold in front of the miners. The difference in weight before and after the melting is mainly attributed to mercury that is evaporated. During this process residual mercury, which usually accounts for about 3 to 5 % of the weight is released (Surimerc 2008). After assaying locally, Suriname gold typically is 92 to 93 percent pure. The equipment and knowhow to purify gold up to 24 K (99.9999% Au) is not present in Suriname.

The second and third most mentioned places to obtain gold are the pawnshop and small-scale gold miners. Buying from these sources is particularly attractive for the good price. In addition, purchasing from these sources is flexible and not restricted by bureaucratic regulations.

Purchasing gold from gold buyers is not allowed by law, yet tolerated (*gedoogd*) and not actively prosecuted. In fact, a staff member from the Currency Commission stated in an interview that jewelers were allowed to buy from gold miners because “they need it for their business”⁸⁴. Drs. Shankar, the district commissioner of Nickerie, made a similar comment when referring to the informal sale of gold by Guyanese miners to jewelers in Nickerie. “Obviously”, he said, “professionals [goldsmiths and jewelers, ed.] cannot continue their work without gold”, and hence the district government does not actively track and punish such activities⁸⁵. These statements contradict both the law (Chapter 6) and formal gold market procedures as explained by Mr. Wolfram, a senior official at the Central Bank⁸⁶.

Few goldsmiths regularly buy from gold miners. One goldsmith said he buys weekly from miners and another respondent buys a few times a month. Yet most goldsmiths who purchase gold from miners only do so just ‘a few times a year’ (n=6) or ‘seldom’ (n=3). For example, a goldsmith may call a befriended miner when he needs gold to fabricate a specific order.

⁸⁴ Ms. Nemelec, Currency Commission, 9 April 2010

⁸⁵ Mr. Shankar, District Commissioner Nickerie, 31 March 2010

⁸⁶ Mr. Wolfram, Central Bank of Suriname, 27 May 2010

When goldsmiths buy from gold miners they often call upon a few trusted acquaintances for reasons of security. One goldsmith said he did not want to bring just anybody to his workshop because he is working from the home where he is living with his family. He was afraid that miners might come back for robbery if they suspect that he is keeping money and gold at home.

The most important reason not to buy from small-scale gold miners, however, is that their gold contains impurities –including mercury- and has to be melted and cleaned. Not all goldsmiths have adequate melting facilities or are willing to burn gold in their workshop. When burning in a backroom of the shop with poor ventilation, mercury vapor remains in the room, thus threatening the health of the goldsmith. Awareness of the danger of mercury vapors was boosted after the publication of an article by two American scientists on mercury vapors in the air around gold buying centers and goldsmiths shops (Peplow and Augustine 2006; Box 3). This study found that: “The Hg levels in the air in the Centrum of Paramaribo are high (mean 551 ng m⁻³, range 0-37,790 ng m⁻³) compared to the average concentrations of Hg in the ambient air in the Southern hemisphere” (Peplow and Augustine 2005). Not burning gold that arrives from the gold fields is not an option because “you don’t know what you get”.

One of the jewelers from Nickerie said he buys from Chinese jewelers in Paramaribo because they give a better price than the Central Bank. Another jeweler mentioned that he does not buy gold from gold miners but makes jewelry for them if they come with their own gold. In addition, various jewelers re-melt jewelry that is not sold to fabricate new pieces (recycling).

Preparing gold for export

We argued above that most Suriname gold is sold to legal buyers. From these buyers the gold goes to the exporter, which in the majority of cases is one and the same person. The exporter prepares the gold for export, taking the following steps:

- The exporter melts the gold that is purchased into bars, numbers the bars, and prepares the collecting sheets (*verzamelstaten*)
- The exporter takes the gold to the CBvS
- In the CBvS gold lab, a sample of each bar is taken for assaying
- The gold is weighted at the CBvS, under supervision of a customs officer
- The exporter pays 1% royalty to the Central Bank
- The gold bars are packaged in chests, which are sealed by the customs officer
- The exporter prepares the paperwork for export, including a specific gold export form (*G-uitvoer*).

- The exporter takes the G-export to the Currency Commission, which signs the paper
- Under supervision of the customs officers, the chests are taken to Zanderije airport, and sent away by value transport (only KLM).

7.4 Storages of Suriname gold; in Suriname and abroad

Gold is no longer an essential asset in Suriname's monetary politics. Since the large gold swap in the year 2000, the gold supply has not been brought back to levels of prior to 2000. Today, monetary reserves primarily consist of convertible currency. These currencies are mostly obtained through royalty and tax payments by the large mining companies (State oil, lam gold. Suralco; USD) and to a lesser extend consist of treaty payments (*verdragsmiddelen*; Euro) from the Netherlands. At present there is no active policy to either increase (by buying gold) or decrease (by selling gold) the amount or share of gold in the monetary reserve.

In addition to some gold that continues to be part of the monetary reserve, the Suriname state owns gold that is kept in consignment at the Royal Canadian Mint. This means that the gold is placed in a locker of the Suriname state at the Royal Canadian Mint, and remains at the disposal of Suriname. The benefit of this construction is that international payments may be conducted by shifting gold from one locker to another in a safe manner.

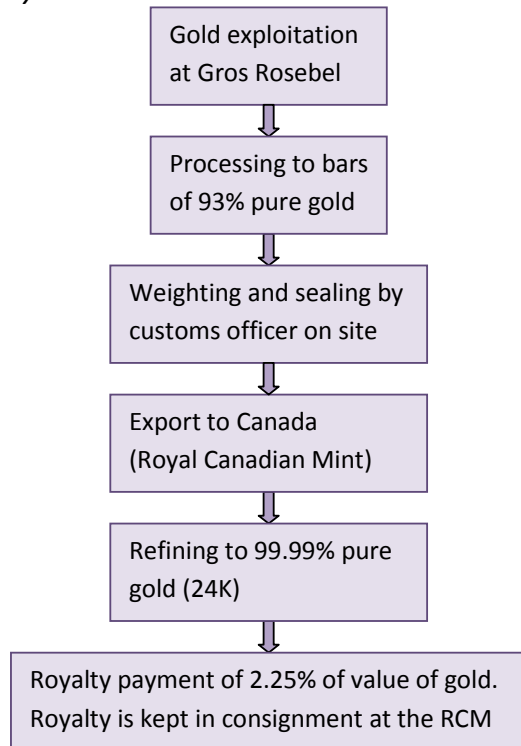
8 Conclusions

In the previous chapters we presented an analysis of the gold marketing chain in Suriname. The study was commissioned in support of WWF efforts to seek out options for, and challenges to, the development and marketing of sustainable or clean gold. In the conclusions we reflect on the extent to which the current realities of the Suriname gold market facilitate, allow for, or obstruct the development of a market for green Suriname gold.

8.1 Two Marketing Chains

Because of the different regulations and conditions for small-scale gold miners and the large-scale mining sector, there are actually two separate marketing chains of gold in Suriname.

Figure 8.1 Marketing chain of gold mined by Iam Gold



Gold mined by Iam Gold, the one large-scale gold mining company that is actively mining in Suriname, enters the market in a straightforward way (Figure 8.1). The route of gold and the roles of the different actors are defined by the Mineral Agreement between the mining company and the Ministries of Natural Resources and Finance.

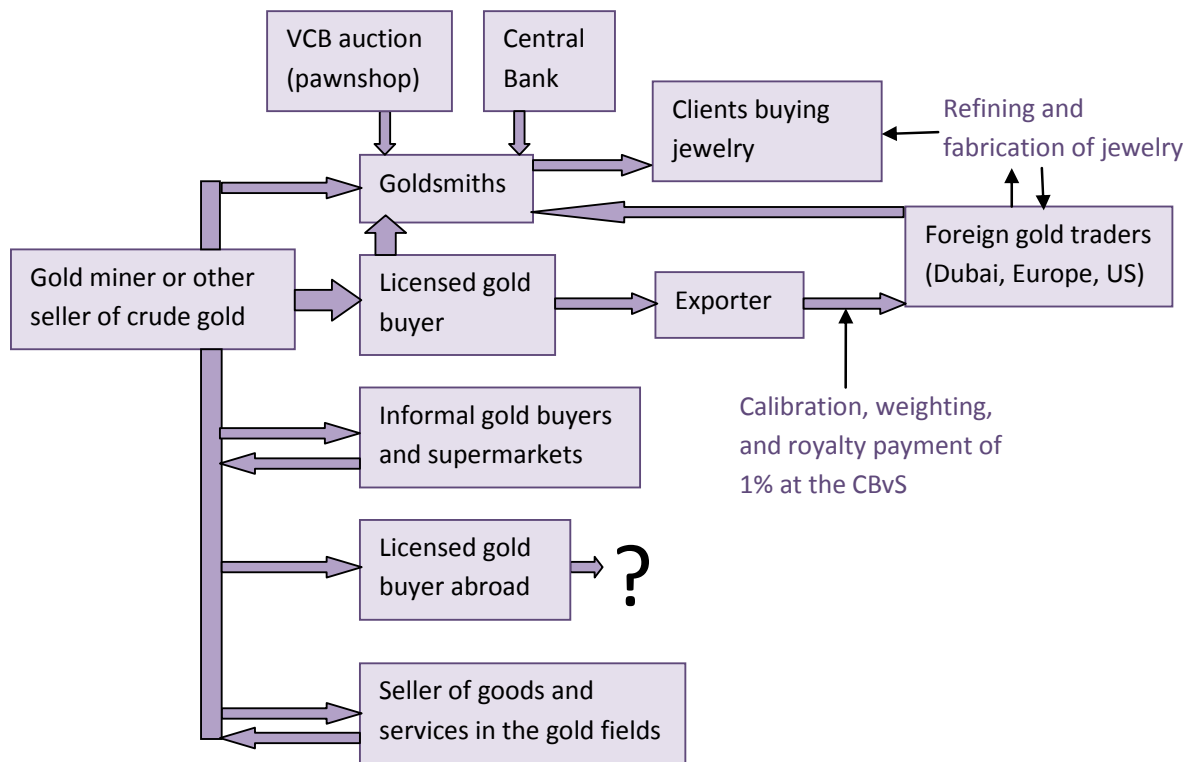
After exploration the gold is melted into bars. Customs procedures take place on the company site, and thereafter the sealed chests are exported to the Royal Canadian Mint where it is refined to 99.99%. The CBvS and the Currency Commission are informed about the weight, fineness, and value of exported gold through monthly reports.

Tracing what happens with the gold after it has been stored at the RCM is difficult. This institution sells gold on behalf of its clients. In this process, gold from different countries merges and enters the international gold market

The marketing chain of gold mined by small-scale gold miners is more complex because in this case, the gold may follow alternative routes. Stakeholders are subject to different regulations and perform different actions in different stages of trading routes (Figure 8.2). Gold miners and others working in the gold business may sell their gold to licensed buyers, goldsmiths, or others. In the end though, most gold ends up with the licensed buyers. These buyers sell their gold to a

few selected foreign clients, among whom Kaloti in Dubai may be the most prominent. Again, what happens with the gold after it ends up with the international gold trader is impossible to say. In the large refineries of Kaloti, gold of different gold producing countries is melted together and at least a share is made into jewelry. After all, gold is gold, and few customers care about the origin of their gold.

Figure 8.2 Marketing chain of gold mined by small-scale gold miners



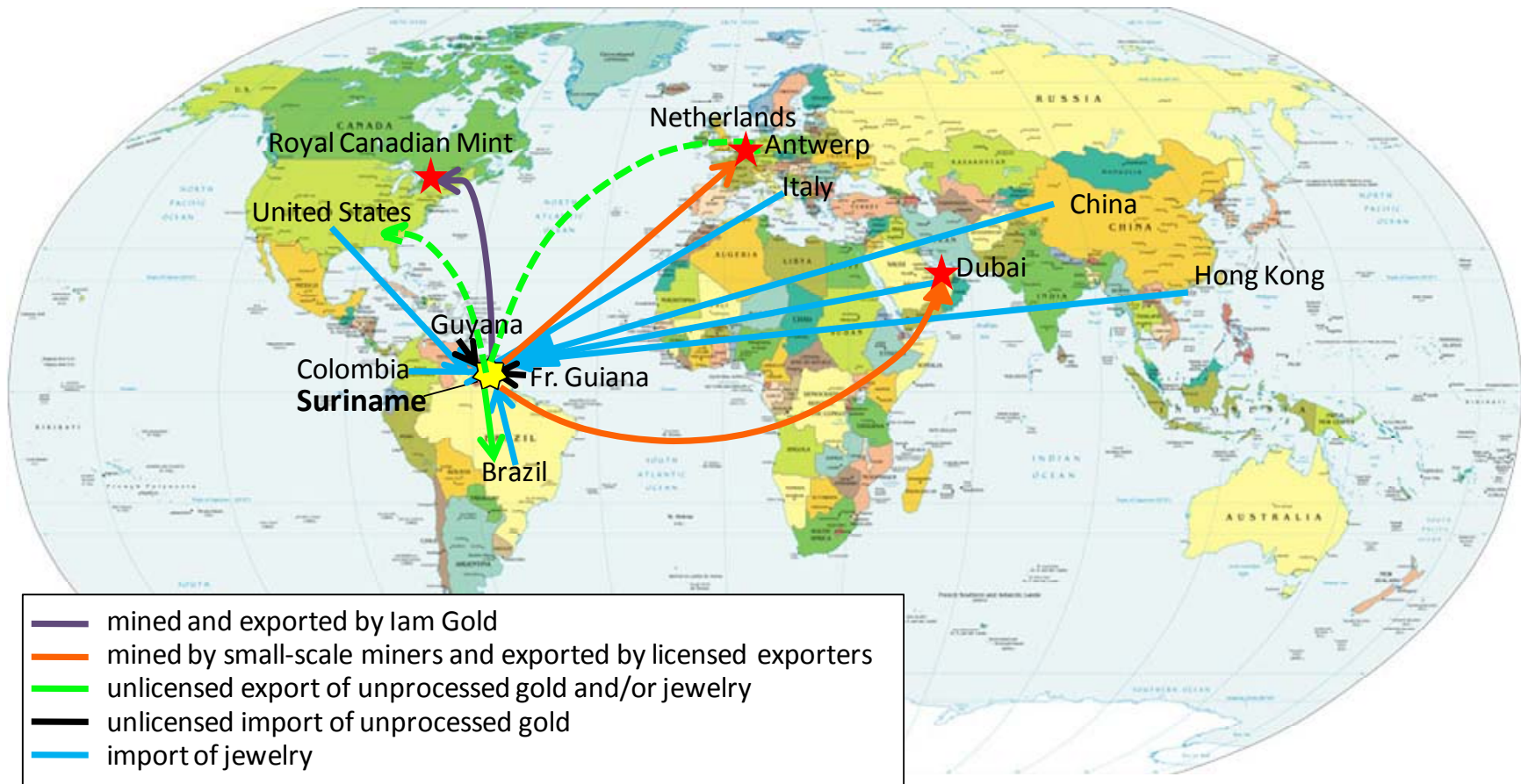
8.2 International routes of gold into and out of Suriname

Figure 8.3 shows the various routes of gold into and out of Suriname. There only a few places where Suriname gold is exported to (most notably Dubai and the Royal Canadian Mint in Canada). A small -and unrecorded- portion of gold stays in Suriname. This gold is primarily used in the jewelry business.

We estimate that between half and three quarters of golden jewelry sold in Suriname stores is made of Suriname gold. Goldsmiths buy this gold from:

- The CBvS, which sells Suriname gold that has been abroad for refinement
- Suriname gold buyers
- Suriname gold miners and other entrepreneurs in the small-scale mining business

Figure 8.3 International routes of gold into and out of Suriname



The remaining golden jewelry is imported prefabricates, including:

- Machine-made jewelry from massive foreign gold trade centers such as Dubai, China, and Hong Kong,
- Jewelry from traditional fine jewelry producing countries such as Italy.

Figure 8.3 shows that the number of countries that export golden jewelry to Suriname and from where unprocessed gold is smuggled to Suriname, is much higher than the number of countries that receive (unprocessed) Suriname gold. On the other hand, the weight and value of gold that leaves Suriname is much higher than the weight and value of gold (mostly jewelry) entering Suriname.

It is impossible to trace the origin of gold that is bought from pawnshops and customers to be re-melted into new pieces.

8.3 A laissez faire policy with regard to the gold market

Market regulation and control thereof is of uttermost importance to the marketing of a green gold product. After all, the client must have a high degree of certainty that the certified gold comes indeed from the green mines.

In terms of the regulatory framework we may conclude that in some areas, current laws are outdated or ambiguous about the rights and obligations of the different stakeholders. For example, it is unclear whether gold buyers may or may not sell gold to goldsmiths. In other cases, laws exist but are not properly known to the people concerned. In various instances, the letter of the law concurs neither with what people believe that the law says nor with what happens in practice.

Regulation and control of the gold market are the responsibility of the State. Gold market regulations are in some instances strictly followed (e.g. in regulation of legal gold exporters) yet in other cases liberally applied. One reason for the lack of control on, for example, gold smuggle to Suriname is a lack of human and capital resources. Another reason for limited enforcement of certain regulations is a laissez faire policy maintained by the responsible officials. This situation leads to ambiguity about what is and what is not a penal act, and to arbitrary police actions against perpetrators. For example, at present the police does not control from where goldsmiths obtain their gold. It is possible, however, that tomorrow a police chief decides that such control must take place, and subsequently fines goldsmiths who buy gold from miners.

Even though illicit gold trade does not take place on a large scale, informal and unregistered gold trade do occur and may interfere with efforts to develop certified gold.

8.4 Challenges and opportunities to the development of a market for green gold

In today's globalized world, commodities are -physically and virtually- traded around the clock and across the globe. This makes tracing the routes of gold mined by small-scale miners to the final client virtually impossible. The same is truth for tracing the origin of the gold from which imported jewelry is made. Most gold mined by small-scale miners ends up in the large melting pots of Dubai. In this huge gold trading centre, Suriname gold is mixed with gold from other source countries and subsequently -mostly in the form of jewelry- distributed across the world. Also the gold mined by Iam Gold, which is first stored at the Royal Canadian Mint, ultimately finds its way to many different customers.

The development of green gold rests upon the idea that the gold mined at a selected site where miners use more sustainable methods, can be kept separate from gold from other sites. In other words, a closed circuit from the mine to the client must be created. In the Suriname context, this is difficult for various reasons:

1. Gold is gold. It is impossible to say whether gold –once purified- comes from one region or another. Hence, as shown by the Kimberly process, there will always be corrupting people trying to sell regular gold as certified gold.
2. The development of a closed circuit would require the licensing of a gold buyer/exporter specialized in green gold. At present, only a few selected licensed companies are allowed to buy and export gold. If the green gold is sold to the regular buyer, it will be melted and mingled with gold from other sites.
3. Alternatively, one of the existing buyers/exporters could be convinced to become a green gold business partner. In that case this company would have to make sure that the green gold is kept separate from other gold throughout the processes of purification, storage, and preparation for export. Unless a truly dedicated gold buyer is involved, this option is fraud sensitive because it will be challenging to mingle some of the regular gold with -higher priced- green gold.
4. Suriname is a country with extremely open international and domestic borders. Except in the case of the large-scale mine at Gross Rosebel, mine sites are more or less open access and any person can enter a mine site to seek for work, sell merchandise, or perform other businesses. It will be difficult to separate the 'green miners' from others in the field. This means any miner may enter the 'green' mining area and claim to have worked there with certified methods. Moreover, green miners may be enticed to buy gold from other miners to sell it –against a higher price- as green gold.
5. Due to limited enforcement of regulations regarding the gold market, the gold trade is not entirely transparent. Corrupting actors may abuse this situation by trying to sell regular (foreign or Suriname) gold as Suriname green gold.

Another challenge is to interest customers in green gold, and to convince them to pay more for a certified product. We have not conducted an extensive survey among clients of Suriname jewelers and goldsmiths and hence we cannot say much about customer preferences. Based on our experience in Suriname and informal conversations with Surinamers, however, we suspect that few Suriname customers are willing to pay more for their gold if it is mined with more sustainable methods. Especially with the current elevated price of gold and depreciation of the Suriname dollar, it is not likely that the general public in Suriname is prepared to invest in green gold.

As is the case with green gold products from countries such as Colombia, the main market for green gold products is probably Europe. Green gold jewelry fits nicely within the elevated interests in organic and green produce in many European countries. Given existing trade and personal relations, the Netherlands may be the most logical site for a pilot project to bring certified gold on the market. In Europe, the Netherlands is among the countries where awareness of, and interests in, green produce is high. An extensive survey among Dutch owners of golden jewelry and clients of jewelry shops is recommended to obtain a better understanding of the options for this niche market.

Both in Suriname and abroad, it is necessary to raise customer awareness about green gold. Even though many Surinamers have heard about mercury contamination and express concern about the 'destruction of the interior by Brazilians', when buying new earrings these concerns do not surface. The young man seeking out a present for his girlfriend will consider whether the price fits his wallet, but does not worry about the price paid by the environment. Customers, goldsmiths, and jewelers must be made aware of the real price of gold, as well as of their role and responsibility in stimulating the use of cleaner mining methods. WWF-Guianas can contribute to awareness rising through media campaigns and workshops with goldsmiths.

Finally, WWF-Guianas is not alone in its interests in the development of green gold. It is recommended that the organization identifies, shares information with, and collaborates with other organizations working with this subject. In Colombia, the NGO AMICHOCO has been working for several years on the development and marketing of *oro verde* (green gold). The NGO Solidaridad, initiator and driving force behind Fair Trade, is currently researching options for the marketing of sustainable gold. This organization has valuable experience in the development of people-friendly and environment-friendly marketing chains for agricultural produce, including coffee, tea, palm oil, and cacao.

It is hoped that, in collaboration with partners, WWF-Guianas will succeed in developing and marketing gold that is mined with respect for the miners, their families, and the natural environment.

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Annexes

Annex A. List of consulted persons

Interviewee name	Institution/Function	Date spoken
GOVERNMENT		
Dhr. Dorini	Central Bank of Suriname, library	24 May 2010
Dhr. Wolfram	Central Bank of Suriname	27 May 2010
Mr. Mc. Lean	Head of the Gold Laboratory of the Central bank of Suriname	
Bernard Paansa	Geology and Mining Department, Min. of Natural Resources	12 March 2010
Mevr. Neemelk	Deviezen Commissie	9 April 2010
Mr. Mursing	Douane Nieuwe Haven	24 March 2010
Mr. Sabajo	Western Police Commander (Nickerie)	31 March 2010
Mr. Sarabdjitsingh	Head customs office Nickerie	31 March 2010
Drs. Shankar	District Commissioner Nickerie	31 March 2010
Mr. Strijk	Sub-Head customs office Nickerie	31 March 2010
Customs Officer Albina	Costums office Albina	12 June 2010
Police Albina	Police Albina	12 June 2010
Commandant Metras	Gendarmerie St. Laurent	12 June 2010
Representative	DSB bank Nickerie; legal representative CBvS	31 March 2010
Ms. Nibte	Ministry of Trade and Industry (HI)	29 June 2010
DC Landburg	DC Paramaribo North representative	29 June 2010
JEWELERS / GOLDSMITHS		
Gold smith E	Gold smith	29 March 2010
Jeweler C.	Jeweler	19 April 2010
BUYERS and EXPORTERS		
Carla Isaacs	Ourominas	27 March 2010
Chin A Sen	Cactus Goudopkoop en Export NV	28 April 2010
Conrad Issa	Amazone Gold NV	19 April 2010
Nancy Chee's	Chee's Jewelry and Watches	23 April 2010
MINERS, CONCESSION HOLDERS AND OTHER GOLD ENTREPRENEURS		
Mr. H. Naarendorp	Nana Resources	8-9 July 2010
Various individuals	Antino/Benzdorp and in Paramaribo	April-June 2010
(GOLD) EXPERTS		
Mr. Tjon Sie Kie	Entrepreneur in Albina and former gold miner	12 June 2010
Ms. Caprino	Historian	12 May 2010
Rickford Vieira	WWF-Guianas officer in Guyana	29 March 2010
Romain Taravella	WWF-Guianas officer in French Guiana	various dates
Chris Healy	Suriname gold mining consultant	Various dates
Michael Priester	Project Consult GmbH, Germany	

Johan Afoichini	Inhabitant of Maripasoela	Various dates
OTHER		
Trade register	Chamber of Commerce	5 July 2010

Annex B1. WWF-Guianas endorsement letter (Dutch)



for a living planet®

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Paramaribo, Suriname

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Fax: +597 422349
www.wwfguianas.org
e-mail: wwf@wwf.sr

Geachte Meneer / Mevrouw,

WWF-Guianas is een niet gouvernementele organisatie die zich inzet voor de bescherming van de natuur en het milieu. Vanaf juni 2007 is WWF-Guiana's gestart met een project ter verbetering van het beheer en behoud van het milieu in Guyana, Suriname, en Frans Guiana. Als onderdeel van dit project werkt WWF-Guiana's aan het minimaliseren van milieuvervuiling veroorzaakt door kleinschalige goudmijnbouw.

In dit kader heeft het goudprogramma van WWF-Guiana's de consultant Marieke Heemskerk gecontracteerd om een onderzoek uit te voeren naar de goudhandel. Mevr. Heemskerk wordt hierin bijgestaan door Dhr. Paul San-A-Jong. Het doel van dit onderzoek is om vast te leggen:

- (1) Waar het goud dat in Suriname gewonnen wordt terecht komt, en via welke tussenstations**
- (2) Hoe, waar, en door wie goud Suriname binnengebracht wordt**
- (3) Hoe, waar, en door wie goud naar andere landen gebracht wordt**

Als onderdeel van dit onderzoek zullen er verschillende ondernemers (bv. juweliers) en instanties geïnterviewd worden. Wij stellen uw medewerking op prijs.

Uw persoonlijke gegevens zullen niet aan derden worden gegeven en de informatie die u ons verstrekt zal vertrouwelijk behandeld worden.

Bij voorbaat dank voor uw medewerking.

Met vriendelijke groeten,

Nathalie Emanuels

Annex B2. WWF-Guianas endorsement letter (Chinese)



尊敬的先生 / 女士,

WWF-Guyana's 是一个保护自然环境的基金会. 从 2007 年开始 WWF- Guyana's 开始进行一个在圭亚那, 苏里南和法属圭亚那的自然环境管理. 在这个项目进行当中, WWF-Guyana's 其中一个项目是避免小型的金矿开发所带来的环境污染.

为了进行 WWF- Guyana's 的项目由顾问 Marieke Heemskerk 负责研究人们进行金矿开发的工作. 协助这个研究项目的有 Paul San-A-Jong 先生负责. 研究项目目的如下:

1. 查明在苏里南开发出来的黄金的流动地点
2. 查明苏里南的黄金如何运输, 运输地点和负责运输的工作人员
3. 查明苏里南的黄金到国外的时候如何运输, 运输到达地点和负责运输的工作人员等等

在这个项目进行的期间, 将会采访多间的商店 (特别是金行等), 请多多合作 !

注: 阁下所提供的私人资料绝对保密, 请大家放心 !

在此, 本研究部门谢谢大家的合作和支持 !

A handwritten signature in blue ink, appearing to read 'Nathalie Emanuels'.

Nathalie Emanuels

STAATSBESLUIT van 15 september 1981 ter uitvoering van artikel 2, leden 1 en 2, van het "Decreet Vergunningen Bedrijven en Beroepen" (S.B. 1981 no. 145). (Besluit vergunningplichtige Bedrijven en beroepen) (S.B. 1981 no. 147), zoals het luidt na de daarin aangebrachte wijzigingen bij S.B. 1985 no. 40, S.B. 1993 no. 51.

Artikel 1¹

1. Als beroepen en bedrijven, bedoeld in artikel 2 lid 1 van het "Decreet Vergunningen Bedrijven en Beroepen", waarvan de uitoefening zonder voorafgaande schriftelijke vergunning van de Minister van Economische Zaken verboden is, worden aangewezen:
 - a. die van aannemer van bouw- en/of schilderwerken, winkelier, standhouder, bakker, barbier, schoonheidsspecialist(e) (w.o. haar- en huidverzorging), auto-monteur, reparateur van rijwielen en bromfietsen, bouwkundige, goud- en zilversmid, pelmolenaar, kleermaker, schoenmaker, slager, venter, architect, accountant, belastingconsulent, handelsreiziger, makelaar, opticiën, bankier, wisselkantoren zoals bedoeld in de Resolutie Vrije Wisselkoers (S.B. 1993 no. 49), handelsagent, commissionair, expediteur, exporteur, importeur, grossier, verzekeraar, verzekeringsbemiddelaar (indien dit beroep of bedrijf bestaat in het beroeps- of bedrijfsmatig bemiddelen bij het sluiten van overeenkomsten van verzekering), bedrijven tot de exploitatie van kapsalons, ingenieurs-, (advies-) bureau's, advertentiebureau, lucht- en watertransportbedrijven (w.o. scheepvaart- en luchtvaartbedrijven), uitdeuk- en spuitinrichtingen drukkerijen, reisbureau's, touroperators, hotels, motels, bioscopen; al dan niet mechanisch gedreven pompinstallaties met ondergrondse reservoirs van benzine, diesel olie, mengsel van andere minerale oliën (z.g. pompstations); het verrichten van bespuitings- en/of besproeiingswerkzaamheden door middel van vliegtuigen, rijtscholen (onderricht tot het besturen van motorrijtuigen), pensions, foto-ateliers (fotostudio's), videoclubs, amusementsspelen (z.a. fietjebal en flipperspelen), schoonmaakbedrijven, insekten en ander ongediertenbestrijdingsbedrijf, radio- en televisiemonteur, uurwerkreparateur (horlogemaker), modiste, tandtechnicus, loodgieter, blikslager, technisch installateur, vertegenwoordiger (agent) van luchtvaartbedrijven, cateringbedrijven, luchtvaartafhandelingsbedrijven, bedrijven voor onderhoud en/of revisie van luchtvaartuigen, luchthavenexploitatiebedrijven, instituten voor de opleiding van luchtvaart- en/of scheepvaartpersoneel, luchtreclamebedrijven, luchtfotografiebedrijven, luchtvaartuigverhuurbedrijven, scheepsagenten, scheepsbevoorradingsbedrijven, stuwadoorsbedrijven, scheepsbouw-, dok- en reparatiebedrijven, havenexploitatiebedrijven, berging- en baggerbedrijven, roeiersbedrijven (meren en ontmeren van schepen).
 - b. fabrikant van alcoholhoudende- en/of niet alcoholhoudende dranken; bedrijven tot vervaardiging van grammofonplaten, zuurstof, acetyleengas en vloeibare kooldioxyde, gasvormige en vloeibare stikstof, triplex, meubelen,

¹ Gew. bij S.B. 1985 no. 40, SB 1993 no. 51

beschuit en biscuits, voedingsmiddelen, cosmetica; tot constructie en reparatie van staal en andere metalen, confectiekleding alsmede andere artikelen van textiel artikelen van de spijkerindustrie zoals draadnagels, spijkers, krammen en haken van ijzer, van staal of van smeedbaar gietijzer, gegolfde gegalvaniseerde dakplaten, cement, betonproducten, balsteen en dakpannen, bouillonblokjes en soepen, eetbare vetten, eetbare oliën, zeep, veevoeder, zakken van juteweefsels en/of zakken van weefsel van andere textielstoffen, insecticiden, insecten- en onkruidbestrijdingsmiddelen, kunstmeststoffen, plastic buizen, producten van plastic en van aluminium, papier en papierwaren, karton en kartonwaren, lucifers; tot constructie, vervaardiging en reparatie van stalen respectievelijk plastic vaartuigen; tot fabrieksmatige bereiding van verf en vernis, tarwebloem en tarwemeel, vleeswaren, farmaceutica, verbandstoffen, artikelen voor huishoudelijk gebruik, schuimplastic artikelen voor huishoudelijk en industrieel gebruik, verlichtingsarmaturen, matrassen, schoeisel; tot samenstelling van aluminium markiezen, aluminium jalouzieën, aluminium ramen en deuren uit ingevoerden halfabrikaten; tot de winning van steenslag; houtzaagmolens; bedrijven tot verwerking van fruit, vis en visproducten, lasserijbedrijven, stoffeerderijen, koeltechnisch bedrijf, keramisch bedrijf, bedrijven tot vervaardiging van produkten van hout, leer, kunstleer en/of ander weefsel.

2. Schriftelijke vergunningen voor de in lid 1 genoemde beroepen en bedrijven kunnen verleend worden voor een bepaalde branche of deel van werkzaamheden van die beroepen of bedrijven.

Artikel 2

Aan de Districts-Commissaris is, ingevolge het bepaalde in lid 2 van artikel 2 van het "Decreet Vergunningen Bedrijven en Beroepen", voor zover zijn district betreft, de bevoegdheid gedelegeerd om te beslissen op de verzoeken om vergunning tot uitoefening van de beroepen of bedrijven van aannemer van bouw- en/of schilderwerken, pelmolenaar, winkelier, standhouder, schoonheidsspecialist(e) (w.o. haar- en huidverzorging), auto-monteur, reparateur van rijwielen en bromfietsen; exploitatie van kapsalons, goud- en zilversmid, bakker, slager, kleermaker, schoenmaker, barbier en venter, exploitatie van uitdeuk- en spuitinrichtingen en al dan niet mechanisch gedreven pompinstallaties met ondergrondse reservoirs van benzine, dieselolie, mengsel van andere minerale oliën (z.g. pompstations), indien betrokkenen hun beroep of bedrijf slechts in het betreffende district wensen uit te oefenen.

Artikel 3

1. Aan ondernemingen en/of personen die op het tijdstip van inwerkingtreding van dit staatsbesluit één of meer der in het tweede lid genoemde bedrijven uitoefenen zal, gerekend vanaf de datum van inwerkingtreding, een vergunning worden verleend, indien daartoe binnen drie (3) maanden na de inwerkingtreding schriftelijk het verzoek wordt gedaan.

2. De in het eerste lid bedoelde bedrijven zijn:

3

- a. het beroep van standhouder, automonteur, reparateur van rijwielen en bromfietsen, architect, accountant, belasting-consulent, handelsreiziger, makelaar, opticiën, schoonheidsspecialist(e) (w.o. haar- en huidverzorging); het beroep of bedrijf uitoefenen van exploitant van kapsalons, ingenieurs (advies-) bureau's, advertentiebureau, lucht- en watertransportbedrijven (w.o. scheepvaart- en luchtvaartbedrijven), uitdeuk- en spuitinrichtingen, drukkerijen, hotels,

motels, bioscopen, touroperators, al dan niet mechanisch gedreven pompinstallaties met ondergrondse reservoirs van benzine, dieselolie, mengsel van andere minerale oliën (z.g. pompstations), en het verrichten van bespuitings- en besproeiings werkzaamheden door middel van vliegtuigen.

b. het bedrijf tot de vervaardiging van:

1. grammofonplaten;
2. vloeibare kooldioxyde en gasvormige en vloeibare stikstof;
3. meubelen;
4. voedingsmiddelen;
5. cement;
6. betonproducten;
7. bakstenen en dakpannen;
8. bouillonblokjes en soepen;
9. insecten- en onkruidbestrijdingsmiddelen;
10. kunstmeststoffen;
11. producten van plastic en aluminium;
12. artikelen voor huishoudelijk gebruik;
13. confectiekleding en andere artikelen van textiel;
14. constructie en reparatie van staal en andere metalen;
15. de exploitatie van houtzaagmolens.

Artikel 4²

1. Bij de inwerkingtreding van dit staatsbesluit vervalt het staatsbesluit van 22 maart 1952 (G.B. 1952 no.32, geldende tekst S.B. 1976 no.40).
2. Dit staatsbesluit, dat als "Besluit Vergunningplichtige Bedrijven en Beroepen" kan worden aangehaald, wordt in het Staatsblad van de Republiek Suriname bekend gemaakt.
3. Het treedt met ingang van een door de President te bepalen tijdstip in werking.

² I.w.t. 1 juni 1982 (S.B. 1982 no. 93).

Annex D Gold exports per year and per exporter

	2002		2003	
	<i>Weight (gr)</i>	<i>Value (US\$)</i>	<i>Weight (gr)</i>	<i>Value (US\$)</i>
Amazone Gold	679,491.60	6,604,154.00	5,378,282.90	57,497,107.04
Surmetex	198,085.30	1,872,058.08	1,192,378.54	12,770,598.51
Century			2,351,224.20	26,714,608.71
Goldmine			82,683.55	824,207.64
Orotrend			2,706,082.31	30,354,628.50
Cactus				
Republic				
Total/Year	877,576.90	8,476,212.08	11,710,651.50	128,161,150.40

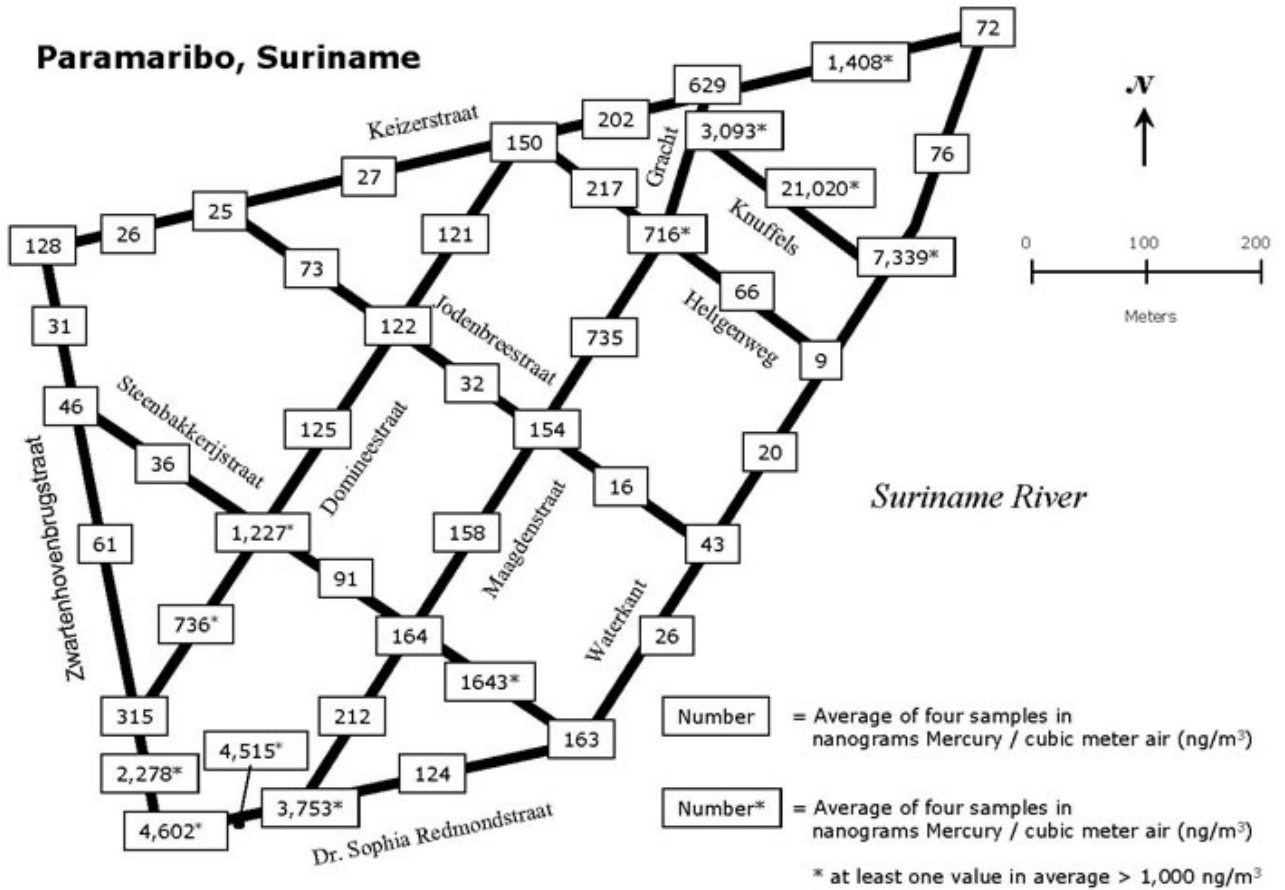
	2004		2005	
	<i>Weight (gr)</i>	<i>Value (US\$)</i>	<i>Weight (gr)</i>	<i>Value (US\$)</i>
Amazone Gold	5,689,227.90	72,568,984.43	7,399,822.70	101,548,956.97
Surmetex	1,047,295.20	13,140,981.19	1,280,396.70	17,154,590.52
Century	2,019,834.10	25,406,860.00	1,451,307.50	19,327,211.36
Goldmine	-	-	1,523,629.60	21,174,789.89
Orotrend	2,376,221.00	29,878,955.30	-	-
Cactus	1,542,046.30	19,364,375.00		
Republic	30,750.80	360,278.35		
Total/Year	12,705,375.30	160,720,434.27	11,655,156.50	159,205,548.74

	2006		2007	
	<i>Weight (gr)</i>	<i>Value (US\$)</i>	<i>Weight (gr)</i>	<i>Value (US\$)</i>
Amazone Gold	8,292,291.01	149,533,156.80	6,540,565.90	141,258,512.88
Cactus	1,074,417.10	15,851,510.20	1,230,954.40	25,367,951.42
Century	1,296,997.40	26,627,668.32	3,062,648.50	71,844,937.11
Orotrend	1,257,733.00	22,708,137.45	2,999,347.10	62,983,063.86
Surmetex	26,915.50	559,304.09	-	-
Republic Gold	-	-	-	-

	2008 (Jan- Sept.)	
	<i>Weight (gr)</i>	<i>Value (US\$)</i>
Amazone Gold	4,410,316.10	118,545,434.38
Cactus	857,884.70	24,297,150.71
Century	2,947,429.01	78,447,744.83
Orotrend	2,119,881.00	53,119,913.06
Surmetex	1,566,223.20	42,129,850.52
Tot. through SEPT.	11,901,734.01	316,540,093.50

Source: Currency Commission, July 2010

Annex E. Air mercury concentrations in Paramaribo, Suriname. July 2005



Source: Suriname Indigenous Health Fund (SIHD).

URL: <http://www.sihfund.org/newsletter.htm> (consulted 3 July 2010)

Annex F1 Overview of relevant legislation on gold

LEGISLATION	REFERENCE	DESCRIPTION OF RELEVANT ARTICLES	COMMENTS
<p>1 Currency regulation</p> <p><i>(Deviezen regeling)</i></p> <p><i>Wet van 8 september 1947, tot vaststelling van een hernieuwde regeling van het deviezenverkeer in Suriname</i></p>	<p>G.B. 1947 no. 136</p> <p>(last amended S.B. 1984 no. 104)</p>	<p>There is a Currency Committee whose purpose is to implement currency traffic regulation under auspices of the President of Suriname who is responsible for the currency policy of Suriname.</p>	
<p>2 General order no. 1 on deliverance and acquisition of gold</p> <p><i>Algemene Beschikking no. 1 van de Deviezen Commissie bedoeld in art. 1 van de Deviezenregeling 1947</i></p>	<p>G.A.B. no. 81</p> <p>(Gouvernements Advertentieblad)</p>	<p>General rules on the import and export of gold by citizens.</p>	
<p>3 General order no. 5 on general permit to gold buyers to sell crude gold for industrial and artistic purposes to the public.</p> <p><i>Algemene beschikking no.5 van de Deviezen Commissie bedoeld in art. 1 van de Deviezenregeling 1947</i></p>	<p>G.A.B. no.</p>	<p>With this General order the Currency Committee gave all gold buyers a general permit to sell their gold to the general public for industrial and artistic purposes.</p>	
<p>4 Resolution on rules regarding extraction, processing and the transport of gold in regards to the</p>	<p>G.B. 1947 no. 139</p> <p>(last amended in S.B. 1959)</p>	<p>By Resolution of the Governor of Suriname additional rules were enforced to further realize the goal of the Currency Regulation. These rules</p>	

	Currency Regulation 1947	no. 35)	amongst others contain the definition of rough gold
	<i>Resolutie van 8 september 1947 no. 3652, houdende voorschriften betreffende de winning, de verwerking en het vervoer van goud in verband met de Deviezenregeling 1947</i>		
5	State order regarding the posting of the official text of the State order on mailing of gold abroad through parcel post	G.B. 1954 no. 20	For the mailing of gold with parcel post certain acts have to be committed which are stipulated in this act.
	<i>Resolutie van 20 maart 1954 no. 589, bepalende de plaatsing in het Gouvernementsblad van de thans geldende tekst van het Besluit van 31 december 1907 (G.B. no. 92), houdende bepalingen betreffende de verzending van goud naar het buitenland met de pakketpost</i>		
6	Bank Act	G.B. 1956 no. 97 (last amended in S.B. 1983 no. 94)	(art. 9.a). As the Monetary watchdog of the country, by law the Bank is responsible for the circulation of paper money. Next to the circulation of paper money the Bank is also authorized to trade in precious metals, convert into coin and to test and refine precious metals.
	<i>Wet van 10 oktober 1956, tot regeling van het Centrale Bankwezen in Suriname (G.B. 1956 no. 97), gelijk zij luidt na de daarin aangebrachte wijzigingen bij G.B. 1963 no. 137, G.B. 1968 no. 63, G.B. 1973 no. 26, S.B. 1981 no. 121, S.B. 1983 no. 94</i>		

7	Security Law <i>Landsverordening van 14 maart 1973 omtrent de gehalten van al dan niet bewerkt goud en zilver (Waarborg wet)</i>	G.B. 1973 no. 46 G.B. 1973 no. 163	The Security Law contains rules on the value of processed and unprocessed gold and silver.
8	Mining Decree <i>Decreet van 8 mei 1986, houdende algemene regelen omtrent de opsporing en ontginning van delfstoffen (Decreet Mijnbouw)(S.B. 1986 no. 28), S.B. 1997 no. 44</i>	S.B. 1986 no. 28 (last amended in S.B. 1993 no. 61)	This Decree is the core of gold mining regulations in Suriname. It contains rules on the exploration and exploitations of al minerals in Suriname. The first and most important rule is that all minerals in and on the ground are not part of the ownership of the land (art. 2.1). Meaning that they are property of the State (art. 2.2).
9	State order on Royalties for Small scale Gold mining and exploitation of building materials <i>Staatsbesluit van 11 mei 1989, ter uitvoering van artikel 65 lid 2 van het “Decreet Mijnbouw”(S.B. 1986 no. 28). (Besluit Royalty Kleinmijnbouw ter zake van Goud en Exploitatie Bouwmaterialen)</i>	S.B. 1989 no. 40 (last amended S.B. 1997 no. 43)	This law stipulates the amount of royalties that must be paid for small-scale gold mining and mining of building materials.

Annex F2 – List of relevant permits issued for gold application

LEGISLATION	PERMITTING AGENCY/MINISTRY	RELEVANT PROVISIONS ON GOLD	RELATING PERMIT	PERMIT CONDITIONS
<p>Nuisance Act <i>(Hinderwet)</i> WET van 27 December 1929 tot vaststelling van bepalingen omtrent het oprichten van inrichtingen, welke gevaar, schade of hinder kunnen veroorzaken (G.B.1930 no. 64), gelijk zij luidt na de daarin aangebracht wijzigingen bij G.B. 1943 no. 119, G.B. 1944 no. 57, G.B. 1944 no. 153, G.B. 1972 no. 96, S.B. 2001 no. 63</p>	<p>Ministry of Regional Development</p> <p>The District-commissioner of the regarding District, where the establishment will be operating.</p>	<p>Permit conditions for the operation of a gold buying establishments where gold is also refined and machinery is used above a certain.</p>	<p>Hindrance Act permit <i>(Hinderwetvergunning)</i></p>	<ol style="list-style-type: none"> 1. With regards to mercury (which is known to be used by the small scale gold miners) it is recommended that exposing oneself to this substance is minimized; 2. Chemicals used need to be stored and used according to the Material Safety Data Sheets (MSDS); 3. Mercury and the remains thereof are not allowed to be drained into the environment, but instead need to be stored in specially designed tanks with a visible label of it's contents; 4. The working areas must be ventilated appropriately and the ventilation system should be connected to a filter system; 5. And entering the working area will not be allowed for unauthorized persons, namely children. There will be a sign on the door were this message is displayed.

<p>State order on Permits for Businesses and Occupations</p> <p><i>(Decreet Vergunningen Bedrijven en Beroepen)</i></p> <p><i>DECREET van 15 september 1981, houdende vaststelling van regelen inzake het verlenen van vergunningen voor het uitoefenen van enig bedrijf of beroep</i></p>	<p>The Ministry of Trade and Industry</p> <p>The Division of Business Permits</p>	<p>Permit condition on the exploitation of a gold processing and jeweler shop in accordance with the State order on Permits for Businesses and Occupations</p>	<p>Operating license</p> <p><u><i>(Bedrijfsvergunning)</i></u></p>	<p>Because of the fact that NIMOS gives advice on both the permit applications under the Nuisance Act and this State order the environmental condition are more or less the same.</p>
<p>Mining Decree</p> <p><i>(Decreet Mijnbouw)</i></p> <p><i>DECREET van 8 mei 1986, houdende algemene regelen omtrent de opsporing en ontginning van delfstoffen (S.B. 1986 no. 28), S.B. 1997 no. 44.</i></p>	<p>The Ministry of Natural Resources</p> <p>The Geological and Mining Service (GMD)</p>	<p>Conditions as specified in permits from the Ministry of Natural Resources on the exploration and exploitation of gold</p>	<p>Exploration license</p> <p><u><i>(Exploratievergunning)</i></u></p> <p>Exploitation License/Mining Concession</p> <p><u><i>(Exploatievergunning)</i></u></p>	<p>Condition in a Exploration permit:</p> <ul style="list-style-type: none"> - Rights of third parties have to be respected; - Activities should start within 3 months after issuance of the permit; - The holder of this right will periodically report (every 3 months) on his activities and results; - The Head and Personnel of GMD (Geologische en Mijnbouwkundige Dienst) have access to the work terrain during working hours to be certain that the mining rights in general and the conditions of this right in particular are observed; - The holder has to withhold himself of commercial production by trade of product obtained out of testproducts;

Conditions in a Exploitation permit:

- Rights of third parties have to be respected;
- Activities should start within 3 months after issuance of the permit;
- Before activities start the holder shall submit a detailed work program.
- The holder of this right will periodically report (every 3 months) on his activities and results;
- The Head and Personnel of GMD (Geologische en Mijnbouwkundige Dienst) have access to the work terrain during working hours to be certain that the mining rights in general and the conditions of this right in particular are observed;
- The holder shall produce a certain amount of gold during a quarter of a year. This amount is specified in each permit, depending on the situation and shall be sold to the Central Bank of Suriname.