

INDUSTRY COMMENTS

Comments in letters, faxes and emails include: **Reserve Bank of India** ("an excellent work"), **State Bank of India** ("excellent coverage") and **The Gem & Jewellery Export Promotion Council** ("a wonderful, educative, informative book").

"This volume is an absolute boon ... The resulting accumulation of facts and data is of fantastic value to anyone who wants to understand the history and nature of the world's most important market for gold."

London Bullion Market Association

"It has provided an excellent basis for the Council and its members to learn about the complex dynamics of the market, and also is a strong foundation for us to review our operational business plans and strategies for the Indian market ... it has added significant value to our operations there."

World Gold Council

"It is necessary to understand the intricacy of market structures and the historical sequence of events (of the Indian gold market). The book by Nigel Desebrock ... provides a veritable gold mine of authentic information".

S.S. Tarapore (former Deputy Governor, Reserve Bank of India), Financial Express (India)

PHONE AND FAX NUMBERS IN INDIA

In October 2002, Mumbai telephone exchanges either prefixed a "2" to the local number, or replaced the first digit with "56". Since then, exchanges in other cities have also made changes. In this publication, while the listed Mumbai numbers take the changes into account, numbers for other parts of the country do not.

Ву

NIGEL DESEBROCK Grendon International Research Pty Ltd

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Virtual Metals Research & Consulting Ltd 100 Ashmill Street, London NW1 6RA, United Kingdom

> Tel: 44-20-7487 3600 Fax: 44-20-7224 4527 Email: jessicacross@compuserve.com

Grendon International Research Pty Ltd 33 Alexandra Road, East Fremantle, WA 6158, Australia

Tel: 61-8-9319 2171 Fax: 61-8-9319 2154 Email: grendon@global.net.au

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TRADE SUPPORT

An Introduction to the Indian Gold Market has relied greatly on the support of gold-related organisations and businesses that kindly provided information and advice.

16 government-related organisations and departments 14 banks and other official bullion importers 31 bullion dealers, refiners and coin fabricators 114 jewellery fabricators, wholesalers and retailers 16 other gold-related entities

Consultant in India Madhusudan Daga



FOREWORD

AN INTRODUCTION TO THE INDIAN GOLD MARKET

This publication, together with the comprehensive analytical study, *India's Golden Era, The Age of Kaliyug*, from which it has been extracted, came about when the gold mining companies that underwrite and sponsor Virtual Metals Research & Consulting Ltd asked a seemingly simple question. Would they still be able to sell their ten-tola bars into India in ten years time? It seemed bizarre that, despite India being the world's largest consumer of gold and thus of vital importance to the global gold business, the world's understanding of the domestic gold industry proved superficial. At the same time, conventional wisdom seemed to insist that India was a bottomless pit into which vast quantities of gold would continue to disappear, never to be seen by the global gold market again. Was this true?

Having thus been commissioned Virtual Metals, in partnership with Grendon International Research, set off for India to find out at first hand what actually happens there, how, where and why it happens and if it will continue to happen in the future. The fruits of these months of labour are, firstly, the analytical report *The Age of Kaliyug* which contains not only a wealth of trade-related information and analysis by Grendon International Research but also an extensive macro analysis by Virtual Metals of the economic, social and political factors driving the Indian gold market, as well as recommendations; secondly, the publication in your hand, *An Introduction to the Indian Gold Market*.

It is Virtual Metals stated philosophy to support the precious metals markets wherever possible and to actively seek ways of giving something back to the industry that we all rely upon. Through sponsorship, Virtual Metals and Grendon International Research are delighted to be able to share freely a sizeable proportion of the project's basic market intelligence.

Without the World Gold Council as the major sponsor and Rand Refinery Limited as the corporate sponsor, the publication of *An Introduction to the Indian Gold Market* could not have been funded, so our thanks go to them for their support and generosity. The overall project is indebted to the foresight and vision of the underwriters and sponsors of Virtual Metals: Gold Fields Ltd, Harmony Gold Mining Company Ltd, Western Areas Ltd and Barrick Mining Ltd.

To acquire a copy of the comprehensive analytical report **India's Golden Era – The Age of Kaliyug** please contact Virtual Metals in London. The price is US\$ 9,000.

Jessica Cross

Chief Executive Officer
Virtual Metals Research & Consulting Ltd

November 2002

PREFACE

An Introduction to the Indian Gold Market is based on the outcome of four GIR fieldtrips (totalling 14 weeks) between November 2001 and September 2002, and extensive communication by phone, fax and email with relevant trade entities.

It also relies on information gathered by GIR over many visits to India since 1990. In 1993, GIR compiled an unpublished report on the Indian gold market for the World Gold Council. This earlier marketing consultancy project, in particular, has assisted GIR to view the current market from an historical perspective.

The publication has been compiled according to three objectives:

- Consolidate accessible statistical and other information on the Indian gold market into a single source of reference.
- Focus on the gold bullion and jewellery markets, the nature of consumer demand from the trade perspective, and the role of the Indian Government.
- Support the promotion of gold in India.

EXTERNAL STATISTICS

The official import and rupee gold price statistics rely largely on **Madhusudan Daga**, who collates them on behalf of most international analysts. The estimates of unofficial imports, and the breakdown of industrial gold demand, also rely on Mr Daga. Imports of gold for re-export as jewellery are derived from statistics provided by The Gem & Jewellery Export Promotion Council. Where external published statistics are recorded, the source is noted below the table.

GIR STATISTICS AND MARKET INFORMATION

Estimates of gross and net demand for jewellery, coins and bars, other tabulated market statistics and general market information are necessarily based on anecdotal evidence provided by the trade, a constraint that applies to all analysts both inside and outside India.

Leading trade entities repeatedly advise that the Indian gold market is so fragmented and complex, and so variable by State, by rural and urban area, and by retailer even in the same locality, that no one can produce a definitive report. It means, for example, that statistical estimates of the breakdown of demand and the level of recycling can only be indicative.

Although GIR has tried to represent the broad view of most trade entities visited, the report should be seen for what it is: a consolidated reference work that others can build upon or modify according to their own understanding of the market, or as new or revised information becomes available.

It can also be recognised that there is not yet a broad consensus among analysts inside and outside India on several aspects of the market. For example, findings in the report suggest that the level of recycling and coin fabrication is higher, and the level of net bar hoarding is lower, than normally reported outside India. In recent years, the nature of Indian gold demand appears to have changed greatly, influenced not least by a largely static rupee gold price between 1998 and 2001.

This publication, designed and compiled by GIR, is one part of a much broader joint research and consultancy project on India and its gold market undertaken by Virtual Metals and GIR. I would like to thank the indefatigable Jessica Cross, CEO of Virtual Metals, and her team, Gary Mead, Tom Butler, Matthew Turner and Sarah Marsden for all their support throughout the overall project.

Nigel Desebrock

Director

Grendon International Research Pty Ltd (GIR)

November 2002



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Photograph: Alukkas

India is the cornerstone of the world's physical gold market.

It fabricates annually more than 1,000 tonnes of gold jewellery - approximately 30% of the gross amount of gold jewellery fabricated worldwide.

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The domestic gold bullion market relies on a small cast bar weighing 10 tolas (3.75 oz).

ACKNOWLEDGEMENTS

GIR FIELDTRIPS

GIR visited New Delhi and 11 States: Punjab, Haryana, Uttar Pradesh and Rajasthan (north), West Bengal (east), Gujarat and Maharashtra (west) and Andhra Pradesh, Karnataka, Tamil Nadu and Kerala (south). There was a focus on the south as it is the most important gold consuming region.

GIR conducted interviews in 38 cities, towns and villages. Apart from New Delhi, the cities were Ludhiana, Panipat, Agra, Meerut, Mathura and Jaipur (north), Kolkata (east), Mumbai, Thane, Ahmedabad and Nagpur (west), and Hyderabad, Bangalore, Chennai, Coimbatore, Cochin/Ernakulam and Trichur (south).

Meetings were held with representatives of 16 government-related departments and organisations, 14 banks and other official gold importers, 31 bullion dealers, refiners and coin fabricators, 114 jewellery fabricators, wholesalers and retailers, and 16 other gold-related entities.

In total, GIR interviewed more than 200 people at 191 gold-related businesses and institutions. Several were visited two and more times to try to clarify the outcome of earlier discussions. GIR is indebted to everyone for their patience and support, and especially to WGC India and Mr Daga.

INDUSTRY SUPPORT

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Government-related departments and organisations

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Banks and official importers

Anand Trivedi Anjana Singh Atul Goel

Biswajyoti Upadhay

C M Yadav D K Seth D M Chinnappan Darryl Netto Dinesh Saxena

Gautam P Puntambekar

Hitesh Jagota I M Sarin

K A Krishnamurthy

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Bullion dealers, refiners and coin fabricators

A K Chamaria B J Jain Bhawar Kothari D Anantkumar Deokar Daman Prakash Davendra Doneria Dinesh Parekh Harmesh Aurora Harshad Ajmera James Joseph Ketan Shroff Kuldip Soni Kumar Paljain M M Dey Manoj Kapur Mukul Sonawala Radhika Dattani Rajeev Mohandas Naik

Rajeev Mohandas Rajesh Parekh Ramesh Agarwal S P Sonawala S Thiyagarajan Sanjay Gupta Shanker Agarwal Shantilal Pincha Suresh Hundia Suresh Kansara V L Koppar Vasanal Mehta Vinay Jalan Vivek Prabhakar

Jewellery fabricators, wholesalers and retailers

A Abraham A N Bharati A Saravanan Abhay K Jain Alok Prakash Amit Agarwal Anthony Thottan Arihant Jain Arun Soni

Arvind Jain (Dhakad) Ashok Vastani Ashwin Vummidi B Bindu Madhav B Nemichand Marlecha

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Dinesh Zaveri
Dr Nawal Agrawal
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G Chandra Shekar
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G Sureshkumar
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Hasmuth Thaker

Hiren Soni

Ishwarlal Jain
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Jose Alukka
Joseph Sebastian
K C Peter
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Nathella Prapanna Kumar

Nathubhai Soni Navin Mehta Niranjan Prasad P C Gupte P J Jenson P Purusothamman

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International bullion dealers, refiners and the LBMA

The following kindly provided background information on their companies, bar photographs and technical dimensions when applicable, or general information relevant to the Indian gold market.

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INDIAN CURRENCY AND NUMBERS

1 Indian rupee = 100 paise 1 lakh rupees = 100,000 rupees 1 crore rupees = 10 million rupees

Large numbers are expressed in *lakhs* and *crores* (not thousands, millions and billions).

1 lakh = 100,000

1 crore = 10 million (100 lakhs)

In India, the number "100,000" is normally written as "1,00,000" (i.e. 1 lakh).



CHAPTER 1

SUMMARY AND POSITIVE FINDINGS

CONTENTS

Background

Role of Indian Government
Orientation
Gold bullion
Gold jewellery
Industrial gold usage
Mumbai gold prices
Pricing and profitability
Gold mining and exploration

Gold supply and demand

1990 – 1997 (growth period) 1998 – 2001 (static period) Above ground stocks of gold

Gold jewellery demand over the next 10 years

Market features Positive findings

Gold coins and net bar hoarding over the next 10 years

Market features Positive findings

Industrial gold usage over the next 10 years

Importance of the Indian gold market



Photograph: Tribhovandas Bhimji Zaveri

Gold jewellery is owned as an "adornment" for cultural, status and decorative reasons. It is also owned as an "investment" for store of value, savings and money purposes.

For most consumers, the motivations are intertwined.

BACKGROUND

ROLE OF INDIAN GOVERNMENT

The Indian Government closely monitors the import, export, distribution, fabrication, retailing and private ownership of gold – as it has done since 1947.

For 27 years (1963 – 1990), Gold Control Rules and the Gold (Control) Act regulated the domestic market. Private gold ownership was restricted to jewellery (and coins already in circulation). Owning bars became illegal. Jewellery fabricators and retailers required licences to operate. Almost all bullion dealers stopped trading – at least officially. To fabricate new jewellery, the gold industry was obliged – theoretically – to rely entirely on the recycling of old gold scrap.

Since the repeal of the Gold (Control) Act in 1990, the Government has adopted pragmatic policies designed to increase the share of official (as opposed to unofficial) gold imports, optimise its revenue from Customs duty, stimulate the export of gold jewellery, improve the overall quality of gold jewellery fabricated in India, and encourage the recycling of gold jewellery in private hands, notably through the Gold Deposit Scheme.

Important initiatives include the introduction of official gold import schemes, notably the Non-Resident Indian (NRI) Scheme in 1992 and the authorisation of banks in 1997, the Gold Deposit Scheme in 1999, the hallmarking initiative in 2000, and on-going support for gold jewellery exporters.

Customs duty on imported gold is currently Rs 250 per 10 g (US\$ 16 per oz). Since 1992, it has generated approximately Rs 106 billion (US\$ 2.6 billion). Official gold reserves have increased from 216 tonnes (1970) to 358 tonnes (2001).

ORIENTATION

India comprises 28 States, 6 Union Territories (UT's) and Delhi as the National Capital Territory (NCT). It is bordered by 6 countries: Pakistan, Nepal, China, Bangladesh, Bhutan and Myanmar.

The population has grown by 20% since 1991 to 1,012 million. The report groups the States into 4 regions. The north accounts for 30% of the population. The west, east and south each account for approximately 22 - 25%.

There are more than 700 languages and dialects. 12 languages are important. Hindi is spoken as a primary and secondary language by 65%, English by 20%. The split by religion is Hindu (82%), Muslim (12%), Christian (2.3%) and others (3.7%).

The rural population (742 million) accounts for 71% of the population. Urbanisation is gradual. The urban proportion grew from 26% in 1991 to 29% in 2001. There are more than 30 cities with populations exceeding 1 million.

Gold demand relies heavily on the agricultural sector. Most of the 107 million farms are small. The average size is 1.6 hectares. Only 1.7 million farms (1.6%) are 10 hectares or more. 60% of agricultural workers are employed fulltime or part-time as hired labourers. Their daily wages range from Rs 50 (US\$ 1.00) to Rs 200 (US\$ 4.00)

For all States, good rainfall during the monsoon is important. Only 38% of the gross cropped agricultural land is irrigated. The South West monsoon occurs over a 3 month period (June to early October). Excess rain can cause severe flooding, and too little rain can cause droughts, in vulnerable States.

GOLD BULLION

Imported gold bars

More than 95% of gold imported for the domestic market is in the form of small cast bars weighing 10 tolas (3.75 oz), widely known as TT bars or *biscuits*. Most imported TT bars are produced by 8 major gold refiners in Switzerland, South Africa, United Kingdom and Australia. In recent years, India has imported 5 - 6 million TT bars annually.

Importers

The official import of gold bullion for the *domestic* market occurs through two authorised Government schemes: Open General Licence (OGL) scheme since 1997, and the Non-Resident Indian (NRI) scheme since 1992.

The OGL scheme (20 banks and 4 Public Sector Undertakings are authorised) accounted for 99% of official imports in 2001.

Gold is also imported unofficially. Bullion re-export centres for the Indian market include Dubai, Singapore and Hong Kong.

Since 1990, an estimated 5,246 tonnes have been imported officially and unofficially. In 2001, the OGL share of total imports was about 90%. 10 international gold dealers, members of the LBMA, supply the bulk of imported gold.

Duty-free gold is also imported officially for re-export as jewellery. An additional 363 tonnes have been imported since 1990 for this purpose. 54 tonnes were imported in 2001.

Imported gold is distributed nationwide through secondary and lower tier bullion dealers that fall below the primary tier of bank and PSU importers. The most important dealers are located in cities where the State sales tax is low. Notably, Ahmedabad, Jaipur, Mumbai and Gurgaon, near New Delhi.

Banks indicate that the bulk of their business is done through less than 50 secondary tier dealers around the country. They feed the distribution chain that involves thousands of tertiary and lower tier dealers nationwide.

Banks

The Reserve Bank of India (RBI) has authorised 20 banks to import gold bullion: 12 Public Sector Banks, 3 Private Sector Banks and 5 Foreign Banks. The report focuses on the 6 Indian and 4 foreign banks that were active importers in 2001.

Banks may not export gold, or hedge its value. All rely on consignment stocks from international dealers. Banks can sell gold on an "unfixed" basis for up to 5 calendar days. The minimum quantity is normally 50 - 100 TT bars. None offer a buy-back service. There are now 111 Gold Cell branches servicing customers in 34 cities in 16 States. Branches in cities, where State sales taxes are low, tend to attract the bulk of imported gold.

Public Sector Undertakings (PSU's)

Public Sector Undertakings (PSU's) are Indian Government enterprises. 4 are authorised to import gold: MMTC, PEC, HHEC and STC.

The gold-related activities of PSU's are supervised by the Ministry of Commerce and Industry (not the RBI). Like banks, they wholesale imported bullion to secondary tier dealers. Unlike banks, they can loan imported gold to domestic fabricators and retailers. They can also sell "unfixed" gold for a longer period, normally 11 calendar days.

The PSU's operate through 38 Gold Cell branches in 18 cities in 13 States. In 2001, they imported more than 100 tonnes.

Non-Resident Indian (NRI) Gold Import Scheme

The NRI scheme, an initiative of the Ministry of Commerce and Industry, was launched in March 1992. It enabled large quantities of gold bullion, for the first time in decades, to be imported officially for the domestic market.

Under the scheme, NRI's are permitted to import up to 10 kg of gold bars and other approved gold items as long as they have been away for not less than 6 months. Prior to January 1997, the amount was 5 kg.

Over a period of 6 years, the scheme accounted for 56% of gold bullion imported for domestic use. Its role as a major conduit for official gold imports fell away when authorised banks started importing gold bullion in November 1997. Since 1992, NRI's - on their own account or on behalf of syndicates – have imported 1,352 tonnes.

Although recorded NRI imports have been nominal since 1999, less than 5 tonnes annually in recent years, the scheme remains in operation.

Gold refiners

The refining of old gold jewellery and other scrap relies on more than 10,000 small refiners in cities, towns and some villages. There are also 2 large refiners and 7 known organised refiners.

Coin fabricators

There are more than 1,000 coin fabrication units. Some fabricate more than 500 kg, most less than 5 kg, annually. Many jewellery fabricators also have a capacity to mint coins. Few standard bars (minted and cast) are fabricated. In India, the word "coin" is commonly used to describe a round medallion bought for savings or gift purposes. The category also includes crude "duplicate" sovereigns (8 g and less and known as "guineas") and minted quasi-coins in rectangular, oval and other shapes. Most coins are retailed by jewellery retailers.

Gold Deposit Scheme

The scheme was launched in 1999. It is supervised by the RBI. Its declared objectives are to reduce the import of gold, bring privately-held gold into circulation, and provide the public with an opportunity to earn income on their gold holdings.

The minimum deposit is normally 200 g. Deposits are lodged over 3-7 years. Annual interest payments are around 3-4%. Depositors are also offered other incentives. Interest earned from the deposit is exempt from income tax. Any increase in the value of the deposit is exempt from capital gains tax. Its value is also not taken into account when calculating the annual wealth tax.

The scheme is offered by 4 banks through 134 branches in 55 cities. In its first two years, around 8 tonnes of old jewellery, bars and coins were deposited. The State Bank of India accounted for 90%.

GOLD JEWELLERY

The gold jewellery market is different from that in Western countries.

In **India**, gold jewellery is sold at *fluctuating* and *low* prices related to the prevailing value of its fine gold content. The declared mark-up ranges from 5-25%. It acts as a tradable investment in that it is easy for consumers to sell or exchange their jewellery at a reasonable price. While cultural, adornment and other factors influence the purchase of gold jewellery, its parallel role as an *investment* for store of value, savings and money purposes is also relevant.

In **Western countries**, gold jewellery is sold at *fixed* and *high* prices ranging from 100% to 300% and more above the value of its fine gold content. It is bought primarily for *adornment* purposes. While the intrinsic value of gold jewellery is important, the investment dimension is not blatant. It is difficult for consumers to exchange or sell their jewellery. Only a fraction of the original purchase price can normally be redeemed.

To mark the difference between Indian and Western markets, the term "investment jewellery" is widely used by Western analysts to describe gold jewellery sold in India.

Gold jewellery products

K22 is the dominant caratage.

The bangle is the most important product for most large retailers. It accounts, on average, for around 30% of their gold jewellery sales. A pair typically weighs between 12 g and 24 g.

Gold jewellery is fabricated in a diverse range of regional styles. Kolkata, for example, is renowned for its intricate filigree jewellery.

Jewellery fabricators

Around 85% of gold jewellery is handmade or mainly handmade. Around 15% is mainly machine-made, but its proportion is increasing.

There are probably about 3 million active goldsmiths and ancillary workers. Many work in units with less than 5 workers. A goldsmith typically has a capacity to fabricate 10 g of carat jewellery each day. Mumbai is now regarded by many as the largest fabrication centre due to its high output of machine-made jewellery. Other major centres include Kolkata, Ahmedabad/Rajkot, New Dehli and Coimbatore.

Units are under pressure from retailers and consumers to produce innovative and higher quality jewellery.

Traditional jewellery retailers

There are approximately 300,000 "traditional" gold jewellery outlets. They are family-owned businesses. Less than 15,000 family retailers may account for 30% or more of gold jewellery sales nationwide. Large showrooms are expected to increase their share of the jewellery market. The distribution network is expected to contract gradually. Many large retailers mount extensive advertising and promotional programmes.

Branded jewellery retail chains

Large national chains of branded jewellery retail outlets have emerged since the mid-1990s. The report covers 5 leading national chains: *Tanishq, Gili, Carbon, Inter Gold* and *Oyzterbay*. Combined, they retail through 188 outlets in 49 cities. All have plans to expand.

The retail chains focus on selling fashionable, lighter weight, studded jewellery as a "fashion accessory" at fixed prices. Although they account for less than 1% of the jewellery market, they anticipate significant growth as the economy develops.

Hallmarking

The Bureau of Indian Standards (BIS), the national standards body of India, launched its long-term scheme to encourage the voluntary hallmarking of gold jewellery in April 2000.

Known as the BIS Certification Scheme for Hallmarking of Gold Jewellery, the scheme is supported by the Reserve Bank of India.

It has 4 declared objectives: protect the consumer against irregular gold quality; support the export of gold jewellery; develop gold-based financial products to assist in mobilising dormant gold reserves in private hands; develop India as a reliable gold market centre commensurate with its status as the world's largest national gold market.

By early 2002, 12 Assaying and Hallmarking Centres had been authorised to service 275 Certified Jewellers.

Gold jewellery exports

According to *The Gem & Jewellery Export Promotion Council* (GJEPC), around 800 enterprises fabricate plain or studded gold jewellery for export.

Since 1990, the import of gold for re-export as jewellery has increased from 11 tonnes to 54 tonnes.

The jewellery export industry receives much government support through the GJEPC, which falls under the administrative control of the Ministry of Commerce and Industry.

INDUSTRIAL GOLD USAGE

Since 1990, industrial gold usage has grown to an indicative 43 tonnes, due mainly to a surge in the use of gold for plating purposes.

Gold plating (70%), Zari thread (14%) and ayurvedic medicines (12%) are the most important categories.

MUMBAI GOLD PRICES

Indian gold prices are normally expressed in rupees per 10 g at 995 purity, or per 10 tola at 999 purity.

For decades until 1996, the rupee gold price increased each year. For 4 years (1998 – 2001), after a decline of 12% in 1997, it remained largely static.

Over the past 10 years, the difference between the Mumbai and London gold price has steadily narrowed. In 1990, the Mumbai premium averaged 56%. In 2001, it averaged 9%.

PRICING AND PROFITABILITY

Bank importers normally mark-up imported TT bars by around 0.1%. Bullion dealers rely mainly on movements in the gold price for their profitability.

Gold jewellery is typically retailed at a declared price ranging between 5 - 25% above the prevailing value of the gold content. Retailers that sell gold jewellery with the correct caratage tend to have a gross profit (after fabrication costs) of less than 10%. Wholesalers generate a gross profit of 2 - 3%. Most goldsmiths earn between Rs 4,000 - 15,000 (US\$ 80 - 300) per month.

Small refiners can charge as little as Rs 10 (US\$ 0.20) per 10 g to refine old gold jewellery. Coin fabricators charge between Rs 20 - 60 (US\$ 0.40 - 1.20) to make a 10 g coin. Retailers usually sell a 10 g coin at a mark-up of less than Rs 50 (US\$ 1.00).

GOLD MINING AND EXPLORATION

For 36 years (1957 - 1993), the mining of gold was nationalised under the Mines & Minerals (Regulation & Development) Act 1957. A new National Mineral Policy was announced in March 1993. Alongside 12 other minerals, the mining of gold was liberalised to include private initiatives.

Although annual gold mine output is only around 2 tonnes, there are many gold exploration projects. More than 20 million tonnes of proven, probable and possible gold ore reserves have now been identified.

GOLD SUPPLY AND DEMAND

Movements in net supply and demand since 1990 fall into 2 broad periods.

- 1990 1997: High growth over 8 years. From 178 tonnes to 645 tonnes
- 1998 2001: Largely static market over 4 years. Ranging between 650 690 tonnes.

Why was growth so rapid between 1990 and 1997?

The restrictions on gold ownership during the Gold (Control) Act generated pent-up demand. Jewellery became more accessible when the number of retailers increased from 16,000 to more than 200,000. GDP grew by 37% in real terms over the period. Industrial production increased by 52%. Agricultural output was high over 1992-94 and again in 1996. Rural, and especially urban, wealth increased. Gold could be officially imported. The rupee gold price rose slowly and steadily each year (as it had done for decades) until 1996. In 1997, when the annual average price fell for the first time in decades (by 12%), gold was viewed as inexpensive in a booming economy. The population also increased by 14% over the period.

Why did net demand remain static between 1998 and 2001 when there were so many positive factors?

For example, there was population growth of 6%, GDP increased by 26% and gold was less expensive because the gold price, static in nominal terms, fell in real terms.

Jewellery retailers attribute static demand to several inhibiting factors. For example, the static rupee gold price weakened gold's investment dimension. Expenditure on lifestyle products increased at the expense of gold jewellery. Among large retailers in major cities, the sale of diamond jewellery increased. More old gold jewellery was recycled. The rural economy was relatively depressed.

To understand movements in net demand (i.e. imports) in the Indian gold market, it is necessary to have a broad understanding of the size, nature and movement of gross supply and demand.

In summary, the research findings suggest the following:

- The recycling of old jewellery, coins and bars, the gross fabrication of gold jewellery, and the fabrication of coins is **higher** than normally reported outside India.
- Net bar hoarding is **less** than normally reported outside India.

Recycling of old jewellery, bars and coins

The market is so complex and so variable by State, by rural and urban area, and by retailer, that any national estimate of recycling can only be *indicative*. To try to obtain a precise estimate is just not possible.

Anecdotal evidence suggests that 40% or more of new jewellery sold nationally in 2001 may have been fabricated from old jewellery exchanged for new jewellery or bought back for cash, or from old coins/bars. This means that for every 1,200 kg imported, 800 kg of old gold was recycled.

The amount of recycling is sensitive to gold price movements, the economic environment and personal stocks. In 1998, it appears to have been closer to 35%. In the first 6 months of 2002, due to the rise in the gold price, recycling is reported to have been 50% and more at times.

Important points: Recycling is much higher than normally reported. A small increase in recycling will impact a lot more on net demand than on gross demand.

Gross fabrication of jewellery

When recycling is taken into account, the gross fabrication of gold jewellery increases dramatically. In 2001, when net fabrication was 583 tonnes, an indicative (and conservative) estimate of gross fabrication is 955 tonnes.

Important points: Gross fabrication is much higher than normally reported. A fall in net fabrication (excluding scrap) does not necessarily imply a fall in gross fabrication (including scrap).

Coin fabrication

Anecdotal evidence suggests that coin fabrication may have been as high as 35 tonnes. Some Indian analysts believe it may have been more. The amount is an unresolved issue because there is no broad consensus among analysts.

Important points: Coins are widely viewed as *intermediate* products. More than 50% is expected to be converted into jewellery over time.

Net bar hoarding

Anecdotal evidence suggests that the annual increase in net bar hoarding may have been small in recent years. In 2001, it may have been as low as 20 tonnes (i.e. 3% of imports). There are several reasons. Owning TT bars is widely associated with the underground economy. Jewellery is generally viewed as the best way to own gold.

There is speculative trading in TT bars, but residual net bar hoarding is regarded as low. Its extent is also reported to have fallen since 1998. Significant quantities of TT bars may be bought to "park" black money, but retailers observe that the bars would probably be held for a short period and would enter the jewellery market.

Important point: The amount of net bar hoarding is an unresolved issue because there is no broad consensus among analysts.

Total market

The total market does not make structural sense, and trade comments also do not make sense, unless the extent of gross demand is taken into account.

The indicative estimate of gross demand in 2001 is 1,053 tonnes. This is about 50% higher than normally reported.

It puts the high tonnages of industrial fabrication (4%) and coin fabrication (3%), as well as net bar hoarding (2%) into perspective. Jewellery accounts for around 90% of the market.

It explains why there are around 300,000 gold jewellery outlets, 3 million active goldsmiths and ancillary workers, and 10,000 refiners.

It explains why net demand (i.e. imports) was able to fall so much more than gross demand in the first 6 months of 2002.

It also explains why so many Indian trade entities observe that the jewellery market is so much larger than normally reported in the West.

Above ground stocks

Stocks at the end of 2001 are recorded at approximately 12,000 tonnes. 45% of the stock (5,300 tonnes) has been acquired since 1990.

The 181 million families in India hold an average of 64 grammes of fine gold (around 85 grammes of carat gold). As 26% of the population is below the poverty line, the top 50% would obviously hold substantially more than the average. At least 90% is held as gold jewellery.

Anecdotal evidence (at this time) suggests that around 5% may be held in the form of coins and bars. The net accumulation of coins and bars is considered low as much appears to have been converted into jewellery. In addition, it was illegal to fabricate coins or own bars during the Gold (Control) Act period.



GOLD JEWELLERY DEMAND OVER THE NEXT 10 YEARS

MARKET FEATURES

Motivation

Gold jewellery is owned as an "adornment" for cultural, status and decorative reasons. It is also owned as an "investment" for store of value, savings and money purposes. For most consumers, the motivations are intertwined.

Many consumer markets

Consumer attitudes to gold jewellery vary among the rural/urban, rich/poor and young/old, and by region and State. Although "everyone buys gold", the market relies mainly on the top 60% (109 million households). Retailers observe that the primary target market is not the very rich or the very poor, but the emerging middle class (upper middle, middle and lower middle).

Urban and rural

Both categories are important. Urban consumer demand may account for as much as 40% of total demand, but the rural/urban split is not a static proportion because rural demand is more sensitive to fluctuations in the rural economy. The markets are also different. For example, in rural areas there is more recycling of jewellery as buy-backs for cash because jewellery is more widely used for savings and as "money". In major cities, there is now more exchange of old for "fashionable" new jewellery.

Marriage-related purchases

As much as 50% of annual sales appears to rely on new purchases associated with around 8 million weddings each year. Most weddings are held on 40 - 60 days declared auspicious each year according to Hindu lunar and solar calendars.

In total, more than 70% of all purchases is broadly regarded as marriage-related because jewellery tends to be accumulated over many years. Amounts given at the time of marriage range from less than 50 g to several kilogrammes.

Gifts

The jewellery market relies on gift-giving. Most jewellery is given to brides (and bridegrooms), women and young girls by their parents, husbands and relatives.

The attitudes of *givers* and *recipients* are both important. The purchase of jewellery is also normally the outcome of a *family* decision.

Fashion is stimulating a higher proportion of personal purchases in large urban showrooms. Although described as personal, many are the outcome of family decisions and would fall within the gift-giving category.

Self-purchases

Retailers observe that the self-purchase of jewellery for adornment purposes will be extremely important in the future, but that it is likely to take many years before this new market rivals the marriage-related market on which most retailers currently depend.

"Wearable" jewellery

Economic and social changes during the 1990s have encouraged many women to acquire items that are suited to a variety of social and work-related occasions. This has led to increasing purchases of lighter weight and smaller items. Most retailers view "wearable" jewellery as an important new market segment.

"Fashionable" jewellery

For both wedding and "wearable" jewellery, many women are now insisting on jewellery with innovative designs. Machinemade chains and other items are becoming more important. They tend to be lighter, sleek, modern, precisely made and available in many stylish designs.

South region

The south is the most important region, accounting for around 40% of retail sales nationwide.

Major cities

They are extremely important retail centres. When there is a need to purchase large quantities of jewellery, many consumers travel to cities with large showrooms. For example, Greater Mumbai (Maharashtra) may account for 35% of retail sales in the State, Chennai (Tamil Nadu) for 30%.

Large showrooms

They are extremely important. The finding that 15,000 retailers may account for 30% of retail sales nationwide may be conservative.



POSITIVE FINDINGS

Retailers draw attention to many factors that will support demand for gold jewellery over the next decade.

Population. Forecast to increase by 17%.

Economy. Annual GDP growth of 3 - 5% in real terms would grow the economy by 50% or more.

Underground economy. For many families, gold jewellery will continue to act as a discreet, tradable asset.

Exchange control. If it continues, as expected, gold jewellery will remain an important hedge in the event of a rupee devaluation against the US dollar.

Insecurity. India is not a welfare State. Most people will retain a sense of financial insecurity. Gold jewellery's role as a tangible asset will continue to be important.

Cultural tradition. All classes, although the commitment by class may vary, will continue to purchase plain (or studded) gold jewellery.

Middle class. According to NCAER, the middle class is expected to increase by around 40%. Individual families may buy less, but the number of middle class families will increase.

Women. For most married women, gold jewellery will remain an important personal asset.

Adornment. The dimension is strengthening. Lighter weight "wearable" gold jewellery is viewed as a new market opportunity with much potential.

Self-purchases and small family gifts. Both categories are expected to become more important as the economy grows.

Sentimentality. The bulk of marriage-related jewellery is regarded as "sticky" and unlikely to be dishoarded. Although some is dishoarded, sometimes within months of the wedding, retailers frequently refer to "sentimentality" as a strong restraining factor.

Rural. An enduring rural commitment to owning gold jewellery is expected to underpin the market. Its proportion of the population is forecast to change only from 71% to 68% by 2011.

PERSPECTIVE

India is in a period of transition as it gradually emerges from its Third World status.

Attitudes to owning gold jewellery for "adornment" and "investment" purposes are no longer homogeneous across the population. Among the urban/rural, rich/poor and young/old, they have started to diverge.

The divergence is the outcome of varying rates of economic and social change among the different population groups.

As a broad generalisation, among the urban, rich and younger populations, the motivation to purchase large quantities of gold jewellery has weakened.

Among the rural, middle and lower classes and older populations, the motivation to purchase large quantities remains strong.

• Although cultural and social change is regarded as irreversible, the pace of change will vary greatly among the many population groups.

For most groups, it is likely to be gradual. It should not be assumed that the attitudes of the urban top end reflect those of the bulk of the population.

As retailers stress, the primary market for gold jewellery is not the very rich or the very poor, but the emerging "middle class" (upper middle, middle and lower middle) not only in major cities but also (and especially) in the rural areas.



GOLD COINS AND NET BAR HOARDING OVER THE NEXT 10 YEARS

MARKET FEATURES

Intermediate role

The trade considers generally that most coins and most personal purchases of TT bars are *intermediate* products. In their view, more than 50% of coins would be converted into jewellery and most personal TT bars would enter the jewellery market over time.

Coins

Products: Thousands of different coins are fabricated. Most are K22. Many are crude "duplicate" sovereigns. 999 and 995 purity coins are also available.

Distribution: Jewellery retailers are the primary conduits. Most stock or obtain coins on request, and will exchange them for jewellery or buy them back. Banks are not active due to low profitability. An Internet company, Fabmart (Bangalore) is pioneering the sale of coins through its website.

Motivation. Most coins are bought for 3 purposes: family gifts, corporate gifts or personal savings. Demand tends to be seasonal during the marriage seasons and at festivals. Most coins are accumulated for marriage-related purposes. In urban areas, such as Mumbai, retailers advise that some consumers, who would previously have hoarded jewellery for marriage-related purposes, are now buying more coins. Corporate companies are buying large quantities as gifts and for use as prizes for competitions and lotteries.

Rare

Products: As few standard cast and minted bars are fabricated, the TT bar (sometimes converted into a rod in some rural areas) is the primary bar investment product.

Distribution: TT bars can be bought and sold through jewellery retailers and smaller bullion dealers.

Motivation: Private TT bar hoarding in rural and urban areas is widely reported as low. According to the trade, TT bars are bought mainly by a relatively small number of speculators in major cities, and those who wish to "park" their funds temporarily.

POSITIVE FINDINGS

Overall demand

Some retailers, notably in Mumbai and Ahmedabad, observe that more consumers are starting to buy coins and TT bars, rather than jewellery, for marriage-related gold accumulation and savings purposes. Demand is likely to increase in the larger cities.

Many consumers, especially in rural areas, still view ownership of TT bars as illegal, or indicative of an association with the underground economy. If the trade should choose to correct the current image of TT bars, after taking other factors into account, demand could be stimulated.

Legal tender Indian gold coin

Reported to be under consideration.

Forward Market Commission

The proposal to establish a gold dealing exchange similar to the Istanbul Gold Exchange could encourage much more speculative trading.

PERSPECTIVE

- Demand for coins as gifts, and for coins/bars for marriage-related gold accumulation purposes is expected to grow over the decade.
- The issue of a legal tender Indian gold bullion coin might be successful over time.

Predicting the sales of an Indian coin, if issued, is difficult because it would face competition from the plethora of existing "coins" available. However, some banks and large jewellery retailers would feel obliged to stock them, and over the decade its sales would be likely to increase.



INDUSTRIAL GOLD USAGE OVER THE NEXT 10 YEARS

Monitoring gold usage for industrial purposes in a fragmented market in a country the size of India is no easy task. The statistics in the report rely on Madhusudan Daga, whose indicative estimates are normally the basis for most Western analysts.

The report does not cover the potential of industrial demand, apart from reporting that demand for plating purposes is expected to increase, and that gold use in Zari thread could decline further due to competition from artificial golden threads.

IMPORTANCE OF THE INDIAN GOLD MARKET

Since the repeal of the Gold (Control) Act in 1990, India has emerged as the cornerstone of the world's physical gold market.

As the purchase of gold jewellery in India is much influenced by its parallel role as an "investment" for store of value, savings and money purposes, demand tends to be sensitive to movements in the gold price.

The Indian gold market is important to the gold industry worldwide not only because it is so large, but also because its sensitivity to lower gold prices leading to increased demand has often underpinned the international market when the international gold price has weakened.



Gold jewellery is retailed through approximately 300,000 outlets.



Gold jewellery is fabricated by approximately 3 million goldsmiths and ancillary workers.

CHAPTER 2

ROLE OF INDIAN GOVERNMENT

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The Ministry of Finance has its headquarters in North Block, New Delhi.

The Indian Government closely monitors the import, export, distribution, fabrication, retailing and private ownership of gold, as it has done since 1947.

As described by the Deputy Governor of the Reserve Bank of India (RBI) in 1997, the evolution of the Government's gold control policy since 1947 centred around 5 main objectives:

"To wean people away from gold, to regulate supply of gold, to reduce smuggling, to reduce the demand for gold, and to reduce the domestic price for gold."

Since 1990, the Government has adopted pragmatic policies designed to increase the share of official (as opposed to unofficial) gold imports, optimise its revenue from Customs duty, stimulate the export of gold jewellery, improve the overall quality of gold jewellery fabricated in India, and encourage the recycling of gold jewellery in private hands, notably through the Gold Deposit Scheme.

Important initiatives include the introduction of official import schemes, notably the Non-Resident Indian (NRI) Scheme in 1992 and the authorisation of banks in 1997, the Gold Deposit Scheme in 1999, the hallmarking initiative in 2000, and on-going support for gold jewellery exporters.

In a recent speech in March 2002, the Deputy Governor of the RBI reiterated the RBI's pragmatic policy:

"A positive approach to gold appears to be demonstrably less disruptive and more consistent with socioeconomic conditions in the country than a negative approach to gold, as amply demonstrated by the ineffectiveness as well as the disruptive nature of the control framework in the past."

Since 1992, Customs duty on imported gold has generated approximately Rs 106 billion (US\$ 2.6 billion).

BACKGROUND

The extent of government regulation of the gold industry has varied greatly, reflecting different policies adopted over 3 broad periods.

1947 - 1963 (16 years)

Although the import and export of gold was banned under the Foreign Exchange Regulation Act in March 1947, the private ownership of gold and the way that the domestic gold industry operated were subject to few restrictions.

1963 - 1990 (27 years)

In January 1963, Gold Control Rules were promulgated, the final provisions enacted under the Gold (Control) Act 1968 in September 1968. During this period of 27 years, the domestic gold market was rigorously controlled. Private gold ownership was restricted to gold jewellery, and gold coins already in circulation. Owning gold bars became illegal. Gold jewellery fabricators and retailers required licences in order to operate, and were strictly regulated. The manufacture of minted bars and medallions was prohibited. The forward sale of gold was banned. Most refiners, unless authorised to refine old gold scrap, closed down. Almost all bullion dealers stopped trading - at least officially. In order to manufacture new jewellery, the gold industry was obliged - theoretically - to rely entirely on the recycling of old gold scrap.

Since 1990

In June 1990, the Gold (Control) Act was repealed. There were many reasons. The gold industry had gone underground. The unofficial import of gold for sale, sometimes 50% and more above the international gold price, had not been stopped. The Government accepted that the Act had, at great expense, impeded but had not controlled the gold industry. Its repeal also fell within the new national policy of economic deregulation.

Accordingly, restrictions on the private ownership of gold fell away, and trade participants no longer required licences to operate domestically. However, it was not until March 1992 that it became possible for gold - for the first time in decades - to be imported officially for the domestic market, when NRI's (Non-Resident Indians) were allowed to import up to 5 kg every 6 months.

GOVERNMENT INITIATIVES - SINCE 1990

Gold import schemes for the domestic market

- **NRI (Non-Resident Indian) Scheme.** From March, NRI's were permitted to import up to 5 kg every six months. Increased to 10 kg in January 1997. Customs duty on imported gold bullion was applied at the initial level of Rs 450 per 10 g, but reduced to Rs 220 in April. The scheme was the main conduit for official gold imports until late 1997. Over this period, recorded NRI imports totalled 1,249 tonnes. Although the scheme is still in operation, its share of gold imports is now nominal, only 2 3 tonnes annually in recent years.
- **Special Import Licence (SIL).** From April, an existing scheme, whereby authorised exporters could use part of their overseas earnings to import specified goods, was expanded to include the import of gold. The licences were tradable. They could be sold to domestic entities for their own import purposes. SIL's were important until the introduction of the OGL scheme in November 1997. 150 tonnes of gold bars, jewellery and medallions were imported over this period. In April 2001, the scheme came to an end.

1997 **Open General Licence (OGL).** On 30 August, 7 banks were authorised to import gold, subsequently increased to 20. The first bank imports occurred in November 1997. 10 banks, reported as active importers, now dominate the official import of gold. 3 banks, appointed in 2002, are in the process of becoming active.

Mobilising gold in private hands

- 5 **year Gold Bond 1998.** Issued over a 3 month period, March June, against the supply of dishoarded gold. Redemption in 1998 was in the form of gold bars at 995 purity plus a lump sum payment of Rs 40 per gramme. 41 tonnes were subscribed.
- 1999 **Gold Deposit Scheme (GDS).** In October, the State Bank of India was authorised to accept gold from the public to enable depositors to earn interest on their gold holdings (3 4%) and the banks to use the gold, after refining, for domestic market purposes, mainly for gold loans to the jewellery fabricators. Subsequently, 5 other banks were authorised. In the first two years, approximately 8 tonnes were deposited.

The GDS is the latest in several schemes designed to attract gold deposits from the public. An important feature is that the scheme is *on-going*, while previous Gold Bond schemes in 1962, 1965 and 1993 restricted the opportunity to deposit gold to a limited period.

Improving the quality of gold jewellery

2000 **Certification Scheme for Hallmarking of Gold Jewellery.** Initiated by the Bureau of Indian Standards (BIS), the *voluntary* scheme involves the authorisation of independent entities to act as Assaying and Hallmarking Centres, and Certified Jewellers to use the centres for hallmarking purposes. The first centre was authorised in April. In the first two years, 12 Hallmarking Centres, serving 275 Certified Jewellers, were established in 9 cities.

Stimulating the export of gold jewellery

Access to imported duty-free gold for the fabrication of jewellery for export has been available since at least 1978 when the State Bank of India was permitted to import gold for this purpose. Subsequently, Public Sector Undertakings (PSU's) were also authorised: HHEC (1982), MMTC (1989) and STC (1997). Several duty-free import schemes are defined in the Government's EXIM (Export/Import) Policy. To facilitate the fabrication of export products (including jewellery) for international markets, "export zones" have been established, notably in Special Economic Zones (SEZ), and Export Processing Zones (EPZ) since the late 1980s. The most important is SEEPZ (in Mumbai), converted to SEZ status in 2000, where almost 50% of the value of gold jewellery exports is fabricated.

Official gold reserves

Official gold reserves are 358 tonnes, having grown from 216 tonnes in 1976. The increase has been due mainly to the absorption of gold confiscated from smugglers, gold derived from nationalised gold mining companies, and adjustments to the amount of gold acquired and held by various Government departments. In 1978, 14 Gold Auctions were held, 13 tonnes sold on a tender basis to licensed dealers and certified goldsmiths.

GOVERNMENT INSTITUTIONS

The gold industry is subject to the regulations, notifications and public notices of many government institutions, notably the following:

- · Ministry of Finance
- Reserve Bank of India
- Ministry of Commerce and Industry
- Ministry of Consumer Affairs, Food and Distribution
- Ministry of Coal and Mines

The Government is also associated with commercial gold-related activities through several institutions that are wholly or partly government-owned:

- Public Sector Banks (PSB's)
- Public Sector Undertakings (PSU's)
- Bureau of Indian Standards (BIS)
- Nationalised gold mining companies
- India Government Mint, Mumbai

MINISTRY OF FINANCE

The Ministry of Finance is concerned with economic and financial matters affecting the country. It comprises the Department of Economic Affairs, Department of Expenditure and Department of Revenue.

The **Central Board of Excise and Customs** (CBEC) falls under the Department of Revenue. It formulates policy relating to the levy and collection of Customs & Central Excise duties. It is the administrative authority of subordinate organisations, including Customs Houses and Central Excise Commissionerates. It monitors the import of gold and collects the Customs duties. It ensures that no gold is officially imported in contravention of the EXIM (Export/Import) Policy.

The **Department of Economic Affairs** formulates and monitors many of the country's economic policies and programmes at the macro level. The Banking Division, concerned with the functioning of the Indian banking system, has an interest in the gold-related activities of banks.

The **India Government Mint, Mumbai** falls under the administrative control of the Ministry of Finance. The Mint refines gold and fabricates gold bars and medallions.

RESERVE BANK OF INDIA

The Reserve Bank of India (RBI), established as a private institution in 1935 under the RBI Act of 1934, was nationalised in 1949 under the Banking Regulation Act 1949. It acts as India's monetary authority, regulator and supervisor of the financial system, manager of exchange control and the issuer of currency. It has 22 regional offices, most in State capitals.

Three Departments have a specific interest in gold.

Department of External Investments and Operations. Monitors official gold reserves, and co-ordinates the twice-yearly meetings of the Standing Committee on Gold.

Exchange Control Department. Involved in all matters relating to foreign exchange.

Department of Banking Operations and Development (DBOD). Authorises and monitors those banks (Public Sector, Private Sector and Foreign Banks) that import gold bullion and participate in the Gold Deposit Scheme.

Public Sector Banks - the Government has a major shareholding - that are active in gold include Allahabad Bank, Bank of India, Corporation Bank, Indian Overseas Bank, Punjab National Bank and State Bank of India.

The **Standing Committee on Gold and Precious Metals** in the RBI advises the RBI and the Government on national gold policy. The committee, established in 1992, includes representatives of the Ministry of Finance and the Ministry of Commerce and Industry.

Historically, the RBI was directly responsible for licensing and regulating all official gold imports. Since 1992, however, when the Foreign Exchange Regulation Act 1973 was amended, gold import and export policies now fall under the purview of the national EXIM (Export/Import) Policy.

MINISTRY OF COMMERCE AND INDUSTRY

The Ministry of Commerce and Industry comprises the Department of Commerce, Department of Supply and Department of Industrial Policy and Promotion.

The **Department of Commerce**, which includes the Directorate General of Foreign Trade, is responsible for policy and regulations relating to the import and export of gold under the overall EXIM (Export/Import) Policy. It controls the Special Economic Zones (SEZ) and Export Processing Zones (EPZ) where much gold jewellery for export is fabricated. It also supervises the **Gem & Jewellery Export Promotion Council** (GJEPC).

Public Sector Undertakings (PSU's), autonomous bodies that engage in gold-related activities and fall under the administrative control of the Department of Commerce, are MMTC Limited, The State Trading Corporation of India Ltd (STC) and PEC Limited. The Handlooms and Handicrafts Exports Corporation of India Ltd (HHEC) is another PSU active in gold, but falls under the Ministry of Textiles.

The Ministry's **Directorate of Commercial Intelligence and Statistics** in Kolkata co-ordinates the collection of import statistics, including gold.

MINISTRY OF CONSUMER AFFAIRS, FOOD AND DISTRIBUTION

The **Bureau of Indian Standards** (BIS) falls under the administrative control of the Department of Consumer Affairs. It launched the **BIS Certification Scheme for Hallmarking of Gold Jewellery** in April 2000. It authorises independent entities to act as Assaying and Hallmarking Centres, and jewellers to use these centres as Certified Jewellers.

MINISTRY OF COAL AND MINES

The **Indian Bureau of Mines** (IBM) falls under the administrative control of the Department of Mines. The liberalised National Mineral Policy, initiated in 1993, encourages exploration and the mining of gold by private enterprises.



GOVERNMENT PERSPECTIVE

The former Deputy Governor of the Reserve Bank of India, Dr Y.V. Reddy, delivered 3 significant speeches on India's national gold policy at conferences in New Delhi organised by the World Gold Council. They are available on the RBI's website (www.rbi.org.in).

Gold in the Economic System. 28 November 1996. Traces the development of India's gold policy since 1947.

Gold Banking in India. 2 August 1997. Reviews India's gold policy options.

Evolving Role of Gold - Recent Trends and Future Direction. 21 March 2002.

In the most recent speech, Dr Reddy identified 5 broad gold policy areas that are under review.

Import of gold

Further rationalisation may result in large institutions such as banks becoming the sole official importers of gold bullion. The NRI scheme that allows individuals to import gold may be withdrawn.

Gold jewellery exports

Some restrictions on gold jewellery export-oriented units may be removed. For example, customs bonding may no longer be necessary.

Market development

The establishment of a Gold Exchange in due course has merit. The feasibility of introducing Futures Trading in Gold is being examined by the Forward Markets Commission.

Hallmarking

The hallmarking initiative needs support. Banks, for example, should consider giving preferential treatment to Certified Jewellers by prescribing different margins for loans extended against the pledge of gold with hallmarking and that without.

Research and policy studies

The RBI is in favour of further studies covering 3 broad areas: "Gold reserves and their role in the forex market; the development of gold markets in conjunction with financial markets; and the macro economic implications of gold policy and gold markets, especially in the context of financial savings".

OBSERVATIONS

India's pragmatic policy since the repeal of the Gold (Control) Act in 1990 appears to have served the country well.

Customs duty has generated substantial revenue.

Since the NRI scheme was initiated in 1992, customs duty has generated around Rs 106 billion (US\$ 2.6 billion).

India is now paying a lot less for imported gold.

The domestic cost of gold imported officially (excluding Customs duty) now matches the international price. This benefits all gold consumers. During the 1980s, unofficially imported gold was traded at an average premium of 47%.

The quality of gold jewellery has improved significantly.

Although the fabrication of undercaratage jewellery remains widespread, notably in suburban and rural areas, most urban retailers at the top end have already raised their caratages whether acting as a Certified Jeweller or not. The hallmarking scheme is likely to see most leading retailers hallmarking much of their jewellery over the next 5 - 10 years.

Gold jewellery exports have surged.

The value of gold jewellery exports has surged from around US\$ 300 million in 1991 - 1992 to around US\$ 1.1 billion in 2000 - 2001. Over the same period, value addition above the cost of gold used has grown from 24% to around 60%, rising from US\$ 73 million to US\$ 653 million.

Unofficial imports have been curbed.

Unofficial imports now represent a small proportion of total gold imports. Since the introduction of the OGL scheme in 1997, unofficial imports have accounted for around 13% of total imports. Smuggling is barely profitable, and fraught with risk, when officially imported gold (after Customs duty and State sales taxes have been paid) is traded at only 7% above the international gold price.

The only failure to date has been the **Gold Deposit Scheme**, the reasons for which are clearly understood by the RBI. Potential depositors are aware that gold jewellery is worth a lot more than the value of its gold content when melted down, that the rate of return on deposited gold is relatively low, and that there is little financial incentive for banks to promote the scheme.



OFFICIAL GOLD RESERVES 1950 - 2001

1950 219.8 1976	216.3
1951 219.8 1977	228.8
1952 219.8 1978	260.1
1953 219.8 1979	266.2
1954 219.8 1980	267.3
1955 219.8 1981	267.3
1956 219.8 1982	267.3
1957 219.8 1983	267.3
1958 219.8 1984	271.7
1959 219.8 1985	292.3
1960 219.8 1986	325.0
1961 219.8 1987	325.0
1962 219.8 1988	325.0
1963 219.8 1989	325.0
1964 219.8 1990	332.6
1965 249.6 1991	350.6
1966 216.3 1992	353.0
1967 216.3 1993	356.3
1968 216.3 1994	367.0
1969 216.3 1995	397.5
1970 216.3 1996	397.5
1971 216.3 1997	397.5
1972 216.3 1998	357.3
1973 216.3 1999	357.7
1974 216.3 2000	357.7
1975 216.3 2001	357.8

Sources. 1950-91: Reserve Bank of India. 1992-2001: Derived from IMF International Financial Statistics.

Official gold holdings have grown from 216 tonnes (1976) to 358 tonnes (2001) - an increase of 142 tonnes over the past 25 years.

1956. The RBI revalued official holdings from Rs 21.24 to Rs 62.50 per tola (Rs 58.58 per 10 g).

October 1990. The RBI changed its valuation policy, revaluing official holdings each month at the prevailing international market price for gold.

May 1991. The government pledged 47 tonnes of official holdings to back loans from international banks for development purposes. After a national outcry, the pledge was withdrawn.



The India Government Mint, Mumbai has refined gold since 1919.

CUSTOMS DUTIES, STATE SALES AND OTHER TAXES

Gold bullion and gold jewellery are subject to taxes at national, State and municipal levels.

As there are 28 States and many municipalities, this section can provide only a broad overview.

Customs duty is payable at the time the gold is cleared. State sales taxes are normally paid on a monthly basis, after the gold has been sold.

BULLION

Customs duty

Since 1992, when gold bullion could be imported officially for the first time (under the NRI Scheme), the level of *Customs duty per 10 g* (gross weight) has changed four times.

1992	March	Rs 450
1992	April	Rs 220
1998	June	Rs 250
1999	January	Rs 400
2001	March	Rs 250

Source: Central Board of Excise and Customs

Customs duty, payable in foreign currency (normally US dollars), has generated substantial revenues. The approximate amounts below are recorded under the standard financial year (April - March).

Financial year	Approx. Rupees Millions	* Approx. US dollars Millions
1992	2,000	80
1993	2,500	80
1994	2,600	80
1995	5,500	170
1996	6,500	180
1997	11,600	320
1998	15,100	360
1999	22,400	520
2000	21,300	480
2001	16,800	360
Total	106,300	2,630

^{*} Official statistics are not available. Derived from monthly imports, Mumbai gold prices, exchange rates and the prevailing level of Customs duty.

The Government has had difficulty raising Customs duty above Rs 250 per 10 g. During the period January 1999 - February 2001, the higher level stimulated the unofficial import of gold to the detriment of official imports.

Assuming an international gold price of US\$ 300 and a US\$/Rupee exchange rate of Rs 48, the import of Customs duty on a 10 tola bar (3.75 oz) at the Rs 250 and Rs 400 levels can be expressed as follows:

Mark-up on 10 tola bar		ns duty 10 g
	Rs 250	Rs 400
In rupees	2,902	4,653
In US \$	60.46	96.93
Mark-up per oz	Customs	duty per oz
In rupees	776	1,244
In US \$	16.19	25.92
%	5.4	8.6

In summary, when Customs duty has been around US\$ 25 per oz, unofficial imports have tended to surge. At the US\$ 16 per oz level, the incentive to import gold unofficially has been undermined.

State sales tax

Most State sales taxes are now 1%. In recent years, however, some States have sometimes reduced the sales tax on gold bullion to levels below 1% in order to attract more gold imports. For this reason, Ahmedabad (Gujarat) and Jaipur (Rajasthan) have acted as important regional and national distribution centres for gold bullion. In 2002, Maharashtra (Mumbai) and Haryana (Gurgaon) have also reduced their State sales taxes on bullion to less than 1%.

In *Ahmedabad*, the current level is 0.5%. In *Jaipur*, dealers authorised between 14 January and 30 September 2001, were allowed to pay a lump sum of Rs 1 crore (around US\$ 200,000) and Rs 10 lakhs (around US\$ 20,000) per annum in order to sell an unlimited quantity of gold without paying any additional State sales taxes. The scheme has been extended until March 2003.

The Government has expressed an intention to standardise sales taxes across India through the introduction of a standard **minimum** Value-Added Tax (VAT). The current target date is April 2003.

Municipal taxes

Some cities also apply local taxes in addition to the State sales tax. For example, Mumbai currently levies on gold bullion a small *octroi* (entrance into the city) tax.

GOLD JEWELLERY

State sales taxes

The State sales tax varies by State, and is subject to change. It normally ranges between 1% and 4%.

Sales taxes on studded jewellery in some States can be higher.

Municipal taxes

As in the case of gold bullion, gold jewellery can also be subject to one or more local taxes.

INDICATIVE COST OF GOLD IMPORTS 1990 - 2001

Year	Imports for domestic use Tonnes	Mumbai gold prices * Rupees per 10 g	Approx. value Billion Rs	Cost in real terms at 1990 prices		
				Billion Rs	% +/-	Index 1990 = 100
1990	176	3,399	59.822	59.822	-	100
1991	155	4,044	62.682	55.080	- 8	92
1992	262	4,255	111.481	87.642	+ 59	147
1993	239	4,384	104.778	77.499	- 12	130
1994	296	4,652	137.699	92.415	+ 19	154
1995	384	4,798	184.243	112.070	+ 21	187
1996	408	5,191	211.793	118.188	+ 5	198
1997	642	4,556	292.495	152.421	+ 29	255
1998	688	4,182	287.722	132.469	- 13	221
1999	651	4,333	282.078	124.045	- 6	207
2000	673	4,520	304.196	128.461	+ 4	215
2001	672	4,462	299.846	122.136	- 5	204

Source: Imports for domestic use: see section on "Gold Supply and Demand"; includes official and unofficial imports. * Mumbai gold prices include import duty and local taxes.

The cost of annual gold imports for domestic use increased in real terms by 204% between 1990 and 2001.

After a decline of 13% in 1998, the cost in real terms has remained largely static.

Its actual cost in 2001 (672 tonnes) was approximately Rs 299 billion (US\$ 6.2 billion).

In 1990 (176 tonnes), the actual cost was Rs 60 billion (US\$ 3.5 billion).



CHRONOLOGY OF INDIAN GOVERNMENT INITIATIVES 1947 - 1990

1947	March	Foreign Exchange Regulation Act. Bullion imports and exports banned.		
1956	November	Kolar Gold Mining Undertakings (Acquisition) Act. Gold mining nationalised.		
1958		Government decides to retain domestic gold mine output as part of unofficial reserves.		
1962	November	15 year 6.5% Gold Bond issued in exchange for gold bars, coins and jewellery. Redeemable in rupees at par on 5 November 1977. 16.3 tonnes subscribed.		
		Government urges the public to refrain from buying gold, and to surrender their holdings. Advised commercial banks to consider recalling loans backed by gold. Forward trading in gold was banned.		
1963	January	Gold Control Rules. Promulgated, imposing severe restrictions on the gold industry. Prohibited the manufacture of gold jewellery above 14 carat.		
1963	December	Gold Control Rules. Control over the domestic trade and distribution of gold was firmly established.		
1965	March	15 year 7% Gold Bonds issued in exchange for gold bars, coins and jewellery. Redeemable in rupees from 2 March 1980. 6.1 tonnes subscribed.		
	October	15 year 6.5% National Defence Gold Bonds 1980. Issued in exchange for gold bars, coins and jewellery. Interest fixed at 2% per 10 g at 995 purity. Redeemable in gold bars from 27 October 1980. 13.7 tonnes subscribed.		
1966	November	Defence of India (Fourth Amendment) Rules. Permitted fabrication of gold jewellery above K14. Banned private possession of primary gold (e.g. bars). Gold jewellery above specified limits had to be declared. Stricter control over gold refineries applied with the ultimate objective of bringing gold refining under State ownership.		
1966		Gem & Jewellery Export Council established.		
1968	September	Gold (Control) Act 1968 established controls on a permanent basis, with only minor changes in subsequent years.		
1975		Voluntary disclosure of Income and Wealth (Amendment) Ordinance 1965. Granted immunity from prosecution for disclosures of wealth and gold within a defined period.		
1978	April	Gold Auctions. Between April - October, the Government held 14 auctions for sale to licensed dealers and certified goldsmiths. 13 tonnes sold.		
1986		Review of Gold (Control) Act initiated. Government sets up "Working Group to Review Gold Policy".		
1988		SEEPZ. Jewellery exporters were allowed to establish fabrication units in Mumbai's EPZ (Export Processing Zone).		
1990	June	Repeal of Gold (Control) Act. Domestic trade deregulated. Dealers, fabricators, retailers and refiners could operate without need for licences. Restrictions on the private ownership of gold were removed. However, at this stage, there was no policy to facilitate the official import of gold.		
Source: Various sources, including Madhusudan Daga				

Source: Various sources, including Madhusudan Daga



GOLD CONTROL RULES 1963 AND THE GOLD (CONTROL) ACT 1968

HISTORICAL PERSPECTIVE

To explain the growth in the Indian gold market since the repeal of the Gold (Control) Act in June 1990, it is important to understand how the market had been constrained over the previous 27 years.

The story begins on 10 January 1963 when a comprehensive range of Gold Control Rules were promulgated as part of the Defence of India Rules 1963. The Government's objective was to inhibit unofficial gold imports and the consumption of gold by imposing severe bureaucratic constraints not only on the trade but also on private owners. By December 1963, control over the domestic trade and distribution of gold was firmly established.

In 1965, Parliament endorsed the Government's policy underlying the Gold Control Rules through the Gold (Control) Act 1965, but before the Act could be brought into force, the Government recognised the need to modify some aspects. Modifications - including the withdrawal of a 14 carat purity restriction on gold jewellery applied since 1963 - were then included in the Defence of India (Fourth Amendment) Rules 1966. Rather than amend the Gold (Control) Act 1965, a new Gold (Control) Act 1968 was enacted in September 1968.

TRADE STRUCTURE

The Act grouped gold market participants into 5 categories:

- General public
- Licensed refiners
- Certified goldsmiths
- Licensed dealers
- · Registered artisans

All categories were controlled by Gold Control Officers based in 30 "Collectorates" around India.

In summary, the role of each category was prescribed as follows:

General public: Permitted to buy gold "ornaments" only, i.e. gold jewellery for the purpose of adornment. They were no longer allowed to own or buy gold bars or any non-jewellery articles. Individuals had to declare the extent of their gold ownership if it exceeded 2000 g, and families if it exceeded 4000 g. Any change in the amount owned over these limits had to be notified.

Licensed refiners: Restricted to melting, refining, assaying and making of bars for the trade only. They could buy and sell primary gold but detailed records of all transactions had to be submitted to the authorities. They were not permitted to make, repair or polish any gold article or "ornament" (i.e. jewellery) or sell bars to the public. As a result, all major refiners closed down and the 49 licensed refiners (at 1989) were small operations mainly involved in melting and assaying.

Certified goldsmiths: Only *self-employed* individuals were certified. They could buy gold bars from a licensed refiner or dealer, could receive gold for manufacturing purposes from a licensed dealer or the general public, but could not buy or sell any jewellery, article or primary gold. They could not engage more than one hired labourer, and the labourer was not permitted to make, repair or polish any jewellery. Officially, most goldsmiths became contract workers to dealers or merely refashioned old gold jewellery provided by the public. The constraints also ensured that almost all Indian jewellery remained handmade. At 1989, 379,883 individuals were certified.

Licensed dealers: The term "dealer" covered all entities involved in buying or selling gold or gold jewellery among trade counterparties or gold jewellery with the public, although most were *jewellery retailers*. However, other entities were included in this category: *wholesalers* and *manufacturers* (dealing in gold in some way or employing artisans) had to be licensed as dealers. There were many constraints: they could deal only on the premises specified in the licence, they could not sell bars to the public, they could have in their possession only gold bars made by licensed refiners - the quantity restricted to a maximum of 400 g if they employed one artisan, rising to a maximum of 2000 g if more than 20 artisans were employed. All movements of gold, down to the last gramme, had to be officially recorded. Even carrying samples was extremely difficult. For all dealers, the bureaucracy and restrictions were oppressive. In 1989, there were 16,662 licensed dealers.

Registered artisans: Defined as a person who was employed or used by a licensed dealer (i.e. not a certified goldsmith) in order to manufacture gold jewellery, having been supplied with the necessary gold to undertake the task. No figures on the number of registered (and unregistered) artisans are available. According to the trade, few artisans were registered.



CONSEQUENCES OF THE GOLD (CONTROL) ACT

• Instead of controlling the gold industry the Act drove the industry underground.

The constraints were considered so excessive that both the trade and the public dealt only in cash, and most transactions were not officially recorded.

• Growth in the number of gold jewellery retail outlets was inhibited over 27 years.

Obtaining a licence to open a new retail jewellery outlet was difficult. The small number of retail outlets (around 16,000 in 1989) was extremely low in the context of India's 3,800 cities and towns.

• The trade remained fragmented. No large gold-related business could emerge.

As gold jewellery retailers were licensed to operate from a single location, it was not feasible to establish a chain of retail outlets, unless managed by a family member who still had to obtain a licence in his own right. Establishing a large jewellery fabrication factory or a nationwide wholesaling company was also impractical. Throughout the period, the businesses were small and family-owned.

 As gold could be owned only in the form of jewellery (not bars), gold jewellery became the vehicle for investment.

Apart from well-crafted jewellery, much crude jewellery (e.g. simple rings and bangles) was fabricated (for sale at a very low mark-up) so that it could be used more easily as "money".

• As the gold industry relied entirely on unofficial gold imports, the domestic gold price was highly inflated.

Throughout the period, the domestic gold price was usually 50% or more above the prevailing international gold price.

• The public's passion for owning gold was reinforced.

Owning gold and gold jewellery in large quantities became the aspiration of most people as the only way to protect their savings during a period of high inflation and rupee devaluation.



The Reserve Bank of India has its headquarters in Mint Road, Mumbai.

ROLE OF INDIAN GOVERNMENT

LICENSED GOLD DEALERS AND CERTIFIED GOLDSMITHS IN 1989

State/UT	Collectorate	License Number	d Dealers % split	Certified (Number	Goldsmiths % split	Populations	on in 1991 % split
NORTH							
Uttar Pradesh	Allahabad	267		6,603			
	Kanpur	263		9,189			
	Meerut	260		5,870			
		<i>790</i>		21,662			
Rajasthan	Jaipur	236		20,611			
Chandigarh	Chandigarh	956		17,002			
Delhi	New Delhi	895		13,881			
Jammu & Kashmir	-	095		13,001			
Sub-total	_	2,877	17	73,156	19	241	28
WEST							
Maharastra	Aurangabad	519		5,822			
Tanarasaa	Bombay	1,885		15,881			
	Nagpur	320		4,535			
	Pune	532		7,530			
	rulle	3,256					
Madhya Dradash	Indore			<i>33,768</i>			
Madhya Pradesh		305		10,331			
Gujarat	Ahmedabad	562		10,225			
	Baroda	342		5,548			
	Rajkot	668		19,137			
		1,572		34,910			
Goa	Goa	163		1,650			
Sub-total		5,296	32	80,659	21	187	22
EAST							
Bihar	Patna	343		8,597			
West Bengal	Bolpur	317		12,960			
	Kolkata I	722		33,370			
	Kolkata 2	184		10,196			
	Nonata L	1,223		56,526			
Orissa	Bhubaneshwar	115		13,757			
Assam	Shillong	44		6,793			
Sub-total	Shillong	1,725	10	85,673	23	208	25
SOUTH		<u> </u>		<u> </u>			
Andhra Pradesh	Guntur	560		15,233			
Andria i idaesii	Hyderabad	611		18,802			
	rryacrabaa	1,171		34,035			
Tamil Nadu	Coimbatore	744					
Idilii Nauu				15,357			
	Madras	736		10,044			
	Madurai	967		21,845			
	Trichy	591		10,201			
		3,038		57,447			
Karnataka	Bangalore	436		5,799			
	Belgaum	565		16,059			
		1,001		21,858			
Kerala	Cochin	1,554		27,055			
Sub-total		6,764	41	140,395	37	200	24
TOTAL INDIA		16,662	100	379,883	100	846	100

Sources: Gold Control Statements No I and II (Numbers at 31 December 1989).

The last Gold Control Statements, published in 1990, record that there were only 16,622 licensed dealers (mainly jewellery retailers) and 379,883 certified goldsmiths.

The south accounted for 41% of licensed dealers and 37% of certified goldsmiths.



CHAPTER 3

ORIENTATION

CONTENTS

Map of India

Population

States

Urban and rural

Major cities

Households - split by social class

Economic indices

Agricultural and Industrial Production and GDP Exchange rates, share prices, interest rates and inflation States – indicative per capita income

Agriculture

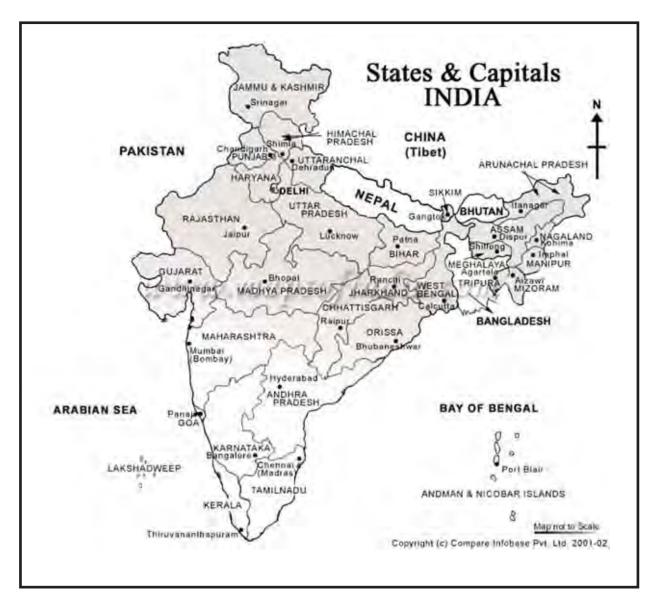
Number of agricultural holdings Major crops

Monsoons

Performance of South West monsoon Extent of irrigation



India's population of 1,012 million live in 5,100 towns and cities and 640,000 villages.



There are 28 States, 6 Union Territories (UT's) and Delhi as the National Capital Territory (NCT).

In the 1991 Census, there were 25 States. Uttaranchal (north), Jharkhand (east) and Chhattisgarh (west) were previously part of Uttar Pradesh, Bihar and Madhya Pradesh respectively.

India borders 6 countries: Pakistan, Nepal, China, Bangladesh, Bhutan and Burma. The island of Sri Lanka is offshore.

Languages

There are more than 700 languages and dialects. There are 12 languages that are spoken by at least 1% of the population. Hindi is spoken as a primary or secondary language by 65%, English by around 20%.

Religions

According to the 1991 Census, the split is recorded as Hindus (82%), Muslims (12%), Christians (2.3%) and others (3.7%).

This report groups Indian States into 4 regions for marketing purposes.

The regional breakdown of the 1,012 million population: north (30%), east (25%), west (22%) and south (22%).



STATES

State		Millions		Capital city
	1991	2001	2011	
NORTH				
Uttar Pradesh	139	174	217	Lucknow
Uttaranchal				Dehradun
Rajasthan	44	55	65	Jaipur
Punjab	20	24	27	Chandigarh (UT)
Haryana	16	20	23	Chandigarh (UT)
Jammu & Kashmir	8	10	12	Srinagar
Himachal Pradesh	5	7	8	Shimla
Delhi (NCT)	9	14	20	New Delhi
Sub-total	241	304	372	
WEST				
Maharashtra	79	92	103	Mumbai
Madhya Pradesh	66	81	97	Bhopal
Chhattisgarh				Raipur
Gujarat	41	49	56	Gandhinagar
Goa	1	2	2	Panaji
Sub-total	187	224	258	
EAST				
Bihar	86	102	121	Patna
Jharkand				Ranchi
West Bengal	68	80	91	Kolkata
Orissa	32	36	40	Bhubaneshwar
Assam	22	27	31	Dispur
Arunachal Pradesh	1	1	na	Itanagar
Sub-total	186	246	284	
SOUTH				
Andhra Pradesh	67	76	85	Hyderabad
Tamil Nadu	59	62	68	Chennai
Karnataka	45	53	60	Bangalore
Kerala	29	33	36	Thiruvanantpuram
Sub-total	200	224	249	
ALL INDIA *	846	1,012	1,179	

Source: Statistical Outline of India 1999-2000, 2001-2002, Tata Services Limited.

Notes: Since 1991, Uttaranchal, Chhattisgarh and Jharkand have been established as new States. Tata tables do not always include these States as separate States. Chandigarah (UT) is the capital of both the Punjab and Haryana.

The population has grown by 20% since 1991. It is expected to increase by a further 17% by 2011.



^{*} Includes "Other". Comprises 6 smaller States: Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura. And 6 Union Territories: Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep, Pondicherry.

URBAN AND RURAL

State	Millions Urban	in 2001 Rural	% split i Urban	in 2001 Rural	Major city
NORTH					
Uttar Pradesh	35	132	23	77	Kanpur
Rajasthan	13	43	25	75	Jaipur
Punjab	8	16	32	68	Ludhiana
Haryana	6	15	28	72	Chandigarh (UT)
Jammu & Kashmir	3	8	25	75	Srinagar
Himachal Pradesh	1	5	10	90	Shimla
Uttaranchal	2	6	26	74	Dehradun
Delhi (NCT)	13	1	93	7	New Delhi
Sub-total	81	226	26	74	
WEST					
Maharashtra	41	56	43	57	Mumbai
Madhya Pradesh	16	44	27	73	Bhopal
Gujarat	19	32	38	62	Ahmedabad
Chhattisgarh	4	17	20	80	Raipur
Goa	1	1	50	50	Goa
Sub-total	81	150	35	65	
EAST					
Bihar	9	74	15	85	Patna
West Bengal	23	58	29	71	Kolkata
Orissa	6	31	17	83	Bhubaneshwar
Jharkand	6	21	22	78	Ranchi
Assam	3	23	12	88	Guwahati
Arunachal Pradesh	1	<1	18	82	Ledo
Sub-total	48	208	19	81	
SOUTH					
Andhra Pradesh	21	55	31	69	Hyderabad
Tamil Nadu	27	35	37	63	Chennai
Karnataka	18	35	34	66	Bangalore
Kerala	8	24	31	69	Cochin
Sub-total	74	149	33	67	
ALL INDIA	285	742	29	71	

Source: Statistical Outline of India 2001-2002, Tata Services Limited, pages 132-135. Tata estimates by State and All India vary in different tables.

The urban population proportion varies by region: west (35%), south (33%), north (26%) and east (19%).

Urbanisation appears to be gradual. The urban population was 26% in 1991. Estimated at 29% in 2001, it is expected to grow to 32% by 2011.

Retailer estimates suggest that urban consumers may account for as much as 40% of jewellery demand. Retailers also observe that urban/rural demand is not a static proportion. In recent years, rural demand has suffered, relative to urban demand, due mainly to a depressed agricultural economy.



MAJOR CITIES

State	City	Population in 1991 000's
NORTH		
Uttar Pradesh	Kanpur	2,030
	Lucknow	1,669
	Varanasi	1,031
	Agra Allahabad	948 845
Dajacthan	Jaipur	845 1,518
Rajasthan Punjab	Ludhiana	1,043
Delhi (NCT)	New Delhi	8,419
	New Dellii	0,719
WEST Maharashtra	Greater Mumbai	12,596
Manarashira	Pune	2,494
	Nagpur	1,664
	Kalyan	1,015
	Thane	803
Madhya Pradesh	Bhopal	1,063
Chhattisgarh	Indore	1,109
Gujarat	Ahmedabad	3,312
	Surat	1,519
	Baroda	1,127
EAST		
Bihar	Patna	1,100
West Bengal	Kolkata	11,022
	Jamshedpur	829
SOUTH		
Andhra Pradesh	Hyderabad	4,344
	Vishakhapatnam	1,057
Tauril Na de	Vijayawada	846
Tamil Nadu	Chennai	5,422
	Coimbatore Madurai	1,101
Karnataka	Madurai Bangalore	1,086 4,130
Kerala	Cochin	1,141
i/Ci ala	Thiruvananthapuram	826
TOTAL	·	30

Source: Statistical Outline of India 2000-200, Tata Services Limited. 2001 Census figures are not yet available.

There are at least 30 cities whose populations now exceed 1 million. 6 now exceed 5 million.

Estimates by leading retailers suggest that Greater Mumbai may account for 35% of jewellery sales in its State, Kolkata, Ahmedabad, Hyderabad and Chennai for 30% and Bangalore and Cochin for 25% in their respective States. New Delhi attracts customers from all States in the north.

Although the estimates may be exaggerated, major cities are regarded as extremely important retail centres.



HOUSEHOLDS - SPLIT BY SOCIAL CLASS

Social Class	Milli	ons of househo	olds	%	Split of househ	olds
TOTAL	1994-95	2001-02	2006-07	1994-95	2001-02	2006-07
High	4.6	12.1	22.7	2.9	6.7	11.4
Upper Middle	7.0	13.6	21.4	4.4	7.5	10.7
Middle	18.0	23.6	36.6	11.2	13.0	18.4
Sub-total	29.6	49.3	80.7	18.5	27.2	40.5
Lower Middle	44.9	72.2	78.5	28.0	40.0	39.4
Low	86.1	59.4	39.9	53.6	32.8	20.0
Total	160.6	180.7	199.2	100.0	100.0	100.0
URBAN						
High	2.7	7.8	15.8	6.0	14.8	26.2
Upper Middle	3.9	7.7	13.7	8.7	14.6	22.7
Middle	8.4	12.9	15.3	18.8	24.6	25.4
Sub-total	15.0	28.4	44.8	33.5	54.0	74.3
Lower Middle	14.8	17.2	13.6	33.1	32.8	22.6
Low	14.9	6.7	1.7	33.3	12.7	2.8
Total	44.7	52.4	60.1	100.0	100.0	100.0
RURAL						
High	1.9	4.3	7.0	1.6	3.3	5.0
Upper Middle	3.1	5.8	7.6	2.7	4.5	5.4
Middle	9.6	10.6	21.3	8.2	8.2	15.3
Sub-total	14.6	20.7	35.9	12.5	16.0	25.7
Lower Middle	30.1	55.0	65.0	26.0	42.8	46.7
Low	71.1	52.6	38.2	61.3	40.9	27.4
Total	115.9	128.3	139.1	100.0	100.0	100.0

Source: National Council of Applied Economic Research (NCAER), New Delhi. Social classes are expressed in terms of annual income in rupees at 1994-95 prices. Low (up to 22,500), Lower Middle (22,551-45,000), Middle (45,001-70,000), Upper Middle (70,001-96,000) and High (above 96,000). Income levels and grouping are approximate and indicative only as figures do not take into account the underground economy. Large retailers generally describe the "Middle Class", in their view, as starting at the Rs 15,000 (US\$ 300) per month level.

There are 181 million households in India.

The household category is important as jewellery purchases are normally the outcome of a family decision.

Retailers stress the importance of the emerging "middle class" to jewellery consumption.

Although NCAER estimates are indicative only, *urban* households account for 58% of the 49 million Middle Class and above households, *rural* for 42%.

Since 1994-95, the number of *urban* households in this category has grown by 90%, the number of *rural* households by 40%.

Retailers also stress that many households cannot afford to buy much gold. 26% of the population is recorded at below the poverty line.



ECONOMIC INDICES

AGRICULTURAL AND INDUSTRIAL PRODUCTION AND GDP

Year	Agricultu	ral Production	Industri	al Production	Gross Don	nestic Product
	Index	% Change	Index	% Change	Index	% Change
1990-91	100.0	3.8	100.0	8.2	100.0	5.6
1991-92	98.0	- 2.0	100.6	0.6	101.3	1.3
1992-93	102.0	4.1	102.9	2.3	106.5	5.1
1993-94	105.9	3.8	109.0	6.0	112.7	5.9
1994-95	111.1	4.9	119.0	9.1	121.0	7.3
1995-96	108.1	- 2.7	134.5	13.0	129.8	7.3
1996-97	117.9	9.1	142.7	6.1	139.9	7.8
1997-98	111.6	-5.4	152.2	6.7	146.7	4.8
1998-99	119.9	7.5	158.5	4.1	156.3	6.6
1999-00	119.1	- 0.7	169.1	6.7	166.3	6.4
2000-01	121.4	2.0	177.6	5.0	175.0	5.2
2001-02 est.	126.3	4.0	182.0	2.5	184.3	5.3

Source: Statistical Outline of India 2001-2002, Tata Services Limited. Indexes are derived from the percentage changes.

Industrial Production has increased by 82%, Agricultural Production by 26%, since 1990.

This table confirms retailer observations in many States that growth in urban demand has been more consistent than rural demand over the past 10 years.

EXCHANGE RATES, SHARE PRICES, INTEREST RATES AND INFLATION

Year	Exchange rate	Share	e prices	Interest deposit rate	Consur	mer prices
	Rs per US\$	Index	% +/-	%	Index	% +/-
1990	17.50	100.0	+ 38.8	9-10	100.0	+ 9.0
1991	22.74	134.9	+ 34.9	12	113.8	+ 13.8
1992	25.92	247.6	+ 83.5	11	127.2	+ 11.8
1993	30.49	203.0	- 18.0	10	135.2	+ 6.3
1994	31.37	322.4	+ 58.8	11	149.0	+ 10.2
1995	32.43	270.3	- 16.2	12	164.4	+ 10.3
1996	35.43	246.8	- 8.7	11-12	179.2	+ 9.0
1997	36.31	228.4	- 7.5	10.5-11	191.9	+ 7.1
1998	41.26	207.6	- 9.1	9-11	217.2	+ 13.2
1999	43.06	257.6	+ 24.1	8.5-9.5	227.4	+ 4.7
2000	44.94	286.5	+ 11.2	8.5-9	236.8	+ 3.7
2001	46.98	217.0	- 24.3	8-8.5	245.5	+ 4.0

Source: IMF International Financial Statistics. RBI Handbook on Indian Statistics (Interest deposit rate).

The rupee has declined in value against the US dollar by more than 200% since 1990. The volatile share market has also not always kept pace with inflation.

Jewellery retailers observe that it is now opportune to emphasise, in an appropriate way, the long-term advantages of owning gold for store of value and savings purposes.



ECONOMIC INDICES

STATES - INDICATIVE PER CAPITA INCOME

State	Population 2001	Per capita income 1998-99	Gross industrial output per capita 1998-99	Agriculture's share of State GDP* 1998-99
	Millions	Rupees	Rupees	%
NORTH				
Delhi (NCT)	14	29,623#	n.a.	1
Punjab	24	20,834	13,232	40
Haryana	20	19,773	17,368	35
Himachal Pradesh	7	12,692	6,568	20
Rajasthan	55	11,045	4,561	35
Jammu & Kashmir Uttar Pradesh	10	10,272	1,480	n.a.
Uttaranchal	174	9,261	3,533	33
Sub-total	304	-, -	-,	
WEST				
Goa	2	24,309	n.a.	n.a.
Maharashtra	92	20,644	17,954	16
Gujarat	49	18,752	23,969	19
Madhya Pradesh		,	•	
Chhattisgarh	81	10,147	3,619	30
Sub-total	224	,	,	
EAST				
West Bengal	80	12,961	4,375	26
Arunachal Pradesh	1	12,929	n.a.	28
Orissa	36	8,719	3,063	26
Assam	27	8,700	3,172	34
Bihar		,	•	
Jharkand	102	5,923	1,111	28
Sub-total	246	,	•	
SOUTH				
Kerala	33	17,756	6,563	22
Tamil Nadu	62	17,525	12,565	18
Karnataka	53	15,889	9,117	26
Andhra Pradesh	76	13,853	6,574	26
Sub-total	224	,	,	
ALL INDIA **	1,012	14,712	8,037	26##

Sources: Statistical Outline of India 2001-2002, Tata Services Limited. * Agricultural Statistics at a Glance, Ministry of Agriculture. ** Includes other States and UT's. # Relates to 1999-2000. ##Total relates to agriculture's share of Net Domestic Product.

Income per capita, and its source, varies greatly among the 28 States.

In 1998-99 (the latest States-wise statistics available):

- Income per capita. Ranged from Rs 5,923 (Bihar, in the east) to Rs 22,834 (Punjab, in the north).
- Gross industrial output per capita. Ranged from Rs 1,111 (Bihar) to Rs 23,969 (Gujurat, in the west).
- Agriculture's share of State GDP. Ranged from 16% (Maharashtra, in the west) to 40% (Punjab).

The 9 States, alongside New Delhi (NCT) and the small State of Goa, with the highest per capita income are:

North Punjab, Haryana East West Bengal West Maharashtra, Gujarat

South Kerala, Tamil Nadu, Karnataka, Andhra Pradesh

The All India average per capita income in 1998-99 was Rs 14,712 (US\$ 350).



As the agricultural sector is so important to the Indian economy, this section includes information relevant to gold demand and the marketing of gold.

The rural population of 742 million accounts for 71% of India's population.

There are about 107 million farms. Most are small. 78% are 2 hectares or less.

Food grains (mainly rice and wheat) account for about 44% of the value of major agricultural crop output, fruit and vegetables for about 23%.

Agricultural GDP per rural capita is generally higher in the south.

Only 38% of agricultural land is irrigated. All States rely on the monsoon.

FARMS

The average size of the 107 million farms is 1.6 hectares.

63 million farms (59%) are less than 1 hectare. 1.7 million (1.6%) are 10 hectares or more.

In the 1991 Census, 60% of the agricultural population were described as cultivators, 40% as agricultural labourers. The Ministry of Agriculture observes that many family members categorised as cultivators on small farms would also work as agricultural labourers on larger farms. It estimates that around 60% of agricultural workers in total are agricultural labourers.

Daily wages for agricultural labourers in different States range from around Rs 50 (US\$ 1.00) to Rs 200 (US\$ 4.00).

MAJOR CROPS

94% of the 154 million hectares under major crop cultivation are used to produce 3 crop categories: food grains (80%), oilseeds (11%) and sugarcane (3%).

Food grains

Includes rice, wheat and pulses. 43% is produced by Uttar Pradesh (22%) and Punjab (12%) in the north, and Madhya Pradesh (10%) in the west.

Oilseeds

Includes soyabean, mustard and groundnuts. 57% is produced by Madhya Pradesh (27%) and Maharashtra (13%) in the west, and Rajasthan (17%) in the north.

Sugarcane

69% is produced by Uttar Pradesh (39%) in the north, Maharashtra (18%) in the west, and Karnataka (12%) in the south.

The important food grains of rice and wheat are harvested at different times.

Rice

Accounts for 43% of food grains. Typically, 86% is harvested in the *Kharif* (October/November) period. 14% in the *Rabi* (March/April) period.

68% of rice is produced by 6 States: West Bengal (16%) and Bihar (9%) in the east, Uttar Pradesh (10%) and Punjab (14%) in the north, Andhra Pradesh (12%) and Tamil Nadu (8%) in the south.

Wheat

Accounts for 35% of food grains. The crop is harvested in the Rabi (March/April) period.

79% of wheat is produced by 4 States. Uttar Pradesh (34%), Punjab (21%) and Haryana (13%) in the north and Madhya Pradesh (11%) in the west.



VALUE OF AGRICULTURAL OUTPUT

The annual gross value of agricultural output is around Rs 4,000 (US\$ 83) billion.

The south has the highest indicative GDP from agriculture per rural capita. The east has the lowest. Indicative figures in rupees in 1999 - 2000:

 South
 6,300

 West
 5,600

 North
 5,400

 East
 3,500

Outside the 4 States in the south, there are also 5 other States with high figures:

Region	State	GDP per rural capita Rupees	% GDP from Agriculture	Industrial input per capita* Rupees
North	Punjab	13,800	40	13,232
	Haryana	10,000	35	17,368
West	Maharashtra	6,600	16	17,954
	Gujarat	6,100	19	23,969
East	West Bengal	6,200	26	4,375
South	Karnataka	7,100	26	9,117
	Kerala	6,100	22	6,563
	Andhra Pradesh	6,100	26	6,574
	Tamil Nadu	6,100	18	12,565

Source: Derived from 1998-99 statistics in Agricultural Statistics at a Glance, Ministry of Agriculture. * Statistical outline of India 2001-2002, Tata Services Limited.

When wholesalers are asked to list the most active gold consuming States per capita, almost invariably they refer to these States, alongside New Delhi.



Rice – India's largest crop – accounts for 43% of food grain production.

NUMBER OF AGRICULTURAL HOLDINGS

State	Rural population	Marginal	Small	Semi- Medium	Medium (M)	Large (L)	Total holdings	Total M+L
	Millions	< 1 h	1-2 h	2-4 h	4-10 h	> 10 h	-	
NORTH								
Uttar Pradesh	137.8	14,819	3,116	1,543	548	45	20,074	593
Rajasthan	43.3	1,517	1,019	1,061	1,017	493	5,107	1,510
Punjab	16.0	296	204	289	261	67	1,117	328
Haryana	15.0	622	304	336	222	46	1,530	268
Jammu & Kashmir	7.6	902	197	98	20	1	1,217	1,218
Himachal Pradesh	5.5	532	166	94	36	6	834	840
Delhi (NCT)	1.0	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sub-total	226.2	18,688	5,006	3,421	2,104	658	29,879	2,762
WEST								
Maharashtra	55.7	3,275	2728	2,126	1,171	171	9,470	1,342
Madhya Pradesh	60.9	3,136	1917	1,738	1,287	323	8,401	1,610
Gujarat	31.7	924	915	890	669	118	3,517	787
Goa	0.7	58	7	4	2	1	72	3
Sub-total	149.0	7,393	5,567	4,758	3,129	613	21,460	3,742
EAST								
Bihar	95.1	10,193	1,438	945	351	39	12,966	390
West Bengal	57.7	4,639	1,107	457	79	1	6,284	80
Orissa	31.2	2,118	1,035	594	186	15	3,948	201
Assam	23.2	1,521	560	343	95	5	2,523	100
Arunachal Pradesh	0.9	16	17	30	26	5	94	31
Sub-total	208.1	18,487	4,157	2,369	737	65	25,815	802
SOUTH								
Andhra Pradesh	55.2	5,211	1,972	1,349	644	118	9,290	762
Tamil Nadu	34.9	5,848	1,275	618	228	31	7,999	259
Karnataka	34.4	2,262	1,586	1,163	636	129	5,776	765
Kerala	23.6	5,016	280	98	21	3	5,418	24
Sub-total	148.1	18,337	5,113	3,228	1,529	281	28,483	1,810
OTHER*	10.3	483	243	152	80	36	996	116
GRAND TOTAL	741.7	63,389	20,092	13,923	7,580	1,654	106,637	9,234
(% Split)	-	(59)	(19)	(13)	(7)	(2)	(100)	(9)
Area in 000's hectares		24,894	28,827	38,327	44,752	28,659	165,507	73,411
(% Split)	-	(15)	(17)	(23)	(27)	(17)	(100)	(44)
Av. size in hectares	-	0.39	1.43	2.76	5.90	17.33	1.55	7.9

Source: Agricultural Statistics at a Glance, Ministry of Agriculture. Figures are taken from the 1991 Census. * Small States and UT's.

83 million (78%) of the 107 million farms are 2 hectares or less.



MAJOR CROPS - NORMAL AREA, PRODUCTION AND INDICATIVE VALUE

Crops	Area	Production	Gross value*	Important	States
·	Million hectares (% split)	Million tonnes	Rs. crores 1999-00 (% split)	State	% share of production in 1999-00
MAJOR CROPS					
Food grains	124.0	201.6	179,519	Uttar Pradesh	22
				Punjab	12
	(00)		(44)	Madhya Pradesh	10
	(80)		(44)		44
Oilseeds	25.6	22.3	29,177	Madhya Pradesh	27
				Rajasthan	17
				Maharashtra	13
	(17)		(7)		57
Sugarcane	4.1	289.2	30,986	Uttar Pradesh	39
_			·	Maharashtra	18
				Karnataka	12
	(3)		(8)		69
Sub-total	153.7 (100)	513.1	239,682 (59)	-	-
OTHER CROPS					
Fruits & vegetables	n.a.	n.a.	94,731 (23)	-	-
Condiments & spices	n.a.	n.a.	15,937	-	-
			(4)		
Other**	n.a.	n.a.	55,227	-	-
			(14)		
Total	-	-	405,577	-	-
			(100)		

Sources: Agricultural Statistics at a Glance, Ministry of Agriculture. * Statistical Outline of India 2001-2002, Tata Services Limited.

Food grains account for 44%, fruit and vegetables for 23% of the annual gross value of the production of major agricultural crops.



Wheat accounts for 35% of food grain production.

^{**} Gross value of "Other" in crore rupees includes kapas (10,510), tea (2,565), tobacco (2,170), coffee (1,773), timber (1,586) and jute (1,331).

MONSOONS

SOUTH WEST MONSOON (JUNE TO EARLY OCTOBER)

The monsoon carries moisture-laden air from the Indian ocean in the south west. Heavy rainfall starts in the extreme south around 1 June and rapidly covers most of India by 30 June.

It starts retreating progressively from around 1 September in the extreme north, withdrawing from most of the country by early October.

NORTH EAST MONSOON (MID-OCTOBER TO END DECEMBER)

When the retreating South West monsoon blows from the north east across the Bay of Bengal, it absorbs moisture that is subsequently released in States in the south west, notably Tamil Nadu. This extension of the rainy season is called the North East monsoon.

MONITORING THE MONSOON

As India's economy is so dependent on good rains, everyone (including jewellery retailers) monitors the monsoon closely. Its impact on different States varies considerably.

Excess rain can cause severe flooding. Too little rain, or rain that is not well distributed, can cause droughts.

According to the Ministry of Agriculture, the States most vulnerable to drought, in the event of deficient rainfall during the monsoon, are normally:

North Rajasthan

West Maharashtra, Gujarat and Madhya Pradesh

South Parts of Karnataka

The States most vulnerable to flooding are normally:

East Assam, Bihar, West Bengal and Orissa.

For 14 years, between 1988 and 2001, the monsoon was generally considered "good" from a national perspective.

However, the Ministry of Agriculture reports that the monsoon in 2002 is the worst since 1987. Agricultural output is expected to fall significantly.



The volume and distribution of rainfall during the monsoons can affect annual demand for gold jewellery.

MONSOONS

PERFORMANCE OF SOUTH WEST MONSOON

(1 JUNE - 30 SEPTEMBER)

Year	Agricultural Production Index	Percentage (%) of Districts	Actual rainfall as a % of Normal	
	% change in Financial Year	Normal/Excess rainfall	Deficient/Scanty rainfall	rainfall	
1990	3.8	88	12	119	
1991	- 2.0	68	32	91	
1992	4.1	65	35	93	
1993	3.8	78	22	100	
1994	4.9	77	23	110	
1995	- 2.7	79	21	100	
1996	9.1	82	18	103	
1997	- 5.4	81	19	102	
1998	7.5	81	19	106	
1999	- 0.7	67	33	96	
2000	2.0	66	34	92	
2001	n.a.	68	32	93	

Source: Agriculture Statistics at a Glance, Ministry of Agriculture. Definitions are related to the "Long Period Average Rainfall": Excess (+ 20% or more), Normal (between + 19% and - 19%), Deficient (between - 20% and - 59%) and Scanty (between - 60% and - 99%).

The table indicates that there has not always been a correlation between *national* rainfall and the *national* Agricultural Production index over the past 10 years.

However, over 1999 - 2001, deficient or scanty rainfall annually in 32 - 34% of Districts, and lower than Normal rainfall overall, alongside lower agricultural prices, depressed the agricultural economy.

EXTENT OF IRRIGATION

Percentage (%) coverage of irrigated area under principal crops in 1997 - 98

State	%	State	%
NORTH		EAST	
Punjab	92	Bihar	47
Haryana	79	West Bengal	27
Uttar Pradesh	66	Orissa	27
Jammu & Kashmir	41		
Rajasthan	30	SOUTH	
Himachal Pradesh	18	Tamil Nadu	54
		Andhra Pradesh	43
WEST		Karnataka	25
Gujarat	34	Kerala	14
Madhya Pradesh	25		
Goa	21		
Maharashtra	15	AVERAGE	38

Source: Agricultural Statistics at a Glance, Ministry of Agriculture.

Around 38% of agricultural land for major crops is irrigated.

The extent to which agricultural land in each State is irrigated varies considerably. It ranges from 14% in Kerala in the south to 92% in Punjab in the north.



CHAPTER 4

GOLD BULLION

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Gold imports for domestic consumption 1990 - 2001

Banks

Gold Cell services
Gold Cell branches

Gold Deposit Scheme

Bank programmes
Participating bank branches
Historical Government gold bond schemes 1962 - 1993

Public Sector Undertakings

Gold Cell services
Gold Cell branches

Non-Resident Indian (NRI) Gold Import Scheme

Other Sections

Bullion dealers
Gold refiners
Coin fabricators
Bar hoarding
Bulk delivery of official gold imports



The 10 tola bar (3.75 oz) dominates the Indian gold bullion market.

More than 95% of gold imported for the domestic market is in the form of these small cast bars, widely known as TT bars or *biscuits*.

Most imported TT bars are produced by 8 major gold refiners in Switzerland, South Africa, Australia and the United Kingdom.

In recent years, India has imported 5 – 6 million TT bars annually.

10 TOLA BARS

Domestic fabricators and retailers rely on TT bars.

The bars enable the trade to buy and sell gold in small quantities, often on a daily basis, in a market where the gold price cannot be hedged.

A TT bar has a gross weight of 10 tolas, equivalent to 3.75 oz or 116.638 g.

At the standard millesimal gold purity of 999, its fine gold content is 3.746 oz.

The fine gold content at other purities is defined by the London Bullion Market Association (LBMA): 3.731 oz (995) and 3.750 oz (999.9).

As an Indian unit of weight, the tola has been used since 1836, when England's East India Company administered much of India. Tola is a Hindi word, derived from the Sanskrit word *tula*, defined as a balance, scale or weight.

KILOBARS

Kilobars are popular among jewellery exporters.

Jewellery exporters tend to be large fabricators. They are also able to loan gold at an unfixed price from banks and other importers such as MMTC Limited. Unlike fabricators for the domestic market, their stock of gold is not exposed to movements in the gold price during the process of fabrication and sale to overseas customers.

The fine gold content of a kilobar (1000 g) in troy ounces at different purities is defined by the LBMA: 31.990 oz (995), 32.119 oz (999) and 32.148 oz (999.9). Most imported kilobars have a purity of 995.

In recent years, India has imported around 30 – 40,000 kilobars annually.



The standard millesimal purity of TT bars is 999.

INTERNATIONAL BAR MANUFACTURERS

Gold refiners in Australia, South Africa, Switzerland and the UK dominate the supply of TT bar imports.

Australia

Australian Gold Refineries (AGR)

A joint venture between Western Australian Mint (subsidiary of Gold Corporation) and Australian Gold Alliance Pty Ltd (major shareholder Newmont Australia). Located in Perth, Western Australia. TT and 1000 g bars normally feature the brand name and logo of the Perth Mint. LBMA accreditation (1928).

South Africa

Harmony Gold Mining Company Ltd

A leading South African gold mining company. The refinery, established in 1997, is located in Virginia, 300 km south of Johannesburg.

Rand Refinery Limited

Owned by leading South African gold mining companies. Located in Germiston, near Johannesburg. LBMA accreditation (1921). The refinery also produces 5 tola cast bars.

Switzerland

Argor-Heraeus SA

Commerzbank International SA (Luxembourg) and Heraeus GmbH (Germany) are major shareholders. Bars feature the brand name and logo of Commerzbank or Argor-Heraeus. Located in Mendrisio, near Chiasso. LBMA accreditation (1961).

Metalor Technologies International SA

Subsidiary of UBS Warburg. Bars normally feature the brand name and logo of UBS. Located in Neuchatel. LBMA accreditation (before 1934).

Pamp SA

Associated with MKS Finance SA. Located in San Pietro, near Chiasso. LBMA accreditation (1987).

Valcambi SA

A subsidiary of Credit Suisse First Boston (CSFB). Bars normally feature the brand name of Credit Suisse. Located in Balerna, near Chiasso. LBMA accreditation (1968).

United Kingdom

Johnson Matthey Plc

Public listed company. TT bars are made not only at its refinery in Royston (UK), but also in Melbourne (Australia). LBMA accreditation (1919).

Other

Banks and bullion dealers report that brands from other countries are also in circulation, normally in small quantities: *Hong Kong* (Lee Cheong and RNA) and *United Arab Emirates* (ARY Traders and Emirates Gold).

TECHNICAL DIMENSIONS

Country	Refinery company	Brand name	Approximate dimensions in mm Length x width x depth		
			10 tola bar	Kilobar	
Australia	AGR	Perth Mint	45 x 24 x 6	110 x 48 x 10	
South Africa	Harmony	Harmony	45 x 28 x 5.5	117 x 53 x 9	
South Africa	Rand Refinery	Rand Refinery	45 x 27 x 7	117 x 52 x 7	
Switzerland	Argor-Heraeus	Commerzbank			
		Argor-Heraeus	45.6 x 26.8 x 6	116.8 x 51.2 x 8.3	
Switzerland	Metalor	UBS	45 x 27 x 6	117 x 52 x 9	
Switzerland	Pamp	Pamp	47 x 27 x 5.01	116 x 51 x 8.67	
Switzerland	Valcambi	Credit Suisse	45 x 28 x 5.5	116 x 52 x 9	
UK	Johnson Matthey	Johnson Matthey	44 x 27 x 5	118.5 x 53 x 8	

Source: Gold refiners or their agents.

10 TOLA BARS



AGR Australia



Harmony South Africa



Rand Refinery South Africa



Argor-Heraeus Switzerland



Metalor Switzerland



Pamp Switzerland



Valcambi Switzerland



Johnson Matthey United Kingdom

The 10 tola bar (3.75 oz) is the world's most important small cast bar.

INTERNATIONAL GOLD DEALERS

Important bullion suppliers to India

Company	Major location*	Other locations
HSBC	London	New York, Hong Kong
Mitsui & Co	London	Tokyo, London, Sydney
N M Rothschild & Sons	London	Singapore, Sydney
Standard Bank London The Bank of Nova Scotia	London	New York, Hong Kong, Dubai, Singapore
- ScotiaMocatta	London	Toronto, New York, Hong Kong, Sydney
Credit Suisse First Boston	Zurich	Singapore
UBS Warburg	Zurich	Singapore, Zurich/Geneva/Lugano, London, Stamford (USA)
MKS Finance	Geneva	Sydney
Commerzbank International	Singapore	Luxembourg, New York
Societe Generale	Paris	New York, Sydney

^{*} Major location for ordering TT bars.

While HSBC and ScotiaMocatta have branches that are authorised importers, two other international dealers have active liaison offices in Mumbai.

Mitsui & Co

The liaison office of Mitsui & Co (Japan), an international trading house. Member of the LBMA.

Societe Generale

Foreign bank. A licensed bank in India since 1985. 4 branches: Mumbai, New Delhi, Pune and Bangalore. Member of the LBMA.



Imported TT bars are normally packed in cardboard or polystyrene boxes containing 100 or 200 bars.

GOLD WEIGHT CONVERSION TABLE

The London Bullion Market Association (LBMA) defines the fine gold content of specified bar weights in *troy* ounces - at 3 levels of millesimal purity - as follows:

Gross weight		Fine gold content in TROY OUNC	ES
-	995.0	999.0	999.9
10 tola	3.731	3.746	3.750
1 Kilo	31.990	32.119	32.148
1/2 Kilo	15.995	16.059	16.074
1/4 Kilo	7.998	8.030	8.037
200 g	6.398	6.424	6.430
100 g	3.199	3.212	3.215
50 g	1.600	1.607	1.608
20 g	0.640	0.643	0.643
10 g	0.321	0.322	0.322
5 g	0.161	0.161	0.161
100 oz	99.500	99.900	99.990
50 oz	49.750	49.950	49.995
25 oz	24.875	24.975	24.998
10 oz	9.950	9.990	9.999
5 oz	4.975	4.995	5.000
1 oz	0.995	0.999	1.000
5 taels	5.987	6.011	6.017

Source: A Guide to the London Gold Market, LBMA, 2001. LBMA copyright. Reprinted with LBMA permission.



At a gold price of US\$ 300 per oz, an exchange rate of US\$ 1.00 = Rs 48, and Customs duty of Rs 250 per 10 g, the cost of an imported TT bar would be approximately Rs 57,700 (US\$ 1,200).

LONDON BULLION MARKET ASSOCIATION

Most international gold dealers that supply India with TT bars are members of the London Bullion Market Association (LBMA).

The LBMA, incorporated in 1987, brought together two former bodies: the London Silver Market (which dates its origins to 1897 when the first Silver Fixing meeting was held) and the London Gold Market. The functions of both bodies were absorbed with the exception of the Fixing meetings, which are held and controlled independently by two groups of Market Maker members within the LBMA.

The LBMA has 3 categories of membership. There are 10 *Market Maker Members* that quote prices for buying and selling gold throughout each working day; 44 Members that are actively engaged in trading, refining, melting, assaying, transporting or storing gold in the United Kingdom; and 31 *Associate Members*.

The Bank of England has formal responsibility for the supervision of the wholesale bullion market following the Financial Services Act 1986.

Acceptable refiners

The LBMA currently lists 59 "Acceptable Refiners" in 28 countries, whose "400 oz" ("12.5 kg") cast gold bars are accepted as good delivery for the settlement of physical gold transactions on the London bullion market.

LONDON GOLD FIXINGS

The first Gold Fixing meeting was held on 12 September 1919 at the offices of N M Rothschild & Sons Limited at New Court, St Swithin's Lane, London EC4.

At the Gold Fixing meetings, which are still held at New Court, gold is traded internationally through the 5 member firms listed below in order to balance prevailing supply with demand at a single price at the same time.

- · Deutsche Bank AG
- HSBC Bank USA London Branch
- N M Rothschild & Sons Limited
- Societe Generale
- The Bank of Nova Scotia ScotiaMocatta

The Gold Fixing price is expressed in US dollars per troy ounce, and derived twice daily at meetings starting at 10.30 a.m. and 3.00 p.m.



The London Gold Fixing meetings are held twice daily in the offices of N M Rothschild & Sons Limited.

LONDON GOOD DELIVERY GOLD BAR



The fine gold content of a London Good Delivery bar must fall within a range of 350 oz and 430 oz.

Bars are weighed in multiples of 0.025 oz rounded down to the nearest multiple.

Bar purity must not be less than 995 parts gold in 1,000 parts.

The dimensions of Rand Refinery's London Good Delivery bar, in millimetres (mm), have been the same since first cast in 1921.

 Top
 260 x 80 mm

 Base
 240 x 60 mm

 Depth
 40 mm

The weight of a London Good Delivery bar is not recorded on the bar because its weight would change in the event of assay samples being taken.



Photograph: Bank of England

London Good Delivery bars in the vaults of the Bank of England.

BULLION IMPORTERS

The official import of gold bullion for the domestic market occurs through two authorised Government schemes:

- Open General Licence (OGL) scheme imports from November 1997.
- Non-Resident Indian (NRI) scheme imports from March 1992.

Since 1990, an estimated 5,246 tonnes have been imported officially and unofficially.

OGL 2,274 tonnes NRI 1,352 tonnes

SIL 157 tonnes (no longer in operation)

Unofficial 1,463 tonnes

The OGL scheme accounted for 99% of official imports in 2001. Its share of total imports was about 90%.

OPEN GENERAL LICENCE (OGL)

Since 30 August 1997, 24 banks and public sector undertakings have been authorised to import gold.

Although commonly referred to as the "Open General Licence" scheme, it is restricted to authorised entities only.

There are 4 categories of authorised importers.

Category	Number	Active in 2001
Public Sector Banks	12	6
Public Sector Undertaking	s 4	4
Private Sector Banks	3	-
Foreign Banks	5	4
Total	24	14

The number of banks recorded above includes 3 banks authorised by the Reserve Bank in 2002: *Union Bank of India* (Public Sector Bank), and *ICICI Bank Ltd* and *The HDFC Bank Ltd* (Private Sector Banks). They are not covered in this report as they are in the process of becoming active.

NON-RESIDENT INDIAN (NRI) SCHEME

In March 1992, NRI's were allowed to import up to 5 kg of gold bullion every 6 months. The amount was increased to 10 kg in January 1997.

The NRI scheme accounted for 1,249 tonnes, 85% of official imports and 61% of total imports, between 1992 and 1997.

NRI imports are now reported as negligible, due to the dominance of bank importers.

SPECIAL IMPORT LICENCE (SIL)

Between April 1994 and March 2001, authorised exporters could use part of their foreign earnings to import gold. The licences were tradable.

Over the period of 7 years, the SIL scheme accounted for 4% (157 tonnes) of total imports.

IMPORT SCHEMES FOR JEWELLERY EXPORTERS

Jewellery exporters have been able to import or obtain imported bars for re-export as jewellery since the late 1970s.

The main schemes are recorded in the chapter on "Gold Jewellery".



BULLION IMPORTERS

UNOFFICIAL IMPORTS

Government gold import schemes have dramatically reduced the proportion of unofficial imports.

Its share in 2001 was 10%. However, when import duty was temporarily increased from Rs 250 to Rs 400 per 10 g between January 1999 and February 2001, its share increased to 21% in 2000.

The main bullion re-export centres for India include Dubai, Singapore and Hong Kong.

Unofficial imports can arrive directly from these centres, and via other countries that border India: Pakistan, Nepal, Bangladesh and Myanmar, and the nearby island of Sri Lanka.

GOLD IMPORTS FOR DOMESTIC CONSUMPTION 1990 – 2001

Year		Offi	cial		Unofficial	Grand	%
	NRI	SIL	OGL	Total	Total *	Total	Official
1990	-	-	-	-	176	176	-
1991	-	-	-	-	155	155	-
1992	93	-	-	93	169	262	35
1993	116	-	-	116	123	239	49
1994	158	19	-	177	119	296	60
1995	228	21	-	249	135	384	65
1996	256	42	-	298	110	408	73
1997	398	68	62	528	114	642	82
1998	93	2	533	628	60	688	91
1999	4	2	554	560	91	651	86
2000	4	2	526	532	141	673	79
2001	2	1	599	602	70	672	90
Total	1,352	157	2,274	3,783	1,463	5,246	72

Source: Madhusudan Daga and other sources. * Includes Customs seizures.

Over the past 5 years, total imports for domestic consumption have ranged between 640 and 690 tonnes.



Imports surged in 1997 when the annual rupee gold price fell for the first time in decades.

The price averaged 12% less than in 1996.

In January 1997, the NRI import limit was also raised from 5 kg to 10 kg.

The Reserve Bank of India (RBI) - on 30 August 1997 - authorised the first banks to import gold bullion for the domestic market. The first imports occurred in November.

Although the RBI has authorised 20 banks, this section focuses on the 6 Indian and 4 foreign banks that were active importers in 2001.

Banks may not export gold, or hedge its value. All rely on consignment stocks from international dealers. They sell the bulk of imported bars to less than 50 large secondary tier bullion dealers.

Banks can sell gold on an "unfixed" basis for up to 5 calendar days. The minimum quantity is normally 50 - 100 TT's. None offers a buy-back service. There are now 111 Gold Cell branches servicing customers in 34 cities in 16 States. Branches in cities, when State sales taxes are low, tend to attract the bulk of imported gold.

AUTHORISED BANKS

The Reserve Bank of India (RBI) has authorised 20 banks in 3 bank categories to import gold under the OGL scheme: 12 Public Sector Banks, 3 Private Sector Banks and 5 Foreign Banks.

Public Sector Banks	Authorisation date	Date of first import
Allahabad Bank *	1997 August	1998 January
Bank of India *	1997 August	1997 November
Canara Bank	1997 August	n.a.
Indian Overseas Bank *	1997 August	1997 November
State Bank of India *	1997 November	1997 November
Corporation Bank *	1997 November	1998 January
Oriental Bank of Commerce	1998 March	n.a.
Bank of Baroda	1998 April	n.a.
Syndicate Bank	1998 December	n.a.
Dena Bank	1999 January	n.a
Punjab National Bank *	2000 January	2000 September
Union Bank of India	2002 May (approx)	n.a.
Private Sector Banks	Authorisation date	Date of first import
Global Trust Bank	2001 January	n.a.
ICICI Bank	2002 May (approx)	n.a.
HDFC Bank	2002 May (approx)	n.a.
Foreign Banks	Authorisation date	Date of first import
ABN-AMRO Bank *	1997 August	1997 November
Bank of Nova Scotia *	1997 August	1997 December
Standard Chartered Bank *	1997 August	
	2000 January (reissued)	1997 December
	2000 June	
Commerzbank	2000 January	n.a.
HSBC *	2000 July	2000 October

Sources: Reserve Bank of India and banks. * These banks were reported as active importers in 2001.

The Indian Government has a shareholding in 11 of the 12 Public Sector Banks. The RBI is a major shareholder of the State Bank of India.

The RBI authorised 3 of the listed banks around May 2002: *Union Bank of India*, ICICI Bank Ltd and *The HDFC Bank Ltd*. This section does not cover them as they are in the process of becoming active.

ELIGIBILITY

The RBI authorises only scheduled commercial banks.

The bank should have a minimum capital base of Rs 300 crore (US\$ 650 million) for its business in India. The ratio of total capital to risk-weighted assets should be 9% or more. It should have an advanced risk management system in place, as well as an excellent business reputation and history. In the absence of previous gold-related business experience, it should provide evidence of its ability and intention to forge links with international banks to develop in-house gold market capabilities.

IMPORTED BULLION PRODUCTS

Banks are permitted to import gold bullion cast or minted bars and medallions with a millesimal purity of not less than 995.

The import of legal tender gold coins is prohibited. Almost all imports for the domestic market are in the form of 10 tola (TT) bars. Kilobars are also imported, mainly for export jewellery fabricators.

Most imported gold bars are produced by 8 refining companies located in Australia, South Africa, Switzerland and the United Kingdom.

INTERNATIONAL SUPPLIERS

Banks rely generally on 10 international gold dealers — members of the LBMA — as their suppliers of gold bullion.

2 of the international dealers supply their bank branches in India directly, notably Bank of Nova Scotia and HSBC. 2 other suppliers have active liaison offices in India, Mitsui & Co and Societe Generale.

4 of them own, part-own or are directly associated with refiners that manufacture large quantities of TT bars, notably Commerzbank, Credit Suisse First Boston, MKS Finance and UBS Warburg.

Most banks are obliged to deal with several international dealers due to credit risk constraints. Some are also obliged to import only TT bars whose refineries are accredited to the LBMA. A minimum order is usually 1,000 - 2,000 TT bars.

DEALING CONSTRAINTS

Due to exchange control regulations, banks are not able to export gold bullion, apart from some leeway afforded to gold accumulated under the Gold Deposit Scheme.

Nor are they able to hedge their bullion imports.

As no bank is prepared to assume the risk of a fluctuating gold price in the absence of a hedging facility, all banks rely on consignment stocks provided by international dealers. For the same reason, no bank is prepared to buy back bullion from its customers.

In some States (e.g. Rajasthan), banks without a branch that is registered to receive and pay State sales taxes may not be permitted to operate in that State.

CONSIGNMENT STOCKS

Most banks rely on consignment stocks located in cities around India.

Some banks will stock 5,000 - 10,000 TT bars or more in different locations. In major import centres, they will often have consignment stocks from several dealers. As consignment stocks normally incur insurance costs and interest charges if not sold within 14 days, and the replenishment of stocks can be done within 3 - 5 days, banks monitor their stocks closely.

Consignment stocks, held by the banks combined, can exceed 10 tonnes when high demand is anticipated.



10 banks were active importers in 2001.

IMPORT CENTRES

Bullion imports can be cleared through 8 international airports.

North New Delhi

West Mumbai, Ahmedabad, Goa

East Kolkata

South Chennai, Bangalore, Hyderabad

They can also be cleared at 6 domestic airports having been trans-shipped directly from the international airports.

Customs duty is paid at the time the bank clears the imported bars at an international airport.

While Customs duty applies nationally, some States and cities have sometimes levied lower rates of Sales and other taxes than others. When this has occurred, notably in Ahmedabad, and Jaipur, and recently (in 2002) in Mumbai and Gurgaon, a disproportionate level of bullion imports can gravitate to these cities – for distribution regionally, and sometimes nationally.

BANK BRANCHES

The 10 active banks have Gold Cells in 34 cities in 16 States and UT's.

The distribution network of bank Gold Cell branches has increased progressively from 7 in 1997 to 111 in early 2002.

Region	No of cities covered	Total Gold Cell branches
South	13	39
North	9	30
West	9	31
East	3	11
Total	34	111

While the number of active branches does not necessarily equate to the quantity of bullion imported, the number of cities served by each bank is as follows:

Public Sector Banks	No of Gold Cell branches
State Bank of India	31
Corporation Bank	17
Punjab National Bank	13
Indian Overseas Bank	8
Allahabad Bank	7
Bank of India	6
Total	82
Foreign Banks	
Standard Chartered Bank	9
ABN-AMRO Bank	8
Bank of Nova Scotia	6
HSBC	6
Total	29



WHOLESALING TO DOMESTIC BULLION DEALERS

Although the banks (combined) wholesale bullion to more than 200 secondary tier dealers around India, the bulk of their business is transacted through less than 50 major customers.

Large orders can exceed 1000 TT's. The minimum order quantity ranges between 50 - 100 TT's.

All banks require cleared payment in full prior to delivery. While Public Sector Banks will normally accept cash in very large quantities, Foreign Banks generally insist on cheques. Typically, bank customers retain or lodge funds in their bank account prior to placing an order.

Bank prices are normally based on the prevailing US dollar gold price (converted by the bank to rupees) quoted by the international dealer that has provided the consignment stock used to supply the customer.

Timing as regards fixing the price can vary.

Some banks will sell *small quantities* at a price fixed each morning by the Gold Cell HQ and communicated to its Gold Cell branches. In a volatile market, however, the price would be changed during the day.

For *larger quantities*, all banks fix the price immediately in consultation with the international supplier of the relevant consignment stock, provided that the customer has sufficient funds in a bank account to act as a deposit, and full payment is received within 2 days.

Alternatively, the bank agrees to allow the price on an order to remain "unfixed" for up to 5 calendar days. The customer pays a deposit of 105 - 110 %. Within 5 days, the customer can then fix the price at the prevailing gold price.

In some cases, for very large quantities, the bank will also act as a "postman" on behalf of a major customer. The customer deals directly with the international dealer, the bank acting as the conduit through which the order is placed, delivery arranged, and payment made.

JEWELLERY FABRICATORS

Although banks do sell bullion to major domestic fabricators, they focus on export fabricators - whose gold usage has grown to around 50 tonnes annually.

Kilobars are popular among export fabricators, as their fabrication units are large relative to those servicing the domestic market, and they are able to loan these larger bars at "unfixed" prices during the period of jewellery fabrication.

4 banks offer a gold loan service to export fabricators (with 3 more planning to do so), while 4 banks provide a small service for domestic fabricators. The minimum loan quantity is generally 1 kg. The current maximum loan period can be 360 days (180 days plus another 180 days after export), while the minimum can be as low as 15 days.

RETAILING TO THE PUBLIC

Only 2 banks retail TT's to the public, and then through only a few of their Gold Cell branches.

Corporation Bank. TT's only. Limited to 4 branches in South India: Cochin and Kozhikode (Kerala), Mangalore and Udipi (Karnataka).

State Bank of India. Apart from TT's, it is the only bank to retail small minted bars: 5 g, 10 g and 20 g. Retailing is limited to a small number of branches.

The activity of banks is inhibited by the time and paperwork required to complete a retail transaction, and the legal requirement that - for transactions above Rs 50,000 - the customer is required to provide personal identity documents and/or make payment through a bank account.

GOLD DEPOSIT SCHEME

The Reserve Bank of India has authorised 6 banks to accept gold deposits from the public. 4 were active in 2001.

This scheme is covered in a separate section. In summary, the minimum deposit is typically 200 g. Deposits are lodged over 3 - 7 years. Annual interest payments are around 3 - 4 %. Although the service is available through 134 bank branches in 55 cities, few branches have received significant deposits.

FORWARDS MARKET COMMISSION

In May 2002, the Forwards Market Commission (FMC) announced that it would be recommending the removal of gold from the list of commodities banned under the Forward Contracts Regulation Act, 1952.

SUMMARY OF GOLD CELL SERVICES

7 of the 10 active banks have their Gold Cell headquarters in Mumbai.

Bank	Gold Cell	Gold Cell branches	Wholesaling Minimum TT	Gold loans to	Gold loans to fabricators	
	HQ branches	order	Domestic	Exporters	Deposit Scheme	
Public Sector Banks						
State Bank of India	Mumbai	31	50	1 kg plus	1 kg plus	Yes
Allahabad Bank	Kolkata	7	100	1 kg plus	In planning	Yes
Bank of India	Mumbai	6	50	-	1 kg plus	-
Corporation Bank	Mumbai	17	50	1 kg plus	-	Yes
Indian Overseas Bank	Chennai	7	100	1 kg plus	1 kg plus	Yes
Punjab National Bank	New Delhi	12	100	-	-	-
Foreign Banks						
ABN-AMRO	Mumbai	8	100	-	-	-
Bank of Nova Scotia	Mumbai	5	100	-	3 kg plus	Yes
Standard Chartered	Mumbai	9	100	-	In planning	-
HSBC	Mumbai	8	50	-	In planning	-



A secondary tier bullion dealer.

Banks normally require a minimum order of 100 TT bars.

BACKGROUND INFORMATION ON BANKS

PUBLIC SECTOR BANKS

State Bank of India (SBI)

The SBI traces its origins to the Bank of Calcutta, founded in 1806. In 1955, when the Reserve Bank of India acquired a major shareholding of the Imperial Bank of India, the State Bank of India was created by an Act of Parliament. The State Bank Group comprises the SBI, 7 associated banks, and other subsidiaries. Branches: 9,000. Employees: 220,000.

Allahabad Bank

Allahabad Bank, established in Allahabad (Uttar Pradesh) in 1865, relocated its headquarters to Kolkata in 1923. It was nationalised in 1969. Branches: 1,900. Employees: 21,000.

Bank of India

The Bank of India was established in Mumbai in 1906. It was nationalised in 1969. Branches: 2,500. Employees: 52,000.

Corporation Bank

Corporation Bank, established in Udipi in 1906, has its headquarters in Mangalore (Karnataka). It was nationalised in 1980. Branches: 650. Employees: 10,800.

Indian Overseas Bank (IOB)

The IOB was established in Chennai in 1937. It was nationalised in 1969. Branches: 1,800. Employees: 23,000.

Puniab National Bank

The Punjab National Bank, the first bank to be owned and managed by Indians, was established in Lahore in 1895. It relocated its headquarters to New Delhi in 1947. It was nationalised in 1969. Branches: 4,200. Employees: 58,000.

FOREIGN BANKS

All have their headquarters in Mumbai.

ABN-AMRO Bank

Established in the Netherlands in 1824, the bank opened its first branch in Kolkata in 1920. Branches in India: 8. Employees: 850.

The Bank of Nova Scotia (ScotiaMocatta)

ScotiaMocatta, part of The Bank of Nova Scotia, has been active in India under this name since December 1998. It is an international bullion dealer with gold dealing offices in Toronto, London, New York, Hong Kong and Sydney. It is a Market Maker member of the LBMA, and member of the daily London gold fixing meetings. The company traces its gold dealing operations to the establishment of Mocatta (London) in 1674. Bank of Nova Scotia branches in India: 5. Employees: 300.

Standard Chartered Bank (SCB)

SCB, known by this name since a merger between Standard Bank and Chartered Bank in London in 1969, has operated in India since 1854. In December 1998, the bank sold Mocatta Metals Corporation (its bullion dealing division) to the Bank of Nova Scotia. This meant that the bank had to re-establish a bullion division and apply for a new licence to import gold, granted by the Reserve Bank of India in January 2000. Branches in India: 57. Employees: 2,600.

The Hongkong and Shanghai Banking Corporation Limited (HSBC)

HSBC, a subsidiary of HSBC (Hong Kong), has operated in India since 1853. It is an international bullion dealer with offices in New York, London and Hong Kong. It is a Market Maker member of the LBMA and member of the daily London gold fixing meetings. Branches in India: 26. Employees: 3,000.

NEWLY-AUTHORISED BANKS *

All have their headquarters in Mumbai.

Union Bank of India. Established in 1919 as a public sector bank. Nationalised in 1969. Branches: 2,100. Employees: 30,000.

ICICI Bank Ltd. Known by this name in 1999. Established in 1994 as a private sector bank. Branches: 81. Employees: 2,000.

The HDFC Bank Ltd. Established in 1994 as a private sector bank. Branches: 111.

Employees: 2,000.

^{*} Source of information: Indian Banking Year Book 2000. Performance Highlights of Banks 1999-2000.

GOLD CELL BRANCHES

Region/State	City	SBI	Allahabad	BOI	Corporation	IOB
NORTH						
Uttar Pradesh	Agra	2000	-	-	2002	1998
	Kanpur	1999	-	-	-	-
	Lucknow	1999	-	-	-	-
Rajasthan	Jaipur	1998	1998	-	1999	-
Punjab	Amritsar	1998	-	-	-	-
	Jalandhar	1998	-	-	-	-
	Ludhiana	1999	-	-	-	-
Haryana *	-	-	-	-	-	-
Jammu & Kashmir	Jammu	1999	-	-	-	-
Himachal Pradesh	-	-	-	-	-	-
Uttaranchal	-	-	-	-	-	-
Delhi (NCT)	New Delhi	1998	1998	1999	1998	-
Chandigarh (UT)	Chandigarh	1998	-	-	-	-
WEST						
Maharashtra	Mumbai	1998 (3)	1998	1997(4)	1998	-
	Pune	- '	-	- ` ´	-	-
Madhya Pradesh	Bhopal	1999	-	-	-	-
•	Gwalior	1998	-	-	-	-
	Indore	1999	-	-	-	-
Gujarat	Ahmedabad	1998 (2)	1998	-	1998	1997
•	Baroda	- '	-	-	-	-
	Rajkot	1998	-	-	1999	-
	Surat	1999	-	-	2001	-
Chhattisgarh	-	-	-	-	-	-
Goa	-	-	-	-	-	-
EAST						
Bihar	Patna	1999	_	_	-	_
West Bengal	Kolkata	1999	1998	_	1998	1998
Orissa	Bhubaneshwar	1999	-	_	-	-
Jharkand	-	-	_	_	_	_
Assam	_	_	_	_	_	_
Arunachal Pradesh	-	_	_	_	-	_
SOUTH						
Andhra Pradesh	Hyderabad	1998	_		1998	1998
Allulla Plauesii	Visakhapatnam		-	-	1990	1990
Tamil Nadu	Chennai	1998	1000	-		
Tamil Nadu		1999	1998	-	1999	1997
	Coimbatore	1999	-	-	1999	1998
	Vellore	1000	-	-	2001	1000
	Tiruchirapalli	1999	-	-	-	1999
Varnataka	Salem	1009	1000	-	- 1009	-
Karnataka	Bangalore	1998	1998	-	1998	-
	Mangalore	-	-	-	1998	-
WI-	Udipi	-	-	-	1998	-
Kerala	Cochin	1998	-	-	1998	-
Dondishown: (UT)	Kozhikode	1000	-	-	1999	1000
Pondicherry (UT)	Pondicherry	1998	-	-	-	1998
GRAND TOTAL		31	7	6	17	8

Note: Year dates refer to the year the branch offered Gold Cell services.

The number of branches has grown progressively from 10 (1997) to 50 (1998), 72 (1999), 88 (2000) and 111 (early 2002).



GOLD CELL BRANCHES

Region/State	City	Punjab	ABN/AMRO	Scotia	SCB	HSBC
NORTH						
Uttar Pradesh	Agra	2001	-	-	-	-
	Kanpur	2001	-	-	2002	-
	Lucknow	2001	-	-	-	-
Rajasthan	Jaipur	2000	-	-	-	-
Punjab	Amritsar	2000	-	-	-	-
	Jalandhar	-	-	-	-	-
	Ludhiana	2000	-	-	-	-
Haryana *	-	-	-	-	-	-
Jammu & Kashmir	Jammu	-	-	-	-	-
Himachal Pradesh	-	-	-	-	-	-
Uttaranchal	-	-	-	-	-	-
Delhi (NCT)	New Delhi	2000 (2)	2001	1998	1997	2000
Chandigarh (UT)	Chandigarh	-	-	-	-	-
WEST						
Maharashtra	Mumbai	2000	1997	1997	2000	-
	Pune	-	2001	-	-	-
Madhya Pradesh	Bhopal	-	-	-	-	-
,	Gwalior	-	-	-	-	-
	Indore	-	-	-	-	-
Gujarat	Ahmedabad	2000	-	DC 2001	2000	2001
,	Baroda	-	2001	-	-	-
	Rajkot	-	-	-	-	-
	Surat	-	-	-	-	-
Chhattisgarh	-	-	-	-	-	-
Goa	Goa	-	-	-	-	-
EAST						
Bihar	Patna	-	-	-	-	-
West Bengal	Kolkata	2001	2001	DC 2000	2000	2001
Orissa	Bhubaneshwar	-	-	-	-	_
Jharkand	-	-	-	-	-	_
Assam	-	-	-	-	-	_
Arunachal Pradesh	-	-	-	-	-	-
SOUTH						
Andhra Pradesh	Hyderabad	_	2001	2001	_	2001
Andria i radesii	Visakhapatnam	_	-	DC 2001	_	2001
Tamil Nadu	Chennai	2000	2001	1999	2000	2001
Tarriii Nada	Coimbatore	2001	-	1999	2000	DC
	Vellore	2001	_	-	-	- -
	Tiruchinapalli	_	_	_	_	_
	Salem	_	-	DC 1999	-	DC
Karnataka	Bangalore	-	2001	1998	2002	2000
ιωπαιακα	Mangalore	-	-	1990	2002	2000
	Udipi	_	_	_	_	_
Kerala	Cochin	-	-	-	2002	-
NEIdid	Kozhikode	-	-	-	2002	-
Pondicherry (UT)	Pondicherry	-	-	-		-
	1 original y					
GRAND TOTAL		13	8	6	9	6

^{*} Branches established in Haryana in 2002 are not included. DC = Delivery Centre.

The list of Gold Cell branches, recorded in early 2002, is indicative only.

Banks tend to open new Cells and mothball others according to the extent of local demand and the level of State sales taxes.



GOLD DEPOSIT SCHEME

The Gold Deposit Scheme was launched in 1999. It is supervised by the Reserve Bank of India (RBI).

The scheme's declared objectives are to reduce the import of gold, bring privately-held gold into circulation, and provide the public with an opportunity to earn income on their gold holdings.

The scheme is available to Resident Indians: individuals, Hindu Undivided Families (HUF), trusts and companies.

The minimum deposit is normally 200 g. Deposits are lodged over 3 - 7 years. Annual interest payments are around 3 - 4%.

Apart from earning interest on deposited gold, depositors are offered other incentives. Interest earned from the deposit is exempt from income tax. Any increase in the value of the deposit is exempt from capital gains tax. Its value is also not taken into account when calculating the annual wealth tax.

The scheme is offered by 4 banks through 134 branches in 55 cities. In its first two years, around 8 tonnes of old jewellery, bars and coins were deposited. The State Bank of India accounted for 90%.

BANK PROGRAMMES

The RBI has authorised 6 scheduled commercial banks to offer the scheme. The 4 marked with an asterisk were active in 2001.

Bank	Authorisation date		
State Bank of India * Indian Overseas Bank * Corporation Bank *	1999 August 1999 November 1999 December		
Allahabad Bank * Canara Bank Bank of Nova Scotia	2000 January 2000 March 2000 August		

Source: Reserve Bank of India

Although authorised banks are responsible for their own individual programmes, RBI guidelines have established common features.

The term of a deposit ranges between 3 - 7 years, although a premature withdrawal after the lock-in period is permitted. Bars, coins and jewellery are accepted as scrap for assaying and refining. After the preliminary assay, but before the final assay, the depositor has a right to withdraw.

Within 90 days of the receipt of the deposit, the bank is obliged to issue a passbook or certificate/bond that records the name of the depositor, the amount of gold deposited in grammes, the date of deposit, the date of maturity, and the interest payable.

Interest on the value of the deposited gold can be paid at fixed intervals or at maturity. At redemption, payment can be made in gold bars (995 purity) or in rupees.

4 banks have launched their programmes, with The Bank of Nova Scotia planning to do so.

Annual interest payments are dependent on the term of the deposit. For example, one bank offers progressively higher rates, from 3% (3 years) up to 4% (7 years).

To cover costs and fund the interest payment, banks loan the deposited gold (after refining) to jewellery fabricators. They are also permitted to enter into forward contracts with overseas exchanges and international bullion dealers, but limited to the amount of gold received under the scheme. They are also allowed to sell the deposited gold domestically, as well as give rupee loans against the deposited gold as collateral.



GOLD DEPOSIT SCHEME

DISTRIBUTION

The public are able to participate in the scheme through 134 bank branches in 55 cities, split regionally as follows: south (20), north (14), west (13) and east (8).

The State Bank of India (50 branches accept deposits) has the widest reach and the largest number of depositors, followed by Indian Overseas Bank (37), Allahabad Bank (26) and Corporation Bank (21).

OBSERVATIONS

Only a small proportion of the 134 branches have taken significant deposits. The State Bank of India is the most active, having announced that it accounts for more than 90% of all gold deposited.

Temples

Participating banks observe that temples are important customers. Several have deposited large amounts of old jewellery received as donations.

General public

The public are reported as loath to deposit their K22 jewellery when, after the preliminary assay, it is often recorded as having a lower than expected caratage. Their jewellery has a higher value when sold back or exchanged at the retailer from which they bought it. In addition, the preliminary assay often damages their jewellery.

In the previous Gold Bond Scheme, available over a short period in 1993, there was an amnesty whereby depositors were not liable for having to explain the original source of funds to purchase the gold being deposited. An amnesty does not apply to the current scheme.

HISTORICAL GOVERNMENT GOLD BOND SCHEMES 1962 - 1993

The Gold Deposit Scheme should be viewed in the context of 4 previous gold bond schemes, issued in 1962, 1965 (2) and 1993.

15 year 6.5% Gold Bonds 1977. Issued 12 November 1962. Redeemable at par in rupees on 12 November 1977. Annual interest increased to 7.5% on 1 April 1965. 16.3 tonnes subscribed.

15 year 7% Gold Bonds 1980. Issued 2 March - 31 May 1965. Value of gold calculated at Rs 53.58 per 10 g at 995 purity. Redeemable at par in *rupees* from 2 March 1980. 6.1 tonnes subscribed.

National Defence Gold Bonds 1980. Issued 27 October 1965 - 31 January 1966. Interest fixed at Rs 2.00 per annum per 10 g at 995 purity. Redeemable in *gold bars* at 995 purity from 27 October 1980. 13.7 tonnes subscribed.

5 year Gold Bond 1998. Issued 15 March - 14 June 1993. Payment in *gold bars* at 995 purity plus a lump sum interest payment of Rs 40 per gramme at 995 purity. 41 tonnes subscribed.



Photograph: Allahabad Bank

A minimum deposit is normally 200 g of old gold jewellery, coins or bars.

GOLD DEPOSIT SCHEME

PARTICIPATING BANK BRANCHES

Region/State	City	SBI	Allahabad	Corporation	IOB
NORTH		4000			
Uttar Pradesh	Agra	1999		-	-
	Kanpur Lucknow	1999 1999	2000	-	2000
	Meerut	1999	2000	-	2000
	Ramanreti	-	2000	_	_
	Varanasi	1999	2000	-	-
Rajasthan	Jaipur	1999	2000	2000	-
Punjab	Amritsar	1999	2000	-	-
	Jalandhar	1999	-	-	-
Hammana	Ludhiana	1999	2000	2000	-
Haryana Jammu & Kashmir	- Jammu	1999	-	-	-
Himachal Pradesh	Janinu -	1333	-	-	-
Uttaranchal	Haridwar	_	2000	_	_
Delhi (UT)	New Delhi	1999 (2)	2000 (2)	2000	2000 (5)
Chandigarh (UT)	Chandigarh	1999	-	-	-
	3 -				
WEST Maharachtra	Mumbai	1000 (2)	2000 (2)	2000 (2)	2000 (4)
Maharashtra	Mumbai Nagpur	1999 (2) 1999	2000 (2)	2000 (3)	2000 (4)
	Pune	1999	-	2000	- -
Madhya Pradesh	Bhopal	1999	2000	-	-
riddiiya riddesii	Gwalior	1999	-	-	-
	Indore	1999	2000	-	-
Gujarat	Ahmedabad	1999	2000	2000	2000 (2)
	Baroda	1999	-	-	200Ò ´
	Jamnagar	-	-	2001	-
	Rajkot	1999	-	2000	-
61.1 ··· 1	Surat	1999	-	-	-
Chhattisgarh	-	-	-	-	-
Goa	Goa	1000	-	2000	-
	Punaji	1999	<u> </u>	<u> </u>	<u> </u>
EAST					
Bihar	Patna	1999	2000	-	-
	Ranchi	1999	-	-	-
West Bengal	Kolkata	1999	2000	2000	2000 (3)
	Burdwan Howrah	1999 1999	-	-	-
Orissa	Bhubaneshwar	1999	2000	-	-
Urissa	Cuttack	1999	2000	-	-
Jharkand	-	-	_	_	_
Assam	Guwahati	1999	2000	-	-
Arunachal Pradesh	-	-	-	-	-
SOUTH					
Andhra Pradesh	Hyderabad	1999		2000	2000 (2)
Aliulia Flauesii	Guntur	1999	-	2000	2000 (2)
	Secundarabad	1999	2000	_	-
	Tirupati	1999	-	2000	2000
	Vijayawada	1999	2000	-	-
	Visakhapatnam	1999	-	-	-
Tamil Nadu	Chennai	1999	2000	2000	2000 (7)
	Coimbatore	1999	-	2000	2000 (2)
	Madurai	1999	2000	2000	2000
	Mayiladuthurai	-	-	-	2000
Karnataka	Tiruchirapalli	1000	2000	2000	2000
	Bangalore Belgaum	1999 1999	2000	2000	2000 (2)
	Mangalore	1999	-	2001 (2)	-
Kerala	Cochin	-	2000	- LOOT (2)	-
	Ernakulam	1999	-		2000
	Calicut	1999	_	-	-
	Trichur	1999	-	-	-
	Trivandrum	1999	2000	-	2000
Pondicherry (UT)	Pondicherry	-	-	-	2000
GRAND TOTAL		50	26	21	37
C.SIID IVIAL		30			<i>3</i>

Note: Year date refers to the year the branch first offered the scheme.

The number of branches offering the scheme increased from 50 (1999) to 134 (2001).

GOLD DEPOSIT SCHEME



The State Bank of India has received around 90% of deposits nationwide.

Public Sector Undertakings (PSU's) are Indian Government enterprises. 4 are authorised to import gold bullion.

- MMTC Limited
- PEC Ltd
- · The HHEC of India Ltd
- The State Trading Corporation of India Limited (STC)

The gold-related activities of PSU's are supervised by the Ministry of Commerce and Industry (not the Reserve Bank of India). Like banks, they import and wholesale bullion to large domestic dealers. Unlike banks, they can loan imported gold to domestic fabricators and retailers. They can also sell "unfixed" gold for a longer period, normally 11 calendar days.

The PSU's operate through 38 Gold Cell branches in 18 cities in 13 States. In 2001, they imported more than 100 tonnes.

BACKGROUND

Prior to the introduction of the OGL scheme in August 1997, nominated PSU's had been allowed to import gold for specified purposes.

HHEC has imported gold since 1982, MMTC (1989), STC (1997) and PEC (1998).

Initially, HHEC and MMTC (alongside the State Bank of India) were permitted to import gold bars, but only for re-export as jewellery.

In 1994, however, the role of MMTC was expanded. In April, when the Special Import Licence (SIL) scheme enabled authorised exporters to import part of their earnings in gold, MMTC was allowed to trade SIL's and import bars to meet requirements. In November, when an amendment to the NRI scheme allowed NRI's to purchase up to 5 kg of gold (subsequently raised to 10 kg in January 1997) within 15 days of their return to India, MMTC (and the State Bank of India) established bonded warehouses in Mumbai and New Delhi to service requirements. The warehouses were subsequently closed down in 1998 when NRI imports declined.

In 1997, when authorised banks were allowed to import gold for sale in the domestic market, PSU's were also permitted to do so.

ADVANTAGES OF PSU'S

As PSU's are supervised by the Ministry of Commerce and Industry, they are able to offer gold-related services that banks do not.

These services enable them to compete with banks that have the advantage of in-house access to favourable exchange rates, interest rates and bank charges.

Notable PSU services include the following:

Imported gold can be loaned in the domestic market.

For the domestic market, banks can only loan gold accumulated through the Gold Deposit Scheme. PSU's, however, have been able to use imported gold for this purpose since 1998. For example, MMTC loans substantial quantities, mainly to dealers for short periods (typically 30 days), against a bank guarantee of 110% of the value of gold loan. Annualised interest is around 6%. Currently, the annual cumulative total of loans exceeds 70 tonnes.

Gold can be sold to domestic dealers on an "unfixed" price basis for a longer period.

While banks are restricted to offering their customers a maximum unfixed period of 5 calendar days, PSU's are able to offer an unfixed period of 11 calendar days, and sometimes more.

USANCE letters of credit are available.

Unlike banks, PSU's are able to offer domestic dealers an opportunity to purchase gold on an unfixed price basis for up to 180 days through a deferred letter of credit. HHEC, PEC and STC offer this service.



BRANCHES

The 4 PSU's combined offer gold-related services through 38 branches in 18 cities.

MMTC has 17 Gold Cells. STC, HHEC and PEC have 7 each. 40% of the branches are located in the South region.

Region	Gold Cells *	Cities covered
South	15	7
West	10	3
North	8	5
East	5	3
Total	38	18

^{*} Excludes Gold Cells established in Haryana in 2002.

SUMMARY OF GOLD CELL SERVICES

Some PSU's are more active than others. MMTC is the only PSU to loan gold to domestic market entities and jewellery exporters.

Public Sector Undertakings	Gold Cell HQ	Gold Cell branches	Bullion wholesaling	Letters of Credit	Gold loans Domestic	Gold loans Exporters
MMTC	New Delhi	17	100 TT's	No	Yes	Yes
HHEC	New Delhi	7	200 TT's	200 TT's	No	No
PEC	New Delhi	7	100 TT's	400 TT's	No	No
STC	New Delhi	7	200 TT's	200 TT's	No	In planning



MMTC, the largest PSU importer of gold bullion, has its headquarters in New Delhi.

BACKGROUND INFORMATION ON PSU'S

The headquarters of the 4 PSU's are in New Delhi.

MMTC Limited

Established in 1963, MMTC is India's largest general trading company covering minerals, metals, agricultural products, precious metals, gems and jewellery. It falls under the administrative control of the Ministry of Commerce and Industry. It was known formerly as *The Minerals and Metals Trading Corporation of India Limited*. Employees: 2,865. Gold Cell branches: 17.

Apart from importing gold bullion since 1989, MMTC has opened 4 retail jewellery outlets: at Mumbai's international airport (1996), in metropolitan Mumbai and Chennai (2001), and in Trivandrum (2002). A minting unit has manufactured MMTC minted bars and medallions since 1995, as well as customised medallions for government and corporate entities. MMTC has offered assaying and hallmarking services since 1987, registered by the Bureau of Indian Standards as an authorised Hallmarking Centre in June 2000. MMTC plays an important role in the promotion of jewellery through exhibitions and attendance of jewellery fairs worldwide.

PEC Ltd

Established in 1971, PEC operates as a trading house under the administrative control of the Ministry of Commerce and Industry. Apart from exporting engineering, electrical, textile and mechanical equipment and tools, it also trades a diverse range of other products from telecommunication and computer hardware to coal, timber, building materials, agricultural products, cotton fabrics and processed foods. It was known formerly as *The Projects and Equipment Corporation*. Employees: 210. Gold Cell branches: 7 (plus 1 in planning).

PEC has been an active gold bullion importer since February 1998. It was the first PSU to offer the USANCE Letter of Credit facility to import gold.

The HHEC of India Ltd

Established in 1962, *The Handicrafts and Handlooms Exports Corporation of India Limited* (HHEC) focuses on the export promotion and trade development of handicrafts, handlooms and village industry products, ranging from woodcraft, furniture and glassware to garments, rugs, carpets and jewellery. It falls under the administrative control of the Ministry of Textiles. Employees: 240. Gold Cell branches: 7.

The State Trading Corporation of India Ltd (STC)

Established in 1956, STC's trading activities range from the export of agricultural products, engineering materials, pharmaceuticals, processed foods and tobacco to the import of acids, fertilizers, sugar and precious metals. It falls under the administrative control of the Ministry of Commerce and Industry. Employees: 1,200. Gold Cell branches: 7.

STC has been expanding its gold-related services since establishing its first Gold Cell office in March 1997.



MMTC and STC also support India's gold jewellery export programme.

GOLD CELL BRANCHES

Region/State	City	MMTC	HHEC	STC	PEC
NORTH					
Uttar Pradesh	Noida	1989	-	-	-
	Bhadowi	-	1997	-	-
Rajasthan	Jaipur	1989	-	-	-
Punjab	Ludhiana	1998	-	-	-
Haryana	-	-	-	-	-
Jammu & Kashmir	-	-	-	-	_
Himachal Pradesh	-	-	-	-	_
Uttaranchal	_	-	-	-	_
Delhi (NCT)	New Delhi	1987	1982	1997	1998
Chandigarh (UT)	-	-	-	-	-
WEST					
Maharashtra	Mumbai	1988 (2)	1982	1997	2002
Madhya Pradesh	-	-	-	-	-
Gujarat	Ahmedabad	1989	1999	1997	1998
Goa	Goa	1998	-	-	-
EAST					
Bihar	_	_	_	_	_
West Bengal	Kolkata	1989	1982	2001	_
Orissa	Bhubaneshwar	1998	-	-	_
Chhattisgarh	Raipur	1999	_	_	_
Jharkand	-	-	_	_	_
Assam	_	_	_	_	_
Arunachal Pradesh	-	-	-	-	-
SOUTH					
Andhra Pradesh	Hyderabad	1989	_	1998	2001
, ilialila i iuucoii	Visakhapatnam	1998	_	-	-
	Vijaywara	-	_	_	2002
Tamil Nadu	Chennai	1998	1997	2001	1999
Tarriii Mada	Coimbatore	1998	-	-	In planning
Karnataka	Bangalore	1991	1998	1998	1998
Kanataka Kerala	Cochin	1997	1990	1990	1990
Pondicherry (UT)	-	1997	-	-	-
GRAND TOTAL		17	7	7	7

NB. Excludes branches established in Haryana in 2002.

The number of PSU branches has increased from 18 (1997) to 38 (early 2002).



NON-RESIDENT INDIAN (NRI) GOLD IMPORT SCHEME

The Non-Resident Indian (NRI) gold import scheme, an initiative of the Ministry of Commerce and Industry, was launched in March 1992.

It enabled large quantities of gold bullion - for the first time in decades - to be imported officially for the domestic market.

Under the scheme, NRI's - when they visit India - are permitted to import up to 10 kg of gold bars and other approved gold items as long as they have been away for not less than 6 months. Prior to January 1997, the amount was 5 kg.

Over a period of 6 years, the scheme accounted for 56% of gold bullion imported for domestic use. Its role as a conduit for official gold imports fell away when authorised banks started importing gold bullion in November 1997 under the Open General Licence (OGL) scheme.

Since 1992, NRI's - on their own account or on behalf of syndicates - have imported 1,352 tonnes.

Although recorded NRI imports been nominal since 1999, less than 5 tonnes annually in recent years, the scheme remains in operation.

DEFINITIONS

A Non-Resident Indian is defined as a passenger of Indian origin, or a passenger holding a valid Indian passport, who is coming to India after a period of not less than 6 months of stay abroad. In the event that the passenger has visited India during the 6 months period, short visits are ignored as long as they do not exceed a total of 30 days during the 6 month period.

Permitted gold includes bars, medallions and jewellery, but excludes legal tender coins and gold items studded with stones or pearls. The maximum amount refers to the gross weight of the items, not to the weight of the fine gold content.

TRANSPORTATION

NRI's can import the gold as part of their personal luggage. Customs duty is payable by the NRI in foreign currency.

NRI GOLD IMPORTS 1992 - 2001

Year	Tonnes	NRI % of gold imports *
1992	93	35
1993	116	49
1994	158	60
1995	228	59
1996	256	63
1997	398	62
Sub-total	1,249	56
1998	93	14
1999	4	< 1
2000	4	< 1
2001	2	< 1
Total	1,352	28

Source: Madhusudan Daga and other sources. * NRI % of total gold imports for domestic use.

NRI imports accounted for 56% of gold imports between 1992 and 1997.



NON-RESIDENT INDIAN (NRI) GOLD IMPORT SCHEME



A 5 kg "parcel" contains 42 TT bars, a 10 kg "parcel" 85 TT bars.

BULLION DEALERS

Imported TT bars are distributed nationwide through secondary and lower tier bullion dealers that fall below the primary tier of bank and PSU importers.

Bank importers indicate that there are less than 50 significant secondary tier dealers around the country. Some deal with only one bank, others with several banks.

Some, acting on behalf of large tertiary tier dealers, can order 1,000 TT bars or more at a time.

The banks combined are reported to deal directly with more than 200 secondary tier dealers.

SECONDARY TIER DEALERS

The most active dealers tend to be located in or near, or have strong links with, cities where the State sales tax is low, notably the following:

State	City
Maharashtra	Mumbai
Rajasthan	Jaipur
Haryana	Gurgaon *
Gujarat	Ahmedabad

^{*} Adjacent to New Delhi

When dealing with banks and PSU's, the minimum wholesale order quantity ranges between 50 - 200 TT bars.

Although secondary tier dealers tend to deal only with tertiary tier dealers, some also sell TT bars directly to large jewellery retailers for fabrication purposes.

While some focus solely on selling TT bars, many are involved in other precious metal-related businesses.

The way secondary tier dealers purchase TT bars is covered in the sections on "Banks" and "Public Sector Undertakings" and in the chapter on "Pricing and Profitability".

OTHER DEALERS

The number of tertiary and lower tier dealers involved in the distribution of TT bars runs to thousands nationwide.

The bullion dealing network is complex because most trade entities act as dealers to varying extents.

For example, all jewellery retailers are "bullion dealers" in that they sell and buy back coins and small bars (and buy back old gold jewellery) at prices related to the prevailing gold price. Most would sell TT bars, if requested, to retail customers. Some also act as secondary and lower tier dealers.

DELIVERY

Some secondary and lower tier dealers in cities will deliver TT bars (or arrange delivery) to other dealers or jewellery retailers in smaller cities, towns and even some villages.

Deliveries are often hand-carried informally by couriers known as "angadias", travelling by air, train or car.

TRUST

The distribution of TT bars throughout India relies on trust.

The reputation of the dealer is more important than the TT bar brand offered. The distribution chain will normally accept any well-known brand from a trusted dealer.



BULLION DEALERS



A secondary tier bullion dealer with stocks of Rand Refinery TT bars.

GOLD REFINERS

The refining of old gold jewellery and other scrap relies on two large refiners, 7 known organised refiners and more than 10,000 small refiners in cities, towns and some villages.

Refiners are grouped under 3 broad categories:

- Large refiners. India Government Mint, Mumbai. Shirpur Gold Refinery Ltd.
- Organised refiners. Capacity to refine 5 or more tonnes annually.
- Small refiners. Most refine less than 1 kg per day.

LARGE REFINERS

India Government Mint, Mumbai

Formally established in 1829, the Mint has refined gold since 1919. It falls under the administrative control of the Ministry of Finance. In recent years, it has focused on the refining of old gold scrap and the manufacture of small bars associated with the 5 year Gold Bond (1993 - 1998) and the on-going Gold Deposit Scheme, launched in 1999. The Mint produces 400 oz, 1000 g, 500 g, 100 g and 50 g cast bars, as well as a 10 g minted bar. It also mints tailormade products. Apart from gold refining, the Mint produces Indian currency coins.

Shirpur Gold Refinery Ltd

Established in 1999 as India's first large modern gold refinery, it is located on a 52-acre site in Shirpur (Maharashtra), about 400 km north east of Mumbai. Annual gold refining capacity: 217 tonnes. It is permitted by the Ministry of Commerce and Industry to import gold dore for refining within India. It manufactures 10 tola bars, 5 tola bars and kilobars at 999.9 purity. Within Maharashtra, the company has "Pioneer Unit" status affording some tax exemption benefits. It has its own aircrafts and a landing strip at the Shirpur refinery to facilitate precious metal transportation. The company, until 2002, was previously known as Agee Gold Refiners Ltd. Headquarters: Mumbai. Employees: 120.

ORGANISED REFINERS

There are at least 7 other significant refiners with a capacity to refine 5 tonnes or more annually.

Several are substantial companies. Most are involved in jewellery fabrication, jewellery retailing, bullion dealing or other businesses.

City	Gold refiner	Approximate refining date
WEST		
Mumbai	India Government Mint	1919
Mumbai	National India Bullion Refinery Unit No 1	1964
Mumbai	National Refining Private Ltd	1942
Mumbai	Narrondass Manordass	1788
Mumbai	Parekh Platinum Ltd *	1993
Shirpur	Shirpur Gold Refinery Ltd	1999
Ahmedabad	Gujarat Gold Centre	1991
SOUTH		
Bangalore	Bangalore Refinery (P) Ltd	1976
Cochin	Chemmanur Gold Refinery Pvt Ltd	1995

^{*} Parekh Platinum is planning to establish a large refinery in Ahmedabad.

Apart from refining and the manufacture of coins and small bars, some also produce an extensive range of industrial gold products. For example, gold anodes for industrial plating, gold alloys in various colours, fine gold wire, gold powders and pastes, and gold chemicals.



GOLD REFINERS

SMALL REFINERS

There are more than 10,000 small refining units in cities, towns and villages throughout India.

Most are extremely small, refining less than 1 kg (many less than 50 g) daily. Many units comprise only 2 workers. Most would also refine silver.

Many small units in towns and villages service less than 5 jewellery retailers.

In major cities, where there are larger units, the ratio of retailers to small refiners appears to be less. Informal trade estimates suggest that there are more than 50 units in Greater Mumbai, New Delhi, Kolkata and Bangalore. An estimate for the State of Kerala was 500, and for Tamil Nadu 1,000.

Many jewellery fabricators and retailers also undertake their own refining in-house.



An organised refiner in Mumbai – receiving old gold scrap.



Most refining is undertaken by thousands of small refiners located in cities, towns and villages.

Coins are minted by organised refiners and more than 1,000 other coin fabricators. Many jewellery fabricators also have a capacity to mint coins.

Although the fabrication of coins and minted bars was prohibited for 27 years (1963 - 1990), existing stocks within India of legal tender gold coins, dated 1962 and earlier (mainly British sovereigns), could be owned over this period.

In India, the word "coin" is commonly used to describe a round medallion bought for savings or gift purposes. It does not imply legal tender status. The category includes minted medallions and quasi-coins in rectangular, oval and other shapes. It also includes crude "duplicate" sovereigns in a variety of weights (from 8 g to 1 g), also known as "guineas".

Coins are bought for 3 main purposes: family gifts, corporate gifts and personal savings. More than 50% of coins are expected to be exchanged for jewellery over time.

Most coins are sold by jewellery retailers. Demand tends to be seasonal, sold mainly during the marriage seasons and at festivals, especially around the time of Diwali (October – November).

More than 35 tonnes of fine gold may have been used to fabricate coins in 2001.

NUMBER AND SIZE

Anecdotal evidence indicates that there are more than 1,000 coin fabrication units. A few mint more than 500 kg, but most mint less than 5 kg, and some less than 1 kg of coins, annually.

In the south, for example, trade estimates indicate that there are more than 50 units in the cities of Chennai, Coimbatore, Bangalore and Hyderabad. For the State of Kerala, the estimate was 100.

Mumbai is the most important fabrication centre. Its units dominate the minting of coins for corporate companies nationwide.

Few units rely on gold coin fabrication as their sole source of income. Many also mint large quantities of silver coins. Most mint coins sporadically according to seasonal demand.

TECHNICAL FEATURES

Purities

Although organised refiners adopt standard purities of 995 or 999, most coins are 916.6 (K22). The purity can also be specified by the retailer or corporate entity ordering the coins (e.g. K23, K21, K20 and K18).

Weights

Most organised refiners produce coins ranging from 0.5 g to 100 g. The most popular weights are 10 g and less.

In the south especially, many fabricators produce a standard range of small coins: 1 g, 2 g, 4 g and 8 g.

Many NRI's are also reported to import foreign coins and minted bars from the Middle East and elsewhere, usually for conversion into jewellery.

Decoration

Coins are available in a plethora of different designs. Corporate companies and jewellery retailers often request that their corporate logo be featured on the obverse with a standard or tailormade design on the reverse.

Many coins depict a Hindu God or Goddess or religious motif on the reverse. Some units report that 50% and more of their coins would be of this kind.

Crude "duplicate" sovereigns normally depict Queen Victoria, Edward VII or George V. They sometimes also incorporate the initials of the fabrication unit.

CONSUMER MOTIVATION

Coins are bought for 3 main purposes: family gifts, corporate gifts and personal savings.

All retailers stress that most coins tend to be exchanged over time for jewellery.

Family gifts

Popular during the marriage season, for other family events, and at the time of festivals. Many large urban retailers observe an increase in demand in recent years.



Corporate gifts

Although bought for this purpose since the early 1990s, Mumbai reports a surge in fabrication over the past 3 - 4 years. Hundreds of companies nationwide have rewarded staff with coins or used them as promotional prizes for their customers. Large orders for 100,000 and even 500,000 1 g coins, have occurred, alongside orders for 100's and sometimes 1000's of 5 g, 10 g and larger coins. Although large coin fabricators deal directly with corporate companies, many large jewellery retailers also act on behalf of corporate companies.

Personal savings

Most retailers observe that the purchase of coins for personal savings purposes is normally low, but some in Mumbai, Ahmedabad and the south report an increase in recent years.

For many consumers, coins are a vehicle to accumulate gold that will eventually be converted into jewellery.

However, retailers observe that most coins featuring a religious Hindu design tend not to be sold back by consumers, unless there is an economic "necessity". It would be "like melting down a God".

In the south, several retailers commented that, for this reason, some customers were becoming resistant to buying coins of this kind in large quantities.

DISTRIBUTION

Jewellery retailers

Apart from those coins produced for corporate companies, trade estimates suggest that more than 80% of coins bought for private purposes are retailed by jewellery outlets.

In most outlets, the coins are usually not visible, as the retailer would prefer to sell jewellery at a higher profit margin.

The retail mark-up on coins is low, normally around Rs 50 (US\$ 1.00), regardless of its weight. Some retailers sell them at the carat gold price without any mark-up as a customer service.

Banks

In 1999, 3 banks tried to retail commemorative coins, but sales did not meet expectations. A relatively high price by Indian, though not by international, standards was reported as an important reason for their lack of success.

Corporation Bank. Tendulkar coin. 1/4 oz. Minted by Perth Mint (Australia). Supplied by Societe Generale.

Bank of India. Millenium 2000 coin. 10 g. Minted by Royal Canadian Mint. Supplied by ScotiaMocatta.

State Bank of India. Millenium 2000 coin. 10 g. Minted by Pamp (Switzerland). Supplied by Rothschild.

Some banks are reported to be investigating how they can retail coins more effectively.

Internet

Fabmart Pvt Ltd (Bangalore) is pioneering the sale of 10 g coins through its website. There is a choice of 22 different designs depicting Hindu Gods and Goddesses. Laser hallmarked. Minted by VNM in Pondicherry.



A small coin fabrication unit.

More coins appear to be fabricated in the west and south than in the north and east.

SEASONALITY

Most coins tend to be sold at the time of festivals and during the marriage seasons. Many fabricators and retailers report that about 50% of annual fabrication and sales occurs around Diwali (October-November).

QUANTITY

Generally, large jewellery retailers report that their coin sales would range from less than 1% up to 5% of their turnover. Some fabricators and bullion dealers also retail directly to corporate companies and the public.

Coin sales appear to be higher in large cities. For most small urban and rural jewellery retailers, sales seem to be non-existent or extremely low. Private demand in the west and south also appears to be higher than in the north and east.

Estimating the size of the coin market is extremely difficult as fabrication is so fragmented.

Informal trade estimates suggest (at this time) that 15 tonnes may be fabricated in the west, 10 - 15 tonnes in the south and less than 10 tonnes in the north. Fabrication in the east is reported as low, probably less than 5 tonnes. An indicative fabrication estimate for 2001 is 35 tonnes of fine gold. This would equate to about 40 tonnes by gross weight of carat gold coins.

The quantity of coins fabricated for corporate purposes nationwide may exceed 10 tonnes. From the fabricator perspective, this would normally include not only tailor-made coins ordered by corporate companies but also tailor-made branded coins for jewellery retailers that may sell them to both corporate companies and the public.

Some Indian analysts believe that coin fabrication for corporate and private use may have been 50 tonnes, perhaps as high as 70 tonnes, in 2001. This may be the case but, when GIR visited major coin fabrication centres in the north, notably New Delhi, Meerut and Agra, gold coin output appeared to be low (while silver coin fabrication was extremely high). In addition, the bulk of small fabricators appear to fabricate less than 5 kg annually. Some large refiners also tend to include in their estimates minted coins and bars that are bought, or swapped for scrap, by jewellery retailers and then melted down for jewellery fabrication purposes.

While the quantity of coins fabricated nationally for corporate and private use is an unresolved issue, the important point is that coin fabrication is substantial and overall demand, according to the trade, has grown at both corporate and private levels over the past 3-4 years, although there is variation among regions and States.

EXAMPLES OF STANDARD MINTED COIN WEIGHTS

Weights	Mumbai	Mumbai	Mumbai	Mumbai	Ahmedabad	Bangalore	Cochin
in grammes	National Gold Refinery	Parekh Platinum	Narrondass Manordass	National India Bullion	Gujarat Gold Centre	Bangalore Refinery	Chemmanur Gold Refinery
100	100	-	100	100	-	100	100
50	50	50	50	50	-	50	50
25	-	25	25	25	-	-	-
20	20	20	-	20	-	-	-
10	10	10	10	10	10	10	10
8 *	-	-	-	-	-	8	8
5	5	5	5	5	5	5	5
4 *	-	-	-	-	-	4	4
2.5	-	-	-	-	2.5	-	2.5
2	2	2	2	2	2	2	2
1	1	1	1	1	1	1	1
0.5	-	-	0.5	0.5	-	0.5	-
Standard purity	995	999	995	995	999	999	999

^{* 8} g and 4 g coins are normally K22.

Most refineries will also tailor-make coins and bars to any specified weight, purity, caratage and design.

Rectangular bars

National Refinery
Parekh Platinum
None.
100 g, 50 g.
Narrondass Manordass
National India Bullion
In all weights.

Gujarat Gold Centre 50 g, 20 g, 10 tola, 5 tola, 1 tola. Bangalore Refinery In all weights, except 8 g and 4 g. Chemmanur Refinery In all weights, except 8 g and 4 g.



A bullion dealer that sells coins in Mumbai.

Many coins are sold at the time of Diwali in October and November.





Photograph: Parekh

Organised fabricators produce tailor-made and well-packaged coins for hundreds of corporate companies and institutions. They are used as gifts and incentives for staff, trade customers and consumers.

BAR HOARDING

Bullion dealers and jewellery retailers in urban and rural areas generally reported that, in their view, bar hoarding by the public is low.

The exceptions were some trade entities in Mumbai and Ahmedabad.

In major cities, speculative trading in TT bars occurs but the number of speculators is regarded as small and confined mainly to the "elite".

Anecdotal evidence suggests that the net increase in bars hoarded may have been as low as 20 tonnes in 2001.

The level of net bar hoarding is an unresolved issue. Some Indian analysts believe it may be higher than the estimates in this report.

PERSPECTIVE

Several reasons for the low level of bar hoarding were advanced.

- Owning imported TT bars implied an association with the underground economy. Even if bought with legitimate funds, bar ownership would be queried by the tax authorities.
- Many people were still not aware that TT bar ownership, banned during the period of the Gold (Control) Act, was now legal. Even those who were aware that it is legal felt more comfortable owning jewellery and coins.
- Gold is not an "idle" asset. Gold in the form of jewellery could be worn. Most wives would also persuade their husbands to convert bars, if held, into jewellery.
- Unlike Western countries, gold jewellery is still widely regarded as the best way to "invest" in gold for store of value and savings purposes.
- In the early to mid-1990s, there had been more bar hoarding, but it had declined in recent years in most States due to the static rupee gold price.

In the major metropolitan cities, the trade did report some private speculation in bars. There were large investors who bought and sold TT bars (sometimes 100 or more), but this did not constitute bar hoarding. There appeared to be little long-term accumulation. The number of speculators had also fallen since the mid to late 1990s.

Some trade entities, in the metropolitan cities, also commented that significant quantities of TT bars may be bought to "park" underground funds, but in their view the bars were likely to be held for a short period before being used for other numbers

Some top end jewellery retailers, in Mumbai in particular, also observed that, although few TT bars were currently used to pay for jewellery (apart from NRI's who often brought back bars and coins for this purpose), they expected consumers to accumulate more bars in the future. There was some evidence that this was starting to happen. It would be cheaper to convert accumulated bars, rather than accumulated jewellery, into new jewellery for marriage purposes.

The trade made these observations in the context of a static rupee gold price between 1997 - 2001. Although the price had risen since September 2001, they believed that the public were still wary about the direction of the gold price. Attitudes to bar ownership might change but, in their view, most purchases in the future were more likely to be for short-term speculative purposes, or accumulated for conversion into jewellery.

ABOVE GROUND STOCKS

Anecdotal evidence (at this time) suggests that bar hoarding as a proportion of India's above ground stocks of gold may be below 2%, i.e. below 240 tonnes.

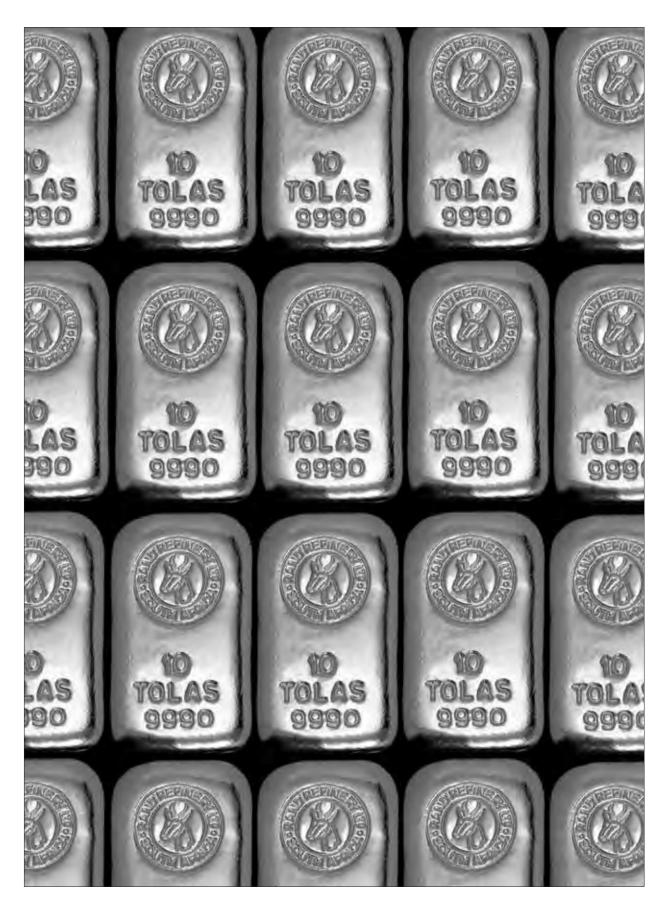
The *net* annual increase in the above ground stock of TT and other bars appears to have been small in recent years.

The annual increase in the net amount of bars hoarded is difficult to resolve as some trade entities appear not to differentiate clearly between the **gross** and **net** level of private bar purchases in any one year.

The on-going dishoarding of bars, originally bought for speculative or "money" purposes, or for conversion into jewellery over time, appears not to be taken sufficiently into account.



BAR HOARDING



Some trade entities in Mumbai and Ahmedabad expect more consumers to accumulate TT and minted bars for conversion into gold jewellery in the future.

The official import of gold bars into India by banks and other authorised entities can be cleared at 14 airports.

Most are cleared at 5 international airports:

North New Delhi

West Ahmedabad, Mumbai

East Kolkata South Chennai

Imports can also be cleared at some domestic airports, having been trans-shipped directly by air from international airports. After clearance, many shipments are transported by air and road throughout India.

Most bars arrive at airports where the State taxes are low, or where they can be subsequently trans-shipped to States with low State taxes.

State sales and municipal taxes tend to change. In recent years, Ahmedabad and Jaipur (clearance at New Dehli) have been important distribution centres. In 2002, Mumbai and Gurgaon have also become important.

Open General Licence (OGL). In 1997-99, for which statistics are available, 59% was cleared at Ahmedabad and New Delhi.

Non-Resident Indian (NRI). In 1994-99, 93% was cleared at Calicut, Mumbai, New Delhi and Chennai.

Special Import Licence (SIL). In 1994-99, 96% was cleared at Ahmedabad, Mumbai and New Delhi.

SHIPPERS

Important agents, that clear gold bullion through Customs and arrange its transportation to final delivery destinations, include the following:

Brink's Arya India Private Limited

Established in 1981 as a joint-venture with Brinks Inc (USA). Branch offices: 15. Headquarters: Mumbai.

Group 4 Securitas Cash Services (P) Ltd

Established in 1998 as a subsidiary of Group 4 Falck (Denmark). Branch offices: 11. Headquarters: New Delhi.

Securitrans India Pvt Ltd

Established in 1999 as a private company. Services Viamat International (Zurich) and Guardforce (Hong Kong). Branch offices: 10. Headquarters: New Delhi.

Major airlines that deliver gold to India include Air India, British Airways, Emirates and Swissair. Side shipments within India are normally undertaken by Indian Airlines.

Bar imports generally arrive in India 3 - 6 days after the bank has placed an order with an international bullion dealer.



Approximately 650 tonnes of gold bars were imported officially in bulk for the domestic market and jewellery exporters in 2001.

SOURCES OF BULK DELIVERY

More than 95% of shipments originate from, or are routed through, Switzerland, South Africa and the United Kingdom.

According to the DGCIS, the table below – based on consignment notes - generally indicates the *last port of call* prior to the shipment landing in India.

It does **not** reflect the actual quantity of bars produced in each country. For example, TT bars made in South Africa are often transported via Zurich.

While highlighting Switzerland as a bullion transit centre, it also underlines the importance of Switzerland, South Africa and the UK as major producers of TT bars.

Country			Tonnes		
•	1996-97	1997-98	1998-99	1999-00	1999-01
Switzerland	42.7	179.6	235.2	236.2	306.3
South Africa	0.8	11.9	101.3	149.4	69.9
UK	1.2	34.5	65.6	64.2	85.5
Sub-total	44.7	226.0	402.1	449.8	461.7
UAE	2.1	30.3	26.9	6.9	3.8
USA	1.9	4.4	5.3	10.2	0.3
Australia	1.0	0.9	10.1	2.1	0.6
Hong Kong	0.2	0.3	4.7	0.1	0.1
Other	2.1	3.5	6.3	.2.2	4.7
Total	52.0	265.4	455.4	471.3	471.2

Source: Directorate General of Commercial Intelligence and Statistics (DCGIS), Kolkata. * The table combines the two categories of imports as recorded by the DGCIS: "Other non-monetary unwrought forms of gold" and "Other non-monetary semi-manufactured forms of gold". The latter is included as gold bars are often recorded as semi-manufactured products. NRI imports are not included, as the DGCIS does not record a breakdown by port of entry. The DGCIS advise that its gold import statistics indicate the minimum amount imported, as it is not always advised of all official imports.

SHIPPING AGENT OFFICES

Brink's, Group 4 and Securitrans have gold storage facilities in 17 cities. Most are located in the south.

State	City	Brinks	Group 4	Securitrans
NORTH				
Delhi (NCT)	New Delhi	Yes	Yes	Yes
Rajasthan	Jaipur	Yes *	**	Yes
Chandigarh (UT)	Chandigarh	Yes	**	Yes
WEST				
Maharashtra	Mumbai	Yes	Yes	Yes
Maharashtra	Pune	Yes	-	-
Gujarat	Ahmedabad	Yes	Yes	Yes
Gujarat	Surat	Yes	Proposed	Yes
SOUTH				
Tamil Nadu	Chennai	Yes	Yes	Yes
Tamil Nadu	Coimbatore	Yes	Yes	Yes
Tamil Nadu	Salem	-	Yes	-
Karnataka	Bangalore	Yes	Yes	Yes
Andhra Pradesh	Hyderabad	Yes	Yes	Yes
Andhra Pradesh	Visakhapatnam	Yes	Yes	-
Kerala	Cochin	-	Yes	-
Kerala	Trivandrum	Yes	-	-
EAST				
West Bengal	Kolkata	Yes	Yes	-
Orissa	Bhubaneshwar	Yes	**	-
Total offices		15	11	10

^{*} Brink's: Storage facility for Jaipur is planned.

^{**} Group 4: Services Jaipur and Chandigarh via Delhi, Bhubaneshwar via Kolkata.

INTERNATIONAL AIRPORTS AND CUSTOMS CLEARANCE CITIES

State	City	Int'l airport	Customs clearance	Clearance	Delivery within India
NORTH					
Delhi	New Delhi	Yes	Yes	-	-
Rajasthan	Jaipur	-	Yes (embargo)	Cleared Delhi*	Road
Chandigarh	Chandigarh	-	-	Cleared Delhi	Road
Jammu	Jammu	-	-	Cleared Delhi	Road or air
Uttar Pradesh	Kanpur	-	-	Cleared Delhi	Road or air
Uttar Pradesh	Lucknow	-	-	Cleared Delhi	Road or air
Punjab	Ludhiana	-	-	Cleared Delhi	Road
WEST					
Maharashtra	Mumbai	Yes	Yes	-	-
Gujarat	Ahmedabad	Yes	Yes	-	Also air from M'bai
Gujarat	Rajkot	-	-	Cleared A'bad	Road
Madhya Pradesh	Indore	-	-	Cleared Mumbai	Road or air
Goa	Goa	Yes	Yes	Cleared Mumbai	Road or air.
SOUTH					Sometimes cleared in M'bai. Mainly air shipments from M'bai
Tamil Nadu	Chennai	Yes	Yes	-	- '
Tamil Nadu	Coimbatore	Yes	Yes	-	Also air from Chennai
Tamil Nadu	Salem	-	-	Cleared Coimbatore	Road
Tamil Nadu	Trichy	-	-	Cleared Cochin or Coimbatore	Road
Pondicherry	Pondicherry	-	-	Cleared Chennai	Road
Karnataka	Bangalore	Yes	Yes	-	-
Karnataka	Mangalore	-	-	Cleared B'lore	Road
Andhra Pradesh	Hyderabad	Yes	Yes	-	-
Andhra Pradesh	Visakhapatnam	-	Yes	-	-
Kerala	Cochin	Yes	Yes	-	-
Kerala	Trivandrum	Yes	Yes	-	-
EAST					
West Bengal	Kolkata	Yes	Yes	-	Also air shipments from M'bai
Orissa	Bhubaneshwar	-	Yes	Cleared Kolkata	Road

Source: Brink's Arya and Securitrans India. $\,^*\,$ Deliveries to Jaipur are currently cleared in New Delhi.

Although gold imports can be cleared in 14 cities, in recent years the bulk has been cleared at Ahmedabad and New Delhi.





Mumbai and Gurgaon have become more important as bulk delivery centres due to a reduction in their State sales taxes on bar imports in 2002.

CHAPTER 5

GOLD JEWELLERY

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Gold jewellery exports

India is the world's largest gold jewellery market.

Indian consumers bought more than 950 tonnes of gold jewellery in 2001.

PERSPECTIVE

INDIA

The gold jewellery market in India is different from that in Western countries.

Gold jewellery is sold at *fluctuating* and *low* prices related to the prevailing value of its fine gold content. The declared mark-up ranges from 5 - 25%.

It acts as a tradable investment in that it is easy for consumers to sell or exchange their jewellery at a reasonable price, as many do.

While cultural, adornment and other factors influence the purchase of gold jewellery, its parallel role as an **investment** for store of value, savings and money purposes is also relevant.

WESTERN COUNTRIES

Gold jewellery is sold at *fixed* and *high* prices ranging from 100% to 300% and more above the value of its fine gold content.

It is bought primarily for **adornment** purposes. While the intrinsic value of gold jewellery is important, the investment dimension is not blatant.

It is difficult for consumers to exchange or sell their jewellery. Only a fraction of the original purchase price can normally be redeemed.

To mark the difference from gold jewellery sold in Western countries, the broad term "investment jewellery" is widely used by Western analysts to describe gold jewellery sold in India.



Photograph: Alukkas

A common retailer estimate is that more than 70% of jewellery purchases is marriage-related.

The category would include jewellery bought for weddings and other marriage-related purposes, not least to accumulate gold for young daughters.

GOLD JEWELLERY PRODUCTS

This section covers caratages, the typical weights and relative importance of the 5 main product categories, and the variety of regional styles.

K22 is the dominant caratage.

The bangle is the most important product for most large retailers. accounting on average for around 30% of the weight of gold jewellery sold. A pair typically weighs between 12 g and 24 g.

Kolkata is renowned for its intricate filigree jewellery.

There is increasing consumer demand for innovative designs.

CARATAGES

Most plain gold jewellery is sold as K22, but K24, K23, K21 and K18 jewellery is also available.

K22 jewellery is generally sold as "22/20". This means that, when the item is melted down, its fine gold content will be approximately 10% less than its designated weight. This traditional practice takes into account gold wastage, and an extensive use of solders, in the fabrication of most handmade items.

Since the introduction of voluntary hallmarking, and the use of solders such as cadmium, many large retailers are now selling jewellery that is "22/22".

K24 is often available to those customers, especially in some rural areas, who want simple, lower value added jewellery.

K23 is also available, notably in the west and north. In Maharashtra, it can account for 20% (sometimes 90%) of jewellery sales in some outlets. In rural areas in the Punjab, K23 is widely sold.

K21, a traditional caratage in the Middle East, is sometimes available.

K18 is normally used for gold jewellery incorporating diamonds.

IMPORTANT CATEGORIES

There are 5 broad categories that normally account for the bulk of gold jewellery sales: necklaces, bangles, chains, earrings and finger rings.

Gold usage

The importance of each category, as a percentage of the total weight of gold jewellery sold, can vary greatly among retailers, even in the same locality.

The table below records the variation among the *large urban retailers* visited.

Category	% Split of retail sales by weight
Necklaces	10 - 35
Bangles	20 - 50
Chains	10 - 40
Earrings	5 - 20
Finger rings	5 - 10
Other	5 - 10
Total	100

Bangles. Generally the most important category, typically around 30% of the total weight of gold jewellery sold. They are normally sold as pairs, sometimes 6 pairs or more at a time.

Chains. Variable, even in the same locality. In the south, chains appear to be more important, typically 25 - 35%.

Necklaces. Variable, but typically 15 - 20%. A marked decline in importance in many outlets over the past 5 years.

The importance of *earrings* and *finger rings* tends to increase progressively down the distribution chain. In small rural and suburban outlets, their proportion often exceeds 50%. However, among many large retailers, their sale is also reported to be increasing.



GOLD JEWELLERY PRODUCTS

Handmade jewellery weights

Among *large urban retailers*, the typical weights of handmade items also varies greatly, dependent on the wealth of customers and regional preferences.

In some outlets, extremely heavy items can be sold. Necklaces can weigh as much as 2 kg, bangles and chains and even a pair of earrings more than 50 g, and finger rings more than 20 g. Less common items such as waist belts can exceed 200 g, while golden plaits can be more than 500 g.

The table below illustrates the more common range of weights available. The inclusion of the "typical" range of weights sold is designed only to indicate the relative weights of different categories.

Category	Common range of weights available	"Typical" range of weights sold
Necklace	15 - 200 g	30 - 60 g
Bangle	8 - 20 g	8 - 12 g
Chain	10 - 40 g	10 - 15 g
Earrings	2 - 20 g	3 - 6 g
Finger ring	2 - 10 g	3 - 6 g

Large retailers observe generally that the average weight of individual items across all categories has fallen over the past 5 years. A typical reduction in weight is around 20%.

The weights of all categories tend to decrease progressively down the distribution chain. In small rural and suburban outlets, necklaces may comprise only a locket strung on a synthetic chain. "Studs" or "tops" (earrings) may weigh 1 - 3 g.

Machine-made jewellery weights

Machine-made jewellery is generally lighter than handmade jewellery. Its weight range is normally less.

Category	Common range of weights available
Chain	6 - 25 g
Bangle	6 - 25 g
Earrings	2 - 15 g
Finger ring	3 - 15 g

Over the past 5 years, the sale of jewellery that is mainly machine-made has increased significantly. Among large urban retailers, its proportion of total jewellery sales typically ranges between 10% and 20%, and as high as 35% in some outlets.

Chain, the most important category, is reported to be increasingly available in towns and villages.

Marriage symbols

Although symbols can vary by regions, State and caste, many married women wear a *mangalsutra*, or a gold chain. A mangalsutra is a necklace that usually incorporates black glass beads.

Gold dinner and Pooja sets

Although not widely available, the following records the weight of K22 sets retailed by Kirtilals in Hyderabad.

Dinner set	Weight
4 large plates 4 cups 1 small plate	220 g each 38 g each 100 g
Total	1,132 g
Pooja set *	Weight
1 plate 1 bowl 2 beakers 1 pot 2 lamps	222 g 60 g 60 g each 48 g 175 g each
Total	1,150 g

 $^{^{}st}$ For Hindu religious purposes.

GOLD JEWELLERY PRODUCTS

STYLES AND DESIGN

A broad trade estimate is that around 80% of gold jewellery is sold nationally as plain gold jewellery.

Around 20% is *studded* jewellery incorporating elements such as precious and semi-precious stones, pearls and synthetic materials.

In some States, notably in the south, some large urban retailers observe that, while sales of diamond-studded gold jewellery have increased, sales of other forms of studded gold jewellery have decreased. One reason is that many consumers are increasingly aware that studded jewellery tends to have a lower resale value. In other States, however, notably in the north and west, sales of other forms of studded jewellery are reported to have increased.

Styles vary around the country. Generally, jewellery is regarded as heavier and more intricate in the north, lighter in the south.

Different proportions of silver, copper and other alloy materials can yield slight variations in the colour of gold jewellery. Preferences among regional fabrication centres are broadly described: yellow (north), red (east), yellow/white (west) and yellow/red (south).

New styles of jewellery are accommodating consumer demand, especially over the past 5 years, for "new" and "fashionable" gold jewellery.

Selected features of different regional styles are often blended together. More subtle designs often reflect a Western influence.

Innovative designs are also applied to studded jewellery, incorporating precious and semi-precious stones such as diamonds, emeralds, rubies and sapphires, artificial materials such as zircons and glass, and pearls.

New styles are also taking into greater account the "wearability" of jewellery for a variety of social and work-related occasions.

Fashion, modern clothes, lifestyle and comfort are now considered important influencing factors by fabricators that serve large urban retailers.

EXAMPLES OF REGIONAL GOLD JEWELLERY



The photographs and texts on the following pages were kindly provided by **Tribhovandas Bhimji Zaveri** (TBZ, Zaveri Bazaar, Mumbai). TBZ, established in 1864, is acknowledged throughout India as one of the country's leading jewellery retailers. Most leading retailers stock a diverse range of regional gold jewellery styles.

KOLKATA



Kolkata (West Bengal) goldsmiths have been regarded for centuries as the best in India. They fabricate intricate filigree jewellery. It often incorporates gold granules or circular cushions interspersed with gold studs that are set onto plain or twisted wire.

NEW DELHI AND AGRA



Goldsmiths in north India, especially in New Delhi and Agra (Uttar Pradesh), excel at the *jadao* technique that inlays hard stones, precious stones and pearls into gold. The stones, set in K24, are then mounted onto K22 jewellery. Although the Chinese have carved jade into beautiful shapes for centuries, Indian goldsmiths have perfected the art of incorporating jade into gold jewellery.

AMRITSAR



Amritsar (Punjab) specialises in heavy filigree work, often incorporating heart shaped motifs into heavy chains. Since the 17th century, Amritsar gold jewellery has been renowned for its distinctive local style.

JAIPUR



The *minakari* technique, which means "artistry of coloured glass", traces its origins to the 16th century workshops of Maharajah Man Singh in Jaipur (Rajasthan). The colours are normally confined to a glowing ruby red, a brilliant translucent green and an opaque white, supplemented occasionally by a greyish blue. Floral and leaf patterns are usually interspersed with birds and animals.

AHMEDABAD



Ahmedabad (Gujarat) is famous for its distinctive "ras rava" style of gold jewellery, and for its influence on jewellery fabrication nationally. Granules and minute flat discs with gold links are normally incorporated into twisted or braided gold wire.

KARWAR



Goldsmiths in the ancient port of Karwar (Karnataka) fabricate gold jewellery renowned for its complexity of structure and combination of motifs. It is light in weight and made from die-struck pieces.

COIMBATORE



Coimbatore (Tamil Nadu) is an important fabrication centre due to its proximity to Chennai. Its jewellery tends to imitate forms found in nature. Its speciality is light filigree jewellery that incorporates gold wire, stamped florets, flat discs and hemispheres.

KUNDAN JEWELLERY



Kundan jewellery incorporates the irregular shapes of uncut precious, semi-precious or coloured stones or pearls into carefully wrought yellow gold mounts that can be leaf, octagonal, square, oval and pear shaped. The rich colourful effect is repeated on the back of the settings, brilliantly enamelled with floral motifs. Rajasthan and Gujarat are important *kundan* fabrication centres.

SWAMI JEWELLERY



Antique *swami work* jewellery, popular in south India, depicts designs or figures of deities in the Hindu pantheon, normally in an alto-relievo or embossed style. The deities most often depicted are Vishnu, Shiva, Ganesh and Sarasvati. European religious symbols have also been depicted since Victorian times.

DESHI JEWELLERY



Deshi, also called *gheru*, is a polish that gives a red-copper colour to gold jewellery. It also softens sharply reflective surfaces. In historical times, tamarind juice was used to obtain the red sheen.

Around 85% of gold jewellery is handmade or mainly handmade. Around 15% is mainly machine-made, but its proportion is increasing.

There are approximately 3 million active goldsmiths and ancillary workers. Most work in units with less than 5 workers.

A goldsmith typically has a capacity to fabricate 10 g of carat jewellery each day.

Units are under pressure from retailers and consumers to produce innovative and higher quality jewellery.

Large quantities of gold jewellery are fabricated in every region. Mumbai dominates the fabrication of machine-made iewellery.

BACKGROUND

Fabrication takes place in cities and large towns, as well as in many smaller towns and villages.

Most units are small, normally comprising less than 20 workers, many less than 5 workers.

Most are contracted to retailers and wholesalers, although some act as wholesalers and retailers in their own right. Many retailers and wholesalers own fabrication units.

Most handmade jewellery is fabricated in the locality where it is retailed, although the output of major fabrication centres such as Kolkata is available nationwide. Machine-made jewellery tends to be sourced from major centres such as Mumbai and New Delhi.

Retailers and wholesalers normally supply the gold when placing an order. A typical leadtime for delivery is one week. The inventory of gold held by most units tends to be low.

The income of goldsmiths is low. Monthly income typically ranges from less than Rs 5,000 (US\$ 100) to Rs 15,000 (US\$ 300), working 10 or more hours per day, 6 - 7 days per week.

Many units and goldsmiths work sporadically according to seasonality and fluctuations in local demand.

NUMBER OF WORKERS

Since the repeal of the Gold (Control) Act in 1990, the workforce appears to have grown from around 1 million to around 3 million.

In the last Gold Control Statement in 1989, licences were held by 380,000 goldsmiths, each allowed to employ one ancillary worker. According to the trade, there were also many unlicensed goldsmiths.

Trade estimates of the size of the workforce nationwide vary greatly. Some estimate the workforce at more than 5 million. However, anecdotal evidence (at this time) suggests that the number of active goldsmiths and apprentices may be less than 2 million, although ancillary and part-time workers might exceed 1 million.

There are several reasons. When asked to estimate the increase in goldsmiths in their own locality since 1990, most fabricators refer to multiples of 2 - 4. Trade estimates tend also to include artisans and ancillary workers associated with the diamond, silver and imitation jewellery industries. Even at an annual fabrication level of 2,000 tonnes, the daily output of 3 million goldsmiths and ancillary workers would be less than 3 g of carat gold.

FABRICATION CENTRES

Mumbai is now regarded as the largest fabrication centre due to its high output of machine-made jewellery.

The 5 most important centres are listed below. Their jewellery is widely available regionally or nationally.

Region	State	City
North	New Delhi	New Delhi/Meerut
East	West Bengal	Kolkata
West	Maharashtra	Mumbai
	Gujarat	Ahmedabad/Rajkot
South	Tamil Nadu	Coimbatore



All centres, with the exception of Coimbatore, have progressively increased their output, and the proportion sold outside their cities, over the past 5 years. Kolkata is now reported to sell around 75% of its output outside, Mumbai 70% and New Delhi 50%.

The fabrication of machine-made jewellery is dominated by Mumbai, widely acknowledged to account for 60% or more of national output. According to the trade, it has around 200 factories, some with more than 100 chain-making machines. The other significant centre is New Delhi/Meerut with around 50 factories.

Most large retailers now tend to offer a wider variety of jewellery from these and many other fabrication centres. Other significant centres include Jaipur and Amritsar (north) and Hyderabad, Bangalore, Karwar, Nellore and Belgaum (south).

Trade estimates of the amount fabricated in the 5 major centres vary greatly, but anecdotal evidence suggests that some centres may fabricate more than 50 tonnes annually.

Indicative trade estimates put the workforce in New Delhi, Meerut and Kolkata at more than 100,000, in Mumbai at more than 200,000.

The trade also observe that many goldsmiths, skilled in a traditional style, are relocating to fabrication centres around the country, notably from West Bengal.

LARGER UNITS

Since 1990, larger units fabricating handmade jewellery have emerged, but the number remains low nationwide.

Conservative trade estimates put the number of *large* units employing more than 50 workers in New Delhi at around 50, in Coimbatore 30, and in Kolkata 20. In Mumbai, the number may be more than 100.

The table below illustrates the tasks undertaken by 94 workers in a large fabrication unit in Coimbatore. The unit includes goldsmiths from West Bengal and Maharashtra.

Category	Number of workers
Smelting and refining	2
Die making	1
Wire drawing	1
Goldsmiths	60
Assistants to goldsmiths	20
Quality check	2
Polishing	2
Cutting and engraving	4
Packing	2
Total workforce	94



Photograph: B.C. Sen

Fabricating handmade jewellery in Kolkata.

Goldsmiths from West Bangal - renowned as the best in India - work in other centres throughout the country.

SMALLER UNITS

The trade has difficulty estimating the number of smaller units in their cities, but generally observe that there may be several thousand *medium* size units with 20 - 40 workers nationwide.

However, the bulk of handmade jewellery is fabricated by thousands of small units with less than 20 workers.

Most of these small units are reported to have less than 5 workers, often the members of a single family.

A striking feature of all handmade fabrication units is that they each tend to service a very small number of clients. Even large units with more than 50 workers may supply less than 10 retailers and wholesalers, in some cases only one.

OUTPUT CAPACITY

Handmade jewellery

Trade estimates of a goldsmith's capacity vary greatly, from less than 5 g to more than 20 g of carat jewellery daily.

Daily output varies according to demand, the skill of the goldsmith, the size and complexity of the piece, the number of similar pieces being made at the same time, and whether it is fabricated in an "organised", as opposed to a small family, unit.

A typical capacity is described as 10 g of carat jewellery per day.

For example, a standard 10 g bangle, or a pair of 6 g earrings, would take about a day to make, a standard 20 g necklace about 2 days. Complicated pieces might take 2 or 3 times as long. Some pieces might take a week or more.

Fabrication of a single piece often involves the participation of several workers with specialised skills and tasks, sometimes operating outside the unit. The average output per worker would often be less than 10 g.

Machine-made jewellery

One large chain-maker in Mumbai indicated that the daily output of a single machine could range from 300 g of thin chain up to 4 kg of thick chain.

TRADE OBSERVATIONS

Designs

Fabricators are under increasing pressure from retailers to provide jewellery with innovative designs. Many large units (and retailers) now employ their own in-house designers.

Quality

Larger retailers are now demanding an even higher standard of workmanship and finish.

Training

Large and medium size units emphasise their need for support: more technical information and more opportunities to attend technical workshops and seminars.

Low income

Goldsmiths observe that, although they are so important to the gold jewellery market, their income does not reflect their technical and design skills. Many advise that they are earning less in real terms than 5 years ago.

Future

There appears to be a surplus of goldsmiths, the outcome of limited growth in the gold jewellery market since 1998. In the 1990s, many youngsters were encouraged to enter the industry.



JEWELLERY WHOLESALERS

Since 1990, wholesalers have become increasingly important. They are now supplying 30% or more (sometimes 60%) of the stock of many large urban retailers.

Most retailers rely on them to provide machine-made chains from Mumbai and elsewhere, as well as handmade items made locally or from a variety of fabrication centres.

The wholesaling category cannot be clearly separated as many fabricators act as their own wholesalers, many also acting as retailers, and many wholesalers also own fabrication units.

Anecdotal evidence suggests that there are many large wholesalers selling 50 kg or more each month, operating alongside thousands of smaller wholesalers, sub-wholesalers and commission agents.

Most are reported to service retailers only within their locality or State, but many act regionally and nationally, if located within a major fabrication centre.

A typical large wholesaler is reported as having between 10 and 50 large clients, although it can run to many more if they focus on smaller clients. Its staff would often be less than 10 people.

Many offer a partial credit facility, some offer consignment stocks. The inventory of a large wholesaler can be substantial, especially if they fabricate jewellery on a speculative basis. Inventories of 50 kg and more are not uncommon.

The wholesaling of jewellery nationwide has been stimulated since banks were authorised to import and sell gold throughout the country. Large retailers are now able to buy gold from bullion dealers nationwide for collection by the wholesaler. This service has reduced the need to hand carry gold to major fabrication centres.



Most jewellery is fabricated by goldsmiths in small units of less than 20 workers.

TRADITIONAL JEWELLERY RETAILERS

There are approximately 300,000 "traditional" gold jewellery outlets. They are family-owned businesses.

Less than 15,000 family retailers may account for 30% or more of gold jewellery sales nationwide.

The exchange of old jewellery, coins and bars for new gold jewellery and buy backs for cash are standard transactions. Dishoarding may have supplied more than 40% of gold used to fabricate new jewellery in 2001.

Large retailers report that their inventories have increased by 20 - 50% over the past 5 years. The inventory stock in total is unlikely to exceed 400 tonnes of fine gold.

Many large retailers report that their profit margin on gold jewellery sales has fallen.

Large showrooms are expected to increase their share of the jewellery market. The distribution network is expected to contract over time.

BACKGROUND

Family-owned jewellery retailers are generally categorised as "traditional jewellers".

The term is misleading as many are at the forefront of innovation.

Although they may operate under the same names, especially in large cities, the outlets tend to be owned and run as separate and loosely associated businesses by fathers, sons, brothers, nephews, cousins and other close relatives.

In their role as jewellery retailers, they act as dealers. They buy back and exchange jewellery at prices linked to the prevailing gold price. They also retail and buy back coins (and bars, if requested).

Many are involved in other jewellery-related businesses and activities: fabrication, wholesaling, refining, coin fabrication and bullion dealing.

Some large retailers in metropolitan and smaller cities also own showrooms outside India, mainly in the Gulf countries, but some also in Europe, the USA and elsewhere.

Many large retailers also have non-precious metal related businesses. Many retailers sell jewellery as an ancillary product.

NUMBER

Since the repeal of the Gold (Control) Act in 1990, the number of jewellery outlets appears to have grown from 16,000 to approximately 300,000.

Since the last Gold Control Statement in 1989, no statistics have been available. Trade estimates vary greatly from 250,000 to several hundred thousand.

Even within major metropolitan cities, trade estimates vary widely. In Mumbai, for example, estimates range from 4,000 to more than 10,000.

The reason for the range in estimates is due mainly to the "uncountable" tens of thousands of very small outlets that have been established in cities, towns and many villages throughout India since 1990. Outlets that only sell silver or imitation jewellery also tend to be included.

Retail distribution increased rapidly due to 4 main factors.

- Many of the 380,000 goldsmiths, certified in 1989, became small retailers, especially in suburban and rural areas.
- Many thousands of pawnbrokers also started to retail gold jewellery.
- Many retailers, licensed in 1989, were well positioned to establish new outlets for other family members.
- Many families, without previous experience, were encouraged to become jewellery retailers as it appeared to be so profitable.

Although new outlets continue to be opened, retailers in most States refer to the rate of overall expansion having eased since 2000.

To provide some indication of the number of outlets in cities, towns and villages, the following are anecdotal trade estimates. The extent to which large urban retailers include smaller outlets in their cities varies.



State	City	Number of outlets	Indicative population*
Maharashtra	Mumbai	> 4,000	9,926,000
Delhi	New Delhi	> 3,000	8,419,000
West Bengal	Kolkata	> 2,000	11,022,000
Gujarat	Ahmedabad	> 2,000	3,312,000
Tamil Nadu	Chennai	> 2,000	5,422,000
Karnataka	Bangalore	> 3,000	4,130,000
Andhra Pradesh	Hyderabad	> 600	4,344,000
Uttar Pradesh	Agra	> 500	948,000
Tamil Nadu	Coimbatore	> 300	1,101,000
Rajasthan	Jaipur	> 200	1,518,000
Punjab	Ludhiana	> 200	1,043,000
Kerala	Cochin	> 200	1,141,000
Maharashtra	Nagpur	> 200	1,604,000

State	Town or village	Number of outlets	Indicative population*
Maharashtra	Jalgaon	150	300,000
Punjab	Fatehgarh	70	120,000
Rajasthan	Kotputli	70	300,000
Gujarat	Limdi	70	45,000
Uttar Pradesh	Kosi Kalan	30	100,000
Andhra Pradesh	Suryapet	30	100,000
Haryana	Samalkha	25	50,000
Kerala	Pala	13	20,000
Tamil Nadu	Sripelubudur	7	10,000

^{*} Indicative populations. Cities (Statistical Outline of India, 2001-2002, Tata Services Limited. Figures relate to the Census in 1991). Towns and villages (trade estimates).

The number of retail outlets is not necessarily proportional to the size of population. Retailers in cities can sell to customers throughout their States (and in other States). In cities such as New Delhi and Mumbai, some large retailers service customers nationwide.

Retailers in rural towns also sell to customers from neighbouring villages. Unusual towns, such as Jalgaon, can attract customers up to 3-400 km away.

The extent to which large retailers sell to "outside" customers varies. A sample of large retailers in the metropolitan cities suggests that outside customers may account for the following proportion of their sales: New Delhi (50%), Kolkata (30%), Chennai (20%) and Mumbai (15%). Their estimates may not be accurate, but they illustrate the current willingness of customers to travel to other centres, especially for purchases of "bridal jewellery".

The rough estimate of 300,000 outlets suggests that, on average, one retail outlet serves 3,300 people in a population of one billion. However, the ratio varies among States, and tends to be lower in major cities.



Large retailers can sell more than 50 times as much gold jewellery as a small retailer.

SIZE

A relatively small number of retailers appears to account for a high proportion of gold jewellery sales nationwide.

Although most retailers are cautious about revealing their own sales, and estimating the sales of their competitors, some general comments can be made.

- There appear to be several thousand outlets nationwide that sell more than 300 g daily (on average during a year). Some outlets sell more than 1 kg daily. Many large retailers sell 50 times, some 100 times, as much as small outlets.
- In most of the cities visited, the top 10% of outlets are reported to account for 50% or more of total jewellery sales. More than 50% of the total number of outlets in their cities are regarded as selling less than 50 g daily.
- In the small towns and villages visited, although there can be large and dominant outlets in some, sales generally appear to be more evenly spread across many small outlets, most appearing to sell less than 50 g daily.

Anecdotal evidence (at this time) suggests that a very high proportion (perhaps 75%) of the approximately 300,000 outlets in urban and rural areas sell less than 50 g daily, many less than 10 g.

It also suggests that less than 15,000 large family retailers may account for as much as 30% or more of gold jewellery sales nationwide.

METHODS OF PAYMENT

Retailers accept payment in 3 forms: cash, old jewellery and coins/bars. The amount of old gold jewellery recycled is substantial.

Although the sample of urban and rural retailers is small, the range and indicative typical amounts were recorded (as a percentage split) as follows.

URBAN	Range	Indicative estimates
Cash	40 - 85	70
Old jewellery	5 - 60	25
Coins/bars	< 1 - 10	< 5
Total		100
RURAL		
Cash	30 - 80	60
Old jewellery	20 - 70	35
Coins/bars	< 1 - 10	< 5

Anecdotal evidence suggests that in 2001 the split nationally may have been approximately: cash (65%), old jewellery (30%) and coins/bars (less than 5%).

Urban retailers observe that the amount of old jewellery exchanged has increased over the past 5 years. The proportion had risen for many from 15 - 20% to 25%.

Most rural retailers indicate that the level of exchange is normally high, but tends to fluctuate according to local economic conditions.

When visiting retailers in the west and south in May 2002, almost all reported that exchange had increased significantly due to the higher gold price, alongside a depressed economic environment. At times it had exceeded 50%.

Old gold jewellery

Old jewellery is exchanged mainly to buy new jewellery for marriage purposes, to replace worn-out jewellery, and to obtain fashionable new designs.

Marriage jewellery. Although the wealthy tend to pay for new jewellery mainly in cash, the middle and lower classes tend to rely a lot more on the exchange of old jewellery accumulated over many years.

Worn-out jewellery. As bangles, chains and earrings are usually worn on a daily basis, many customers exchange broken, dented and scuffed pieces. High caratage jewellery is prone to wear and tear.

"Fashionable" jewellery. Exchanging items, even if bought only months or a few years previously, for new jewellery with fashionable new designs has grown significantly over the past 5 years, mainly by the high and upper middle classes.

The amount of old gold jewellery exchanged can greatly influence the amount of gold imported, as well as annual estimates of the amount of jewellery fabricated and consumed.

Coins and bars

The proportion of coins and bars received as payment is generally recorded as low. A typical proportion is less than 1% - 2%, but it can be as high as 5 - 10% in some outlets.

While coins were usually used, NRI's often use small bars acquired from outside India.

Some urban retailers expect the proportion to rise as some of their customers are buying more coins for accumulation and gift purposes than in the past. They anticipate that more than 50% of these coins will eventually be converted into jewellery.

BUY-BACKS FOR CASH

The buy-back of old jewellery for cash is significant, but extremely difficult to quantify nationally.

The variation among retailers is marked, even in the same locality. Some also confused buy-backs for cash with exchange. In some cities (notably in Mumbai), independent scrap merchants also account for a significant amount of buy-backs.

In 2001, among large urban retailers, buy-backs as a percentage of gold jewellery sales were reported to range between 1% and 10%.

Among rural and smaller urban retailers, it ranged between 5% and 40%.

During visits to the west and south in May 2002, however, almost all urban and rural retailers observed that the level of buybacks had increased significantly due to the high gold price, in some cases the percentage exceeding 50% of gold jewellery sales. When combined with an increased level of exchange, at times some had no need to buy TT bars.

Anecdotal evidence suggests that in 2001 buy-backs nationally may have been as high as 10% of gold jewellery sales. A conservative estimate is that it was around 7%.

It can be stressed that many retailers find it difficult to differentiate precisely the split between old jewellery, coins and bars acquired through exchange and through buy-backs for cash. The important point is that recycling in all its forms is substantial, and in 2001 appears to have provided 40% or more of the gold used for jewellery fabrication.

General retailer comments on the nature of buy-backs, and the propensity of customers to sell their old jewellery, can be recorded.

- Urban high and upper middle classes (includes large farmers) do not normally sell back their jewellery.
- Middle and lower classes in urban and rural areas tend to sell back old jewellery, including wedding jewellery, when there is an economic "necessity" to do so.
- Most customers, who sell back jewellery, would try to replace some of the jewellery when their financial circumstances improved.
- Although the selling back of jewellery is more common in rural areas, many farmers also use their jewellery to secure loans from moneylenders and banks. This practice inhibits the level of buy-backs in some States.
- Rural buy-backs also tend to be sporadic. Farmers tend to sell back more jewellery during the monsoon season to cover family costs when little or no agricultural income is generated.
- In the view of some retailers, customers tend to plan their selling back (unless an emergency occurs such as the need for medical treatment) to coincide with a known future expenditure. If the gold price rises unexpectedly, many would take the opportunity to sell sooner the jewellery that they would have sold anyway.

Retailers observe generally that their level of buy-backs over the period 1998 - September 2001 was relatively stable. The higher level of buy-backs (and exchange) in the first half of 2002 is mainly the outcome of gold jewellery's sensitivity to a significant increase in the gold price.



A scrap dealer in Mumbai buying back old gold jewellery for cash when the gold price spiked in May 2002.

INVENTORIES

The inventories of most large and many smaller retailers have increased substantially, especially over the past 5 years.

Large retailers observe generally that their inventories have increased by 20 - 50% over this period. Many smaller retailers also report that they have been obliged to increase their inventories.

Reasons include the trend among customers to buy ready-made, rather than customised, jewellery. Many are now insisting on a much wider variety of "fashionable" pieces to choose from. Retailers have responded to this trend, and fuelled it, to attract new customers in a static market.

To increase their inventories, many retailers have reinvested their profits, while both large and small retailers appear to be supported increasingly by wholesalers who offer partial credit terms or consignment stocks at higher prices.

Inventories vary greatly in size. A large retailer may have 30 kg of gold jewellery on display, some 100 kg and more. Many small retailers have less than 5 kg, some only a few hundred grammes, and even less when they rely on their customers to provide the gold for fabrication purposes.

Although inventory turnover rates vary considerably, large retailers indicate that a typical average is now likely to be around 3 times annual sales, although in the mid-1990s it was higher at around 4 - 6 times. Among medium size and smaller retailers, who operate with small inventories and sell more customised jewellery, the inventory turnover rate would be higher.

Anecdotal evidence suggests that the total amount of gold jewellery held in inventories by retailers nationwide is unlikely to exceed 400 tonnes of fine gold (equivalent to around 500 tonnes of carat gold).

Inventories tend to be stable. Retailers observe generally that they do not increase their inventories when the gold price falls, or reduce them when the gold price rises.

To replace the net amount of gold jewellery sold (taking into account the amount of old jewellery exchanged or bought back for cash), and to preserve the size of their inventory, they usually buy gold on a daily or weekly basis regardless of the prevailing gold price. They do not speculate on the gold price.

When buying gold bars from bullion dealers, they advise that they rarely keep them in bar form for long. They are normally converted into jewellery as soon as possible.

Inventories act generally as depositories of family wealth.

In India, most traditional retailers view their inventories differently from retailers in Western countries. Apart from being the vehicle to retail gold jewellery, inventories also serve as a long-term family investment in gold.



Most jewellery retailers are small. Many sell on average less than 50 g of gold jewellery daily.

ANTICIPATED CHANGES IN THE DISTRIBUTION NETWORK

Most traditional retailers expect the jewellery distribution network to evolve over the next 10 years, although most stress that the rate of change is likely to be gradual. They expect large showrooms to increase their share of the jewellery market.

Large showrooms will become increasingly dominant in major cities.

The rationale of large retailers is that their large inventories, wide range of innovative jewellery designs and commitment to promotion will attract more and more of the emerging middle class. Their high profile and prestige will increasingly reassure customers that are concerned about product quality. The new generation of well-educated (many university-trained) family members will also ensure that showrooms adopt improved business and marketing practices. They will also be better equipped to respond to changing consumer needs and preferences.

Large showrooms in smaller cities will become more sophisticated, and more large showrooms will be established in major towns and important villages.

There will be a natural evolution. Growth in the size and number will be driven not only by resident retailers, but also by new entrants (some from outside the city, town or village) opening or franchising new showrooms. This development is likely to erode over time the sales growth of retailers in those cities that have many "outside" customers.

Some traditional retailers will establish well-branded small regional or national chains of wholly owned or franchised showrooms.

During the 1990s, many large retailers opened new family outlets within their cities.

Several are now aware that there are opportunities to establish or franchise sophisticated new showrooms in smaller cities and large towns within their State and nationally.

An important motivation is that competition within major cities is so intense. Another is their view that high growth in the jewellery market is more likely to occur outside the major cities.

Some have already opened or franchised new showrooms in smaller cities and large towns. Several others report that they are planning to do so.

However, there is likely to be a contraction over time in the number of traditional retailers nationwide.

Although few outlets have closed down in recent years, the trade expects some contraction to take place across all outlet categories.

The timing and extent of contraction will be much influenced by the extent to which the gold jewellery market will grow. Its overall growth has been limited since 1998.

Large showrooms. Vulnerable showrooms are those that are not prepared or not able to adapt to an increasing level of competition, especially in large cities. The overheads of large showrooms are high.

Medium-size retailers (150 - 300 g daily). Notably those in cities where there are many large showrooms. The trade observe generally that this is the category most at risk.

Small outlets (less than 100 g). Contraction is likely to be variable. Many small outlets will continue to prosper, servicing the poorer communities in cities, towns and villages.

They also expect some contraction to occur in the clusters of traditional outlets in some city locations where there is substantial traffic congestion. In large cities, suburban clusters will become increasingly important.

Traditional jewellers are also aware that, as a category, they will lose market share to non-traditional branded jewellery retail chains being established nationwide in department stores and shopping centres, and as stand-alone outlets.

Although the retail chains (covered in a separate section) are still at the experimental stage, and their combined volume is less than 1% of the jewellery market, they are expected to erode the sales of traditional retailers in many cities over time.



PROMOTIONAL ACTIVITIES

This section illustrates the range of promotional activities undertaken by jewellery retailers. In an increasingly competitive market, many large retailers now undertake sophisticated promotional programmes.

There are 4 categories of promotion that are common to most retail outlets.

Carat gold prices

Display boards record the prevailing K22 and other carat gold prices per gramme or 10 g as the basis of their gold jewellery pricing policy.

Gold jewellery displays

Great care is normally taken to show as much gold jewellery as possible. Hundreds, sometimes thousands of pieces, are displayed on the walls and in the showcases of larger outlets.

Trained counter staff

A high level of personal service is offered. Many large retailers have 20, sometimes 100 and more, counter staff. Most are highly experienced, or well trained, to motivate and reassure customers.

Hospitality

Most retailers, at every level, encourage their customers to view their visit as a social event. The customer normally sits down, trays or selected pieces of jewellery are brought to the counter, transactions tend to be leisurely, and refreshments are often offered.

Although few retailers go beyond this level of promotion, many large retailers now undertake a wide variety of promotional programmes.

The following lists some reported activities:

Advertising

On TV, cable networks, cinema, radio, press and billboards. Large promotional banners outside showrooms are common.

Festivals and auspicious days

Promotion at the time of national and local festivals, and important auspicious days in the State's Hindu calendar.

Innovative jewellery collections

Tailor-made displays of new collections for marriage and important family occasions and anniversaries, for festivals and special events, and for the young.

Pricing incentives

Periods when discounts, reduced "making" charges and other incentives apply.

Promotional materials

For example, calendars drawing attention to auspicious marriage and other days, promotional leaflets, sophisticated packaging and branded carry-bags.

Mail-shots

Advising customers of new collections and promotional events.

Travelling sales exhibitions

In suburbs, as well as in nearby cities and towns. Normally in hotels.

Community projects

For example, well-publicised support of public gardens and charitable events.

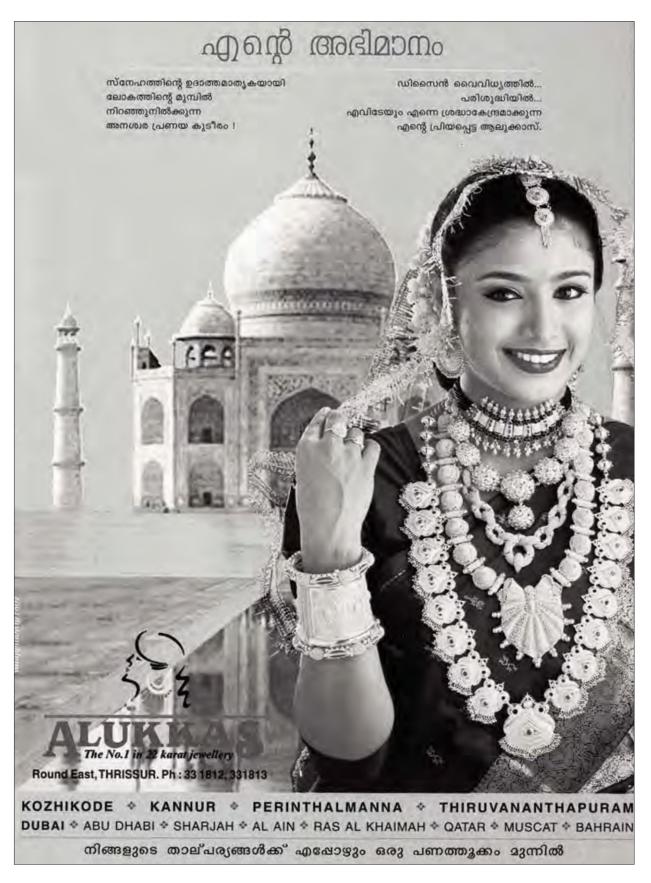
PR programmes

For example, regular media interviews and the loan of jewellery for publicity purposes.

Branding

The most conspicuous change in the attitude to promotion is represented in the scale of the refurbishment of so many existing large showrooms during the 1990s, and the construction of new showrooms with an image that is contemporary with the aspirations of the emerging middle class. Many retailers are conscious of the need to *brand* their outlets.





Many large retailers now undertake extensive promotion.

Although most promotional budgets are less than Rs 5 lakh (US\$ 10,000), several exceed Rs 1 crore (US\$ 200,000).

Gold jewellery is bought as an "adornment". It is also bought as an "investment". For most consumers, the motivations are intertwined.

As much as 50% of annual sales may rely on new purchases associated with about 8 million weddings each year.

In total, more than 70% of all purchases is broadly regarded as marriage-related because jewellery is accumulated for this purpose over many years.

India is fundamentally a "gift-giving" market. Most jewellery is given to brides (and bridegrooms), women and young girls by their parents, husbands or relatives.

Fashion is stimulating a higher proportion of personal purchases in large urban showrooms. Although described as personal, most are the outcome of *family decisions*, and many fall within the gift-giving category.

Lighter weight "wearable" jewellery is viewed by retailers as an emerging new market with much potential.

In the rural areas, much low value added jewellery appears still to be bought personally as a way to store "savings".

Jewellery purchases tend to be higher over 2 periods: October - January (4 months) and April - May (2 months).

Although "everyone buys gold", the jewellery market appears to rely on the top 60% (109 million households) for the bulk of annual purchases. Retailers stress the importance of the emerging middle class.

The urban population may account for 40% of jewellery purchases at this time. The rural/urban split is not a static proportion each year. Rural demand weakens in a depressed agricultural environment.

The south (40%) is regarded as the most important jewellery consuming region, followed by the west (20 - 25%), north (20 - 25%) and the east (15%).

Cities are important retail centres in their States. For example, Greater Mumbai (Maharashtra) may account for 35%, and Chennai (Tamil Nadu) for 30% of sales within their States.

This section relies on information and insights provided by gold jewellery retailers.

MOTIVATION TO OWN GOLD JEWELLERY

"Gold is an auspicious metal. It is supposed to be divine. It is considered as bringing the Goddess Laxmi into your home. It is a symbol of wealth and prosperity."

"Giving gold jewellery to your daughter at the time of marriage is a necessity. Owning gold jewellery is a necessity. It is our tradition."

"Gold jewellery's main role is as an asset. Its advantage is its liquidity and high resale value."

These retailer observations illustrate two parallel motivations. Gold jewellery is owned as an "adornment" for cultural, status and decorative reasons. It is also owned as an "investment" for store of value, savings and money purposes.

Although attitudes towards owning gold have started to diverge among the rich/poor, young/old and urban/rural, both motivations remain relevant across all categories.



The purchase of gold jewellery is normally the outcome of a family decision.

ADORNMENT DIMENSION

Gold jewellery is a symbol of wealth, status and good fortune that is underpinned by the Hindu religion.

Weddings

The bride is normally adorned with as much jewellery as the family can afford. Large items tend to be worn by female guests. For most families, a public display of wealth and financial security at weddings is an age-old tradition and ritual.

Among the wealthy, much bridal jewellery is rarely worn again: stored in one of millions of bank "lockers" (deposit boxes). Large items tend to be withdrawn only occasionally for important functions.

Daily wear

Jewellery is normally worn by women on a daily basis. Most married women wear an item indicating their married status, many wearing a mangalsutra or long gold chain. Ancillary gold items can include earrings, finger rings and pairs of bangles.

Adornment-related observations

"Wearable" jewellery

Economic and social changes during the 1990s have encouraged many women to acquire items, within their bridal collection or through additional purchases or the exchange of old jewellery, that are suited to a variety of social and work-related occasions, clothing and lifestyle. This has led to increasing sales of lighter weight and smaller items.

Most retailers view "wearable" jewellery as an important new market segment for the middle class. Wedding jewellery tends to be heavier, formal and more traditional in design.

"Fashionable" jewellery

For both wedding and "wearable" jewellery, many women are insisting on jewellery with innovative and contemporary designs.

Machine-made jewellery is becoming more popular. It is light, sleek, modern and available in many stylish designs.

Competition

Although there is economic growth, much disposable income that might previously have been spent on jewellery is now being absorbed by lifestyle products such as TV's, white goods, electrical appliances, clothing and holidays. The joint-family system is also gradually being replaced, especially in urban areas, by nuclear families that tend to be less conservative and less committed to gold.

Image

Gold jewellery's image remains strong among the middle and lower classes, but the sale of large amounts for adornment purposes is intertwined with the consumer's perception of gold as a worthwhile asset.

At the top end, demand has weakened for several reasons. Gold jewellery is viewed as "old-fashioned". The younger generation appears to be less committed to owning or wearing as much as their parents. Retailers are well aware that they need to address these issues.

Positive factors

The population and number of marriages increase each year. Economic growth will generate a much larger middle class. The custom of wearing much jewellery at weddings and important functions is expected to endure for a long time. Personal purchases of wearable, fashionable and small items of jewellery are expected to increase significantly over time.



Photograph: Alukkas

For many jewellery consumers the gold bangle is the most important product category.

Bangles account on average for about 30% by weight of the gold jewellery sales of large urban retailers.

INVESTMENT DIMENSION

In a country where there is widespread poverty, no social security net, an underground economy, and a vulnerable currency alongside exchange control, gold jewellery has been viewed as an important family investment for decades.

As an investment, gold jewellery acts mainly as a "store of value". It is easy to buy and sell close to the value of its gold content. It is accepted as "money" everywhere. Its rupee price has normally kept pace with, and exceeded, the rate of inflation over the long term. It is portable and easy to store. It is a discreet asset.

The investment dimension is important for most women because much of the family's jewellery is generally viewed as their personal property. For many married women, it is the only valuable asset they own.

The investment dimension is also important to men. Jewellery enables fathers to provide some financial security for their daughters at the time of marriage. For most brides, it represents their inheritance. Within the family, husbands often prefer to give gifts of gold jewellery, and to encourage their wives to buy jewellery rather than ephemeral items, because the family's overall wealth is enhanced.

Gold jewellery can be used to secure loans. Thousands of banks, co-operative banks, moneylenders and pawnbrokers accept gold jewellery as security, normally 50 - 60% of the value of gold content. For many people, pledging gold jewellery is the only way to obtain a loan. The amount pledged nationally during the 1980s was registered at around 60 tonnes. There is now no official record, but it might exceed this level several times.

Gold jewellery can be sold to cover emergencies. Among small farmers, it can be sold to cover family and other costs when agricultural income is low.

It is also used to absorb "excess money", a term commonly used. The poorer population has limited access to banks, while many others distrust banks or prefer not to use them.

Investment-related observations

Static rupee gold price

Since 1998, the investment dimension has weakened. A static annual price for 4 years until late 2001 did not keep pace with inflation. Over the previous 26 years, in all but one (1982), the price had increased every year. Consumers were not resistant to paying higher prices over this period as an annual price increase was "guaranteed". Many consumers appear to be more sensitive to higher gold prices. They distrust volatile spurts, and have lost some faith in the role of gold as a long-term investment.

Competition

For many consumers, increasing access to bank deposit accounts, the share market, life insurance and pension funds has reduced gold jewellery's investment role.

Encouraging factors

Although the rupee gold price has been static in recent years, gold jewellery retains its residual advantage as a discreet, tradable and wearable asset. Many people have also lost heavily on Indian share markets and in property investment in recent years. The underground economy is expected to endure for many years. Many retailers stress that now is the time to emphasise, in an appropriate way, the advantages of owning gold jewellery for store of value and savings purposes.

TRANSACTIONS

A common retailer estimate is that more than 70% of all jewellery sold is marriage-related.

Transactions fall under 3 broad categories.

- Gifts of bridal and other jewellery at the time of weddings.
- Other gifts of jewellery within the family.
- Personal purchases.

Retailers observe that much jewellery, bought as "other gifts" and for personal purposes, is much influenced by a family's need to accumulate gold for their daughter's wedding, and to enhance the personal wealth of married women.

In joint-families, and in many nuclear families, most purchases are the outcome of a family decision. Men play an important role. They tend to determine or agree the choice of retailer and the amount to be spent. They can also participate in choosing bridal and other jewellery.

For many families, buying jewellery is a social event. When bridal jewellery is bought, the presence of 10 or more relatives is not uncommon. For other purchases, a small group of relatives or close friends tends also to be present.



MARRIAGES

Family purchases of jewellery at the time of marriage appear to account for as much as 50% of annual jewellery sales nationwide.

Large urban showrooms. Its share can range from 25% to 80%, most retailers reporting a range between 40 - 60%. Most observe that its share has fallen over the past 5 years, typically by 10%. Reasons include a reduction in the average amount bought, and an increase in the purchase or replacement of jewellery with fashionable new designs.

Smaller suburban outlets. Its share tends to vary. While some indicate its share at 50 - 70%, others refer to high personal purchases of small items such as earrings, studs and finger rings.

Rural outlets. Its share tends to vary. While some indicate its share at 60 - 70%, it can often be 40% or less where more jewellery is bought for "savings" or "money" purposes.

Number of marriages

A broad estimate is that around 8 million marriages take place each year. The number increases annually by about 1.5% (130,000). There is no official statistic as marriages are not registered.

The estimate assumes that 90% of young Indians marry. In 2001, 18 million was the average number of men and women in each year, aged 20 - 24 (Tata Services Limited).

Marriage season

Most marriages take place on 40 - 60 auspicious days during the year, according to the Hindu solar or lunar calendar.

The number and the dates of auspicious days change each year, and can also vary by region, State and community.

In Mumbai (Maharashtra), a Hindu lunar calendar records 49 auspicious days for 2002, and 42 days for 2003. In both years, 75% of the days occur in the first 6 months. There are no auspicious days in August, September or October.

In Coimbatore (Tamil Nadu), a Hindu solar calendar records 62 auspicious days for 2002, 64% of the days occurring in the first 6 months. Every month has at least one auspicious day.

As important "marriage seasons" can sometimes shift to different months each year, seasonality can be affected. Generally, most marriages occur intermittently over an 8 month period, November to June.



Photograph: Alukkas

The gold jewellery market relies heavily on purchases associated with 8 million weddings each year.

WEDDING JEWELLERY

An agreed amount of jewellery in grammes, or a rupee value, is normally given at the time of marriage, regardless of the prevailing gold price.

The amount of new jewellery that is purchased can be influenced by several factors.

Arranged marriages

An arranged, as opposed to a "love", marriage generally involves the gifting of much more jewellery. A common observation is that more than 90% of rural and 60% of urban marriages are arranged. The number of arranged marriages is expected to fall. In rural areas, the decline is likely to be gradual.

Dowry

Although the dowry system has been illegal since the early 1960s, the giving of jewellery and other items to the bride, groom and other family members occurs at every level.

In the case of an arranged marriage, a weight or rupee value of gold jewellery is normally agreed between the families. In the south, the weight is widely expressed in terms of sovereigns (K22 coins weighing 8 g). For example, 5 sovereigns (40 q) or less at lower levels, 100 sovereigns (800 q) or more at higher levels.

At higher levels, jewellery as a percentage of the total amount is reported as falling, due to the groom's and couple's preference for lifestyle products. A typical comment is that a percentage in urban areas of around 60% in the mid 1990s would now range between 25 - 40%. However, as the overall rupee value demanded by many grooms has increased, a substantial amount of jewellery still tends to be given.

Accumulated jewellery

Many families acquire wedding items over several years in order to meet their obligations at the marriage of their daughters. Some accumulate items that will eventually be converted into wedding jewellery. Some family jewellery, owned by the mother or grandmother, may also be converted, or repolished and given.

Economic environment

The conversion of more existing family jewellery may occur if family finances are stretched.

Gold price

If the gold price is considered high, more existing family jewellery may also be converted.

Non-Resident Indians (NRI's)

Millions of Indians working in the Middle East, Europe, USA and elsewhere remit funds to their families. This enables many poorer families to boost their purchases substantially.

New jewellery is normally bought 2 - 4 weeks prior to the marriage, although it may be chosen well beforehand. Retailers in both urban and rural areas observe that, as the purchase of bridal jewellery is so important, many families travel to larger cities and towns. Status is enhanced, and more designs are available.

Purchases can range from a few grammes to several kilos.

The chosen categories, weights and styles of individual items can vary according to regional, community and personal preferences. An appendix illustrates what might be purchased at the level of 200 g.

Apart from bridal jewellery bought by the bride's parents, other jewellery can also be bought at this time. The bride can receive items from the groom's family, the groom from the bride's family. Other members of both families can give or receive gifts of jewellery (or coins).

OTHER GIFTS WITHIN THE FAMILY

The giving of gold jewellery at important family occasions is common among those who can afford to do so.

It may be given at a child's naming ceremony, puberty, birthdays and anniversaries, and on the occasion of festivals and some auspicious days.

For example, at a naming ceremony, a small bangle, hip chain, chain, pendant and anklet may be given.

The main recipients are girls and women. Girls need to accumulate jewellery for their marriage. For many married women, jewellery is their only personal asset.

The "other gift" market is important for most large showrooms, its share ranging from 10 - 15% and more. For most small urban and rural outlets, the gift market tends to be small.

PERSONAL PURCHASES

Fashion is reported as stimulating more personal purchases in large urban showrooms. Investment continues to drive many personal purchases in smaller outlets and in rural areas.

Although described as "personal", retailers observe that most purchases are the outcome of *family decisions*. Many fall within the category of gifts when funded by the head of the family.

Among large urban retailers, personal purchases range from 10 - 40% of sales, typically between 10 - 15%. Most report an increase over the past 5 years, typically by 5%.

Older married women, 30 - 50 years, are reported to account for the bulk. Small items can be self-purchased by working or unmarried young women, but generally their capacity to spend is regarded as limited. For larger items, most rely on the support of their parents.

In rural areas, most personal purchases appear to be for "savings" purposes. Many outlets refer spontaneously to only two categories of transaction: "weddings" and "savings".

SEASONALITY

Seasonality by State, and within States, can vary greatly, but there are periods when sales are generally reported as higher: October - January (4 months) and April - May (2 months).

Indicative monthly seasonality, as recorded by leading retailers in 9 States and New Delhi, suggests that in 11 of the 12 months at least one area is enjoying "high" sales.

Apart from factors such as the economy, the prevailing gold price and the marriage seasons, local demand can be influenced in other ways.

Festivals

Hundreds of festivals around the country provide an incentive to give or buy jewellery.

The most widely celebrated festival is *Diwali*. It commemorates the Hindu New Year, occurring in October or November. Jewellery demand is also stimulated by Government departments and companies tending to pay bonuses at this time.

Harvest festivals are also important. For example, Pongal (Tamil Nadu) and Onam (Kerala) in January.

Some retailers include within this category "family festivals" such as the naming ceremony, as well as particularly auspicious days.

Many retailers promote heavily at the time of festivals. Festival-related purchases range between 10 - 30% of the annual sales of large showrooms.

Auspicious days

Many consumers are stimulated to buy more jewellery, or to coincide their planned purchases with auspicious days.

The number and dates can vary by State and community, and whether the Hindu lunar or solar calendar is used. Customers also have their own personal auspicious days.

In Coimbatore, a solar calendar records 13 particularly auspicious days, apart from auspicious wedding days. In Mumbai, a lunar calendar records 15. There is at least one each month. None of the days coincide.

Some days are regarded as especially important, notably *Dhanteras* (2 days before Diwali) and usually *Akshayatritiya* (in May).

Including auspicious wedding days, retailers observe that in total there are around 100 auspicious days each year. There are also a large number of inauspicious days.



A World Gold Council promotion encouraging the purchase of gold jewellery on the auspicious day of Akshayatritiya.

SOCIAL CLASSES

Middle class

Retailers everywhere refer to the impact of economic growth on jewellery consumption during the 1990s.

The National Council of Applied Economic Research (NCAER) estimates that, over the past 7 years, the number of households of the high, upper middle and middle class has increased by 66%, from 30 million to 49 million, approximately 20% of the 181 million households.

It expects this group to increase over the next 5 years by a further 85% to 91 million households.

Although the NCAER's income classification by class by Western standards is extremely low (and lower than that estimated by large retailers), it illustrates the growth in the size of the middle class.

Most large retailers view the emerging "middle class" in both urban and rural areas as their primary target for jewellery sales.

Lower middle class

Retailers observe that "everyone will try to own some gold".

According to the NCAER classification, the lower middle class accounts for 72 million (40%) of the 181 million households.

55 million households (76% of the lower middle class) are in rural areas. Although their capacity to buy gold each year is limited, retailers stress that they have a strong commitment to owning and giving gold when they can afford to do so.

Low class

The capacity of the low class to buy gold is reported in most States to be extremely limited.

According to the NCAER, the low class accounts for 59 million (33%) of the 181 million households.

53 million low class households (89% of all low class households) are in the rural areas. Almost all fall below the poverty line.

Importance of each class to the jewellery market

Trying to obtain a sense of the importance of annual purchases by class is difficult as the NCAER classification does not match the perception of most retailers.

For many large retailers, for example, the "middle class" category would start at family income levels of Rs 15,000 (US\$ 300) per month. This would put almost all the upper middle and middle class into the "high" class by NCAER standards (although NCAER does not take into account the impact of the underground economy).

Anecdotal evidence suggests tentatively at this time the following:

Nationally, around 40% (72 million households) have a limited capacity to buy much jewellery each year, unless supported by a family NRI.

The top 5% (9 million households) may well account for more than 15%, but their commitment to buying extremely large quantities, compared to the past, is eroding, particularly in urban areas.

The market appears to rely on around 60% (109 million households) for the bulk of annual purchases.

The national breakdown would not apply to individual States, such as the wealthier States in the south and Punjab in the north.



"Wearable" gold jewellery – lighter in weight and stylish – is widely regarded as an important new market segment.

RURAL VERSUS URBAN DEMAND

The sentiment of leading retailers suggests that the urban population may account for as much as 40% of gold jewellery purchases at this time.

Their estimates of urban demand in 10 States range from 40% to 65%.

State	Indicative % split of demand within the State		
	Urban population	Rural population	Total
Maharashtra	65	35	100
Uttar Pradesh	60	40	100
Punjab	50	50	100
Rajasthan	50	50	100
Gujarat	50	50	100
Kerala	55	45	100
Andhra Pradesl	h 40	60	100
West Bengal	40	60	100
Karnataka	40	60	100
Tamil Nadu	40	60	100
Range	40-65	35-60	100

Source: Leading jewellery retailers in major cities.

Although their indicative estimates for their States may not be accurate, large retailers generally report that urban demand (i.e. purchases by the population living and working in urban areas) became more important during the 1990s due to high industrial growth. In recent years, the agricultural sector in many States has been relatively depressed.

Retailers also observe that the rural/urban split is not a static proportion. The rural population's proportion is likely to increase in the future, especially in years when the agricultural economy is particularly strong.

REGIONAL DEMAND

Retailers, wholesalers and bullion dealers throughout the country report that the south is the most important gold jewellery market.

Trade estimates of the south's market share range from 35% to more than 50%.

While there is consensus that the east has the lowest share, there is some disagreement over the relative size of the west and north.

Anecdotal evidence suggests the following approximate split:

Region	Market share % Split
South	40
West	20-25
North	20-25
East	15
Total	100

Anecdotal evidence also indicates that the following States are particularly important within their regions.

South. **Tamil Nadu** may account for 35%. There is little consensus about the relative size of **Andhra Pradesh, Karnataka** and **Kerala**. They are all large. The small State of Kerala is regarded as having the highest per capita consumption in the south and nationally.

West. Gujarat and Maharashtra may account for 75%. Madhya Pradesh and Chhattisgarh are viewed as less important.

North. Uttar Pradesh and Punjab may account for 40%. Many large consumers in the north rely on New Delhi retailers. Rajasthan and Haryana (bordering New Delhi) and the other States are considered less important.

East. West Bengal may account for 40%. Bihar and Orissa are regarded as less important. The small border States in the North East (Assam and others) are considered significant.

IMPORTANCE OF CITIES AS RETAIL CENTRES

The sentiment of leading urban retailers underlines the importance of cities as retail centres of gold jewellery in their States.

Their estimates of the market share of the major city within their State range from 25% to 35%.

State	Major city	% of total retail sales in the State
Maharashtra	Greater Mumbai	35
Rajasthan	Jaipur	30
Gujarat	Ahmedabad	30
Tamil Nadu	Chennai	30
Andhra Pradesh	Hyderabad	30
West Bengal	Kolkata	30
Karnataka	Bangalore	25
Kerala	Cochin	25
Range		25-35

Source: Leading jewellery retailers in major cities.

Although their estimates may be exaggerated, retailers observe that many consumers in smaller cities, towns and some villages travel to major cities when they need to buy a large quantity of jewellery. City retailers offer a wider range of designs. City purchases carry high status.

TRADE OBSERVATIONS ON THE PROMOTION OF GOLD JEWELLERY

The following records the sentiment of several leading retailers:

Focus on marriage-related jewellery.

High volume over the next 10 years will continue to rely on marriage-related purchases. There is a need to underpin this market.

Parallel focus on "wearable" jewellery and self-purchases.

Both categories are recognised as extremely important to achieve growth over the next 10 - 20 years. However, the extent of their promotion should be balanced against the need to support the marriage-related jewellery market.

The market relies heavily on the "gifting" of jewellery.

The target market is not only the female recipient but also the person who gives or pays for the jewellery. Givers and recipients both need to be motivated.

The purchase of most jewellery is normally the outcome of a *family decision*. Reassuring the head of the household, parents and husbands is also important.

Motivate the younger generation

Many young people are not as committed as their parents to buying or receiving large quantities of gold jewellery.

Jewellery has both an "adornment" and "investment" dimension.

Retailers at every level are aware that the adornment dimension is strengthening. Gold jewellery needs to be positioned as "fashionable". However, there is also a need to underpin gold jewellery's "investment" dimension.

Retailers observe that investment-related advantages can be emphasised credibly. Jewellery remains a "trusted and secure asset" that has risen in value over the "long term". It is a "highly liquid asset" with a "high resale value".





Gold jewellery retailers at every level stress the importance of motivating the younger generation.

A World Gold Council advertisement in 2002.

INDICATIVE BRIDAL AMOUNTS OF GOLD JEWELLERY - BY SOCIAL CLASS

Social class	Punjab Ludhiana	Uttar Pradesh Agra	Capital New Delhi
High	4,000 g	800 g	1,200 g
Upper Middle	1,000 g	400 g	800 g
Middle	500 g	200 – 300 g	300 g
Lower middle	100 – 200 g	100 – 200 g	120 g
Low	< 50 g	< 50 g	< 50 g

Social class	Rajasthan Jaipur	Maharashtra Mumbai	West Bengal Kolkata
High	1,000 g	500 g	800 g
Upper Middle	700 g	300 g	600 g
Middle	400 g	150 g	300 g
Lower middle	200 g	100 g	150 g
Low	< 50 g	< 50 g	< 50 g

Social class	Gujarat	Andhra Pradesh	Karnataka
	Ahmedabad	Hyderabad	Bangalore
High	1,000 g	2,000 g	400 - 600 g
Upper Middle	400 g	800 - 1,000 g	250 - 300 g
Middle	200 – 300 g	200 - 300 g	200 g
Lower middle	100 – 200 g	100 - 150 g	100 g
Low	< 50 g	< 50 g	< 50 g

Social class	Tamil Nadu Chennai	Kerala Cochin
High	2,000 g	4,000 g
Upper Middle	800 g	2,500 g
Middle	250 g	1,000 g
Lower middle	100 g	500 g
Low	< 50 g	< 200 g

Source: Leading jewellery retailers in major cities.

The amount of gold jewellery given at the time of marriage can range from a few grammes to 1,000~g and more.

Although gold jewellery is normally accumulated over many years, the purchase of new jewellery for the bride, bridegroom and other family members at the time of marriage may account for as much as 50% of national gold jewellery sales each year.

This table is indicative only.

Retailer estimates, even in the same locality, tend to vary greatly according to their own definition of each social class and the size of their outlet.



INDICATIVE WEDDING SETS – AT THE 200 GRAMME LEVEL

Item	Punjab Ludhiana	Uttar Pradesh Agra	Rajasthan Jaipur	West Bengal Kolkata
Necklace	50 g 30 g	40 g 35 g	70 g	80 g
Bangle	10 g each (3 pairs)	18 g each (1 pair) 12 g each (2 pairs)	15 g each (2 pairs)	15 g each (2 pairs) or 30 g each (1 pair)
Chain	20 g	15 g	20 g	20 g
Earrings	5 g pair	6 g pair 4 g pair	25 g pair	10 g pair (2 pairs)
Finger ring	5 g	4g each (3 rings)	5 g	5 g
Mangalsutra*	-	25 g	20 g	15 g
Other	20 g bracelet and 7 g ring for groom	Š	, and the second	-
Total weight	197 g	213 g	200 g	200 g

Item	Capital New Delhi	Gujarat Ahmedabad	Maharashtra Nagpur	Karnataka Bangalore
Necklace	50 g	50 g	50 g 20 g	40 g 20 g
Bangle	10 g each (2 pairs)	20 g each (1 pair) 12 g each (2 pairs)	10 g each (2 pairs)	12 g each (1 pair) 4 g each (3 pairs)
Chain	10 g each (3 chains)	12 g 8 g	15 g	24 g 16 g
Earrings	6 g - 8 g per pair (3 pairs)	10 g pair	5 g pair	12 g pair 6 g pair
Finger ring	4 g - 5 g (3 rings)	5 g 3 g	4 g	6 g 2 g
Mangalsutra*	25 g	22 g	25 g 5 g pendant	16 g
Other	5 g nath 5 g earchain 5 g tikka	2 g pendant 7 g earchain	5 g nathi 12 g bindi 39 g poocha pair	8 g mathes
Total weight	200 g	207 g	200 g	200 g

Item	Andhra Pradesh Hyderabad	Tamil Nadu Coimbatore	Kerala Cochin
Necklace	40 g	48 g 20 g	30 g 20 g
Bangle	14 g each (2 pairs)	12 g each (1 pair) 10 g each (1 pair)	6 g - 12 g (4 pairs)
Chain	22 g	28 g	32 g
Earrings	12 g pair 6 g pair	4 g pair (2 pairs)	2 g - 8 g per pair (4 pairs)
Finger ring	5 g 4 g	6 g 3 g	2 g - 6 g each (5 rings)
Mangalsutra*	45 g	40 g 6 g pendant	15 g 1 g thali
Total weight	190 g	197 g	200 g

Source: Leading jewellery retailers. Notes on other gold items: nath or nathi (for the nose), bindi or tikka (for the head), pocha (for the hands), mathes (for the ears). * Mangalsutra or equivalent.

The bride is normally clad with as much jewellery as the family can afford.

For most brides, wedding jewellery includes items that can also be worn on a daily basis.

INDICATIVE MONTHLY SEASONALITY

Month	Punjab	Uttar Pradesh	Rajasthan	Capital
	Ludhiana	Agra	Jaipur	New Delhi
January	High	Medium	High	High
February	High	High	Medium	High
March	Medium	High	Medium	Medium
April	Medium	High	Medium	Medium
May	Low	High	Medium	Low
June	Low	Low	Low	Low
July	Low	Low	Low	Low
August	Medium	Low	Low	Medium
September	Medium	Medium	Low	Medium
October	Medium	High	Low	Medium
November	High	High	Medium	High
December	High	Medium	High	High

Month	Gujarat	Maharashtra	Andhra Pradesh	Karnataka
	Ahmedabad	Mumbai	Hyderabad	Bangalore
January	High	High	Medium	Medium
February	Medium	Low	Medium	Low
March	Low	Low	Low	Low
April	High	High	High	Medium
May	High	High	High	High
June	Medium	Low	High	High
July	Low	Low	Low	High
August	Low	Medium	Medium	Medium
September	Low	Medium	High	Low
October	Medium	Medium	High	High
November	High	High	High	High
December	High	High	Low	Medium

Month	Tamil Nadu Chennai	Kerala Cochin
January	High	High
February	Medium	Medium
March	Low	Medium
April	Medium	High
May	High	High
June	High	Low
July	Low	Low
August	Low	High
September	Medium	High
October	High	Medium
November	High	Medium
December	High	High

Source: Leading jewellery retailers in major cities.

Seasonality by State, within States, and among retailers (even in the same cities) can vary greatly.

This table indicates that jewellery demand is generally higher during 2 periods: October - January and April - May.

Local seasonality each year can be influenced by the timing of wedding seasons, festivals and auspicious days, as well as by the economic environment and movement in the gold price.

AUSPICIOUS DAYS FOR HINDU WEDDINGS

LUNAR CALENDAR

Mumbai (Maharashtra)

2002	Auspicious days	Total	2003	Auspicious days	Total
January	-	-	January	15, 20, 22, 29	4
February	15, 21, 22, 28	4	February	5, 6, 7, 8, 18, 19	6
March	5, 6, 7	3	March	4, 5, 6, 9, 10	5
April	15, 16, 17, 22, 24, 25, 26, 27, 28, 30	10	April	14, 17, 20, 21	4
May	1, 8, 9, 15, 19, 20, 21, 24, 26, 27, 28	11	May	4, 11, 18, 26	4
June	4, 5, 6, 15, 16, 18, 19, 20, 21, 22	10	June	6, 8, 9, 11, 14, 20, 21, 22	8
July	1, 2, 3	3	July	3, 4, 6, 10	4
August	-	-	August	-	-
September	-	-	September	-	-
October	-	-	October	-	-
November	16, 20, 21, 22, 30	5	November	20, 25, 26, 27	4
December	1, 12, 13	3	December	2, 3, 9	3
Total		49	Total		42

Source: Panchang (Hindu Calendar Book), Mumbai

SOLAR CALENDAR

Coimbatore (Tamil Nadu)

2002	Auspicious days	Total
January	3, 7, 10, 20, 21, 27	6
February	1, 3, 4, 8, 15, 17, 22, 24, 25	9
March	10, 11, 24, 31	4
April	4, 7, 8, 17, 24, 25, 29	7
May	3, 6, 8, 9, 10, 17, 23, 24	8
June	5, 6, 13, 21, 27, 30	6
July	7, 8, 15	3
August	26	1
September	4, 8, 9, 11	4
October	28, 31	2
November	8, 10, 11, 15, 22, 24, 25, 29	8
December	1, 2, 8, 9	4
Total		62

Source: Kota Jewellers, Coimbatore

Most weddings take place on auspicious days according to the Hindu lunar or solar calendars.

The number and dates of days change each year, and can also vary by region, State and community. Solar calendars tend to be used in the south, lunar calendars in the north.



Large national chains of branded jewellery retail outlets have emerged since the mid-1990s.

The section covers 5 leading national chains: *Tanishq, Carbon, Gili, Inter Gold* and *Oyzterbay*. Combined, they retail through 188 outlets in 49 cities. All have plans to expand.

The chains focus on selling fashionable, lighter weight, studded jewellery as a "fashion accessory" at fixed prices.

Although they account for less than 1% of the jewellery market, they anticipate significant growth as the economy develops.

MAIN FEATURES

The new chains operate in a way that is different from the thousands of "traditional" retailers.

- Most retail jewellery at fixed prices (not at variable prices reflecting the prevailing gold price).
- Most focus on selling relatively low-price items to urban women for their own personal use or as gifts.
- Most stock K18 jewellery, normally studded with diamonds and other stones, and usually machine-made (not handmade).
- About 50% of the outlets are small "shops-in-shops" in department stores and shopping centres, or in traditional jewellery outlets. About 50% are stand-alone stores or small shops.
- Their mark-ups are generally higher. Most will exchange jewellery. Few will buy it back for cash.
- All brand their companies, and the image of their jewellery, nationally.

RETAIL CHAINS

Gil

Established in Mumbai in 1995. Owned by Gitanjali Jewels Ltd. 52 outlets are located in 20 cities. They are almost all shops-in-shops. Counters are placed in department stores (30%) and in traditional jewellery outlets (70%). Its only "Gili Shop", an independent store, is in Cochin. It fabricates all jewellery in-house at its factory in Mumbai. The company is expanding internationally. There are 8 outlets in Dubai.

Brand name: "Gili - Gitanjali Jewels".

Tanisha

Established in Bangalore in 1996. Part of Titan Industries, a Tata group enterprise. 54 stores are located in 42 cities. It plans to open a total of 75 stores. Most fabrication takes place at its factory in Hosur (Tamil Nadu). Tanishq is the largest branded retail chain. Most of its plain gold jewellery is K22.

Brand name: "Tanishq - Pure Jewellery, Pure Joy".

Carbon

Established in Bangalore in 1996. Owned by Peakok Jewellery Private Limited. 36 "shops-in-shops" are located in 14 cities. It is planning to open stores. Most fabrication takes place in-house, mainly in Bangalore.

Brand name: "Carbon - 18K Fashion Accessories".

Inter Gold

Established in Mumbai in 1997. 14 outlets are located in 9 cities. It operates three categories of outlet: 7 stores, 4 smaller shops and 3 "shops-in-shops". It is planning to open 50 more outlets. It fabricates all jewellery in-house at its factory in Goa. Most designs are done in-house in collaboration with Hammer & Sohne (Germany). It is associated with India's largest exporter of studded precious metal jewellery.

Brand name: "Inter Gold - Jewellers to the World".

Ovzterbay

Established in Bangalore in 2000. 32 outlets are located in 18 cities: 20 stores and smaller shops, and 12 "shops-in-shops". Most fabrication to in-house designs takes place in Bangalore, Mumbai and Jaipur.

Brand name: "Oyzterbay - Jewellery for the Living".



DISTRIBUTION

The number of outlets is expected to increase rapidly over the next 5 years. Not only by the featured chains, but also by other chains and new entrants.

The featured chains have, to date, established 86 jewellery stores and small shops, and 102 "shops-in-shops".

Company	Stores and smaller shops	Shops-in-shops	Total
Tanishq	54	-	54
Gili	1	51	52
Carbon	-	36	36
Oyzterbay	20	12	32
Inter Gold	11	3	14
Total	86	102	188

Including non-featured chains, the total number of outlets is likely to exceed 250 nationwide.



The retail chains mount extensive advertising campaigns to brand their outlets nationally.

PRODUCTS AND CONSUMERS

"Wearable" and "fashionable" jewellery

Generally, the retail chains are encouraging urban women, especially younger women, to acquire lighter weight, inexpensive, lifestyle jewellery that is "wearable". It can be used every day. It can be worn on many occasions within the home, at work or socially. It can be bought on impulse. In most outlets, it can easily be exchanged to accommodate the latest "fashionable" trend. Innovation is their hallmark. New collections tend to be launched every few months.

Studded jewellery

The chains focus on higher value added studded jewellery. None sell hallmarked jewellery. Some sell no plain gold jewellery. Most items (Tanishq is an exception) tend to contain less than 10 q of gold.

Fixed prices

Unlike traditional retailers, the chains sell jewellery at fixed prices, although prices can be adjusted across the board to reflect significant gold price movements. One reason for fixed prices is that store managers are now employees (not trusted family members), and to offer jewellery at fluctuating prices through so many outlets is considered an unmanageable task.

Most items are priced below Rs 10,000 (US\$ 200). They observe that many potential customers are resistant to fixed prices for larger items.

Promotion

All chains brand their outlets and jewellery through extensive TV and press advertising campaigns.

Perspective

The retail chains are at an experimental stage. Some are aware that they may need to include innovative plain gold jewellery, or increase its proportion, within their product range.

ADDENDUM ON FABMART - INTERNET RETAILER

Fabmart was established in Bangalore (Karnataka) as a private company in 1999. A major shareholder is Reliance Industries, India's largest private sector company. Fabmart retails music, books, toys, computers, videos, watches, coins, jewellery and other items through its website.

When an order for jewellery is received, it is forwarded to one of 20 leading jewellery suppliers in 6 major cities. Pricing is fixed on the day of the order. Most orders are less than Rs 10,000. Fabmart normally delivers the item by courier within 7 days. All jewellery is hallmarked. There is a 30 day money-back guarantee.

While Indian residents account for the bulk of its jewellery business, Fabmart also services international customers. They either take delivery overseas, or request that the purchase be sent to relatives or friends within India.



Tanishq, the largest retail chain, has outlets in 42 cities.

LOCATION OF OUTLETS

Region/State	Gili	Tanishq	Carbon	Inter Gold	Oyzterbay
NORTH Uttar Pradesh		Noida Kanpur Agra Meerut Lucknow Varanasi	Noida Kanpur		
Rajasthan Punjab	Jaipur	Jaipur Ludhiana Amritsar Jalandhar	Jaipur Ludhiana		Ludhiana Jalandhar
Haryana Jammu & Kashmir		Jammu Srinagar	Gurgaon		Jammu
Himachal Pradesh Uttaranchal Delhi Chandigarh (UT)	New Delhi Chandigarh	New Delhi Chandigarh	New Delhi Chandigarh	New Delhi	New Delhi Chandigarh
WEST					
Maharashtra	Mumbai Pune	Mumbai Pune Nagpur	Mumbai Pune	Mumbai Pune	Mumbai Nagpur
Gujarat	Ahmedabad Surat Anand	Nasik Ahmedabad	Ahmedabad	Ahmedabad Surat	Ahmedabad
Madhya Pradesh Chhattisgarh Goa	Baroda Jamnagar Indore	Indore Raipur Panjim-Goa		Goa	Indore
EAST West Bengal Bihar Orissa	Kolkata	Kolkata Patna Bhubaneshwar	Kolkata	Kolkata	Kolkata Bhubaneshwar
Jharkand Assam		Ranchi Guwahati	Guwahati		Guwahati
SOUTH Andhra Pradesh	Hyderabad	Hyderabad Vijayawada	Hyderabad		Hyderabad
Tamil Nadu	Chennai Coimbatore Salem	Vizag Chennai Coimbatore Salem Hosur Madurai Tuticorn	Chennai		Vizag Chennai
Karnataka	Bangalore	Trichy Bangalore Mangalore Hubli	Bangalore Mangalore	Bangalore	
Kerala	Calicut Cochin	Calicut Cochin			Cochin
Pondicherry (UT)	Pondicherry			Pondicherry	Trivandrum
TOTALS					
Cities covered	20	42	16	9	18
Retail outlets	52	54	36	14	32

Source: Individual companies. Gili outlets as recorded on its website.

The 5 featured retail chains currently sell jewellery through 188 outlets in 48 cities in 22 States and UT's.

The Bureau of Indian Standards (BIS), the national standards body of India, launched its long-term scheme to encourage the voluntary hallmarking of gold jewellery in April 2000.

Known as the BIS Certification Scheme for Hallmarking of Gold Jewellery, the scheme is supported by the Reserve Bank of India.

It has 4 declared objectives:

- Protect the consumer against irregular gold quality.
- Support the export of gold jewellery.
- Develop gold-based financial products to assist in mobilising dormant gold reserves in private hands.
- Develop India as a reliable gold market centre commensurate with its status as the world's largest national gold market.

In early 2002, 12 Assaying and Hallmarking Centres had been authorised to service 275 Certified Jewellers.

BACKGROUND

Established in 1986, BIS falls under the administrative control of the Department of Consumer Affairs within the Ministry of Consumer Affairs, Food and Public Distribution. Its headquarters is in New Delhi, with regional offices in Mumbai, Kolkata, Chandigarh and Chennai, supported by branch offices in 17 other cities.

The BIS scheme involves the authorisation of independent entities to act as Assaying and Hallmarking Centres, and the certification of jewellers (*Certified Jewellers*) to use the centres for hallmarking purposes.

In the first 18 months, BIS has authorised 12 centres (in 9 cities) and certified 275 jewellers. Although most Certified Jewellers are retailers, fabricators and wholesalers can also be appointed.

Plain gold jewellery has been hallmarked since June 2000, and gold jewellery incorporating diamonds since September 2001.

The scheme is voluntary, and there is no obligation on Certified Jewellers to hallmark all the gold jewellery that they retail, fabricate or wholesale.

As BIS receives no government subsidy, the hallmarking scheme (like all other BIS schemes) is obliged to operate as a business in order to cover its technical, administrative and promotional costs. Income is derived from charges levied on Hallmarking Centres, Certified Jewellers and each item of jewellery hallmarked.

The hallmarking scheme is in line with the International Convention on the Control and Marking of Articles of Precious Metals (Vienna Convention). BIS expects that India will in due course become a member of the Vienna Convention so that articles hallmarked in India can be imported into member countries without further testing or marking.

HALLMARKING CENTRES

Hallmarking Centres are obliged to have a legal identity and an independent status. They may not be linked to any jewellery manufacturer or retailer, although they can be set up by a Jewellers' Association provided that no office bearer is involved in day to day activities.

BIS specifies rigorous procedures for the receipt, sampling, assaying and hallmarking of jewellery as laid down in IS (Indian Standard) 1417 (fineness and marking), IS 1418 (assaying methods) and ISO 9002 (receipt, sampling and hallmarking). Hallmarking Centres are audited at least twice annually by trained BIS assessors.

A batch of jewellery is initially assayed for homogeneity using a touchstone. A minimum of 10% of the items is then scraped, cut or drilled to provide a composite sample for testing by fire assay or spectrometric assay. Hallmarks are applied by punch or laser. The centre is required to complete its assaying and hallmarking procedures within 48 hours of the receipt of the items.

CERTIFIED JEWELLERS

Jewellers are only certified if they adopt a system of quality management approved by BIS. Prior to its arrival at a Hallmarking Centre, each batch of jewellery items must also be checked for homogeneity and assayed in-house, and the caratage specified.

BIS Certified Jewellers are required to display their BIS Licence Number. Hallmarked jewellery should be clearly differentiated from non-hallmarked jewellery in a separate showcase, or with a tag or label. Display materials should illustrate and define the components of hallmarks, as well as record the millesimal fineness of authorised caratages. A magnifying glass to enable customers to see the hallmarks should also be available.



HALLMARKS

In accordance with BIS procedures, hallmarking is normally applied to all parts of the item that can easily be detached or replaced. An exception is made for bangles and light items - hallmarking need only be applied once. The height of the marks are either 0.5 mm or 1.00 mm.

A hallmark comprises 5 compulsory symbols, illustrating the following:

- · BIS mark
- Fineness
- · Assaying and Hallmarking Centre mark
- Year of marking
- Jeweller's mark

Fineness

There are 6 defined levels of millesimal purity:

- 958 Corresponding to 23 carat
- 916 Corresponding to 22 carat
- 875 Corresponding to 21 carat
- 750 Corresponding to 18 carat
- 585 Corresponding to 14 carat
- 375 Corresponding to 9 carat

Year of marking

A letter of the alphabet, as designated by BIS, indicates the year in which the item was hallmarked.

- A 2000
- B 2001
- C 2002

PRICING

BIS

To recover its costs, BIS charges are currently as follows:

Hallmarking Centres pay a certification fee of Rs 40,000 that covers a 3 year period. They also pay a 10 % commission on all assaying and hallmarking charges incurred by Certified Jewellers.

Certified Jewellers pay an annual certification fee of Rs 25,800.

Hallmarking Centres

Assaying and hallmarking charges are at the discretion of the Hallmarking Centre. They are usually based on the item's weight. For example:

Below 20 g Rs 50 per item Above 20 g Rs 75 per item



The headquarters of the Bureau of Indian Standards is in New Delhi.

LOCATION OF HALLMARKING CENTRES

State	City	Assaying and Hallmarking Centre	Start date
NORTH			
Delhi	New Delhi	Micro Assaying & Hallmarking Centre	2000 May
	New Delhi	MMTC Limited	2000 June
	New Delhi	Jalan Hallmarking Centre	2001 August
WEST			
Maharashtra	Mumbai	Geekay Exim (India) Ltd	2000 September
	Mumbai	Jewel Metallochem	2001 May
Gujarat	Ahmedabad	Gujarat Gold Centre	2000 July
EAST			
West Bengal	Kolkata	JJ Hallmarking Centre	2001 November
SOUTH			
Andhra Pradesh	Hyderabad	Vimta Labs	2000 July
Tamil Nadu	Chennai	Bharat Assayer	2001 December
	Coimbatore	Emerald Testings Pvt Ltd	2000 December
Kerala	Cochin	Chemmanur Gold Refinery	2000 April
	Calicut	Calicut Assay & Hallmarking	2000 April

Source: Bureau of Indian Standards





The voluntary hallmarking of gold jewellery is supervised by the Bureau of Indian Standards.



Most jewellery in the World Gold Council's "Collection g" programme is hallmarked.

According to *The Gem & Jewellery Export Promotion Council* (GJEPC), around 800 enterprises fabricate plain or studded gold jewellery for export.

Over the past 4 years, their duty-free import of gold has increased from 35 tonnes to 54 tonnes.

Gold jewellery exports have surged over the past 10 years, from US\$ 304 million in 1991-92 to US\$ 1.2 billion in 2001-02.

Over the same period, value addition above the cost of gold used has grown from 24% to 51%, rising from US\$ 73 million to US\$ 594 million.

The jewellery export industry receives much government support through the GJEPC, which falls under the administrative control of the Ministry of Commerce and Industry.

EXPORT FABRICATION LOCATIONS

Gold jewellery for export is fabricated in 4 categories of location.

Fabricators in SEEPZ (Mumbai) and in the Domestic Tariff Areas account for almost all gold jewellery exports.

Special Economic Zones (SEZ)

Isolated, demarcated manufacturing zones dedicated to exports. A new category, effective from April 2000.

SEEPZ (Mumbai), converted to SEZ status in 2000, dominates the gold jewellery export industry. Its 72 large units (expected to increase to 120 by 2003) fabricate 44% of the value of India's gold jewellery exports.

Export Processing Zones (EPZ)

Smaller, isolated, demarcated manufacturing zones dedicated to exports. MEPZ (Chennai) and NOIDA EPZ (near New Delhi) fall into this category, but their gold jewellery output is low.

Export Orientated Units (EOU)

These units can be located anywhere. A Customs officer is also obliged to be in attendance 24 hours daily to monitor all materials brought into and out of each unit.

Domestic Tariff Areas (DTA)

Defined as *any* location falling outside a demarcated zone. Fabricators in DTA's account for 52% of the value of gold jewellery exports.

EXPORT MARKETS

3 countries account for 85% of the value of India's gold jewellery exports: USA (55%), United Arab Emirates (20%) and the United Kingdom (10%).

Export growth over the past 10 years has relied largely on the USA market, sales having increased from less than US\$ 100 million in 1991-92 to US\$ 647 million in 2001-02.

PRODUCTS

Almost all gold jewellery fabricated in the export zones is studded, mainly with diamonds.

Although SEEPZ (Mumbai) accounts for 44% of the value of gold jewellery exports, its 72 units are reported to produce studded gold jewellery only.

However, fabricators in the DTA's, accounting for 52% of the value of gold jewellery exports, are reported to produce a substantial amount of plain gold jewellery.

Most export products are fabricated to meet the precise requirements of overseas customers. Although many customers provide detailed drawings, most fabricators have in-house designers as well.



SOURCES OF GOLD BULLION

Jewellery exporters can obtain gold bars duty-free from nominated agencies.

Conditions apply as specified in the Government's EXIM (Export/Import) Policy. A "nominated agency" is either a Public Sector Undertaking (PSU) such as MMTC, or a bank authorised by the Reserve Bank of India.

Export against supply by foreign buyer

Bars can be obtained either directly or through a nominated agency.

Export against supply by nominated agencies

Bars can be obtained in advance or as replenishment after export. This method is widely used in export zones.

Export against Advance Licence

A licence to obtain bars, as well as mountings, sockets, frames and findings, to a specified amount of gold in advance of an order. It carries an obligation to re-export the gold in a value added fabricated form.

Replenishment Scheme

Bars can be obtained from a nominated agency based on a percentage of the documented FOB value of the jewellery exported. Since April 2002, it is now no longer necessary to obtain a replenishment licence.

GOLD BULLION SUPPLIED TO JEWELLERY EXPORTERS

Source	<u> </u>	Kilogrammes						
	1998 - 1999	1999 - 2000	2000 – 2001	2001 - 2002				
MMTC	22,920	22,460	16,621	14,100				
ABN AMRO Bank	1,826	8,610	10,551	5,125				
State Bank of India	8,965	6,910	7,301	4,783				
Bank of Nova Scotia	505	6,710	16,349	25,169				
Bank of India	497	3,676	3,429	4,067				
Corporation Bank	111	256	174	1,021				
Total	34,824	48,624	54,425	54,265				

Source: GJEPC

Jewellery export fabricators now annually absorb more than 50 tonnes of duty-free gold bullion imports.



Photograph: Inter Classik

Around 15,000 artisans fabricate jewellery in SEEPZ (Mumbai).

GOLD JEWELLERY EXPORTS TO MAJOR MARKETS

Country					US	dollars i	n millior	ns				% split
•	1991 - 1992	1992 - 1993	1993 - 1994	1994 - 1995	1995 - 1996	1996 - 1997	1997 - 1998	1998 - 1999	1999 - 2000	2000 - 2001	2001 - 2002	in 2001
USA	54.3	54.8	65.4	82.0	86.2	107.0	156.4	436.6	600.9	646.2	647.0	55
UAE	120.3	72.8	95.5	96.2	105.7	154.6	150.4	239.1	170.6	230.1	234.0	20
UK	38.5	31.9	31.5	47.3	65.2	83.1	89.2	80.3	100.5	102.1	111.2	10
Singapore	6.6	8.6	20.4	13.7	21.0	20.1	23.5	19.8	30.9	39.6	45.0	4
Hong Kong	3.2	4.1	6.6	22.8	22.6	23.8	21.3	44.0	36.5	37.6	13.0	1
Kuwait	4.2	7.4	11.3	21.2	12.6	20.6	21.6	21.6	11.2	13.3	12.8	1
Germany	*	*	*	*	*	5.1	4.5	25.5	29.6	19.5	12.0	1
Belgium	*	*	*	*	*	1.6	1.7	10.3	28.1	*	*	*
Bahrain	*	*	*	*	*	3.2	6.5	12.2	5.8	*	*	*
Others	12.0	12.7	15.4	20.6	33.6	38.0	35.9	63.8	87.9	69.9	91.8	8
Gross exports	239.1	192.3	246.1	303.7	346.8	457.3	510.9	853.1	1,102.0	1,168.8	1,166.8	100
Returned items	- 1.3	- 1.0	- 1.5	- 2.0	- 5.4	- 7.5	- 10.6	- 6.9	- 14.6	- 18.9	n.a.	n.a.
Net exports	237.8	191.4	244.6	301.7	341.4	449.8	500.4	846.2	1,087.4	1,149.9	n.a.	n.a.
Add SEEPZ	66.5	94.6	122.8	184.1	227.7	297.9	339.1	#	#	#	#	#
Grand Total	304.3	286.1	367.4	485.8	569.2	747.7	839.5	846.2	1,087.4	1,149.9	n.a.	n.a.

Source: GJEPC. * Exports included in "Others". # Countrywise destination of gold jewellery exported from SEEPZ (Mumbai) is only included from 1998 - 1999.

The USA is India's most important export market. It now absorbs 55% of the value of gold jewellery exports.

VALUE ADDITION - GOLD JEWELLERY EXPORTS VERSUS GOLD BULLION USAGE

Category					US dolla	ars in mil	llions				
-	1991 1992	1992 - 1993	1993 - 1994	1994 - 1995	1995 - 1996	1996 - 1997	1997 - 1998	1998 - 1999	1999 - 2000	2000 - 2001	2001 - 2002
Gold jewellery exports	304.3	286.0	367.4	485.8	569.2	747.7	839.5	846.2	1,087.4	1,149.9	1,166.8
Gold bar imports	231.6	162.9	350.4	373.6	347.9	409.6	284.3	394.8	438.8	497.1	573.22
Value addition	72.7	123.1	16.9	112.2	221.3	338.2	555.2	451.4	648.6	652.8	593.6
% Value addition	24	43	10	23	39	45	66	53	60	57	51

Source: GJEPC

Value addition on gold jewellery exports has grown from US\$ 73 million in 1991-92 to more than US\$ 600 million in recent years.



LOCATION OF GOLD JEWELLERY EXPORT FABRICATION

Location	US dollars in millions									% Split	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	in 2000
	- 1992	- 1993	- 1994	- 1995	- 1996	- 1997	- 1998	- 1999	- 2000	- 2001	
EPZ & EOU											
Jhandewalan	11.4	6.8	3.2	n.a.	n.a	n.a.	3.1	n.a.	n.a.	n.a.	-
SEEPZ	64.8	94.6	122.8	184.1	227.7	297.9	339.1	406.2	525.3	507.7	44
MEPZ	n.a.	1.4	1.1	0.5	1.0	1.0	0.7	1.6	2.4	2.5	-
NODIA – EPZ	3.2	17.9	20.5	39.4	43.5	42.6	n.a.	28.7	30.0	40.6	4
Sub- total	79.4	120.7	147.5	224.0	272.2	341.6	342.9	436.5	557.8	550.6	48
DTA	224.8	165.2	219.8	261.8	297.0	406.2	496.6	409.7	529.6	599.4	52
Total export	s 304.3	286.1	367.4	485.8	569.2	747.7	839.5	846.2	1,087.4	1,149.9	100
Zone % total	26	42	40	46	48	46	41	52	51	48	48

Source: GJEPC.

According to the GJEPC, 44% (US\$ 508 million) of the value of India's gold jewellery exports was fabricated in SEEPZ (Mumbai) in 2000 - 2001.



Photograph: Inter Classik

Inter Classik Jewellery is one of 72 large fabrication units in SEEPZ (Mumbai).
In 1990, there were only 10 units.

THE GEM & JEWELLERY EXPORT PROMOTION COUNCIL

The GJEPC, established in 1966, has its headquarters in Mumbai.

It has 5 regional offices located in New Delhi (since 1976), Jaipur (1980), Chennai (1985), Surat (1987) and Kolkata (1999).

Supervised by the Ministry of Commerce and Industry and elected industry representatives, its membership comprises 6,800 registered exporters, the bulk located in Mumbai (61%) and Jaipur (15%). Although most focus on the cutting and polishing of diamonds and gems, about 800 are involved in the fabrication of gold jewellery.

The GJEPC (80 employees) provides a wealth of services to its members, including the following:

Jewellery Product Development Centres (JPDC)

Established in Mumbai in 1985, and subsequently in New Delhi (1986) and Jaipur (1998), the centres conduct seminars and training courses, from one day up to a year in duration.

Sardar Patel Centre of Jewellery Design and Manufacture

Located at the Indian Diamond Institute (IDI) in Surat, the centre offers a 3 year course in jewellery design and manufacture.

India International Jewellery Show (IIJS)

India's most important jewellery trade fair has been held annually since 1973, normally in Mumbai. The IIJS in 2001 had 140 exhibitors, 150 overseas visitors from 29 countries, and 3,000 domestic visitors.

International Exhibitions

The GJEPC co-ordinates the participation of jewellery exporters at international gold jewellery fairs, notably in Singapore, Abu Dhabi, Bahrain, Germany (Munich), Switzerland (Basel), USA (New York) and Chile (Santiago).

GJEPC MEMBERSHIP AND REGISTRATION

GJEPC estimates that 800 (12%) of its 6,680 registered diamond, gem and gold jewellery exporters fabricate plain or studded gold jewellery.

Fabricators in the west (including Gujarat) account for 65% of GJEPC membership, while fabricators in the north (including Jaipur) account for 27%.

Category	1999 -2000 Number	2000 - 2001 Number	2000 - 2001 % Split
GJEPC members	7,001	6,930	-
Registered exporters	6,792	6,680	-
Membership breakdown			
Mumbai (Western region)	4,240	4,253	61
Gujarat	269	294	4
Delhi (Northern region)	834	858	12
Jaipur	1,158	1,009	15
Chennai (Southern region)	398	413	6
Kolkata (Eastern region)	102	103	1
Total	7,001	6,930	100

Source: GJEPC



GOLD JEWELLERY EXPORTERS - GJEPC AWARD WINNERS IN 2000 - 2001

Plain gold jewellery	Location	US\$ millions
Modern Impex	Mumbai	30.3
P.P. Jewellers	New Delhi	26.8
Rajesh Exports	Bangalore	23.1
Studded gold jewellery	Location	US\$ millions
Merrygold Jewellers	Mumbai	11.2
Vaibhav Gems	Jaipur	3.5

Source: GJEPC Annual Awards

Some fabricators in Mumbai, New Delhi and Bangalore export more than US\$ 20 million of plain gold jewellery annually.

KILOBARS



AGR Australia



Harmony South Africa



Johnson Matthey United Kingdom



Rand Refinery*
South Africa
*Actual size



Argor-Heraeus Switzerland



Valcambi Switzerland



Pamp Switzerland

Many exporters use kilobars, normally at 995 purity, for the fabrication of gold jewellery.

CHAPTER 6

INDUSTRIAL GOLD USAGE

CONTENTS

Gold plating

Zari thread

Ayurvedic medicines

Indicative industrial gold usage 1990 - 2001

Appendix

Imitation gold jewellery



A retailer of silver and imitation gold jewellery in Kosi Kalan (Uttar Pradesh).

There are thousands of similar outlets serving the low income populations in rural and urban areas.

INDUSTRIAL GOLD USAGE

Since the repeal of the Gold (Control) Act, industrial gold usage is reported to have grown to more than 40 tonnes, due mainly to a surge in the fabrication of gold plating products and the widespread use of gold for plating purposes.

There are 3 important categories:

- Gold plating
- Zari thread
- Ayurvedic medicines

Monitoring industrial gold usage in India, where the market is so fragmented, is no easy task. The statistics rely on the indicative estimates of Madhusudan Daga.

GOLD PLATING

The gold plating of silver and other metals and materials is a "cottage industry" throughout India.

The category includes the use of gold for plating cutlery, dinner sets, tea sets, plates, bowls, tumblers, trays and other utensils, as well as gold plated decorative ornaments, watch cases and straps, inkpots and pens, optical frames, mirrors and glass. It also includes electroplated gold items and imitation gold jewellery.

The fabrication of imitation gold jewellery has grown significantly. Increased consumer demand is attributed to its low price (relative to real gold), improved product quality, new fashionable designs and rising levels of crime in major cities.

ZARI THREAD

India is renowned for its decorative golden Zari thread.

It can be woven into materials for sarees, suits, sashes, blouses, ceremonial cloths and many other embroidered items. The craft has been practised for thousands of years. Zari is a Hindu word for a metallic thread.

Most Zari thread and materials are made by hand in west and north India:

Gujarat Surat

Uttar Pradesh Bareilly, Varanasi, Agra

Rajasthan Jaipur, Barmer

Surat is the most important fabrication centre.

The most important export markets for Zari products are the USA (accounting for 20% of exports), UK (17%) and Japan (10%).

AYURVEDIC MEDICINES

Although gold is incorporated in less than 1% of ayurvedic medicines consumed, around 5 tonnes of gold is now reported to be swallowed in tablet or powder form each year by millions of Indians.

About 50% of gold consumption is for 'rejuvenation' purposes, especially during the winter months. There are more than 20 commonly used 'rejuvenation' brands. For example, Brihat Vatchintamani Ras, Vasant Kusumar Ras and Suvarna Malini Vasant.

A typical daily dose would include 1 - 2 mg of gold within a mixture of herbs.

Gold is also widely used for the treatment of many illnesses, including rheumatoid arthritis, osteoarthritis, tuberculosis, schizophrenia, epilepsy, colitis, heart disease, neurological disorders, malabsorption syndromes and complications associated with diabetes.

Traditional ayurvedic medicines, known for more than 3,000 years, are recorded in 3 classical treatises: Charak, Sushrut and Vaghbhatta. The term incorporates the Sanskrit words 'ayu' (life) and 'veda' (knowledge). The widespread use of gold dates back to around 600 AD when a chemist, Nagarjuna, pioneered the medical use of metals and minerals.



INDUSTRIAL GOLD USAGE

INDICATIVE INDUSTRIAL GOLD USAGE 1990 - 2001

Category						Tonnes						
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Decorative												
- Gold plating	0.7	2.0	3.0	4.5	4.0	3.5	3.5	4.0	5.0	15.0	18.0	30.0
- Zari crafts	0.4	1.5	2.0	12.0	12.0	10.0	12.0	10.0	9.0	8.0	8.0	6.0
- Foils	-	-	-	0.2	0.3	0.5	0.5	0.5	1.0	1.0	1.0	1.0
Sub- total	1.1	3.5	5.0	16.7	16.3	14.0	16.0	14.5	15.0	24.0	27.0	37.0
Medical	0.2	0.2	0.3	1.0	1.0	2.0	2.0	2.0	2.0	3.0	4.0	5.0
Electronic	0.2	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.0	1.0
Total	1.5	4.2	5.8	18.7	18.3	17.0	19.0	17.5	18.2	28.2	32.0	43.0

Sources: 1990: Gold (Control) Act statistics. 1991-2001: Based on statistics compiled by Madhusudan Daga.

Gold plating (70%), Zari crafts (14%) and ayurvedic medicines (12%) account for the bulk of industrial gold usage.





Source: http://travel.indiamart.com

Zari crafts are reported to have absorbed 6 tonnes of gold in 2001.

INDUSTRIAL GOLD USAGE

IMITATION GOLD JEWELLERY

Imitation gold jewellery is fabricated and sold in cities, towns and many villages throughout India.

It is made in copper, brass, silver or other materials and then gold-plated. Most items contain 1 g or less of fine gold.

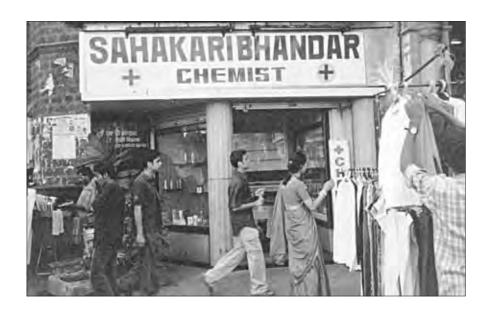
While lower income families account for the bulk of fabrication nationwide, retailers in Mumbai observe that imitation jewellery is now being used by young and older consumers across all social classes.

In Mumbai, the number of imitation jewellery outlets is reported to have grown over the past 5 years from less than 50 to more than 200. Informal trade estimates suggest that the number of fabricators may exceed 20,000 (including unemployed goldsmiths), as Mumbai's output is also distributed nationally.

An imitation gold chain can be bought for as little as Rs 600 (US\$ 12), a bangle for Rs 700 (US\$ 14) and a necklace for Rs 1,000 (US\$ 20).



A retailer of high quality imitation gold jewellery in Mumbai.



Ayurvedic medicines containing gold are widely used for rejuvenation and the treatment of many illnesses.

CHAPTER 7

MUMBAI GOLD PRICES

CONTENTS

Annual 1970 - 2001

Monthly 1997 - 2001

Annual 1925 - 1969





The Bombay Bullion Association was established in 1948.

The Mumbai gold price per 10 g grew from Rs 184 in 1970 to an annual average of Rs 4,462 in 2001.

Indian gold prices are normally expressed in rupees per 10 g at 995 purity, or per 10 tola at 999 purity.

Over the past 10 years, the difference between the Mumbai and London gold price has steadily narrowed.

In 1990, the Mumbai premium averaged 56%. In 2001, it averaged 9%.

MUMBAI

The prevailing price of standard gold in Mumbai is widely accepted as a national benchmark.

The Mumbai price reflects the international US dollar price, the rupee exchange rate with the US dollar (the official, as well as the unofficial cash and hawala rates), and the level of local gold supply and demand. It also takes into account bar import costs (including Customs duty), and applicable State sales and other taxes in Mumbai.

The standard gold price in other cities and towns can be slightly higher or lower than the Mumbai price, dependent on local rupee exchange rates, State and municipal taxes, bar transportation costs, and their own level of local gold supply and demand.

The relevant standard gold price then determines the local price of 10 tola bars, and the local price per gramme at which jewellery retailers sell, exchange and buy back gold jewellery at 22 carat and other caratages.

Bank prices for 10 tola bars at 999 purity are now also widely publicised.

This has occurred since November 1997, when authorised banks started importing gold bars. As banks rely on imported gold bars, and do not buy bars on the secondary market, their prices can sometimes be above the standard gold price.

SOURCES

There are no accessible statistics that record Mumbai's highest, lowest and average monthly and annual gold prices, and Mumbai's variation from London gold prices, back to 1970. In addition, many published statistics, relating to the 1970s and 1980s, appear to use prices on the last trading day of March, or India's April - March financial year average, as indicative calendar year averages.

When referring to the tables in this section, the following can be noted:

Period 1970 - 1989

Rupee gold prices. The price in Mumbai on the last trading day of March, as recorded by The Bombay Bullion Association Ltd.

US dollar gold prices. The average for March at the London gold fix, as recorded by Samuel Montagu & Co Ltd in its historical bulletins.

Rupee/US dollar exchange rates. The annual period rate, as recorded by the IMF in its International Financial Statistics Yearbook.

Difference between Mumbai and London prices. It is only indicative as the average US dollar price for March is compared to the rupee price on the last trading day of March.

Period 1990 - 2001

Based on statistics compiled by *Madhusudan Daga*, who provides many of the statistics normally published by The Bombay Bullion Association Ltd.

Rupee gold prices. Average monthly and annual prices in Mumbai.

US dollar gold prices. Average monthly and annual prices at the London fixes. The annual average is the average of the monthly averages.

Rupee/US dollar exchange rate. Official average monthly and annual rates, based on daily rates recorded in Mumbai.

Both periods

Equivalent London gold price in rupees per 10 g. Based on the official exchange rate, 10 g equals 0.32151 oz, and purity at 995.



ANNUAL 1925 - 1969

Mumbai gold prices on the last trading day in March

Year	Rs per 10 g
1925	18
1926	18
1927	18
1928	18
1929	18
1930	18
1931	18
1932	23
1933	25
1934	28
1935	30
1936	29
1937	30
1938	29
1939	31
1940	36
1941	37
1942	44
1943	51
1944	52
1945	62
1946	83
1947	88
1948	95
1949	94
1950	99
1951	98
1952	76
1953	73
1954	77
1955	79
1956	90
1957	90
1958	95
1959	102
1960	111
1961	119
1962	120
1963	97
1964	108
1965	123
1966	144
1967	n.a.
1968	162
1969	176

Source: The Bombay Bullion Association Ltd

The Mumbai price grew from Rs 18 in 1925 to Rs 176 in 1969. The annual average price in 2001 was Rs 4,462.



INDICATIVE DIFFERENCE BETWEEN MUMBAI AND LONDON GOLD PRICES

ANNUAL 1970 - 2001

YEAR	MUMBAI	LONDON	OFFICIAL EXCHANGE	LONDON	AT OFFICI	DIFFERENTIAL AL EXCHANGE ATES
1970 - 1989	Rs per 10 g End March	US\$ per oz March	Rs per US\$ Annual	Rs per 10 g	Rs	% + or -
1970	184	35.09	7.50	84	100	+ 119
1971	193	38.87	7.49	93	100	+ 108
1972	203	48.31	7.59	117	86	+ 74
1973	278	84.24	7.74	209	69	+ 33
1974	506	168.36	8.10	436	70	+ 16
1975	540	178.18	8.38	478	62	+ 13
1976	532	132.63	8.96	380	152	+ 29
1977	573	148.28	8.74	415	158	+ 38
1978	665	183.72	8.19	481	184	+ 38
1979	937	242.20	8.13	630	307	+ 48
1980	1,330	553.93	7.86	1,393	- 63	- 5
1981	1,700	499.23	8.66	1,383	317	+ 23
1982	1,645	333.33	9.46	1,009	636	+ 63
1983	1,800	420.20	10.10	1,358	442	+ 33
1984	1,975	394.50	11.36	1,434	541	+ 38
1985	2,130	303.57	12.37	1,201	929	+ 77
1986	2,140	345.90	12.61	1,395	745	+ 54
1987	2,570	408.88	12.96	1,695	875	+ 52
1988	3,130	443.55	13.92	1,975	1,155	+ 58
1989	3,140	390.15	16.23	2,026	1,114	+ 55
1990 - 2001	Annual	Annual	Annual	Rs per 10 g	Rs	% + or -
1990	3,399	383	17.61	2,173	1,226	+ 56
1991	4,044	362	22.95	2,669	1,375	+ 53
1992	4,255	344	29.50	3,250	1,005	+ 31
1993	4,384	361	31.56	3,658	726	+ 20
1994	4,652	384	31.50	3,889	763	+ 20
1995	4,798	384	32.47	4,006	792	+ 20
1996	5,191	388	35.39	4,415	776	+ 18
1997	4,556	331	36.33	3,852	704	+ 18
1998	4,182	294	41.27	3,901	281	+ 7
1999	4,333	279	43.14	3,868	465	+ 12
2000	4,520	279	44.94	4,029	491	+ 12
2001	4,462	271	47.19	4,111	351	+ 9

From 1970 until February 1992, when all gold imports for the domestic market were unofficial, the Mumbai price averaged 49% above the London price.

The Mumbai premium fell to around 20% between 1993-97, when NRI's accounted for the bulk of imports. It has since ranged between 7 - 9%, after authorised banks started to import gold in November 1997.



INDICATIVE DIFFERENCE BETWEEN MUMBAI AND LONDON GOLD PRICES

MONTHLY 1997 - 1999

1997	MUMBAI	LONDON	OFFICIAL EXCHANGE	LONDON	MUMBAI	DIFFERENTIAL
	Rs per 10 g	US\$ per oz	Rs per US\$	Rs per 10 g	Rs	% + or -
January	4,897	354.90	35.87	4,093	804	+ 20
February	4,826	346.78	35.89	4,002	824	+ 21
March	4,790	351.80	35.87	4,058	732	+ 18
April	4,788	344.33	35.80	3,964	824	+ 21
May	4,782	343.84	35.82	3,960	822	+ 21
June	4,637	340.94	35.81	3,926	711	+ 18
July	4,469	324.06	35.75	3,725	744	+ 20
August	4,512	323.93	35.96	3,746	766	+ 20
September	4,442	322.90	36.44	3,659	783	+ 21
October	4,400	324.70	36.23	3,783	617	+ 16
November	4,135	306.00	37.26	3,666	469	+ 13
December	3,995	288.74	39.22	3,641	354	+ 10
Average	4,556	331.08	36.33	3,852	704	+18

1998	MUMBAI	LONDON	OFFICIAL EXCHANGE	LONDON	MUMBAI	DIFFERENTIAL
	Rs per 10 g	US\$ per oz	Rs per US\$	Rs per 10 g	Rs	% + or -
January	4,009	288.80	39.37	3,656	353	+ 10
February	3,995	297.33	38.90	3,719	276	+ 7
March	3,994	295.70	39.52	3,757	237	+ 6
April	4,210	307.80	39.66	3,925	285	+ 7
May	4,143	299.10	40.51	3,896	247	+ 6
June **	4,215	292.30	42.24	3,970	245	+ 6
July	4,271	292.90	42.52	4,005	266	+ 7
August	4,186	284.10	42.77	3,907	279	+ 7
September	4,234	289.00	42.52	3,951	283	+ 7
October	4,336	295.90	42.32	4,027	309	+ 8
November	4,306	294.15	42.39	4,009	297	+ 7
December	4,280	291.60	42.55	3,990	290	+ 7
Average	4,182	294.06	41.27	3,901	281	+ 7

^{**} Import duty increased in June 1998 from Rs 220 to Rs 250 per 10 g.

1999	MUMBAI	LONDON	OFFICIAL EXCHANGE	LONDON	MUMBAI	DIFFERENTIAL
	Rs per 10 g	US\$ per oz	Rs per US\$	Rs per 10 g	Rs	% + or -
January **	4,347	287.10	42.51	3,924	423	+ 11
February	4,357	287.30	42.47	3,923	434	+ 11
March	4,330	286.00	42.45	3,904	426	+ 11
April	4,390	282.60	42.74	3,884	506	+ 13
May	4,314	276.70	42.78	3,806	508	+ 13
June	4,109	261.30	43.15	3,625	484	+ 13
July	4,051	256.10	43.28	3,564	487	+ 14
August	4,086	256.85	43.46	3,589	497	+ 14
September	4,179	264.75	43.54	3,707	472	+ 13
October	4,749	310.70	44.44	4,440	309	+ 7
November	4,615	293.20	43.40	4,092	523	+ 13
December	4,473	283.00	43.48	3,957	516	+ 13
Average	4,333	278.80	43.14	3,868	465	+12

^{**} Import duty increased in January 1999 to Rs 400 per 10 g.

INDICATIVE DIFFERENCE BETWEEN MUMBAI AND LONDON GOLD PRICES

MONTHLY 2000 - 2001

2000	MUMBAI	LONDON	OFFICIAL EXCHANGE	LONDON	MUMBAI D	IFFERENTIAL
	Rs per 10 g	US\$ per oz	Rs per US\$	Rs per 10 g	Rs per 10 g	% + or -
January	4,511	284.31	43.55	3,981	530	+ 13
February	4,707	299.86	43.61	4,205	502	+ 12
March	4,543	286.39	43.59	4,014	529	+ 13
April	4,460	279.69	43.64	3,925	535	+ 14
May	4,368	275.18	43.99	3,892	476	+ 12
June	4,522	285.73	44.68	4,105	417	+ 10
July	4,529	281.60	44.77	4,054	475	+ 12
August	4,516	274.00	45.69	4,025	491	+ 12
September	4,518	273.60	45.90	4,038	480	+ 12
October	4,538	270.00	46.34	4,023	515	+ 13
November	4,481	266.00	46.77	4,000	481	+ 12
December	4,542	271.40	46.75	4,080	462	+ 11
Average	4,520	278.98	44.94	4,029	491	+12

2001	MUMBAI	LONDON	OFFICIAL EXCHANGE	LONDON	MUMBAI	DIFFERENTIAL
	Rs per 10 g	US\$ per oz	Rs per US\$	Rs per 10 g	Rs	% + or -
January	4,465	264.50	46.54	3,958	507	+ 13
February	4,369	261.85	46.52	3,917	452	+ 12
March **	4,269	263.00	46.62	3,942	327	+ 8
April	4,267	260.50	46.79	3,919	348	+ 9
May	4,437	272.65	46.93	4,114	323	+ 8
June	4,400	270.20	46.99	4,083	317	+ 8
July	4,381	267.55	47.14	4,055	326	+ 8
August	4,453	272.40	47.12	4,127	326	+ 8
September	4,628	283.05	47.64	4,336	292	+ 7
October	4,692	283.11	48.02	4,371	321	+ 7
November	4,602	276.16	47.99	4,261	341	+ 8
December	4,580	275.86	47.92	4,251	329	+ 8
Average	4,462	270.90	47.19	4,111	351	+ 9

^{**} Import duty reduced in March 2001 to Rs 250 per 10 g.

The current 7-8% premium of the Mumbai price above the London price largely reflects the impact of Customs duty at Rs 250 per 10 g.



CHAPTER 8

PRICING AND PROFITABILITY

CONTENTS

Perspective

Key features at the retail level

Gold bullion

Bank importers Bullion dealers Pricing an imported 10 tola bar

Gold jewellery

Fabricators Wholesalers Retailers

Gold refining

Organised refiners Small refiners

Minted coins and bars

Organised fabricators Small fabricators Retailers



Photograph: Tribhovandas Bhimji Zaveri

India is one of the few countries in the world where gold jewellery – superbly fabricated – can be bought with a mark-up of 25% or less above the prevailing value of its gold content.

Bank importers normally mark-up imported TT bars by around 0.1%. Secondary and lower tier bullion dealers rely mainly on movements in the gold price for their profitability.

Gold jewellery is typically retailed at a declared price ranging between 5 - 25% above the prevailing gold price.

Retailers that sell gold jewellery with the correct caratage tend to have a gross profit (after fabrication costs) of less than 10%.

Wholesalers generate a gross profit of 2 - 3%.

Most goldsmiths earn between Rs 4,000 - 15,000 (US\$ 80 - 300 per month).

Small refiners can charge as little Rs 10 (US\$ 0.20) per 10 g to refine small quantities of old gold jewellery.

Coin fabricators charge between Rs 20 - 60 (US\$ 0.40 - 1.20) to make a 10 g coin.

Retailers usually sell a 10 g coin at a mark-up of less than Rs 50 (US\$ 1.00).

PERSPECTIVE

This section can only provide *indicative* information. Pricing and profitability for each trade category can vary regionally, within cities, and in the rural areas.

While there is some reference to the pricing of smaller businesses, the section focuses mainly on top end businesses for two reasons. Within cities (and nationally), top end jewellery retailers are important as retail conduits. Although their standard prices tend to be higher, the important point is that even these higher prices are extremely low by Western standards.

Tax elements

Reference to Customs duty, and State and municipal taxes, is usually omitted in this section for two reasons.

Standard bullion prices can sometimes incorporate these taxes.

State sales and other taxes, applicable to jewellery and other products, vary. For example, the State sales tax applied to gold jewellery in the 4 main cities ranges from 1% in New Delhi to 4% in Chennai. The level of taxes can also change.

KEY FEATURES AT THE RETAIL LEVEL

Prices are "unfixed" at every level.

The prices of all gold products are generally unfixed, linked to the prevailing gold bullion price at the time of the transaction.

Although some of the national retail jewellery chains, established since the mid-1990s, have started selling branded jewellery at fixed prices, their combined volume accounts for less than 1% of the market.

Customers require a breakdown of charges.

Customers, at every level, normally require a detailed breakdown of all charges. For example, jewellery retailers are expected to advise customers of the value of the carat gold content, the fabrication or "value addition" charge (including not only the "labour" or "making" charge to fabricate the item, but also in many cases the "wastage" factor), the value of the precious or semi-precious stones if the item is studded, and the relevant taxes.

Customers ask what price they will receive if they sell back or exchange the item.

Many retailers observe that this question is almost invariably asked at the time of purchase. For most customers, jewellery is viewed as a tradable asset.

Customers bargain.

Buying, exchanging or selling jewellery, bars and coins invariably involves some bargaining between the customer and the retailer, even though the discount tends to be small as the retailer's gross margin above the prevailing gold price is generally so low.



GOLD BULLION

BANK IMPORTERS

The Gold Cells of authorised bank importers are obliged to absorb all overheads and the direct costs incurred when buying gold bars (from international suppliers) and selling them (to secondary tier dealers). Overheads include administrative and insurance costs and, in some cases, the cost of consignment stocks that move slowly.

To cover these costs, and to generate a profit, a Gold Cell generally relies on 3 - 5 sources of income.

Small gross mark-up

Banks normally apply a small percentage or rupee amount to the *actual* cost of the bullion (delivered to a location in India) at the time it is purchased from an international supplier.

The actual cost takes into account the US dollar gold price quoted by the international supplier (that supplied the consignment stock), the bar mark-up per ounce charged by the supplier (inclusive of the refiner's fabrication charge and the cost of insured delivery to the required city in India), the US\$/rupee exchange rate, Customs duty, State sales taxes and other taxes.

The bank's gross mark-up on the actual cost of an imported TT bar is currently low, at around 0.1% (Rs 15 per oz - about US\$ 0.32), although it can vary according to the size of the transaction and the prevailing level of TT supply and demand.

Since the introduction of the OGL Scheme in 1997, the bank's mark-up on imported TT bars has fallen significantly. In 1997, it was around 0.6% (about Rs 90 per oz - US\$ 2).

Rupee exchange rates

The opportunity to convert US dollars into rupees in-house enables banks to generate a small amount of incremental income. Typically, a few paise per US dollar.

Interest earned on advance payments

As most secondary tier dealers are obliged to lodge large cash deposits and/or make payment in full before delivery, the bank can earn interest on those funds until obliged to pay international suppliers.

Movements in the gold price

Although the Gold Cells of most banks are permitted to take some risk on movements in the gold price, almost all do not. On rare occasions, in a rapidly rising gold price scenario and anticipated demand is "guaranteed", a small risk might be undertaken by some.

Gold loans

Income is also derived if the bank offers gold loans to jewellery exporters (and, if it is part of the Gold Deposit Scheme, to domestic fabricators and retailers).

For example, one bank requires a cash deposit (110%), a bank guarantee (110%) or other securities to 100% value of the gold plus 10% cash, plus an annualised interest payment ranging from 7.5% to 10.5%, plus handling charges.

Addendum

International refiners that supply TT bars indirectly (via international dealers) have seen their margins on TT bars fall substantially, from around US\$ 1.25 - 1.50 per ounce in the early 1990s to less than 70 cents in 2002.

BULLION DEALERS

Secondary tier dealers

The relatively few domestic dealers that buy TT bars in bulk from bank importers normally place an accumulated order on behalf of several subsidiary customers (e.g. lower tier dealers and large jewellery businesses) in order to eliminate or reduce their exposure to an unexpected fall in the rupee gold price. When acting on behalf of others, their margins tend to be small, usually less than Rs 50 per ounce. When buying on their own account, their profit or loss is dependent on movements in the standard bullion price.

Lower tier dealers

Tertiary and lower tier dealers may also reduce their risk by acting on behalf of others. However, in the absence of a hedging facility, both large and smaller dealers (and their customers) are exposed to unexpected falls in the gold price. Their profit or loss is dependent on movements in the standard bullion price, and sometimes the prevailing price of unofficial imports of TT bars.

For this reason, most lower tier dealers (and their customers) tend to buy TT bars in small quantities, often on a daily basis.



Recycling of old gold scrap and bars

The bulk of dishoarded jewellery is bought back (from known customers), or exchanged for new jewellery, by jewellery retailers.

However, where the retailer from which the jewellery has been bought is not accessible (e.g. closed down, or located far away), some lower tier bullion dealers, some refiners, as well as specialised scrap dealers will buy back old jewellery (as well as bars and coins) for cash.

The price is usually based on a conservative estimate of the caratage.

PRICING AN IMPORTED 10 TOLA BAR

The schedule illustrates a method of calculating a bank's TT wholesale price in rupees, assuming a gold price of US\$ 300 and an exchange rate of Rs 48.

Bank importers normally mark-up imported TT bars by around 0.1%. The mark-up can vary according to prevailing supply and demand.

Description	Amount	Calculation
US\$ gold price per oz. Quoted by international dealer.	\$ 300	
Add gross mark-up per oz charged by international dealer, inclusive of delivery. Assume: US\$ 85 per oz.	\$ 300.85	\$300 plus \$0.85
US\$ price of a TT bar. Gross weight: 3.75 oz. Purity: 999 purity.	\$ 1,126.98	\$300.85 x 3.746 oz
Conversion to rupees. Assume exchange rate: US\$ 1.00 = Rs 48	Rs 54,095.04	\$ 1,126.98 x Rs 48
Add Customs duty per oz. Assume: Rs 250 per 10 g. Gross TT weight: 116.64 g	Rs 2,916.00	Rs 250 x 11.664
Cost before State and other taxes	Rs 57,011.04	Rs 54,095.04 plus Rs 2,916.
Add State sales and other taxes per TT Assume 1.15%	Rs 655.62	Rs 57,011.04 x 0.115
Total cost to bank per TT	Rs 57,666.66	Rs 57,011.04 plus Rs 655.62
Add bank gross mark-up Assume 0.1%	Rs 57.66	Rs 57,666.66 x 0.001
TT wholesale price Percentage above international gold price	Rs 57,726.52 7.01%	Rs 57,666.66 plus Rs 57.66 \$ 300 x 48 x 3.746 = Rs 53,942.40.
Additional statistics: - Bank gross mark-up per oz in rupees - Bank gross mark-up per oz in US\$	Rs 15.39 \$ 0.32	Rs 57.66 divided by 3.746 Rs 15.39 divided by 48

Source: Bank importer.



GOLD JEWELLERY

JEWELLERY FABRICATORS

Contracts

Where retailers and wholesalers do not undertake their fabrication in-house, they enter into a contract with one or more independent fabrication units.

Most fabrication by these units is undertaken on the basis that retailers and wholesalers, and the public if they deal directly with them, *supply* the required amount of gold. The prevailing gold price is usually irrelevant to the transaction.

The units normally cover their costs in one of 3 ways. The agreed charges vary according to the category, weight, complexity and quality of the item, although some fabricators may charge the same (or similar) rate per gramme for all designs if they specialise in a specific category and style.

In the form of retained gold

Under this system, fabricators return gold jewellery to an agreed weight, caratage and solder content, retaining an agreed percentage of the fine gold content to cover the wastage and labour charges. Where this occurs, the percentage retained tends to range between 4 - 10 %.

In the form of retained gold plus labour charges

Under this system, wastage and the labour charges are negotiated separately. For example, wastage might be 4% and the labour charge Rs 15 per gramme.

In the form of labour charges only

In recent years, many top end retailers and wholesalers now require fabricators to take responsibility for the wastage factor. Instead, they pay a higher labour charge (inclusive of wastage), normally in rupees per gramme.

This system has grown among top end retailers as a result of the use of cadmium (it evaporates under heat after fabrication) or high caratage solders, access to more sophisticated assaying procedures and assay centres, the need to upgrade caratages since hallmarking was first mooted in the late 1990s, and a motivation to reduce their costs.

Under this system, they expect to receive jewellery containing the *same* amount of fine gold supplied. The higher labour charge tends to range between Rs 25 - 50 per gramme, but can be more for complicated items.

Indicative fabrication costs to retailers

The schedule below illustrates the *relative* charges (inclusive of wastage and labour costs) incurred by a top end retailer for different categories of standard items. It does not imply that these charges are standard. They would vary according to the complexity of the items.

Item	Handı	nade
	Rs per gramme	US\$ per gramme
Necklace	35	0.70
Bangle	30	0.60
Chain	45	0.90
Earring	45	0.90
Ring	35	0.70

Generally, a top end retailer would expect average fabrication costs to be around 8 - 10% above the value of the prevailing gold price.

Profitability

Independent fabrication units are generally regarded as low profit enterprises. Most have also seen their incomes and profits decline for two reasons, apart from the pressure of increasing competition.

Where gold retention is part or the entire source of income, they have been squeezed by a rupee gold price that has been largely static in recent years.

The trend among top end retailers to pay labour charges only (permitting no wastage) has also reduced a fabrication unit's profitability. The labour charge tends not to cover the previous wastage charge in full. The unit is also often obliged to use additional gold from its own inventory to provide sufficient feedstock to fabricate the required items.

For example, in Kolkata, it is reported that about 5 years ago, the system was typically 6.5% wastage (Rs 30) plus a labour charge of Rs 6 per gramme. Total: Rs 36 per gramme. Many units are now receiving around Rs 25 - 30.

The income of employed goldsmiths and ancillary workers is generally low. Wages are reported to range between Rs 4,000 - 15,000 (US\$ 80 - 300) per month.

JEWELLERY WHOLESALERS

Jewellery wholesalers, acting as middlemen between fabricators and retailers, normally expect to make a gross profit of 2 - 3%. It can be higher if credit is given.

They are normally paid in cash, or in the form of gold. As many major wholesalers also produce jewellery on a speculative basis (not just in response to orders), their profitability can depend on movements in the standard bullion price.

JEWELLERY RETAILERS

Methods of payment

Retail customers obtain new gold jewellery using one or a combination of 4 methods. In summary:

- Cash payment. Some retailers now also accept credit cards.
- Exchange of old for new jewellery. Its value is credited.
- Supply of bars and coins. The gold content value is credited.
- Supply of old jewellery for *refashioning* into new jewellery.

Retailers normally communicate a breakdown of pricing elements, although some can be combined and the terminology can vary. In summary:

Carat gold price

Quoted in rupees per gramme at the appropriate caratage.

Labour charge

Normally quoted in rupees per gramme, although a flat amount can also be quoted.

Wastage charge

Normally quoted as a percentage.

Hallmarking charge

If applicable, a supplementary charge is sometimes levied.

State sales and other taxes

Variable by State and city.

Carat gold price

Carat gold prices per gramme or per 10 g are normally displayed in most outlets. For example, at K22 and K18, and sometimes K24, K23 and K21 as well.

The price usually reflects that calculated by the local jewellery association. It is based on the prevailing local standard bullion price per gramme or TT.

The carat gold price is not always directly proportional to the standard bullion price, as it sometimes includes a surcharge that may also include part or all applicable State and municipal taxes on jewellery, and a contribution to wastage.

For example, if the standard bullion price is Rs 450 per gramme, the quoted K22 price may be Rs 430 (as opposed to a proportional carat price of Rs 412).

The carat gold price is used as the basis for buying, selling and exchanging jewellery.

Labour charges

"Labour" or "making" charges are normally expressed in rupees per gramme, although for small low weight items (such as rings, earrings and nose pins), the labour charge can be a fixed amount per item.

In small suburban and rural outlets (usually where the retailer fabricates the jewellery on-site), the labour charge is often a fixed amount per item. Although the charge can vary according to the weight of the item, the cost is not necessarily calculated on a consistent rupees per gramme basis.

The tables below can only provide a rough indication of the approximate level of labour charges quoted for different jewellery categories. The charges, especially at the top end, are inevitably dependent on the intricacy of designs and the quality of craftsmanship, and whether the wastage cost is included.



Top end retailers

The labour charge for some standard machine-made items can be 10 - 20% less than standard handmade items.

Category	Handmade Labour charge per gramm				
	Rs	Approx US\$			
Necklace	40 - 200	0.80 - 4.20			
Bangle	30 - 100	0.60 - 2.10			
Chain	30 - 80	0.60 - 1.60			
Earrings	75 - 100	1.60 - 2.10			
Ring	75 - 100	1.60 - 2.10			
Category		ne-made			
Category	Labour charg	je per gramme			
Category					
Category Necklace	Labour charg	je per gramme			
	Labour charg Rs	pe per gramme Approx US\$			
Necklace	Labour charg Rs 40 - 200	pe per gramme Approx US\$ 0.80 - 4.20			
Necklace Bangle	Labour charg Rs 40 - 200 30 - 80	pe per gramme Approx US\$ 0.80 - 4.20 0.60 - 2.10			

Small suburban and rural retailers that fabricate on-site

The table below illustrates how jewellery can sometimes be priced with a fixed labour charge in rupees per item.

Category	Weight	Handmade Fixed labour charge	
		Rs	Approx US\$
Necklace	25 g	200	4.20
Bangle	10 g	100	2.10
Earrings	6 g	100	2.10
Ring	5 g	100	2.10

The table below illustrates how jewellery can sometimes be priced in rupees per gramme, regardless of the category, at different (and decreasing) rates according to the weight of the item.

Item weight	Handmade	
	Variable labour charge per gramme	
	Rs	Approx US\$
2 g	25	0.50
4 g	20	0.40
8 g	15	0.30
24 g	10	0.20

Crude "money" jewellery

The labour charge can be as low as Rs 2 - 5 per gramme (plus wastage) for simple items in K24, K23 and K22 at specified weights.

For example, a retailer may stock a range of crude rings weighing 1/2, 1, 2, 3, 4, 5 and 10 grammes, and crude bangles at heavier weights.

Wastage charges

The wastage charge, sometimes referred to as a "polishing" charge, is intended to cover the gold lost in the fabrication and polishing of gold jewellery, and in many cases to contribute towards the total cost of the jewellery. For example, if the wastage charge is high, it enables the labour charge to be lower.

While most outlets levy a wastage charge, it can also be absorbed within an overall "value addition" or total fabrication charge (including labour charges).

The quoted wastage charge can vary from zero to 10%. A top end wastage charge tends to range between 4 - 8% (although it is often absorbed within a total "value addition" charge). In small suburban and rural areas, it typically ranges between 2 - 4%.

Hallmarking charges

The few hundred retailers that currently sell hallmarked jewellery either absorb the cost or increase the labour charge. For example, by Rs 5 - 15 per gramme.

Authorised hallmarking centres can set their own charges. For example:

Below 20 g Rs 50 per item (US\$ 1.00) Above 20 g Rs 75 per item (US\$ 1.50)

For most retailers hallmarking is an expensive exercise, when obliged to operate competitively at low retail margins. The hallmarking cost for a pair of small earrings (2 items) would be Rs 100.

A retailer is also obliged to recover the annual BIS certification fee of Rs 25,800.

Exchanging old for new jewellery

If the old jewellery had been bought from the **same** retailer.

The customer is normally credited with the quoted K22 carat gold price per gramme, if it had been sold as K22 and cadmium solder had been used.

If it had been sold as 22/20 (i.e. a low caratage solder had been used so that after melting the residual gold content would be 10% less than the original weight of the jewellery), the K22 carat gold price per gramme would normally be reduced by 3% or more. The credited value would then be set against the price of the new jewellery.

If the old jewellery had been bought from another retailer.

The old jewellery would be assayed using a touchstone. As the caratage often turns out to be less than the declared caratage, an appropriately lower carat gold price would apply.

In addition, there would be a further reduction: around 10 - 20% if the solder is non-cadmium, and around 8 - 10% if the solder is cadmium (or high caratage).

Supplying old jewellery for refashioning into new jewellery

Under this system, often used in suburban areas, small towns and villages, gold in any form (but usually accumulated old jewellery) is given to a local retailer or fabricator so that it can be refashioned into new items.

The customer can hand over sufficient gold to cover all fabrication costs (i.e. labour and wastage charges). Or he can pay for the fabrication costs in rupees.

The prevailing carat gold price is irrelevant to the transaction. The actual caratage of the old and new jewellery is not necessarily an issue.

In rural areas in particular, this can be the cheapest way in rupee terms to obtain new gold jewellery provided the goldsmith does not reduce the caratage or retain any recoverable wastage. Customers sometimes watch him as he fabricates the new jewellery.

Selling back old jewellery for cash

If the old jewellery had been bought from the **same** retailer.

Using the carat gold price, the retailer first calculates its value at the caratage at which it had originally been sold, and then reduces it according to his own declared formula. For example:

Around 5% if the solder is cadmium (or high caratage).

Around 10% if the solder is non-cadmium.

If the old jewellery had been bought from another retailer.

Most retailers tend not to buy back old jewellery from customers with whom they have not dealt in the past. In the event that they do, the price would tend to be low, often 10% or more below the standard bullion price.

Studded gold jewellery

All retailers observe that studded jewellery is more profitable than plain gold jewellery.

While gross profitability (after fabrication costs) on plain gold jewellery is reported at around 10%, diamond and other studded jewellery can yield 15 - 20% and often much more.

Retailers normally advise customers of the breakdown in the cost of diamond (and other precious and semi-precious) jewellery: weight of gold, cost of diamonds, labour charge and taxes.

Retailers will exchange old for new diamond jewellery. The customer would usually receive the prevailing break-up value, less the labour charge. However, retailers will normally *only* buy back diamond jewellery if it had originally been bought from them. The price would be based on the prevailing break-up value, less 15 - 20%.

Staff costs

In metropolitan cities, wages for counter staff (often 20 or more in large showrooms) are reported to range from less than Rs 5,000 (US\$ 100) per month up to Rs 15,000 (US\$ 300).

GOLD REFINING

ORGANISED REFINERS

Although organised refiners are few, the table below records the published charges levied by an organised refiner. The refining (to 995 purity) and gold loss charges reduce on a graduated scale according to weight.

Assumptions:

Gold price US\$ 300

Exchange rate Rs 48 per US dollar

Scrap purity K20

Melting and refining gold jewellery on a gross weight basis	Rupees	Approximate US dollars
Under 4 kg	Rs 40 per 10 g	US\$ 2.59 per oz
10 kg or more	Rs 6 per 10 g	US\$ 0.39 per oz
Gold assaying		
Dip muster sample	Rs 200	US\$ 4.17
Cut sample	Rs 100	US\$ 2.08
Urgent assay	Rs 400	US\$ 8.33
Duplicate certificate	Rs 50	US\$ 1.04
Gold loss on refining gold jewellery on a fine weight basis		
Under 5 kg. At 7 g per 1,000 g 10 kg or more.	Rs 26.98 per 10 g refined Nil	US\$ 1.75 per oz refined Nil

The table below indicates the approximate cost of refining old gold jewellery into an assayed, certified and stamped slab of gold ready for recycling.

Gross weight	Rupees	Approximate US dollars
Under 4 kg	Rs 64.17 per 10 g	US\$ 4.16 per oz
10 kg or more	Rs 8.50 per 10 g	US\$ 0.55 per oz

SMALL REFINERS

The bulk of the refining of old gold jewellery is undertaken by thousands of small refiners in cities, towns and villages. Both large and small retailers and fabricators use them as they are so accessible, and their charges are significantly less when refining small quantities.

Some retailers and fabricators also undertake their own refining in-house. Some recycle old gold jewellery (after assay) without refining it.

Using the same gold price, exchange rate and scrap purity assumptions, the table below indicates the charge levied by a reputable small refiner in a major city. It is indicative only. Some small refiners can charge as low as Rs 10 per 10 g when they retain the silver content.

Category	Rupees	Approximate US dollars
Melting and refining	Rs 15 per 10 g	US\$ 0.97 per oz
Gold loss at 1.5 g per 1000 g	Rs 6.36 per 10 g fine	US\$ 0.41 per oz fine
Assaying	Rs 1.50 per 10 g	US\$ 0.10 per oz
Total cost	Rs 22.29 per 10 g	US\$ 1.44 per oz

Although small refiners are much less expensive for refining small quantities, top end retailers will be obliged increasingly to use organised refiners to ensure that the purity of recycled jewellery meets hallmarking standards.

MINTED COINS AND BARS

ORGANISED FABRICATORS

Although charges vary among fabricators, and bulk orders are subject to negotiation, the following records the published wholesale charges levied by an organised fabricator in a major city. Its minimum order is $1\ \mathrm{kg}$.

Assumptions:

Gold price US\$ 300

Exchange rate US\$ 1.00 = Rs 48

For standard minted coins and bars

Using standard in-house designs, weights and dimensions.

Weight - at 995 purity	Fabrication charge per item Rupees Approximate US dollars	
500 g	Rs 225	US\$ 4.69
200 g	Rs 100	US\$ 2.08
100 g	Rs 60	US\$ 1.25
50 g	Rs 50	US\$ 1.04
20 g	Rs 30	US\$ 0.62
10 g	Rs 25	US\$ 0.52
5 g ¯	Rs 23	US\$ 0.48
2 g	Rs 20	US\$ 0.42
1 g	Rs 15	US\$ 0.31

For tailor-made minted coins and bars

Using standard in-house weights and dimensions, 995 purity and applying requested designs.

Standard weights	Fabrication charge per item Rupees Approximate US dollars	
10 g 5 g 2.5 g 1.25 g	Rs 50 Rs 40 Rs 30 Rs 20	US\$ 1.04 US\$ 0.83 US\$ 0.62 US\$ 0.42
Guineas 8 g 4 g	Rs 40 Rs 30	US\$ 0.83 US\$ 0.62

Supplementary charges

Assumes that the customer provides acceptable bars (e.g. TT bars) for conversion into minted coins or bars.

Cost category	Additional charges *		
	Rupees Approximate US dollar		
Melting	Rs 4 per 10 g	US\$ 0.25 per oz	
Gold loss: 5 g coins and less: 1.5 g per 1 kg 10 g coins: 0.7 g per 1 kg	Rs 6.94 per 10 g Rs 3.24 per 10 g	US\$ 0.45 per oz US\$ 0.21 per oz	

^{*} Excludes the cost of new designs and dies, if required.

SMALL FABRICATORS

The many small fabricators of coins normally charge less than organised fabricators, especially for small quantities.

The table below records the fabrication charge for 10 g coins by a small entity in a major city.

Quantity - at 995 purity	Fabrication charge per item	
	Rupees	Approximate US dollars
For 10 coins	Rs 20 each	US\$ 0.42
For 100 coins	Rs 8 – 10 each	US\$ 0.17 - 0.21

RETAILERS

Coins are normally retailed by jewellery retailers. The mark-up is generally low, usually Rs 50 (US\$ 1.00) or less above the carat gold price for coins 10 g and less. Some retailers sell coins as a "service" without a mark-up.

CHAPTER 9

GOLD MINING AND EXPLORATION

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Secondary gold producers

Gold mining potential

Indian Bureau of Mines

Appendices

Gold production by State and District Gold production in India 1970-2001



Hutti Gold Mines is India's largest gold mining company.

Its mines are located in Karnataka (south India). Annual gold output is around 2 tonnes.

GOLD MINING AND EXPLORATION

For 36 years (1957-1993), the mining of gold was nationalised under the Mines & Minerals (Regulation & Development) Act 1957.

In line with the Indian government's policy of economic deregulation initiated in 1991, a new National Mineral Policy was announced in March 1993. Alongside 12 other minerals, the mining of gold was liberalised to include private initiatives.

The new policy is designed to encourage the development and exploitation of the country's mineral resources, focusing on those minerals, such as gold, where there is a disparity between domestic supply and demand.

Although current annual gold mine output is only around 2 tonnes, there are many gold exploration projects. More than 20 million tonnes of proven, probable and possible gold ore reserves have now been identified.

PRIMARY GOLD PRODUCERS

The original Act, renamed the Mines and Minerals (Development and Regulation) Act 1957, was amended in January 1994 and December 1999.

Restrictions on foreign equity participation have been removed. More powers have been given to State governments to grant, renew and transfer mineral concessions. Area restrictions have also been liberalised to apply to a single State, not the country as a whole. For example, in each State, a Reconnaissance Permit can now cover 10,000 square kilometres, a Prospecting Licence 25 square kilometres, and a Mining Lease 10 square kilometres.

Two companies mine primary gold in India. The mines are located in two States in the south: Karnataka and Andhra Pradesh.

The Hutti Gold Mines Co Ltd (HGML)

Established in 1947, but known as Hutti Gold Mines since 1956. An undertaking of the Karnataka State Government under the administrative control of the Department of Commerce and Industry.

Mines: Located in Karnataka. Hutti (in the Raichur district) and Mangalur (in the Gulburga district).

Annual gold output is around 2 tonnes.

M/s Bharat Gold Mines Ltd (BGML)

Incorporated in 1972. A Public Sector Undertaking under the administrative control of the Ministry of Coal and Mines.

Mines: Located in the Kolar Gold Field in Karnataka, and in the Anantapur and Chittoor districts of Andhra Pradesh.

Current annual gold output is less than 100 kg, following the closure of several mines in the Kolar Gold Field in 2000.

SECONDARY GOLD PRODUCERS

Two other companies produce gold as a by-product from copper slimes and concentrates. The smelters are located in *Bihar* in the east and *Gujarat* in the west.

M/s Hindustan Copper Ltd (HCL)

Incorporated in 1967. A Public Sector Undertaking under the administrative control of the Ministry of Coal and Mines.

Smelter: Located at Ghatsala in the Singhbhum East district of Bihar.

Annual gold output, as a by-product of copper slimes, has ranged between 400 - 700 kg.

Indo-Gulf Corporation Ltd (Birla Copper)

Part of the Birla Group of companies. The smelter, commissioned in May 1998, is located at Dehej in the Bharuch district of *Gujarat*.

Annual gold output, as a by-product of imported copper concentrates, was 5.1 tonnes in its first year of production (2000-01).



GOLD MINING AND EXPLORATION

GOLD PRODUCTION BY STATE AND DISTRICT: 1998-99 - 2000-01

Gold mines in Karnataka produce 97% of India's primary gold mine output.

State	District	Kilogrammes		
		1998 - 1999	1999 - 2000	2000 - 2001
Primary gold				
Andhra Pradesh	Anantapur	43	5	#
	Chittoor	182	179	28
Karnataka	Kolar	306	239	36
	Raichur	1,427	1,546	1,784
	Tumkur ***	220	184	174
	Sub-total	2,178	2,153	2,022
Secondary gold				
Bihar *	Singhbhum East	505	433	435
Gujarat **	Bharuch	-	-	5,097
-	Sub-total	505	433	5,532
Total		2,683	2,586	7,554

Source: Indian Bureau of Mines. ** Gold is recovered as a by-product of copper slimes. ** Gold is recovered as a by-product during the refining of imported copper. *** Includes gold recovered from ore obtained incidental to prospecting and exploratory operations. # Temporarily suspended due to lack of electricity.

GOLD MINING POTENTIAL

According to the Indian Bureau of Mines, 9 States have been identified as offering gold mining potential.

Gold has been mined in India, albeit in small quantities, for more than 2,000 years.

State	District
NORTH Jammu & Kashmir Rajasthan	Jammu Banswara, Jodhpur, Sirohi
WEST	-
EAST Bihar Chhattisgarh Jharkhand	Monghir, West Champaran Bastar, Raigarh, Raipur Ranchi, Singhbhum
SOUTH Andhra Pradesh Karnataka Kerala Tamil Nadu	Ananatpur, Chittoor, Kurnool, Nellore Dharwar, Gulbarga, Hassan, Kolar, Raichur, Shimoga, Tumkur Kozhikode, Malapuram, Palakkad, Wynad Dharampur

Source: Indian Bureau of Mines.

Government and State agencies, active in gold exploration, include the following:

Geological Survey of India (GSI)

Headquarters: Kolkata. A department within the Ministry of Coal and Mines. Established in 1851.

Mineral Exploration Corporation Ltd (MEC)

Headquarters: Nagpur. A Public Sector Undertaking under the administrative control of the Ministry of Coal and Mines. Incorporated in 1972.

State Directorates of Geology and Mining

Notably, in Rajasthan (north), Madhya Pradesh (west), West Bengal (east) and Andhra Pradesh, Kerala and Karnataka (south).

Many *domestic* and *foreign companies*, with registered offices in India, have been granted Reconnaissance Permits and Prospecting Licences that refer to gold. Notably, the following:

New Delhi. AMIL Mining India Pvt Ltd, CRA Exploration (India) Pvt Ltd, Pasminco Exploration Pvt Ltd, Phelps Dodge Exploration India Pvt Ltd, WSIL, Mineral Sands India Pvt Ltd.

Mumbai. De Beers India Prospecting Pvt Ltd, Metmin Finance & Holdings Pvt Ltd, Adamas India Pvt Ltd.

Thane. ACC-RIO TINTO Exploration Ltd.

Bangalore. Geomysore Services (India) Pvt Ltd.

GOLD MINING AND EXPLORATION

GOLD PRODUCTION 1970 - 2001

Year	Tonnes	Year	Tonnes
1970	3.241	1986	1.931
1971	3.656	1987	1.864
1972	3.290	1988	1.944
1973	3.278	1989	1.827
1974	3.145	1990-91	2.077
1975	2.825	1991-92	2.041
1976	3.152	1992-93	1.850
1977	3.014	1993-94	2.075
1978	2.774	1994-95	2.373
1979	2.637	1995-96	2.036
1980	2.452	1996-97	2.710
1981	2.495	1997-98	2.636
1982	2.244	1998-99	2.683
1983	2.154	1999-00	2.586
1984	1.989	2000-01	7.554
1985	1.853	2001-02	9.000 *

Source: Indian Bureau of Mines. * Estimated.

India's domestic gold output has grown from less than 2.6 tonnes to 9 tonnes over the past 3 years, due to Birla Copper (Gujarat) producing gold as a by-product of imported copper concentrates.

INDIAN BUREAU OF MINES

The Indian Bureau of Mines, established in 1948, falls under the Department of Mines within the Ministry of Coal and Mines.

Its national headquarters in Nagpur (Maharashtra) has 6 technical divisions: Mines Control and Conservation of Minerals, Mineral Economics, Ore Dressing, Technical Consultancy, Mining and Mineral Statistics, Planning and Co-ordination. It has regional and sub-regional offices, as well as laboratories and pilot plants, located throughout the country. Employees: 1,600.

Its functions include approving mining plans and schemes, undertaking geological studies, conducting feasibility studies, preparing mineral maps, updating the National Mineral Inventory, disseminating information from its data base, evolving new technologies, and providing consultancy services. It also advises the Indian and State governments on issues related to mineral policy, mineral legislation, trade policy, royalty, taxation and other matters.

The Bureau publishes around 40 books, market survey reports, monographs, bulletins and periodicals each year. Publications, relevant to the gold industry, include the following:

Indian Minerals Yearbook (Annual) Bulletin of Mineral Information Monthly Statistics of Mineral Production



The headquarters of the Indian Bureau of Mines is in Nagpur (Maharashtra).

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Photograph: B.C. Sen

Gold imports for the domestic market grew from less than 200 tonnes in 1990 to more than 670 tonnes in 2001.

Movements in net supply and demand since 1990 fall into 2 broad periods.

1990 - 1997: High growth over 8 years. From 178 tonnes to 645 tonnes

1998 - 2001: Largely static market over 4 years. Ranging between 650 - 690 tonnes.

To understand unexpected movements in imports, it is necessary to take into account the large quantity of old jewellery, coins and bars recycled. It is substantial and tends to increase when the gold price spikes. A small increase in recycling at this time can reduce imports substantially.

In 2001, when 672 tonnes were imported for the domestic market, an indicative estimate is that *gross* demand was about 1,053 tonnes.

The gross statistic puts high tonnages of industrial fabrication (4%), coin fabrication (3%) and net bar hoarding (2%) into perspective. Jewellery accounts for around 90% of gross demand.

NET SUPPLY

1990 - 1997 (8 years)

Imports for the domestic market grew rapidly from 176 tonnes to 642 tonnes in 1997.

Official imports were permitted for the first time in decades when the Non-Resident Indian (NRI) scheme was launched in March 1992. It enabled NRI's (and organised NRI syndicates) to import 5 kg of gold every 6 months.

Over the period, official imports accounted for 63% of total imports. NRI's accounted for 56%. The Special Import Licence (SIL) scheme that included gold from April 1994 accounted for 7%. Unofficial imports were responsible for 37%.

1998 - 2001 (4 years)

Imports for the domestic market remained largely static, ranging between 640 – 690 tonnes.

Since 1998, authorised banks and Public Sector Undertakings have dominated official imports. Their first imports under the OGL scheme occurred in November 1997. Banks and PSU's now account for more than 99%.

Over the period, official imports accounted for approximately 87% of total imports.

Gold mine output and gold as a by-product

Primary gold mining yields around 2 tonnes annually. Total gold output increased to 9 tonnes in 2001, due to Birla Copper starting to process imported copper concentrates in 2000.

Imports for iewellery exporters

Duty-free gold imports for re-export as jewellery (mainly studded with diamonds and other stones) have grown substantially from 11 tonnes in 1990 to 54 tonnes in 2001 - 2002. These imports are not included in the analysis of the domestic market.

GROSS SUPPLY

Annual gross supply is much influenced by the amount of old jewellery, coins and bars recycled.

Although the high level of recycling is not under-estimated by Indian analysts, it has not been widely publicised outside India.

There are many forms of recycling as recorded in the chapter on "Gold Jewellery".

The Indian gold market is so complex, and so variable by State, by urban and rural area, and by retailer, that any national estimate of recycling can only be *indicative*. To try to obtain precise estimates is just not possible.

What is important is a broad understanding of the approximate size, nature and annual change in recycling, and how it impacts on *gross* and *net* demand.

Recycling of old jewellery, coins and bars

Although there is great variation by retailer, by rural/urban area and by State, anecdotal evidence suggests (conservatively) that 40% of new jewellery sold *nationally* in 2001 was fabricated from old jewellery exchanged for new jewellery or bought back for cash, or from old coins and bars. This suggests that for every 1,200 kg of gold imported, an additional 800 kg of old gold was recycled.

Large retailers in several States report an increase in recycling, mainly for exchange purposes, over the past 3 - 4 years. Compared to 40% in 2001, the national average may have been around 35% in 1998.

In the first 6 months of 2002, due to the spurt in the gold price, recycling nationally is reported to be have exceeded 50%.



Coins and TT bars

Anecdotal evidence suggests that more than 50% of annual coin fabrication is converted into jewellery over time.

It also suggests (at this time) that most TT bars bought for personal hoarding would enter the jewellery market (i.e. sold for cash), or would be converted into jewellery, over time.

Many coin and TT bar purchases appear to act as deferred purchases of gold jewellery.

Consolidated gross supply

When recycling is taken fully into account, gross annual supply is broadly estimated at 1,053 tonnes in 2001.

Gross supply	2001	2000
New gold	681	680
Recycled gold	372	347
Total	1,053	1,027

Source: See appendix "Indicative gross fabrication and demand".

To repeat, an estimate of the amount of gold recycled can only be indicative. The important point is that the amount is substantial, and sensitive to movements in the gold price.

NET DEMAND

In a gold market that comprises hundreds of thousands of family retailers and fabricators, the breakdown of demand is obliged to rely on an interpretation of anecdotal evidence. There are no firm statistics.

In this section, net gold jewellery demand (i.e. excludes fabrication from recycled gold) and net bar hoarding are combined for 3 reasons. Both have an investment dimension. Hoarded bars tend to enter the jewellery market over time. Among analysts there is also not yet a broad consensus about the split. This report does suggest a tentative split, based on available anecdotal evidence. Its net bar hoarding estimate is low.

1990 - 1997 (8 years)

Net demand for gold in all categories rose rapidly over the period from 178 tonnes in 1990 to 645 tonnes in 1997.

Industrial fabrication increased from less than 2 tonnes to an indicative 18 tonnes, due mainly to an increase in the use of gold for Zari crafts.

Coin fabrication grew from zero, as fabrication was banned under the Gold (Control) Act, to an indicative 19 tonnes.

Net jewellery fabrication & bar hoarding increased from 176 tonnes to 609 tonnes. The reason for its rapid growth was the outcome of several factors:

- Restrictions on gold ownership during the Gold (Control) Act had generated pent-up demand.
- Jewellery became more accessible when the number of retailers increased from 16,000 to more than 200,000.
- Gold could be officially imported by NRI's.
- Population increased by 14%.
- Rural, and especially urban, wealth increased. Industrial production grew by 52%. Agricultural output was high in 1992
 94 and again in 1996. GDP grew by 37% in real terms.
- Rupee gold price rose slowly and steadily each year, as it had done for decades, until 1996.
- In 1997, when the annual average price fell for the first time in decades (by 12%), gold was viewed as inexpensive in a booming economy.

1998 - 2001 (4 years)

Net demand in total was largely static over this period, ranging between 650 - 690 tonnes.

Industrial fabrication increased from 18 to an indicative 43 tonnes, due mainly to an increase in demand for gold plating purposes.

Coin fabrication grew from 23 to an indicative 35 tonnes, influenced by increased corporate demand for coins as gifts and promotional prizes, and an increase in personal purchases.

Net jewellery fabrication & bar hoarding appears to have declined. In 2001 (603 tonnes) it appears to have been 7% less than in 1998 (650 tonnes).

Why was net demand largely static when there were so many positive factors such as the following?

- Population grew by 6%.
- GDP increased by 26%.
- Gold was less expensive the price, static in nominal terms, fell in real terms.

The trade attribute static net demand to some inhibiting factors. For example, expenditure on lifestyle products increased at the expense of gold jewellery. More old gold jewellery was recycled. Among large retailers in major cities, the sale of diamond jewellery increased. The static rupee gold price weakened gold's private investment dimension. Importantly, the rural economy was relatively depressed.

GROSS FABRICATION AND DEMAND

Gold jewellery

When exchange and buy-backs for cash are taken into account, the gross fabrication of gold jewellery increases dramatically.

In 2001, when net fabrication was 583 tonnes, gross fabrication appears to have been around 955 tonnes.

Although the gross estimate can only be indicative, it can be recognised that a small decrease in gross fabrication, alongside a small increase in exchange and buy-backs, can result in a large decrease in net fabrication. And vice versa.

Example

Assume that gross fabrication over a period of 3 months is normally 300 tonnes, and exchange/buy-backs feed 40% so that net fabrication is 180 tonnes.

If gross fabrication falls by **10%** (30 tonnes) to 270 tonnes, and exchange/buy-backs feed 50% (135 tonnes), net fabrication would fall by **25%** to 135 tonnes.

This scenario is relevant to the first quarter of 2002. When the rupee gold price increased unexpectedly by 10 - 15%, net fabrication (and imports) fell by more than 50%, while gross fabrication (and demand) appeared to fall by only around 15 - 20%.

Total domestic market

Gross demand for gold in 2001 is estimated at 1,053 tonnes: jewellery (91%), industrial (4%), coins (3%) and net bar hoarding (2%).

Two important points can be made.

- Jewellery retailers tend to refer to quantities of gold in **carat** (not **fine**) gold terms. In carat terms, for example, the market would be around 1,200 tonnes assuming an average actual caratage of K20.
- The market does not make structural sense, and the comments of retailers also do not make sense, unless the extent of gross demand is taken into account.

The indicative gross demand estimate of 1,053 tonnes explains why there are approximately 300,000 jewellery retailers, 2 million active goldsmiths and 10,000 refiners.

It puts high tonnages of industrial fabrication (4%), coin fabrication (3%) and net bar hoarding (2%) into perspective. Jewellery accounts for around 90% of the gross market.

It also makes sense of trade estimates that the total market is well over 1,000 tonnes in carat terms, in some cases estimated at 2,000 tonnes.

It also explains why net demand (and imports) fell so much more than gross demand in the first six months of 2002.

Total imports

This section has focused on supply and demand within the domestic market. In the appendix, "Total gold imports", reference is made to gold imported for re-export as jewellery.

When these imports are combined with those for the domestic market, total annual imports ranged between 700 - 727 tonnes over the 4-year period 1998 - 2001.

When indicative gold jewellery fabrication in 2001 for the domestic market (955 tonnes) is combined with that for export (54 tonnes), India fabricated more than 1,000 tonnes of gold jewellery.



NET NEW GOLD SUPPLY

For the domestic market 1990 - 2001 Excludes the recycling of old gold Tonnes

Year	NRI	Officia SIL	l imports OGL	Sub- Total	Other Unofficial	imports Seizures	Total imports for domestic use	Mining and concentrates	Grand total for domestic use	Mumbai gold price per 10 g (Rs)
1990	-	-	-	-	170	6.0	176	2.1	178	3,399
1991	-	-	-	-	150	5.0	155	2.0	157	4,044
1992	93	-	-	93	166	3.0	262	1.9	264	4,255
1993	116	-	-	116	122	1.5	239	2.1	241	4,384
1994	158	19	-	177	118	1.1	296	2.4	298	4,652
1995	228	21	-	249	134	1.1	384	2.0	386	4,798
1996	256	42	-	298	109	1.1	408	2.7	411	5,191
1997	398	68	62	528	113	1.3	642	2.6	645	4,556
1998	93	2	533	628	60	0.5	688	2.5	691	4,182
1999	4	2	554	560	90	0.9	651	2.6	654	4,333
2000	4	2	526	532	140	0.7	673	7.6	680	4,520
2001	2	1	599	602	70	0.5	672	9.0	681	4,462
Total	1,352	157	2,274	3,783	1,442	22.7	5,246	39.5	5,286	-

Table source: Grendon International Research

Sources. NRI, SIL, OGL, Seizures: Madhusudan Daga and other sources. Mining: Bureau of Mines, financial year (April-March) used for annual totals. Unofficial imports: estimates by Madhusudan Daga.

1990 – 1997: High growth over 8 years. From 178 tonnes to 645 tonnes.

1998 – 2001: Largely static market over 4 years. Ranging between 650 – 690 tonnes.



INDICATIVE USAGE OF NET NEW GOLD SUPPLY

For the domestic market 1990 - 2001 Excludes the recycling of old gold Tonnes

Year	Decorative	Industrial f Medical	abrication Electronic	Total	Coin fabrication	Jewellery & bar hoarding (net usage)	Total
1990	1.1	0.2	0.2	1.5	-	176	178
1991	3.5	0.2	0.5	4.2	4	149	157
1992	5.0	0.3	0.5	5.8	7	251	264
1993	16.7	1.0	1.0	18.7	10	212	241
1994	16.3	1.0	1.0	18.3	13	267	298
1995	14.0	2.0	1.0	17.0	16	253	386
1996	16.0	2.0	1.0	19.0	16	376	411
1997	14.5	2.0	1.0	17.5	19	609	645
1998	15.0	2.0	1.2	18.2	23	650	691
1999	24.0	3.0	1.2	28.2	27	599	654
2000	27.0	4.0	1.0	32.0	31	617	680
2001	37.0	5.0	1.0	43.0	35	603	681
Total	190	23	11	223	201	4,862	5,286

Table source: Grendon International Research

Sources. Grand total: uses figures in "Net New Gold Supply" table. Industrial fabrication (decorative, medical and electronic): estimates by Madhusudan Daga. Fabrication of minted coins/bars: GIR in consultation with fabricators, and Madhusudan Daga who believes fabrication in recent years may have been higher. Jewellery fabrication (net) & bar hoarding (net): a residual figure.

Between 1990 and 2001:

- Industrial fabrication has grown from less than 2 tonnes to an indicative 43 tonnes.
- **Coin** fabrication has grown from zero to an indicative 35 tonnes.
- Net gold usage for **jewellery & bar hoarding** grew to 650 tonnes in 1998, but has since fallen to about 600 tonnes.

Net gold jewellery demand & net bar hoarding are combined for 3 reasons.

Both have an investment dimension. Many hoarded bars enter the jewellery market over time. Among analysts there is not yet a broad consensus about the split.



INDICATIVE GROSS JEWELLERY FABRICATION

For the domestic market 2001 and 2000 Includes the recycling of old gold Tonnes

Category	2001	2000
Jewellery & bar hoarding		
(net usage)	603	617
Less		
Increase in inventories	25	(25)
Increase in net bar hoarding*	20	(14)
Net sales	558	578
Add recycling		
Exchange	279	254
Buy-backs for cash	65	65
Coins and bars	28	28
Sub-total	372	347
Gross sales	930	925
Add back		
Increase in jewellery inventories	25	25
Gross fabrication	955	950

Table source: Grendon International Research

Basis: 40% increase in inventories since 1997. Net bar hoarding: 3% (2001) and 2% (2000) of imports. Recycling as a proportion of nationwide sales, including exchange, buy-backs for cash and dishoarded bars and coins: 40% (2001) and 37.5% (2000). This table does not include recycling through non-jewellery retailers. However, anecdotal evidence suggests that (outside Mumbai) most recycling occurs through jewellery retailers. * Some analysts consider the amount of net bar hoarding to be higher.

An indicative estimate of gross jewellery fabrication for 2001 is 955 tonnes. It includes 372 tonnes of recycled gold.

The table highlights the extent to which jewellery fabrication relies on the recycling of old jewellery, coins and bars.



INDICATIVE GROSS FABRICATION AND DEMAND

For the domestic market in 2001 and 2000 Includes the recycling of old gold Tonnes

Fabrication	20	01	2000		
	Tonnes	% Split	Tonnes	% Split	
Industrial	43	4	32	3	
Jewellery					
Gross sales	930	88	925	90	
Increase in inventories	<i>25</i>	2	25	2	
Sub-total	955	91*	950	93*	
Coins	35	3	31	3	
Gross fabrication	1,033	98	1,013	99	
Net bar hoarding	20	2	14	< 2	
Gross demand	1,053	100	1,027	100	

Table source: Grendon International Research

Sources. Derived from previous tables. * Totals do not add up due to rounding.

The market does not make structural sense, and the comments of the trade do not make sense, unless the extent of gross fabrication is taken into account.

The indicative estimate of 1,053 tonnes puts the tonnages of industrial fabrication (4%), coin fabrication (3%) and net bar hoarding (2%) into perspective. Jewellery accounts for around 90% of the gross market.



TOTAL GOLD IMPORTS

Includes gold imported for jewellery exporters 1990 - 2001

Year	For domestic gold usage	For jewellery exporters	Grand Total
1990	176	11	187
1991	155	17	172
1992	262	18	280
1993	239	24	263
1994	296	25	321
1995	384	23	407
1996	408	29	437
1997	642	24	666
1998	688	35	723
1999	651	49	700
2000	673	54	727
2001	672	54	726
Total	5,246	363	5,609

Table source: Grendon International Research

Sources. Total for domestic usage: taken from table "Net new gold supply". For jewellery exporters: from various sources. 1990-1992: WGC. 1993-1997: derived from GJEPC financial year (April-March) rupee statistics. 1998-2001: uses GJEPC financial year kilogramme statistics.

Since 1990, gross imports (including imports for jewellery exporters) have increased from 187 tonnes to 726 tonnes.

The import of gold for re-export as jewellery has grown from 11 tonnes to 54 tonnes.



INDICATIVE ABOVE GROUND GOLD STOCKS

Based on estimated gold imports since 1831

Years	Category	Tonnes
1831 – 1931	Net imports	3,700
1832 – 1940	Net exports	(1,400)
	Stock at end of 1940	2,300
1941 – 1950	Net imports *	311
1951 – 1957	Unofficial imports	653
	Stock at end of 1957 **	3,264
1958 – 1963	Unofficial imports	520
1964 – 1967	Unofficial imports	720
1968 – 1973	Unofficial imports	750
1974 – 1978	Unofficial imports	210
1979	Unofficial imports	11
1980	Unofficial exports	(9)
	Stock at end of 1980	5,466
1981 – 1985	Unofficial imports	381
1986 – 1990	Unofficial imports	520
	Stock at end of 1989	6,367
1990 – 1994	Official imports and other sources	1,137
1995 – 1999	Official imports and other sources	2,787
2000 – 2001	Official imports and other sources	1,362
	Stock at end of 2001	11,653
	Including official gold reserves of 358 tonnes at end 2001	12,011

Table source: Grendon International Research

Sources: *1831 – 1957: ** Reserve Bank of India Bulletin, April 1958. 1958-1980: Estimates by Mr Shantilal Sonawala, former President of Bombay Bullion Association. 1981-1989: Gold Fields Mineral Services Ltd (GFMS).

Stocks at the end of 2001 are recorded at approximately 12,000 tonnes. 45% of the stock (5,300 tonnes) has been acquired since 1990.

The 181 million families in India hold an average of 64 grammes of fine gold (around 85 grammes of carat gold). As 26% of the population is below the poverty line, the top 50% would obviously hold substantially more than the average.

At least 90% appears to be held as gold jewellery. Anecdotal evidence (at this time) suggests that around 5% may be held in the form of coins and bars. The net accumulation of coins and bars is considered low because much has been converted into jewellery. In addition, it was illegal to fabricate coins or own bars during the Gold (Control) Act period.

Some Indian analysts believe that historical estimates of the amount of gold imported into India may be understated.



SUPPLEMENTARY SECTIONS

CONTENTS

World Gold Council

Communication

Bibliography

About Virtual Metals Research & Consulting Ltd

About Grendon International Research Pty Ltd



The World Gold Council has been supporting the Indian gold market since 1993.

WORLD GOLD COUNCIL

The World Gold Council (WGC) is an international organisation formed and funded by leading gold mining companies from around the world to increase the demand for gold.

Established in 1987, the WGC has offices worldwide. Its international headquarters is in London.

WGC India has been active since 1993. Its headquarters is in Mumbai.

WGC India undertakes advertising, promotional and PR programmes, as well as market research. It provides technical support to major fabricators. It also liaises with government institutions, including the Reserve Bank of India, Ministry of Finance and Bureau of Indian Standards.

Its market-related programmes to support the gold jewellery industry include the following:

TV and Press Advertising Programmes

Undertakes generic campaigns, as well as partly WGC-funded co-operative advertising campaigns with trade partners. Encourages retailers to associate their showrooms with all promotional campaigns undertaken by the WGC.

PR Programmes

Undertakes extensive trade and consumer PR programmes. Encourages, for example, media coverage of gold demand trends, gold jewellery fashion trends and the investment-related advantages of owning gold and gold jewellery.

Market Research

Undertakes trade and consumer research to assist in the formulation of appropriate promotional strategies.

Collection of

Launched in 2002 to stimulate gold jewellery purchases by the younger generation. More than 125 leading retailers now stock the Collection's wide range of innovative lightweight items, 25 g and less. All items are hallmarked.

Swarnanjali Jewellery Design Contest

Encourages designers to develop innovative designs under 3 categories: bridal, formal and casual. The top 10 designs in each category are fabricated for national display in about 15 cities. Initiated in 1997, more than 15,000 designers have entered the contests.

Hallmarking

Encourages leading retailers to hallmark their jewellery as part of a long-term programme. The Bureau of Indian Standards (BIS) launched its national programme in 2000.

Gold Clubs

Encourages leading retailers, fabricators and wholesalers in major centres to establish Gold Clubs in order to discuss important trade issues. Established in Mumbai and Chennai.

Shopping Festivals

Encourages groups of retailers to stage a "festival", usually for a period of one month. WGC sometimes subsidises advertising and promotion. The first festival was staged in Coimbatore in 1998. Festivals have also taken place in Mumbai, New Delhi and Pondicherry.

Local Festivals

Encourages groups of retailers to create a jewellery collection for specific local festivals, such as Diwali, Pongal, Durga Pooja and Onam in the appropriate region. WGC sometimes subsidises advertising and promotion. The first festivals were staged in 1997.

Gold Exhibitions

Encourages groups of retailers, usually 15 - 20 from inside and outside the State, to display and sell their jewellery at an urban venue. WGC sometimes subsidises advertising and promotion. Exhibitions have been staged since 1997.

Up-country Franchise Initiatives

Encourages major urban retailers to franchise their brand names and jewellery to less sophisticated retailers in smaller towns. Initiated in the south in 2001.

Technical Education

Technical workshops and seminars have been held annually in 6 - 7 fabrication centres since 1996. Designed for domestic fabricators and goldsmiths, exporters and students.

Publications

Available to leading trade entities.

Gold Demand Trends. Statistical review of the international gold market. Quarterly. Gold. Magazine with articles relating to the gold market worldwide. Quarterly. Gold Technology. Magazine with technical articles for fabricators. 3 - 4 times each year.



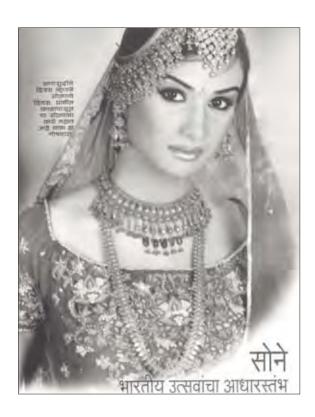
WORLD GOLD COUNCIL

GENERIC ADVERTISING



A WGC advertisement supporting the generic promotion of gold jewellery in 2002.

TRADITIONAL GOLD JEWELLERY





The WGC supports the promotion of traditional gold jewellery not only in its festival programmes but also in partnered programmes with leading retailers.

SHOPPING FESTIVALS





The WGC works closely with leading retailers to stage gold jewellery "Shopping Festivals" in major cities. In 2002, the WGC supported festivals in New Delhi, Mumbai, Tamil Nadu and Kerala.

LOCAL FESTIVALS





The WGC encourages the promotion of gold jewellery at the time of religious, harvest and other local festivals. In 2002, in partnership with leading retailers, the WGC organised advertising and advertorial programmes covering 8 important festivals.

GOLD JEWELLERY EXHIBITIONS





The WGC encourages the staging of gold jewellery exhibitions for consumers.

The Jewels of India exhibition (top) in Bangalore and the Sonar Sansar Gold World exhibition (below) in Kolkata, for example, are organised each year by 50 – 60 leading retailers from around India with the support of the WGC.

YOUNGER GENERATION







WGC advertisements supporting the Collection g gold jewellery programme in 2002.

The programme, targeted at young women, offers more than 125 participating retailers access to 1,200 items of gold jewellery that are unique, stylish, lightweight and in K22 gold. The collection includes pendants, earrings, bracelets, rings, bangles and complete sets.

CATEGORIES

- Indian Government institutions
- · Bullion importers
- International gold dealers
- Shipping agents
- International gold refiners
- Refiners and coin fabricators
- Gold jewellery exporters
- National Institute of Jewellery Design
- Consumer jewellery publication
- Gold mining and exploration
- · Gold market consultants in India
- London Bullion Market Association
- World Gold Council

International telephone code for India: 91

INDIAN GOVERNMENT INSTITUTIONS

MINISTRY OF FINANCE

Department of Economic Affairs

Ministry of Finance, North Block, New Delhi 110 001.

Tel: (011) 301 5292 Fax: (011) 301 3355

Central Board of Customs & Excise

Ministry of Finance, Department of Revenue, North Block, New Delhi 110 001.

Tel: (011) 301 3908 Fax: (011) 301 5173

RESERVE BANK OF INDIA

Department of Banking Operations & Development

Reserve Bank of India, Central Office, Centre-1, World Trade Centre, Cuffe Parade, Mumbai 400 005.

Tel: (022) 2218 9131 Fax: (022) 2215 5954

email: <u>rbidoco@bom3.vsnl.net.in</u>

Exchange Control Department

Reserve Bank of India, Central Office, Forex Markets Division, Amar Building, Fort, Mumbai 400 001.

Tel: (022) 2261 7912 Fax: (022) 2261 1427

Department of External Investments & Operations

Reserve Bank of India, 22nd Floor, Central Office, Shahid Bhagat Singh Road, Mumbai 400 001.

Tel: (022) 2266 1602 Fax: (022) 2266 4667

MINISTRY OF COMMERCE AND INDUSTRY

Directorate General of Foreign Trade

Gate No. 2, Udyog Bhavan, 1 Rafi Marg, New Delhi 110 011.

Tel: (011) 301 6466 Fax: (011) 301 8613

Directorate General of Commercial Intelligence and Statistics

1 Council House Street, Kolkata 700 001.

Tel: (011) 301 3908 Fax: (011) 301 5173

MINISTRY OF CONSUMER AFFAIRS, FOOD AND DISTRIBUTION

Bureau of Indian Standards

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110 002.

Tel: (011) 323 0131 or 3375 Fax: (011) 323 9382 Email: <u>bis@vsnl.com</u>

MINISTRY OF COAL AND MINES

Indian Bureau of Mines

Indira Bhavan, Civil Lines, Nagpur 400 001.

Tel: (0712) 533 631 Fax: (0712) 533 041 Email: <u>ibmnag@mah.nic.in</u>

BULLION IMPORTERS

PUBLIC SECTOR BANKS

State Bank of India

Gold Banking Department

State Bank Bhavan, 11th Floor, Madame Cama Road, Mumbai 400 021.

Tel: (022) 2202 2426 - Ext 5423

Fax: (022) 2202 2768.

Website: www.sbi.com.in, or www.statebankofindia.com

Allahabad Bank

Gold Banking, Foreign Department

Head Office, 119 Park Street, 2nd Floor, Kolkata 700 016.

Tel: (033) 229 2310 or 229 7896

Fax: (033) 217 7363 Email: albfd@giascl01.net.in

Bank of India

Bullion Banking Department

Express Towers, 7th Floor, Nariman Point,

Mumbai 400 021.

Tel: (022) 2202 3020 - Ext 387

Fax: (022) 2202 2831

Email: <u>intidept@bom3.vsnl.net.in</u> Website: <u>www.bankofindia.com</u>

Corporation Bank

Precious Metals Cell

15 Mittal Chambers, Nariman Point, Mumbai 400 021.

Tel: (022) 2283 2429 or 2202 3304 Fax: (022) 2285 6202 or 2284 4798 Website: <u>www.corpbank.com</u>

Indian Overseas Bank

Precious Metals Section, Foreign Exchange Department Central Office, Chennai 600 002.

Tel: (044) 859 1566 Fax: (044) 859 1564 Email: iobfx@vsnl.com Website: www.iob.com

Punjab National Bank

Gold Cell, International Banking Division 7 Bhikhaiji Cama Place, New Delhi 110 066.

Tel: (011) 618 5981 or 617 6297

Fax: (011) 619 3315 Email: pnbibd@ndf.vsnl.net.in Website: www.pnbindia.com

FOREIGN BANKS

ABN-AMRO Bank

Precious Metals Sales Department 14 Veer Nariman Road, Mumbai 400 023.

Tel: (022) 2287 2957 Fax: (022) 2287 3143

Email: <u>in.preciousmetals@ap.abnamro.com</u> Website: <u>www.abnamroindia.com</u>

Standard Chartered Bank

Trade Products Department - Bullion 90 Mahatma Gandhi Road, Mumbai 400 001.

Tel: (022) 2269 0288 Fax: (022) 2270 1063

Website: www.standardchartered.com

The Bank of Nova Scotia

ScotiaMocatta

11 Maker Chambers VI, 220 Nariman Point, Mumbai 400 021.

Tel: (022) 2288 0994 or 2288 3411 - 3415

Fax: (022) 2288 1078 Website: <u>www.scotiabank.com</u>

The Hongkong and Shanghai Banking Corporation Limited - HSBC

Precious Metals Department

52/60 Mahatma Gandhi Road, Mumbai 400 001.

Tel: (022) 2268 1110 Fax: (022) 2269 2305 Website: www.hsbc.co.in

NEWLY-AUTHORISED BANKS*

Union Bank of India

239 Vidhan Bhavan Marg, Nariman Point, Mumbai 400 021.

Email: <u>union@bom3.vsnl.net.in</u>
Website: <u>www.unionbankofindia.com</u>

ICICI Bank Ltd

ICICI Bank Towers, Bandra-Kurla Complex,

Mumbai 400 051.

Tel: (022) 2653 1037 - 42 Fax: (022) 2653 1089 Website: www.icicibank.com

The HDFC Bank Ltd

Sandoz House, Dr Annie Besant Road, Worli, Mumbai 400 018

Tel: (022) 2496 1616 or 2498 8484 Fax: (022) 2496 5235 or 2495 1771 Website: www.hdfcbank.com

* Source: Indian Banking Year Book 2000

PUBLIC SECTOR UNDERTAKINGS

MMTC Limited

Gem & Jewellery Department

Core-1, Scope Complex, 7 Institutional Area,

Lodhi Road, New Delhi 110 003.

Tel: (011) 436 2200 or 1336 Fax: (011) 436 4103

Email: gold@mmtc.delhi.nic.in
Website: www.mmtclimited.com

PEC Ltd

Gold Division

'Hansalaya' 15, Barakhamba Road, New Delhi 110 001.

Tel: (011) 371 3932 Fax: (011) 331 5508 or 3804 Website: www.peclimited.com

The HHEC of India Ltd

Jewellery & Import Division

Jawahar Vyapar Bhawan Annexe, 1 Tolstoy Marg,

New Delhi 110 001.

Tel: (011) 370 1185 or 1086 Fax: (011) 370 1051

Email: hhecnd@ndc.vsnl.net.in
Website: www.hhecworld.com

The State Trading Corporation of India Ltd

Marketing Department

Jawahar Vyapar Bhawan, 1 Tolstoy Marg,

New Delhi 110 001.

Tel: (011) 331 3177 or 370 1100

Fax: (011) 332 4416 Website: <u>www.stcindia.com</u>

INTERNATIONAL GOLD DEALERS

LIAISON OFFICES IN INDIA

Mitsui & Co

Steel & Metals Section Mafatlal Centre, 7th Floor, 238 Nariman Point, Mumbai 400 021.

Tel: (022) 2204 8192 Fax: (022) 2204 6099

Societe Generale

Commodity Markets & Export Finance Maker Chambers IV, 13th Floor, Nariman Point, Mumbai 400 021.

Tel: (022) 5630 9530 or 5687 0909

Fax: (022) 5604 5459 Website: www.socegen.com

OFFICES OUTSIDE INDIA

Commerzbank Singapore

8 Shenton Way, #43-01 Temasek Tower, Singapore 068811.

Tel: 65-6372 1742 Fax: 65-6225 0414

Credit Suisse First Boston

Uetlibergstrasse 231, CH-8070, Zurich, Switzerland.

Tel: 41-1-333 6826 Fax: 41-1-333 5515

HSBC Bank USA London Branch

Thames Exchange, 10 Queen Street Place, London EC4R 1BQ, United Kingdom.

Tel: 44-20-7621 7801 Fax: 44-20-7621 7878

Mitsui & Co Precious Metals Inc, London Branch

Wren House, 15-23 Carter Lane, London EC4V 5HH,

United Kingdom.

Tel: 44-20-7246 8935 Fax: 44-20-7248 6050

MKS Finance SA 10 Promenade St Antoine, Geneva 3, CH-1211,

Switzerland.

Tel: 41-22-818 5200 Fax: 41-22-311 1800

N.M. Rothschild & Sons Limited

New Court, St Swithin's Lane, London EC4P 4DU,

United Kingdom.

Tel: 44-207-280 5000 Fax: 44-207-280 5095

Societe Generale

Tour Societe Generale, 17 Cours Valmy, 92987 Paris La Defense Cedex, France.

Tel: 33-1-4213 3963 Fax: 33-1-4213 4697

Standard Bank London Ltd

Cannon Bridge House, 25 Dowgate Hill, London EC4R 2SB, United Kingdom.

Tel: 44-207-283 4343 Fax: 44-207-815 4236

The Bank of Nova Scotia - ScotiaMocatta

80, Cheapside, London EC2V 6LD, United Kingdom.

Tel: 44-207-489 1200

UBS Warburg

Precious Metals Distribution, P O Box, CH-8098, Zurich,

Switzerland.

Tel: 41-1-239 4111 Fax: 41-1-239 4434



SHIPPING AGENTS

Brink's Arya India Private Limited

International House, 1st Marine Cross Road, Churchgate,

Mumbai 400 020.

Tel: (022) 5638 4900 Fax: (022) 5638 4901 Email: gs@brinksarya.com

Group 4 Securitas Cash Services (P) Ltd

Panchwati, 82-A, Sector-18, Gurgaon 122 016.

Tel: (0124) 639 8888 Fax: (0124) 639 7129

Securitrans India Pvt Ltd

A-27/1, Mahipalpur Extension, Mahipalpur,

New Delhi 110 037.

Tel: (011) 678 1823 or 1961 or 1983 or 3826

Fax: (011) 678 1807 or 1978 Email: finance@apsecuritas.com Website: www.apsecuritas.com

INTERNATIONAL GOLD REFINERS

Gold refiners that normally produce TT bars for international gold dealers:

Australian Gold Refineries

Horrie Miller Drive, Newburn, WA 6104, Australia.

Tel: 61-8-9479 9999 Fax: 61-8-9479 9909 Email: admin@agrjv.com.au

Harmony Gold Mining Company Ltd

Harmony Refinery, P.O. Box 1, Glen Harmony 9435,

South Africa.

Commercial enquiries: Tel: 27-11-411 2240 Fax: 27-11-411 2266

Rand Refinery Limited

Refinery Road, Industries West, PO Box 565, Germiston

1400, South Africa.

Tel: 27-11-873 2222 Fax: 27-11-825 1806

Johnson Matthey Plc

Orchard Road, Royston, Hertfordshire, SG8 5HE,

United Kingdom.

Tel: 44-1763-253 000 Fax: 44-1763 253 821

Gold refiners in Switzerland whose TT bars are normally

sold by associated international gold dealers:

Argor-Heraeus SA

Contact: Commerzbank Singapore

Metalor Technologies SA

Contact: UBS Warburg

Pamp SA

Contact: MKS Finance SA

Valcambi SA

Contact: Credit Suisse First Boston

REFINERS AND COIN FABRICATORS

WEST

India Government Mint, Mumbai

Shahid Bhagat Singh Marg, Mumbai 400 023.

Tel: (022) 2266 1838 Fax: (022) 2266 1450

Shirpur Gold Refinery Ltd

Vikas Centre, 104 S.V. Road, Santacruz (West), Mumbai 400 054.

Tel: (022) 2611 6400 or 1666 Fax: (022) 2611 6705 or 615 2196

Narrondass Manordass

135 Sheikh Memon Street, Mumbai 400 002.

Tel: (022) 2342 6783 or 0421 Fax: (022) 2341 0776

National India Bullion Refinery Unit No 1

Andheri-Kurla Road, Safaid Pool, Mumbai 400 072.

Tel: (022) 2851 0542 Fax: (022) 2851 5390

National Refinery Private Ltd

87 Tardeo Road, Mumbai 400 034.

Tel: (022) 2495 1263 or 1264 Fax: (022) 2495 1229

28 1st Agiary Lane, Zaveri Bazaar, Mumbai 400 003.

Tel: (022) 2342 2144

Email: nrpl@nationalrefinery.com

Parekh Platinum Ltd

16B, Samhita Industrial Estate, Off Andheri Kurla Road, Mumbai 400 072.

Tel: (022) 2851 0205 or 0501 or 3588

Fax: (022) 2851 2219

Email: pplbom@bom3.vsnl.net.in

Gujarat Gold Centre

Gujarat Hosiery Mill Compound, Gomtipur Road, Ahmedabad 300 021, Gujarat.

Tel: (079) 212 5132 or 216 0851

Fax: (079) 214 6187 Email: ggc@icenet.net

SOUTH

Bangalore Refinery (P) Ltd

A-18, 3rd Stage, Peenya Industrial Estate, Bangalore 560 058, Karnataka.

Tel: (080) 836 1183 or 1347 Fax: (080) 836 3786

Chemmanur Gold Refinery Pvt Ltd

CGR House, 55/2458, Alappat Road Extension, Ravipuram, Cochin - 15, Kerala.

Tel: (0484) 351 746 or 749 Fax: (0484) 373 250

Email: mail@chemmanurgold.com

VNM Gold

Palayam Road, Calicut 673 001, Kerala.

Tel: (0495) 722 125 or 924 Fax: (0495) 720 526 Email: vnmgold@vsnl.com

GOLD JEWELLERY EXPORTERS

The Gem & Jewellery Export Promotion Council

Diamond Plaza, 5th Floor, 391-A, Dr D.B. Marg,

Mumbai 400 004.

Tel: (022) 2382 1806 or 2380 6916. Fax: (022) 2380 8752 or 2380 4958

Email: gjepc@vsnl.com

Exhibition Cell: gjepc@bol.net.in

Website: www.gjepc.org

The list below refers to the 5 GJEPC Award Winners in 2000 - 2001 that fabricate plain and studded gold jewellery, as well as Inter Classik - it provided information

on SEEPZ (Mumbai).

Modern Impex

7 Camac Street, Azimganj House, Block No. 308, Kolkata 700 017.

Tel: (033) 282 0415 or 9017 Fax: (033) 282 8906.

PP Jewellers

2708 Bank Street, Karol Bagh, New Delhi 110 005.

Tel: (011) 575 7711 or 573 1697 Fax: (011) 575 8811 or 578 7640 Email: ppjewellers@ppjewellers.org

Rajesh Exports Ltd

Batavia Chambers, Kumara Krupa Road, Kumara Park East, Bangalore 560 001.

Tel: (080) 226 6735 or 0443 Fax: (080) 225 9503

Merrygold Jewellers

Conwood House, Yashodham, Gen. A.K. Vaidya Marg, Goregaon (East), Mumbai 400 063.

Tel: (022) 2873 4375 or 3983 Fax: (022) 2873 3910 Email: goldfinger@vsnl.com

Vaibhav Gems Ltd

K-6B Adarsh Nagar Road, Jaipur 302 004.

Tel: (0141) 601 020 Fax: (0141) 603 228

Email: vgl@vaibhavgems.com

Inter Classik Jewellery (I) Pvt Ltd

Plot No. 2 & 3, Opposite G & J Complex - II, SEEPZ,

Andheri (E), Mumbai 400 096.

Tel: (022) 2829 0035 or 0683 Fax: (022) 2829 0668

Email: intclas@bom5.vsnl.net.in

NATIONAL INSTITUTE OF JEWELLERY DESIGN (NIJD)

The NIJD in Ahmedabad is one of several organisations in India that offers training courses for jewellery fabricators and retailers.

National Institute of Jewelery Design

Dhirajba Gordhandas Zaveri Education and Research Foundation, 9/10 Panchratna, Panchwati, C.G. Road, Ahmedabad 380 006, Gujurat.

Tel: (079) 642 3400 or 5400 Fax: (079) 656 3473 Email: nijd@dhirajba.org Website: www.dhirajba.org

CONSUMER JEWELLERY PUBLICATION

The Art of Jewellery, launched in January 2002, is a new magazine for jewellery consumers. Published in Bangalore, it focuses on south India.

Dipti Publications

184 Indiranagar 2nd Stage, Bangalore 560 038.

Telephone:

Bangalore (080) 528 0178 Chennai (044) 822 9925 Hyderabad (040) 790 3412 Jaipur (0141) 301 473 New Delhi (011) 723 2075

GOLD MINING AND EXPLORATION

Indian Bureau of Mines

Indira Bhavan, Civil Lines, Nagpur 440 001.

Tel: (0712) 524 500 or 792 (Extension: 1105)*

Fax: (0712) 532 471 Email: <u>ibmnag@mah.nic.in</u> Website: <u>www.ibm.nic.in</u>

*Extension for ordering publications

The Hutti Gold Mines Co Ltd (HGML)

No 6/13, Gurappa Avenue, Primrose Road Cross, Bangalore 560 025, Karnataka.

Tel: (080) 532 3840. Fax: (080) 532 4245 Email: hgml@vsnl.com

M/s Bharat Gold Mines Ltd (BGML)

Suvarna Bhavan, Oorgaum, P.O. Kolar Gold Field, Karnataka 563 120.

Fax: (08153) 60330

M/s Hindustan Copper Ltd (HCL)

Tamra Bhavan, 1 Ashutosh Chowdury Avenue, Kolkata 700 019.

Fax: (033) 240 8478 or 247 8640

Indo-Gulf Corporation Ltd (Birla Copper)

Unit Birla Copper, P.O. Box Dahej Lakhigam, Dist.

Bharuch, Gujarat 392 130. Fax: (091) 2641 56002/3

Geological Survey of India (GSI)

27 Jawaharlal Nehru Road, Kolkata 700 016.

Tel: (033) 249 6941. Fax: (033) 249 6941 Email: gsi_chq@vsnl.com Website: www.qsi.gov.in

Mineral Exploration Corporation Ltd (MEC)

Seminary Hills, Highland Drive Road, Nagpur 440 006.

Fax: (0712) 510 133 or 548

GOLD MARKET CONSULTANTS IN INDIA

Madhusudan Daga

306, Satyanarayan Bhavan, 7/1 Dr R. G. Thadoni Marg, Worli, Mumbai 400 018.

Tel: (022) 2493 4500 or 2490 0197

Fax: (022) 2490 0197

Bhargava N. Vaidya

Ground/4th Floor, Vaidya Bhavan, 92 Atmaram Merchant Road, 2 Anant Wadi, Mumbai 400 002.

Tel: (022) 2208 7849 Email: <u>bnv@vsnl.com</u>

LONDON BULLION MARKET ASSOCIATION

3rd Floor, 13-14 Basinghall Street, London EC2V 5BQ, United Kingdom

Tel: 44-20-7796 3067 Fax: 44-20-7796 2112 Email: <u>alchemist@lbma.org.uk</u> Website: <u>www.lbma.org.uk</u>

WORLD GOLD COUNCIL

Headquarters - Mumbai

101 Maker Chamber VI, 10th Floor, 220 Nariman Point, Mumbai 400 021.

Tel: (022) 5630 1323 Fax: (022) 5630 1324

Chennai

B-2 Alexander Square, 34/35 Sardar Patel Road, Guindy, Chennai 600 032.

Tel: (044) 230 0083 or 0084 Fax: (044) 230 0086

International headquarters - London

45 Pall Mall, London SW1Y 5JG, United Kingdom.

Tel: 44-20-7930 5171 Fax: 44-20-7839 6561 Website: www.gold.org



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Agricultural Statistics at a Glance 2001. Agricultural Statistics Division, Ministry of Agriculture, New Delhi, May 2001.

All India Sales Tax Tariff 2001. Commercial Law Publishers (India) Pvt Ltd, New Delhi, September 2001.

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Census of India 2001, Provisional Population Totals. Registrar General & Census Commission, New Delhi, June 2001.

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Gold Surveys. Gold Fields Mineral Services Ltd, London. International gold supply and demand surveys are published annually.

Handbook of Statistics on Indian Economy. Reserve Bank of India, Mumbai, December 2000.

India Market Demographics Report 1998. By I. Natarajan. National Council of Applied Economic Research, New Delhi.

Indian Banking Year Book 2000. Indian Banks' Association, Mumbai, April 2001.

Indian Gem & Jewellery Statistical Booklet. Published annually by The Gem & Jewellery Export Promotion Council, Mumbai.

India Minerals Yearbook. Published annually by the Indian Bureau of Mines, Nagpur.

International Financial Statistics Yearbooks. International Monetary Fund, Washington.

Nabhi's New Import Export Policy & Handbook of Procedures (Vol. 1) 1997 – 2002. A Nabhi publication, New Delhi, April 2001.

Performance Highlights of Banks 1999 – 2000. Indian Banks' Association, Mumbai.

Retail Gold Investment and Private Investor Stocks – A Review. Prepared for the World Gold Council by Gold Fields Mineral Services Ltd, London, November 2001.

Statistical Outline of India 2001 – 2002. Tata Services Limited, Department of Economics and Statistics, Mumbai, December 2001.

Survey of Indian Investors. Securities and Exchange Board of India, Mumbai, June 2000.

The Bombay Bullion Association Ltd. A Golden Jubilee Millennium 2000 publication.

The Case for Importing Gold. The Bombay Bullion Association Ltd, Mumbai, March 1978.

The Early History of Gold in India. By Rajni Nanda. Munshiram Manoharlal Publishers Pvt Ltd, New Delhi 1992.

Traditional Jewellery of India. By Oppi Untracht. Thames and Hudson Ltd, London, 1997.

Grendon International Research

Gold's Private Investment Dimension. Paper delivered at LBMA Precious Metals Conference, Istanbul, May 2001.

Private Gold Investment Demand – Bars, Coins and "Investment" Jewellery. Paper delivered at Australian Gold Conference, Melbourne, April 2002.



ABOUT VIRTUAL METALS RESEARCH & CONSULTING LTD

An internationally recognised consultancy offering cutting edge precious metals research and analysis.

Virtual Metals is a small dynamic team of highly experienced analysts dedicated to revealing the truth about the current and future state of the precious metals markets. Financially supported by world-class mining companies¹, Virtual Metals specialises in proprietary research covering gold, silver and the platinum group metals, giving clients the insights necessary for sound long-term strategic decision making.

Apart from the mining industry, Virtual Metals has as clients refiners, bullion banks, equity brokers, trading houses and fund managers. Clients in all segments of the mining and metals industries select Virtual Metals for independent outsourced value and experience without adding to corporate overhead.

The Virtual Metals Team excels in macro economic analysis, the generation of supply and demand scenarios, costs analysis, derivative research and price forecasting. Confidentiality, experience and independence are key elements of such advisory roles. Our aim is to assist those in need of external expertise, as well as those who wish to supplement their own in-house resources. With our extensive international contacts, we are able to broaden our services through links with experienced associates in related fields worldwide.

Our close associations with market participants forged over more than 15 years is at the heart of one of the Company's primary objectives and that is to support the precious metals industries and wherever possible to give something back to the respective markets. Thus through sponsorships, Virtual Metals shares on complimentary basis a great deal of the Company's in-house intelligence.

To acquire a copy of the comprehensive analytical report **India's Golden Era - The Age of the Kaliyug** or for further details regarding the Virtual Metals team and services please contact Sarah Marsden on +44 (0)20 7487 3600 or email sarah@virtualmetals.co.uk

VIRTUAL METALS
RESEARCH & CONSULTING LTD

DELIVERING INDEPENDENT SOLUTIONS

¹ Barrick/Homestake, Gold Fields, Harmony, Western Areas with others to follow.

ABOUT GRENDON INTERNATIONAL RESEARCH PTY LTD

Grendon International Research Pty Ltd (GIR) is a small marketing consultancy, research and promotional company that focuses on the gold industry.

GIR was established in 1989 by Nigel Desebrock. It has undertaken international, regional and national consultancy projects for mining companies, refiners, mints, bullion dealers and the World Gold Council. It covers the gold investment, jewellery, industrial and refining sectors.

Apart from consultancy, GIR has also compiled and published three widely acclaimed industry reference books, the outcome of fieldtrips to more than 30 countries.

- The Industry Catalogue of Gold Bullion Coins (380 pages, 1999)
- The Industry Catalogue of Gold Bars Worldwide (344 pages, 1998)
- Gold Refiners & Bars Worldwide (476 pages, 1991)

In 1993, GIR (Curator) established **The Industry Collection of Gold Bars Worldwide** with the support of N.M. Rothschild & Sons (Australia) Ltd (Custodian & Owner) and the World Gold Council (Sponsor). Apart from acting as an information and photographic resource for the industry, major exhibitions have been staged in Europe, North and South America, South East Asia and the Middle East. They tell the story of gold from gold-bearing ore – through gold bars – to the end uses of gold. The collection, the largest in the world, contains more than 700 standard, innovative and unusual bars (1000 g and less) from 29 countries.

Nigel Desebrock was educated in South Africa and, on a Rhodes scholarship, at Oxford University. His practical marketing experience includes six years with Bass Ltd, Europe's largest brewery group at the time, six years with International Gold Corporation (the marketing arm of the Chamber of Mines of South Africa) in London and Johannesburg where he became Manager, Investment Division (Worldwide), and three years with Gold Corporation (which included the Perth Mint and Australian Gold Refineries) where he became Managing Director, GoldCorp Australia.

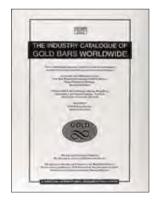
He is an occasional speaker at international gold conferences, most recently at the LBMA Precious Metals Conference in Istanbul (2001) and at the Australian Gold Conference in Melbourne (2002) where he delivered papers on private gold investment worldwide that took into account "investment jewellery" in countries such as India.

GIR is an associate member of the Australian Gold Council.

Grendon International Research Pty Ltd 33 Alexandra Road, East Fremantle, WA 6158, Australia

Tel: 61-8-9319 2171 Fax: 61-8-9319 2154

email: <u>grendon@global.net.au</u> website: <u>www.grendon.com.au</u>







GIR's reference books can be ordered directly from GIR or off the GIR website: www.grendon.com.au



AN INTRODUCTION TO THE INDIAN GOLD MARKET



Photograph: Alukkas

Gold jewellery accounts for 90% of India's gross annual consumption of gold.

For most consumers, gold jewellery has both an "adornment" and "investment" dimension.