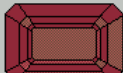
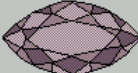
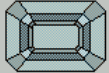




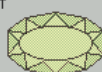
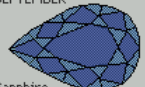

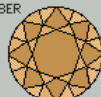



SOCIO-ECONOMIC ASPECTS OF ARTISANAL GEM MINING IN SRI LANKA

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<p>JANUARY</p>  <p>Garnet Symbolizes: Constancy</p>	<p>FEBRUARY</p>  <p>Amethyst Symbolizes: Sincerity</p>	<p>MARCH</p>  <p>Aquamarine, bloodstone Symbolizes: Courage</p>	<p>APRIL</p>  <p>Diamond Symbolizes: Innocence</p>
<p>MAY</p>  <p>Emerald Symbolizes: Love, success</p>	<p>JUNE</p>  <p>Pearl, alexandrite, moonstone Symbolizes: Health, longevity</p>	<p>JULY</p>  <p>Ruby Symbolizes: Contentment</p>	<p>AUGUST</p>  <p>Peridot, sardonyx Symbolizes: Married happiness</p>
<p>SEPTEMBER</p>  <p>Sapphire Symbolizes: Clear thinking</p>	<p>OCTOBER</p>  <p>Opal, tourmaline Symbolizes: Hope</p>	<p>NOVEMBER</p>  <p>Topaz Symbolizes: Fidelity</p>	<p>DECEMBER</p>  <p>Turquoise, zircon Symbolizes: Prosperity</p>

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Birthstones and Their Symbolic Meanings

Special qualities have been attributed to gemstones since ancient times because of their beauty, rarity, and durability. Birthstones are gems that have been linked to the months of the year and assigned particular characteristics such as innocence and health. Many people consider it lucky to wear the stone associated with their birthday.

Sri Lanka has many varieties, sizes of precious, and semiprecious stones, varying in size, globally known and used for more than 2500 years.

These include high-value gemstones

- Sapphire
- Ruby
- cat's-eye
- topaz, and beryl

semiprecious gemstones

- Garnet
- Moonstone
- tourmaline, and
- feldspar.

Mining of these varieties locally differs, and have been spread irregularly in the:

- Vijayan Complex
- Highland Group and
- Southwestern Group in Precambrian rocks

However, principal gem fields have been concentrated mainly in the Ratnapura District.

In Sri Lanka, traditional artisanal small scale gem mining is obvious and popular method throughout the country.

Before the setting up of the State Gem Corporation (SGC) in 1972:

- **gem mining (digging the pit)**
- **identification of gemstones**
- **Lapidary (cut and polish)**
- **buying and selling (gem business)**

were conducted by traditional artisans were skilled-workmen (miners and labourers).

Until that time, about 90 percent of the artisans and labourers engaged in the gem industry were farmers.

They did not have the knowledge to evaluate and assess the value of each gem they found and hence they could not get a reasonable profit from the clutches of crafty businesspersons.



Washed gems (Hambantota)

There are number of partners related to a gem pit or a mine

Land owner (main partner)

Suppliers

- wooden logs
- weekly allowance
- water pump and kerosene oil

Boss - manager (skilled person)

Brokers (brokerage)



At least eight labours who receive weekly allowance are working in a gem pit

Very often, the skilled miners were hired labourers who worked in mines that belonged to rich and powerful families or businesspersons in the area.

They received a poor allowance each week. Sometimes when they found a valuable gem, they received a small bonus.



A gem pit at sithralaka -Hambantota area

Social and economic background of the partners

Owner of a mine - Land owner

- **Probably, he is a rich person (no proper educational background, but has vehicles, big houses and other properties**
- **Sometime monthly income of such a person should be over Rs. 40,000/= - 50,000/=**

The labourers who are working in a gem mine are very poor persons

Their ages are range between 18 and 45 years

They receive very low weekly allowance

- **in 1993 this allowance was around Rs. 75/= to 150/=**
- **in 1998 this allowance was around Rs. 200/= to 300/=**

This amount is not sufficient to cover daily expenses

Education level of the labourers are every low.

Knowledge on a gem pit

About mining:

- The small-scale miners are well skilled
- Traditionally they have more than 30 years experience. Such miners are more than 60 years old
- Sometimes they can identify places, where gems can be found

Stop mining:

- Mining activities terminate due to water springs, flowing of sand, cracking of the earth etc.

Identification of gemstones

- Many partners of the pit have indigenous knowledge to identify different varieties of gems.



A gem pit at Wagawatta in Nivithigala area



A gem pit at Wagawatta in Nivithigala area

Before starting a new pit, traditionally all partners to participate a religious and some ritual activities.

For e.g.

- **appeal to Lord Buddha and Triple Gem**
- **believing and appeal the God Sumana Saman**
- **believing and appeal the God Kataragama**
- **conducting ritual activities for Bahirawa**
- **conducting ritual activities for Bodhi**

Similar activities are conducting before starting washing operations too.



A gem pit at Wagawatta in Nivithigala area

Instruments use for mining:

- **Illam Kura (vain rod)**
- **Alavanguwa (crow bar)**
- **Kuda (baskets)**
- **Gerum watti (washing pans)**
- **Dabaraya (windlass)**

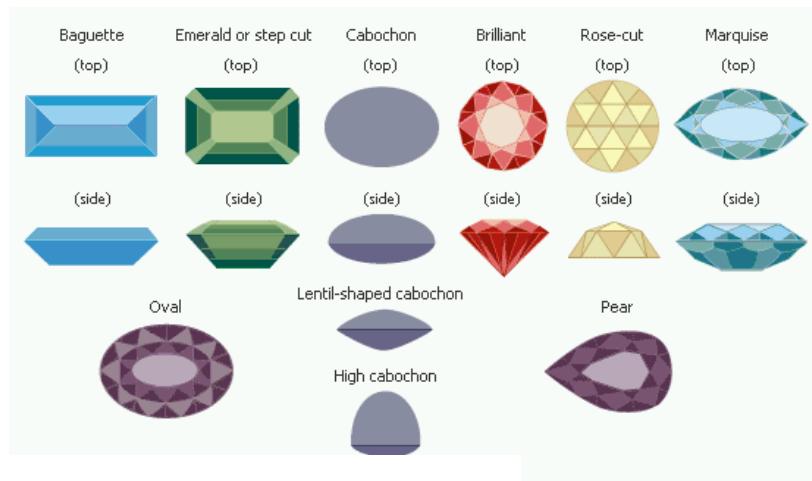
All these instruments have been produced by local people with very low cost.

Land ownership

- **Free hold lands - belonging to one person or to family members**
- **Lease hold**
- **ryot tenure**
- **Crown lands - illegal mining**

Special words use by gem miners

- **Illalam - vain of the gem bearing gravel**
- **Illam kura**
- **Naambuwa - gems with small gravel**
- **Terawwa, esbedda, haula, Karu haula**
- **Sumana kasi**
- **Santosama**



Gem Cuts

Gem cutters choose a cut, or shape, to enhance the color, brilliance, and fire of a particular gem. For instance, the multiple symmetrical facets of the brilliant cut enhance the sparkle of a diamond, while the rounded eyes surfaces of the cabochon cut show off the depth and color of stones such as cat's eyes and rubies.

After the setting up of SGC, a great difference is observed in the value of gem exports but not in the standard of living of artisans.

A striking feature is that the exports of the private sector have always surpassed those of the SGC.

With the open economic policy, which came into effect in 1978, private traders in the gem business appear to have reduced their contacts with the SGC and tended to carry on their business separately.

There were greater opportunities for the smuggling of gems.

Regular detections by Customs officers at airports and other exits have borne this out.

However, it is well known that smuggling of gems has become an extremely well organized affair during the past 25 years.

Such activities have reduced the income of the SGC and the government.

Another trend is the advent of Thai traders who arrived in Sri Lanka in small numbers to purchase low quality semi-precious stones known as geuda, which could be bought very cheaply.

However, when the Thai traders came in large numbers to buy these stones, there was a rapid increase in price, which finally reached a level similar to the price offered for the traditionally more valuable gems.

Thai nationals who came to Sri Lanka to buy gems were the leading businessmen, but the majority of those who moved to Ratnapura were not so wealthy.

Furthermore, Thai nationals were beginners to the gem trade in Sri Lanka but once they took up residence at Ratnapura, they were able to exert an impact on the gem industry in the country.

They began to visit the gem mining areas close to the Ratnapura town, such as Okkampitiya, Pelmadulla and Balangoda.

As a result, a new class of young intermediaries began to buy gems from miners and offered these in turn to the Thai nationals.

This new class came mostly from among those who worked earlier in gem pits on a daily payment basis.

They had some formal education, but lacked job opportunities.

As a result of the gem trade, these people have become richer, and in possession of semi-luxurious houses and new motor vehicles.

All these trends in the gem industry are reflected in the changing socio-economic characteristics and emerging environmental problems in gem mining areas.

The labourers who worked in gem pits for a daily or weekly allowance have not benefited and are still faced with problems associated with land tenure, poverty, illiteracy, poor health and mining accidents.

But the others, for e.g. powerful families (landowners), gem merchants at Beruwala and new class of young intermediaries were obtained many social and economic benefits.

On the other hand the powerful families (landowners), gem merchants and the new class of young intermediaries have obtained many social and economic benefits.

The private sector has gained from the gradual increase in the value of exports.

Therefore, there is an illegal operation of gemming activities backed by some organized powerful groups that have adversely affected the natural environment.

The environmental damage resulting from common gem mining methods has been discussed by Rupasinghe and Cooray (1993). These methods are:

- morphological damage to land areas
- damage to vegetation cover
- damage to forests
- damage to fauna
- damage to stream and river banks
- sedimentation
- water pollution

All these also affect directly or indirectly to the local people creating different issues.

Hence, creation of public awareness of major issues related to gem mining through rural level societies, youth clubs and schools and further in depth research are **needed to solve the adverse environmental and socio-economic impacts of the gem mining industry with particular emphasis on the situation of the poorer small-scale gem miners.**

THANK YOU