

# 200 YEARS LATER RETRACING FRANCIS BUCHANAN'S JOURNEY OF 1800-01 THROUGH PARTS OF SOUTHERN INDIA

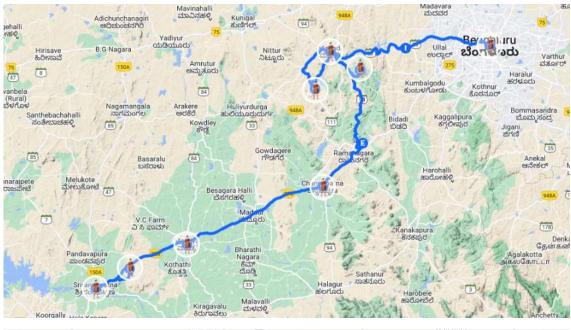
**Chapter III: Journey from Srirangapatna to Bangalore** 

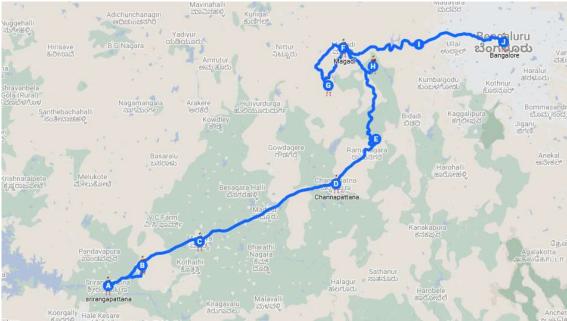
## SHIVA M PROJECT FIELD RESEARCHER

FOUNDATION TO AID INDUSTRIAL RECOVERY (FAIR)

BANGALORE, INDIA

A. Srirangapattana-B. Ganangooru(Gaynangur)-C. Mandya(Mundium)-D.Channapattana-E.Ramadevara betta(Ramagiri) - F.Magadi(Magherry) -G.Ghattipura(Ghettipura)-H.Savanadurga-I.Tavarekere(Taveri-caray)-J.Bangalore





#### Srirangapatna

We have already discussed Srirangapatna in Chapter II.

#### Mandya(anglicized as Mundium)



Farmers Harvesting Sugarcane: A Glimpse into Traditional Agricultural Practices in a Mandya Village

Buchanan passed through Ganangooru on his way to Mandya, now a district headquarters situated approximately 42 km northeast of Mysore. Presently, Mandya is well-connected by the Bangalore-Mysore Expressway and a railway line. During Buchanan's visit, it was a small village known as Mandium, surrounded by predominantly dry land. The construction of the Krishna Raja Sagara (KRS) Dam across the River Kaveri, completed in 1931, marked a turning point for the region. The KRS irrigation project transformed the arid landscape, enabling large-scale cultivation and significantly boosting agricultural productivity. Today, paddy and sugarcane are the region's primary crops. In 1933, Mandya saw the establishment of a major sugar factory, which became one of the largest in the country and catalyzed the growth of distillation industries utilizing byproducts from the factory.

#### Channapatna





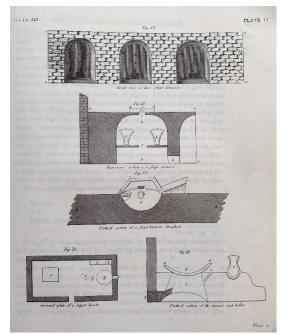
Left to Right: 1. 19th-century photograph of Channapatna Fort; 2. The surviving section of the fort was documented during a 2024 visit

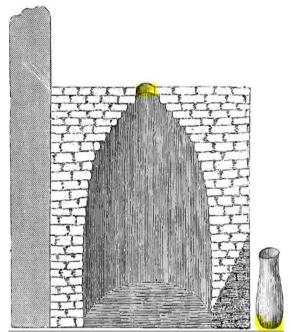
Channapatna, currently a Taluk headquarters in Ramanagara District, is located approximately 80 kilometers from the state capital, Bangalore.

As recorded by Buchanan, Channapatna was formerly the residence of a poligar family known as the Jagadeva Rayas. This family, belonging to the Telugu Banajiga community, established control over the region during the Vijayanagara period. However, their power declined during the reign of the Mysore Rajas and was later further diminished under Hyder Ali's rule. Buchanan also documented that a direct descendant of this lineage, identified as Jiva Raja Chitty (Jagadeva Raya), reportedly lived in poverty in Channarayapattna, working as a petty trader.

Channapatna was once renowned for its glassware manufacturing, including glass bottles and ornamental rings worn on women's arms.

Buchanan provided sketches of the furnaces used in glass manufacturing at Channapatna.





Sketch by Buchanan: Illustrations of Glass Furnaces Used in Channapatna's Glass Manufacturing.

### The following materials, measured according to the apothecary's weight, were used for making green glass. The quantities listed below represent the charge for one crucible:

Material	Pound (lb)	Ounce (oz)	Dram (dr)	Seer (ser)	Grain (gr)
Broken glass	14	9	0	0	0
Benachu kallu(Powdered white quartz)	14	9	0	0	0
Loha(an old button brass)	0	3	2	1	13
Copper	0	2	9	1	16
Caricalllu,Iron ore with manganese	0	2	1	2	2
Soulu(Impure soda)	29	6	0	0	0

<sup>\*</sup>For the production of red glass, brass (referred to as "loha") is omitted, and forty-four crucibles are arranged within a single furnace.

Unfortunately, the glass bangle manufacturing industry in Channapatna has completely disappeared, and no one practices this craft anymore. Currently, the majority of glass bangle production is concentrated in the Bailahongala region of Belagavi District.

While no traces of the old glass manufacturing sites were found in Channapatna, large glass furnace sites were discovered behind Kamanadurga Hill in Pavagada Taluk, Karnataka.

<sup>\*</sup> The raw materials used for producing black glass include quartz, impure soda (locally known as "soulu"), and broken glass.

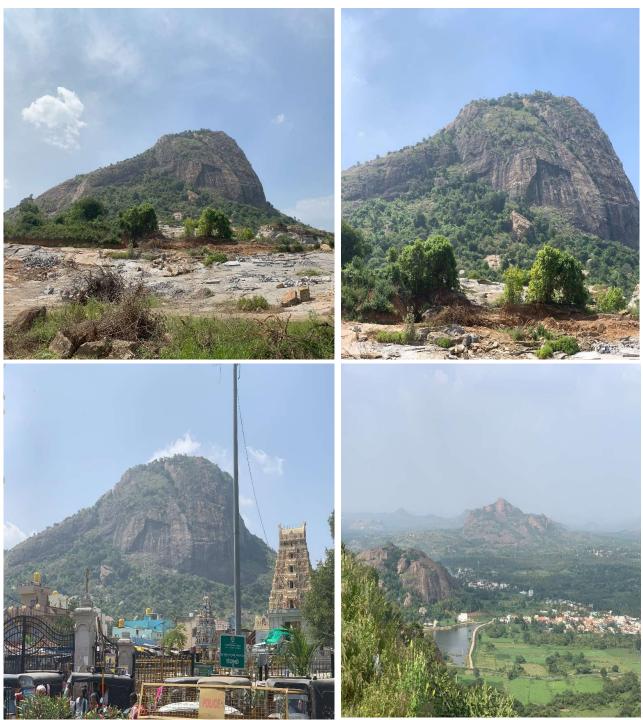


Clockwise from the Top left: 1. Ruined glass bangle furnaces near Kamanadurga Hill; 2. Furnace remains at Hanumanabetta; 3. Quartz slag with glass traces; 4. Furnace beneath Hanumanabetta, 18 km from Pavagada.

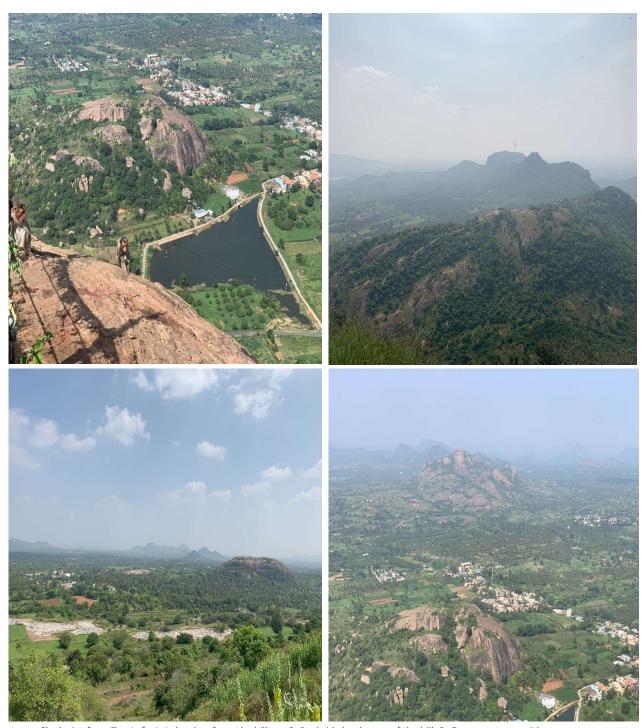
Buchanan also documented another notable industry in Channapatna: the manufacture of steel wire for the strings of musical instruments. These strings were highly esteemed and were distributed to remote parts of India.

According to Buchanan, the smelting centers of Channarayanadurga and Devarayanadurga were likely the primary sources of steel, which was further refined in Channapatna to produce wire for musical instruments. He provided a detailed description of the wire-drawing operations and processes involved.

Unfortunately, there is no longer any trace of wire-drawing activities in the region. With the rapid industrial revolution in the steel industry, a wide variety of steel products, from cast iron to engineering steel, are now readily available in the market, rendering the traditional craft obsolete.



Clockwise from Top Left: 1. Kabbaladurga Hill Fort; 2. Close-up of Kabbaladurga Fort; 3. Landscape view of Closepet Granite Hills; 4. Kabbalamma Shrine at the base of Kabbaladurga.



Clockwise from Top Left: 1. Lake view from the hilltop; 2. Backside landscape of the hill; 3. Green pastures with coconut plantations and village hamlets; 4. Closepet Granite Hill chain.



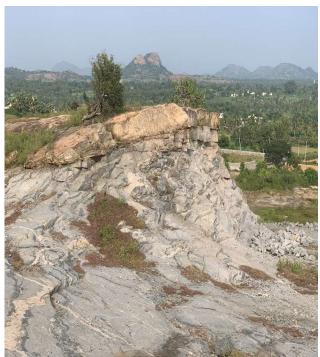
Clockwise from Top Left: 1. Hyder-era prison atop Kabbaladurga Fort Hill; 2. Indo-Saracenic arches inside the prison; 3. Crumbling structure, possibly a garrison or ammunition storage; 4. Interior prison view showing bricks and mortar construction.

Between Channapatna and Kabbaladurga lies a rugged landscape characterized by the chain of Closepet Hills. The primary agricultural products of this region include coconut, areca nut, ragi, and small quantities of sugarcane.

The Kabbaladurga granite hill, standing at approximately 4,216 feet above sea level, was historically significant as a fortress used by Hyder Ali to imprison captives. Notably, Murari Rao, the Chief of Gooty, surrendered to Hyder Ali and was confined in this fort along with his family.

During the British Raj, the fort was used for punitive measures, with convicts reportedly being thrown off its cliffs as a form of execution.

The ruins atop the hill include old and crumbling structures that once served as a prison, garrison, ammunition storage facility, and small temples dedicated to Bheemalingeshwara and Kabbalamma.





Granite Quarry in Operation at the Base of Kabbaladurga Fort Hill Entrance.

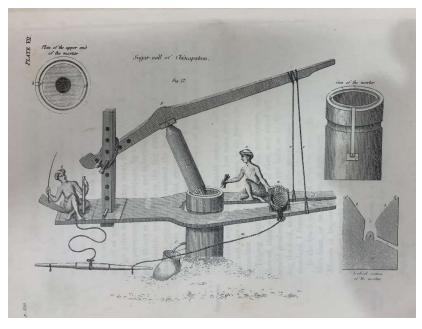


A Traditional Mysore-style Village House with a Clay Tile Roof and Wooden Pillars Supporting the Veranda Porch. The semi-circular shaped clay tiles, once common, were later replaced by Mangalore tiles with modernization.



A Labourer at Work in the Granite Quarry

On my visit, I observed active granite quarries on the northern face of the hill. At its base lies the famous Kabbalamma Temple, dedicated to the Hindu goddess Devi, which continues to attract numerous devotees from the surrounding areas.



A sketch of the Channapatna sugar mill documented by Buchanan. The mill comprises a mortar, beam, lever, pestle, and regulator. The mortar, made of wood approximately ten feet long and fourteen inches in diameter, is sunk perpendicularly into the ground, leaving two feet above the surface. Powered by bulls or buffaloes, the mill is operated as a man feeds sugarcane into it to extract the juice, as depicted in the sketch.



Clockwise from Top Left: 1. A laborer feeding sugarcane into the juice extractor; 2. A laborer in the jaggery boiling house; 3. Thick jaggery syrup spreading for cooling and solidification; 4. Jaggery from the mold, ready for sale.

At Channapatna, Buchanan documented the process of sugar and jaggery production. Unfortunately, due to insufficient rainfall in the region, the traditional jaggery-making process has declined.

Today, jaggery production continues only in areas with sufficient irrigation, primarily fed by the Krishna Raja Sagara (KRS) Dam or the Kannambadi Anicut, which provides irrigation to the Mandya, Maddur, Srirangapatna,

and Pandavapura regions. In these areas, the KC Canal irrigates the land, and you can still witness many cottage industries dedicated to jaggery production.



Channapatna Wooden Toys with Lacquer Finish and Natural Colour Paints



Clockwise from Top Left: 1. Hale (Ivory) tree wood stored in a factory warehouse; 2. Wood undergoing processing inside the toy factory; 3. Turned components awaiting further operations; 4. A laborer surrounded by wooden chips from the manufacturing process.

Today, Channapatna is renowned for its traditional lacquered wooden toys, a craft that dates back over 200 years. These toys are crafted using a unique process where wood, typically sourced from the hale (ivory) tree, is shaped and coated with layers of vibrant lacquer. The lacquer is applied using a spinning technique, resulting in toys with a smooth finish and bright, colorful appearance.

Many private enterprises in Channapatna are involved in the production of wooden toys. The Channapatna Crafts Park (CCP), spanning 14 acres, was developed by the government to enhance production standards and provide local manufacturers with better infrastructure.

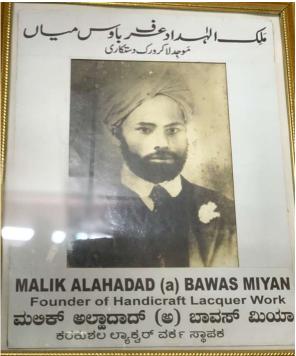
I visited the Bharat Toy Factory in Ramanagara, where I had the opportunity to meet the owner and discuss the rich legacy of toy manufacturing and lacquerware craftsmanship in Channapatna.

Initially, this craft was developed on a small scale by the artisan community known as Chitragars. Skilled in temple painting and crafting wooden masks of humans and animals for village use, this community laid the foundation for Channapatna's artisanal wooden toy manufacturing.









Clockwise from Top Left: 1. Lacquering in process during wood-turning operation; 2. Lacquer sourced primarily from Madhya Pradesh; 3. Bawas Miyan, pioneer of Channapatna lacquerware; 4. Mr. P. Md. Ilyas, proprietor of Bharat Art and Crafts, Channapatna.

In 1904, an industrial school was established in Channapatna to promote local crafts and industries, offering subjects such as instrument string making (Veena wires) and glass bead production. Mr. Bawas Miyan, appointed as the first superintendent of the school and a high school teacher, played a pivotal role in the development of the lacquerware craft. His innovative ideas and methods significantly advanced the practice, earning him recognition as the architect of Channapatna's lacquerware industry.

The Mysore princely state also demonstrated considerable interest in supporting and promoting the development of this artisan craft.

Source: Mysore Gazetteer: Bangalore Rural District, Government of Mysore, 1904, p. 395

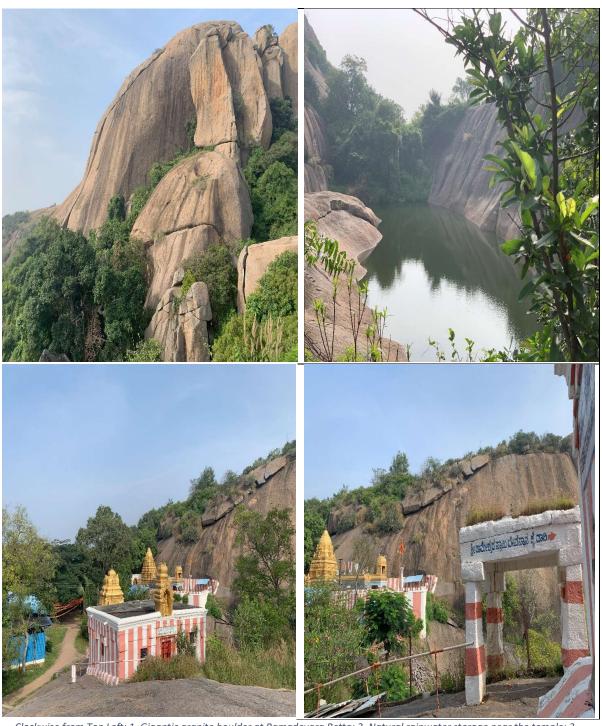
#### Ramagiri(Ramadevara betta)



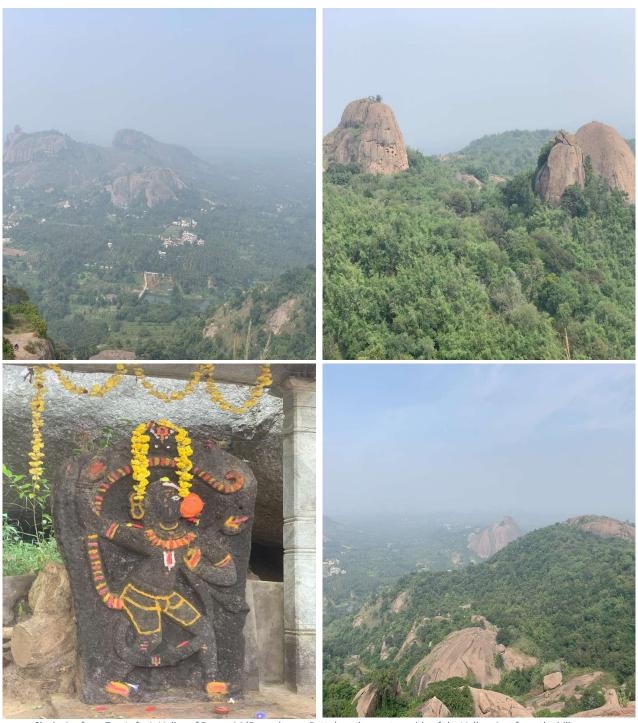
Clockwise from Top Left: 1 & 2. Western views of Ramadevara Betta (Ramagiri Hills), Ramanagaram; 3 & 4. Fortified hill on the left bank of the River Arkavathy.



Clockwise from Top Left: 1. Fort entrance on the west side of the hill, likely the main access point; 2. Colonial-era survey stone at the fort entrance; 3 & 4. The path leading to the hill.



Clockwise from Top Left: 1. Gigantic granite boulder at Ramadevara Betta; 2. Natural rainwater storage near the temple; 3 & 4. Temples of Lord Shiva (Sri Rameshwara) and Lord Rama, after whom the town of Ramagiri is named.



Clockwise from Top Left: 1. Valley of Ramagiri (Ramadevara Betta) on the western side of the Valley view from the hilltop; 2. Deciduous shrub forest; 3. Closepet granites; 4. Hanuman shrine on the way to the hill.

This fortified hill is located on the left bank of the River Arkavathy and is associated with the Kempegowda family. The hill rises to an elevation of 3,066 feet above mean sea level (MSL). The original settlement, Ramagiri town, was situated at the foothills (now lost) but was later relocated to a new township called Closepet, now known as Ramanagaram.

The town was named Ramagiri due to the presence of a temple dedicated to Lord Rama and another to Lord Shiva (Rameshwara) at the hilltop. These temples were constructed during the Vijayanagara-Kempegowda period.

The hill is accessible from the east via modern steps and from the west through the original path, where remains of the fort, mandapas, and gates from the Vijayanagara era are still visible.

Buchanan described the granite rocks of the hill as "beautiful" and noted their composition of black mica grains. Today, this hill serves as a prime destination near Bangalore for weekend trekking and devotional hiking.

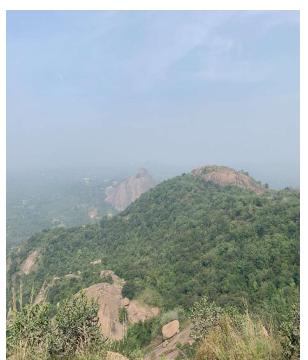
Buchanan mentioned animal husbandry in this region, focusing on goats, sheep, cows, and oxen. Even today, the ox (Basavanna) is revered in this area, with numerous shrines dedicated to Basaveshwara. For the agrarian community, the ox has historically been a vital force for agricultural activities, and this legacy continues to be honored.

Buchanan also noted that in earlier times, if an ox suffered from any disease, a traditional remedy involved applying cautery in specific patterns, depending on the nature of the illness. The animal would be restrained, with its mouth and legs tied, and hot iron rods would be applied to its skin (known as bare in Kannada). These lines were often drawn along the entire length of the animal, and remarkably, this practice continues in some parts of the region even today.

I also recall a similar practice from my childhood. When we had a fever, my grandmother would use a piece of broken black glass bangle, heated and drawn across the skin on the chest. It was believed that this would help reduce the fever.









Clockwise from Top Left: 1. Iruligara Doddi, a village hamlet home to the Kadu Pujaris (Iruligas); 2. Small thatched house covered with a plastic sheet for rain protection; 3. Elderly woman, the last fluent speaker of the Iruliga language; 4. Kadu Iruligars, once living near the forest, are now scattered across Ramagiri and nearby hamlets.

Buchanan mentioned a tribal community referred to as the "Cad Eriligaru" (Kadu Iruligaru), inhabiting the region between the Savanadurga hills and Ramagiri. He provided a comprehensive account of their physical appearance, linguistic characteristics, and way of life. Their language, a Tamil dialect, incorporates Kannada and Telugu words and features a unique accent distinct from Madras Tamil. Buchanan also documented their origins and habitation patterns, noting that while some members lived in forest interiors, others settled in nearby villages. Their traditional occupations included collecting forest resources such as lac, wood, wild roots, herbs, honey, wax, bamboo rice, and other products. Today, this community, commonly known as "Kaadu Poojaru" (Worshippers of the Forest), largely resides in clustered villages near Ramanagaram, such as Iruligara Doddi and Iruligara Colonies. While some members still venture into forests to gather herbs, most have transitioned to agriculture or migrated to urban areas for employment. The younger generation is more integrated into mainstream society, adopting Kannada as their mother tongue, leading to the near-extinction of their native language. Despite these changes, many community members remain marginalized, with limited access to government welfare schemes. Immediate measures are needed to improve their living conditions and preserve their rich cultural heritage.



Lac (Aragu in Kannada) was once a key commodity collected by the Iruligas from the surrounding hills, though this practice has declined. Only a few farmers in the Sirsi and Hunsur regions of Mysore continue it. Images from Hunsur, Mysore.

Lac was one of the key commodities collected by the Iruligas from the surrounding hills. The trees that produced lac were never planted but grew naturally, and the person responsible for harvesting the lac would transfer the insects from one tree to another. The stick lac (shellac) was sold at three fanams per maund of 40 seers. It was primarily used in industries such as silk weaving and others. However, this practice has now declined, with very few individuals still involved in lac extraction. Only a handful of farmers in the Sirsi and Mysore regions(Hunsur) have resumed the practice, with assistance from the Agricultural Department. Although India remains the leading producer and exporter of lac, with Jharkhand, Madhya Pradesh being the

dominant state, lac continues to be widely used in industries such as chemicals, perfumes, pharmaceuticals, electrical, and food production. It is also crafted into beautiful jewelry (lac Bangles) and traditional items.

#### Ghattipura ,Magadi(anglicized as Maghery),Savanadurga

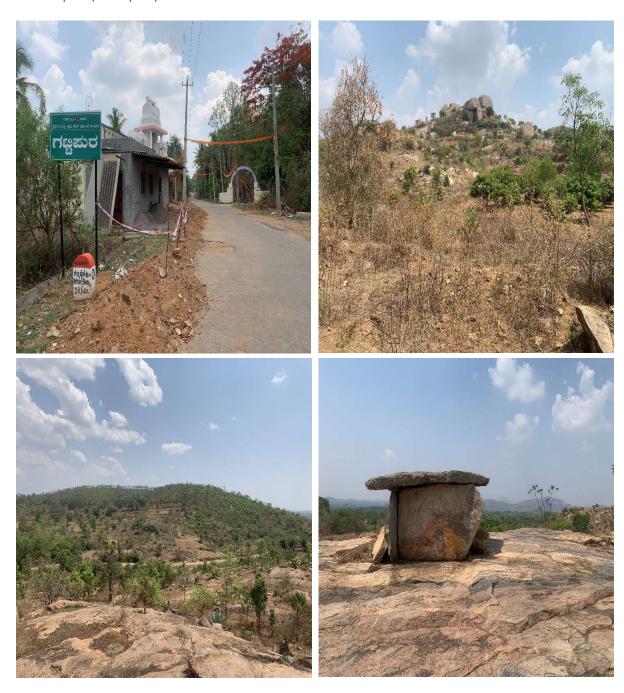


Buchanan noted that the route between Ramagiri and Magadi through Ghattipura traversed a rugged, untamed yet picturesque region, with low hills interspersed with cultivated valleys. He observed a plentiful presence of timber and bamboo near Savanadurga, with the hilltops composed of exposed granitic porphyry rocks.

Buchanan mentioned the path between the Ramagiri and Magadi through Ghattipura passed through a rugged valley's wild but romantic country, with low hills, mixed with cultivated valleys. A good number of Timber timber and bamboo near Savanadurga. The summits of all the ridges of hills are bare rocks of the granitic porphyry.

Now a good road connectivity through SH 94 passes between Ramanagaram and Magadi with rugged hills and beautiful valleys.

#### Ghattipura (Ghettipura)



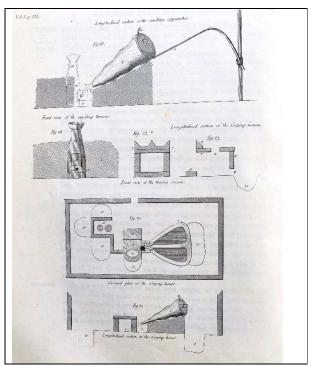
Clockwise from Top Left: 1. Entrance to Ghattipura Village; 2. Ancient Someshwara Temple on a hillock south of the village; 3. Untouched prehistoric dolmen, despite 18th-century peak iron smelting activity in the region; 4. Hills rich in iron ore



The site of historic iron extraction shows no remains of the furnace, but iron slag, locally known as 'Kittada Kallu' (iron smelting furnace waste), can still be found.

During his travels, Buchanan visited Ghattipura, a small village with historical significance in iron smelting and steelmaking during Tipu Sultan's reign. Along with regions like Devarayanadurga, Chickbayaladakere, Madhugiri, Halaguru, and Channarayana Durga, Ghattipura was one of the principal centers of iron production in Tipu's government. Situated between two hills, Buchanan examined several iron forges in this hilly region. The iron was produced partly from black sand found in the rainy season in local streams and partly from ores near Ghattipura. He documented detailed observations on iron smelting and steelmaking, including sketches of smelting factories, descriptions of furnace charging, manpower involved, labor distribution, and their wages

and tax to the government. Buchanan also recorded the process of making "Ukku," known as crucible steel to Europeans, providing insights into this advanced metallurgical technique.



Iron smelting setup sketched at Ghattipura by Francis Buchanan, referred to by Europeans as the crucible steel production method.

Good-quality clay is mixed with an equal amount of charcoal made from paddy husks, moistened with water, and thoroughly kneaded under oxen's feet. After cleaning, the mixture is shaped into crucibles (cupels) and dried for one day in the shade and another in the sun. A parallelogram-shaped furnace is constructed with two parallel stones, one cubit long and 2.5 inches high, and a clay wall 8 inches tall placed a foot above the stones. One end is sealed with stone and clay, while the other is built up with clay to a height of two cubits, incorporating a tube for bellows. Each crucible is loaded with a small piece of iron (weighing 14 ounces to 1.5 seers) and five small pieces of Tangaree wood (Cassia auriculata). The crucibles are stacked in three rows, leaving space for airflow from the bellows. They are then covered with two bushels of charcoal and burned for six hours, with an additional bushel added as fuel is consumed. The resulting pieces are hammered into small square bars after reheating with charcoal from Mimosa tuggala.

I visited a village nestled between two hills, with the southern hill featuring the ancient "Bettada Sri Someshwara Swamy Temple" and the opposite hill covered with deciduous forest and iron-rich soil and rocks, possibly used for ironmaking in the past. When I inquired with locals about iron smelting in the village and showed a sketch documented by Buchanan in 1800, they were unaware of such a history. Further questioning the village elders led them and told them that it was a "Kittada Kallu" (iron smelting furnace-charged waste) at the foothills, but this did not provide definitive answers. Proceeding north, I met a middle-aged shepherd who recounted stories from his grandfather about iron smelting told by his ancestors, referred to as (Kabbina Kaysoru) Shepherds like him are invaluable guides, akin to local "Google Maps," for uncovering undocumented historical sites.

Further exploration led me to areas scattered with numerous iron slags, partially hidden beneath dense bushes in the fields and hill tracts. I also found fragments of pottery and collected a few samples for analysis.

#### Magadi(Magherry)







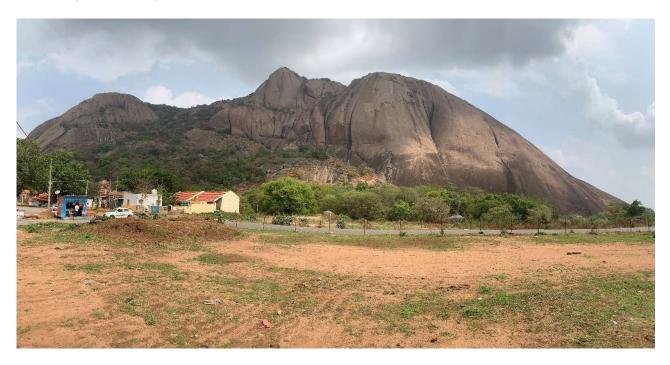


Colonial-era image (1850) and recent photographs of the Someshwara Temple in Magadi, dedicated to the principal deity of the Magadi Polygars.

Magadi, now a taluk center in the Ramanagara district, is located about 51 km from Bengaluru, the state capital. Historically, Magadi was ruled by various kingdoms. In the 16th century, it came under the control of Immadi Kempegowda, who established Magadi as his capital. It remained under his successors until 1728, after which it was captured by the rulers of Mysore. Magadi is home to small forts and notable temples such as

the Rameshwara Temple and Ranganathaswamy Temple, both constructed and restored during the Magadi Polygar period.

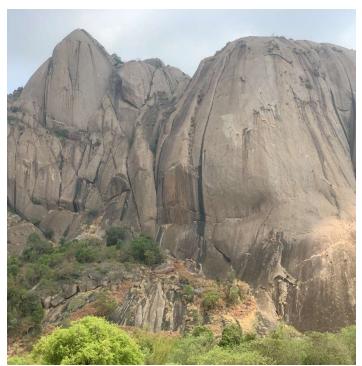
#### Savanadurga(Savan-Droog)

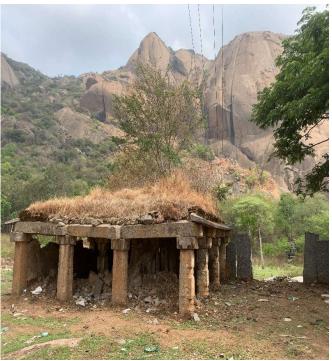


View of Savanadurga Fort Hill









Clockwise from Top Left: 1 & 2. Western views of Savanadurga Hill; 3 & 4. Closer views from the southern side near the Savandi Veerabhadra Temple.

Located about 11 km from Magadi, this tall granite hill rises to 4024 feet above mean sea level and consists of two peaks locally known as Karigudda (Black Hill) and Biligudda (White Hill). It is a popular tourist destination, offering opportunities for adventure trekking as well as religious significance. The hill was fortified during the Magadi Polygar period, serving as a defensive structure alongside Ramagiri Hill (Ramadevara Betta). At the base of the hill lies the ancient Savandi Sri Veerabhadra Temple and a Narasimha Temple, which attract devotees from various regions. Nearby is a dargah associated with Hazrath Sultan Syed Ghulam Hussain Shah Khadri, a saint from Bijapur. Unfortunately, this dargah was not documented by Francis Buchanan. Other temples in the area, however, remain in ruinous condition.

Buchanan documented that Savandurga once housed numerous temples and expansive gardens belonging to the Magadi Kempegowdas. It served as a refuge for local inhabitants, who would retreat there with their grain and cattle during times of invasion.

He also described the region's dense timber woods and bamboo forests, collecting information on local trees with the help of locals and translating their Kannada names into botanical names. Additionally, Buchanan collected stone specimens from the best quarries nearby. Building on his work, Mr. Murali Sreenivasa from the FAIR organization conducted a comparative study titled "Forests of Savandurga, Karnataka: 1800-01 and Present." This study lists all the species in the region, including both local and botanical names, providing insights into its ecological evolution.

Buchanan documented the production of lac in the region, noting its limited presence in Savandurga but significant abundance in Ramagiri (Ramadevarabetta) and nearby hill tracts. Lac was primarily used for polishing furniture and was a valuable resource in those areas. However, during the wars with Lord Cornwallis, much of the lac production was destroyed by the armies there is no longer any rearing of lac insects in the region.

#### Tavarekere (anglicized as Taveri-caray)





Left to Right: 1. The Arkavathy River flowing through the rugged valley between Magadi and Tavarekere, with the Thippagondanahalli Reservoir (Chamarajasagar) built across it; 2. An old bridge spanning the Arkavathy River on the Magadi-Tavarekere road.

Buchanan passed through the present-day Tavarekere on their way to Bangalore, describing the pass between Magadi and Tavarekere as being overgrown with bushes and having poor soil. He mentioned several small reservoirs in the area designed primarily to supply water for cattle and drinking purposes, rather than for irrigation.

Buchanan also noted the presence of a wild animal called the *Shin-Nai* (wild dog or *Kadu Nayi*) in the forests between Magadi and Tavarekere, which is now extinct. Inquiries with locals revealed that only older generations recall seeing this animal in their childhood. Today, the region is home to wild boars and bears.

The Arkavathy River flows through the rugged valley between Magadi and Tavarekere, with the Thippagondanahalli Reservoir (Chamarajasagar) constructed across it. This river is a confluence of the Arkavathy and Kumudvathi rivers, originating from the Nandi Hills and Shivagange, respectively. Another dam, the Manchanabele Dam, is built across the Arkavathy River near Magadi, offering a stunning view of the water from the top of Savandurga Hill.

Tavarekere, now a suburban area of Bangalore, is rapidly transforming with the growth of housing and real estate developments.

#### Source:

1. https://www.ngv.vic.gov.au/explore/collection/work/12315/