ANALYSING FAMINE RESILIENCE AND RELIEF APPROACHES IN MYSORE STATE DURING THE 19TH AND EARLY 20TH CENTURY

Dr. Mahadevaswamy.N, Assistant Professor and Head, Department of History, JSS College for Women (Autonomous), Saraswathipuram, Mysore, India
Srinivas M, Assistant Professor and Head, Department of History, Government First Grade College, Saligrama, Mysore, India

Abstract: This research delves into the historical archives documenting instances of famine-driven hardship in the Mysore region prior to 1924. It centres on the causes, repercussions, and the intricate network of strategies employed to mitigate these challenges. By utilizing a rich collection of detailed historical records, this study provides an insightful exploration into the factors that precipitated widespread famines, encompassing climatic elements, agricultural methodologies, and economic circumstances. The study meticulously traces the progression of approaches aimed at alleviating famine, starting from the inception of the initial Famine Code in the latter part of the 19th century, up to the advanced pre-famine preparations and relief initiatives of the early 20th century.

Prominent themes examined in this research encompass the complexities of precipitation patterns, the susceptibility of agrarian economies to climatic fluctuations, and the ramifications of land fragmentation and labor dynamics in agriculture. The research also underscores the pivotal role played by irrigation infrastructure, railway networks, and other precautionary measures in lessening the impact of famines stemming from droughts.

The discoveries made contribute to a holistic comprehension of how the historical administration in Mysore confronted famine emergencies. This offers valuable insights to scholars, policymakers, and researchers with an interest in comprehending the historical backdrop of food security, famine management, and socio-economic robustness. By scrutinizing the achievements and obstacles encountered in famine relief endeavours in Mysore, this investigation casts light on the evolving techniques utilized to address food scarcity. Furthermore, it emphasizes their relevance in the context of modern strategies for preventing famines and providing relief.

Key Words: Famines, Mysore, Relief Efforts, Food Scarcity, 1876-77 Famine, Intelligence System, Irrigation, Resilience, Railways, Credit Societies, Famine Resilience Fund, Drought-Induced Famines, Rainfall Shortfall, Grain Prices, Madras and Bombay Districts, Famine Conditions, Relief Activities, Mortality, Financial Repercussions, Famine Prevention, Relief Initiatives, Rainfall Patterns, Agricultural Prosperity
Introduction

This research article delves into famines in Mysore during the 19th and early 20th centuries. It discusses causes, consequences, and relief efforts. Beginning with post-conflict famines in the late 1700s, it covers food scarcity in the 1800s and the transformative 1876–77 famine. The article highlights an intelligence system for data gathering, emphasizing irrigation's role in resilience. Relief measures like railways, credit societies, and economic committees are explored. It concludes with the Famine Resilience Fund, showing the evolution of famine prevention from history to the present. This article provides a holistic view of Mysore's famine battle.

Periods of Famine and Distress in Mysore: 19th and Early 20th Century

Emergence of Severe Famines after Conflicts

The available historical records regarding drought-induced famines before 1876–77 are quite limited. However, severe famines emerged after the destructive campaigns of the Maratha armies and the conflict with Mysore in the late 1700s. An example is during Lord Cornwallis' invasion, when the nation was besieged from all sides, leading to significant casualties due to both enemy attacks and the ravages of defending forces. Approximately half of the population is believed to have died due to starvation during this period.

In the 1800s, instances of food scarcity were observed in 1824, 1831, and 1833. The decade following 1851 was particularly challenging, marked by successive years of inadequate and untimely rainfall that instilled a constant fear of famine within the agricultural communities. Although there were a few prosperous seasons in between, 1866 witnessed another widespread famine in regions like Chitradurga and the northeastern territories of the State.

Unprecedented Famine of 1876–77

The drought failure experienced during the years 1875–76 and 1876–77 resulted in an unprecedented famine. The crisis began with a partial rainfall shortfall in 1875, when precipitation was reduced to one-third or two-thirds of the average. While a significant portion of the food crops were lost, the State's substantial reserves initially mitigated the distress, and grain prices remained moderately elevated. However, in 1876, the situation worsened as rainfall was once again inadequate, leading to only a third of the usual harvest being reaped. The severity was compounded by crop failures in neighbouring Madras and Bombay Districts, culminating in famine conditions by mid-December. The following months, until March 1877, witnessed a deteriorating situation.

Despite the daily importation of 500 tons of food via the sole Madras-Bangalore railway, capable of sustaining nine lakh individuals, prices for essential goods during those months soared to four to five times their standard rates. A glimmer of hope emerged in April and May 1877 with the customary spring showers. However, as June progressed into July, it became evident that early rains were failing for the third consecutive year, leading to widespread panic, increased mortality, and intensified famine. By August, the number of starving paupers receiving aid had risen to 227,000, with an additional 60,000 employed on the Mysore railway. In response, Viceroy Lord Lytton visited Mysore and appointed Sir Charles Elliot as Famine Commissioner, bolstered by a team of European Assistants.

Famine relief efforts were refocused, and free aid was restricted to those incapable of contributing any work due to their dire condition. The relief activities gained momentum, and the burden began to ease due to generous rains in September and October. Over the eight months of acute famine, no crops were harvested, and grain prices surged to three to six times the norm. Employment opportunities outside of relief initiatives were nearly non-existent for the common populace. Even in 1877–78, the harvest yield was less than half that of a typical year. From November 1877 to December 1878, prices remained nearly three times higher than usual. The subsequent year, 1878–79, enjoyed a particularly favourable growing season, primarily benefiting rice and ragi crops—vital contributors to the region's agricultural prosperity. The rainfall in 1878, while slightly less than in 1877, was better timed, avoiding the damage caused by excessive but ill-timed precipitation towards the end of 1877.
A plentiful harvest in 1878 led to a welcome reduction in prices, especially for food grains accessible to the economically disadvantaged. Regrettably, the estimated mortality during this famine amounted to 11 million in a population of 51 million, with the average annual birth rate plummeting to half of its former rate of 36 per 1,000. The financial repercussions of the famine were severe, resulting in the depletion of a 63-lakh surplus and the accumulation of an 80-lakh debt.

As per the findings of the Indian Irrigation Commission's report, Mysore experiences an average annual rainfall of 34 inches. Over 50 years, it is projected that there will be around 9 dry years and 3 years characterized by drought conditions. The Revenue Commissioner's assessment of relief efforts during 1908-09 further categorizes the period from 1881-82 to 1908-09 into the following segments: (a) "Favorable years" (totalling 11) when the rainfall was well-timed, sufficient, and generally appropriate across the entire state. (b) "Moderate years" (totalling 9) during which either one of the monsoons was insufficient or triggered concerns of scarcity, but subsequent rains significantly improved the situation. (c) "Unfavorable years" (totalling 8) are marked by overall inadequate and improperly distributed rainfall, leading to unfavourable conditions.

Droughts and Relief in Subsequent Years

The years 1883-84, 1884-85, 1891-92, 1899-1900, 1904-05, 1905-06, 1907-08, and 1908-09 are categorized within the aforementioned "unfavourable years." Within this classification (c), the years 1883-84 and 1884-85 were particularly concerning for the government. In the former year, the dry crops in the northeastern and eastern districts only yielded between one-fourth to half of the normal average output. In 1884-85, the adverse conditions witnessed during the first half of 1883-84 were even more severe. However, this situation changed due to substantial rainfall towards the end of September, leading to a shift toward more favourable conditions in the subsequent season.

The period leading up to 1891-92 witnessed five years of normal prosperity. However, during 1891-92, the rainfall in October brought significant disappointment. In the plains of Mysore and the Hassan District, the southwest monsoon was both sparse and uncertain. The northern and eastern districts received no early rains. While a few later showers allowed for the sowing of dry crops in the northern taluks, these crops began to wither due to insufficient moisture.

In addition to the standard relief initiatives, an equivalent endeavour focusing on the same objectives involved the establishment of drinking water wells. A total grant of Rs. 1, 38,000 (primarily sourced from Local Funds) was allocated for this purpose. A total of 850 wells were either being constructed or deepened, prioritizing areas with the most pressing need for drinking water, given the widespread scarcity.

In 1891, the government decided to offer financial advances for the sinking of irrigation wells at a reasonable interest rate, with repayment spread over an extended period. The only required collateral was the well itself and the irrigated land. This scheme came with the assurance that farmers would be exempted from the increased assessment due to the guaranteed agricultural benefits. Consequently, the execution of this plan in 1892 was assigned to a dedicated officer in each of the districts - Kolar, Tumkur, Chitradurga, and Bangalore. The loans granted amounted to Rs. 2, 80,000, intended for the irrigation of 917 Kapile and 530 Yeitant.

Another significant category of projects that received government loans was the construction and repair of Saguvali Kattes. In response to the distress of 1891-92, loans totalling Rs. 21,175 were approved for 251 such projects, anticipated to enhance 5,069 acres of land. The total expenditure on the various measures taken by the government (excluding revenue remissions) summed up to Rs. 14, 05,000.

The rainfall during July and August of 1899 fell below the usual levels, and the northeast monsoon was also lacking and unevenly distributed. For dry crops, the late plantings resulted in varying degrees of failure. Additionally, irrigated crops suffered due to a significant deficiency in the rain to fill tanks, impacting the Keirtik harvest and preventing the cultivation of Vaisakh. This shortage prompted a general increase in food grain prices, particularly for ragi. Towards the conclusion of the official year, the situation in the plains areas looked bleak. To provide relief to villagers, a few trial projects were initiated in the Bagepally Taluk of Kolar District and Mandya Taluk of Mysore District. However, the rains in September and October 1899 notably improved the prospects in nearly all parts of the State.
The heavy rainfall in 1903-04 resulted in significant damage to the tanks in Kolar District. Subsequently, 1904-05 witnessed the failure of the north-east monsoon, and the following year, except Bangalore and Hassan, all Districts faced similar issues. In 1907-08, the plains districts, except for Mysore, experienced unfavourable conditions, as the early rains were neither timely nor evenly distributed. The northeast monsoon was particularly disappointing across all districts, with November's rainfall barely exceeding the average. Consequently, there was insufficient water in the tanks for the Vaisakh crops. Thus, the year 1908-09 was preceded by three consecutive unfavourable years.

The distress was exceptionally severe due to the combination of the preceding unfavourable years, deficient and untimely rainfall, inadequate food grain reserves, and exceptionally high prices. The impact of the severe drought began to be felt by the population around December 1908. Even earlier, farmers in the arid regions of Tumkur and Hassan Districts began to worry about cattle fodder shortages and migrated in large numbers to the forested areas of Mysore, Shimoga, and Kadur. In the Districts of Mysore, Tumkur, and Chitradurga, the provision of free relief on a limited scale became essential. By January 1909, systematic relief efforts were initiated. As January progressed into February, small landholders and labourers began to face difficulties. With the hottest part of the year underway, the scarcity of water and fodder exacerbated the hardships for those who could only manage meagre harvests and had to buy food grains at exorbitant prices. Consequently, several factors culminated in intense distress during February and March. In April, May, and June, extensive relief operations were carried out in the plains districts, although the April and May rains alleviated some of the distress. Apprehensions arose due to a rain hiatus in June and July, but substantial rainfall in August considerably improved the situation. By the end of September, most special relief initiatives were effectively terminated.

The affected areas encompassed approximately 5,600 villages spanning all districts, covering a total area of around 7,800 square miles and a population of about 1.4 million. The total expenditure borne by the government for both direct and indirect relief measures reached Rs. 19 lakhs.

Drought and Distress in 1923

The southwest monsoon of 1923 proved feeble in the eastern districts of the State, and the subsequent northeast monsoon was a complete failure. As a result, a significant portion of Kolar and Tumkur Districts, along with smaller areas in Bangalore and Mysore Districts, grappled with drought conditions, a shortage of cattle fodder, and a lack of employment opportunities for labourers.

Prompt measures were taken upon the initial signs of distress. The sinking of temporary wells was widely pursued, while the transportation of fodder was facilitated by railway freight concessions. Government depots selling straw and hay procured from external sources were established. Forests were opened up for free grazing, and the relocation of valuable cattle to Malnad forests was organized. Initiatives like tank maintenance, restoration, and village improvement were initiated as per local requirements to create accessible labour opportunities. Loans for land improvement, Takavi, and irrigation wells were generously provided. Relief for weavers was arranged mainly through Co-operative Societies. Gratuitous relief was extended to the most vulnerable individuals when necessary. Certain exemptions were introduced regarding the revenue collection on wetlands in the affected regions. The cultivation of fodder crops was promoted under the Krishnaraja Sagara and Vani Vilas Sagara projects. Detailed instructions issued up to April 10, 1924, were condensed into a recently published handbook. Given that relief operations are ongoing, the total cost has not yet been determined.

Understanding Famine Causes and Relief Measures: Mysore's Historical Perspective

The excerpt from the Imperial Gazetteer of India that elucidates the causes of famine applies to Mysore as well. Famine is an affliction common to all agrarian nations. India, including Mysore, has historically been predominantly agrarian, making it particularly vulnerable to famine. Land ownership is fragmented into small plots, and farmers lack capital, relying on local credit networks that shrink during crop failures. Additionally, there are millions of agricultural labourers dependent on land, often with irregular employment, leaving them without work during crop losses. Thus, the majority of the Indian population relies on successful harvests, which hinge on periodic, yet unpredictable, rainfall. In cases where both monsoons falter, distress becomes inevitable, with the severity often influenced by rainfall patterns in the preceding years. The adverse effects of failed rainfall extend not only to humans but also to livestock, due to water scarcity and a lack of fodder.
Famine Problem and Modern Relief

With the establishment of British rule in India, conflicts and warfare have ceased. The populace, engaged in peaceful activities, has rapidly grown in number. However, the growth of new industries only absorbs a fraction of the population increase. Consequently, the pressure on land escalates, and the surplus of agricultural labour surpasses demand, particularly in the plains districts where agricultural wages remain low. Inheritance laws result in the subdivision of agricultural holdings, leading to smaller land areas. This, combined with traditional cultivation methods, yields meagre profits. Food grains and fodder are typically stored for no more than a year, and only about 16 per cent of cultivated land is safeguarded by irrigation, leaving the rest susceptible to drought, which recurs approximately every 12 years within a 50-year cycle. This complex interplay of factors contributes to the persistent famine challenge.

The Famine Code

The initial Mysore Famine Code was formulated during the dire circumstances of the Great Famine of 1876-78. It replaced conflicting orders and disparate approaches, serving as an authoritative framework for policy and detailed procedures. The Famine Commission of 1880 endorsed this concept, which was subsequently supported by the Government of India in provisional Codes for British India and Native States. While adopting the provisional Code for British India, Mysore introduced necessary modifications to align with local conditions and administrative systems. The Durbar emphasized the importance of providing relief works near villages, a principle upheld in the subsequent 1896 Code, endorsed by the Government of India in their August 31, 1901 Resolution.

Famine Commissioner

Section 49 of the 1909 Famine Code designates the Revenue Commissioner with principal executive authority over Famine Administration alongside regular duties, unless a distinct Famine Commissioner is appointed.

Preparedness Measures

The Revenue Commissioner remains consistently informed about seasonal conditions and price trends. Detailed plans for relief works are established for each district, outlining the population and the maximum number of relief work beneficiaries. Stockpiles of tools and equipment are maintained, and lists of potential personnel for famine-related endeavours are compiled in each district.

Beyond rain deficiency and rising prices, the following signs necessitate attention as potential precursors to distress: reduction in private charity observed through the movement of paupers, credit constriction, heightened activity within the grain trade, increased criminal behaviour reflecting unrest, unusual movement of livestock in search of grazing land, and abnormal population migration.

Initial Steps When rainfall failure sparks concern, active measures are taken to reassure the populace. Meetings are held to explain famine policies, non-official relief groups and private charities are organized, and influential community members are appointed to central committees in each Taluk. These committees offer general advice, stimulate private charitable efforts, collect cash or grain donations, and potentially oversee village projects. Village assessments commence, scrutinizing public and village work plans to assess sufficiency for the affected area, and arrangements are made to have necessary tools and equipment readily available for immediate use. Civil, Engineering, Police, and Medical capacities are bolstered in preparation, while efforts are made to expedite applications for Takavi advances for well sinking, private tank construction, etc. Steps to address water and fodder scarcity are taken early, and considerations regarding the suspension of revenue are examined.

Monitoring Phase

Upon completing the aforementioned preparations, ongoing developments are closely monitored. If conditions fail to improve substantially, a "test work" is implemented to ascertain whether mere scarcity or genuine distress warranting relief exists. Ensuring the safety and well-being of the affected population is paramount. The presence of distress is verified when test works begin attracting a significant number of people.
The welfare of those engaging in test works is meticulously observed, while village inspection tracks the condition of those remaining in their communities. Simultaneously, poorhouses are established in key areas of the monitored regions.

**Measures Implemented upon Famine Declaration**

The adopted measures align with the specific requirements of the situation, addressing the people's suffering and applying effective remedies. The actions taken typically include:

1. Allowing temporary cultivation of tank beds.
2. Opening State and District Forests, along with select Amrut Mahal kavals, for cattle grazing, along with the provision of stacked hay and permission for the utilization of date leaves for cattle.
3. Providing gratuitous relief to elderly, frail, and secluded Gosha women.
4. Granting loans under Takavi and the Land Improvement Regulation on a generous scale, along with advances for tank earthworks and seed grain purchase for farmers.
5. Expanding ordinary village and public works, road projects, and other utilities.
6. Remitting hulbanni, mohatarfa, and land revenue for wetlands, and suspending land revenue for dry lands.
7. Extending advances to weavers.
8. Providing grain compensation allowances to low-paid officials and village servants.

As the hot weather season concludes, decisions are needed on whether to close significant projects immediately and redistribute workers to smaller public and village works closer to their residences. Dependent family members would gain access to village-based gratuitous relief. Another consideration is whether to keep the large works operational until the monsoon onset. Simultaneously, actions are taken to distribute charitable relief fund donations and Takavi advances for seed and cattle purchases.

Premature action is avoided, and relief measures are not fully withdrawn until the monsoon's arrival is confirmed. As the rain initiates field employment, able-bodied workers and their dependents are allocated tasks. Weaker groups or individuals are ideally assigned tasks closer to their homes. Those in need of relief, particularly children, are included in village gratuitous relief lists until the main harvest brings improved earnings for the able-bodied.

The gradual winding down of relief works begins with the demand for field labour and concludes by the time the first significant autumn crop ripens. With the harvesting of the earliest primary autumn crops, gratuitous relief is generally terminated, and recipients receive a parting grant, either in grain or cash, sufficient for around two weeks' sustenance.

The objective of relief efforts during periods of distress, before full-fledged famine conditions, is to prevent the concentration of needy labour on major projects. Instead, smaller projects are evenly distributed across affected regions. Initiatives such as generous loans at the outset aim to uplift the farmers' spirits, a strategy witnessed in both the 1908-09 and 1923-24 instances.

**Preventing Famine: Strategies and Initiatives for Resilience**

Key measures implemented for famine prevention have included expanding railways to facilitate widespread food grain import and distribution. Additionally, efforts have been made to extend irrigation and enhance cultivation opportunities. Preparedness plans for appropriate relief works are also in place, ready to be activated in response to scarcity-related emergencies.

A permanent intelligence framework operates across all districts, collecting vital agricultural and statistical data at regular intervals through the village and Taluk officials, submitted to the Deputy Commissioner. Precise analysis of rainfall data and vigilant monitoring of price increases occur. Factors like broader agricultural decline, consecutive early and late rain failures, unusual rainfall patterns, crop losses, substantial migrations for food or labour, and elevated mortality rates among people and livestock are closely observed and analyzed.

Experience underscores the necessity of irrigation across the entire State, except for a limited area with reliable western border rainfall, to counteract sporadic famines and typical season fluctuations. Furthermore, the
Irrigation serves as employment for agricultural communities between dry crop harvesting in December and the onset of May's rains. Essential crops like sugar cane, vegetables, and high-quality rice cannot be lucratively cultivated without irrigation. It's estimated that a single crop's value increases by nearly fourfold in typical years with a secure river water supply, expanding to a thirtyfold increase during drought years.

The topography of the region, well-suited for tank construction, has been effectively utilized for this purpose for a long time. Additionally, numerous canals and river channel projects are present, many of which have been enhanced or established by the State and are under its administration.

One notable example is the Marikanve Reservoir, also known as Vani Vilas Sagara, which was completed in 1908 for Rs. 441 lakhs. It boasts a substantial capacity of 30,025 million cubic feet. This reservoir is anticipated to replenish approximately once every five years and to provide an annual irrigation water supply for roughly 30,000 acres of rice fields. The channels deriving water from its right and left banks span a combined length of 29 miles and cover 12,500 acres of wetlands each. Importantly, the reservoir can offer year-round irrigation water.

Another recent significant endeavour is the Cauvery Reservoir located at Kannambadi, with an estimated cost of Rs. 365 lakhs overall. The construction of this reservoir has opened up opportunities for cultivating premium perennial crops that were previously not cultivated in this valley. Plans are being implemented to cultivate around 10,000 acres of sugarcane, facilitated by the storage's dependable water supply, using both existing and new channels.

Utilizing river channels for direct irrigation, such as those drawing water from the Cauvery River and its tributaries, serves as a reliable method to safeguard against famine. The majority of these river channels are situated within the Cauvery Valley. Their total count amounts to 53, with an overall length of just under 1,000 miles.

Tanks can be categorized into major and minor types. The State is home to 2,668 major tanks and 22,228 minor tanks. On average, there's one tank for every square mile across the State. Ongoing efforts are focused on restoring both major and minor tanks in need of repair. Moreover, substantial reserves of sub-soil water exist beneath tank beds and sandy streams, presenting the potential for tapping and lifting using pumps driven by various sources of motive power. Progress in this area has been made. The State boasts a total of 40,464 wells, irrigating an average of 2 acres each and subject to an assessment of either Rs. 5 per acre or Rs. 10 per well. Wells are particularly abundant in the Kolar and Tumkur Districts.

A dedicated railway system has been established to serve as a protective measure by importing and distributing food grains during scarcity periods. Radiating from Bangalore, railway lines extend to various areas affected by scarcity. Presently, every district is connected to a railway line passing through a section of it. Since the significant famine of 1876-78, when the sole railway was the Bangalore branch of the Madras Railway up to Bangalore Cantonment, the construction of new railway lines through the heartland has played a crucial role in averting severe distress.

Considerable efforts have been undertaken across various domains to advance overall prosperity. The assessment of land revenue has been progressively made more reasonable and adaptable, allowing for flexible collection during drought periods. The State provides loans at low interest rates and with lenient repayment terms for initiatives like land improvement, acquiring seeds, and procuring bullocks. Dedicated government departments are tasked with establishing Co-operative Credit Societies to uplift the populace, conducting experiments to enhance agricultural practices, and fostering the growth of arts, industries, and commerce within the State. Starting from 1911-12, the Economic Conference and its diverse Committees have been dedicated to enhancing the populace's material well-being through multiple avenues.

To avert the need for excessive borrowing when confronted with substantial famine relief obligations, the Government took the decision in 1906-07 to set aside two lakhs of rupees annually as a famine insurance fund. For several years thereafter, a regular provision of two lakhs of rupees was allocated, with the allocation even being raised to Rs. 5 lakhs in 1916-17. However, due to recent financial constraints, this provision has had to be discontinued.
Bibliography

- Imperial Gazetteer of India, Vol. III.
- "Sequence of Famine Relief Works" Memorandum, dated 15th September 1901.
- "Irrigation Works in Mysore" Memo, 1901.
- "Marikanve Reservoir and Irrigation under It" Note, 1906.
- Mr. T. Ananda Rao's Memorandum, dated 16th September 1899.
- The Mysore Famine Code, 1909.
- Handbook on Famine Administration in the Mysore State.
- Irrigation Improvements in Mysore, 1912.
- Handbook of Instructions: Distress of 1923-24, 1924.
- Devans Addresses to the Mysore Representative Assembly, 1881 to 1925.