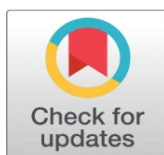


SOCIO-ECONOMIC CONDITIONS OF LABORERS ENGAGED IN SAND MINING IN THE RIVER CHALIYAR OF KERALA DURING THE POST-BAN PERIOD OF SAND MINING

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DOI
[10.29121/shodhkosh.v5.i1.2024.3935](https://doi.org/10.29121/shodhkosh.v5.i1.2024.3935)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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ABSTRACT

This study investigates a comparative analysis of the socio-economic conditions of laborers engaged in sand mining in the River Chaliyar of Kerala, focusing on the impacts of the recent ban on sand mining activities. Using a sample size of 100 laborers on whom the study was earlier conducted for the investigator's PhD work. The research examines changes in their income, employment status, living conditions, and alternative livelihood opportunities following the ban. The findings reveal significant challenges faced by laborers and highlight the need for sustainable alternatives.

Keywords: Sand Mining, Socio-Economic Conditions, Sand Auditing

1. INTRODUCTION

Sand mining has been a significant economic activity along the River Chaliyar, providing livelihoods for many laborers. However, environmental concerns have led to a ban on sand mining in the region. River sand mining having found very much capable of boosting the rural economy, enhancing the socio-economic status of labourers and increasing the revenues of Local Self- Governing Institutions (LSGIs). The authority should take measures in pursuing sustainable and efficient river sand mining without compromising the needs of the future generations. River sand is a common property resource having the features of non-excludability and rivalry in consumption. Hence, the goal of the LSGIs, labourers and all other related people is to be "Nurturing the nature for future." This study aims to understand how this ban has affected the socio-economic conditions of the laborers who relied on this activity for their livelihoods earlier.

METHODOLOGY

- **Sample Size:** 100 laborers directly involved in sand mining activities before the ban were selected through random sampling.
- **Data Collection:** Surveys were conducted using structured questionnaires that covered demographic information, income levels, employment status, living conditions, and alternative livelihoods.
- **Analysis:** Data were analyzed using statistical tools like percentages, paired t test etc. to identify trends and correlations.

FINDINGS

Major findings of the study are explained in the following paragraphs

Demographic Profile of Respondents

Age: Majority of labourers belonged to the age group of 30-40 followed by the 20-30 age groups. It was observed that the age of the youngest labourer was 17 years and age of the oldest labourer was 65years. The average age of labourers was found to be 35.

Gender: Predominantly male (95%), with women primarily involved in ancillary roles.

Education: 70% had completed primary education; 30% had higher secondary education and labourers having completed Graduation and above is very negligible.

Income Levels

- **Pre-Ban Income:** Average monthly income from sand mining was approximately INR 41930
- **Post-Ban Impact:** 80% of the laborers reported a significant drop in income, with average earnings falling sharply to INR 22703 from alternative sources.

Descriptive Statistics on Income of Sand Mining Labourers (Monthly)

Level	Mean Income	Standard deviation	Paired t-value 20.34 (0.00) **
During sand mining	21175	6716.231	
After Ban on sand mining	11465	4565.58	

Figure in brackets is p-value. ** indicates that there is statistically significant difference between mean values of the two groups at 5% level. That is, there is a significant fall in the monthly income of the labourers in the post ban period of sand mining.

Employment Status

- **Loss of Employment:** 75% of respondents lost their primary source of income due to the ban on sand mining.
- **Alternative Employment:** Only 25% found alternative work, primarily in agriculture or daily wage labour, often at lower wages.

Table 2: Employment Status of Laborers Post-Ban

Status	Percentage
Unemployed	75
Employed in Alternative Jobs	25

Living Conditions

Housing: Many laborers reported deteriorating living conditions, with 60% unable to maintain their homes.

Access to Basic Amenities: Access to clean drinking water and sanitation facilities decreased, with many relying on shared resources.

Table 3: Changes in Living Conditions

Condition	Pre-Ban	Post-Ban
Housing Quality	Good (60%)	Poor (60%)
Access to Clean Water	Yes (70%)	No (55%)
Sanitation Facilities	Adequate (50%)	Inadequate (60%)

Health and Nutrition

Nutritional Status: 65% of families reported a decline in nutrition, often skipping more food due to financial constraints.

Health Issues: Increased health problems were reported, including stress-related disorders and malnutrition among children.

Table 4: Health and Nutritional Status Post-Ban

Parameter	Percentage (%)
Decline in Nutrition	65
Health Issues Reported	70

Social Impact

- **Community Tensions:** The economic strain has led to increased tensions within communities, with rising instances of domestic conflicts.
- **Migration:** Some laborers are considering migrating to urban areas in search of better opportunities.
- **Illegal sand mining:** Illegal mining has been very active since the ban in the Chaliyar river banks due to poor night patrolling by officials which will lead to the losing of revenue to local bodies and make the decay of public property.
- **Formation of Mafia groups:** Unemployment on account of ban has resulted in the formation of different mafia groups which pose threat on the peaceful life of the people.

DISCUSSION

The ban on sand mining in the river Chaliyar of Kerala has had profound socio-economic repercussions for laborers. The transition from a stable income to uncertainty has highlighted vulnerabilities among the labour force, exacerbating issues related to poverty and social inequality. Many of the labourers had to switch over to risky jobs with less earnings. The authority has to conduct sand auditing and revoke the ban on sand mining in the river Chaliyar of Kerala. Some important steps towards tackling these issues are explained below.

Need for Alternative Livelihoods:

There is an urgent need for government and non-governmental interventions to provide alternative livelihood options. Skill development programs and support for entrepreneurship in sustainable practices can mitigate the adverse effects of the ban.

Community Support Systems:

Establishing community support systems that provide financial assistance, healthcare, and education can help laborers transition to new forms of employment.

Sand Auditing: The LSGIs have to conduct proper sand auditing and lift the ban on sand mining. It will boost up the local economy which was once very much vibrant due to sand mining and related activities.

2. CONCLUSION

The study underscores the critical socio-economic challenges faced by laborers due to the ban on sand mining in the River Chaliyar. Comprehensive policies that prioritize the well-being of affected communities and facilitate alternative livelihoods are essential for sustainable development in the region. The LSGIs concerned should take measures to do the needful for surviving the local people as well as to protect the river by mining upto the desirable level after conducting sand auditing.

RECOMMENDATIONS

- 1) **Government Intervention:** Formulate policies that support skill development and alternative livelihood programs for affected laborers.
- 2) **Community Engagement:** Involve local communities in decision-making processes related to resource management. Here, the labourers are to be given due role in formulating policies.
- 3) **Monitoring and Evaluation:** Implement systems to monitor the socio-economic conditions of laborers and assess the effectiveness of alternative livelihood initiatives. Proper monitoring and evaluation the sand mining process and the socio-economic conditions of the stakeholders are to be systematically adopted.

POSSIBLE SUGGESTIONS

- The implementation of the Kerala Protection of River Banks and Regulation of Removal of Sand Act, 2001, is to be made scientific
- Sand mining should be done by Grama Panchayath by using labourers and sold at fair prices.
- Illegal mining should be strictly dealt with.
- Awareness programmes should be conducted among labourers and other beneficiaries. Policies are to be formulated in making sand mining sustainable.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

None.

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