

AN OVERVIEW OF FIRE CRACKER MARKET SCENARIO: A CASE STUDY OF NANGI (MAHESHTALA MUNICIPALITY); SOUTH 24 PARGANAS

Mitra Mondal

Assistant Professor in Geography, Vivekananda College for Women, Barisha,
Kolkata -700008

Abstract

Fireworks industries are more hazardous than compared to other industries. Fire and explosion are common causes of occurring accident. But still the use of firecracker is related with much celebration like Diwali, marriage, festive and other occasions. Nangi is the third largest firework industry after Sivakasi and Champahati in India. In recent years, the Calcutta High Court has banned the sale of fire cracker as this fire cracker creates the environmental pollution. Therefore, the industry is shocked over the high court banning sale of cracker and make the seller and customer lose confidence in sale and purchasing products. The present paper attempts to highlight the present market scenario and the problems faced by seller and customer and also suggest some remedial measures to overcome the problems.

Keywords: firework, hazardous, explosion, accident, environmental, pollution



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Introduction

Fire work industry has long tradition in India. It is generally associated with celebration from local events to huge nationwide celebrations. It is related with Festivals, entertainment, joy and pleasure. But at the same time this industry is dangerous also as there is a chances of explosion and accidents and affects on environment. Therefore, the sale of fire cracker is restricted by law in many countries.

Nangi once had a thriving firework industry. It is famous for manufacturing and sale of crackers like phuljuri, rangmashal, basan tubri and chocolate bombs. However, this industry has now gradually entered into sinking phase and illegal firework industry took the place of it due to socio economic and environmental factors.

Objectives:

Objectives of case study are as follows

- To analyze the socio economic profile of seller and customers.
- To find out the different problems faced by the seller and customers.
- To suggest remedial measures to overcome the problem.

Location and Background of the Study Area

Nungi is located in Maheshtala Municipality of South 24 parganas of West Bengal. It is also part of Kolkata Metropolitan Development Authority.

Out of 35 administrative wards of Maheshtala Municipality, the ward number 30 and 31 has been selected as study area. Ward no. 30 and 31 has been chosen as study area because it covers Nungi fire cracker market. Ward no. 30 and 31 and its surrounding village Chongripota have traditional firework activities. Fireworks production has evolved as a cottage industry.

The study area located between 22° 29' 6" N to 22° 29' 47" N latitude and 88° 12' 18" E to 88° 13' 30" E.

Methodology

The methodology of the whole study has been divided by into three steps:

- a) **Pre field work:** This stage involves the collection of different levels of primary and secondary data like census data ward maps etc. Questionnaire was designed to collect primary data through market and customer survey.
- b) **Field work:** This step involves visiting the study area for collection of primary data. Photographs have been taken to visualize the spatial variation of fireworks.
- c) **Post field work:** This is the most important task for preparation of this paper by assembling the report obtained by various sources. The available primary and secondary data was analyzed, arranged in tabulated form and represented by cartographic diagram and statistical methods.

Database

- a) **Primary survey:** For the present study, primary data have been collected through market survey in selected wards of Nangi based on questionnaires.
- b) **Secondary survey:** The census of South 24 parganas is the secondary database of this study which gave information about male and female population, literacy rate and working population etc. Besides this Maheshtala Municipality provides other secondary information about the area and ward map.

Accessibility

Nangi is easily accessible within 2-3 hours from the state capital Kolkata. Transportation is affordable due to effective services by Calcutta State Transport, private busses, Auto etc. It

has a railway station; 23 km from Sealdah, on the Sealdah Budge Budge section of Kolkata suburban railway. It serves as the railway station for the industrial town of Batanagar.

Market at a glance

Year of Establishment

Most of the shops are very old because Nangi market is very famous for its fire cracker. It is the third largest fire cracker centre in India. Therefore, most of the shops are old. According to primary survey 18 shops were established during 1980-1990 years. 16 shops were build up during 1990-2000years. 11 shops were constructed in the periods of 2000 to 2010.

Nature of Ownership

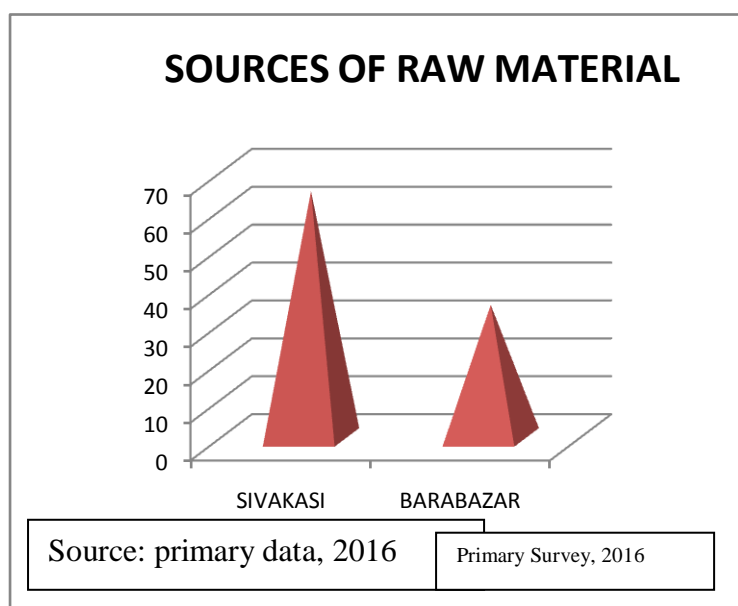
Most of the shops are situated in ground floor of the house.53% shops are owned. 31% shops are rented and 16% shops are leased for 5 years.

Category of shops

Most of the shops are retailer. 40% shops are retailer and 33% shops are dealer and only 26% are combined. It is mentionable that most of the customers are buying various kinds of cracker for their business purpose. Most of the shops are opened for 7 days during festival and other celebration seasons. Otherwise shop remains closed on Thursday and Friday.

Raw material coming from

Large numbers of goods are coming from Sivakasi and some are brought from Barabazar, some from local household. The goods are transported through Truck



In this area there is a business committee. Only 40% shopkeepers have membership of committee. 57% shops have fire extinguishing facility and 71% have license.

Socio economic profile of seller

Caste

Majority of shopkeepers are Hindu. From the primary survey, it is clear that 44% persons are SC. Actually the area is SC dominated. 26% are general and 20% persons are OBC A.

Educational level

Most of the shopkeepers studied up to class X. 8% shopkeepers are illiterate, they are aged people. 15% shopkeepers are graduate and 24% studied up to class VIII.

Educational Status

Education Level	Shopkeepers
VIII cleared	24%
X cleared	35 %
H.S	18%
Graduate	15%
Illiterate	8%

Source: Primary Survey, 2016

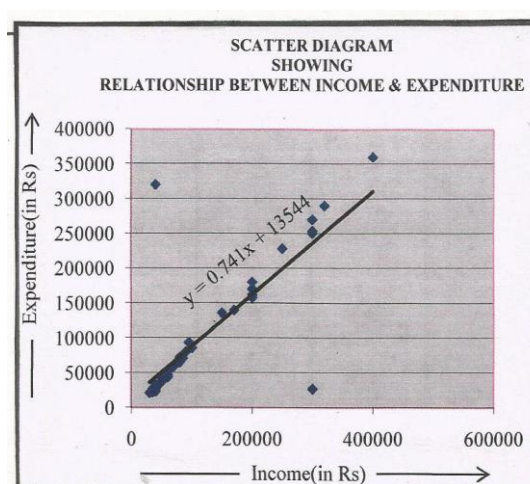
Wages for Employee

35 shop owners has appointed employee in their shops. Employees are paid wages on monthly basis.9 employee earned wages above 30000 rupees on yearly basis and 8 employees are paid Rs

20000 to 30000 per year. Only 6 employees are earned below Rs 10000 to 20000 .6 children are also engaged in bazi shop. So child labour problem also exists in the market.

Annual Income of Shops

Most of the shops have medium income per year.20 shops have earned income Rs50000 to 100000 per annum and 10 shopkeepers have annual income below Rs 50000 per annum. Little proportion of shopkeepers earned money Rs300000 to 400000 per year.



Expenditure

Shops expenditure includes electricity, corporation tax, raw material and transportation cost. 29 shops spend money from Rs 20000 to 80000 per annum. Some shops have expenditure Rs 260000 to 380000 per year.

From the diagram it is clear that higher income encourages the shop owners to invest more. Out of 45 shopkeepers 16 shopkeepers have other sources of income. They engaged in some other occupation like seasonal labour, Fishing, and another business.

Mainly cash payment is done here. But other mode of payment is also found here.

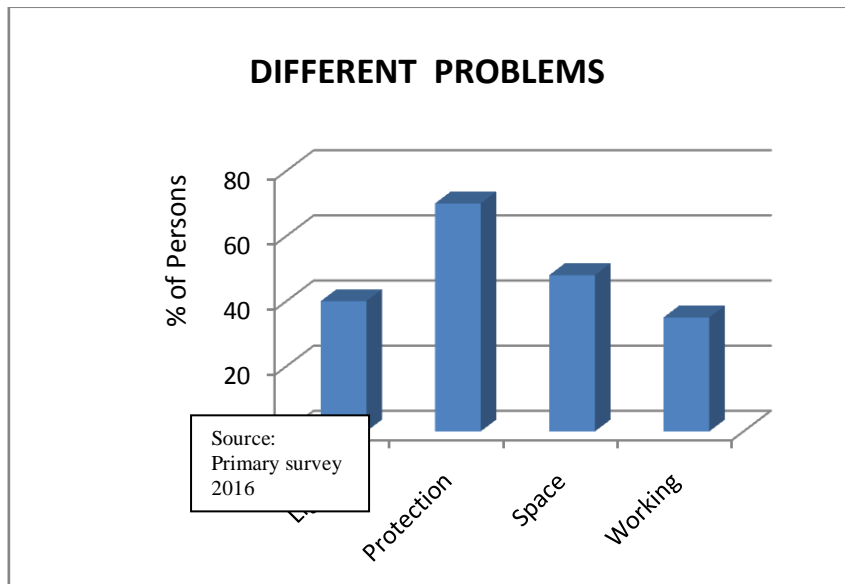
Mode of payment

Payment is mainly done through cash. Besides cheque and card payment is also done.

Cash payment	80 %
Cheque payment	5%
Card payment	15%

Source: primary survey, 2016

Problems Perception survey about the market reveals dissatisfaction of shopkeepers regarding garbage disposal, drainage system, sewerage system. Transport and Management and administration are good.



Profile of Customer

Customer plays an important role in the economy.

The survey reveals that male customer are dominant than female. Out of 100 buyers almost 80% are male and 20% are female.

In terms of caste variation it is observed that OBC A people are much higher than others. ST population is much lower and general and SC population is medium.

From Religious point of view 62% buyers are Muslim and 38% are Hindu .Most of the buyers are unmarried. It is found that young generations are more interesting in purchasing firecrackers.

Educational status

From the primary survey it is seen that only 24% customer have passed Higher Secondary. PG and UG level students are low in number. Some customers are engineer.

Occupation

Different types of occupations are found like carpenter, construction worker, agricultural labourer, driver, daily wage labourer etc. The number of driver, conductor and construction worker is comparatively higher than other occupation.

Customer coming from

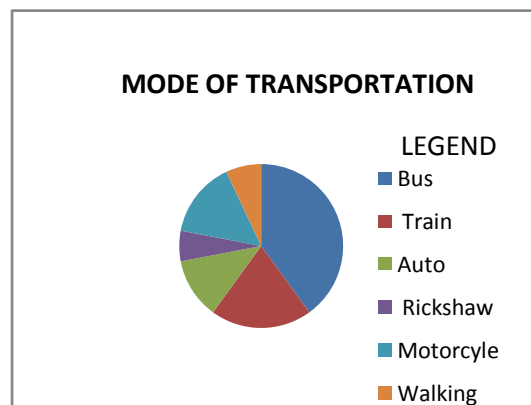
From different region people come to Nangi for buying firecracker. Because Nangi is a very famous fire cracker centre. Customer mainly comes from different parts of Kolkata, Howrah, Barasat, Sonarpur. Buyers also comes from local villages and surrounding towns like Kalikapur, Joka, Bata, Budge budge, Behala, Sontoshpur, Metiabruz and Gardenreach.

Mode of Transportation

The study reveals that most of the buyers prefer bus service. The buyers who are coming from long distance, they prefer train, the chief mode of transportation and otherwise customer prefers Auto, Rickshaw, Motor cycle and even walking. Specially customers coming from Howrah , Barasat and Sonarpur mainly travel in train to reach Nangi.

Transport Cost

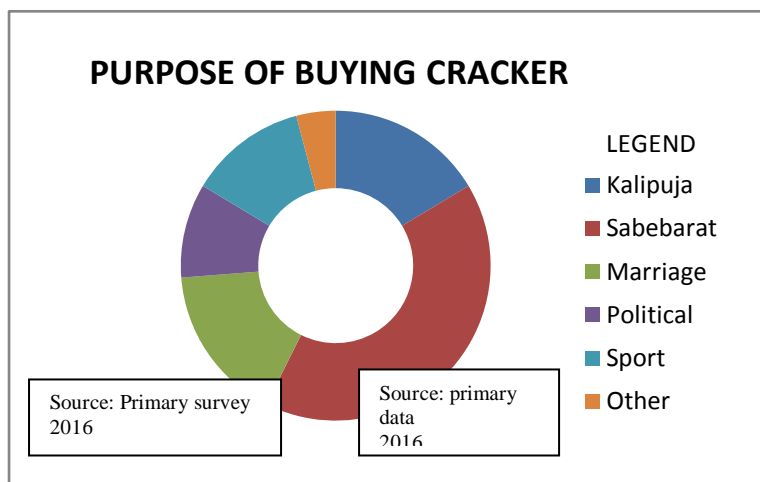
Transport cost for most the customers is Rs 20 to 40. 40% buyer spend money 60 to 80 rupees and 10% buyers spend more than 80 rupees for transportation.



Purpose of Buying

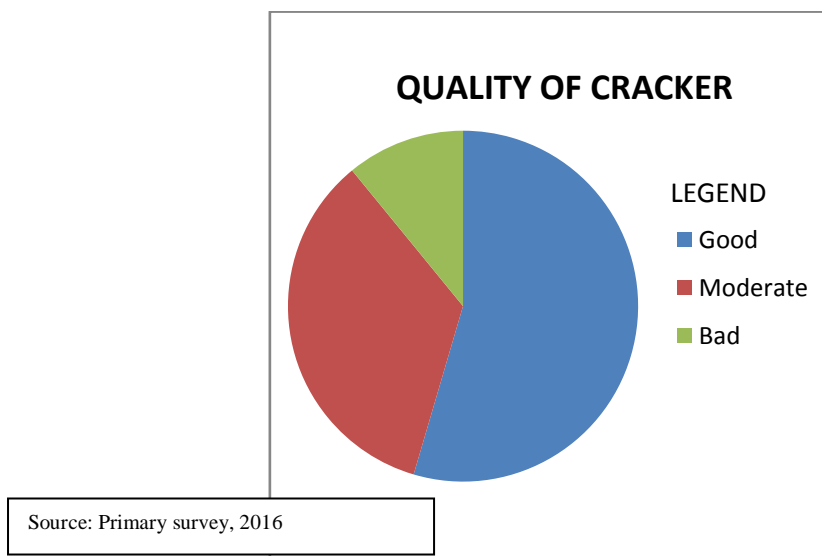
As the survey conducted in the period of April, May and some days of June, So many customer especially Muslim buyers are higher due to festival of Sabebarat. 50% customer buy cracker for this occasion. 19% customer buy cracker for Kali puja. Some local Kali puja are there. Others buy fire cracker for the purpose of marriage, victory of sports and other occasions.

Preference of Cracker From primary survey it is seen that demand of Rocket and Chocolate bomb, and Tubri are much higher. The demand of Charki, Sparkle, and Rangmashal are quite low and these are specially used by children. Most of young generation prefer Chocolate bomb, Rocket and Tubri.



Quality of Products

52% customers are satisfied with crackers quality. 34% respondents say the quality is moderate. 15% buyers say that the quality is not up to the mark.



Amount of buying Cracker

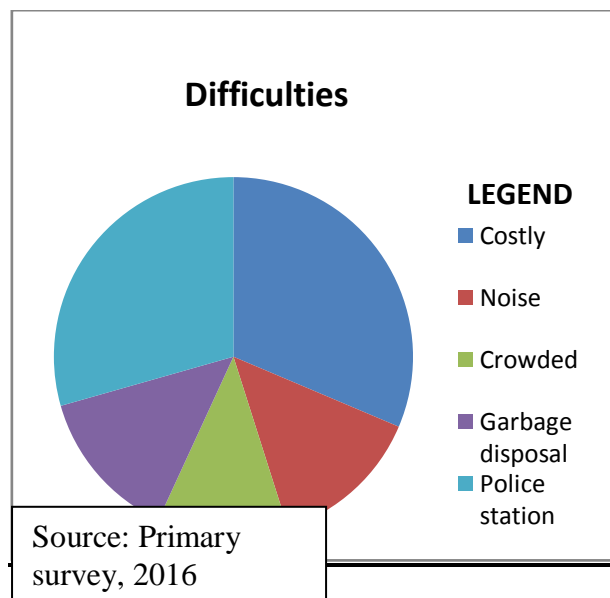
It is observed that 30% people buy cracker between 2000 to 10000 rupees. 22% people buy it between 10000 to 18000 rupees and 16% persons buy between 26000 to 34000 rupees due to good quality.

Frequency of Visit

Most of the buyer comes for 6 times in a year. They purchase cracker for different occasion throughout the year and medium number of customer comes for 4 and 5 times.

Difficulties

As per most of the customer’s opinion, the cracker price is expensive. Many of them suffer from police interferences. Some of them also complain about the noisy, crowded and polluted environment of the market.



Findings

From primary survey different problems are identified

- No protection system to prevent fire accident in market area.
- Wage given to employee is very low.
- Child labour exists due to poverty.
- The market area is crowded, congested and polluted.
- Presence of Police Interference due to the judgment of Kolkata High court.
- Selling is maximum during festive seasons.
- Young persons are the main customer and Muslim customers are maximum in number.

- Rocket and chocolate bomb are high in demand.

Suggestion

For the revive of fire cracker industry and market some measures should be taken.

- Introduce of fire protection system to prevent accidents.
- The proper waste management should be initiated in the market area.
- Uses of eco friendly components in fireworks to prevent pollution
- News paper, media shall be enhanced to create awareness of eco friendly fire work among the people and manufacturer.

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