

EVALUATION OF EFFECTS OF DEMONETIZATION ON SMALL SCALE INDUSTRIES IN KARNATAKA



KARNATAKA EVALUATION AUTHORITY DEPARTMENT OF PLANNING, PROGRAMME MONITORING AND STATISTICS GOVERNMENT OF KARNATAKA

JULY 2019

EVALUATION OF EFFECTS OF DEMONETIZATION ON SMALL SCALE INDUSTRIES IN KARNATAKA

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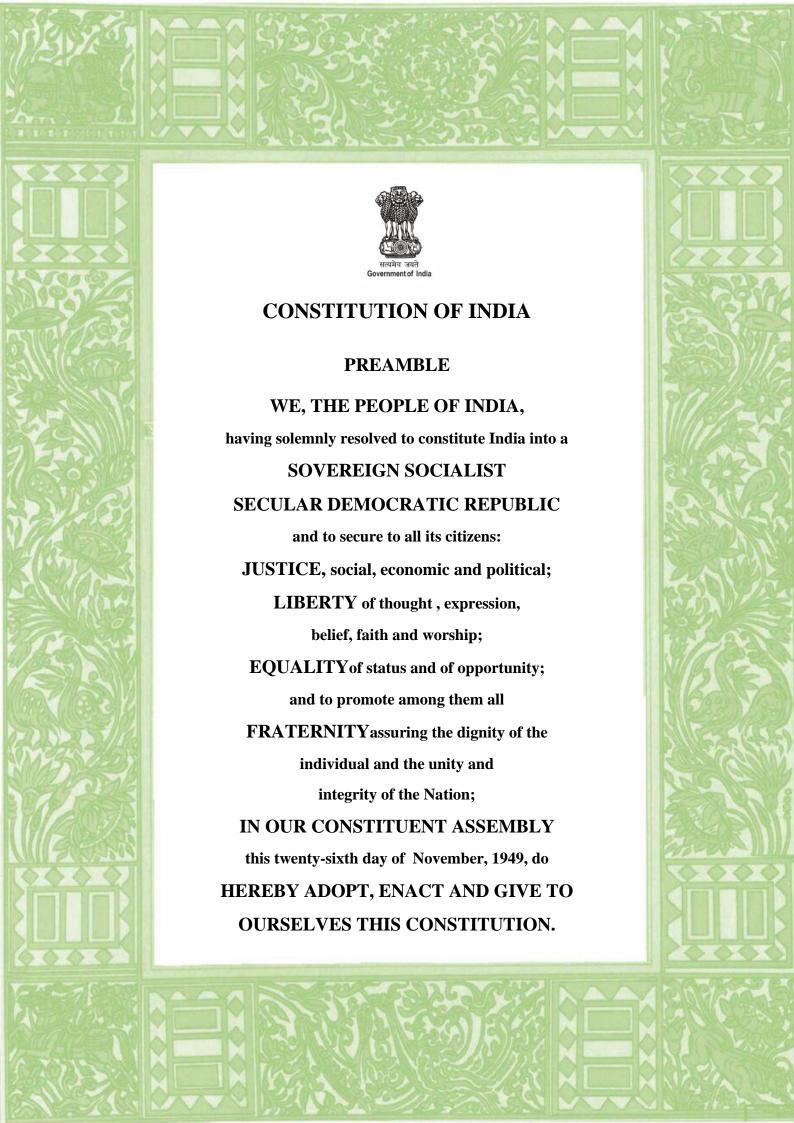
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FOREWORD

India's monetary policy witnessed a major breakthrough with the announcement of the demonetisation of Rs. 500 & Rs. 1000 currency notes from circulation on 8th November 2016. This was followed by prolonged cash shortages in immediate following period that created significant disruptions in the economic activities. The incidence varied across the business community depending on the cash base of their day-to-day transactions. In this context, it was likely that the small industries & petty traders to get more affected and had to find out alternatives to meet their cash needs. To understand the immediate impact and the coping strategies applied by the small industry owners a study on 'Evaluation of Effects of Demonetisation on Small Scale Industries in Karnataka' was initiated by Karnataka State Small Industries Development Corporation through Karnataka Evaluation Authority (KEA). The study was outsourced by KEA to the Empanelled Consultant Organization Hyderabad Karnataka Centre for Advanced Learning, Kalaburagi.

The study is based on a small sample of 235 units drawn from Bangalore (Urban) and Kalaburagi districts of the State. The findings of the study indicate that for 93 percent of the sample respondents it was an unexpected and sudden change. The non availability of cash affected salary and wage payments of the workers and the purchase of inputs. Production was adversely affected in 70 percent of sample units in Kalaburagi district which is a rural area. Small entrepreneurs also faced problems with banks for cash withdrawal. The coping strategy adopted was either using cash in hand or borrowings from friends and relatives and postponement of payments. The study has suggested promotion of electronic methods of payments with adequate security measures to control cyber crimes for safe movement towards a cashless economy and increased financial assistance to small scale industries to build resilience against such vulnerabilities.

The study received support and guidance of the Principal Secretary and the Secretary Planning, Programme Monitoring and Statistics Department, Government of Karnataka at various stages. The report was approved in 43rd Technical Committee meeting. The review of the draft report by KEA, members of the Technical Committee and an Independent Assessor, has provided useful comments and inputs to improve the report. I duly acknowledge the assistance rendered by all in successful completion of the study.

Chief Evaluation Officer Karnataka Evaluation Authority

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President

SSulapule

HKCAL, Kalaburagi

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Executive Summary

Money is backbone of transactions in modern economies, playing roles like medium of exchange, store of value and unit of account. Monetary policy determines supply and demand for money and changes in monetary policy affects them. Government in India introduced a major monetary policy change in November 8, 2016 by demonetizing specified currencies, i.e. Rs. 500 and Rs. 1000, with objectives of (1) eliminating fake currency, (2) eliminating black money, and (3) controlling subversive activities. Specified currencies were to the tune of 86.4 per cent of total currencies in circulation. Hence, government introduced demonetization to meet above mentioned objectives, besides moving towards cash less economy using modern technology based electronic transactions.

Demonetization is a monetary process of stripping a currency unit of its legal tender status, which results in withdrawing currency from circulation. Demonetization has been introduced in various other countries also over time to meet different objectives like controlling excess liquidity, inflation, black money, etc. In India during the initial days of demonetization people experienced difficulties in exchanging old currency to new currency, which was accentuated by inadequate supply of new currencies. It was reported by media that people stood in long lines in front of ATMs and banks to obtain new currencies. It was observed that demonetization promoted digital transactions and payments through electronic payment system increased. Keeping in view impacts of demonetization on all sectors of the economy, this study tried to analyse impacts of demonetization on SSIs in Karnataka.

Review of literature illustrated limited number of studies on small scale industries. Some of the available studies are narrow in coverage of issues and

samples. Hence, this study tried to fill this gap on impacts of demonetization on SSIs.

This study has been conducted in Karnataka, which has 3.82 lakh SSI units employing 22.77 lakh people. Objectives of the study were to understand need and context for demonetization in India, study revenue of SSIs, examine impacts demonetization on production, sale and employment during demonetization. This study is limited to SSIs in Karnataka only and the reference period is April 2016 to May 2017 and used both secondary and primary data. Primary data were collected from study districts Bangalore Urban and Kalaburgi, respectively representing urban and rural areas, canvassing structured schedules among 235 SSI units.

Small scale industries in India have been renamed as micro, small and medium enterprises and been classified on the basis investment in manufacturing and service sectors. Among 634 lakh units, large number of MSMEs are micro units at 630.52 lakh, where Uttar Pradesh and West Bengal have large number of MSMEs and Karnataka has over 38 lakh units.

Karnataka is an important industrial state promoting high technology based, capital intensive and knowledge based industries. MSMEs constitute a significant place in Karnataka, with over 4.8 lakh registered units employing over 28 lakh people during 2014.

The study observed that Karnataka has 13959 factories, including readymade garments, textiles, chemical and engineering employing over 15 lakh people. Bangalore Urban district has over 43 per cent of factories, while it is around 1 per cent in Kalaburgi. Karnataka has 176 industrial estates thus encouraging industrial growth. The state has 3.82 lakh SSI units providing employment for 22.77 lakh people, out of which Bangalore Urban district has largest share.

Large number of MSMEs, 62 per cent, in the study area were established during the period 2001-10, which might be due to changes in industrial policies to capture opportunities provided by economic reforms. Majority of SSIs (84 per cent) under study had markets in few districts around their location, which indicates SSIs meeting local demands. Establishment cost of SSIs was on an average over Rs. 1.5 crores from both districts together, indicating large number units in the category of small scale industries according to the MSME classification. Average revenue of SSIs declined from Rs. 5.16 crores in 2011 – 12 to Rs. 4.41 crores in 2016 – 17, due to reduction in demand, lack of financial support, increased competition were factors as expressed by entrepreneurs.

Demonetization was an unexpected move by the government as opined by 93 per cent of respondents and electronic media like television are major medium of communication about demonetization. SSIs faced problems in day to day transactions due to reduction in cash availability, which affected salary payment (26 per cent of SSIs) to employees, purchasing of raw materials (6 per cent), etc. The impact was more in rural areas as observed in Kalaburgi district. Entrepreneurs adopted measures like using cash in hand (14 per cent) to borrow loan to meet their requirements of cash and cash usage is more in Bangalore than Kalaburgi.

Large proportion of entrepreneurs (22 per cent) faced problems while transacting with banks, but the point to be noted is that even 22 per cent is not a small proportion as they have faced problems with banks during demonetization.

Demonetization process adversely affected production of SSIs (25 per cent) and it was more (70 per cent) in Kalaburgi, which experienced decline in production. Further, sales in 25 per cent of SSIs reduced during demonetization due to declined production and also non-availability of cash. The reduction was

more in rural areas (Kalaburgi – 70 per cent of SSIs). The average revenue also fell sharply during demonetization, from Rs 484.6 lakh in October 2016 and declined to Rs. 379.67 lakh in November 2016. The study reveals that demonetization created negative impacts on production, sales and revenue of SSIs.

On employment side demonetization impacted adversely on temporary job workers (14 per cent of SSIs) as entrepreneurs had to stop engaging temporary workers due to non-availability of cash. Loss of temporary employment is high in Kalaburgi district (40 per cent), which shows vulnerability of rural less skilled labourers during sudden shocks. The study observed relatively large number of entrepreneurs (34 per cent) opining demonetization as not a good move as it adversely affected production and revenue of SSIs.

Demonetization affected private money lenders and this in turn affected SSI owners also, explaining the need to strengthen financial system to meet needs of SSIs. Further, SSIs which function on job work basis suffered more as most of them deal in cash. Impact of demonetization was more on recently started firms due to non-availability of money. Entrepreneurs faced problem to pay for their staff and hence some of them relieved their daily wage labourers. Overall, entrepreneurs felt that sudden implementation of demonetization created confusion and problems while severely affecting their business.

Findings of this short term study on impacts of demonetization on SSIs leads to the following policy suggestions.

Demonetization has promoted use of electronic payment system, hence monetary literacy, in terms of reducing cash usage in transactions and adopting electronic methods of payments may be promoted.

Use of electronic methods of payments has increased finance related cyber-crime, indicating the necessity of taking adequate security measures to control finance related crimes.

Growth of industries need to be promoted in other districts also to create employment opportunities particularly in rural areas.

SSIs should be encouraged in all districts to meet demands of these regions.

Inadequate financial support was a major reason for the difficulties of entrepreneurs and hence this problem needs to be addressed by creating financial institutions that help SSIs.

Any policy change will immediately impact on vulnerable groups like casual and less skilled labourers. Hence, efforts should be taken to protect these groups from adverse impacts of policy changes.

Chapter I Introduction

Money plays significant role particularly in economic life of human beings. In modern economies production and consumption activities have increased manifold, increasing transactions or exchanges of goods and services between suppliers and consumers. Money has been facilitating to carry out these exchanges smoothly. This indicates that money is a medium of exchange and is backbone of modern economic activities. Economic theory, broadly, defines money as a medium of exchange, store of value, and unit of account - as a medium of exchange money is used to pay for goods and services; as store of value it transfers purchasing power from present to future; and as unit of account provides way for fixing prices. These different functions are carried out through various forms of money such as currency with public, deposits in banks and post offices. People prefer to hold currency or cash in hand for transactions because of its high liquidity. According to Reserve Bank of India 13.46 per cent of money was in the form of currency with the public as on January 18, 2019 (Reserve Bank of India – Website). Volume and supply of money is monitored by monetary policy of the country as per financial requirements of economy. Any changes in monetary policy will alter financial system and affect the economy.

Money is backbone of modern economies which are based on expanded markets, i.e., producers and consumers with increased volume of transactions. Modern economies are in the process of fast movement towards digital economy, where information technology is paving way for electronic transactions of money. This technological development has been enabling countries to adjust their monetary policies to meet various needs of the economy. In this regard, Indian government also introduced a major change in its monetary policy to attain different objectives.

Government of India announced a major change in monetary policy, demonetization, on 8th November, 2016 by withdrawing Rs. 500 and Rs. 1000 notes from circulation (GOI 2016 – Ministry of Finance - Gazette of India, No. 2652; Reserve Bank of India Circular in Annexure 1). Subsequently Reserve Bank of India, on the basis of Government of India Gazette, issued a circular stating "In terms of Gazette Notification No 2652 dated November 08, 2016 issued by Government of India, 500 and 1000 denominations of Bank Notes of the existing series issued by Reserve Bank of India (hereinafter referred to as Specified Bank Notes) shall cease to be legal tender with effect from November 09, 2016, to the extent specified in the Notification. Further, it stated that a new series of Bank Notes called Mahatma Gandhi (New) Series having different size and design, highlighting the cultural heritage and scientific achievements of the country, would be issued (RBI 2017).

Major objectives behind this move as specified by the government were:

- (1) Elimination of fake currency stated that the fake currency of above denomination notes are largely in circulation, identification of fake and genuine bank notes has become difficult and use of fake currency is causing adverse impacts on the economy;
- (2) Elimination of black money stated that high denomination bank notes have been used for storing unaccounted wealth, which has come to light because of large cash recoveries made by enforcement agencies;
- (3) Control of subversive activities said that fake currency has been used for financing subversive activities like drug trafficking and terrorism, which is causing damage to economy and security of the nation.

In the background of above objectives Government of India ceased Rs. 500 and Rs. 1000 notes as legal tender with effect from 9th November, 2016. It

was stated that high denomination money was used for creating black money and subversive activities. In this respect the Government aimed at curbing these illegal activities by removing existing high denomination currencies and replacing them with new currencies, a move which could also reduce fake currencies. On the eve of demonetization, in terms of value, as per the Annual Report of Reserve Bank of India (RBI - 31 March 2016) in March 2015 and March 2016 high denomination currencies, i. e, Rs. 500 and Rs. 1000 accounted for over 85 per cent and 86.4 per cent of total currencies in circulation, which indicates that high denomination currency was significantly large in circulation. Keeping this in view, Government of India introduced demonetization, initially stating to control cash transaction and later it was said that demonetization is for reducing cash circulation, encouraging digital payments and making Indian economy less cash dependent.

Demonetization is not new in India as Indian Governments had demonetized currencies earlier also where in January 1946 and January 1978 higher denomination banknotes of Rs. 1000, Rs. 5000 and Rs. 10000 were withdrawn from circulation.

1.1. Definition of Demonetization

Demonetization is a monetary policy where a certain currency unit ceases to be used as a form of legal tender. Further, it is an act of stripping a currency unit of its status as legal tender. Governments take decisions to stop circulation of some denominations or completely replace old currency for various reasons. During demonetization process demonetized currency is withdrawn from circulation and deposited in banks and replaced by currency which is in circulation or with new currency. Demonetization is also referred to as the process of moving people from a cash-based transaction system to a cashless transaction system. Nowadays governments and financial institutions

discourage people from keeping hard cash as it helps in evading tax, reducing deposit base of financial institutions and may increase public debt. In this regard demonetization has been defined as ending something that is no longer legal tender in a country or when a currency notes of a particular denomination ceases to be a legal tender it is called as demonetization (Rebello, J. and Gayatri N. (2016 Nov 29).

Generally, demonetization is implemented for various factors such as combating inflation, removing corruption and criminal activities (counterfeiting, tax evasion), discouraging cash dependent economy, facilitating trade, and controlling circulation of black money and other unaccounted money. Demonetization is a process with multi-dimensional impacts on all groups i.e., households, manufacturing, services, etc. in the economy, covering both formal and informal sectors (V. Basil Hans).

1.2. Demonetization across Countries

Demonetization as a monetary policy has been implemented by many countries from time to time for various reasons and under different circumstances. Ghana (in 1982), Myanmar (in 1985, 1987), Brazil (in 1990, 1993), Soviet Union (in 1991), Russia (in 1993), Iraq (1993), North Korea (in 2009), Cyprus (in 2013), Greece (in 2015), and Venezuela (in 2016) announced demonetization suddenly for reasons like controlling excess liquidity, hyperinflation, fighting black marketing, control organized crime, exchange of old notes, meet financial and fiscal needs (GoI 2017), Government of India (2017), Economic Survey.

While countries like Singapore (1967, 1999 and 2014), Australia (1988 and 2015), Euro (1999), Canada (2011), Denmark (2012), Sweden (2013 – 2016), Zimbabwe (2015), Pakistan (2015), Euro area (2016) introduced demonetization with prior announcement to overcome monetary system failure, prevent

counterfeit money, create common currency, mitigate higher value money, improve public confidence in currency, replace banknotes, control inflation, corruption, black money, terrorism and illicit activities using high denomination currency (GoI 2017), Government of India (2017), Economic Survey.

1.3. Demonetization in India

Central Government announced demonetization in India on November 8, 2016 by withdrawing Rs. 500 and Rs. 1000 notes from circulation. These two category notes accounted for 86 per cent of total circulating cash in the economy. Government provided time till December 31, 2017 to deposit old currencies of Rs. 500 and Rs. 1000, and issued new currencies of Rs. 2000 and Rs. 500. According to the government demonetization was implemented for various reasons, which changed from time to time, like combating underground economy, eradicating counterfeit currency, controlling corruption, controlling tax evasion, eliminating black money (from money laundering, terrorist activities), promoting cashless economy, and controlling individuals and institutions/entities with huge sums of black money obtained from parallel cash systems.

Initial phase of recent demonetization saw lot of confusions as the cash dependent economy unexpectedly starved of cash to carry out economic activities. People had to stand in long and snake like lines outside banks and ATMs to exchange their old currency to new currency. The problem was accentuated by non-adjustment of ATM technology to new currency of Rs, 2000 and Rs. 500, so large number of ATMs turned non-functional to new currency. Further, government had imposed restrictions on withdrawal limit of cash by individuals from banks and ATMs, where majority of banks and ATMs faced shortage of cash.

It was believed that implementation of demonetization would result in improving financial system besides financial behaviour of citizens encouraging them to use less cash and move towards digital transactions. It was also hoped that the entire exercise would reduce inflation and control black money circulating in the economy. However, according to RBI's Annual Reports share of high denomination currency did not decline significantly, as it was 86.4 per cent in March 2016 and 80.2 per cent March 2018.

Demonetization was expected to promote digital transactions, which paved way for development of alternative methods of payments like Real time gross settlement (RTGS), National electronic funds transfer (NEFT), mobile wallets (Paytm, MobiKwik), prepaid cash cards (Itzcash, Ola Money, Flipkart Wallet) etc. Information presented in Table 1.1 shows payments made through electronic systems in India between November 2016 and January 2018 published by Reserve Bank of India. Payments made through different electronic systems was Rs. 94004 billion in November 2016 and increased to Rs. 131980 billion in January 2018, which indicates rise in use of electronic payment methods. Among the various methods highest proportion of payment is made through RTGS followed by NEFT. Electronic payments across all methods have increased during the above period, as shown by average growth rate, but payment made through mobile banking has declined from November 2017. This issue needs to be studied further to examine factors for decline in the wake of promotion of mobile banking among people.

Table 1.1: Electronic Payment Systems - Representative Data (Updated as on March 06, 2018) (Value in Rs. Billion)

(value ii Rs. Dimon)											
Data for the period	RTGS	NEFT	CTS*	IMPS*	NACH*	UPI*	USSD**	Debit and Credit Cards at POS &	PPI #	Mobile Banking	Total
Nov-16	78479.2	8807.8	5419.2	324.8	606.6	0.9	7302.6	352.4	13.2	1244.9	94004.2
Dec-16	84096.5	11537.6	6811.9	431.9	626.8	7.0	103718.4	522.2	21.3	1365.9	104055.3
Jan-17	77486.1	11355.1	6618.4	491.2	541.4	16.6	381760.2	481.2	21.0	1206.7	97011.4
Feb-17	74218.8	10877.9	5993.9	482.2	592.0	19.0	357055.2	391.5	18.7	1080.0	92594.5
Mar-17	123375.8	16294.5	8062.8	564.7	829.4	23.9	337962.4	416.2	21.5	1499.9	149589.1
Apr-17	88512.2	12156.2	6990.6	562.1	905.2	22.0	301650.5	431.4	22.3	1443.8	109602.2
May-17	90170.5	12410.8	6745.9	585.6	692.4	27.7	316723.7	450.8	25.3	1940.7	111109.3
Jun-17	92812.6	12694.2	6409.9	596.5	708.6	30.7	313277.0	468.2	24.1	1584.7	113745.2
Jul-17	87149.3	12011.6	6342.5	604.8	771.7	33.8	302097.8	439.3	25.1	1019.2	107378.4
Aug-17	89163.4	12500.4	6224.3	651.5	752.4	41.3	294239.4	457.1	27.2	1033.0	109817.9
Sep-17	102348.1	14182.1	6271.5	717.6	628.4	52.9	323578.5	478.2	27.6	1121.6	124706.8
Oct-17	92056.1	13851.3	6340.2	750.4	900.5	70.3	299071.8	530.5	32.7	1168.7	114532.2
Nov-17	98410.5	13884.0	6633.9	782.6	724.1	96.4	287309.6	483.3	32.0	848.4	121047.1
Dec-17	100907.8	15779.2	6564.0	871.1	714.0	131.4	299367.3	528.7	35.1	921.5	125531.5
Jan-18	107488.4	15374.1	6792.6	882.1	727.7	155.4	290020.0	521.9	38.3	928.7	131980.8
Avg. Growth Rate (%)	3.9	5.4	2.3	7.7	2.9	76.0	111.6	3.8	8.9	-0.1	3.9

Source: Reserve Bank of India Website

Note:

- 1. Data is provisional.
- 2. *: Source is NPCI.
- 3. **: Figures Negligible, Source is NPCI
- 4. &: Card transactions of four banks.
- 5. #: PPI issued by 8 issuers for goods and services Transactions only.
- 6. h: Holiday
- 7. Mobile Banking figures are taken from 5 banks. The total volume & value of electronic payment systems does not include mobile banking.
- 8. NACH figures are for approved transactions only

RTGS – Real time gross settlement

NEFT – National electronic funds transfer

CTS – Cheque truncation system

IMPS – Immediate payment service

NACH – National automated clearing house

UPI - Unified Payments Interface

USSD - Unstructured Supplementary Service Data

POS – Point of sale

PPI – Prepaid payment instrument

Impacts of demonetization were observed on all sectors of the economy, i.e. agriculture, industry and service. In India large number of people earn their livelihood from agriculture and industrial sector. In terms of employment industrial sector is contributing next to agriculture by employing large number of people. These two sectors, unorganized to a large extent, depend on cash for their transactions. Reduction in cash availability disturbs activities hitherto carried out through cash. Therefore, effects of demonetization required to be studied in order to understand its impacts. In this respect examining the impacts of demonetization on industrial sector becomes essential. Industrial sector comprises both large scale industries and small scale industries (SSIs) or micro, small, and medium enterprises (MSMEs). This study is an attempt to examine impacts of demonetization on SSIs or MSMEs in Karnataka and does not cover large scale industries, which needs a large scale study.

Demonetization, although was intended to yield favourable results on the economy the initial impacts were not so favourable as it resulted in different types of hardships. During demonetization, as reported in various newspapers and electronic media households struggled to find cash, small businesses were severely affected, daily wage workers suffered. Trade related activities, particularly in informal sector, were adversely affected because of cash shortage. Impact of demonetization created a kind of uncertainty and short term liquidity was squeezed in the economy. Hence, this study tried to analyse impacts of demonetization on SSIs in Karnataka.

1.4. Review of Studies on Demonetization

Impacts of demonetization have been reported in newspapers, studies, etc. on different sectors of economy. A review of these reports and studies would provide an opportunity to understand demonetization and research gaps to analyse impacts of demonetization on SSIs.

Dash A (2017) argued that initial impacts of demonetization were seen in social, economic, and health sector, as people faced cash problems during marriages, at hospitals, etc. because of non-availability of cash. Besides, a cash limit of Rs. 2,50,000 was allowed for marriages after producing wedding invitation, but public opined that this amount was insufficient to meet necessary expenditures of marriage. Further, lack of cash in hand led many people to forego their medical treatment. People had to stand in long lines at banks and ATMs waiting for hours to get cash, which all indicate that people found it difficult to adjust during the initial phase of demonetisation.

Arun Kumar (2017) states that in modern economies money is used for purposes like transactions, precautionary motives, meet contingencies and also as store of value. Hence, money is an asset accumulated over time. The study finds that demonetization reduced cash availability in the economy. This reduction in cash adversely affected the informal sector, which produces 45 per cent of output, because of contraction in transactions. Further, working capital for unorganized sector reduced, particularly impacting on small and cottage industry, shop keepers, etc.

Singh Pratap and Virender Singh (2016) found that soon after announcement of demonetization BSE Sensex fell-down by 3.8 per cent which is more compared to other Asian markets. BSE's mid-cap and small-cap indices declined by 6 per cent, and the real picture of impact of demonetization was seen in BSE Reality index which decreased by 15 per cent.

A study (Hariharan S et al. 2018) conducted in Kanchipuram district of Tamil Nadu on socio-economic and health impacts of demonetization revealed that 58.1 per cent of participants used only cash as their payments mode and only about 6.7 per cent of participants reported to have used credit card, debit card and online transactions, which indicates that majority of people use cash as

payment mode. Large number of participants (over 60 per cent of sample) had reported to be satisfied with demonetization move as it would help government in curbing black money and fund for terrorism related activities. Further, majority of respondents opined that the government had not made adequate arrangements for implementation of demonetization and hence large number of people under went stress during demonetization process.

Vij Dimpal (2018) analyzes impacts of demonetisation on Indian economy and finds both positive and negative effects. The study states that people converted their black income to white by depositing in banks, as 99 per cent of Rs. 500 and Rs. 1000 i.e. Rs. 15.28 crore of Rs. 15.44 crore has been deposited in banks. Further, 2.24 lakh dubious companies were identified and their bank accounts are frozen. It is observed that Rs. 15497 crores of unaccounted money had been voluntarily declared which is 38 per cent higher than previous year which indicates positive effect of demonetization. However, on terror funding the study states that in the first six months of 2017 terrorist supported activities like stone pelting in Jammu and Kashmir increased from 71 to 324; controlling fake currency another objective of demonetization was also not achieved as many cases of counterfeit currency had come to light. Demonetization has helped in increasing tax compliance as direct tax collection rose by 15.2 per cent between April and October 2017-18. The study finds that demonetization has helped in changing saving habits of people as gross financial savings increased from 10.9 per cent of gross national disposable income in financial year 2016 to 11.8 per cent in the year 2017. People instead of holding cash invested their money in mutual funds, which saw an increase of 155 per cent. However, the study observes that GDP growth has declined from 8 per cent in 2015-16 to 7.1 per cent 2016-17. Agriculture sector that depends largely on cash based transactions was hit by demonetization and similarly industrial sector also witnessed decline from 8.8 per cent in 2015-16 to 5.6 per cent in 2016-17 as noticed by the study. Demonetization hit hard the real estate sector which saw a negative growth from 4.5 per cent in 2015-16 to 1.7 per cent in 2016-17. It is to be noted that demonetization aimed at increasing digital transactions, but this move has resulted in more number of cyber crimes in the country. As reported by the study cyber crime increased by three folds during this time.

Arun Kumar (2017) analysing data from RBI and answer given to questions in Rajya Sabha found that by January 13, 2017 98.8 per cent of old notes had come back, and further by end of April 2017 remonetisation was done to the extent of 79.66 per cent of currency in circulation on 8 November 2016. The study states that currency with public did not decline drastically as at the peak of demonetization currency shortage was at 47.03 per cent.

Litvack Leon and Samuel Vigne (2017) states demonetization was aimed at reducing shadow economy and tax evasion, but there are no studies which have quantitatively verified this. The study observes that demonetization severely affected casual labourers particularly in informal sectors, which constitutes 92 per cent of workforce, by reducing their earnings. The study reports that the drive towards cash less or digital economy might be enhanced by demonetization and this would increase financial inclusion in India where 47 per cent of population had no financial access in 2014.

A study on effects demonetization conducted in National Capital Region during January – February 2017 by Beg Sana and Nandita Joshi (2017) revealed that 50 per cent of respondents opined note ban was not a bad move, but majority said that demonetization is not the only way for controlling black money because people hold black money in terms of assets. Over 80 per cent of respondents faced problems of exchanging Rs. 2000 notes. Majority of people reported that demonetization was not a planned implementation, had several

loopholes. It adversely affected routine life of people (65 per cent of respondents). The study observed negative impact of demonetization on real estate sector (as reported by 55 per cent of respondents) and tourism industry (90 per cent of respondents).

Ritika Mankar and Sumit Shekhar (2017) studied impacts of demonetization between 22 November and 2 December, 2016 covering a sample of 88 small, medium enterprises (SMEs) across India. The study found that SME sector is under pressure after demonetization. Further, it was observed that SMEs in India depend on cash as more than 50 per cent of transactions are cash based; sales would decline (according to 50 per cent SMEs); competition from formal sector would increase according to 59 per cent of SMEs; and non-performing loans in SME segment would increase for money lenders. SMEs opined that they would not be able to collect more than 50 per cent of remaining dues from their customers. This study further found that textile industry in Panipat of Haryana saw 40 to 80 per cent decline in its domestic sales, which resulted in laying off workers. In Tiruppur of Tamil Nadu also seen decline in demand and hence functioning of units was reduced to 3 days in a week, which was seven days before demonetization.

Pawan Kumar (2018) argues that demonetization has negative impact on employment opportunities in India. Economic growth and employment growth are directly related and hence the projected decline in GDP, ranging from 0.5 to 2 per cent growth rate due to demonetization would decline employment also. According to the author if demonetization led to closure of a factory it leads to unemployment of 41 workers.

Gabriel Chodorow-Reich, Gita Gopinath, Prachi Mishra and Abhinav Narayanan (2018) study the importance of cash in transaction by analysing impacts of demonetization in India. The study assumes that demonetization amounts to a forced conversion of cash into less liquid bank deposits, which in the presence of downward wage rigidity generate a decline in output, employment and borrowing by firms. Households also switch to non-cash forms of payment to attenuate the impact of cash shortage. The study observes that all districts experienced reduction in the receiving new currencies, where the median district received new notes equal to 31 per cent of demonetized notes. After demonetization payments using e-wallet and POS have increased, growth in alternative method of payments. Further, the study finds that in areas experiencing severe demonetization effects bank deposits have increased while credit has been contracted. The authors found that areas experiencing more severe demonetization had sharper declines in ATM withdrawals, reduced economic activity, and faster adoption to alternative payment technologies. This study observed the following results "(i) demonetization caused cash shortages, as evidenced by a sharper decline in ATM withdrawals in areas with larger shocks; (ii) economic activity, as measured by employment rates and nightlights, fell in these areas relative to areas which experienced smaller shocks; (iii) these areas adopted alternative forms of payment; and (iv) deposits increased more and credit fell in these areas".

Literature reviewed above revealed that demonetization announced suddenly by the government created cash shortage and hence people faced problems to meet their necessary expenditures like health needs, family events like marriages, etc. For instance, in Tamil Nadu where more than 50 per cent of respondents use cash payments faced problems during demonetization process. Further, some studies found that impact of demonetization was adverse on informal sector, particularly casual labourers affected severely. Some studies have shown that demonetization was not successful in achieving its objectives like controlling unaccounted money, counterfeit money, but along with increase in digital transactions finance related cyber-crime rate also has increased.

Demonetization created negative impacts on real estate and tourism sectors as evidenced by few studies. Impact of demonetization was observed in all spheres of life, in this regard industrial sector is also affected as revealed in some studies. Among the various studies available hardly any study has been conducted to examine impacts of demonetization. Majority of the available studies are general in nature while explaining impacts, while few have mentioned any information on data and sample selection. Studies related to small scale industries (SSIs) or micro, small and medium enterprises (MSMEs) are not available except one reviewed above. Even this study also covers limited sample of 88 units spread across the country. It is to be observed that no study has been carried out to examine the impacts in a detailed manner. In this respect the present study attempted to fill the gap by carrying out a detailed study on impacts of demonetization on small scale industries or MSMEs in Karnataka.

1.5. Need for the Study

Small scale industries sector or MSME comprises of micro and small scale industries, which includes automobiles, electrical and electronics, chemicals, food and intoxicants, leather, paper and printing, rubber and plastic, textiles, wood and others enterprises. According to Directorate of Industries and Commerce Karnataka has 382269 small scale industrial units up to 2014-15 and provided employment to 2277122 people. These small scale industries depend upon cash for their regular transactions, as it provides high and quick liquidity, besides convenience.

In this context, it is imperative to analyse the impact of demonetization on small scale industrial sector whose survival is largely dependent on everyday transactions in local and surrounding markets. This sector of the economy deals with local people where cash transactions are very large in size both in rural and urban areas. Their dealings in short period purchases of raw materials and in

retail sale are in the form of cash. It is likely that demonetization policy has its first hit on these small scale producers. Hence the present study is taken up to examine impacts of demonetization on small scale industries in Karnataka.

1.6. Evaluation Framework

The present study attempted to assess the impacts of demonetization on small scale industries in Karnataka. The state has 3.82 lakh small scale industries employing about 22.77 lakh people. The study has been conducted now to understand the impacts of demonetization on small scale industries in Karnataka. It is known that demonetization was implemented in India on November 9, 2016. Therefore, the impacts of demonetization have been assessed in three periods i.e., before, during and after demonetization, which can give more insights on effects of demonetization.

1.7. Scope and reference period of evaluation

Scope of this study limited to small scale enterprises selected from the sample region. Analysis in this study covers the impact on production, sales and revenue of SSIs. The reference time period was April 2016 to May 2017 covering three periods i.e., before, during and after demonetization.

1.8. Stakeholders and audience

- Stakeholders of the study are SSI units.
- Audience of the study are Karnataka Small Scale Industries Development Corporation (KSSIDC), Government of Karnataka.
- This study will evaluate impacts of demonetization on SSIs.

1.9. Objectives of the study

In the backdrop of implementation of demonetization and issues discussed above the present study attempted to -

- 1. understand need for and the context of demonetization in India
- 2. study the volume or revenue of small scale industries in the study area
- 3. examine impact of demonetization on production and sale of SSI producers
- 4. To examine the impact on employment of workers in SSIs after demonetization
- 5. To know gains and losses to the enterprises due to demonetization

1.10. Evaluation questions and sub questions

- 1. What is the first reaction of small scale entrepreneurs to the sudden decision taken by the Government?
- 2. What were the difficulties faced by them in the initial stage?
- 3. What are the coping strategies adopted by them to meet the emergencies in initial stages?
- 4. How things have moved for them during different phases of the demonetization policy?
- 5. What was the specific impact on transactions during the period 9th November to 31st December?

Sub questions are given in schedule (enclosed).

1.11. Source of data

Data on number of SSIs, etc. have been collected from secondary sources, while primary data required for the study were collected from SSI Units in the sample area.

1.12. Indicators

- 1. Level of revenue (month/year)
- 2. Level of income (before and after)
- 3. Level of borrowings (before and after)
- 4. Number of employees (before and after)

1.13. Evaluation methods and techniques

This study used before and after approach to assess the impacts of demonetization on SSIs. As the nature of the study was quick analysis based on small sample size, the methodology is designed to suit the requirements of the study. Hence, simple statistical tools like average, percentage were used to analyse data.

1.14. Data and information sources

The study is mainly based on primary data but secondary data were also used according to the needs of study. Sources of secondary data are government reports – Directorate of Industries and Commerce, Directorate of Economics and Statistics, Government of Karnataka

Source of primary data was SSIs and data were collected by using pre designed and pre tested schedule addressed to the sample respondents. Data were collected from entrepreneurs of SSIs in the study area, through field assistants. Entrepreneurs provided information by recalling their experience before, during and after demonetization. The study adopted recalling method of data collection, in spite of its limitations, as it helped in gathering information in the given time. Further, focussed group discussion (FGD) was also conducted with SSI unit owners to elicit their information on impacts of demonetization on production, employment, financial aspects, etc.

1.15. Sample and sampling design

Sampling structure was designed to get a disaggregated assessment of the impact of the policy on small producers in rural and urban areas incorporating issues related to development. Data base used for sample selection was from the Directorate of Industries and Commerce, published by Directorate of Economics and Statistics. Number of SSIs is highest in Bangalore Urban with 91314 units and hence this district is selected for the study, besides Bangalore Urban district also represents urban area. In order to represent rural and backward regions of the state one district, Kalaburgi, from Hyderabad Karnataka region has been randomly selected. Bangalore North Taluk from Bangalore Urban district and Chittapur and Gulbarga taluks from Kalaburgi districts have been chosen to identify SSIs and field survey was conducted in these two taluks. The Sample design of the study is given in Table 1.2.

Table 1.2: Sample Design of the study

Criteria	District	Taluks	Number of SSIs	Sample size
Urban	Bangalore	Bangalore North	2199	215
Rural	Kalaburgi	Chittapura Gulbarga	116 78	20
	Tota	1	2393	235

Note: Sample size considered was 10 per cent of total number of SSIs i.e. 240. However, data from 5 SSI units were insufficient hence the study considered 235 SSI units as sample size.

1.16. Data collection tools

Primary data were collected by using schedules (Annex 3) canvassed through field investigators in the study area of Bangalore Urban and Kalaburgi districts.

1.17. Method of data analysis

Data collected through schedules will be analysed by using statistical tools like per cent and averages. The data were processed and qualitative data were coded appropriately.

1.18. Limitations

Present study attempted to analyse impacts of demonetization on small scale industries in Karnataka. This is a short term study focusing mainly on eliciting experience and opinion of SSI owners. The study did not consider large scale industries. Scope of the study is limited to analyse experience of SSIs on aspects like revenue, production, employment, finance, banks etc. The study attempted to collect data on various aspects, but the respondents were not inclined to share it. In this background, the study analysed impacts using available data from respondents. Further, this study covers only two districts, namely Bangalore Urban and Kalaburgi. Hence, there is a limited scope for generalizing the results.

Chapter II Small Scale Industries in India and Karnataka

Industries are major contributors of economic development both in terms of production of goods and generation of employment opportunities. Industrial sector constitutes large, medium and small scale industries. Contribution of small scale industries (SSIs) is also significant, as during 2015-16, they have accounted for 28.77 per cent of GDP (CSO, quoted in Annual Report 2017-18, Ministry of Micro, Small and Medium Enterprises, Government of India, 2018). This chapter presents details about small scale industries in India and Karnataka.

It is to be noted that since 2006 SSIs are being referred to as micro, small and medium enterprises (MSMEs). Government of India has classified MSMEs according to the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006. This Act classifies MSMEs in to two broad categories as manufacturing sector and service sector based on investment on plant, machinery and equipment (as shown below).

Classification of MSME's in India

Manufacturing Sector					
Enterprise Category	Investment in plant & machinery				
Micro Enterprises	Does not exceed twenty five lakh rupees				
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees				
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees				

Service Sector					
Enterprise Category	Investment in equipment				
Micro Enterprises	Does not exceed ten lakh rupees				
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupee				
Medium Enterprises	More than two crore rupees but does not exceed five crore rupees				

Source: Government of India, 2018, Annual Report 2017-18, Ministry of Micro, Small and Medium Enterprises, Government of India, 2018.

2.1. Number of MSMEs in India

According to the 73rd Round of National Sample Survey there were 633.88 lakh MSME units in India during 2015-16, out of which manufacturing units are 196.65 lakh, trade related are 230.35 lakh units, other services are 206.85 lakh units and electricity are 0.03 lakh units. Among these 51 per cent of MSMEs are in rural area while the remaining are located in urban areas. Further, distribution of MSMEs across micro, small and medium shows that 630.52 lakh are micro, 3.31 lakh are small and 0.05 lakh are medium units. The above illustration reveals that micro units, which have invested less than Rs. 25 lakhs in manufacturing and less than Rs. 10 lakhs in service sector constitute a major share in total MSMEs in India.

2.2. Industrial Scenario in Karnataka

Karnataka is one of the leading states in Indian industrial sector, particularly in high-technology based industries in electrical, electronics, information and communication technology, biotechnology and nanotechnology areas, which indicates existence of modern high-tech capital intensive and knowledge intensive industries in Karnataka. The state is considered as most desired place for starting industries in the country, which has resulted in

establishment of both large scale and small scale industries in the state. It is to be noted industrial units have been established by both public sector and private sector in the state.

MSMEs constitute a significant and increasing place in industrial scenario of Karnataka, as the state has been promoting MSMEs to achieve objectives of employment generation and production. Concerted efforts for development of small scale industries in the state began in 1961 with the Directorate of Industries and Commerce starting to register small scale industries. These efforts have developed MSMEs sector as one of the important sectors in terms of employment creation and increased share of industrial production. Information on number of SSIs in the state are presented in Table 2.1, which shows that during 2016-17 the state had 5.78 lakh SSIs providing employment opportunity to 37.52 lakh people. Across the districts Bangalore urban district has more number of SSIs followed by Belagavi, while Yadagiri district has less number of SSIs compared to other districts.

Table 2.1: Number of Small Scale Industrial Units in Karnataka (up to 2016-17)						
Sl. No.	Districts	Number	Employment			
1	Bangalore	117717	1242662			
2	Belagavi	50341	235562			
3	Dharwada	36346	197669			
4	Mysore	35129	192936			
5	Dakshina Kannada	32403	210479			
6	Tumkur	28933	159785			
7	Bangalore (R)	26219	212603			
8	Ballari	24749	137685			
9	Shivamogga	23005	106980			
10	Kalaburgi	20939	89286			
11	Kolar	17410	116687			

12	Vijayapura	16292	78556
13	Hasana	15681	70235
14	Chitradurga	15167	74708
15	Uttara Kannada	14217	68474
16	Raichur	13631	76079
17	Mandya	12464	59559
18	Chikkamagaluru	11528	45472
19	Bidar	9275	56646
20	Davanagere	8021	33552
21	Bagalakote	7809	38942
22	Udupi	7508	64031
23	Haveri	6431	24469
24	Koppala	5587	28608
25	Gadaga	5108	23534
26	Kodagu	4619	29054
27	Ramanagara	4370	39203
28	Chamarajanagara	3291	17911
29	Chikkaballapura	2472	15841
30	Yadagiri	1455	5793
	Karnataka	578117	3752935

Source: Directorate of Industries and Commerce, Government of Karnataka

This chapter provided an overview of small scale industries in India and Karnataka. There are over 5.78 lakh SSI units in the state providing job to over 37.52 lakh persons in the state.

Chapter III

Characteristics of Small Scale Industries in Study Area and Views on Demonetization

This chapter provides characteristics of small scale industries in the study area in terms of number of factories, employment, number of SSIs, etc. as background for understanding nature of SSIs. Further, it also discusses how SSIs viewed demonetization, type of problems faced, etc. Small scale industries were selected from Bangalore Urban and Kalaburgi districts as explained earlier, where the first one represents urban area and the later represents rural area for an in-depth study.

Population composition (Census 2011) across rural and urban areas of these two districts shows that in Bangalore Urban district 9.06 per cent of people live in rural area while 90.94 per cent in urban area. In contrast to Bangalore Urban district, Kalaburgi has 67.44 per cent of people in rural area and 32.56 per cent in urban area. Rural – urban composition of population in these two districts differ when compared to Karnataka as a whole as at the state level over 61 per cent of population are in rural areas and 39 per cent is in urban areas. This indicates that Bangalore Urban and Kalaburgi districts represent urban and rural areas of the state in this study.

Let us look at the industrial scenario in terms of number of factories, industrial estates, number of SSIs, etc. in selected districts.

3.1. Number of Factories and Employment in Study Districts

Information presented in Table 3.1 shows that in Karnataka 13959 factories were there employing over 15.16 lakh people in 2015. Number of factories is significantly high in Bangalore Urban district as over 43 per cent of factories in Karnataka are located in Bangalore, providing employment

opportunities to nearly 46 per cent total employment in the state, while the same is respectively around one per cent in Kalaburgi district. This indicates that factories have been concentrated heavily in urban area compared to rural area. Factories include readymade garments, textiles, chemical and engineering as reported by the Department of Factories and boilers, but the source of data does not show whether all these factories are SSIs or not. However, the available information presents a view about industrial scenario in Karnataka.

Table 3.1: Number of Factories and Employees, as on March, 2015							
Types	Bangalore Urban		Kalaburgi		Karnataka		
	Number	Employees	Number	Number Employees I		Employees	
Readymade							
garments	728	286847	-	-	859	379492	
Textiles	112	6073	1	50	191	22302	
Chemical	195	18300	6	1340	510	51923	
Engineering	1118	104367	23	2860	2129	208700	
Others	3906	281917	95	14972	10270	854263	
Total	6059	697504	125	19222	13959	1516680	

Source: Department of Factories and Boilers, published by Government of Karnataka (2015),

Karnataka At a Glance - 2014-15, Directorate of Economics and Statistics, Bengaluru

Industrial development depends on availability of area specified for the purpose, information on industrial estates, sheds and plots is presented in Table 3.2. Karnataka government has developed 176 industrial estates, 6211 sheds as on 2015. Distribution of these infrastructures across districts shows Bangalore district has more number of industrial estates, and sheds compared to Kalaburgi.

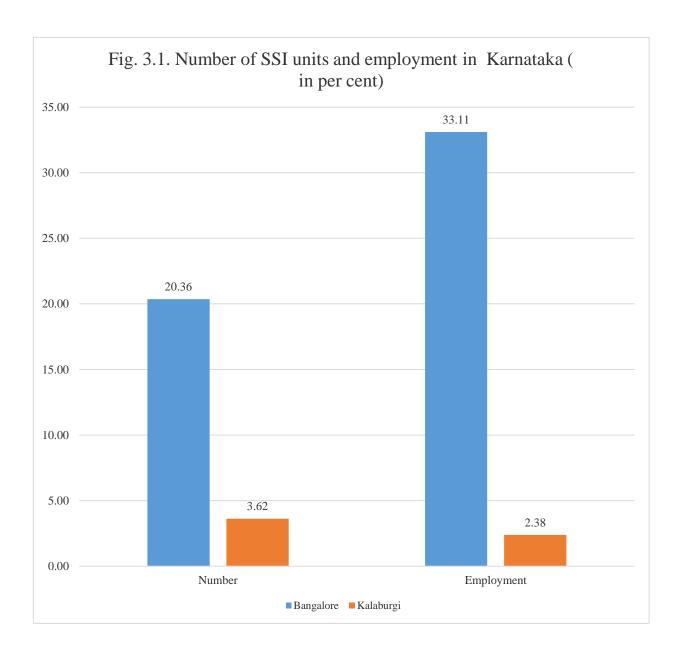
Table 3.2: Number of Industrial Estates, Sheds and Plots (as on March, 2015)						
Districts	Estates	Sheds	Plots			
Bangalore	16	2140	616			
Kalaburgi	10	238	574			
Karnataka	176	6211	8269			

Source: Karnataka Small Scale Industries Development Corporation, published by Government of Karnataka (2015), Karnataka At a Glance - 2014-15, Directorate of Economics and Statistics, Bengaluru

Number of small scale units in the state is presented in Table 3.3 which shows that 5.78 lakh units have been established employing 37.52 lakh persons (Government of Karnataka – Directorate of Industries and Commerce). Bangalore Urban district has more number of SSIs (20.36 per cent), as shown in Fig. 3.1, while it is 3.62 per cent in Kalaburgi. Further, number of people employed in SSIs also more in Bangalore compared to Kalaburgi. Bangalore has attracted more number of SSIs which might be due to available infrastructure, manpower and other facilities like accessibility and conducive environment. It is necessary to examine exact reasons for promoting industries in other districts also based on raw materials available.

Table 3.3: Number of Small Scale Industrial Units in Karnataka (up to 2016-17)					
Districts	Number	Employment			
Bangalore	117717	1242662			
Kalaburgi	20939	89286			
Karnataka	578117	3752935			

Source: Directorate of Industries and Commerce,



Small scale industries registered in district industrial centre, presented in Table 3.4, indicates that during March, 2015 over 1.69 lakh units were registered in the state in which over 8.47 lakh people were employed. Number of units registered in Bangalore Urban district is 4710 and in Kalaburgi district 607 units.

Table 3.4: Small Scale units registered in District Industrial Centre as on March, 2015						
	Districts					
	Bangalo	re Urban	Kala	aburgi	Karnataka	
Catalania of CCI		Total		Total		Total
Categories of SSIs	Number	Workers	Number	Workers	Number	Workers
Automobile	999	6655	8	40	2677	19287
Electricals & Electronics	680	6675	4	27	5602	30842
Chemicals	ı	-	5	32	4375	32433
Food and Intoxicants	570	3525	64	401	23164	140629
Leather	580	3805	25	115	5777	22337
Paper and Printing	520	3310	1	6	3771	19966
Rubber and Plastic	580	3650	3	18	2811	19493
Textiles	-	-	4	24	26001	90392
Wood	781	4780	45	213	22497	65085
Others	-	-	83	431	43414	238914
Other service activities	-	-	365	1590	29083	167653
Total	4710	32400	607	2897	169172	847031

Source: Directorate of Industries and Commerce, published by Government of Karnataka (2015),

Karnataka At a Glance - 2014-15, Directorate of Economics and Statistics, Bengaluru

Note: Data pertains to categories of SSIs presented in the table

3.2. Profile of Small Scale Industries selected for the Study

As outlined above Bangalore Urban and Kalaburgi districts have been selected for the study. In Bangalore Urban district, Bangalore North Taluk and in Kalaburgi district Kalaburgi and Chittapur taluks were selected for data collection. In Bangalore North taluk 215 SSIs units and in Kalaburgi and Chittapur taluks 20 SSI units, altogether 235 SSI units, (Table 3.5) were considered to canvass the structured schedule.

Table 3.5: Number of SSI units

	Number of SSIs	Percent
Bangalore Urban	215	91.5
Kalaburgi	20	8.5
Total	235	100.0

Source: Survey Data

Information on types of SSIs, according National Industrial Classification, covered in the study are presented in Table 3.6, which illustrates that out of 235 units, SSIs related to manufacture of machinery and equipment - non electrical components are more (103 units), followed by manufacture of fabricated metal products - except machinery and equipment with 49 units. Across the districts, in Bangalore district the above two categories of SSIs are large in number compared to other types, while in Kalaburgi district SSIs of other mining and quarrying are highest at 8 units out of 20 SSI units.

Table 3.6: Distribution of SSIs in the study area according National Industrial Classification (Numbers)

NIC Classification	Bangalore	Kalaburgi	Total
1. Other mining and quarrying	-	8	8
2. Manufacture of food products and beverages	3	2	5
3. Manufacture of wearing apparel; dressing and dyeing of fur	7	1	8
4. Manufacture of paper and paper products	3		3
5. Publishing, printing and reproduction of recorded media	2	2	4
6. Manufacture of chemicals and chemical products	9		9
7. Manufacture of rubber and plastic products	24	1	25
8. Manufacture of fabricated metal products, except machinery and equipment	46	3	49

9. Manufacture of machinery and equipment n.e.c	101	2	103
10. Manufacture of electrical machinery and apparatus n.e.c.	16		16
11. Manufacture of furniture; manufacturing n.e.c	4	1	5
Total	215	20	235

Source: Survey Data

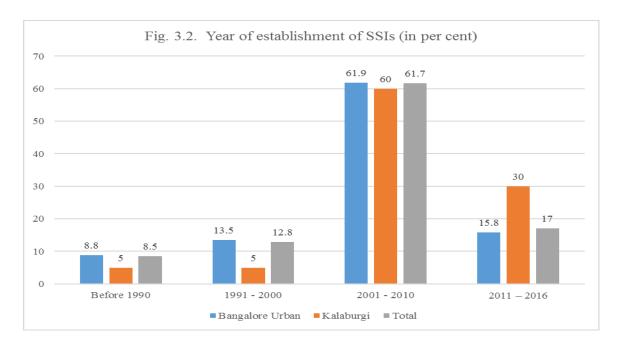
3.2.1. Establishment Period of Small Scale Industries

Year of establishment of SSIs in the study area, Table 3.7, reveals that large number of SSI units were started, nearly 62 per cent (Fig. 3.2), between 2001 and 2010 taking both districts together, followed by 17 per cent during 2011 – 16. Establishment of large number of SSIs during this period might be due to policy changes in industrial sector of the state, which promoted MSMEs as engines of growth and job creation. Across the districts also during 2001 to 2010 around 61 per cent of SSIs were started. However, in Kalaburgi 30 per cent of selected SSIs were established during 2011 to 16.

Table 3.7: Year of Establishment of SSIs

Year	Bangalore Urban	Kalaburgi	Total
Before 1990	19	1	20
	(8.8)	(5.0)	(8.5)
1991 - 2000	29	1	30
	(13.5)	(5.0)	(12.8)
2001 - 2010	133	12	145
	(61.9)	(60.0)	(61.7)
2011 - 2016	34	6	40
	(15.8)	(30.0)	(17.0)
Total	215	20	235
	(100.0)	(100.0)	(100.0)

Source: Survey Data Note: Figures in brackets are percent to total.



3.2.2. Spread of Market Area of SSIs

Information presented Table 3.8 illustrates marketing area covered by SSIs, which shows over 84 per cent of SSIs in the study districts have their marketing area in few districts around their location. This indicates that to a greater extent SSIs cater to the needs of local markets. Number of SSIs covering few districts is more in Bangalore district (nearly 88 per cent), while 50 per cent of SSIs in Kalaburgi reported to have their marketing area in entire Karnataka. SSIs are meeting the demand of nearby markets shows their significance in that area. This point might be considered for spread and promotion of SSIs in other districts also to meet local needs.

Table 3.8: Extent of Marketing Area SSIs in study area

Marketing Area	Bangalore Urban	Kalaburgi	Total
Entire Karnataka	10	10	20
Entire Karnataka	(4.7)	(50.0)	(8.5)
Easy Districts	189	9	198
Few Districts	(87.9)	(45.0)	(84.3)
Karnataka and Outside	16	1	17
Karnataka and Outside	(7.4)	(5.0)	(7.2)
Total	215	20	235
1 Otal	(100.0)	(100.0)	(100.0)

Source: Survey Data

Note: Figures in brackets are percent to total.

3.2.3. Investment of Small Scale Industries in the Study Area

Small scale units covered in this study are manufacturing units in both Bangalore Urban and Kalaburgi districts. This study made an attempt to examine the establishment cost of SSIs (Table 3.9), which showed that these units have invested an average amount of Rs. 1.51 crore taking all SSI units together (This investment is at the beginning of SSI units). Across the districts SSI units in Bangalore district have spent more to establish the unit (Rs. 1.58 Crores) compared to that in Kalaburgi (Rs. 0.75 Crores), which shows establishing SSI units in Bangalore is costlier than that in Kalaburgi. Major reason for high investment in Bangalore is mainly due to high land value and construction or high amount of rent for building to carry out SSI activities. It is to be noted that SSI units in both districts fall under category of small enterprises, with an investment between Rs. 25 lakh and Rs. 5 Crore, according MSME classification. Average investment by SSI units ranges from Rs. 75.49 lakh in Kalaburgi to Rs. 1.58 Crores in Bangalore urban district.

Table 3.9: Investment of Small Scale industries in the study area (Rs.)

Districts	Average Amount of Investment per unit	
Bangalore Urban	158,17,533	
Kalaburgi	75,49,400	
Total	151,13,863	

Source: Survey Data

Note: Average investment at the beginning of the SSI units

3.2.4. Revenue Pattern of Small Scale Industries

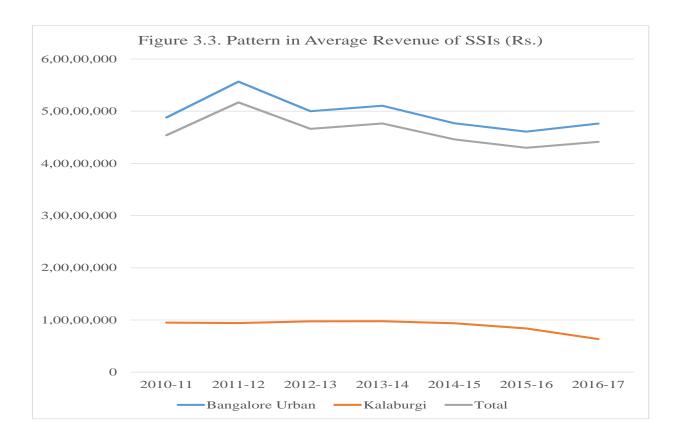
Revenue is an important indicator of performance of any economic, particularly manufacturing activity. Every producer attempts to maximise his revenue by usually increasing sale of his products. The present study made an attempt to understand the pattern of revenue generated by SSIs in the study area

during 2010 -11 to 2016-17. Average revenue of SSIs during the above period is presented in Table 3.10. The average revenue of SSIs, taking both districts together, range from Rs, 4.29 crore in 2015-16 to Rs. 5.16 crore in 2011-12. A point to be observed is that the average revenue of SSIs in Bangalore urban district is higher than that in Kalaburgi district. This might be due to concentration of more number technology based SSI units in Bangalore as observed above. Taking all SSIs together the average revenue was Rs. 5.16 crore during 2011-12 and it was Rs. 4.41 crore in 2016-17, showing a decline over the years. It is to be noticed that the average revenue has been continuously declining over the years in both districts also (Fig. 3.3). According to owners of SSIs, factors like decreased demand, non-availability of financial support during necessary times like getting work order from customers, increased competition, etc. reduced revenue.

Table 3.10: Average revenue of SSIs between 2011 - 12 and 2016 - 17 (Rs.)

Years	Districts			
Tours	Bangalore Urban	Kalaburgi	Total	
2010-11	4,87,98,265	94,88,889	4,53,96,492	
2011-12	5,56,53,080	94,19,444	5,16,90,197	
2012-13	4,99,99,330	97,38,889	4,66,28,688	
2013-14	5,10,52,782	97,52,778	4,76,58,261	
2014-15	4,76,84,827	93,59,722	4,46,05,131	
2015-16	4,60,85,910	83,89,474	4,29,98,702	
2016-17	4,76,29,007	63,49,000	4,41,15,814	

Source: Survey Data



3.3. Demonetization: Problems and Coping by Small Scale Industries

As seen in review of literature demonetization impacted adversely on different aspects like meeting health and marriages related expenditures, reduction in cash availability to industries, fall in realty market, etc. Let us examine the impacts of demonetization in study area, which is discussed in the form of problems faced by entrepreneurs, method of overcoming the difficulties etc.

3.3.1. Source of information on demonetization

Announcement of implementing demonetization on November 8, 2016 was unexpected as revealed by SSI entrepreneurs. Large number of entrepreneurs, i.e., over 93 per cent of total respondents (Table 3.11) said that they came to know about demonetization through television. This indicates that television is an important media of communication. Among the districts television is the main source of information in both Bangalore and Kalaburgi, while in Kalaburgi 25 per cent of respondents got information from both television and newspaper.

Table 3.11: Source of information on Demonetization

Source	Bangalore Urban	Kalaburgi	Total
TV	206	13	219
Per cent	(95.81)	(65.00)	(93.19)
News paper	2	2	4
Per cent	(0.93)	(10.00)	(1.70
TV and News paper	7	5	12
Per cent	(3.26)	(25.00)	(5.11)
Total	215	20	235
Per cent	(100.00)	(100.00)	(100.00)

Source: Survey Data

Note: Figures in brackets are percent to total.

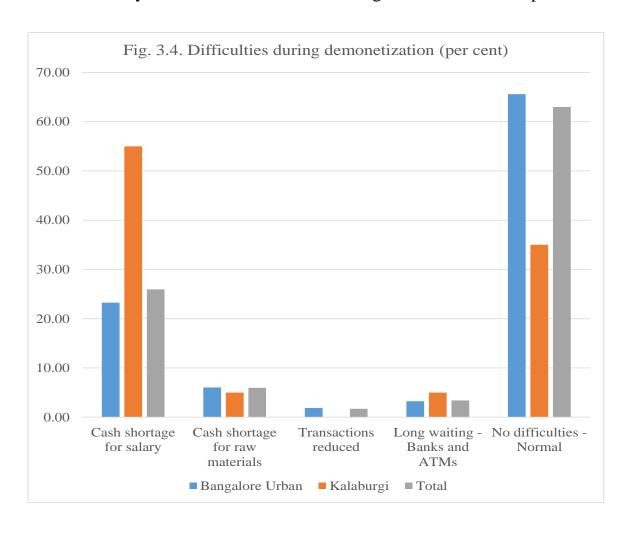
3.3.2. Nature of Difficulties during Demonetization

Implementation of demonetization reduced cash circulation in the economy as observed in previous sections. Entrepreneurs of SSIs reported that withdrawal of specified currencies of Rs. 500 and Rs. 1000 from circulation, all of a sudden created problem to carry out their daily business. Reduction in cash adversely affected activities of small scale units like cash shortage for paying salary, purchasing raw materials, etc. as shown in Table 3.12. It is to be noticed that 26 per cent of SSIs covered in the study faced difficulties to pay salary for their workers (Fig. 3.4), which is more in Kalaburgi district, which indicates that during demonetization rural areas faced more difficulties than urban areas like Bangalore Urban district. Although the per cent of SSIs reported no difficulties is high, at 63 per cent, more than 25 per cent of SSIs have faced difficulties, which need to be taken in to account to understand the impacts of demonetization.

Table 3.12: Difficulties faced during demonetization					
Difficulty	Bangalore Urban	Kalaburgi	Total		
Cash shortage for salary	50	11	61		
Cash shortage for salary	(21.28)	(4.7)	(25.98)		
Cash shortage for rayy materials	13	1	14		
Cash shortage for raw materials	(5.53)	(0.42)	(5.95)		
Transactions reduced	4	0	4		
Transactions reduced	(1.70)	(0.0)	(1.70)		
Long weiting Penks and ATMs	7	1	8		
Long waiting - Banks and ATMs	(2.98)	(0.42)	(3.40)		
No difficulties Normal	141	7	148		
No difficulties - Normal	(60.00)	(2.97)	(62.97)		
Total	215	20	235		
Total	(91.49)	(8.51)	(100)		

Source: Survey Data

Note: Figures in brackets are percent to total.



3.3.3. Managing cash inadequacy during demonetization

Let us examine how entrepreneurs handled the situation of shortage of cash during the initial phase of demonetization. Taking together both the districts nearly 14 per cent of entrepreneurs (Table 3.13) used cash in hand to make payments, while the same per cent of SSIs borrowed loan to meet cash inadequacy. The proportion of entrepreneurs used cash is high in Bangalore district and the proportion of taking loan is more in Kalaburgi district (65 per cent). This indicates that in urban area like Bangalore entrepreneurs hold more cash than entrepreneurs in rural areas like Kalaburgi, for meeting transactions. This might be the reason for borrowing by more number of owners of SSIs in Kalaburgi district. Number of SSI units used electronic transfers like NEFT, RTGs etc. to overcome cash inadequacy is low during the initial phase of demonetization. However, it should be noted that in Bangalore Urban district large number of SSI units did not face cash inadequacy problem, which may be because of using electronic mode of transaction.

Table 3.13: Managing cash inadequacy

Method of managing cash inadequacy	Bangalore Urban	Kalaburgi	Total
Used cash in hand	31	1	32
	(14.4)	(5.0)	(13.6)
Paid through cheques/	5	4	9
NEFT/ RTGS/ Banks	(2.3)	(20.0)	(3.8)
Borrowed loan	21	13	34
	(9.8)	(65.0)	(14.5)
Payments postponed	7	0	7
	(3.3)	(0.0)	(3.0)
No inadequacy	151	2	153
	(70.2)	(10.0)	(65.1)
Total	215	20	235
	(100.0)	(100.0)	(100.0)

Source: Survey Data

Note: Figures in brackets are percent to total.

3.3.4. Relation between entrepreneurs and banks during demonetization

In the initial phase of demonetization banks were asked to exchange old currency of Rs. 500 and Rs. 1000 in the hands of people to new currency, where long queues were seen at many places in front of banks and occurrence of untoward incidents were also reported by media, which was observed earlier. In this regard, this study tried to examine the interaction between banks and entrepreneurs in the study area, where over 22 per cent of the respondents (Table 3.14) from both districts faced problems in their transactions at banks while exchanging their old notes or getting new currencies. Per cent of SSIs faced problems is more in Kalaburgi, at 40 per cent compared to Bangalore at 21 per cent. This might be because of inadequate supply of new currencies to rural and interior areas. All this reveals that entrepreneurs, at least to some extent, faced problems while interacting with banks during demonetization phase and this is more in rural areas compared to urban areas.

Table 3.14: Interaction with banks during initial days of demonetization

Nature of interaction	Bangalore Urban	Kalaburgi	Total	
Faced problems	45	8	53	
r deed problems	(20.93)	(40)	(22.55)	
Normal	170	12	182	
TVOITIGE	(79.07)	(60)	(77.45)	
Total	215	20	235	
10001	(100)	(100)	(100)	

Source: Survey Data

Note: Figures in brackets are per cent to total.

Further, this study tried to elicit information on the average time spent by respondents at ATM or Banks to get new money or to exchange old notes. It was observed that on an average people spent 3 hours at ATM to withdraw

money whenever the money was loaded to ATM machine. Respondents reported that money in ATM was getting over soon and sometimes not available. This condition was there for almost a week after announcing demonetization. Similarly, respondents opined that even at banks also they spent on an average 3 hours to deposit old currency and to obtain new currency. Large crowds were seen at banks for exchanging money where aged people were also standing in the line as reported by respondents. Further, they said that even the amount given by banks was less; therefore it was difficult to manage their day to day transactions. All these points reveal the difficulties faced by people at banks and ATM during demonetization.

This chapter presented industrial scenario in Karnataka and study districts, which showed Karnataka has over 4.8 lakh registered MSMEs providing job to over 28 lakh people. The study considered Bangalore Urban and Kalaburgi districts for primary data collection from SSIs using structured schedule, covering 235 sample SSIs. It was observed that SSIs felt demonetization was a sudden move, which created problems in their daily transactions. Owners of SSIs resorted for different methods to overcome the problem of cash shortage. Some of them also faced problems while transacting in banks.

Chapter IV Impact of Demonetization on Production, Revenue and Employment of Small Scale Industries

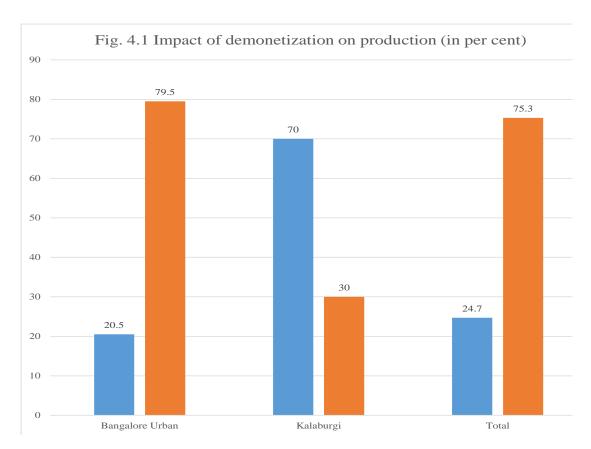
It is known that during demonetization process money supply would shrink, hence cash availability decreases thereby causing disturbances in economic activities like production, consumption etc. at least in the initial phase. This was also seen as evidenced by few studies reviewed earlier. This study attempted to examine the impact of demonetization on production and sales of SSIs, as opined by entrepreneurs in the study area.

Information presented in Table 4.1 shows that 58 respondents (nearly 25 per cent – Fig. 4.1) of entrepreneurs said reduction in production during demonetization. Although the proportion of SSIs expressing decline in production is 25 per cent it needs to be examined in view of long term impacts of demonetization on production. Across the districts, more number of entrepreneurs in Kalaburgi revealed that demonetization had adverse impact on their production and they also had expressed that demonetization reduced cash availability. This indicates that immediate effect of demonetization is reduction in SSIs production. Reduction in production was also experienced by entrepreneurs in Bangalore also (over 20 per cent). The results indicate that negative impact of demonetization on production was more in rural areas compared to urban areas.

Table 4.1: Impact of demonetization on production						
Impact on production Bangalore Urban Kalaburgi Total						
Dagwagad	44	14	58			
Decreased	(18.72)	(5.96)	(24.68)			
No ahanga	171	6	177			
No change	(72.77)	(2.55)	(75.32)			
Total	215	20	235			
10181	(91.49)	(8.51)	(100)			

Source: Survey Data

Note: Figures in brackets are percent to total.



Let us examine the impact of demonetization on sales of SSIs, which is illustrated in Table 4.2. Taking both districts together nearly 25 per cent of entrepreneurs experienced decline in their sales, and this decline was more in Kalaburgi district. It is to be noted that decline in sales is due to reduction in production of SSIs after demonetization. This shows that demonetization affected adversely on both production and sales of SSIs in study area, and negative impact was more in rural areas.

Table 4.2: Impact of Demonetization on Sales of SSIs

Sales of SSIs	Bangalore Urban	Kalaburgi	Total
Decreased	44	14	58
	(20.5)	(70.0)	(24.7)
No change	171	6	177
	(79.5)	(30.0)	(75.3)
Total	215	20	235
	(100.0)	(100.0)	(100.0)

Source: Survey Data

Note: Figures in brackets are percent to total.

4.1. Impact of Demonetization on Production and Revenue of Small Scale Industries – Industrial Classification-wise Analysis

Production and revenue play an important role in decisions on manufacturing, because every entrepreneur aims at maximising revenue. In this regard the present study attempted to examine impacts of demonetization on production and revenue or receipts of SSIs. This study considers output produced and revenue received as an indicator of performance of SSIs. Hence, production and revenue of these SSIs have been used as common indicators to know the impact of demonetization on SSIs in the study area. Revenue of SSIs months before demonetisation, during demonetization demonetisation was collected, and production and revenue per firm of these SSIs is presented below. Period covered in this regard is between (1) April and October 2016 (before demonetisation), (2) November and December 2016 (during demonetization) and (3) January and May 2017 (after demonetization). A point to be noted here is that the study considered only total revenue for assessment as revenue details were available in a relatively accurate manner as compared to expenditure data of firms. Entrepreneurs were hesitant to share information on financial, production and other aspects. Hence, with the available data this study has attempted to examine impacts of demonetization. Due to the above limitation cost analysis, like input cost, and profit – loss analysis could not be carried out in the study. However, an analysis of changes in production in terms of quantity and revenue during the study period would reveal impacts of demonetization on SSIs. In the above background impact of demonetization on production and revenue has been presented across categories of industries based on national industrial classification, following before, during and after demonetization approach.

4.1.1. Impact on Other Mining and Quarrying SSI Units

Table 4.3 illustrates production and revenue details of firms in category of other mining and quarrying. These units were observed only in Kalaburgi and not in the study area of Bangalore Urban district. Before demonetization these SSIs units were carrying out crushing and polishing of stone to the tune of over 55 thousand meters (in October 2016). It is to be noted that production has been declining among these SSI units before demonetization period. During demonetization period production fell sharply to 47.63 thousand metres in November 2016 and to 46.75 thousand metres in December 2016. This indicates the negative impacts of demonetization on production in other mining and quarrying activities. This is because, as reported by entrepreneurs, customers did not come forward for purchase during those months and hence they could not produce more. However, production among these units was revived from January 2017, i.e., after demonetization.

Revenue of these firms also declined during demonetization period as observed in the Table, which reveals decline in revenue from Rs. 76.27 thousand in October, 2016 to Rs. 65.49 thousand in November 2016 and further to Rs 64.28 thousand in December 2016. This indicates that on an average each firm lost over Rs. 10 to 12 thousand during demonetization period.

Table 4.3: Production and Revenue in firms of category Other Mining and Quarrying						
	Quantity	in Metres pe	er firm	Rev	enue in Rs. pei	firm
Month	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total
	Urban			Urban		
			lemonetiz	zation		
April 2016	0	639375	639375	0	876250	876250
May 2016	0	616125	616125	0	845000	845000
June 2016	0	511500	511500	0	704375	704375
July 2016	0	488250	488250	0	670000	670000
August 2016	0	511500	511500	0	700625	700625
September 2016	0	488250	488250	0	667500	667500
October 2016	0	555500	555500	0	762712	762712
		During o	demonetiz	zation		
November 2016	0	476313	476313	0	654973	654973
December 2016	0	467563	467563	0	642853	642853
		After d	emonetiz	ation		
January 2017	0	563813	563813	0	772813	772813
February 2017	0	517313	517313	0	708438	708438
March 2017	0	488250	488250	0	668125	668125
April 2017	0	441750	441750	0	607500	607500
May 2017	0	401063	401063	0	550938	550938
Note: includes stone crusher and stone polishing units						

Source: Survey data

4.1.2. Impacts on Manufacture of Food Products and Beverages Units

Impact of demonetization on production and revenue of manufacturing of food products and beverages firms such as milling, graining and dal production, is presented in Table 4.4, which shows three periods of production and revenue information. It is observed that in October 2016 taking all food products firms from both districts the production was over 3 tonnes. The production has declined from 4 tonnes in April 2016 to 3 tonnes in October 2016. Production declined during demonetization period i.e., to 2.5 tonnes in November 2016, which started increasing only in March 2017. These entrepreneurs revealed that production was reduced because of uncertain situation due to demonetization

and reduction in supply of raw materials. Production across the districts reveal relatively higher production per firm in Kalaburgi compared to that in Bangalore Urban district. However, it can be noticed that in both districts production has fell during demonetization period and the decline is more in Bangalore Urban district compared to Kalaburgi. Further, revenue per unit presented in the table also depicts decline during demonetization to Rs. 1.25 lakh (November 2016) from Rs. 1.65 lakh (October 2016). Therefore, results show that during demonetization SSIs units belonging to food and beverage production experienced reduction in both production and revenue.

Table 4.4: Production and Revenue in firms of Manufacture of Food Products and Beverage									
Month	Quantity in Tonnes per firm			Revenue in Rs. per firm					
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total			
	Urban			Urban					
Before Demonetization									
April 2016	3.3	5.0	4.0	166333	255000	201800			
May 2016	3.3	4.0	3.6	166333	205000	181800			
June 2016	3.6	4.5	4.0	183667	230000	202200			
July 2016	3.5	4.0	3.7	175000	205000	187000			
August 2016	3.3	4.0	3.6	166333	205000	181800			
September 2016	3.3	4.0	3.6	166333	205000	181800			
October 2016	3.3	3.3	3.3	166333	165000	165800			
		During Do	emonetiz	ation					
November 2016	2.3	2.8	2.5	116000	140000	125600			
December 2016	2.1	2.5	2.3	105667	127500	114400			
After Demonetization									
January 2017	2.3	2.8	2.5	117667	140000	126600			
February 2017	2.3	2.8	2.5	117667	140000	126600			
March 2017	3.3	4.0	3.6	166333	205000	181800			
April 2017	3.3	4.0	3.6	166333	205000	181800			
May 2017	3.3	4.0	3.6	166333	205000	181800			
Note: includes SSI units of milling, graining and dal production									

Source: Survey Data

4.1.3. Impacts on firms in Manufacture of Wearing Apparel, Dressing and **Dyeing of Fur**

Production and revenue information of firms in the category of manufacture of wearing apparel, dressing and dyeing of fur is presented in Table 4.5. Production of apparels declined during demonetization period from 19.7 thousand units in October 2016 to 16.2 thousand units of cloth. This decline in production was observed in both the study districts, where the decline was more in Bangalore Urban district compared to Kalaburgi. In Bangalore Urban district production of apparels was over 21.7 thousand in October 2016 and fell to 17.8 thousand in November 2016, where as in Kalaburgi production declined from 5.5 thousand units to 5 thousand units. The results indicate that demonetization has adversely affected SSIs involved in producing apparels, dresses, and other related activities like embroidery and the impact is more in urban areas as these units are concentrated more in urban areas like Bangalore. It is to be noticed that in the period after demonetization production of apparels has increased in both districts. Similarly, the revenue per firm also declined during demonetization period taking both districts together and also across districts.

Table 4.5: Production and Revenue of firms in Category Manufacture of Wearing Apparel, Dressing and Dyeing of Fur

Month	Quantity in Units per firm			Revenue in Rs. per firm			
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total	
	Urban			Urban			
Before Demonetization							
April 2016	21393	5000	19344	3315000	250000	2931875	
May 2016	21621	6000	19669	3431429	300000	3040000	
June 2016	21443	5500	19450	3311543	275000	2931975	
July 2016	21464	5200	19431	3352857	260000	2966250	
August 2016	21493	5300	19469	3367143	265000	2979375	

September 2016	21557	5400	19538	3397143	270000	3006250		
October 2016	21743	5500	19713	3421714	275000	3028375		
During Demonetization								
November 2016	17814	5000	16213	2911000	250000	2578375		
December 2016	18700	5100	17000	2996857	255000	2654125		
	After Demonetization							
January 2017	28489	5455	25610	3685934	272750	3259286		
February 2017	29824	5420	26774	3744714	271000	3310500		
March 2017	30714	5500	27563	3869714	275000	3420375		
April 2017	31050	5600	27869	3938429	280000	3481125		
May 2017	31249	5750	28061	3972006	287500	3511443		

Note: includes Manufacture of shirts, garments, shirt labels, jeans, embroidery work

Source: Survey Data

4.1.4. Impact on Manufacture of Paper and Paper Products

Information presented in Table 4.6 shows impact of demonetization on SSI units manufacturing paper products such as paper tubes, spiral containers, and cups. These units were observed in Bangalore Urban district. Impact of demonetization on production of these units is clearly visible as production came down from 30 thousand units in October 2016 to 29 thousand units in November 2016. Before demonetization the production was over 30 thousand units and it declined to 29 thousand during demonetization. However, the production has increased after demonetization to over 31 thousand units.

Revenue earned by these SSIs was nearly Rs. 65 thousand before demonetization and declined to Rs. 55 thousand in November 2016 i.e., during demonetization. After demonetization period revenue per firm has increased which was Rs. 64 thousand in May 2017. Demonetization, as observed, has reduced income of these manufacturing units during its process.

Table 4.6: Manufacture of Paper and Paper Products

Month	Quantity in Units per firm		Revenue in Rs. per firm				
	Bangalore Urban	Kalaburgi	Total	Bangalore Urban	Kalaburgi	Total	
		Before den	onetiza	tion			
April 2016	29680	0	29680	640000	0	640000	
May 2016	30515	0	30515	650000	0	650000	
June 2016	30349	0	30349	648667	0	648667	
July 2016	30516	0	30516	650667	0	650667	
August 2016	30683	0	30683	653333	0	653333	
September 2016	30013	0	30013	643000	0	643000	
October 2016	30514	0	30514	649000	0	649000	
		During den	nonetiza	tion			
November 2016	29233	0	29233	552667	0	552667	
December 2016	29637	0	29637	530667	0	530667	
After demonetization							
January 2017	29567	0	29567	526667	0	526667	
February 2017	31078	0	31078	523333	0	523333	
March 2017	31623	0	31623	596733	0	596733	
April 2017	31483	0	31483	611833	0	611833	
May 2017	31667	0	31667	646667	0	646667	

Note: includes manufacture of paper tubes, spiral containers, cups

Source: Survey Data

4.1.5. Impact on Demonetization on Printing related SSIs

Impact of demonetization on printing related SSIs is presented in Table 4.7 both in terms of production and revenue in three periods. SSIs were producing 9.4 thousand units (in October 2016) and it declined to 8.2 thousand in November 2016 indicating the negative effects of demonetization. The entrepreneurs reported that demand declined during the months of demonetization i.e., November and December 2016. Across the districts also decline in production has been observed and the fall is high in Kalaburgi district, which declined from 10.5 thousand units in October 2016 to 8.5 thousand in November 2016.

Details presented in the table show that revenue per firm declined during demonetization period, as it came down from Rs. 11.5 lakh to Rs. 9.3 between October 2016 and November 2016. District-wise revenue of printing related SSIs shows that in Kalaburgi it declined more than that in Bangalore Urban district.

Table 4.7: Publishing, Printing and Reproduction of Recorded Media

	Quantity	in Units per	firm	Revenue in Rs. per firm				
Month	Bangalore Urban	Kalaburgi	Total	Bangalore Urban	Kalaburgi	Total		
Before demonetization								
April 2016	8110	11000	9555	902000	1480000	1191000		
May 2016	8130	11050	9590	900000	1484000	1192000		
June 2016	8158	11083	9621	901640	1486640	1194140		
July 2016	8149	11089	9619	899080	1487080	1193080		
August 2016	8149	10584	9367	899720	1386720	1143220		
September 2016	8060	11500	9780	892000	1580000	1236000		
October 2016	8281	10575	9428	927200	1386000	1156600		
		During den	nonetiza	tion				
November 2016	8040	8550	8295	882000	984000	933000		
December 2016	7681	7601	7641	864040	848040	856040		
After demonetization								
January 2017	7685	9600	8643	865000	1248000	1056500		
February 2017	8340	10750	9545	918000	1400000	1159000		
March 2017	8360	11250	9805	922000	1500000	1211000		
April 2017	8470	13050	10760	938000	1854000	1396000		
May 2017	8573	11350	9962	952600	1508000	1230300		

Note: includes printing related SSIs

Source: Survey Data

4.1.6. Impact of demonetization on SSI Units of chemicals and chemical products

Impact of demonetization on SSI firms producing chemicals, paints, soap, painting coats and lubricants, in the category of chemicals and chemical products is presented in Table 4.8. These firms are observed in Bangalore Urban district and not in Kalaburgi, which indicates establishment of these SSIs in more urbanized areas like Bangalore. This might be due to the available market in these areas. Information presented in the table shows that production of chemical related products was 152 tonnes per firm in October 2016 and it declined to 149 tonnes in November 2016, and further to 146 tonnes in December 2016, showing the negative impact of demonetization. After demonetization period i.e., from January 2017 production increased but by April 2016 it declined to 141 tonnes revealing the continued adverse effects of demonetization. Similarly, revenue of these firms also declined during demonetization period, i.e., from Rs. 12.26 lakh in October 2016 to Rs. 10.52 lakh in November 2016.

Table 4.8: Manufacture of Chemicals and Chemical Products									
	Quantity	in tonnes pe	er firm	Reveni	ue in Rs. per	firm			
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total			
Month	Urban			Urban					
	Before demonetization								
April 2016	148.6	0	148.6	1188244	0	1188244			
May 2016	148.0	0	148.0	1170122	0	1170122			
June 2016	148.6	0	148.6	1195022	0	1195022			
July 2016	148.4	0	148.4	1168711	0	1168711			
August 2016	148.5	0	148.5	1164378	0	1164378			
September 2016	150.8	0	150.8	1199267	0	1199267			
October 2016	152.7	0	152.7	1226700	0	1226700			

	During demonetization								
November 2016	149.9	0	149.9	1052500	0	1052500			
December 2016	146.8	0	146.8	1108489	0	1108489			
After demonetization									
January 2017	147.8	0	147.8	1288833	0	1288833			
February 2017	149.1	0	149.1	1198711	0	1198711			
March 2017	150.1	0	150.1	1284389	0	1284389			
April 2017	141.2	0	141.2	1268889	0	1268889			
May 2017	141.4	0	141.4	1222133	0	1222133			

Note: includes manufacture of chemicals, paints, soap, paintings coats and lubricants

Source: Survey Data

4.1.7. Impact on firms manufacturing rubber and plastic products

Table 4.9 illustrates production and revenue details of SSI firms involved manufacturing plastic and rubber products, in which output is measured in number of units. Impact of demonetization on these firms is visible in both production and revenue as both have declined during demonetization period. Output was over 40 thousand units in October 2016 which declined to 34 thousand in November 2016. Similarly, the revenue also declined from Rs.19.46 lakh to Rs. 17.69 lakh between October and November, which shows negative impacts of demonetization.

Table 4.9: Manufacture of Rubber and Plastic Products

Month	Quantity in units per firm			Revenue in Rs. per firm		
	Bangalore Kalaburgi Tot		Total	Bangalore	Kalaburgi	Total
	Urban			Urban		
April 2016	37093	0	37093	1766343	0	1766343
May 2016	36606	0	36606	1846519	0	1846519
June 2016	38420	0	38420	1930063	0	1930063
July 2016	40210	0	40210	1949293	0	1949293
August 2016	41395	0	41395	1842866	0	1842866

September 2016	41610	0	41610	1892703	0	1892703
October 2016	40245	0	40245	1946904	0	1946904
November 2016	34843	0	34843	1769409	0	1769409
December 2016	37000	0	37000	1907539	0	1907539
January 2017	41501	0	41501	1996236	0	1996236
February 2017	42618	0	42618	1931113	0	1931113
March 2017	43451	0	43451	2060651	0	2060651
April 2017	45906	0	45906	2117644	0	2117644
May 2017	44333	0	44333	2183776	0	2183776

Note: includes manufacture of plastic bottles, rubber parts, pipes, shoes, plastic materials

(Output measured in number of units)

Source: Survey Data

Information on SSIs producing rubber and plastic products, in which output is measured in tonnes, is presented in Table 4.10. Production of these SSI units was 21.5 tonnes in October 2016, which declined to 20 tonnes in November 2016, revealing negative impacts of demonetization. The declining trend in production was also observed across the study districts. Revenue of these firms also fell during demonetization period, i.e., from Rs. 8.31 lakh in October 2016 to Rs. 6.5 lakh in November 2016. Among the districts also revenue per firm fell sharply, where in Bangalore Urban district it declined from Rs. 9.33 lakh in October to Rs. 7.34 lakh in November 2016 and in Kalaburgi from Rs. 16 thousand to Rs. 8 thousand. All this shows that during demonetization period production and revenue fell among these SSIs in the study area.

Table 4.10: Manufacture of Rubber and Plastic Products

	Quantity i	n tonnes per	firm	Revenu	Revenue in Rs. per firm			
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total		
Month	Urban			Urban				
April 2016	23.19	0.05	20.6	903316	16364	804765		
May 2016	25.04	0.05	22.3	951083	17018	847298		
June 2016	25.20	0.05	22.4	969644	16364	863724		
July 2016	23.21	0.05	20.6	855114	14727	761737		
August 2016	23.20	0.05	20.6	862298	16364	768305		
September 2016	23.53	0.05	20.9	902521	16364	804059		
October 2016	24.14	0.05	21.5	933189	16364	831319		
November 2016	22.89	0.03	20.3	734202	9818	653715		
December 2016	23.27	0.04	20.7	796644	13091	709583		
January 2017	23.54	0.05	20.9	937314	16364	834986		
February 2017	24.54	0.05	21.8	946463	16364	843118		
March 2017	24.43	0.05	21.7	897764	16364	799830		
April 2017	23.61	0.05	21.0	894221	16364	796681		
May 2017	23.86	0.05	21.2	919244	16364	818924		

Note: includes manufacturing of plastic powder, plastic rubber, packaging materials, plastic paper, covers (output measured in tonnes)

Source: Survey Data

4.1.8. Impact of demonetization on SSI units of manufacture of fabricated metal products, except machinery and equipment

Production and revenue pattern of SSI units involved in manufacture of fabricated metal products, except machinery and equipment, among which output is measured in number of units, is presented in Table 4.11, for periods before, during and after demonetization. It can be observed from the table that before demonetization production was over 4 thousand units, for example in October 2016 it was over 4.3 thousand. But, the production was 3.4 thousand in November and 3.6 thousand in December 2016. This illustrates that production in SSI firms related to fabricate metal products declined during demonetization. Production also declined across both the study districts, where in Bangalore

Urban it fell from 4.3 thousand to 3.5 thousand and in Kalaburgi from 2.5 thousand to 1.5 thousand between October and November 2016. During demonstration period revenue of these firms also declined from Rs. 30.13 lakh in October to Rs. 26.43 lakh in November 2016.

Table 4.11: Manufacture of Fabricated Metal Products, except Machinery & Equipment

Month	Quantity	in units per f	firm	Revenue in Rs. per firm					
	Bangalore Urban	Kalaburgi	Total	Bangalore Urban	Kalaburgi	Total			
	Before Demonetization								
April 2016	4234	2500	4191	2977918	200000	2908470			
May 2016	4275	2500	4231	3020635	200000	2950119			
June 2016	4375	2500	4328	3050680	200000	2979413			
July 2016	4408	2500	4361	3071241	200000	2999460			
August 2016	4395	2500	4348	3084911	200000	3012788			
September 2016	4341	1250	4264	3066404	100000	2992244			
October 2016	4392	2500	4345	3085439	200000	3013304			
		During D	emonet	ization					
November 2016	3536	1500	3485	2708018	120000	2643318			
December 2016	3667	1200	3606	2767105	96000	2700328			
		After De	emoneti	zation					
January 2017	3855	1250	3790	3006895	100000	2934223			
February 2017	4050	1875	3996	3073968	150000	3000869			
March 2017	4113	2500	4072	3087218	200000	3015038			
April 2017	4016	2500	3979	3112408	200000	3039598			
May 2017	4021	2500	3983	3104947	200000	3032323			

Note: includes manufacture of power turbines, coating, electro plating irrigation pipes, electrical lamination, gear box, panel boards, fabrication, kitchen items (output measured in number of units)

Source: Survey Data

Impact of demonetization on production and revenue of SSIs related to manufacture of fabricated metal products, except machinery and equipment, in which output is measured in tonnes, is presented in Table 4.12. Production among these firms was around 91 tonnes in October 2016 i.e., before demonetization and came down to 77 tonnes in November 2016 i.e., during demonetization. Across the districts also production has declined showing the negative impacts of demonetization. Similarly, revenue also has been declined during demonetization period from Rs. 36.34 lakh per firm to Rs. 32.36 lakh per firm between October and November 2016.

Table 4.12: Manufacture of Fabricated Metal Products, except Machinery & Equipment

	Quantity i	in tonnes per	firm	Revenue in Rs. per firm			
Month	Bangalore Urban	Kalaburgi	Total	Bangalore Urban	Kalaburgi	Total	
		Before d	emonet	ization			
April 2016	103.5	50.0	91.6	5143066	1250000	4277940	
May 2016	93.2	60.0	85.9	4036912	1500000	3473154	
June 2016	95.7	55.0	86.6	4095055	1375000	3490598	
July 2016	94.5	55.0	85.7	4045495	1375000	3452051	
August 2016	99.0	60.0	90.3	4275495	1500000	3658718	
September 2016	99.1	50.0	88.2	4259780	1250000	3590940	
October 2016	102.1	52.5	91.1	4297495	1312500	3634162	
		During d	lemonet	tization			
November 2016	89.7	35.0	77.5	3911484	875000	3236709	
December 2016	92.9	30.0	78.9	4288066	750000	3501829	
		After de	emoneti	zation			
January 2017	98.5	40.0	85.5	4286352	1000000	3556051	
February 2017	99.8	47.5	88.2	4191769	1187500	3524154	
March 2017	98.4	55.0	88.8	4052769	1375000	3457709	
April 2017	98.9	55.0	89.2	4148286	1375000	3532000	
May 2017	104.8	60.0	94.8	4154000	1500000	3564222	

Note: includes manufacture of MS plate sheets, non-ferrous castings, saw dust, polish machine and cutting, metal fabrication (Output measured in tonnes)

Source: Survey Data

4.1.9. Impact on Production and Revenue of firms related to Manufacture of Machinery and equipment Non Electrical Components

Impact of demonetization on firms manufacturing machinery and equipment - NEC is presented in Table 4.13, which indicates that production on these firms declined during demonetization as quantity produced per firm came down from 41.78 thousand units in October 2016 to 32.2 thousand units November 2016. Across the districts also production has declined during demonetization period. Revenue of these firms was over Rs. 10.14 crores per firm in October and declined to Rs. 7.92 crore in November 2016. The average revenue has declined across the districts also.

Table 4.13: Production and Revenue in firms related to Manufacture of Machinery and Equipment N E C

	Quantity in Units per firm			Revenue in Rs. per firm					
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total			
Month	Urban			Urban					
Before demonetization									
April 2016	40817	550	40011	97009476	625000	95081786			
May 2016	35205	600	34513	81692329	690000	80072282			
June 2016	35906	550	35199	81686104	625000	80064882			
July 2016	35960	500	35251	82166472	575000	80534642			
August 2016	36582	500	35860	85072299	575000	83382353			
September 2016	42666	550	41824	103460417	640000	101404009			
October 2016	42626	550	41784	103518004	625000	101460143			
		During de	emonetiz	ation					
November 2016	33353	375	32694	80829601	412500	79221259			
December 2016	34739	400	34052	81774364	445000	80147776			
		After der	monetiza	tion					
January 2017	39889	500	39102	96855119	560000	94929217			
February 2017	40627	500	39825	97412182	575000	95475439			
March 2017	42973	550	42124	103434179	640000	101378296			
April 2017	42539	600	41700	103520153	690000	101463550			
May 2017	40585	550	39784	97269450	640000	95336861			

Source: Survey Data

Note: Group includes manufacture of kitchen equipment, machinery, metal parts, machinery spare parts, precision auto parts, hydraulic cylinder, dies milling, drills and boring, automobile, balls and screws, industrial fans and pollution control equipment, engineering machine, furnaces, holders, solar light poles (output measured in number of units)

Pattern of production and revenue of firms related to manufacture of machinery and equipment – Non Electrical Components, in which output is measured in tonnes is presented in Table 4.14. These SSIs units are found in Bangalore Urban district and involved in producing machinery and copper products. Output in these units was 637 tonnes in October 2016 and declined to 593 tonnes in November 2016 indicating negative impacts of demonetization on production. The entrepreneurs reported that because of non-availability of cash and holding of orders by their customer production was reduced. Production started increasing only from March 2017, showing that the impact of demonetization last for long duration to some SSIs. Similarly, revenue per firm also declined during demonetization as shown in table. In October 2016 the revenue per firm was Rs. 29.18 lakh and came down to Rs. 27.25 lakh in November 1016. Therefore, negative impacts of demonetization are clearly seen in production and revenue of these SSI units.

Table 4.14: Production and Revenue in firms related to Manufacture of Machinery and Equipment N E C

	Quantity	in tonnes pe	er firm	Revenue in Rs. per firm		
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total
Month	Urban			Urban		
April 2016	622	0	622	2849167	0	2849167
May 2016	599	0	599	2733000	0	2733000
June 2016	606	0	606	2760667	0	2760667
July 2016	608	0	608	2777833	0	2777833
August 2016	623	0	623	2851667	0	2851667
September 2016	638	0	638	2926667	0	2926667
October 2016	637	0	637	2918333	0	2918333

November 2016	593	0	593	2725000	0	2725000
December 2016	550	0	550	2508333	0	2508333
January 2017	560	0	560	2551667	0	2551667
February 2017	560	0	560	2560000	0	2560000
March 2017	631	0	631	2905000	0	2905000
April 2017	633	0	633	2921667	0	2921667
May 2017	633	0	633	2921667	0	2921667

Note: includes manufacture of machinery and copper products

Source: Survey Data

4.1.10. Impact on firms in Manufacture of Electrical Machinery and **Apparatus**

Information presented in Table 4.15 shows impacts of demonetization on production and revenue of SSI units manufacturing electrical machinery and apparatus such as panel boards, small transformers, bobbins, etc. in the study area. Production of these declined during demonetization period as the output came down from 2700 units in October 2016 to 2650 units per firm as observed in the table. Similarly, revenue of these firms also declined during the above period indicating the impact of sudden implementation of demonetization.

Table 4.15: Production and Revenue of firm in Manufacture of Electrical Machinery and **Apparatus**

Month	Quantity	in Units per	firm	Revenue in Rs. per firm		
	Bangalore	Kalaburgi	Total	Bangalore	Kalaburgi	Total
	Urban			Urban		
April 2016	2495	0	2495	1994233	0	1994233
May 2016	2504	0	2504	2021093	0	2021093
June 2016	2537	0	2537	2098045	0	2098045
July 2016	2609	0	2609	2122184	0	2122184
August 2016	2705	0	2705	2311453	0	2311453
September 2016	2630	0	2630	2104793	0	2104793

October 2016	2711	0	2711	2152799	0	2152799
November 2016	2650	0	2650	1884724	0	1884724
December 2016	2698	0	2698	1977709	0	1977709
January 2017	2726	0	2726	1936607	0	1936607
February 2017	2700	0	2700	1998525	0	1998525
March 2017	2863	0	2863	2255500	0	2255500
April 2017	2902	0	2902	2249583	0	2249583
May 2017	3007	0	3007	2305795	0	2305795

Note: includes manufacture of panel boards, small transformer, wire crafts, transfer bobbin,

panel board gasket, capacitors

Source: Survey Data

4.1.11. Impact on firms manufacturing furniture

SSIs are involved in manufacturing furniture in the study area and information related to impact of demonetization on production and revenue of these firms is given in Table 4.16. These activities are more in Bangalore urban district compared to Kalaburgi district. Production of furniture declined during demonetization as taking both districts together it came down to 852 units from 1054 units between October 2016 and November 2016. Revenue also declined during this period showing the adverse impacts of demonetization on earning of SSIs.

Table 4.16: Production and Revenue in firms Manufacture of Furniture

Month	Quantity	y in Units per	firm	Revenue in Rs. per firm					
	Bangalore Urban	Kalaburgi	Total	Bangalore Urban	Kalaburgi	Total			
April 2016	1213	250	1020	693750	27500	560500			
May 2016	1187	200	990	703750	22000	567400			
June 2016	1195	200	996	694000	22000	559600			
July 2016	1210	210	1010	701750	23100	566020			
August 2016	1225	200	1020	700125	22000	564500			
September 2016	1242	200	1034	705125	22000	568500			
October 2016	1265	210	1054	705375	23100	568920			
November 2016	1018	190	852	608125	20900	490680			
December 2016	1054	190	881	603750	20900	487180			
January 2017	1125	190	938	655000	20900	528180			
February 2017	1190	200	992	693750	22000	559400			
March 2017	1295	200	1076	792500	22000	638400			
April 2017	1216	200	1013	709500	22000	572000			
May 2017	1241	200	1033	720000	22000	580400			

Note: includes manufacturing furniture like college desks, gym products, dental chairs, etc.

Source: Survey Data

4.1.12. Impact of Demonetization on Revenue of all SSIs together

An aggregate view of impact of demonetization on revenue of small scale industries, covered in the study, is presented in Table 4.17. It can be observed that before demonetization taking all SSIs together had revenue of Rs. 484.6 lakh per firm in October 2016 and the revenue declined to Rs. 379.67 lakh per SSI in November 2016, i.e., during demonetization. Across the districts also same declining trend has been observed during demonetization period. Negative impact of demonetization, i.e., decline in revenue per firm was observed across all categories of industries.

The above analysis of production and revenue of small scale industries in Bangalore Urban and Kalaburgi districts indicate that sudden implementation of demonetization had reduced production and revenue of these manufacturing units during demonetization period. Decline in average revenue of SSIs might be due to factors like reduction in cash availability, non -supply of raw materials, etc. which are discussed in this report. It is to be noted that the average revenue of SSIs increased after and reached the level of previous year, which means that during this period production was reduced, this observation is in line with opinion of entrepreneurs and also as evidenced by other studies reviewed earlier. This scenario of fluctuation in average revenue of SSIs is also true across Bangalore Urban and Kalaburgi districts. But, an important point to note is that the average revenue of SSIs in Kalaburgi is relatively less than that of SSIs in Bangalore Urban district. This might be due to changes in type of SSIs in these two districts.

Table 4.17: Revenue across industrial categories (NIC based category and Revenue Rs. in Lakh per firm)

NIC Classification/ District	April 2016	May 2016	June 2016	July 2016	Augu st 2016	Sept. 2016	Octob er 2016	Novem ber 2016	Decem ber 2016	Janua ry 2017	Februa ry 2017	March 2017	April 2017	May 2017
Other Mining a	nd Quarry	ing												
Kalaburgi	8.76	8.45	7.04	6.70	7.01	6.68	7.63	6.55	6.43	7.73	7.08	6.68	6.08	5.51
Total	8.76	8.45	7.04	6.70	7.01	6.68	7.63	6.55	6.43	7.73	7.08	6.68	6.08	5.51
Manufacture of	Food Pro	ducts and	Beverag	es										
Bangalore Urban	1.66	1.66	1.84	1.75	1.66	1.66	1.66	1.16	1.06	1.18	1.18	1.66	1.66	1.66
Kalaburgi	2.55	2.05	2.30	2.05	2.05	2.05	1.65	1.40	1.28	1.40	1.40	2.05	2.05	2.05
Total	2.02	1.82	2.02	1.87	1.82	1.82	1.66	1.26	1.14	1.27	1.27	1.82	1.82	1.82
Manufacture of	Wearing	Apparel, I	Dressing	and Dye	eing of F	ur								
Bangalore Urban	33.15	34.31	33.12	33.53	33.67	33.97	34.22	29.11	29.97	36.86	37.45	38.70	39.38	39.72
Kalaburgi	2.50	3.00	2.75	2.60	2.65	2.70	2.75	2.50	2.55	2.73	2.71	2.75	2.80	2.88
Total	29.32	30.40	29.32	29.66	29.79	30.06	30.28	25.78	26.54	32.59	33.11	34.20	34.81	35.11
Manufacture of Paper and Paper Products														
Bangalore Urban	6.40	6.50	6.49	6.51	6.53	6.43	6.49	5.53	5.31	5.27	5.23	7.13	7.15	6.60
Total	6.40	6.50	6.49	6.51	6.53	6.43	6.49	5.53	5.31	5.27	5.23	7.13	7.15	6.60

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Publishing, Printing and Reproduction of Recorded Media														
Bangalore Urban	9.02	9.00	9.02	8.99	9.00	8.92	9.27	8.82	8.64	8.65	9.18	9.22	9.38	9.53
Kalaburgi	14.80	14.84	14.87	14.87	13.87	15.80	13.86	9.84	8.48	12.48	14.00	15.00	18.54	15.08
Total	11.91	11.92	11.94	11.93	11.43	12.36	11.57	9.33	8.56	10.57	11.59	12.11	13.96	12.30
Manufacture of Ch	emicals an	d Chemica	l Produc	ts										
Bangalore Urban	11.88	11.70	11.95	11.69	11.64	11.99	12.27	10.53	11.08	12.89	11.99	12.84	12.69	12.22
Total	11.88	11.70	11.95	11.69	11.64	11.99	12.27	10.53	11.08	12.89	11.99	12.84	12.69	12.22
Manufacture of Ru	bber and P	lastic Prod	lucts											
Bangalore Urban	26.70	27.98	29.00	28.04	27.05	27.95	28.80	25.04	27.04	29.34	28.78	29.58	30.12	31.03
Kalaburgi	0.16	0.17	0.16	0.15	0.16	0.16	0.16	0.10	0.13	0.16	0.16	0.16	0.16	0.16
Total	25.71	26.94	27.94	27.11	26.11	26.97	27.78	24.23	26.17	28.31	27.74	28.60	29.14	30.03
Manufacture of Fab	oricated Me	etal Produc	cts excep	t Machin	nery and	Equipme	ent							
Bangalore Urban	81.2	70.6	71.5	71.2	73.6	73.3	73.8	66.2	70.6	72.9	72.7	71.4	72.6	72.6
Kalaburgi	14.5	17.0	15.8	15.8	17.0	13.5	15.1	10.0	8.5	11.0	13.4	15.8	15.8	17.0
Total	71.9	64.2	64.7	64.5	66.7	65.8	66.5	58.8	62.0	64.9	65.3	64.7	65.7	66.0
Manufacture of Machinery and Equipment N E C														
Bangalore Urban	998.6	844.3	844.5	849.4	879.2	1063.9	1064.4	835.5	842.8	994.1	999.7	1063.4	1064.4	1001.9
Kalaburgi	6.3	6.9	6.3	5.8	5.8	6.4	6.3	4.1	4.5	5.6	5.8	6.4	6.9	6.4
Total	979.3	828.1	828.3	833.1	862.3	1043.3	1043.8	819.5	826.6	974.8	980.4	1042.8	1043.9	982.6

Manufacture of Electrical Machinery and Apparatus														
Bangalore	19.94	20.21	20.98	21.22	23.11	21.05	21.53	18.85	19.78	19.37	19.99	22.56	22.50	23.06
Urban														
Total	19.94	20.21	20.98	21.22	23.11	21.05	21.53	18.85	19.78	19.37	19.99	22.56	22.50	23.06
Manufacture of F	urniture													
Bangalore	6.94	7.04	6.94	7.02	7.00	7.05	7.05	6.08	6.04	6.55	6.94	7.93	7.10	7.20
Urban	0.74	7.04	0.74	7.02	7.00	7.03	7.03	0.00	0.04	0.55	0.74	7.73	7.10	7.20
Kalaburgi	0.28	0.22	0.22	0.23	0.22	0.22	0.23	0.21	0.21	0.21	0.22	0.22	0.22	0.22
Total	5.61	5.67	5.60	5.66	5.65	5.69	5.69	4.91	4.87	5.28	5.59	6.38	5.72	5.80
All SSIs together	All SSIs together													
Bangalore	454.69	384.71	384.85	387.06	400.48	484.19	484.61	379.67	384.41	453.99	456.62	484.49	485.00	456.59
Urban	434.07	304.71	304.03	307.00	700.70	707.17	101.01	317.01	304.41	T33.77	430.02	707,7	1 03.00	750.57
Kalaburgi	8.72	8.89	8.15	7.93	7.81	7.91	7.89	5.99	5.58	7.33	7.45	7.74	8.45	7.96
Total	416.74	352.72	352.80	354.79	367.06	443.66	444.04	347.87	352.17	415.98	418.39	443.92	444.44	418.40

Source: Survey Data

4.2. Impact of demonetization on employment

Another adverse impact of demonetization expected was on employment in SSIs, as shown by some studies (review of literature). This study attempted to elicit information on impact of demonetization on employment in the study area. Table 4.18 presents information on impact of demonetization on temporary employment as reported by entrepreneurs, which illustrates decrease in temporary employment (over 14 per cent of SSIs). But, even this decline also should be taken into consideration as these workers who are usually less skilled have to face unemployment and associated problems all of a sudden because of demonetization. This problem is more in rural area compared to that in urban area, as decline in temporary employment is more in Kalaburgi, 40 per cent, which might be due to appointment of more number of daily wage labourers than regular employment. It shows adverse impact of demonetization on wage labourers.

Table 4.18: Impact of demonetization on employment

Impact on temporary employment	Bangalore Urban	Kalaburgi	Total
Decreased	26	8	34
	(12.1)	(40)	(14.47)
No change	189	12	201
	(87.9)	(60)	(85.53)
Total	215	20	235
	(100)	(100)	(100)

Source: Survey Data

Note: Figures in brackets are percent to total.

This study also collected information on whether SSIs had to relieve any of their permanent employees or not due to demonetization. Table 4.19 shows that no permanent staff of SSIs left job during demonetization, in both districts.

This is because SSIs require to keep their permanent employees to carry out regular production activities and hence there is no decline in this segment of employment.

Table 4.19: Impact of demonetization on permanent workers

Impact on workers	Bangalore Urban	Kalaburgi	Total
Workers left the job	0	0	0
	(0.0)	(0.0)	(0.0)
Workers not left the job	215	20	235
	(100.0)	(100.0)	(100)
Total	215	20	235
	(100.0)	(100.0)	(100.0)

Source: Survey Data

Note: Figures in brackets are percent to total.

4.3. Opinion on demonetization and its effects on SSIs

the experience of entrepreneurs Considering during and demonetization the study attempted to obtain their opinion on whether demonetization is good or not. This question was asked on the background of objectives of demonetization i.e., controlling of black money, counterfeit currency, finance for terrorism related activities and also the problems faced by due to reduction in cash availability during demonetization. It was observed that large number of entrepreneurs opined demonetization is not good as it adversely affected their production related activities, created problems in payments. Majority of these respondents expressed demonetization should have been implemented in phase-wise so that people could have adjusted to the new system.

4.4. Case Studies on Impact of Demonetization

Demonetization brought several changes in the day to day functioning of SSIs. Let us look at some cases of SSIs which reveal these changes.

Case Study 1: An entrepreneur producing carton boxes in Bangalore Urban district reported that he could not purchase few input materials, which were being purchased with cash, because of non-availability of cash due to demonetization. Hence, he had to stop production of carton boxes on 10th November 2016. After arranging money through his bank account he could purchase and continue production. Further, he mentioned that some orders for carton boxes got cancelled quoting non-availability of cash. This indicates that during demonetization production was reduced for non-availability of cash.

Case Study 2: A stone cutting and polishing unit owner in Kalaburgi revealed that immediately after announcement of demonetization demand for stone declined. He mentioned that for almost one week hardly any customer visited his unit to purchase stones or for enquiry about the product and price. Before demonetization every day at least 15 customers were visiting to enquire about the price and product. As a result of this he did not place order for new stones from his suppliers. This development illustrates how production got affected adversely after demonetization.

Case Study 3: Another stone polishing unit owner in Kalaburgi reported that 4 persons work in his unit and all of them were receiving their wage in cash as they had no bank account. These workers asked the owner to give their payment in new currency and not in old currency. But, the owner did not get adequate new money to pay for his labourers. In order to avoid problems to his staff the owner took them to grocery shop and purchased the required items for them. This episode illustrates that labourers in informal sector still demand wage in cash and non-availability of cash puts them in hardships.

4.5. Overall Views of Entrepreneurs on Demonetization emerged during Focussed Group Discussion

Implementation of demonetization brought unexpected changes in spending pattern of people due to shortage of fresh currency. In order to elicit overall views of owners of SSIs focussed group discussion was held in both Bangalore Urban and Kalaburgi districts. The discussion focussed on issues like impacts on production, employment, transactions in banks, etc. during demonetization. Entrepreneurs and office bearers of Karnataka Small Scale Industries Association (KASSIA) opined that demonetization was an unexpected stroke on their production and marketing activities. Participants expressed that SSIs meet their financial requirements from sources like banks and private lenders. Dependence on private lenders is high during immediate needs of money and when formal banking system does not provide financial assistance to SSIs. Demonetization adversely affected private lenders and in turn SSIs were also affected due to non-availability of money. Further, during demonetization even banks were not extending loans, hence SSIs owners faced difficulties to arrange money all of a sudden. This shows demonetization affected financial flow to SSIs which affected adversely their regular transactions like payments, purchases etc. Among SSIs particularly those working on the basis of job works (i.e., producing fixed quantity of goods, finished or intermediary, for a fixed amount within a specified time, like electro-plating) were severely affected as majority of them transact using cash as reported by the members. All participated members expressed delay in payments to them and also by them to others. Majority of them opined that demand for their goods declined due to non-availability of cash, particularly for those who were transacting through cash. The negative impact was more on recently started firms, but established SSIs did not face much problems as their large proportion of transactions are through banks. Entrepreneurs participated in

Kalaburgi district opined that they had cut appointment of daily wage employees due to non-availability cash. Large number of daily wage earners does not have their bank accounts and hence paying them through check was also not possible. Further, the entrepreneurs could not arrange raw materials for their units during the initial days of demonetization and hence they could not continue daily wage labourers during that time. This shows that demonetization adversely affected the labour class. Entrepreneurs in Kalaburgi said that supply of raw materials declined during demonetization as suppliers were not ready to accept cheques of banks, instead they preferred wait and watch for some time.

Chairman, KASSIA opined that demonetization adversely affected the small scale industrial sector, as majority of these units depend on both formal and informal financial system due to inadequacies in formal financial system. Entrepreneurs require to provide collateral property, arrange various documents etc. to obtain financial support from banks, which becomes a major hurdle for them and hence opt for informal banking which help them to meet day-to-day expenditures. He said that rules like demonetization may help multi-national companies than promoting MSMEs in the country considering their financial health. According to some entrepreneurs, demonetization negatively affected luxury goods and real estate markets, as cash transaction was high in this segment of market.

Some of the participating members felt that demonetization might help in formalizing the financial system, but reduction in cash availability affected their functioning of SSIs for the reasons mentioned above. The overall opinion of members participated in the FGDs at both the districts was that sudden implementation of demonetization created confusion, and their transactions affected severely as it took time for adjusting to new system.

To sum up: This chapter analysed the impacts of demonetization on production, sales, revenue and employment of SSIs in the study area. It was observed that production, sales, revenue declined during demonetization. The study found that the daily wage labourers and less skilled workers faced more problems as SSIs reduced their labour usage. Entrepreneurs of SSI opined during focus group discussion that owners of SSI had to undergo difficult time due to nonavailability of funds during demonetization, and the problem was high for job work based units and recently started units. Demonetization according to SSI owners was not called for as it reduced production, sales and revenue.

Chapter V

Conclusions and Suggestions

5.1. Introduction

Money, a medium of exchange, is backbone of transactions in modern economies. Different roles like medium of exchange, store of value and unit of account, performed by money are crucial for carrying out production and consumption activities in the economy. Monetary policy of any country determines supply and demand for money and changes in monetary policy will affect demand and supply of money. Government in India brought a major monetary policy change in November 8, 2016 by implementing demonetization of specified currencies, i.e. Rs. 500 and Rs. 1000. Demonetization was introduced with objectives of (1) Elimination of fake currency, (2) Elimination of black money, and (3) Control of subversive activities. Objectives of demonetization were aimed at controlling illegal activities by withdrawing existing high denomination currencies with new currencies. At the time of demonetization specified currencies were to the tune of 86.4 per cent of total currencies in circulation. In this background the government introduced demonetization to meet above mentioned objectives, besides moving towards cash less economy using modern technology based electronic transactions.

Demonetization is a monetary process of stripping a currency unit of its legal tender status, which results in withdrawing currency from circulation. It is seen as a move to discourage people from cash transactions and encourage people to use cash less transactions. Demonetization has been introduced in various other countries also over time to meet different objectives like controlling excess liquidity, inflation, black money, etc. In the beginning days of demonetization people experienced difficulties in exchanging old currency to new currency, this was accentuated by inadequate supply of new currencies. It

was reported by media that people stood in long lines in front of ATMs and banks to obtain new currencies. It was observed that demonetization promoted digital transactions. Keeping in view impacts of demonetization on all sectors of the economy, this study tried to analyse impacts of demonetization on SSIs in Karnataka.

5.2. Objectives and Approach

Review of literature illustrated limited number of studies on small scale industries. Some of the available studies are narrow in coverage of issues and samples. Hence, this study tried to fill this gap on impacts of demonetization on SSIs.

This study has been conducted in Karnataka, as it is one of the important states in terms of contribution from SSIs with 3.82 lakh units employing 22.77 lakh people. This study is limited to SSIs in Karnataka only and the reference period is April 2016 to May 2017. Objectives of the study were to understand need and context for demonetization in India, study revenue of SSIs, examine impacts demonetization on production, sale and employment, and to understand gains or losses to SSIs during demonetization. Both secondary and primary data were used in the study. Secondary data were collected from Government Records while primary data were collected from study districts Bangalore Urban and Kalaburgi, which respectively represent urban and rural areas. Structured schedules were canvassed among 235 SSI units to elicit information on impacts of demonetization.

Small scale industries in India have been renamed as micro, small and medium enterprises and been classified on the basis investment in manufacturing and service sectors. Among 634 lakh units, large number of MSMEs are micro units at 630.52 lakh, which have invested less than Rs. 25 lakhs in manufacturing and less than Rs. 10 lakhs in services, constitute a major

share. Uttar Pradesh and West Bengal have large number of MSMEs compared to other states in India. Karnataka has over 38 lakh units of MSMEs.

Employment generation is another important contribution of MSMEs in the economy as over 11 crore jobs have been created during 2015-16, in which micro enterprises have contributed more. State-wise distribution of employment shows that more job opportunities have been created in Uttar Pradesh and West Bengal by SSIs.

Karnataka is an important industrial state promoting high technology based, capital intensive and knowledge based industries. It is considered as a desired place for establishing large and small scale industries.

In order to examine effects of demonetization on SSIs Bangalore Urban district and Kalaburgi districts were selected for collection of data. Bangalore Urban district comprises 90.94 per cent of its population in urban area, while Kalaburgi has 67.44 per cent of people in rural area representing urban and rural areas respectively.

The study observed that Karnataka has 13959 factories, including readymade garments, textiles, chemical and engineering employing over 15 lakh people. Bangalore Urban district has over 43 per cent of factories, while it is around 1 per cent in Kalaburgi. Industrial sheds are important infrastructure in promoting industrial activities. Karnataka has 176 industrial estates thus encouraging industrial growth. The state has 3.82 lakh SSI units providing employment for 22.77 lakh people, out of which Bangalore Urban district has largest share, owing to the advantages it has over other districts in the state. However, reasons for this skewed establishment of industries need to be studied and growth of industries should be promoted in other districts also.

This study covered 235 small scale industries taking 215 samples from Bangalore North taluk in Bangalore Urban district and 20 samples from Kalaburgi and Chittapur taluks in Kalaburgi district. Categorization of SSIs according to National Industrial Classification showed that units related to machinery and equipment - non electrical components (103 out of 235 SSIs) were more in number followed by manufacture of fabricated metal products - except machinery and equipment taking both districts together, and also in Bangalore Urban district. But, in Kalaburgi district mining and quarrying units are more in number (8 out of 20).

The study found that in the study area large number of MSMEs (62 per cent) was established during the period 2001-10, which might be due to changes in industrial policies to capture opportunities provided by economic reforms. It was observed that majority of SSIs (84 per cent) under study had markets in few districts around their location, which indicates SSIs meeting local demands. This point shows that SSIs should be encouraged in other districts also to meet demands of those regions. The study found that establishment cost of SSIs was on an average over Rs. 1.5 crores from both districts together, which shows that large number units fall in the category of small scale industries according to the MSME classification. Analysis of average revenue of SSIs revealed decline in revenue from Rs. 5.16 crores in 2011 – 12 to Rs. 4.41 crores in 2016 – 17. Entrepreneurs opined that reduction in demand, lack of financial support, increased competition were factors for decline in revenue.

5.3. Views of SSI entrepreneurs on demonetization - Summary

Large number of entrepreneurs opined that demonetization was an unexpected move by the government, as 93 per cent of respondents came to know about demonetization through television. Electronic media is the major medium of communication as large number of SSIs owners came to know about demonetization through television.

SSIs faced problems in carrying out their day to day transactions due to reduction in cash availability. It affected salary payment (26 per cent of SSIs) to employees, purchasing of raw materials (6 per cent), etc. The impact was more in rural areas as observed in Kalaburgi district.

The study found that entrepreneurs adopted different measures like using cash in hand (14 per cent) to borrow loan to meet the requirements. It was observed that cash usage is more in Bangalore than Kalaburgi as more per cent of SSI owners used cash with them during demonetization as compared to Kalaburgi district, where 65 per cent of entrepreneurs resorted to borrowing to manage cash inadequacy. This shows that urban entrepreneurs hold more cash than rural entrepreneurs, which might be the reason for borrowing by large number of SSIs in Kalaburgi.

The study revealed relatively large proportion of entrepreneurs (22 per cent) faced problems while transacting with banks. It is to be noted that even 22 per cent of respondents is not a small proportion as the point is that they have faced problems with banks either for exchanging old notes or getting new currencies. These types of problems need to be addressed by financial organizations in order to accommodate new changes and to make institutions customer friendly.

5.4. Findings of the Study

Findings of impact of demonetization on production, sales, revenue and employment are summarized below:

Demonetization process adversely affected production of SSIs in the study region as reported by 25 per cent of respondents. More number of entrepreneurs (70 per cent) in Kalaburgi district experienced decline in production. This needs to be examined in detail with a larger study covering

long term impacts of demonetization on production of SSIs, in both rural and urban areas.

SSIs reported reduction in sales (25 per cent of SSIs) during demonetization due to reduced production and also non-availability of cash. The reduction was more in rural areas (Kalaburgi – 70 per cent of SSIs) as observed in the study.

Reduction in production and sales of SSIs resulted decline in average revenue of these units as evidenced in the study. The average revenue which had declining trend before demonetization fell sharply during demonetization. It was Rs 484.6 lakh in October 2016 and declined to Rs. 379.67 lakh in November showing significant fall in few month period. However, average revenue of SSIs to some extent recovered after demonetization period. This reveals that during its process demonetization created negative impacts on production, sales and revenue of SSIs.

On employment side demonetization impacted adversely on temporary job workers (14 per cent of SSIs) as in the study area entrepreneurs had to stop engaging temporary workers due to non-availability of cash. Loss of temporary employment is high in Kalaburgi district (40 per cent), which shows vulnerability of rural less skilled labourers during sudden shocks. The study indicated that casual and less skilled workers suffered most during demonetization.

The study observed that relatively large number of entrepreneurs opining that demonetization was not a good move as it adversely affected production and revenue of SSIs.

Focus group discussion with entrepreneurs revealed that demonetization affected private money lenders and this in turn affected SSI owners also,

explaining the need to strengthen financial system to meet needs of SSIs. Further, it was opined that SSIs which function on job work basis suffered more due to demonetization, as most of them deal in cash. All members said delay payments. The discussion revealed that impact of demonetization was more on recently started firms due to non-availability of money. Entrepreneurs faced problem to pay for their staff and hence some of them relieved their daily wage labourers.

Overall, entrepreneurs felt that sudden implementation of demonetization created confusion and problems while severely affecting their business.

5.5. Policy suggestions

Findings of this short term study on impacts of demonetization on SSIs leads to the following policy suggestions.

5.5.1. Urban area

Demonetization has promoted use of electronic payment system and after demonetization use of various electronic instruments has considerably increased. Hence, the practice of using electronic payment system may be promoted further, particularly in urban areas as provision of these facilities are available in large number compared to rural areas.

Monetary literacy, in terms of reducing cash usage in transactions and adopting electronic methods of payments, among people has to be increased by creating awareness on advantages.

Use of electronic methods of payments has increased finance related cyber-crime, as evidenced in review of literature. Hence, adequate security measures need to be implemented to control finance related cyber-crimes and protect customers from losing their money. Otherwise, trust of people on new methods of payment might be reduced.

Any policy change will immediately impact on vulnerable groups like casual and less skilled labourers. Hence, efforts need to be taken to protect these groups from adverse impacts of policy changes.

5.5.2. Rural areas

Monetary literacy, in terms of reducing cash usage in transactions and adopting electronic methods of payments, among people has to be increased by creating awareness on advantages.

SSI units create significant number of job opportunities, but there is variation across urban and rural areas in establishment of SSIs. Hence, growth of industries may be promoted in other districts also to create employment opportunities, particularly in rural areas.

SSIs are supplying goods and services to local markets, which shows that SSIs should be encouraged in all districts to meet demands of these regions.

Inadequate financial support system was a major reason for the difficulties of entrepreneurs and hence this problem need to be addressed by creating financial institutions that help SSIs to meet their immediate monetary needs.

Any policy change will immediately impact on vulnerable groups like casual and less skilled labourers. Hence, efforts need to be taken to protect these groups from adverse impacts of policy changes, with adequate safety measures.

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Annexure 2



RBI/2016-17/112 DCM (Plg) No.1226/10.27.00/2016-17 2016

November 08,

The Chairman / Managing Director/ Chief Executive Officer, Public Sector Banks/ Private Sector Banks / Foreign Banks/ Regional Rural Banks / Urban Cooperative Banks / State Cooperative Banks

Dear Sir

Withdrawal of Legal Tender Character of existing ₹500/- and ₹1000/-**Bank Notes**

In terms of Gazette Notification No 2652 dated November 08, 2016 issued by Government of India, ₹500 and ₹1000 denominations of Bank Notes of the existing series issued by Reserve Bank of India (hereinafter referred to as Specified Bank Notes) shall cease to be legal tender with effect from November 09, 2016, to the extent specified in the Notification. A new series of Bank Notes called Mahatma Gandhi (New) Series having different size and design, highlighting the cultural heritage and scientific achievements of the country, will be issued. Bank branches will be the primary agencies through which the members of public and other entities will be exchanging the Specified Bank Notes for Bank Notes in other valid denominations or depositing the Specified Bank Notes for crediting to their accounts, upto and including the December 30, 2016. Therefore, banks have to accord highest priority to this work.

In order to enable the members of public and other entities to exchange their existing $\stackrel{?}{\stackrel{?}{?}}$ 500/- and $\stackrel{?}{\stackrel{?}{?}}$ 1000/- notes, the following arrangements have to be made by the banks.

2. Action to be taken on November 09, 2016

- i) November 09, 2016 (Wednesday) shall be a non-business working day for all banks. However, branches will function on that day to carry out preparations for implementing the scheme as per this circular.
- ii) The Specified Bank Notes stocked in ATMs, Cash Deposit Machines, Cash Recyclers, Coin Vending Machines, any other cash dispensing/receiving machine, CIT Companies and Business Correspondents attached to the branch will have to be called back forthwith. The sponsor banks of White Label ATMs will be responsible for recalling the Specified Bank Notes from the White Label ATMs sponsored by them.
- iii) Banks should take steps to stop issuing Specified Bank Notes through their branches, business correspondents from November 09, 2016.
- iv) All ATMs, Cash Deposit Machines, Cash Recyclers and any other machine used for receipt and payment of cash shall be shut on November 09 and 10, 2016.
- v) All ATMs and cash dispensing machines will have to be re-configured to disburse bank notes of ₹100/- and ₹50/- denominations prior to reactivation of the machines on November 11, 2016; however banks should await separate instructions from Reserve Bank of India on issuing Mahatma Gandhi (New) series Notes through ATMs and cash dispensing machines though they can be issued over the counters from November 09, 2016.
- vi) Every banking company defined under the Banking Regulation Act, 1949 and every Treasury shall complete and forward a return in the format specified **in Annex-1** showing the details of the Specified Bank Notes held by it at the close of business as on November 08, 2016, not later than 13:00

hrs on November 10, 2016 to the concerned Regional Office of Reserve Bank of India under whose jurisdiction the Head office of the bank is located. The return should also include details of Specified Bank Notes recalled from ATMs, Cash Deposit Machines, Cash Recyclers, Coin Vending Machines, CIT Companies, Business Correspondents, etc.

- Arrangement should be made by the branches to promptly deposit these vii) Specified Bank Notes with the linked currency chest / RBI and get the amount credited to their account.
- Branches should estimate their cash requirement and obtain from the linked / viii) nearby currency chest /RBI Bank Notes of other valid denominations.
- Cash Deposits machines / Cash Recyclers should continue to accept ix) Specified Bank Notes upto December 30, 2016.
- Information Material for educating the public regarding withdrawal of Legal x) Tender character of the Specified Bank Notes (as per Annex-2(a)) and salient features of the Mahatma Gandhi (New) Series Bank Notes (Annex-2(b)) are required to be printed/copied in adequate quantity and distributed to the public / displayed in the banking hall / ATM kiosks.
- Banks should identify the staff for managing the exchange counters and brief xi) them properly about the scheme and the procedure to be followed. A copy of the FAQs provided in Annex-2(c) may be supplied to the staff manning the exchange counters.
- Banks should provide adequate number of note counting machines, UV xii) Lamps, note sorting machines etc. at their counters to take care of the work load and timely detection of counterfeit notes. As already advised vide our circular No DCM (FNVD) No.1134/16.01.05/2016-17 dated October 27, 2016, the banking hall, public areas and counters should be under CCTV surveillance and recording should be preserved.

3. Action to be taken on November 10, 2016

- a. Bank branches will commence normal operations on November 10, 2016.
- b. Banks have to accord top priority to provide facility for exchanging / accepting deposits of Specified Bank Notes and open additional counters to meet the public demand and keep the counters open for extended hours, if necessary. Maximum staff should be deployed for this purpose. If necessary banks may consider hiring retired employees for a temporary period to take care of additional work load.

c. Provision of Exchange Facility:

- I. The specified bank notes held by a person other than a banking company referred to in sub-paragraph (1) of paragraph 1 or Government Treasury may be exchanged at any Issue Office of the Reserve Bank or any branch of public sector banks, private sector banks, foreign banks, Regional Rural Banks, Urban Cooperative Banks and State Cooperative Banks for a period up to and including the December 30, 2016, subject to the following conditions, namely:
- II. the specified bank notes of aggregate value of ₹4,000/- or below may be exchanged for any denomination of bank notes having legal tender character, with a requisition slip in the format specified by the Reserve Bank and proof of identity; the limit of ₹4,000/- for exchanging specified bank notes shall be reviewed after fifteen days from the date of commencement of this notification and appropriate orders may be issued, where necessary;
- III. there shall not be any limit on the quantity or value of the specified bank notes to be credited to the account maintained with the bank by a person, where the specified bank notes are tendered; however, where compliance with extant Know Your Customer (KYC) norms is not complete in an account, the maximum value of specified bank notes as may be deposited shall be 50,000/-
- IV. The equivalent value of specified bank notes tendered may be credited to an account maintained by the tenderer at any bank in accordance with standard

- banking procedure and on production of valid proof of Identity;
- the equivalent value of specified bank notes tendered may be credited to a V. third party account, provided specific authorisation therefor accorded by the third party is presented to the bank, following standard banking procedure and on production of valid proof of identity of the person actually tendering, as indicated in Annex-2(d);
- VI. cash withdrawal from a bank account over the counter shall be restricted to ₹10,000/- per day subject to an overall limit of ₹20,000/- a week from the date of the notification until the end of business hours on November 24, 2016, after which these limits shall be reviewed;
- VII. there shall be no restriction on the use of any non-cash method of operating the account of a person including cheques, demand drafts, credit or debit cards, mobile wallets and electronic fund transfer mechanisms or the like;
- VIII. withdrawal from Automatic Teller Machines (hereinafter referred to as ATMs) shall be restricted to ₹2,000 per day per card up to November 18, 2016 and the limit shall be raised to ₹ 4,000 per day per card from November 19, 2016;
 - any person who is unable to exchange or deposit the specified bank notes in IX. their bank accounts on or before the December 30, 2016, shall be given an opportunity to do so at specified offices of the Reserve Bank or such other facility until a later date as may be specified by it.
 - X. Business Correspondents (BCs) may also be allowed to exchange Specified Bank Notes upto ₹4000/- per person as in the case of bank branches, against valid identity proof and requisition slip. For this purpose banks may, at their discretion, enhance the cash holding limits of BCs at least till December 30, 2016.
- XI. While crediting the value of Specified Bank Notes to Jan Dhan Yojna Accounts, the usual limits will apply mutatis mutandis.

4. Reporting Mechanism

Each bank branch exchanging Bank Notes in the denominations of Rs.500/-and Rs.1,000/- shall report at the close of business on each day starting from November 10, 2016 till the closure of the scheme on December 30, 2016 (or till any other date thereafter as may be advised by RBI) by email or Fax to their Controlling Office a statement as per Annex-2(e) showing the details of Specified Bank Notes exchanged by it and the respective Controlling Offices will aggregate these as per Annex-2(f) and report to the Department of Currency Management, RBI, Central Office by email on a daily basis.

- **5.** Banks may issue detailed instructions to their branches advising them to strictly adhere to the norms of the scheme and procedures laid down above. The staff at the branch level, particularly the tellers, should be adequately sensitized. For this purpose, information as available at our website (www.rbi.org.in) and Government of India website may be used. Staff should familiarise themselves with the FAQs (as per Annex-2(c)).
- **6.** Banks should make copies of information material (As available at Annex-2(a), Annex-2(b) and Annex-2(c)) and distribute these to the public.
- **7.** Bank should issue instructions to BCs, ATM Switch Operators and CIT Companies on various aspects of the above scheme relevant to them.
- **8.** Banks should monitor the implementation of the scheme on a day to day basis through a monitoring cell headed by an Officer not below the rank of a General Manager, who will act as a Nodal Officer. The Contact details of the Nodal officer will be reported to the concerned Regional Office of RBI, with a copy to RBI Central Office, Mumbai through email as indicated below.
- **9.** RBI has opened a Control Room at its Central Office for monitoring the progress and providing guidance to banks and members of public. The email id and telephone numbers of the Control room are as under:

 Email. Telephone No: 022 22602804 / 022 22602944

Statement to be submitted by bank branches to their Controlling Office by 13:00 hrs on November 09, 2016

Details of withdrawn banknotes in the denominations of ₹500/- and ₹1000/- held in the custody of the branch including those in ATMs, cash recyclers, Cash dispensing machines, Coin Vending Machines and any other machine accepting or disbursing cash, attached to it, as at the midnight of November 08, 2016

Name of the Bank:			
Name of the Branch:		IFSC Code:	
Denomination	Number of Pieces	Total value	
` 500			
` 1000			
TOTAL			
Name ad Designation of th	Ç		
Signature of the Branch In-	-charge		
Date:			
Place:			

Annex-2(a)

Withdrawal of Legal Tender Character from existing series of Bank Notes in the denominations of ₹ 500 and ₹ 1000_- Salient features of the scheme

- 1. In terms of Gazette Notification No 2652 dated November 08, 2016 issued by Government of India, existing series of banknotes in the denominations of ₹500/- and ₹1000/- issued by the Reserve Bank of India upto November 08, 2016, hereinafter referred to as Specified Bank Notes (SBN), shall cease to be legal tender in payment or on account at any place with effect from the November 09, 2016.
- 2. SBN held by a person other than a bank or Government Treasury may be exchanged at the 19 Issue Offices of the Reserve Bank of India and all branches of public sector banks, private sector banks, foreign banks, Regional Rural Banks, Urban Cooperative Banks and State Cooperative banks only upto and including December 30, 2016, on tender of the SBN subject to the following conditions:
- (a) SBN of aggregate value upto ₹4000 only held by a person can be exchanged by him/her at any bank branch or Issue Office of Reserve Bank of India for any other denomination of Banknotes, provided a Requisition Slip as per format prescribed in **Annex-2(d)** is presented with proof of identity (as indicated in Annex-2(d)), along with the High Denomination Banknotes.
- (b) Where the aggregate value of the SBN tendered exceeds ₹ 4000, the equivalent value will be credited to the account of the tenderer maintained with the bank where the High Denomination Banknotes are tendered. The limit of ₹ 4000/- for exchanging SBN at bank branches or at Issue Offices of Reserve Bank of India will be reviewed after 15 days.
- (c) There will be not be any limit on the quantity or value of SBN to be credited to the account of the tenderer, maintained with the bank where the SBN are tendered.

- (d) The equivalent value of the SBN tendered can be credited to an account maintained by the tenderer at any bank in accordance with standard banking procedure and on production of valid proof of Identity.
- (e) The equivalent value of the SBN tendered can be credited to a third party account provided specific authorization therefor accorded by the said account holder is presented to the bank, following standard banking procedure and on production of valid proof of Identity of the person actually tendering.
- (f) In accounts where compliance with extant Know Your Customer (KYC) norms is not complete, a maximum value of ₹ 50,000/- of SBN can be deposited.
- (g) Cash Withdrawal from a bank account over the counter will be restricted to ` 10,000/- subject to an overall limit of ₹ 20,000/- in a week for the first fortnight.
- (h) There will be no restriction on the use of any non-cash method of operating the account which will include cheques, demand drafts, credit/debit cards, mobile wallets and electronic fund transfer mechanisms.
- (i) Withdrawal from ATMs would be restricted to ₹ 2,000/- per day per card up to November 18, 2016. The limit will be raised to ₹ 4,000/- per day per card from November 19, 2016 onwards. All ATMs will dispense ₹100 and/or ₹50 denomination Banknotes only until further instructions from RBI.
- (j) For those who are unable to exchange their SBN on or before December 30, 2016, an opportunity will be given to them to do so at specified offices of the RBI until a later date, along with necessary documentation as may be specified by the Reserve Bank of India.

Annex-2(b)

Features of Mahatma Gandhi (New) Series Bank Notes - Salient features of ₹2000/- Bank Note



Salient Features of New ₹500 notes



Annex-2(c):

For Updated FAQs please refer to FAQ section on Banks website

(https://www.rbi.org.in/Scripts/FAQView.aspx?Id=119)

FAQs on Withdrawal of Legal Tender Character of the existing Bank Notes in the denominations of `500/- and `1000/- (Issued on November 08, 2016)

1. Why is this scheme introduced?

The incidence of fake Indian currency notes in higher denomination has increased. For ordinary persons, the fake notes look similar to genuine notes, even though no security feature has been copied. The fake notes are used for antinational and illegal activities. High denomination notes have been misused by terrorists and for hoarding black money. India remains a cash based economy hence the circulation of Fake Indian Currency Notes continues to be a menace. In order to contain the rising incidence of fake notes and black money, the scheme to withdraw has been introduced.

2. What is this scheme?

The legal tender character of the existing bank notes in denominations of ₹ 500 and ₹ 1000 issued by the Reserve bank of India till November 08, 2016 (hereinafter referred to as Specified Bank Notes) stands withdrawn. In consequence thereof these Bank Notes cannot be used for transacting business and/or store of value for future usage. These Bank Notes can be exchanged for value at any of the 19 offices of the Reserve Bank of India or at any of the bank branches or at any Head Post Office or Sub-Post Office.

3. How much value will I get?

You will get value for the entire volume of notes tendered at the bank branches / RBI offices.

4. Can I get all in cash?

No. You will get upto ₹ 4000 per person in cash irrespective of the size of tender and anything over and above that will be receivable by way of credit to bank account.

5. Why I cannot get the entire amount in cash when I have surrendered everything in cash?

The Scheme does not provide for it, given its objectives.

6. ₹ 4000 cash is insufficient for my need. What to do?

You can use balances in bank accounts to pay for other requirements by cheque or through electronic means of payments such as Internet banking, mobile wallets, IMPS, credit/debit cards etc.

7. What if I don't have any bank account?

You can always open a bank account by approaching a bank branch with necessary documents required for fulfilling the KYC requirements.

8. What if, if I have only JDY account?

A JDY account holder can avail the exchange facility subject to the caps and other laid down limits in accord with norms and procedures.

9. Where can I go to exchange the notes?

The exchange facility is available at all Issue Offices of RBI and branches of commercial banks/RRBS/UCBs/State Co-op banks or at any Head Post Office or Sub-Post Office.

10. Need I go to my bank branch only?

For exchange upto ₹4000 in cash you may go to any bank branch with valid identity proof.

For exchange over ₹4000, which will be accorded through credit to Bank account only, you may go to the branch where you have an account or to any other branch of the same bank.

In case you want to go to a branch of any other bank where you are not maintaining an account, you will have to furnish valid identity proof and bank account details required for electronic fund transfer to your account.

11. Can I go to any branch of my bank?

Yes you can go to any branch of your bank.

12. Can I go to any branch of any other bank?

Yes, you can go to any branch of any other bank. In that case you have to furnish valid identity proof for exchange in cash; both valid identity proof and bank account details will be required for electronic fund transfer in case the amount to be exchanged exceeds ₹ 4000.

13. I have no account but my relative / friend has an account, can I get my notes exchanged into that account?

Yes, you can do that if the account holder relative/friend etc. gives you permission in writing. While exchanging, you should provide to the bank, evidence of permission given by the account holder and your valid identity proof.

14. Should I go to bank personally or can I send the notes through my representative?

Personal visit to the branch is preferable. In case it is not possible for you to visit the branch you may send your representative with an express mandate i.e. a written authorisation. The representative should produce authority letter and his/her valid identity proof while tendering the notes.

15. Can I withdraw from ATM?

It may take a while for the banks to recalibrate their ATMs. Once the ATMs are functional, you can withdraw from ATMs upto a maximum of ₹ 2,000/-per card per day upto November 18, 2016. The limit will be raised to ₹ 4000/-per day per card from November 19, 2016 onwards.

16. Can I withdraw cash against cheque?

Yes, you can withdraw cash against withdrawal slip or cheque subject to ceiling of ₹ 10,000/- in a day within an overall limit of ₹ 20,000/- in a week (including withdrawals from ATMs) upto November 24, 2016, after which these limits shall be reviewed.

17. Can I deposit Specified Bank Notes through ATMs, Cash Deposit Machine or cash Recycler?

Yes, Specified Bank Notes can be deposited in Cash Deposits machines / Cash Recyclers.

18. Can I make use of electronic (NEFT/RTGS /IMPS/ Internet Banking / Mobile banking etc.) mode?

You can use NEFT/RTGS/IMPS/Internet Banking/Mobile Banking or any other electronic/ non-cash mode of payment

19. How much time do I have to exchange the notes?

The scheme closes on December 30, 2016. The Specified banknotes can be exchanged at branches of commercial banks, Regional Rural Banks, Urban Cooperative banks, State Cooperative Banks and RBI till December 30, 2016.

For those who are unable to exchange their Specified Bank Notes on or before December 30, 2016, an opportunity will be given to them to do so at specified offices of the RBI, along with necessary documentation as may be specified by the Reserve Bank of India.

20. I am right now not in India, what should I do?

If you have Specified banknotes in India, you may authorise in writing enabling another person in India to deposit the notes into your bank account. The person so authorised has to come to the bank branch with the Specified banknotes, the authority letter given by you and a valid identity proof (Valid Identity proof is any of the following: Aadhaar Card, Driving License, Voter ID Card, Pass Port, NREGA Card, PAN Card, Identity Card Issued by Government Department, Public Sector Unit to its Staff)

21. I am an NRI and hold NRO account, can the exchange value be deposited in my account?

Yes, you can deposit the Specified banknotes to your NRO account.

22. I am a foreign tourist, I have these notes. What should I do?

You can purchase foreign exchange equivalent to ₹ 5000 using these Specified Bank Notes at airport exchange counters within 72 hours after the notification, provided you present proof of purchasing the Specified Bank Notes.

23. I have emergency needs of cash (hospitalisation, travel, lifesaving medicines) then what I should do?

You can use the Specified Bank Notes for paying for your hospitalisation

charges at government hospitals, for purchasing bus tickets at government bus stands for travel by state government or state PSU buses, train tickets at railway stations, and air tickets at airports, within 72 hours after the notification.

24. What is proof of identity?

Valid Identity proof is any of the following: Aadhaar Card, Driving License, Voter ID Card, Pass Port, NREGA Card, PAN Card, Identity Card Issued by Government Department, Public Sector Unit to its Staff.

25. Where can I get more information on this scheme?

Further information is available at our website (www.rbi.org.in) and GoI website

26. If I have a problem, whom should I approach?

You may approach the control room of RBI by email or on Telephone Nos 022 22602201/022 22602944

Annex-2(d)

Request Slip for exchange of Old High Denomination Bank Notes in denominations of $\stackrel{?}{=}$ 500/- and $\stackrel{?}{=}$ 1000/-

Name of the Bank				
Branch:				
Name of the Tenderer			_	
(In capital Letters)				
Identity Proof Original to be shown at the counter	Aadhaar Card, Pass Port, NREC	_		rd,
(Tick the one applicable)	Identity Card Is Departr	ssued by Gov nent, Public Sec		Staff,
Identification Number				
(Number mentioned in the Identity Proof submitted)				
Details of Old High	Denomination	No of Pieces	Value	
Denomination Bank Notes submitted for	₹ 500			-
exchange	₹ 1000			-
	TOTAL			-
	Total value in w	ords:		
Signature of Tenderer				
Place:				
Date:				

Annex-2(e)

Format for reporting daily exchange of withdrawn bank notes in the denominations of ₹500/- and ₹ 1000/- to the Controlling Office

Name of the Bank:		
Name of the Branch:		
IFSC Code:		
The Bank Notes exchanged	at the branch on	are as
under:		
Denomination	Number of Pieces	Total value
₹ 500		
₹ 1000		
TOTAL		
Name and Designation of the	Ç	
Signature of the Branch In-	charge	
Date:		
Place:		

Format for reporting to RBI Central Office (Email) on a daily basis

Annex-2(f)

Place:_____

Nam	e of the Bank:		
The	withdrawn banknotes excl	nanged on (Date)	are as unde
	Denomination	Number of Pieces	Total value
	₹ 500		
	₹ 1000		
	TOTAL		
	Name and Designation of	of the Reporting Officer mg Officer	

Annexure 3: Banknotes in Circulation

Banknotes in Circu	ılation			
Denomination	Value			
(₹)	(₹ billion)			
	Mar-15	Mar-16	Mar-17	Mar-18
1	5	6	7	7
2 and 5	46	45	45	44
	(0.3)	(0.3)	(0.3)	(0.2)
10	303	320	369	307
	(2.1)	(1.9)	(2.8)	(1.7)
20	87	98	203	200
	(0.6)	(0.6)	(1.5)	(1.1)
50	174	194	356	367
	(1.2)	(1.2)	(2.7)	(2)
100	1,503	1,578	2,528	2,222
	(10.5)	(9.6)	(19.3)	(12.3)
200				371
				(2.1)
500	6,564	7,854	2,941	7,734
	(46)	(47.8)	(22.5)	(42.9)
1,000	5,612	6,326	89	66
	(39.3)	(38.6)	(0.7)	(0.4)
2,000	-	-	6,571	6726
	-	-	(50.2)	(37.3)
Total	14,289	16,415	13,102	18,037

Note: Figures in parentheses represent the percentage share in total volume/value.

Source: Reserve Bank of India website

Annex 4: Questionnaires

EVALUATON OF EFFECTS OF DEMONETIZATION ON SMALL SCALE INDUSTRIES IN KARNATAKA

Schedule

1. Location of SSI un	it:	1.1. District	
		1.2. Taluk	
		1.3. City/Town	
2. Name of SSI unit:			
3. Year of Establishm	nent:		
4. Name of owner/ow	ners:		
5. Types of product:	5.1: Ma	in Product	
	5.2: By	e product	
6. Marketing Area:	6.1: Ent	ire Karnataka	
Ç	6.2: Fev	w Districts (mention districts)	
		tside Karnataka (mention states)
7. Quantity of produc	tion in la	st few years:	
<u>_</u>		Name of product	
Year		Main product	Bye product
2010 -11		1	
2011 -12			
2012 -13			
2013 -14			
2014 -15			
2015 – 16			
<u>-010</u> 10			

8. Quantity sold in last few years:

Evaluation of Effects of Demonetization on Small Scale Industries in Karnataka

	Main product		Bye product	
Year	Quantity	Price	Quantity	Price
2010 -11				
2011 -12				
2012 -13				
2013 -14				
2014 -15				
2015 – 16				

9. Number of workers in last few years:

	Permanent	Total salary	Temporary	Total salary	Daily wage	Total salary paid
		paid		paid		
Year						
2010 -11						
2011 -12						
2012 -13						
2013 -14						
2014 -15						
2015 – 16						

10. Cost of production:

Details		
Materials cost		
Labour cost		
Advertisement cost		
Others		
1		
2		
3		

11. Investment on SSI unit

Expenditure on buildings

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Expenditure on technology
Expenditure on obtaining facilities like electricity, water supply, waste disposal etc.
Effects of Demonetization on SSIs
12. How did you come to know about demonetization?
13. What type of difficulties you faced during the initial days of demonetization?
14. How did you manage cash inadequacy during the initial days of demonetization?
15. How was your interaction with banks during initial days of demonetization?
16. What is the impact of demonetization on production? Decreased/ Increased/ No change

Expenditure on machinery

Evaluation of Effects of Demonetization on Small Scale Industries in Karnataka

17. Give details of production for the following months:

18. What is the impact of demonetization on sales of your product?

Decreased/Increased/No change

19. Give details of sales for the following months:

Month	Main product	Price	Bye product	Price
April 2016				
May				
June				
July				
August				
September				
October				

November (till 8 th)		
November (8 th onwards)		
December		
January 2017		
February		
March		
April		
May		

20. Give details of returns / receipts for the following months:

Month	Returns
Wionin	Returns
April 2016	
May	
June	
July	
August	
September	
October	
November (till 8 th)	
November (8 th	
onwards)	
December	
January 2017	
February	
March	
April	
May	

21. What is the impact of demonetization on employment in your unit?

Decreased/ Increased/ No change

Evaluation of Effects of Demonetization on Small Scale Industries in Karnataka

22. How did you manage the difficulties	s of demonetization on production?
Type of difficulty	resolved by
1.	
2.	
3.	
23. How did you manage the impacts or	n sales?
Type of impact	resolved by
1.	
2.	
3.	
24. How did you manage the impacts or	n workers?
Type of impact	resolved by
1.	
2.	
3.	
25. What is your opinion on demonetize	ation and its effects on SSIs?

EVALUATION OF EFFECTS OF DEMONETIZATION ON SMALL SCALE INDUSTRIES IN KARNATAKA

Karnataka Evaluation Authority #542, 5th Floor, 2nd Gate Dr. B.R Ambedkar Veedhi M.S. Building Bengaluru – 560 001

Website: kea.karnataka.gov.in Contact No: 080 2203 2561

Email Id: keagok@karnataka.gov.in