



ECONOMICS EXTENDED ESSAY

Impact of India's Demonetisation

Research Question

*How did demonetisation in India in 2016 affect the agricultural sector
of the Godavari Districts?*



EXAMINATION SESSION – May 2021

WORD COUNT: 3990

Excluding Graphs, Figures, Headings, Bibliography and Appendices

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1. INTRODUCTION

On 8 November, 2016, the Government of India announced the demonetisation of 500 and 1000 rupee notes in the country. This amounted to the withdrawal of 86% of India's currency in circulation. It was to be replaced by new 500 and 2000 rupee notes.¹ But there was considerable time lag involved because there was not enough new currency printed. Moreover, the new currency had different specifications like thickness and size which were not compatible with the existing ATMs for the disbursement of cash because of which the ATMs had to be recalibrated.² Only 60% of the ATMs were operational. All these issues show that there was lack of planning in the government intervention. Demonetisation is the act of withdrawal of currency units from circulation as legal tender. The main motive of demonetisation in India, as stated by the Government was to

- Tackle black money and counterfeit notes in the economy.
- Make India a cashless economy
- Curb terrorism

Although demonetisation aimed at a better economy in the long- term, it affected the supply of money in the short-term. The fall in liquidity and the prolonged cash shortage adversely affected the economic activity and conditions in the country. Demonetisation is one of the major economic reforms in India and affected almost all sectors of the country. The agricultural sector being the backbone of the Indian economy, and the largest livelihood provider contributing a significant

¹ Rowlatt, Justin. "Why India wiped out 86% of its cash overnight." *BBC*, 14 Nov. 2016.
www.bbc.com/news/world-asia-india-37974423 Accessed 12 Sept. 2020.

² "Demonetisation: All you need to know about ATM recalibration." *Business Standard*, 17 Nov. 2016.
www.business-standard.com/article/economy-policy/demonetisation-all-you-need-to-know-about-atm-recalibration-116111701429_1.html Accessed 10 Nov. 2020.

share of 15% to the total output of the country, was largely affected by demonetisation.³ Cash is the primary mode of transaction in the agricultural sector in India. Small farmers need cash to purchase seeds and fertilizers, while the bigger ones have to pay wages to the agricultural workers tilling their fields. As mentioned by Rao, in the Godavari districts of the south Indian state of Andhra Pradesh (AP), rabi crops like maize, pulses and chick-pea are grown in November. With demonetisation being announced in November, the farmers of AP faced a crisis due to lack of cash. It is in November that the kharif crop harvest picks up pace, coinciding with the sowing of rabi crops. Farmers who had to sow seeds did not have the money to buy them, while farmers who had to sell their harvest could not make enough sales due to lack of demand from consumers facing a liquidity crunch.

Considering the huge impact of demonetisation on the sector offering the largest employment in India, this essay will deal with the economic impact of demonetisation on the agricultural sector of the Godavari districts of AP, India. From this arises my research question,

“How did demonetisation in India in 2016 affect the agricultural sector of the Godavari Districts?”

³ Kohli, Renu. “Demonetization: The impact on agriculture.” *Live Mint*, 22 Nov. 2016, www.livemint.com/Opinion/B1vFTOGwqHjdM5nkmg2CxJ/Demonetization-The-impact-on-agriculture.html Accessed 23 Sept. 2020.

Fig. 1 Farmers in Konaseema, East Godavari District



Source: Deccan Chronicle. 23 Aug. 2016 ⁴

2. BACKGROUND

The Godavari Districts (East and West) have a vast area of cultivated land in AP, a state in the southern part of India (Rao). This research is based on the impact of demonetisation on the farmers of this area. Although a lot has been said about the many disadvantages of demonetisation and how farmers suffered, it must not be forgotten that demonetisation was a measure taken to improve the economy of the country in the long- term. Although farmers had to face difficulties in the short- term, it also brought them into the formal money market.

To answer the research question, this essay will analyse how demonetisation, as a form of *Government policy intervention* affected the sale of kharif crops, rabi sowing in the year 2016-17, and the benefits and costs to the farmers of the Godavari Districts. This will be done by connecting it with *Government failure (policy failure)* and arrive at an appropriate conclusion.

⁴ Samaritin, Sampat G. “Paddy farmers look to aquaculture for profits in West Godavari” *Deccan Chronicle*, 23 Aug. 2016, www.deccanchronicle.com/nation/current-affairs/230816/paddy-farmers-look-to-aquaculture-for-profits-in-west-godavari.html. Accessed 25 Sept. 2020.

3. METHODOLOGY

Most of the essay is based on quantitative statistical records and qualitative data collected from secondary sources. One primary source is a telephonic interview with an agricultural economist at the university here.

3.1 Primary Data

- A *telephonic interview* with Mr. Jalapathi Rao, Agricultural Economist, Department of Agriculture, Osmania University.

3.2 Secondary Data

- *Annual publication of the Season and Crop Report* by The Directorate of Economics and Statistics, AP.
- Official website of *Agricultural Department, West Godavari District*, Government of AP - westgodavari.ap.gov.in/departments/agriculture/
- Data on Money Supply released by India's central bank, *Reserve Bank of India*
- Records released by *Food Corporation of India* (FCI)
- Centre for Monitoring Indian Economy
- Journal of the International Organization of Scientific Research
- Research Paper by National Institution for Transforming India

3.3 Research Methodology

- To choose a topic, initial research was conducted by going through various newspaper articles.
- After the topic was selected, secondary research was conducted using sources like Livemint, Times of India, Economic Times and journals like the International Organization

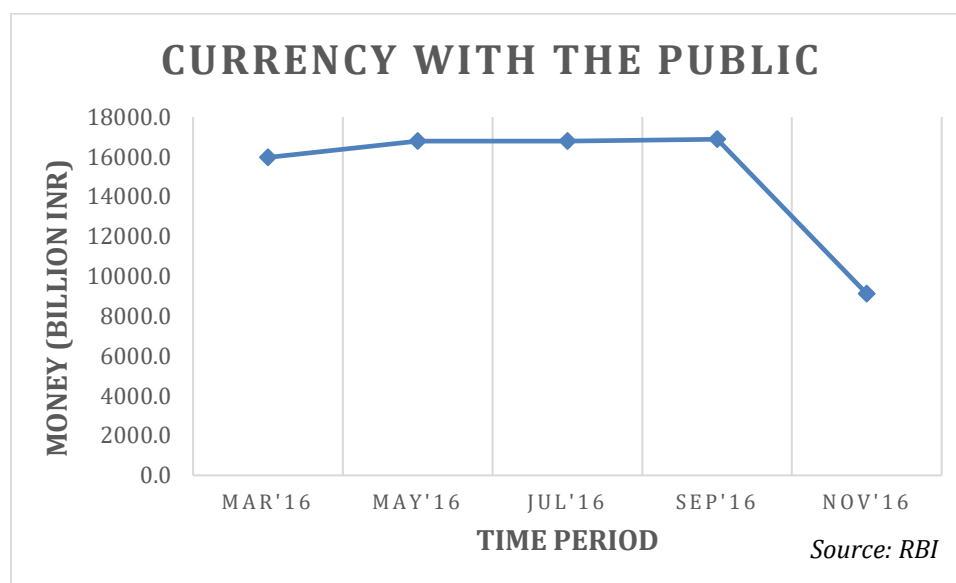
of Scientific Research for qualitative understanding of the effect of demonetisation on various stakeholders of the agricultural sector in AP. Quantitative data like currency in circulation, statistical records of production of crops in AP was collected from the official government websites of the Reserve Bank of India (RBI), Season and Crop Report by the Government of AP, Food Corporation of India (FCI) all of which provide factual and objective data.

- For my primary research, I interviewed an Agricultural Economist, Mr. Jalapathi Rao, a Lecturer at an Agricultural University to gain a deeper insight into the effect of demonetisation on the agricultural sector. This interview helped me comprehend the collected secondary data.
- For economic understanding, research papers from relevant sources were used. These include *The National Institution for transforming India* (NITI Aayog), Scholars at Harvard etc.

4. ECONOMIC CONCEPTS AND DISCUSSION

4.1 CASH CRUNCH IN THE AGRICULTURAL MARKET

Supply of money is the amount of money in circulation determined by the central bank of the country. The withdrawal of this money by demonetisation, reduced the money, causing a liquidity crisis in the economy.



Self, Self using MS Excel

Fig.1 shows a steep fall in the currency with the public in November, reflecting the immediate effect of demonetisation on the country's liquidity. The money⁵ in circulation fell by 46% from 16,880 billion INR to 9,119 billion INR. This shortage of cash had a two-fold impact on the economy – an AD shock and an AS shock.

As stated by Prof. Jalapathi Rao, the agricultural sector was one of the most affected sectors by the nationwide cash crunch, post-demonetisation. This sudden decision of demonetisation had a large impact on the purchase of inputs, supply of crops and farmer income. With 86% of the

⁵ "Data On Money Supply." Reserve Bank of India, www.rbi.org.in/Scripts/Data_MSupply.aspx. Accessed 31 Oct. 2020.

currency being withdrawn, there was a huge, unexpected shortage in the supply of money. It took almost eight months for the government to print enough new notes to replace that currency. The agricultural retail sector being unorganized, relies on high-volume cash transactions impacting the sector both at the consumer level and the firm level.

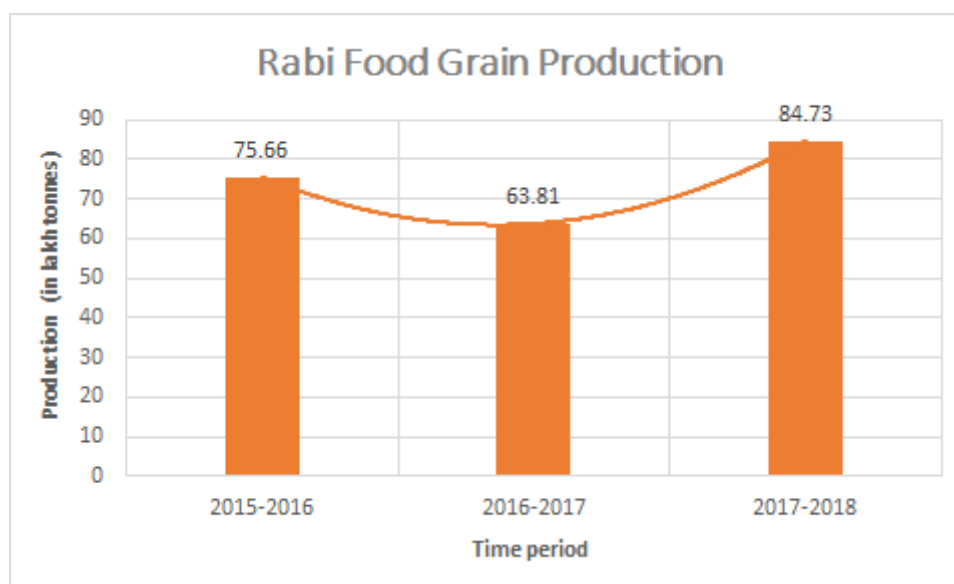
4.2 IMPACT ON THE SOWING OF RABI CROPS

When demonetisation was announced, the farmers of the Godavari Districts were in immediate need of money because November is the time when farmers sow rabi crops. In India, Rabi crops, also known as winter crops are the crops that are sown at the beginning of the winter season (November) and harvested in spring (April). These farmers needed cash to purchase inputs like seeds, fertilizers, pesticides etc. They had to suffer considerably due to the shortage of cash because they were not yet in the formal banking system of the country. They had to stand in long queues outside ATMs and banks to withdraw money⁶. Since demonetisation took place without providing for enough replenishment, the farmers did not get cash in their hands despite waiting in long queues.

⁶ Roychoudhury, Arup and T E Narasimhan. "Demonetisation: 30 days on, distress and queues show no sign of abating." *Business Standard*, 9 Dec. 2016. www.business-standard.com/article/economy-policy/demonetisation-30-days-on-distress-and-queues-show-no-sign-of-abating-116120801299_1.html Accessed 10 Nov. 2020.

Fig. 3 Farmers in queues at the ATMs during the cash crunch

Source: Business Standard. 9 Dec. 2016.⁷

Fig. 2 Fall in the production of Rabi Food Grains in AP

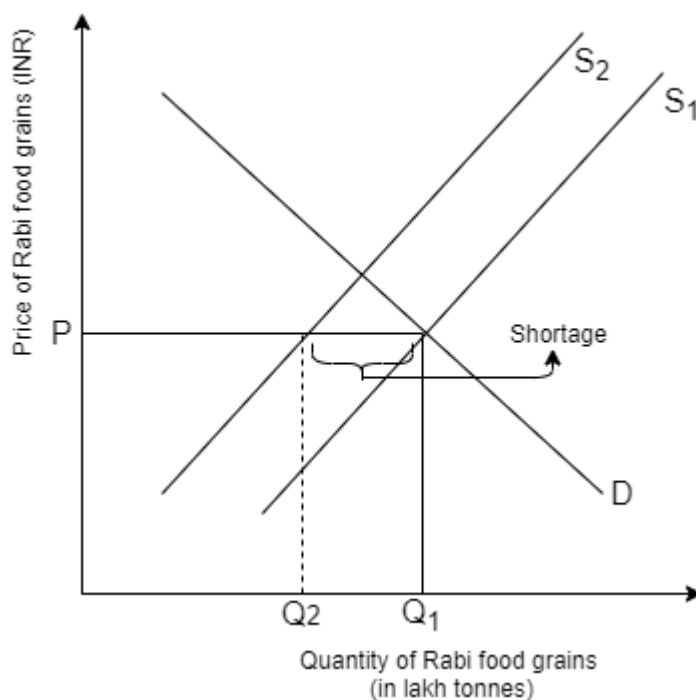
Source: Table 4.2, Area and Production of Food grains⁸
Created using MS Excel

⁷ Roychoudhury, Arup and T E Narasimhan. "Demonetisation: 30 days on, distress and queues show no sign of abating." *Business Standard*, 9 Dec. 2016. www.business-standard.com/article/economy-policy/demonetisation-30-days-on-distress-and-queues-show-no-sign-of-abating-116120801299_1.html Accessed 10 Nov. 2020.

⁸ Government of Andhra Pradesh. Season and Crop Report 2016-17. Directorate of Economics and Statistics, 25 Jan. 2018. www.ap.gov.in/wp-content/uploads/2018/05/SCR-2016-17-28-05-18-online-copy.pdf Pdf. Accessed 3 Oct. 2020.

The Godavari Districts account for a significant proportion of the production of Rabi food grains in AP. During 2016-2017, the production of food grains in the rabi season was 63.81 lakh tonnes as against the 75.66 lakh tonnes in 2015-2016 (as seen in Figure 2). This sudden fall in produce was the outcome of the cash crunch creating problems for the farmers in buying inputs for production. This can be seen as a supply shock in the agricultural sector of the Godavari Districts because demonetisation was a completely unexpected act which resulted in the decreased supply of rabi crops by 15.66% (refer to Fig. 2). However, the statistical data alone cannot be the only source to arrive at a conclusion. The fall in Rabi production in 2016-17 could have been the result of some other reason.

Fig.3 Demonetisation and supply of Rabi food grains



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Fig. 3 shows the output of rabi crops (food grains specifically) in the Godavari Districts in 2016 - 2017. Although there was a decrease in the supply of rabi crops from Q1 to Q2, shown by a leftward shift in the supply curve from S1 to S2, the price of rabi crops remained unchanged at P. At price P, the demand for food grains was Q1, but the supply was only Q2. This caused a shortage of food grains in the agricultural market.

However, the shortage was prevalent only for one year. Fig.2 shows that production of Rabi food grains increased by 32.78% the next year (2017-2018). Also, the production in 2017-2018 was nearly 12% higher prior to demonetisation (2015-2016). This shows that even after demonetisation, the agricultural production in the Godavari Districts successfully maintained an increasing trend. So, it can be said that there was no huge and obvious impact on the growth of the agricultural sector. However, the various negative short-term impacts of demonetisation on this sector cannot be overlooked.

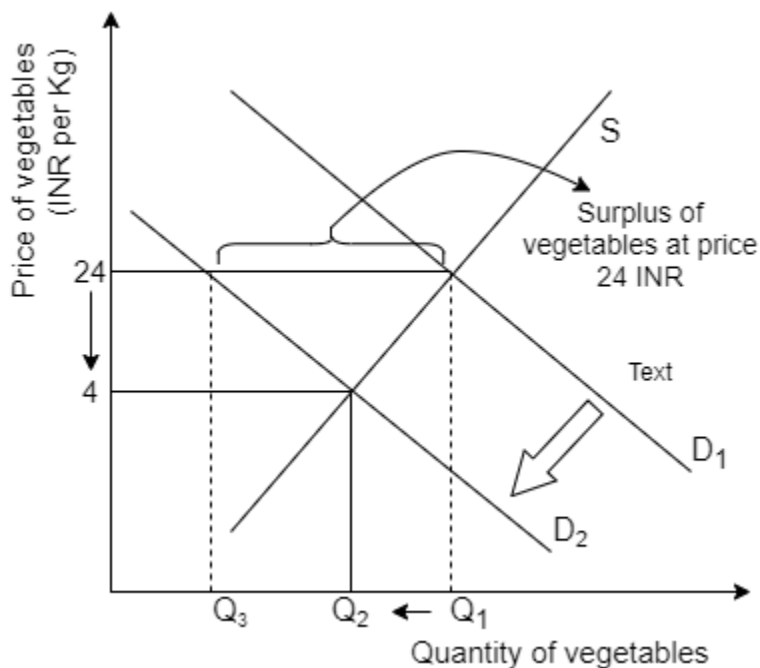
4.3 IMPACT ON THE SALE OF KHARIF CROPS

While it was the time to sow rabi crops, it was also the time for harvesting and selling kharif crops. Kharif crops are the crops sown in May and harvested in October. Farmers cultivating kharif crops were also at a loss because of the fall in demand due to lack of cash with customers. Demonetisation also disrupted the supply-chain because all activities like transport, sale, marketing and distribution of crops are largely cash-dependent.

The banana market in the East Godavari District saw a 25 - 30% fall in transactions. No farmer was willing to enter a cashless transaction (Sarma). This could be because the farmers were not yet into the digital banking system or because they only needed cash for their expenses. In November 2016, Sathi Babu, a merchant from East Godavari District expressed that both yield

and prices had fallen that year. Demonetisation not only reduced the demand for kharif crops, but also its prices. Vegetable prices in the East Godavari Districts fell on an average from ₹24 per kg to ₹4 per kg overnight (Sarma). This is because demonetisation resulted in loss of consumer purchasing power, especially in the informal sector.

Fig. 4 Impact of demonetisation on vegetable demand and price



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A fall in demand for vegetables in East Godavari District from Q_1 to Q_2 , (see Fig. 4) represented by a leftward shift in the demand curve from D_1 to D_2 exerted a downward pressure on the price of vegetables, lowering it from ₹24 per Kg to ₹4 per Kg. This reduced farmer revenue from $(24 * Q_1)$ to $(4 * Q_2)$. Here, both producers and consumers are worse off because producers are selling less at a lower price.

Having completed the harvesting of the kharif crops in November, the smaller farmers were not able to adjust their supply to the reduced demand. The small farmers lacked facilities to store their output. With the demand for kharif crops falling and supply remaining the same, there was a

surplus created in the market. At price ₹24 per Kg, a surplus of vegetables equal to $Q1 - Q3$ (see Fig. 4) was created and even at the new market equilibrium of price ₹4 per Kg and quantity $Q2$, the surplus equal to $Q3 - Q2$ persisted (see Fig. 4) This surplus of vegetables gets wasted because the small farmers do not have the facilities to store their produce. As a sign of protest, the farmers of AP threw away their produce on the roads.⁹ Indian farmers lead vulnerable lives and this fall in revenue added to it which caused them to take their lives. East Godavari District accounted for 60 farmer suicides in the aftermath of demonetisation¹⁰.

Tenant farming is a very popular practice in the Godavari Districts (Jalapathi Rao). It is a process of the agricultural production system where land is taken on lease by farmers for cultivation. Farmers usually hire labour to work in their fields for various activities like sowing, fertilisation and harvesting. These labourers are paid in cash. Due to lack of cash, these small farmers and labourers did not receive money. So, these small farmers had to bear the burden of demonetisation more than the big farmers. In the West Godavari District alone, there are 562,069 small and marginal farmers¹¹, accounting for a whopping 91.98% of the total farmers of that district.¹² Demonetisation was supposed to tackle black money. These small farmers belong to the lower strata of the society and barely have any black money with them. But, unfortunately, demonetisation caused them a lot of damage and they had to face a lot more problems than the big farmers. This also goes against one of the macroeconomic objectives - equity in the distribution of

⁹ "Farmers Throw Vegetables On Roads As Sign Of Protest Against Demonetisation." *YouTube*, upload by V6 News Telugu, Dec 21. 2016, www.youtube.com/watch?v=aStImFNeW14 Accessed 28 Sept. 2020.

¹⁰ "Demonetisation-hit farmer family in the lurch." *The Hindu*, 28 Jan. 2017, www.thehindu.com/news/national/andhra-pradesh/Demonetisation-hit-farmer-family-in-the-lurch/article17105394.ece Accessed 27 July. 2020.

¹¹ Government of AP. "Agriculture." *West Godavari District* westgodavari.ap.gov.in/departments/agriculture/ Accessed 11 Sept. 2020.

¹² Government of AP. "Agriculture." *West Godavari District* westgodavari.ap.gov.in/departments/agriculture/ Accessed 11 Sept. 2020.

income, because the poor farmers have suffered more than the actual targets, holders of black-money. Also, only a small portion of the black money is actually stored in the form of cash. Most of it is in the form of physical assets like gold, land etc. But, demonetisation only impacted the small portion of black money stored as cash. Demonetisation hit these farmers hard because they were not able to preserve their produce. This reflects the failure of this policy intervention. Moreover, black-money is a deep-rooted problem in the Indian economy which cannot be resolved with only a single policy intervention. Had it been implemented along with other policies targeting black money in other forms, demonetisation could have achieved greater success.

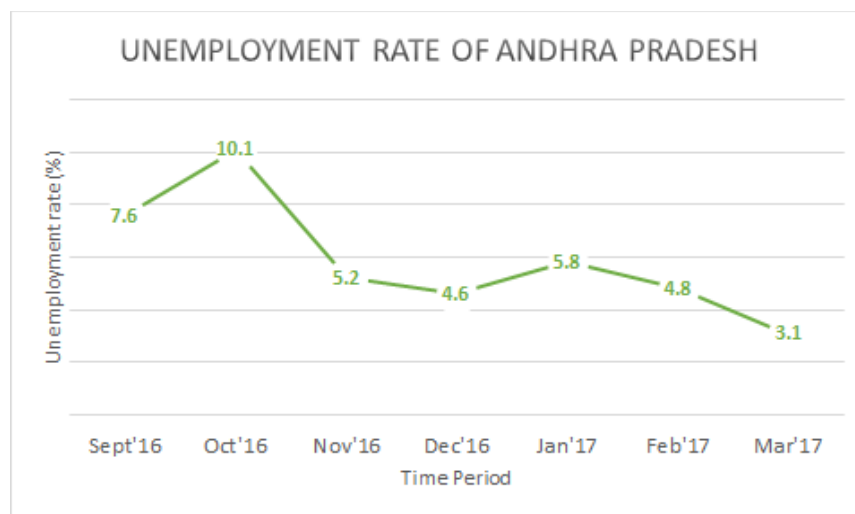
Demonetisation caused a surplus of Kharif crops and shortage of Rabi crops in the market. This shows that there was a misallocation of resources for the production of crops. The failure of the agricultural market of Godavari districts to allocate resources efficiently caused Market Failure which is a consequence of government policy failure.

4.4 GOVERNMENT INTERVENTION LEADING TO POLICY FAILURE

The main reason for policy intervention by the government in this case was to improve the performance of the economy by achieving its earlier stated objectives. Policy failure, also known as Government failure, occurs when government intervention in the economy results in inefficient allocation of resources and a decline in economic welfare. Usually, these government policies attempt to correct some issue or to improve the performance, but end up following the Law of Unintended Consequences by causing unanticipated consequences which in the case of India's demonetisation was huge cash shortage, loss in economic output (GDP growth rate slowed from

8% in 2015-16 to 7.1% in 2016-17 to 6.7% in 2017-18 as reviewed by Arun)¹³ and increased unemployment in both formal and unorganised sectors throughout the country among many others. However, contrary to this, in the Godavari Districts, demonetisation did not have any long-lasting effects on the unemployment rate.

Fig. 5 Unemployment rate of AP from September 2016 to March 2017.¹⁴



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Ironically, immediately after demonetisation, in November 2016, there was a 5% drop in the unemployment level of AP. So, we can say that demonetisation did not lead to loss of jobs in the Godavari Districts. Only in Jan 2017, we saw a small rise in unemployment rate. But there is no evidence to prove that this fall was a consequence of demonetisation alone. In fact, it might have resulted in an increase in employment in the Godavari Districts because of the increase in production due to the support provided by the Government in the form of Minimum Support

¹³ T, Arun K. "Demonetisation: All Cost and Little Benefit." *Economic Times*, 2 Sept. 2018, economictimes.indiatimes.com/news/economy/policy/demonetisation-all-cost-and-little-benefit/articleshow/65639832.cms?from=mdr Accessed on 16 Sept. 2020

¹⁴ "Unemployment Rate Monthly time series (%): India." *CMIE*, unemploymentinindia.cmie.com/kommon/bin/sr.php?kall=wsttimeseries&index_code=050050000000&dtype=total Accessed 20 Oct. 2020.

Prices, loans and permission to buy agricultural inputs with old notes. This could have contributed to the fall in unemployment level in the months of January and February. Overall, the note-ban did not have any significant impact on employment in the Godavari Districts.

Although demonetisation was intended to correct the problem of black-money, it led to the unintended creation of a problem in other parts of the economy which includes the agricultural sector. One of the reasons for the failure of demonetisation is ‘imperfect knowledge’. Government cannot always have perfect or complete information about the economy because the market always has more information than any individual or government. Policies based on imperfect information are often misleading. The Indian government admitted that it did not have estimates of how much black money was held in the form of cash.¹⁵ But the theory of government policy failure can limit our analysis of the impact of demonetisation specifically on the agricultural sector of the Godavari Districts. This theory takes into consideration the impact on all the sectors of the country. To analyse such a public policy, a more comprehensive theory which allows us to make relative comparisons of the impacts of the policy on different sectors would have been more ideal.

4.5 MINIMUM SUPPORT PRICE

In 2018, the Government of India announced an increase in Minimum Support Price (MSP) for the Kharif season, marking the highest increase¹⁶ since 2013. Although the government

¹⁵ Kaul, Vivek. “Viewpoint: Why Modi’s currency gamble was ‘epic failure’.” *BBC*, 30 Aug. 2017, www.bbc.com/news/world-asia-india-41100610#:~:text=Hence%2C%20demonetisation%20has%20failed%20in%20its%20two%20major%20objectives.&text=The%20funny%20thing%20is%20that,after%20having%20announced%20the%20policy.&text=India's%20large%20cash%20economy%20was%20badly%20hit%20by%20the%20policy. Accessed 23 Sept 2020.

¹⁶ “Don’t crib about MSP hike, actually it isn’t too much; here’s why.” *Economic Times*, 9 July. 2018, economictimes.indiatimes.com/markets/stocks/news/dont-crib-about-msp-hike-actually-it-isnt-too-much-heres-how/articleshow/64886575.cms?from=mdr Accessed 23 Aug. 2020.

responded to the distress in the farm sector, it reflected a lagged government intervention to address the distress arising from demonetisation. MSP is a price floor, which is a legally set minimum price for a particular good. MSP is set above the market determined price so that farmers are benefited by the higher price and increased revenue.

Table 1. Showing the Minimum Support Price for crops in 2018.

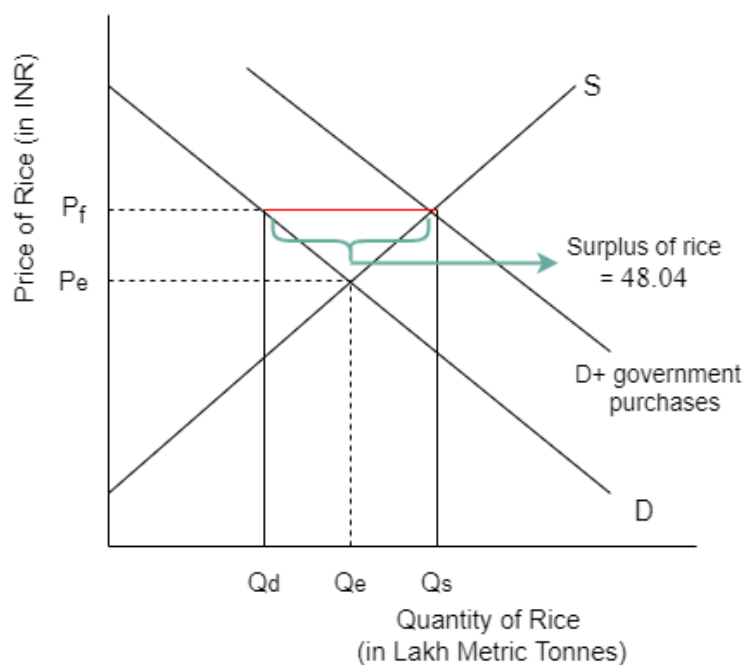
Crop	%hike
Rice	13%
Coarse cereals	35%
Oil seeds	17%
Cotton	27%

Source: Economic Times, 9 Jul. 2018.

Rice is one of the majorly sown Kharif crops in AP.

AP As seen in Table 1, this crop has saw a 13% hike in its MSP.

Fig. 5. Minimum Support Price for rice



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The objective of the MSP was to raise the price of rice above the equilibrium market price (Pe). In Fig. 5, the price of rice after MSP is shown as Pf. An increase in price increased the quantity of rice supplied resulting in a disequilibrium leading to a surplus of rice of nearly 50 Lakh Metric Tonnes. In order to maintain the price at Pf, the Government intervened by buying the excess supply at the MSP. This increased demand for rice shown by a rightward shift of the demand curve from D to D+government purchases. This was the direct outcome of intervention by the Indian Government. As reflected in Table 1, the 13% hike in MSP resulted in an increase in the price of rice to Pf. This increase was passed on to the consumers making them pay a higher price, thus making them worse-off. In 2018-19, Government of India procured 48.04 Lakh Metric Tonnes of Rice from AP.¹⁷ This means that there was a surplus of 48.04 Lakh Metric Tonnes of rice in the market as a result of the MSP. Purchasing the surplus rice is a burden on the Government's budget as it leaves lesser funds to spend on other activities in the economy like development of infrastructure, education etc. Since the costs of the Government are paid out of the tax revenue, it is indirectly the taxpayers who are paying for the purchases. But this MSP did not take domestic demand into consideration. Since the fall in demand was caused by the cash crunch, a further increase in supply would increase the overallocation of resources.

It has to be noted that the awareness of MSP and procurement agency is much lower among the small farmers.¹⁸ With 92% of the farmers of Godavari Districts being small farmers, the MSP provided by the government was not of great use to the farmers because there were no other measures taken to support procurement. According to a survey by the NSSO, only about 14% of

¹⁷ "Statewise Procurement of Rice for KMS 2018-19." *Food Corporation of India*
[fci.gov.in/app/webroot/upload/Procurement/Statewise%20Procurement%20of%20Rice\(KMS%202018-19\)_95.pdf](http://fci.gov.in/app/webroot/upload/Procurement/Statewise%20Procurement%20of%20Rice(KMS%202018-19)_95.pdf) .Accessed 9 Sept. 2020.

¹⁸ Anand, Ishan. "Modi Government's 'Historic' MSP Hike Is Nothing More Than a Band-Aid For Farmers." *The Wire*, 5 July. 2018, thewire.in/agriculture/msp-hike-agriculture-farmers-narendra-modi-government. Accessed 19 Oct. 2020.

the farmers in AP are aware of the MSP for crops and out of the few farmers who were aware of the scheme, 25% of the farmers reported that they could not sell their produce to procurement agencies due to their unavailability.¹⁹ Had there been more concrete measures taken to increase awareness of MSP among the small farmers in Godavari Districts, the MSP would have been a successful policy intervention.

On the whole, the MSP had negative welfare impacts. It created a welfare loss, indicating that the MSP caused an overallocation of resources, thus supplying an excess of rice in the market. An increase in the prices also results in increased inflation. The benefits that are meant to be enjoyed by farmers are also only used by the big farmers who face a lesser impact of the cash crunch than the small farmers.

Since the small farmers have not benefited, some other possible alternatives to support farmers during such a cash crunch could have been direct transfer of money into the farmer's accounts. An example would be the one being followed by some other Indian states like Telangana under the scheme of 'Rythu Bandhu' or subsidies to support the purchase of seeds and fertilisers. This would have ensured that the farmers did not face problems due to cash shortage.

¹⁹ Aditya, K. S. et al. *Awareness about Minimum Support Price and Its Impact on Diversification Decision of Farmers in India*, DOI doi.org/10.1002/app5.197. Accessed 11. Oct. 2020.

5. LONG-TERM IMPACT

Demonetisation was meant to have positive long-term impacts by reducing black money, bringing the masses into the digitised financial banking system. In the Godavari Districts, we can clearly see a huge transformation from cash to cashless transactions. Some small villages like Mori in East Godavari District are declared to be fully digital.²⁰ These villages now make digital transactions for almost everything right from payments in small Kirana shops to paying their electricity and water bills. The farmers of Godavari Districts have opened their bank accounts and entered into the formal banking system of the country (Rao). This proves that the goal of making India cashless has been partially successful. In connection with the 8th Sustainable Development Goal of Decent Work and Economic Growth, the policy of demonetisation is aimed at achieving the 8.10 target of that SDG - encourage and expand access to banking and other financial services.²¹ It has helped increase the proportion of the rural citizens with a bank account. However, the labour working in the fields (in the form of tenant farming) is still being paid in cash. So, we cannot say that the economy has fully turned cashless. But it has definitely brought awareness among the rural farmers about the importance of cashless payments to enter the official financial banking system.

²⁰ Rajulapudi, Srinivas. "Mori to be declared fully digital village." *The Hindu*, 28 Dec. 2016, www.thehindu.com/news/national/andhra-pradesh/Mori-to-be-declared-fully-digital-village/article16951690.ece Accessed 6 Sept. 2020.

²¹ Targets and Indicators "Goal 8." *United Nations* sdgs.un.org/goals/goal8 Accessed 16 Sept. 2020.

6. CONCLUSION

To answer the research question, “*How did demonetisation in India in 2016 affect the agricultural sector of the Godavari Districts?*”, this essay has analysed both the negative and positive impacts of demonetisation in the short-term and long-term on the agricultural sector of Godavari Districts. Short-term impacts like cash crunch, misallocation of resources resulting in shortage of rabi crops and surplus of kharif crops are the costs of demonetisation. Although the government was primarily targeting wealthy tax evaders in an attempt to redistribute income, the poor farmers like those of the Godavari Districts suffered the most.

Long-term impacts like farmers carrying out cashless transactions and entering the financial banking system, elimination of middlemen in the agricultural sector are the benefits of demonetisation. The government’s decision of demonetisation had most of its benefits targeted at the long-term.

Although demonetisation caused some inconveniences to the farmers of Godavari Districts in the form of inability to buy seeds and fertilizers and problems to meet their day-to-day requirements, with no negative impacts in the long-term, it did not have any damaging effect on the growth and development of the agricultural sector of the districts. While the production of Kharif crops did not fall (refer to 4.2), the Rabi crops were underprovided in the market for a few months because of lack of cash to produce them (refer to 4.1). But the agricultural market corrected itself the following year and the production increased by nearly 38%.

Therefore, since the costs and benefits of demonetisation do not occur at the same time, it is difficult to measure and compare them to conclude whether costs outweigh benefits or vice-versa. However, this research paper has some limitations, which if resolved, might have resulted in a more accurate conclusion. Although people in the Godavari Districts are largely dependent on

agriculture, due to lack of appropriate and accurate data on employment in the agricultural sector of the Godavari Districts, this paper could not analyse in great depth the effect of demonetisation on employment in the sector. Analysing this point would have provided a more holistic conclusion.

7.BIBLIOGRAPHY

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Interview

1. Rao, Jalapathi, Agricultural Economist, Agriculture Department, Osmania University.
Personal Interview. 31 Aug. 2020.

Technology used

1. *app.diagrams.net* app.diagrams.net/ Accessed 20 Sept. 2020.
2. MS Excel
3. MS Word

8. APPENDIX

Appendix 1

Telephonic interview with Agricultural Economist.

Interviewee: Prof. Jalapathi Rao

Date: 31 August, 2020.

- 1. Can you share your views on the impact of demonetisation on the agricultural sector of India?*

Ans - Yes. Demonetisation definitely posed some problems for financial transactions, purchase of seeds and fertilisers and for meeting day-to-day requirements. Agriculture is one of the most affected sectors thus affecting the lower-class people who are oriented towards agriculture. In South India, Kharif sales were majorly affected because farmers were not able to sell their Kharif produce. Since your research pertains to the Godavari Districts, I would like to mention that major crops of this area are coconuts and bananas. These are all long-duration crops. So, their sales were not very seriously affected during November. But it also has other crops like chick-pea, maize and pulses whose farmers were affected. This reduced the revenue and thus further investment by farmers. Farmers also faced problems in engaging labour because of lack of cash. Labour was employed throughout the year for various activities and it was important for the land owners to pay them. But, for a short period, the banks were also not able to pay in time. So, we can say that demonetisation posed temporary problems for the farmers.

- 1. How do you think the Indian economy will be impacted in the long-term?*

Ans - So, the inconvenience was only for a short period. In the long-term, demonetisation did not affect the growth and development of the agricultural sector. Rabi sowing was a little delayed. Rice is another major crop sown in Godavari Districts. So, delay in the purchase of inputs delayed rice sowing. But it definitely did not show any significant effect on the growth of the agricultural sector in the Godavari Districts. And, more than the big farmers who owned land, labourers who worked for these farmers were greatly affected because they needed cash for their daily transactions, which the farmers were not able to pay. So, whatever impact demonetisation had, was only for a very short duration and did not affect the long-term productivity, growth and development of the agricultural sector.

2. Which sectors would you say have been most affected by the demonetisation?

Ans - Like everyone knows, I think the majorly affected sector would definitely be the automobile sector, real estate sector and the agricultural sector. We have already talked about the agricultural sector. So, coming to the consumer durables, the demand for these collapsed post demonetisation. The manufacturing sector was also greatly affected because they were not able to pay wages to their workers. So, apart from the agricultural sector, these are also main sectors in India and their collapse gave some serious signs of crisis in the Indian economy.

3. How did it impact the agricultural sector in AP?

Ans - So, there is a vast amount of land sown in the Godavari Districts and there is a lot of tenant farming done. This is an agricultural production system where land is taken on lease by farmers for agriculture. I think these farmers and the labourers are the most affected ones. These farmers have suffered due to shortage of cash as they were not able to get employment and labourers

wanted payment in the new currency, which had a shortage. In South India, especially AP, monsoon is the main sowing season and not the Rabi season. In the monsoon season, rice is one of the majorly grown crops in Andhra. So, by the time demonetisation was announced, the major season of Kharif was over and their productivity was not affected. But, sales of the Kharif crop were affected due to the fall in domestic demand.

4. How long do you think the impact of demonetisation prevailed?

Ans - Like I said, I don't think the impact prevailed for very long. It only impacted the agricultural sector temporarily for about 3 - 4 months. But after that the production and demand recovered.

5. To what extent do you think, the goal of making India cashless can be achieved in the agricultural sector?

Ans - Actually, we never expected the farmers from rural areas of India to go for cashless transactions. We expected them to be the last group. But surprisingly, it has made an impact even on the rural people. They are now making cashless transactions and the youth are using these e-commerce payment apps like Paytm, PhonePe etc. So, demonetisation has definitely contributed to making payments cashless to a great extent. People who did not even have bank accounts are now having ATM cards and are using cashless payment methods everywhere possible. However, the labour is still being paid in cash. So, we cannot say that the economy has completely turned cashless. But one must not forget that demonetisation increased awareness among the rural people.

6. How did the implementation of GST in 2017 add to the effect of demonetisation?

Ans - I don't think there was a huge added effect and the ordinary middle-class Indians were not much affected by the implementation of GST. GST was implemented to group all the taxes and have a standardised format so that double-taxation is not done and GST was imposed mostly on luxury goods because for some basic goods, GST was 0%. So, GST did not add any effect on the agricultural sector of India. Therefore, GST is of not much concern to the farmers of India.

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