REASSESSING THE IMPACT OF DEMONETISATION ON AGRICULTURE AND INFORMAL SECTOR¹ (IDF, January 2017)

On the 9th of November, 2016, old currency notes of INR 500 and 1000 ceased being legal tender. It is two and half months since the event and the impact of demonetisation on the Indian economy has been widely discussed and debated. Our objective in this study is to show how to read data so that observed changes (if any) can be attributed to demonetisation.

Keywords: demonetisation; agriculture; SME; informal sector; india

1. Introduction

On the evening of November 8, 2016, Prime Minister Narendra Modi in a televised address to the nation announced his government's decision to discontinue already issued currency notes of Rs. 500 and 1000 as legal tender from midnight of the same day.²The government further announced that it will issue new Rs. 500 notes, discontinue the Rs. 1000 notes and introduce a new denomination of 2000 rupees. According to the initial announcement, while people could transact in old currency notes for "humanitarian reasons" in select public outlets for 72 hours until the midnight of 11 November, they had 50 days to deposit their old demonetised currency³ and all were expected to transact in the new notes of Rs 500 and Rs 2000 from January 1, 2017.

Denominations below 500 continued to be legal tender. It was assumed that people will be able to deposit into the banks, by the end of the year, the discontinued notes. The government had two stated policy goals --- catch people with black money and get rid of fake notes in circulation. Fake notes, it was assumed, would obviously, be discovered when brought into the banks for exchanging them against the new notes. As for black money, the assumption was that much of it is simply undisclosed income. It was felt that those holding undisclosed income, in the now suddenly defunct currency, will be unable to convert this into the new denomination notes and, hence, will suffer a loss in purchasing power. This is because they run the risk of being caught out when they come to the bank to exchange the old notes, leaving a record of their exchange with banks that can be later used by tax authorities to track them down.

People have criticised the government move on three counts. The first set of criticisms involve the policy goals: (a) only about 20% of black money is held in cash, the rest in property and other assets like gold (b) the estimated fake notes constitute only 0.025% of the total budget of close to 20,000 billion, i.e., 5 billion, a pittance (according to a study by the Indian Statistical Institute (ISI), Kolkata).⁴

¹ This is drawn from a more detailed analysis being carried out by Nishant Chadha, Arijit Das, Shubhashis Gangopadhyay and Nalin Mehta at IDF.

² Text of Prime Minister Narendra Modi's address to the nation, 8 Nov. 2016, Press Information Bureau, <u>http://pib.nic.in/newsite/erelease.aspx</u>

³ According to the PM's 8 November announcement, to "reduce hardship to people", old Rs 500 and Rs 1000 notes would still be accepted till midnight of 11 November at the following public utilities: government hospitals; government pharmacies; petrol, diesel and CNG gas stations authorised by public sector oil companies; consumer co-operative stores authorised by state or central government; milk booths authorised by state governments; crematoria and burial grounds; railway ticket booking counters, ticket counters of government buses and airline ticket counters at airports. Ibid. The Ministry of Finance and RBI subsequently issued over 71 notifications on the issue. See for instance, http://pib.nic.in/newsite/pmreleases.aspx?mincode=61

⁴ http://economictimes.indiatimes.com/news/defence/secret-study-pegs-value-of-fake-notes-in-circulation-at-rs-400-crore/articleshow/55424455.cms

The second criticism is that while this may catch, or destroy, some of the black money accumulated in the past, it does not do anything to stop corruption in the future. Indeed, with the introduction of the new Rs. 2000 note, it will become easier to store black money.

The third set of criticism emphasizes the consequences of this unanticipated shock to the economy. Print and visual media, opposition parties and many expert commentators, reported hardships faced by people standing in queues at bank counters and ATMs, inability of businesses transacting mostly in cash to continue their activities, distress of farmers unable to buy seeds and fertilizers, casual labourers remaining without jobs and employees in small businesses being fired. The common position of almost all critics was that the sudden shortage of currency in a largely unbanked economy adversely affected the common person (aam aadmi and aam aurat) with severe consequences for the relatively poor sections of the community.

However, what appears as a puzzle to us is that there were no major protests (as happened, for example, in Venezuela which went through a similar experience at around the same time) even when various political parties tried to rally people to come out onto the streets and protest against this move.

The driving objective of this research note is to try and address the puzzle of why the reported sufferings of the people did not spill over into street protests. One obvious explanation could be that people were willing to suffer these hardships in the hope that those with ill-gotten gains will lose their stash. In other words, the perceived satisfaction of seeing black wealth being destroyed was larger in magnitude compared to the costs of this sudden de-notification of high value notes.

Our note explores the extent of the problems faced by different sections of the 'honest citizenry': focusing in particular on agriculture and the informal sector. We use two sets of data: (a) secondary data on currency holdings, consumption expenditure, prices and quantities of perishable and non-perishable goods and (b) primary data from a rapid perception survey of village 'sarpanchs', industry representatives of clusters and the urban slum population in 48 districts across 9 states.

2. How to read data?

One needs an appropriate framework to draw inferences from data, In particular, the framework has to be contextual. We have to be able to reason why we observe what we observe. We illustrate this with an example.

The immediate impact of the November 8 announcement was expected to be to reduce the ability of consumers to make purchases as planned. Why? It was felt that consumers will suddenly realize that expenditures planned in the immediate future were now at stake for they may not have the necessary instruments to carry out their transactions. This fear was attributed to the public confessions by the government and monetary authorities that they will not be able to substitute the notes that were being pulled out with the new notes, before December 31, 2016. If this fear was true, then people would restrict non-essential purchases and start hoarding smaller denomination notes to make purchases that would be necessary in the (near) future and before the economy was fully remonetised with the new notes. Such fears could have been fuelled by the restrictions from November 9, 2016 on how much could be withdrawn, in a given period, from one's own account in banks. It was felt that this would lead to a reduction in the prices of commodities bought and sold on a daily basis.

To support this line of reasoning, ideally, we have to be able to provide evidence that prices with 'demonetisation' are lower than prices without. Alternatively, prices on November 15, 2016 (or, say, December 15, 2016) are lower than what they should have been. However, we are never able

to observe November 15, 2016, without demonetisation once the November 8 announcement was made! We, therefore, look at proxies for what the prices would have been if the demonetisation was not announced. One obvious candidate is the November 15 price in the previous year, i.e., 2015. Given seasonal consumption and production patterns, the same period last year, when there was no demonetisation, could give us some ideas of what the post-demonetisation period would have been this year had the announcement not been made. Indeed, there were many reports comparing the end of the year prices in 2015 with those of 2016 to argue that demonetisation had resulted in a lower price for farmers.

For this purpose, IDF analysed the prices of 22 commodities at wholesale mandis in Delhi, Hyderabad and Karnataka along with retail prices in 100 centres in the country.⁵ While prices of many of these commodities were lower in 2016 compared to 2015, we found NO evidence of price falls which could be directly attributed to demonetisation. In many cases, the price falls, preceded the demonetisation announcement.

As an illustrative example, Figure 1 shows the post November 9 prices of tomato in one Delhi wholesale market for 2015 and 2016. Observe that in this period, 2015 prices, though falling, were much higher than 2016 prices though the price in the latter period was more stable. Indeed, the stability in the post-November-9 price of tomatoes in 2016 could also be due to the inability of price to move upwards as buyers had less cash in hand. However, we are now going to argue that using this observation of data to attribute lower prices in 2016 to demonetisation could be erroneous.



(The data is from the Azadpur market in Delhi)

Prices are an outcome of supply and demand. So, when comparing 2015 with 2016, we have to argue that all conditions affecting supply and demand, barring demonetisation, were similar in both periods. However, we know that 2016 year had better rains than 2015 (and 2014). Therefore, there was greater supply of agricultural produce this year compared to last year. This would keep prices lower this year compared to last year, independent of demonetisation. Also, every year, prices rise leading up to Diwali and drop off in the days after Diwali. In 2015, Diwali was on November 11,

⁵ See Appendix 1 for a list of the markets and commodities from where price and arrival data have been analysed.

while in 2016, Diwali happened on October 30. So, while November 9 in 2015 was leading *up to* Diwali, in 2016 it was more than a week *after* Diwali. Thus, in 2016, both demand and supply conditions were such that prices would be lower than what it was compared to 2015. Thus, the mere observation that prices post-November-9 in 2016 were lower than that of the same period in 2015, is not sufficient reason to attribute the negative effect on prices to demonetisation.

Instead, if we were to look at the tomato price in 2016 before and after demonetisation, then we come to a very different conclusion. Since the November 8, 2016 announcement was unanticipated, there was no reason for the prices prior to November 8 being affected by expectations of demonetisation. Prices pre-demonetisation would thus reflect the fundamental supply and demand factors that determine price. If demonetisation has an impact on one or both sides of the market, there would be a 'structural break' in the price trends before and after November 9, 2016.



As Figure 2 shows, such a structural break in prices due to demonetisation is not visible.

(The data is from the Azadpur market in Delhi)

3. Agricultural prices and quantities

Agricultural produce could be categorized as perishable and non-perishable. Perishable items would include fresh fruits and vegetables while non-perishable would include items like rice, wheat and other cereals. If the November announcement has led to buyers not being able to make their purchases then there would be two different effects on perishables and non-perishables.

Note that there are two distinct stages in marketing the produce from farms. First, the farmer sells the produce to an aggregator, or in mandis. This is the wholesale market. Traders then distribute what has come to the wholesale market to retail sellers. The price we pay is the price charged by retailers. The price squeeze through demonetisation could occur, therefore, at either one or both levels. If the retail demand shifts down because of our unwillingness, or inability to pay high prices, retail prices will fall and retail traders will get a lower price. They will then pay the wholesalers a

lower price who, in turn, will pay the farmers a lower price. On the other hand, if the wholesalers are short of cash, the farmers will get a lower price from them. Depending on the market power in retail distribution, this lower price paid to farmers may not get fully transferred to a lowering of the retail price unless the retail buyers are also squeezed of cash.

Figures 1 and 2 described the wholesale price of tomatoes in Delhi and showed that one could not find an obvious impact of demonetisation. Figures 3 and 4 give similar pictures for cauliflower and cabbage prices (respectively) in a whole market in Delhi. In both these latter cases, there was no reversal in the price trends post demonetisation. Figure 5 shows the retail price of tomatoes in Delhi. Observe that what was true of tomato wholesale price carried over into the retail price. We have looked into the retail prices of different commodities in various cities but are not reporting all of them here. The story is similar in all cases.



Figure 3 (The data is from the Azadpur market in Delhi)



Figure 4 (The data is from the Azadpur market in Delhi)



(The data are for the city of Delhi)

Before we finish this section we need to look at the possible differences in the paths by which prices are determined for perishables vis-à-vis non-perishables. Consider the production decisions that were taken before the announcement and output was realized immediately after November 9. All perishable items would have to be sold by the farmers since cost of storing them is very high. In other words, farmers would not be able to hold back supplies now because they are getting low prices and plan to sell them if and when prices start rising again.

For non-perishables, however, storage costs are, by definition, lower than those of perishables and one could see some of the supply being reduced by putting the produce in storage. In other words, while for perishables one should not see any significant reduction in market arrivals, nonperishable arrivals may be held back if prices fall significantly. In other words, the manifestation of the price squeeze on non-perishables may be dampened by a reduction in market arrivals. Nevertheless, the pattern of price and arrival for each produce, perishable or non-perishable, were very similar with none showing any significant change in trends post-demonetisation.

Price data in markets could be driven by past production decisions and demonetisation could have longer term supply impacts. These will show up only when production decisions taken post-November 9, 2016 results in agricultural produce at the end of the growing season. In our primary perception survey we, therefore, collected information on what villagers felt about these production decisions that were taken immediately after November 9, 2016. Table 1 gives the results collected from 48 districts in 9 states (see Appendix 1 for the list of districts). Though there were significant proportions who said that agriculture activity this year was lower than last year, majority maintained that activity levels were the same or higher.

	Increased	No change	Decreased
Area under cultivation	26	28	46
Use of fertilizer	33	32	35
Quantity of seeds used	32	33	35
Use of labour in agriculture	36	20	44

Table 1: Village perceptions

Note: All numbers are percentages of total responses

4. Small and medium enterprises (SME)

We now turn to the SME sector. Along with the agricultural sector, SMEs form the other big part of the informal sector. It was felt that demonetisation had the most severe impact on those involved with the informal sector as most of them were (a) 'unbanked' and (b) depended largely on cash. The sudden drying up of currency severely dented their ability to carry out business as usual. Being in the informal sector, SMEs find it easier to let go of labour when business is hard. Hence, there were many newspaper and media reports of loss in informal sector jobs. Here also, we need to look at data and interpret them properly within the appropriate contextual framework.

However, up-to-date, authentic, official data are difficult to get. We, therefore, conducted a rapid primary survey of perceptions about business and employment situations in villages, slums and industry clusters spread around 48 districts in 9 states. In villages we surveyed the village heads (sarpanchs), in slums we randomly surveyed people in the slum and in industry clusters we surveyed the industry associations. Of course, all these respondents could have ideological and other economic compulsions leading them to misreport or exaggerate what was actually happening on the ground. So, we had to look at both internal and external consistencies in the responses. Nevertheless, the analysis in this section is restricted by the lack of data and, hence, one can at best look for a consistent story to be checked out against more authentic data.

We can divide up the SME sector into those that produce for other businesses (ancillary or as part of a supply chain) and those that cater directly to consumers. As far as the former are concerned, their buyers would be large 'banked' economic entities and should not be immediately affected by demonetisation as production plans had already been determined and (advance) payments have already been made and/or will be paid later and mostly into bank accounts. However, their employees and many of their suppliers may want payments in cash and the restrictions on how much businesses can withdraw from banks may have put a squeeze on them. And this could have been more acute in SMEs that service consumers directly, especially in sectors like construction where a large amount of business is transacted in cash.

In most sections of the informal sector where cash is used, a large section of their employees are migrants. So, when surveying slum representatives we asked whether people have left for their home town (or village) after losing their jobs due to demonetisation. We, similarly, asked in the villages whether people are coming back from towns or, more importantly, if the demand for MNREGA had increased since demonetisation. And, we checked these responses against the official data of MNREGA disbursements and demand for work. We did this because MNREGA payments are supposed to be made directly into banks and, by government administration. Hence, such disbursements should have been relatively unaffected by demonetisation.

But first, as Table 2 shows, the responses are mixed but internally consistent. That is, almost all those who reported that production has fallen post-demonetisation also reported that wages and employment did not rise. All these were in comparison to the same period last year. Table 2 gives data on MNREGA and whether village administrations have faced increased demand for such work.

Question	Responses in data
Production activity has fallen	Yes (74.2) Same (18.2) Higher (7.6)
Labour employed this quarter has fallen	Yes (71.0) Same (13.0) Higher (16.0)
Wages paid to labour have decreased	Yes (39.1) Same (27.6) Higher (33.3)
Employees have been fired in the last two months	Not many (20.0) Some (54.0) Quite a few (26.0)

Table 2: Impact on SMEs (all nine states)

Note: All numbers are percentages of total responses

In general, production and employment are down this year compared to last year according to industry. In most cases, though, the majority of the slum population say that the situation in the post-demonetisation phase is not worse than that in the same period last year (Table 3). However, there is some variation in how people going back to villages have been able to cope.

Question	Responses in data
People living in the <i>basti</i> lost employment in the last 2 months	Not many (31.3) Some (29.9) A lot (38.8)
People have migrated back to their villages	Not many (22.7) Some (42.4) A lot (34.9) (34.9)
Has there been reverse migration from the cities to the village	Yes (72.0) No (28.0)
Has demand for NREGA increased	Yes (49.3) No (50.7)
Have you been able to provide work under NREGA in last two months	Yes (42.9) No (57.1)
Is disbursement under NREGA made into bank accounts	Yes (70.0) No (30.0)

Table 3: Impact of demonetisation on migration and NREGA (all nine states)

Note: All numbers are percentages of total responses

In Table 4 we give data from select states to highlight the variations across states. The purpose of choosing these states is to explain how context plays a role and must be kept in mind when interpreting data. Recall that MNREGA disbursements should be made into bank accounts. While respondents in Telangana, Andhra Pradesh and Gujarat said that disbursements are made through banks, Uttar Pradesh stands out in that respondents denied that MNREGA disbursements go into bank accounts. Uttar Pradesh and Gujarat both had larger reverse migration from town to village. However, while Telangana and Andhra Pradesh respondents said that there was greater demand, provision and disbursements in MNREGA accounts, both Gujarat and Uttar Pradesh denied that MNREGA had been used to mitigate the negative impacts of reverse migration. For Uttar Pradesh, the reason could be that banks were not being used for disbursing payments and, hence, demonetisation created a problem. For Gujarat, the local elections were going on around this time and, hence, local administration was not fully functional as new elected leaders were in the process of coming into office.

	Responses in data			
Question	Telangana (8 districts)	Andhra Pradesh (9 districts)	Uttar Pradesh (8 districts)	Gujarat (5 districts)
Production activity has fallen	Yes (61) Same (18)	Yes (94) Same (6)	Yes (87.50) Same (12.50)	Yes (75) Same (25)
Labour employed this quarter has fallen	Higher (22) Yes (65) Same (13) Higher (22)	Yes (56) Same (6) Higher (38)	Yes (87.50) Same (12.50)	Yes (80) Same (20)
Wages paid to labour have decreased	Yes (30) Same (30) Higher (39)	Yes (25.00) Same (12.50) Higher (62.50)	Yes (87.50) Same (12.50)	Same (40) Higher (60)
Employees have been fired in the last two months	Not Many (36) Some (50) A lot (14)	Some (62.5) A lot (37.5)	Not many (16.67) Some (83.34)	Some (60) A lot (40)
People living in this basti lost employment in the last 2 months	No many (55) Some (20) A lot (25)	Not many (53) A lot (47%)	Some (28.5) A lot (71.5)	Some (100)
People have migrated back to their villages	Not Many (22) Some (55) A lot (23)	Not Many (33) Some (33) A lot (33)	Some (29) A lot (71)	Not Many (20) Some (80)
Has there been reverse migration from the cities to the village	Yes (28.5) No (71.5)	Yes (12.5) No (87.5)	Yes (25) No (75)	Yes (60) No (40)
Demand for NREGA increased	Yes (23) No (77)	Yes (31) No (69)	Yes (100)	Yes (80) No (20)
Provided work under NREGA	Yes (95.45) No (3.55)	Yes (81.25) No (18.75)	No (100)	Yes (40) No (60)
NREGA in bank account	Yes (100)	Yes (87.50) No (12.50)	Yes (28.57) No (71.43)	Yes (100)
NREGA disbursement made in last 2 months	Yes (67) No (33)	Yes (80) No (20)	Yes (12.50) No (87.5)	No (100)

Table 4: Different outcomes in select states

Note: All numbers are percentages of total responses

We look at the official MNREGA data in the state data portals to check the external consistency of our perception survey. These are given as examples for the states of Andhra Pradesh and Uttar Pradesh. Recall that while Andhra Pradesh recorded positive responses to MNREGA demand and disbursements, every respondent from Uttar Pradesh reported that that nothing was disbursed through MNREGA post demonetisation. Figures 6 and 7 show that our survey responses are consistent with official data, especially for these two states.



Figure 6

(The data are from official MNREGA data portal of the state)



Figure 7 (The data are from official MNREGA data portal of the state)

5. Final observations

It is instructive to understand the possible magnitude of the problems faced by demonetisation before we begin to look at the data. So, our first investigation was into the cash holdings at the macro level. According to RBI figures, the currency held by the public prior to the November 8, 2016 announcement was a little over 17,000 billion. Of this, 84 per cent was in the two (now discontinued) denominations and 16 per cent was in the smaller denomination notes of 100, 50,

20 and 10. If this money was uniformly distributed among all households, then each household was holding 10,889 rupees in the smaller denominations. This is a strong assumption. A more realistic assumption would allow for two complexities in this simple description of currency holdings. First, currency with public is not with households only; businesses also hold on to cash. Second, the poorer households should have more of the smaller denomination notes and the richer households (and businesses) more of the higher denominations.

Businesses holding cash reduces the cash holdings in smaller denominations by the poorest households. On the other hand, it will be natural to assume that the poorest households will also hold a greater proportion of the smaller denomination notes compared to the richer households. This is because poorer households (a) have lesser need for cash as they usually undertake transactions of smaller values (b) includes casual and daily labourers who get daily wages that are much less than 500 rupees and (c) are mostly 'unbanked'. This would suggest that the poorer households get paid and make payments using the smaller denomination notes. So, at a macro level, how does the withdrawal of higher denomination notes affect the poorest households?

We use the NSS data to get a handle on the expenditures made by households to support their consumption needs. Table 5 gives the percentile distribution of expenditure classes. Observe that the highest amount spent on monthly consumption by the bottom 75 per cent of the households (10,381 rupees) is less than the average holdings of currency (10,889 rupees) in smaller denomination. In other words, unless currency holding is highly skewed (i.e., richer households, and businesses, have most of the smaller denomination notes), velocity of circulation of these notes is very low and, poorer households regularly make high value transactions, there should be little or no effect of the withdrawal of high denomination notes. If, however, the poorer households feared a cash crunch in the future, they may start hoarding currency (even in small denominations) and this could have had an effect. The fact there were little, or no, street protests would suggest that poorer households had no such anticipation, or fears. Whatever may be the long term implications of the November 8, 2016 announcement, what the data suggest are that businesses hold a large amount of cash, especially the SME sector.

Percentile	Total	Rural	Urban
1%	1,367	1,330	1,674
5%	2,458	2,346	3,092
10%	3,202	3,039	4,138
25%	4,624	4,357	6,379
50%	6,804	6,166	9,881
75%	10,381	8,757	15,321
90%	16,009	12,436	23,565
95%	21,382	15,674	30,402
99%	37,925	26,381	51,497

Table 5: Percentile distribution of monthly consumption in Rs.

APPENDIX 1

Wholesale Markets covered in this study

Wholesale Markets	Commodities
Azadpur (Delhi), Bowenpally (Hyderabad,	Tomato, Cauliflower, Cabbage, Brinjal, Rice (
Telangana), Mysore (Karnataka)	West Bengal, Punjab)

Retail Markets

List of centres Adilabad, Agartala, Agra, Ahmedabad, Aizawl, Allahabad, Ambikapur, Amritsar, Bathinda, Bengaluru, Bhagalpur, Bhopal, Bhubaneshwar, Bhuj, Bilaspur, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dharamshala, Dharwad, Dimapur, Dindigul, Durg, Ernakulam, Gangtok, Gorakhpur, Gurgaon, Guwahati, Gwalior, Haldwani, Haridwar, Hisar, Hyderabad, Indore, Itanagar, Jabalpur, Jadcherla, Jagdalpur, Jaipur, Jammu, Jhansi, Jodhpur, Kanpur, Karimnagar, Karnal, Kharagpur, Kolkata, Kota, Kozhikode, Kurnool, Lucknow, Ludhiana, Malda, Mandi, Mangalore, Meerut, Mumbai, Mysore, Nagpur, Nashik, Palakkad, Panaji, Panchkula, Patna, Port Blair, Puducherry, Pune, Purnia, Purulia, Raiganj, Raipur, Rajkot, Rampurhat, Ranchi, Rewa, Rourkela, Rudrapur, Sagar, Sambalpur, Shillong, Shimla, Siliguri, Solan, Srinagar, Surat, Suryapet, T.Puram, Thiruchirapalli, Thrissur, Tirunelveli, Tirupathi, Udaipur, Varanasi, Vijaywada, Visakhapatnam, Warangal, Wayanad

Commodities

Rice, Wheat, Atta Wheat, Gram Dal, Tur/Arhar Dal, Urad Dal, Moong Dal, Masoor Dal, Sugar, Milk, Groundnut Oil, Mustard Oil, Vanaspati, Soya Oil, Sunflower Oil, Palm Oil, Gur, Tea Loose, Salt, Potato, Onion, Tomato

States	Districts
Andhra Pradesh	Guntur, Visakhapatnam, Anantapur,
	Kurnool, Eluru, Vizianagaram, Nellore,
	Ongole
Gujarat	Valsad, Amreli, Porbandar, Navsari,
	Devbhumi Dwarka
Jharkhand	Hazaribagh
Madhya Pradesh	Vidisha, Bhopal
Maharashtra	Yavatmal, Beed, Vashim, Kohlapur
Rajasthan	Jaipur, Jodhpur, Dholpur, Sikar, Jhunjunu
Tamil Nadu	Thiruppur, Kanyakumari, Dindugul, Vellore,
	Trichy, Chennai, Nagapattinam
Telangana	Mahbubnagar, Nalgonda, Warangal,
	Karimnagar, Adilabad, Medak, Nizamabad,
	Srikakulam
Uttar Pradesh	Lalitpur, Sitapur, Farrukabad, Gorakhpur,
	Jhansi, Mainpuri, Baghpat

Perception Survey Districts