World’s Largest LED Street Lighting Programme

The LED based Street Lighting National Programme (LSNAP), currently running in the South Delhi Municipal Corporation (SDMC) area, was dedicated to the Nation on 9th January 2017. It is the World’s Largest Street Light Replacement Programme, which is being implemented by the Indian Green Energy Services Limited (IGESL), a joint venture under the Ministry of Power, Government of India.

The LSNAP programme is presently running in Purba, Hiralal Fede, Uttar Pradesh, Assam, Bihar, Jharkhand, Odisha, Chhattisgarh, Maharashtra, Andhra Pradesh, Karnataka, Goa, Madhya Pradesh, Gujarat and Maharashtra. A total of 16,519 lakh street lights have already been replaced in the country with LED bulbs, which is resulting in savings of 2,286 crore kWh, avoiding expenditure of 1,345 MW and reducing 2,271 lakh tonnes of greenhouse gas emissions per annum. The energy efficiency market in India is estimated at USD 12 billion that can substantially result in energy savings of up to 20 per cent of current consumption, by way of innovative business and implementation models.

The cumulative savings of Rs. 335 crores in next 7 years and Rs. 50 crores per annum beyond that, through this programme, is expected to help in investment in social development initiatives and that has resulted in a great success. The number of people not able to spend an extra money.

Road Connectivity Project for Left Wing Extremism Affected Areas approved

The Cabinet Committee on Economic Affairs (CCEA), chaired by the Prime Minister, has approved a Centrally Sponsored Scheme namely “Road Connectivity Project for Left Wing Extremism (LWE) Affected Areas” to improve the rural road connectivity in the worst LWE affected districts from security angle.

The project will be implemented as a vertical under Pradhan Mantri Gram Sadak Yojana (PMGSY) to provide connectivity with necessary sub-center and main center roads in 44 worst affected LWE districts and adjoining districts, critical from security and communication points of view. The roads will be operable throughout the year irrespective of all weather conditions. Under the project, construction/upgradation of 5,411 km road and 326bridges/Cross drainages works will be taken up at an estimated cost of Rs. 33,729 crore in the above district. The fund sharing pattern of JFR road project will be same as that of PMGSY i.e. in the ratio of 60:40 between the Centre and States for all States except for eight North Eastern and three Himalayan States (Uttarakhand, Himachal Pradesh and Uttarakhand) for which it is 50:50. The likely duration of implementation of the project in four phases 2016-17 to 2019-20. The “Road Connectivity Project for LWE Affected Areas” envisaged in 8 (eight) States including the 31 worst affected LWE districts which account for 80% of total LWE violence in the country and 140 adjoining districts critical from security angle as per the report and list of roads/districts provided by the Ministry of Home Affairs. The roads taken up under the scheme would include other District Roads (ODRs), Village Roads (VRs) and upgradation of the existing Major District Roads (MDRs) that are critical from the security point of view. Bridges up to a span of 100 metres, critical from security angle would also be funded on those roads.

PUBLICATIONS DIVISION’S PARTICIPATION IN WORLD BOOK FAIR, 2017

Publications Division (PD), like every year, participated in the World Book Fair, 2017 organized in New Delhi at Pragati Maidan from 1st January 2017. The Division, a pioneer in publishing books on Art, Culture and Heritage received very encouraging response from the visitors.

PD has published several books on Gandhian thought including the Collected Works of Mahatma Gandhi (CWMG) in 100 volumes, in English and Sanskrit, Gandhi Narang, Gandhi in Mind which is considered the most comprehensive and authentic collection of Gandhi’s writings.

The titles of PDG under the ‘India’ series, published books on Rashtrapat Bhavan and ‘Couns of India’ attracted good reader attention. The visitors also showed interest in e-books bought from the PDG’s stall and a special rew of speciality put up as part of PDG’s stall to highlight the e-books of PDG. The visitors also used the opportunity to subscribe to the journals brought out by PDG.

Fourteen books on varied topics including children’s books, books on history, culture and other contemporary topics were released during the fair. To name a few: the book entitled ‘(LLE) Vanavil Kathai, Ulagai, Sandhi Il Gudya, Bharati Il Uska Kahi, Bharati Il Usaka Kahi, Bapuva Il Kudhu, Vanavil a Vanavil, Vanavil a Vanavil, Vanavil a Vanavil, Vanavil a Vanavil’ was published.

Three book discussions were also organized during the fair on the topics of “Abhijit Ganguly (Labour), The Rise of Indian Economists in the 21st Century”, “M.Thiru M.K. Stalin” and “Liberation of Mahatma Gandhi: Reading out to Youth in Digital Age.”

One of the significant highlights of PDG’s participation was the facility of cashless transactions through Debit/Credit Card and also through Bharat Cash portal. Out of token sales, around 32% of the sales were done through Debit/Credit Cards. The estimated sales of books and journals of PDG during the nine-day Book Fair exceeded Rs. 17.00 lakhs which was highest ever in the history of PDG.
CONTENTS

DEMONETISATION – A LOOK BACK AT THE LAST TWO MONTHS
Arun Jaitley .......................................................... 7

DO YOU KNOW? ...................................................... 9

FROM A CASH ECONOMY TO A LESS-CASH ECONOMY
Pravakar Sahoo, Amogh Arora .................................. 11

FOCUS

DEMONETISATION - IMPACTING ELECTIONS
S Y Quraishi ......................................................... 16

NORTH EAST DIARY .............................................. 19

LESS CASH ECONOMY: IMPACT ON BLACK MONEY
Timsy Jaipuria ........................................................ 21

CYBER SECURITY: ISSUES AND WAY FORWARD
B M Mehtre .......................................................... 24

SPECIAL ARTICLE

LESS-CASH ECONOMY: INDIA VIS-A-VIS THE WORLD
Arpita Mukherjee, Tanu M Goyal .................................. 28

ACHIEVING A CASHLESS RURAL ECONOMY
Sameera Saurabh .................................................... 34

DIGITAL TRANSFORMATION: BOOSTING RURAL ECONOMY
Sandip Das ............................................................. 38

DEMONETISATION: A STEP TOWARDS LESS CASH ECONOMY
D S Malik ............................................................... 42

PAYMENT SYSTEMS IN INDIA–DRIVING “LESS CASH ECONOMY”
G Raghuraj ............................................................. 47

DEMONETIZATION, CASHLESS ECONOMY AND DEVELOPMENT
B K Pattanaik .......................................................... 52

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When the Prime Minister announced demonetisation of 500 and 1000 rupee notes on the night of 8th November 2016, the first reaction all over the country was one of stunned disbelief.

The main objective of this move was to curb black money, corruption and fake money menace. With inflation and the cost of commodities going up daily, the 100 rupee and 50 rupee notes had become virtually invisible in the purchase domain. And, the joke going around was that the only two people who would accept 10 rupee notes were god and the beggar!

In India demonetisation was undertaken twice in the past, once in 1946 and the second time in 1978. However, during both those times, the Indian economy was not so vibrant. The notes demonetised were of high denominations with very few people having access to these high denomination notes and hence not much hardship was faced by the common man. However, the present demonetisation announcement had widespread repercussions. The 500 and 1000 rupee notes being the most widely circulated denominations, their demonetisation left people with no cash in hand even to purchase daily perishables like bread, milk and eggs, vegetables and fruits. How was fees to be paid, salaries to be given, et al became daily concerns for the common man. The cash crunch in banks and ATMs added to the people’s woes. There was clamor to deposit cash in bank accounts, exchange old notes for new ones, and to withdraw scarce cash from ATMs.

The only fact that actually gave the common man solace was the stated purpose of the demonetisation i.e unearthing of black money and curbing of terror financing. The Prime Minister, in his speech, had declared that the step would strengthen the hands of the common citizens in the fight against corruption, black money and counterfeit notes. The common man, frustrated by the problems caused by black money economy and also the violent proclivities of terrorist organisations funded by black money, was glad that some drastic action had been taken to put an end to these activities.

Another motive of the government in demonetisation was to create a cashless economy. Cashless transactions have the benefit of transparency i.e. all transactions can be traced and tracked. This helps the government to track payment to terrorist organizations and other anti-national activities. At the same time, the existing white money of the people remains with banks and also in knowledge of the government facilitating its recycling into the system for giving loans to the needy and for development activities.

However, in a country where a large proportion of the population is illiterate and the rural areas have inadequate infrastructure for digital transactions it is not possible to create a totally cashless economy. So, the effort has now been to create a less-cash economy i.e. a system of economy where part of the transactions are in cash and the rest in digital payments. Incentives are being offered to those who make digital payments as also those who make arrangements for accepting payments through digital methods.

One major cause for concern in the less cash economy has, however, been the danger of cyber crimes. While, the digital methods reduce the risks involved in carrying cash, they are prone to cyber security risks. At the same time there are definite solutions to handle cyber crimes. Often it is not the technology that fails but carelessness on the part of the user that results in cyber security hazards. The need, therefore, is to have stricter policies to ensure high cyber security standards and to educate people about precautions they need to take to minimise vulnerability.

Digitisation of the economy has been undertaken in various countries with some being successful and some not very successful. The most successful effort so far has been in Sweden. How successful it will be in India will depend on how much awareness is created among India’s vast illiterate and semi-literate population, especially in rural areas, who have virtually no or very less access to internet. With effective government policies to deal with cyber security issues and large scale awareness drives to educate people, one can hope to see India become a global player in the digital economy.
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Source:
Budget documents and CGA.

Central Plan Outlay by Sectors in BE 2015-16 (in per cent)
More than two months have passed since the Prime Minister announced the decision that high denominational currency notes would cease to be a legal tender. Subsequently those notes have been demonetised. When 86 per cent of a country’s currency constituting 12.2 per cent of its GDP, is squeezed out of the market and sought to be replaced by a new currency, there would obviously be significant consequences of that decision. Now that the remonetisation has moved ahead, it would be worthwhile to analyse the rationale behind the decision and its impact.

Steps against Black Money

The present Government had absolute clarity from day one that it would move against the shadow economy and black money. It’s first decision was to constitute SIT under the directions of the Supreme Court. The Prime Minister had proposed to the G-20 at Brisbane that international cooperation in sharing information with regard to base erosion and profit shifting should be expedited. The arrangement with the United States furthered this object. The Government completed its agreement with Switzerland that w.e.f. 2019, details of assets held by Indian citizens in Switzerland and vice versa would be provided to each other. Since 1996, the Double Taxation Avoidance Treaty with Mauritius was being renegotiated. The treaty effectively incentivised round-tripping. It was renegotiated. Similar treaties with Cyprus and Singapore have also been renegotiated. The Black Money Law dealing with illegal assets outside India opened a window for disclosure with 60 per cent tax and provides a ten year imprisonment.

The Income Declaration Scheme (IDS) 2016 was highly successful with a 45 per cent tax. The PAN card requirement for cash transaction beyond rupees two lakhs put hurdles on expenditure through black money. The Benami law was legislated in 1988 and never implemented. It was amended and has been put into action. The GST, which is scheduled to be implemented this year, will provide for better indirect tax administration and being a more efficient law will check tax evasion. The demonetisation of high denominational currency notes was the big step in the same direction.

The New Normal

In the year 2015-16, 3.7 crore assesses of the total population of over 125 crores, filed income tax returns. Out of these, 99 lakhs declared income below Rs.2.5 lakhs and paid no taxes; 1.95 crores declared income less than Rs.5 lakhs; 52 lakhs declared income between Rs.5 to10 lakhs, and only 24 lakhs declared income above Rs.10 lakhs. No better evidence is required.
to substantiate that both in the matter of direct and indirect taxes India continues to suffer being a hugely tax non-compliant society.

Expenditure required for poverty eradication, national security and economic development have to be compromised with on account of tax non-compliances. For seven decades the Indian “normal” has been to undertake transactions partly in cash and partly in cheque. “Pucca” and “Kachha” accounts are a part of the business language. Tax evasion has been considered as neither unethical nor immoral. It was just a way of life. The Prime Minister’s decision is intended to create a new “normal”. It seeks to change the expenditure pattern of India and Indians. It is obviously disruptive. All reforms are disruptive. They change the retrograde status quo. The demonetisation puts a premium on honesty and penalises dishonest conduct.

The Adverse Consequences of Cash

Paper currency is a zero interest anonymous bearer bond. It has no name or history attached to it. Crime can take place with or without cash but excessive cash as a medium of exchange is favoured by the underground economy. It results in non-compliance in the matters of tax payments which creates an unjust enrichment in favour of the evader as against the poor and the deprived. Mountains of cash money reach tax havens through the hawala route from the original paper currency. Cash facilitates real time untraceable payments. Cash is the medium which funds bribery, corruption, counterfeit currency and terrorism. Ethical and developed societies aided by technology have consistently moved towards banking and digital transactions as against the excessive use of cash. Paper currency opens the doors for many vices. When Governments are able to collect more tax from tax evaders, they are in a better position to collect less tax from everyone else. Reducing cash may not eliminate crime and terrorism but it can inflict serious blow on them. States have shown that the stores of cash do not disappear on their own till Governments take active steps to reduce the quantum of paper currency.

The Magnitude of the Decision

The Prime Minister’s decision to replace the high denominational currency and eventually demonetise it required both courage and stamina. The implementation of the decision carried pain. It can lead to short

BHIM will create Equality

The new indigenously developed payment app ‘BHIM’ (Bharat Interface for Money) has been launched by the government named after the main architect of the Indian constitution, Bhim Rao Ambedkar. BHIM will curb black money system and create equality in the society. BHIM is a biometric payment system app using Aadhar platform and is based on Unified Payment Interface (UPI) to facilitate e-payments directly through banks. It was launched to stress on the importance of technology and digital transactions. It can be used on all mobile devices, be it a smartphone or a feature phone with or without internet connection.

The payments through the BHIM App can be made by just a thumb impression after the bank account is linked with Aadhaar gateway. The technology through BHIM will empower poorest of the poor, small business and the marginalised section.

The new app is expected to minimise the role of plastic cards and point of sale machines. The app will eliminate fee payments for service providers like MasterCard and Visa, which has been a stumbling block in people switching to digital payments.

The app can be used to send and receive money through smartphones. Money can also be sent to non UPI supported banks. Bank balance can also be checked through the app.
Drop in economic activity on account of the currency squeeze during the remonetisation period would have a transient impact on the economy. The decision involves high level of secrecy and printing substantial amounts of paper currency, distribution through banks, post offices, banking mitras and ATMs.

The fact that large quantum of high denominational currency has been deposited with the banks does not render this money to be legitimate cash. Black money does not change its colour merely because it is deposited in bank. On the contrary, it loses its anonymity and can now be identified with its owner. The Revenue Department would thus be entitled to tax this money. In any case, the amendment to the Income Tax Act itself provides that the said money, if voluntarily declared or if involuntarily detected, would be liable for differential and high rates of taxation and penalty.

The Situation Today

The period of pain and inconveniences is getting over. Economic activity is being restored. The banks today admittedly have a lot more money available in order to lend for growth. Since this money constitutes low cost deposits with the banks, it is bound to bring down the rate of interest. Both these things have already happened. Lakhs of crores, which were floating in the market as lose currency, have now entered the banking system. Not only has the money lost its anonymity, it’s owners, after being taxed, are entitled to put it to more effective uses. The size of the banking transactions and consequently the size of the economy is bound to increase. In the medium and long run, the GDP would be bigger and cleaner. Money entering into the banking system and officially transacted would give ample scope for higher taxation – both direct and indirect. The Centre and the State Governments would both stand to gain. The economy would also be serviced by both cash and highly digitized transactions.

Source: PIB

DO YOU KNOW?

LEGAL TENDER MONEY

Denomination of a country’s currency by law, must be accepted as a medium of exchange and payment for a money debt. While usually all denominations of the circulating paper money are legal tenders, the denomination and amount in coins acceptable as legal tender varies from country to country. This is also called lawful money.

The legal tender money is of two types:

(i) Limited Legal Tender Money: This is a form of money, which can be paid in discharge of a debt up to a certain limit and beyond this limit, a person may refuse to accept the payment and no legal action can be taken against. Coins are limited legal tender in India.

(ii) Unlimited Legal Tender Money: In this form of money, which can be paid in discharge of a debt of any amount. A person who refuses to accept this money a legal action can be taken against. Paper notes/currency are unlimited legal tender in India.

The ‘Legal tender’ is the money that is recognised by the law of the land, as valid for payment of debt. It must be accepted for discharge of debt. The RBI Act of 1934, which gives the Central Bank the sole right to issue bank notes, states that “Every bank note shall be legal tender at any place in India in payment for the amount expressed therein”.

The recognition or cancellation of the legal tender status is important because paper money derives all its value from the Government’s recognition of it. Also, for a piece of paper to function as a medium or exchange and store of value, it needs to enjoy unquestioning acceptance from the public. This can only be ensured by declaring such paper currency notes as ‘legal tender’ through a fiat, with the RBI or the Centre promising to ‘pay the bearer’ an equivalent sum if the currency note is presented to them.

Non-Legal Tender Money: It is a form of money, which is generally accepted, but legally is not bound to accept it. Such as cheques, bank drafts, bills of exchange, postal orders etc. are not legal tenders and are accepted only at the option of the creditor, lender, or seller. It is also called the optional money because it does not have legal backing and their acceptance is optional.
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From a Cash Economy to a Less-Cash Economy

On 8 November 2016, the government demonetised currency notes of two denominations: Rs 500 and Rs 1000. Together, currency notes of these denominations had accounted for more than 85 per cent of the total value of banknotes in circulation. Demonetisation caused a cash crunch and forced the government to push for electronics payments and transfers. Though the main pitch of demonetisation was towards curbing financing of terrorism and eliminating black money, a major shift towards a cashless economy emerged as a necessity. In fact, in his ‘Mann Ki Baat’ address to the nation on 27 November 2016, Prime Minister declared, ‘Our dream is that there should be a cashless society. This is correct that 100 per cent cashless society is never possible. But we can make a start with a less-cash society, and then cashless society will not be a far-off destination.’

Although the narrative of demonetisation has changed, the government has been sowing the seeds of a cashless economy. First, in 2014, the government launched the Jan Dhan Yojana in 2014; as on 20 April 2016, nearly 220 million accounts had been opened. In February 2016, the Government of India approved the guidelines for promoting payments through cards and digital means. A massive change from the informal cash-carry system to a formal financing payment system will give an impetus to the payments and settlement system in India. The best way to reduce corruption and black money in the economy is to move from an economy dependent predominantly on cash to electronic transfers, which needs universal banking access and facility.

A cashless economy runs on credit or debit cards, electronic funds transfer, or online shopping instead of cash. The idea of a cashless economy is actually a revolution from the fiat money to digital money, generally adopted with the aim of curbing the flow of black money and increasing transparency of the flow of cash. All transactions are made with cards or through digital means—whether one has to pay bills, buy fruits, or take a bus or taxi ride. Just like traditional pocket wallets, e-wallets do not require cash in its physical form; these are linked to one’s bank account and payments are directly deducted from it. Internet banking and the recently launched Unified Payment Interface (UPI) are other products of technology that are directed towards going cashless, but e-wallets are the most prevalent and widely used. In fact, it is being opined that in the near future even credit and debit cards will become redundant as all transactions would be made possible through a

Digitising financial transactions can prove to be an effective means of curbing the large parallel economy in India. It would make bookkeeping easier and increase the tax base, and substantially reduce the need to carry cash and the risk of physical theft.

Pravakar Sahoo is Associate Professor, Institute of Economic Growth (IEG), Delhi. Amogh Arora is Research Intern, Institute of Economic Growth (IEG).
smartphone, and a mobile phone code would be sufficient to withdraw cash at ATMs, and there would be no need for a card.

**Advantages of a Cashless Economy**

The Indian economy is one of the fastest growing economies in the world, but it suffers from issues like black money, corruption, terrorism, illicit wealth, etc. To break the grip of corruption and black money, there have always been various ways like auditing and enforcement agencies, but the idea of cashless economy is more appealing, as most economic transactions would be part of the formal system and easy to track. In India, few use non-cash payment methods; only 10-15 per cent of the population is estimated to have ever used any kind of non-cash payment instrument, compared to 40 per cent of people in countries like Brazil and China. Meanwhile, as of 2014, India’s ratio of currency in circulation outside of banks to GDP was 11.1 per cent, higher than other emerging economies like Russia, Mexico, and Brazil. This indicates ample scope for strengthening the base of the untapped non-cash user market. Increasing the horizon of non-cash users along with convenient, reliable, secure, and affordable payment systems will have implications for access to other financial services such as loans and insurance to the unbanked, particularly in light of the financial inclusion initiative. However, the challenge is to strengthen the digital infrastructure of banks and to make transactions safe.

Cashless society offers the government and the public many advantages.

- **Convenient Mode of Payment:** The ease with which every transaction can be carried out certainly promotes going cashless. The cashless economy offers everyone (apart from low-income groups) enormous benefits, including reduction in transaction cost of carrying and doing business/transactions in cash.

- **Lower Risk:** With proper cybersecurity, online payment is relatively risk-free, whereas there are always safety issues with physical cash.

- **Reduction in the Cost of Printing Money:** Printing of new currency notes and replacement of soiled and mutilated currency notes involves cost. In 2015, printing currency cost the RBI Rs 27 billion. The cost can be reduced if the economy moves towards a cashless economy.

  **The move towards a cashless economy or electronic transactions might help curb black money by reducing tax evasion and ensuring transparent functioning of the economy. Ultimately, the risk of carrying money would fall, and a more planned structure of credit access and financial inclusion would come up. Government expenditure will increase in the direction of development process, as there is a possibility of increase in transparency and the flow of revenues.**

  - **Decrease in Crime Rate:** Many anti-social and illegal activities like drug trafficking, prostitution, financing of terrorism, and money laundering are carried out only in cash. A cashless economy will make it difficult to carry out such operations.

  - **Good for the Banking Sector:** A digital economy will help the banking system. Once people get used to digital payment and transfers, there would be less demand for cash holding or cash hoarding; this would leave more cash in the banking system and thereby enable more savings.

- **Transparency and Monitoring:** Cashless transactions can be easily monitored by the government. Therefore, tax evasion would be difficult and would enhance revenue collection.

  The past two months have witnessed a significant increase in the digitisation of transactions in India and in installations of swipe machines, be it at small shops or by street vendors. There has been a rise in the quantum of e-transactions, enabling speedy payments, which is good news for the economy. Mobile wallets have seen a formidable rise, and it is quite possible that a large number of Indians will move straight from cash to mobile wallets. MobiKwik claims it will easily hit $10 billion in payments volume by 2017 and will soon be accepted by over a million merchants.

  The move towards a cashless economy or electronic transactions might help curb black money by reducing tax evasion and ensuring transparent functioning of the economy. Ultimately, the risk of carrying money would fall, and a more planned structure of credit access and financial inclusion would come up. Government expenditure will increase in the direction of development process, as there is a possibility of increase in transparency and the flow of revenues.

  However, the flip side of moving towards a cashless economy in a developing economy like India is that for poor people, cashless transactions are just not practical. Demonetisation has particularly hit the informal society and unbanked community. This section of society would need longer to adapt to move to a cashless society. The mode of transaction might seem difficult to adopt initially but it will ensure that
the country takes its first step towards a transparent economy. The end of cash may seem like fancy thinking but certainly cash is on its way out.

**Towards a Cashless Society**

Soon after demonetisation, government took a variety of steps to motivate people and seek their attention towards various digital modes to be adopted so that people do not have to stand in long queues either outside a bank or an ATM when there was a cash crunch.

- **Lucky Grahak Yojana** for consumers and Digi Dhan Vyapar Yojana for merchants:

  With the aim of incentivising digital payments, the government on 25 December 2016 launched digital lottery schemes—Lucky Grahak Yojana for consumers and Digi Dhan Vyapar Yojana for merchants. With incentive schemes like these, the Digital India movement will certainly strengthen the country’s economic backbone. Only transactions processed through RuPay cards, Unstructured Supplementary Service Data (USSD), UPI, and Aadhaar-Enabled Payment System are part of the schemes.

- **Vittiya Saksharta Abhiyan:** The Vittiya Saksharta Abhiyan has been launched to encourage people to adapt to a digital economy and cashless modes of transaction. The main purpose of this campaign is to create awareness and to encourage the people and to motivate them to go digital. The Ministry of Human Resource Development appealed to the people to use a digitally enabled cashless economic system for funds transfer. It also appealed to private and government institutions of higher studies to receive and pay nothing in cash, and develop a cashless campus (shops, canteen, and services). This appeal motivated students, faculty, and staff members of many educational institutions to participate in accomplishing this challenging task.

  Also, many people have enrolled at the webpage launched by the HRD Ministry and the positive feedback and suggestions show the enthusiasm among the people.

- **BHIM (Bharat Interface for Money):** On 30 December 2016, the Prime Minister launched a new e-wallet app, BHIM, to make it easier to transact online. The Aadhaar-based mobile payment application will allow people to make digital payments directly from their bank accounts. One’s phone number is linked with the bank account and hence can transfer money at the click of a button. However, though the app can be synced with UPI-enabled bank accounts, only one UPI-enabled account can be added to BHIM. A person with two bank accounts will have to switch between the two to perform UPI transactions on both accounts.

- **RuPay:** RuPay is an Indian version of a credit or debit card and similar to international cards such as Visa or MasterCard. The National Payment Corporation of India (NPCI) launched RuPay under the Jan Dhan scheme. Banks provide every account holder a RuPay debit card with Rs 1 lakh accident insurance. RuPay works on three channels (ATMs, point-of-sale (POS), and online sales) and is the seventh such payment gateway in the world. Since crores of poor people have a RuPay debit card, this is an effort to involve lower-income groups in the cashless economy. However, the primary focus of RuPay is financial inclusion and it needs to match all the policies and standards of credit/debit cards to be a world-class financial product.

- **Aadhaar Payment App:** On 25 December 2016, government launched an Aadhaar payment app; it links the Aadhaar Card of an individual to his/her bank account. This application will be connected to a biometric reader and customer will enter the unique Aadhaar number and choose a bank for the transaction. One special feature is that this app can be used by a person to make payments without any phone.

**The Sweden Experience**

Sweden is one of the top five cashless economies in the world. It has already adopted effective policies to facilitate transactions using mobile or plastic payments through digital infrastructure. Sweden is the first country to promise to go 100 per cent cashless by 2020, and leads the race to become a cashless society with banks, buses, street vendors, and even churches expecting plastic or virtual payments. According to the central bank (the Riksbank), cash transactions made up barely 2 per cent of the value of payments made in Sweden in 2016, and the figure is expected to drop to 0.5 per cent by 2020. Around 900 of Sweden’s 1,600 bank branches no longer keep cash on hand or take cash deposits and many, especially in rural areas, no longer have ATMs. Circulation of Swedish krona has fallen from around 106 billion in 2009 to 80 billion in 2016.

Technology plays an important role when we talk about the policy shift from cash to cashless. *Swish* (a mobile app owned by six Swedish
banks, and the result of a collaboration between several major Swedish and Danish banks) has seen huge uptake in Sweden. The app allows users to make real-time transactions from their bank account to another, whether they are at a restaurant, in a cab, or at the flea market. The user base of *Swish* has grown by 1,20,000 users per month. In December 2014, over 1.69 billion kronor got transferred using the *Swish* app. The company expects to have three million users by the end of 2017.

However, there are huge differences in terms of base and other crucial dimensions. As on 31 December 2015, the population of Sweden was estimated at 9.85 million people; literacy was almost 100 per cent. India had a population of 1,260 million; literacy was only 75 per cent. The population of illiterate people in India was almost 30 times the entire population of Sweden. Per capita income is 435 per cent of the world average in Sweden but 14 per cent in India. In India, 68 per cent of the population lives in rural areas; in Sweden, 85.5 per cent of the population is urban. It is difficult for India to think along the lines of Sweden; nonetheless, India has come up with an app called BHIM, although large-scale adoption has not happened yet, and a large section of the Indian population is unfamiliar with the technology. The RBI and commercial banks need to come up with an innovative idea that enables cashless transactions and makes them safe and easy to perform.

In India, greater adoption of the real time gross settlement system (RTGS) and the national electronic fund transfer (NEFT) by all segments of users increased volumes almost threefold between 2013 and 2016, and the volume of mobile banking transactions increased nearly sevenfold. Both ATM and POS card transactions have grown significantly, and POS debit card usage has picked up significantly. Clearly, banks have been widely adopting the non-cash payment mode to meet the objective of making transactions faster, improving efficiencies, and tackling the growing burden of government welfare services through bank accounts (subsidies to LPG consumers, MNREGA payments). Notwithstanding, less than 5 per cent of all payments are electronic; India continues to be driven by the use of cash.

**Challenges Ahead**

Demonetisation has encouraged the entire economy to use less cash but has left various challenges for the people and also for the government. There is unanimous agreement on the need to go digital. But can this be achieved without proper infrastructure? In rural areas, there are only 20.8 per cent of ATMs of public sector banks and of the State Bank group) and 8.5 per cent of the ATMs of private sector banks. It is difficult to find an ATM in a rural area. E-wallets and mobile payment systems need a smartphone and an internet connection, but less than a quarter of the population owns a smartphone, a fast and reliable internet connection is expensive and difficult to find, public wi-fi hotspots and mobile phone battery charging stations few and far between, and cybersecurity remains a key concern. How can one be sure that swiping a card at small shops and vendors is risk-free and the details shall remain confidential? If a card is cloned, it might take several years for a person to recover his hard-earned money. In October 2016, more than 30 lakh debit cards were feared to have been exposed at ATMs and customers were told to change their PIN. A month later, when demonetisation led to a sudden surge in card transactions, the network was overloaded, card machines stopped working, and people had to queue long hours.

The government has consistently argued that the main purpose of demonetisation is to fight corruption. In a democratic system of government, political party funding is one of the major sources of corruptions. In fact, high-level corruption does not involve cash. Therefore, any attempt at fighting corruption that does not first involve bringing transparency to the funding of political parties cannot be meaningful or successful. From educating people in rural areas to improving infrastructure and logistics, the government will have to spend a lot of time in deciding policies to overcome these flaws. India will not turn cashless overnight; first, the government will have to consider the problems people face and then how to overcome them.

**Conclusion**

Achieving a 100 per cent cashless society will never be possible, but one can always start from a less-cash society and then move towards becoming mostly cashless. The move towards a mostly cashless society is extremely incremental. Though cash will still play an important role for discrete transactions, especially in the most remote areas and informal sector, even these transactions can be automated. With upcoming technology, it is possible to design applications where the most informal purchase can be automatically debited from the buyer’s bank accounts. Also, if cash in circulation decreases, and most transactions are digital, people will tend to hold less cash and hence interest forgone earlier for holding cash would decrease. Digitising financial transactions can prove to be an effective means of curbing the large parallel economy in India. It would make bookkeeping easier and increase the tax base, and substantially reduce the need to carry cash and the risk of physical theft. Fake currencies and their use will fade away, and money laundering will go down. While going digital facilitates the tracking of financial transactions, it also increases the cost. IT infrastructure would be required on a grand scale, which India severely lacks even after 70 years of independence. However, move towards less cash economy depends on how effectively we deal with issues like cyber security, online frauds, financial inclusion into the formal banking sector, awareness campaigning and proper redressal system.

(E-mail: pravakarfirst@gmail.com amogh.arora04@yahoo.com)
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for far too long, Indian politics has seen extensive use of money power to influence the voters and win elections. Traditional wisdom with regard to polls in India has it that distribution of money and liquor on the night before polling decides the representatives of the people. There is a strong evidence that over the years free and fair elections have been sacked in bags of currency notes being peddled to the nation by our political parties.

An analysis by Association of Democratic Reforms (ADR) shows that among the affidavits declared by candidates in the 2011 assembly elections in Tamil Nadu, West Bengal, Kerala, Puducherry and Assam, 576 candidates (16 per cent of the 3,547 analyzed), were crorepatis (multi-millionaires) and yet 50 per cent of the candidates had never filed income tax returns. The situation cannot be different in other states.

The seed of corruption sown in elections eventually germinates in corruption in administration in the country. When candidates and political parties spend crores of rupees in election campaigns, they have to generate enough funds by hook or by crook when they come to power. The ‘collection drive’ that follows inevitably leads to a politician-bureaucracy nexus. When the two most important instruments of governance join hands in this unholy alliance, corruption spreads in all directions, horizontally and vertically, and seeps into every sphere of life. The lowest functionaries like a constable or patwari when accosted, have a stock answer, “Ooper tak dena hai” (we have to pay up to the top).

State Funding of Polls

Not that political leaders are happy with rampant use of money in elections. They have expressed concerns about it. However, in the absence of a serious discussion to find a solution, it seems their concern is mere lip service. The problem has been discussed in parliamentary debates, committees have been constituted and the only refrain we hear is that there should be state funding of elections as a solution to the problem.

The most famous committee on this subject was the Indrajit Gupta Committee set up in 1999 which consisted of many political stalwarts like Dr Manmohan Singh, Mr Somnath Chatterjee and the like. The committee suggested only partial state funding of elections and that too with a condition that there must be genuine inner party democracy – which no party is willing to consider.

The unprecedented step of demonetization may hopefully turn out to be a blessing in disguise for conducting free and fair elections, where cashless transactions will ensure higher level of transparency and scrutiny.

The author is the former Chief Election Commissioner of India and the author of the book "An Undocumented Wonder - The Making of the Great Indian Election".
The ECI has been deeply concerned about the use of money to bribe voters ahead of polls. In my inaugural press conference on taking over as chief election commissioner (CEC), I had given myself two challenges — abuse of money and voter apathy. Two new divisions were created to addressing these issues seriously. Both met with significant success, one achieving the highest-ever voter turnouts ever since and the other unearthing crores of rupees and goods including liquor. Our proactive steps led to some landmark achievements including unseating and disqualifying a sitting MLA in Uttar Pradesh and countermanding two Rajya Sabha elections in Jharkhand.

Working in tandem, voter education program sought to educate and motivate voters not to accept money for votes. The National Voters Day -NVD- on 25 January every year since 2011, the biggest voter enrolment programme in the world, administered a pledge to the new voters, mostly youth, for ethical voting. Almost 140 million voters have so far taken this pledge.

With a proactive expenditure control division, a supportive voter education division and a watchful media and civil society, manipulating expenditure to avoid the electoral code of conduct has become increasingly difficult. Yet, it’s a sad reality that black money in elections still continues.

It is a fact that democracy cannot function without money to contest elections. However, money cannot be allowed to dominate the process so much that only the rich can contest and hijack the political system.

The law, therefore, prescribes a ceiling on expenditure of the candidates – though strangely not on the expenditure of the political parties. The absence of a ceiling on political parties’ expenditure negates the whole logic of a ceiling and creates conditions of financial indiscipline. To outdo their rivals, all parties spend thousands of crores of rupees. In the 2014 general elections, the amount spent on campaigns was estimated at a staggering Rs 30,000 crore.

Where does this money come from? The sources could be: corporate funds, small donations, sale of coupons and membership fee, besides interest on deposits, rental and revenue income. There is no transparency in the source of most donations. As much as 75-80 percent of all funds are shown as cash donations without disclosing the source. This is a serious matter. It may be foreign money or from crime, drug or real estate mafia.

Cash-for-votes notoriety as a regular feature in our elections was conveyed by US diplomatic cables, leaked by WikiLeaks. A cable quoted a confidante of a Union Minister from Tamil Nadu distributing up to ₹5,000 per voter in a by-election in 2009. After his victory, the politician announced that his formula was a sure winner. This notorious “Thirumangalam formula” became our biggest challenge.

Around ₹300 crore of unaccounted cash was seized by the commission during the 2014 election. Cash seizure across all assembly elections since 2014 has been at an all-time high. Bihar, for instance, registered the highest seizure of cash (₹19 crore) during the assembly polls in 2015. In Tamil Nadu, the figure crossed ₹100 crore.

The public perception of the politicians today is that they are all corrupt.

Such an image of politicians is not good for democracy. We have had an impressive line-up of honest politicians in the country. In fact, India has grown into a major power mainly due to the great political leaders we have had.

It has often been suggested that the presence of black money in large quantities, especially in the real estate sector, prevented India from suffering many of the ill effects of the global financial crisis of 2008, but the pernicious effect of money power in elections in India has no such upside. The demonetisation of high denomination notes of Rs. 500 and Rs. 1,000 announced by the Prime Minister came at the right time, just
ahead of five state elections. Parties and candidates who were ready with the sackful of notes for public bonanza were fixed not knowing what to do with that money.

I personally felt that this move would have a big impact on the ongoing polls, as this is the time that black money is in the distribution pipeline. Even fake money from across the borders that also increases its tentacles during the polls would be hit.

Earlier, disbursal of money to various areas used to be done closer to the date of polling, and after the imposition of the model code of conduct. When the ECI started cracking down, political parties moved up the disbursal date. That’s why announcement of demonetisation a few weeks before the elections hit the money distribution plans at the right time.

In my book, An Undocumented Wonder - The Making of the Great Indian Election, I have detailed 40 different ways in which we found black money being disbursed in polls. I have no doubt that new ways would be found to do so again, but it may take time and these set of polls might escape being deluged with illicit money.

The lessons learnt in elections must be remembered when consolidating the gains of demonetisation. Just a couple of days after the demonetisation decision announced by the Prime Minister I had expressed my fear in a newspaper article that to hurt the move, a money-laundering industry will mushroom with the complicity of bank officials. This turned out to be a right forecast. I had cautioned that the government must watch out for the omnipresent touts and colluding bank officials. This advice was based on experience. Once our (EC’s) Expenditure vigilance team intercepted a vehicle carrying over Rs. 2 crore. We were told that the money was going to refill the ATM. So we let it off with our apology. The next day, another team caught a vehicle with double the amount with the same explanation. When a third vehicle was interrupted with Rs.11 crore, we decided to investigate and found that the van was not accompanied by an armed guard and did not follow other security protocols as mandated. I immediately spoke to Governor of Reserve Bank of India, D Subba Rao who was shocked to hear of this mode of money laundering and ordered an investigation.

In the last set of Assembly polls concluded in May 2016, we saw an unprecedented step when the ECI was forced to cancel elections to two Tamil Nadu assembly seats, Aravakurichi and Thanjavur, for the uncontrolled use of money. The poll panel then wrote to the government seeking permanent legal powers to countermand polls on credible evidence of the use of black money.

Although the Law Ministry has rejected this proposal, I am hopeful the Prime Minister will consider it in pursuance of his war against black money.

The BJP’s economic affairs cell chief, Gopal Krishna Agarwal, said the demonetization drive would address, at least for the duration of this set of polls, the problem of electoral financing from the supply side. “Till now, there was pressure on political parties to give an account of their spending in polls, but on circulation of this money, regulation was not effective. This will hit the supply side and will bring down the volume of spending quite significantly,” he said.

These claims will be proved right only if the follow up action on the long pending electoral reforms proposals is taken without further delay.

Dr. Trilochan Shastry of the Association of Democratic Rights (ADR), an election watchdog, said that while there would be an impact on the funds available for disbursal, it could encourage parties to promise freebies from the exchequer to balance out matters. “There is a Supreme Court directive to the Election Commission on this, but it needs to be monitored closely,” he said.

Demonetisation and the subsequent developments, even if not originally intended, have a bearing on electoral reforms. After demonetisation threw up huge logistical challenges, the government’s campaigns to promote e-banking, e-wallet etc have come on everybody’s lips. This, again, is a positive development to end black economy. When even a rickshaw puller or vegetable seller is told...
to stop cash transactions, this will lead to establishment of a stronger banking system and higher level of financial inclusion.

However, this has led to an inevitable demand that exemption of cash donations to political parties below Rs 20,000 must also be dispensed with straight away. This will take care of the non-transparency of 80 per cent of political funding which all political parties have shown as cash donations. This amounts to an average Rs 1,000 crore per year.

Another development is the Prime Minister’s directive to his party legislators to disclose all their bank transactions since November 8. Many questions were raised. My reaction is that instead of criticising it and suggesting what the PM could have done better, why not welcome it as a first positive step towards the financial transparency of politicians? Another great move of the government is to pass an Act to curb benami property deals and the subsequent crackdown. This should also have a salutary effect on the black money in elections as this is the biggest source of illicit election funding.

The unprecedented step of demonetization may hopefully turn out to be a blessing in disguise for conducting free and fair elections, where cashless transactions will ensure higher level of transparency and scrutiny. I hope the time for long-pending electoral reforms has finally come.

(North East Diary)

BIOTECHNOLOGY PROJECTS IN ARUNACHAL PRADESH

The Government will set up 50 Biotech Laboratories in Senior Secondary Schools of Arunachal Pradesh under the scheme Biotech Labs in Senior Secondary Schools (BLISS) to encourage young dynamic students and Rs. 75 to 100 crores have been earmarked for implementing the projects.

A State Level Biotech Hub will also be set up in the State for conducting high-end researches and training North Eastern Region Researchers and students, to create and train employable manpower. For protection of indigenous traditional knowledge of the State, an Intellectual Property(IP) Cell will be set up in the State Science and Technology Council. Five centres of excellence will also be established in different areas of Biotechnology in the State.

Setting up biotechnology labs in the schools will directly benefit more than ten thousand students and teachers of the state towards promoting education in biotechnology and attracting billion young students with multidisciplinary research areas. The outreach programme will immensely help in generating awareness and enhancing literacy and promoting public understanding of biotechnology in the state. The outreach programme will have direct benefit to more than five lakh people including students in the state, towards understanding biotechnology comprehensively/holistically.

These projects will lead to more than 1500 natural dye extraction units, 100 banana fibre and extraction units, more than 150 fruit processing units, more than 300 mushroom production entrepreneurs, 200 medical and aromatic cultivation units, and more than 50 orchid cultivation entrepreneurs and more than 100 vermi-culture entrepreneurs.

Implementation of Biotechnology projects will also lead to developing market linkages to facilitate entrepreneurs for marketing their produce that will help in income generation, sustainable Socio-techno-economic development in rural tribal areas at large. The Project will also lead to biotechnological implementation and sustainable utilization, development and conservation of bio resources of the State.

NORTH EASTERN INSTITUTE OF AYURVEDA AND HOMOEOPATHY AT SHILLONG

The North Eastern Institute of Ayurveda and Homoeopathy (NEIAH), was inaugurated in Shillong, Meghalaya recently. It is the second Ayurvedic College in the North East Region with a Homeopathy college and the only Central Academic Institute of Ayush.

This Institute will cater to the needs of all the states of the North East. The establishment of this Institute will solve the problem of scarcity of doctors in remote areas of the North Eastern regions to a great extent as it will produce quality medical graduates in the stream of Ayurveda and Homeopathy and thereby it will suitably help in implementing and improving the execution of national health policies.
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Less Cash Economy: Impact on Black Money

As India decided to fight against shadow economy on November 8, what helped in pulling up the day to day transactions was the fact that people could use alternatives of cash.

With the country moving to a new way of concluding payments i.e., by using credit/debit cards, electronic wallets, mobile banking etc, what has got hit hard the most is the movement of cash.

The vision of the present government to march ahead with all measures necessary to achieve a more transparent and less corrupt society are aimed at rooting out black money and moving to a cashless economy in which transactions can be tracked, which, in turn, lifts tax collections and ensures that credit flows to the less privileged.

According to a 2015 report by PricewaterhouseCoopers, it pegs cash transactions at 98 per cent of consumer transactions in value terms and 68 per cent in volume terms, much higher than comparable economies, such as China, Brazil and South Africa.

Experts and a certain school of economists see cash transactions as a deterrent to the idea of financial inclusion. Also, what comes as a challenge with such high rates of cash movements is the money and resources spent to deal with cash.

But what gets a straight pull from all the efforts made to push digital transactions is the black economy.

The parallel economy which has no transparency and thrives on anonymity of the currency has taken a back seat as people are left with no option but to resort to cashless transactions.

If all transactions are electronic then all transactions can be chased, can be recorded, checked. And thus it will be possible to curb the menace of the black economy which has been denting the tax base, tax collections, encouraging terror financing, drug distribution, generation of fake currency and much more.

In a cyclical pact it will also reduce real estate prices because of curbs on black money as most of the black money is invested in real estate prices which inflates the prices of real estate markets.

Interesting to note is the fact that India continues to be driven by the use of cash and less than 5 per cent of all payments happen electronically. However the Finance Minister, in the 2016 budget speech, talked about the

The author is currently Special Correspondent with CNBC TV18, with wide experience in the field. She specializes in writing on economic, socio-economic and politico-economic issues ranging from taxes, international trade relations, infrastructure, social schemes and many more.
idea of making India a cashless society to help curb the flow of black money.

Pushing the agenda forward during the demonitisation period, the apex bank -- RBI has also recently unveiled a document — “Payments and Settlement Systems in India: Vision 2018” — setting out a plan and mood to encourage electronic payments enabling India to move towards a cashless society or economy in the medium and long term.

In the financial year 2015, RBI spent Rs 27 billion on just the activity of currency issuance and management. Economists feel that at a time when the world is moving to digital payment mechanisms and plastic money, India’s spend on currency takes it on a regressive path.

As the Finance Minister says, less cash economy will also pave the way for universal availability of banking services to all as no physical infrastructure is needed other than digital which can be facilitated by the government very easily.

Not just this, some of the other advantages which too dent at the generation of black money is the fact that digital payments bring in greater efficiency in welfare programmes as money is wired directly into the accounts of recipients. Thus, once the money is transferred directly into a beneficiary’s bank account, the entire process becomes transparent. Payments can be easily traced and collected, and corruption will automatically drop, so people will no longer have to pay to collect what is rightfully theirs.

Building this wave of change, the Prime Minister urged people to start learning how the digital economy works wherein one can use mobile phones as banking devices and make payments. “Learn the different ways you can use your bank accounts and internet banking. Learn how to effectively use the apps of various banks on your phones. Learn how to run your business without cash. Learn about card payments and other electronic modes of payment,” he said. Asking people to bring a change starting from themselves to help the nation weed out black money.

(E-mail: timsy.jaipuria@gmail.com)
India moves towards Cashless Transactions to fight Black Money & Corruption

SPECIAL INCENTIVES to Encourage Digital Payments

Go Digital, Get Benefits

- Discount of 0.75% on digital payment at Central Government Petroleum PSUs
- 10% discount for toll payment on National Highways using RFID card/Fast Tags in 2016-17.
- Discount of 0.5% for monthly or seasonal tickets on digital payments from 1st Jan 2017 on suburban railway network. Free accidental insurance upto Rs 10 lakh on buying online ticket in Railways.
- No service tax on digital transaction charges/MDR upto Rs.2000 per transaction.
- Discount or credit of upto 10% on the insurance premium sold through the customer portals of public sector insurance companies on digital payment.
- Rural Regional Banks and Cooperative Banks to issue “Rupay Kisan Cards” to 4.32 crore Kisan Credit Card holders. Government will support this through NABARD.
- 2 POS devices will be deployed in 1 Lakh villages with population of less than 10,000. Government through NABARD will extend financial support.
- Central Government Departments & PSUs to bear transactions fee/MDR charges on digital payments. State Governments being advised to do the same.

6 easy ways to go cashless...

1. Cards, PoS
2. Aadhaar Enabled Payment System
3. UPI
4. e-Wallet
5. USSD

My Mobile...My Bank...My Wallet

More convenience, More savings
Cyber Security: Issues and Way Forward

B M Mehtre

Technological advances have brought many conveniences to modern society. One of the most important benefits is the “any where any time” paradigm. That is, you can carry out your work in the cyber world, from anywhere and at anytime. For example, you can do your tasks like buying a ticket, bill payment, placing order for goods and merchandise online. All such business transactions can be done from anywhere and anytime. The first such system, i.e. all electronic transaction, was first demonstrated in Hyderabad in 2001 [1]. The all electronic eco system was established, and household water bill payment was made electronically. The payment was through e-cheque issued by Andhra Bank to a resident account holder, Water Board who made their bills presentment and payment in collaboration with Andhra Bank.

The aim of Information Security is to provide confidentiality, integrity and availability of information. These (CIA) three parameters are also called security goals or security services. The other security objectives also include such other parameters as authenticity, authorization, accounting and nonrepudiation. This is illustrated as shown in Figure 1.

Cyber security is a process, technique or procedure to ensure information security goals. Various terms used to mean information security or cyber security, include IT security, digital security, electronic security, systems security, internet security etc.

Let us take an example of online banking. The customer account details (like name, address, bank balance, and transactions) forms important information for any bank and its customers. This information needs to be kept confidential (secret) from others, and to be known to only the customer and to the authorized/designated staff in the bank. Any leakage of this information (somebody else having access/knowing this info) is called a security breach. Similarly, communication between the customer and the bank has to be secure, that is, exactly the same message has to reach the bank (and vice versa), and it should not get altered in anyway during transit. This is called message integrity (or quality) of information or message. One of the methods to achieve integrity and confidentiality is by encryption, a cryptographic process in which clear text is scrambled using a mathematical function. The scrambled text message is decrypted at the receiver’s end using similar or related cryptographic (mathematical)
This indicates that you are going to login into a secure system.

To login to a system, you need user id and the password. Password is like a lock and key. You need to keep it secret and not share with anybody, because for computer systems, it is the user name and password that represents the user. Whoever has these credentials is the real owner for the system. Many attempts are made to steal these credentials by cyber criminals, also called, hackers. One of the popular methods is to send hundreds of emails announcing 30 M$ lottery (or such other alluring mails) to unsuspecting users. Once you respond to such emails, they will lure you to reveal your credentials or ask for registration fees etc. Such attempts to extract credentials is called phishing. Other methods to steal credentials through cyber attacks involves steps like social engineering, scanning, finding vulnerabilities and exploiting the vulnerabilities in the system. Such attempts to steal credentials and gaining access to the systems are called cyber attacks.

Important and Mission critical systems employ several measures to counter the cyber attacks. In large organizations cyber security operating centers are necessary to be established, which can monitor security incidents and events and generate alerts. The alerts are for system administrators to look into the matter, as there are quite often false alarms. Normally, several layers of defense (defense in depth) is employed – to take care of data, applications, hosts, and network or perimeter assets and infrastructure. This is illustrated in Figure 3.

Cyber security is managed and administered through a mechanism called people, process and technology. As shown in Figure 4, security largely depends on people involved, and less on technology. Technology installed and configured properly will work as designed, but humans behave differently, at different times. This requires important culture change and adhering to process and procedure, which depends on human beings.

Cyber security is a skill based technology and thrives on knowledge of underlying infrastructure, operating systems, computer networks and applications which are built using programming language. There are large opportunities for our young engineers in the coming years in this area to work and make a professional career. In fact, such opportunities are worldwide, as the whole world is dependent on cyber space and cyber security is everybody’s concern.

Suggestions for Password Protection

- It should be 8 to 10 characters or longer, preferably mix of alphabets and numerals
Security Tips for Organizations/System, Network Administrators

- Need to have a security policy approved by top management
- Ensure that Security policy is read and understood by every employee
- Revisit controls/counter measures periodically
- Apply security patches regularly
- Plan diversity in data center and disaster sites environments
- Take system backup regularly and test backups for restoration
- Need to have a suitable password policy for multishift system admin personnel
- Refer to Cyber security check list IDRBT July 2016 doc at www.idrbt.ac.in site.

In summary, a brief introduction to cyber security is given along with the convenience it provides and the precautions one has to take. This is especially important for online banking and the present era of less cash economy. This is also an area for our young engineers to make a career in the field of cyber security.

Readings:


(E-mail: bmmehre@idrbt.ac.in)
In June 2016, the Reserve Bank of India (RBI) released a report titled Payment and Settlement Systems in India: Vision 2018 that envisioned making India into a ‘less-cash’ economy by building one of the best payment and settlement systems. The aim is to encourage greater use of electronic payments by all sections of the society which will enable the large informal sector to enter into the formal economy, increase the tax base, reduce black money and cash funding for terrorism and election. The Prime Minister has reiterated that India should move towards a ‘less-cash’ society as a stepping stone towards becoming a cashless society. A number of countries including Sweden, Kenya and Brazil have successfully moved towards a “less-cash” economy. Their experience shows that “less-cash” economy needs supporting regulations ensuring security of online transaction, robust infrastructure and customer centricity.

India vis-a-vis Other Countries

Comparing India with some of the other countries shows that the currency in circulation in India is higher than many developing and developed countries. In 2015, the share of cash in circulation in the economy as a percentage of the gross domestic product (GDP) of India was 12.3 per cent compared to 3.8 per cent in Brazil, 5.6 per cent in South Korea and 1.7 per cent in Sweden (see Figure 1).4

Further, in 2016, more than 68 per cent of the transactions in India were settled in cash, one of the highest in the world after Indonesia and Russia. Other developing countries such as Thailand, Brazil and China have much lower usage of cash for settling payments, as compared to India. The use of credit cards in India has also been much lower compared to many developed and developing countries.

Sweden has one of the lowest cash intensities in the world. A majority of the payments in the country are settled through electronic means, including payments for bus tickets and charities. Retailers are legally entitled to refuse coins and notes.6 Swedes use debit cards three times more than average Europeans.7 Incidentally, Sweden declared certain currency notes (20, 50 and 1000 Krona) invalid this year and has already announced that by July, 2017, certain other denominations will also become invalid.

Dr. Arpita Mukherjee is a Professor at ICRIER. She has several years of experience in policy-oriented research, working closely with the government in India and policymakers in the EU, US, ASEAN and in East Asian countries. Her research is a key contributor to India’s negotiating strategies in the WTO and bilateral agreements.

Tanu M Goyal is a Consultant at ICRIER and her research interests include trade in services, international trade agreements and policy and regulatory issues. She has edited and co-authored books, published in international and national journals and has written book chapters and popular media articles.

...the Indian government has taken the right step to move towards a ‘low-cash economy’. However, experiences of other countries show that a “less-cash economy” needs infrastructure and supporting regulations. To move towards a “less-cash economy” government, financial institutes and businesses have to work together.
Among developing countries Kenya has taken measures for online payments for government services such as council parking, construction permits, land rates, renewal of driving licences and passport fees to reduce fraud and ensure better collection. According to the World Bank’s Global Findex Report, 58 per cent of the adult population in Kenya had active mobile money accounts in 2014, the highest rate in the world. The Central Bank of Kenya reported 31 million mobile money subscribers backed by close to 144,000 agents in 2015. Kenya is an example where mobile technology and the increase in smart phone ownership have played key roles in improving online payments despite low credit card usage and internet penetration.

Available Infrastructure

Apart from acceptability of electronic means of payment, it is important that these payment instruments penetrate into the society. In India, for instance, in 2015, only half of the Indian population had a card. Compared to this, in Sweden, the average number of cards per person was 2.5, in South Korea it was 5.5, in Brazil 4.1 and in China 4.

South Korea, which has one of the highest penetrations of cards among the comparative countries, is a fast mover into the cashless payment system. It introduced a preferential value added tax treatment for consumers who pay through card, thereby encouraging the use of plastic money. In India, bank charges are deducted in case of card payments – thereby making it more lucrative for consumers to pay by cash.

Further, compared to the large size of the Indian population, India has one of the lowest numbers of point of sale terminals (or PoS which help in processing cashless transactions through the use of debit or credit card at the point of sale), per million inhabitants in the country compared to other developing countries including Brazil and China (see Table 1).

There are several other modes of settling payments that have taken-off in other less-cash countries, which include electronic money terminals and mobile-money payment systems. In India, the available infrastructure for these modes is limited. With a population of 1.2 billion people, India has a wireless phone subscriber base of over a billion people as of 30 June, 2016. Yet, only 0.05 per cent of the total non-cash transactions are made through electronic money terminals that can be accessed through mobile phones. One of the reasons for this is that smart phone ownership and internet penetration is low in India compared to other countries. In India, only 17 per cent of adults had smart phones in 2016 compared to 88 per cent in South Korea and 26 per cent in Kenya. Further, 26 per cent of individuals were using the internet in India in 2015 as compared to...
Thus, the present level infrastructure, particularly the technological infrastructure in India needs to be upgraded at a fast pace to support the ‘less-cash’ initiative of the Indian government. Along with that there is need to ensure security of online transaction through the right policies.

Global Experiences and Way Forward

If countries such as Kenya and Nairobi can successfully move towards a “less cash economy”, India can also move towards such an economy by increasing the use of technology-based innovative payment products. In this regard, mobile payment wallets and mobile applications that support online transfer of funds are a key alternative. This is particularly useful for small business or non-corporate players who do not accept cards or have point of sale terminals installed for accepting payments. In Sweden for instance, most street vendors and small businesses have adopted payment application and PoS card reader developed by a company called iZettle, which has led to a positive impact on the sales made by these businesses. Similarly in Kenya, which is one of the biggest users of mobile money in Africa, M-Pesa is used for paying fees and bills and even receiving salaries. In India, there is a need to encourage and support the use of payment gateways such as Paytm, CC & PayU, among others, especially for inducing cashless transactions.

Some of the key areas that need immediate attention are cash payment for retail and wholesale transactions, payment to workers in informal sector and payment to agriculture labourers. Much of these payments in the informal sector are done by cash to avoid paying taxes or for paying the workers below the minimum wages. Several initiatives are underway to bring the informal sector into the formal sector and encourage cashless transactions. In August 2016, the National Payments Corporation of India (NPCI) launched Unified Payment Interface, which allowed the users to transfer funds across two bank accounts using a mobile application. It also allows the users to make payments to different merchants without using card details and other codes and passwords. The Government passed an ordinance in December 2016, which brings an amendment to Section 6 of the Payment of Wages Act. This amendment is to provide for crediting the wages in the bank account of the employees or payment through cheque – thereby making the transaction cashless. It is worth mentioning that Sweden too started moving towards a cashless country with the use of digital transfer for payment of wages in the 1960s.

The village of Ibrahimpur in the state of Telangana has become completely cashless by having bank accounts, using payment gateways and credit cards. Other villages too can replicate this success story. In some cases, banks have taken the initiative to digitalise a certain area. For instance, a village in Gujarat – Akodara – has been digitalised by an Indian private sector bank in 2015. The bank has invested in infrastructure such as wireless Internet and payment terminals that have provided the villagers access to modern banking facilities.

Table 1: Number of Point of Sale (PoS) Terminals Located in Selected Countries per Million Inhabitants in 2011-2015.

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<tbody>
<tr>
<td>Brazil</td>
<td>17,811</td>
<td>20,561</td>
<td>22,146</td>
<td>24,837</td>
<td>25,241</td>
</tr>
<tr>
<td>China</td>
<td>3,592</td>
<td>5,270</td>
<td>7,814</td>
<td>11,650</td>
<td>16,602</td>
</tr>
<tr>
<td>India</td>
<td>550</td>
<td>695</td>
<td>865</td>
<td>889</td>
<td>1,080</td>
</tr>
<tr>
<td>Sweden</td>
<td>22,167</td>
<td>20,837</td>
<td>20,380</td>
<td>20,304</td>
<td>18,660</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>21,499</td>
<td>25,732</td>
<td>25,800</td>
<td>26,346</td>
<td>30,078</td>
</tr>
</tbody>
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Source: Compiled by authors from Table 11b of the Comparative Tables for Committee on Payments and Marketing Infrastructure Countries, BIS accessible at http://www.bis.org/cpmi/publ/d155.htm (accessed on 27 December, 2016)
Other initiatives that are now being taken in India include the use of electronic payment methods in availing public transportation services such as the Delhi Metro will go cashless from the 2017.

Moving forward towards a less-cash economy the government should ensure:

**Neutrality of mode of payments:** Payments through cards or digital methods should not be costlier for the payer as compared to use of cash payments. Often banks deduct bank charges or fees for processing an online payment or electronic transfer. This discourages the use of online payment methods as opposed to the use of cash, which is free from additional charges.

**Security of information:** Electronic methods for making payment ensure that all transactions and customer information is recorded. There is a threat to privacy. In Sweden for instance, while bank robberies have reduced tremendously after digitalisation of payment systems, there has been an increase in online payment frauds.24 Thus, maintaining data security and privacy of information is important. The RBI is already undertaking review of policies related to pre-paid payment instruments such as smart cards. There should be a strong system for ensuring mitigation of risks and a fast track grievance redressal mechanism.

**Setting-up a robust physical and technological infrastructure:** Mode of payment is determined by the availability, acceptability and access to different payment terminals. As mentioned, in India, the present infrastructure to handle cashless transactions is insufficient. The government needs to install infrastructure and the capacity to operate the infrastructure to ensure that cashless transactions take place in the country. This includes access to smart phones, internet and broadband connectivity, among other things. A majority of the cashless payment systems are technology-dependent as internet connectivity is a pre-requisite for enabling their use.

**Lower taxes:** It is important that taxes on information technology devices such as smart phones and tablets are reduced. This will enable people to make payments digitally. As per the goods and service tax (GST) structure released by the Ministry of Finance, electronic items are likely to attract 28 per cent GST.25 This is very high. Smart phones have to be made affordable. India also has one of the highest corporate taxes in the world. In 2016, India had a corporate tax rate of 30 per cent for domestic companies and 40 per cent for foreign companies, along with additional charges. In Sweden it was 22 per cent and in China it was 25 per cent for both domestic and foreign companies.26 Higher taxes encourage tax evasion.

**Robust e-commerce policy:** The country must have a strong e-commerce regulation which ensures consumer protection for cashless payments.

To conclude, the Indian government has taken the right step to move towards a ‘low-cash economy’. However, experiences of other countries show that a “less-cash economy” needs infrastructure and supporting regulations. To move towards a “less-cash economy” government, financial institutes and businesses have to work together. Further, the country should have a lower and simplified tax structure and the Union Budget of 2017-18 will be a key instrument to take the government policies related to “less-cash economy” forward.

**Readings**


2. For details see https://rbdncs.rbi.org.in/rdocs/PublicationReport/Pdfs/VISION20181A8972F5582F4B2B8B46C5B669CE396A.PDF (accessed on 21 December, 2016)

3. This includes the notes and coins in circulation outside banks. The figure excludes notes and coin kept in vaults at central banks or at banks but includes holdings by non-residents. It also excludes commemorative coins that are not used for payments.

4. For details see http://www.bis.org/cpni/publ/d155.pdf (accessed on 26 December, 2016)


11. These include all cards – cards with cash function, debit card, credit card and cards with e-money function.

12. These include all cards – cards with cash function, debit card, credit card and cards with e-money function.


19. For details see https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/VISION20181A8972F5582F4-B2B8B46C5B669CE396A.PDF (accessed on 21 December, 2016)


21. M-Pesa is a mobile phone-based money transfer, financing and micro-financing service launched by Vodafone.

22. http://www.livemint.com/Politics/J46fz7lApxkXgN2e5TzmnY/cabinet-nod-for-ordinance-seeking-cashless-transactions-unde.html (accessed on 23 December, 2016); at present, the Ordinance is only liable to government employees.


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Achieving A Cashless Rural Economy

Sameera Saurabh

Worldwide there is tremendous interest among policymakers to explore the possibility of moving towards a cashless economy. However, cash still continues to remain the predominant form of transaction. Recording financial transactions has many advantages. First, it aids the Government to collect appropriate tax revenues; second, it can effectively detect, and help curtail, illegal transactions; third, it will give us a better estimate and understanding of the huge unorganized sector in India; and last, but not the least, it will help plug the ‘leakages’ in various government programmes.

With cashless transactions, almost all transactions will leave a digital footprint. A system that encourages and incentivizes the ‘buyer’ to pay through cashless instruments (increasing use of bank to bank transactions without involving the physical currency) will have higher financial transparency. This is perhaps the most direct way of battling issues in corruption and black money in India. Digital footprints have other major advantages. It can make public delivery systems much more efficient. In 2009, the Planning Commission estimated that only 27 per cent of Public Distribution System (PDS) expenditure reached the targeted low-income groups. Digitalization of transactions is the best way to move towards cashless economy. Such a cashless economy may be achievable by promoting electronic money instruments, developing financial infrastructure and spreading digital transaction habits among people. Government’s demonetization drive is also supposed to benefit cashless economy. Still there are several constraints as well as prospects in the journey towards cashless economy.

In the contemporary scenario, our nation is set to emerge as one of the world’s most thriving and promising economies. India is largely an agrarian based rural economy with a predominant unorganized sector and 68.84 per cent of India’s population living in rural areas. The informal sector accounts for 20 per cent of the GDP and 80 per cent of employment. Rural areas are home to two thirds of the country’s population of some 870 million people where much of the challenge lies in achieving cashless transactions for the rest of the decade. It is estimated that rural users will constitute about half of all internet users in 2020. Number of connected rural consumers is expected to increase from 120 million in 2015 to almost 315 million in 2020. Currently, the age group of 18 to 50 years constitutes around 160 million people with 30 per cent internet penetration. It is
interesting to note that rural growth is expected to significantly outpace growth in urban centers.

Over 93 per cent of people in rural India have not done any digital transactions. So the real potential lies there. The government has taken steps, including announcing zero balance accounts for poor people, but growth of bank branches has been low as margins are slender for most lenders. In 2001, India had 5.3 bank branches per 100,000 people in rural areas. Today, that stands at only 7.8 branches, according to RBI data.

**Indirect Benefits**

There are three distinct yet important indirect benefits from promoting cashless transactions in India. These are:

- It will promote financial inclusion;
- It will keep records of financial transactions; and
- It will lower transaction costs involving any two parties engaged in a financial transaction.

While the last observation is in general true for any economy, the first two are particularly relevant for India. Gangopadhyay (2009), shows that more than half the Indian population is not financially included. There are about 7.8 bank branches for every 100,000 people in India, less than 3 branches per 100 square kilometres. For rural India, the numbers are less than 1 branch per 100 square kilometres. In particular, 45 per cent of the rural, 28 per cent of the urban and 38 per cent of all households in India, admit that access and availability are the main factors determining their choice of a particular bank. While it is necessary for financial inclusion that every household should have access to a bank, mere physical access to a bank is, of course, not sufficient. This is particularly important given that more than 90 per cent of the workforce in India is in the unorganised sector, and physically accessing banks would mean huge opportunity costs for them (measured in terms of daily earnings).

Informal sector is the largest employer in India and runs on cash primarily. An enabling system that promotes cashless transactions would, therefore, be the natural extension of the existing policies directed towards financial inclusion. Government has announced incentives like cutting down on service charge and other levies on debit/credit card transactions. The government’s initiatives over the past year or so have been focused on promoting e-payments, plastic transactions, cashless payments. It is, indeed, the future for the Indian economy. The question, however, remains whether India is ready for such an overhaul of its cash-driven economy especially in rural areas. RBI figures for July 2016 show that banks had issued 697.2 million debit cards and 25.9 million credit cards to customers after deducting withdrawn or cancelled cards. It is important to note that number of cards does not equal number of individuals holding those cards. Usually urban residents have multiple cards and the trend is seen now in rural areas as well. Further, cards are used for 3 primary purposes–withdrawing money from ATMs, making online payments and payments at point of sale (POS) terminals at shops, restaurants, fuel pumps etc. Merely 26 per cent of India has internet access, and there are only 200 million users of digital payment services. India’s modern banking system maps neatly onto social and spatial inequalities. Only 18 per cent of all ATMs are deployed in rural India. The RBI’s own research finds that states with a higher female population and a more rural populace show lower levels of financial inclusion.

A report by Google India and Boston Consulting Group showed that last year around 75 per cent of transactions in India were cash-based while in developed countries like the US, Japan, France, Germany etc it was around 20-25 per cent. Due to demonetization, business for mobile or e-wallet companies has boosted by up to four times. Much of the cash transactions in the country are small exchanges for goods or services and the penetration of PoS terminals is not enough. Millions of people still don’t have a bank account, access to PoS sale points, internet or infrastructure to understand and use online payment methods etc. So we need a large scale penetration of digital services and PoS terminals to facilitate digital transactions in small towns and rural India. In July this year, 881 million transactions were made using debit cards at ATMs and PoS terminals. Out of these, 92 per cent were cash withdrawals from ATMs. The principal purpose for cards in Indian setup is thus a means to withdraw cash.

Another big hurdle is the unachieved targets for digital India. Mobile internet penetration is crucial into deeper pockets since PoS works over mobile internet connections. Earlier, banks used to charge money on card-based transactions which has now been pointed out as a hurdle.
Also, the low literacy rates in rural areas along with lack of internet access or even basic utilities makes it very difficult for people to adopt to digital transactions.

**Challenges of a Cashless Rural Economy**

- **Currency dominated economy:** High level of cash circulation in India. Cash in circulation amounts to around 13 per cent of India’s GDP.
- **Transactions are mainly in cash:** Nearly 95 per cent of transactions take place in cash. Large size of informal/unorganized sector entities and workers prefer cash based transactions. They don’t have required digital literacy.
- **ATM use is mainly for cash withdrawals and not for settling online transactions:** There are large number of ATM cards including around 21 crore RuPay cards. But nearly 92 per cent of ATM cards are used for cash withdrawals. Multiple holding of cards in urban and semi-urban areas show low rural penetration.
- **Limited availability of Point of Sale terminals:** According to RBI, there are 1.44 million PoS terminals installed by various banks across locations at the end of July 2016. But most of them remain in urban/semi-urban areas.
- **Mobile internet penetration remains weak in rural India:** For settling transactions digitally, internet connection is needed. But in India, there is poor connectivity in rural areas. In addition to this, a lower literacy level in poor and rural parts of the country, make it problematic to push the use of plastic money on a wider scale. This is being overcome by application BHIM (Bharat Interface for Money) launched by the Prime Minister which will work on USSD i.e without mobile internet.

Private sector banks have been steadily increasing their rural presence. An analysis of their financial year 2014 annual reports shows that on an average, rural areas have accounted for 50-65 per cent of their new branches. Top private lenders ICICI Bank, Axis Bank, HDFC Bank and Yes Bank have been expanding their presence in unbanked and under banked areas over the past five years. RBI has asked banks to prioritize opening of branches in unbanked rural centers (Tier-V and VI) over a three-year cycle of 2013-16. It has asked them to allocate at least 25 per cent of the total number of new branches to these areas. Also, the central bank will give credit for the branches opened in excess of the 25 per cent for a year, which would be carried forward for achieving the criteria in the next year.

Semi-urban and rural markets are currently growing at a pace faster than the larger centers and, consequently, a large proportion of the recent branch expansion has been in these areas.

**Semi-urban and rural markets are currently growing at a pace faster than the larger centers and, consequently, a large proportion of the recent branch expansion has been in these areas. The focus is to make the branches a single-point interface for all services. Technology is a great enabler for financial inclusion, which includes Branch on Wheels, a mobile-van-based branch that aims at providing banking services to a cluster of remote unbanked villages.**

The focus is to make the branches a single-point interface for all services. Technology is a great enabler for financial inclusion, which includes Branch on Wheels, a mobile-van-based branch that aims at providing banking services to a cluster of remote unbanked villages. However, one of the main problems faced by a rural branch is the time it takes to break even due to unavailability of business. The cost of running a rural branch is close to Rs.4 lakh a month against Rs.9 lakh in a tier-1 city. Meanwhile, public sector banks are not far behind when it comes to rural expansion. In FY14, SBI opened 1,053 branches, 57 per cent of which were in rural and semi-urban areas. And, though rural branches benefit from cheaper real estate rents, the cost of servicing and staffing balances out the benefits. However, since RBI mandates 25 per cent of new branches in rural areas, banks have aggressively ventured into rural areas.

**Prospects and the Road Ahead**

When 86 per cent of currency notes in a country of 1.3 billion people are rendered illegal tender in a matter of hours, it is bound to create a short term disruption in daily lives. Particularly so, since much of India’s economic activity still takes place in the informal sector with no cheque payments, resulting not just in widespread direct and indirect tax evasion but also an inability to assess the true state of the economy. For instance, while farmer’s income is not taxed, most of them now have a Kisan Credit Card, first launched in 1998, and no-frills Bank accounts whose creation has been scaled up by the present Government. But the agricultural economy is still controlled by middlemen and traders who only make cash payments to farmers while reaping a profit from the difference in prices.

The Jan Dhan Aadhar Mobile (JAM) can encourage digital transaction culture. It is spreading to reach each remote corner of the country. Aadhaar was introduced in 2009, and within seven years the project has enrolled 1.07 billion people, or about 88 per cent of the country’s population. A large number of government transfers (DBT) are made through JAM mode. This will help people to get digital transaction awareness.

There are a large number of nodal points of interaction between a citizen and the Government. The role of the Government in these cases will be to make cashless transactions mandatory for certain payments and make it mandatory for certain services
exceeding a certain amount which has already been initiated. For example, payment for passports can be made mandatory through cashless methods (online payments or bank drafts). Also, payments of various taxes (income, sales or excise duties) can be made mandatory through cashless modes. In addition, a tax rebate (of say 1 per cent to 2 per cent) on payments made by households as salary to unorganized sector (domestic servants, sweepers etc) can boost cashless payments. This will do two things, one the households will have an incentive to go cashless and two, large portion of the unorganized sector will be financially included. Apart from the incentives and mandatory prescriptions of cashless modes mentioned above, there are some direct government programmes and initiatives where it can create a large platform for cashless transactions.

Bottlenecks which need to be factored in policy formulation are the lack of acceptability and the other is high transaction costs. However, it is worthwhile to note that, even if these two constraints were to be removed, cashless transactions will not be automatic. The framework for recommendation must eventually address the 5 A’s of promoting financial inclusion through cashless payment instruments which are availability, accessibility, acceptability, affordability and awareness.

Government should assure basic necessities in rural areas and focus on developing infrastructure. Special drives through schools, colleges, Panchayats etc. can help create awareness about cashless/banking transactions. Financial Literacy is a must for bringing more and more people to the digital platform. Digital payment or payment through banks, instead of paying cash should be encouraged. Linkage of all welfare activities with bank accounts is a very strategic step. A strong banking base is the basic prerequisite for the cashless economy. The path forward is clear: a nationwide financial literacy campaign accompanied by a medium-term strategy to improve access to, and awareness of, electronic payments. Targeted financial education programmes can improve financial skills and credit management, and increase account ownership in rural India.

(E-mail: sameera.saurabh@gmail.com)
The Prime Minister, following the announcement of demonetization of Rs 500 and Rs 1000 notes in November last year, had stated that this currency swap would not merely nudge the economy in the direction of cashless economy but give it a significant push in that direction. More than two months after demonetization, there is a transformation taking place in the rural areas in adoption of various modes of cashless financial transactions facilities available such as - payment gateways or mobile banking services such as Aadhaar Enabled Payment System, National Unified USSD (unstructured supplementary service data) platform, point of sale (PoS) machine linked to debit and credit cards and mobile app based programmes such as e-wallet.

Entire focus of the government has been on ensuring that a significant chunk of rural population adopts cashless transactions in various activities such as receiving wages for Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) through the bank accounts of beneficiaries, direct fund transfer to banks accounts of dairy farmers for the milk sold to cooperatives or private sector or making purchases through using RuPay cards issued by banks under Pradhan Mantri Jan Dhan Yojana. At present more than 26.5 crore banks accounts have been opened under the Jan Dhan Yojana. The scheme also promised to provide every new Jan Dhan account holder with RuPay debit cards, with 19.5 crore cards being issued so far. The Finance Ministry has said that the government is aiming at ensuring that Jan Dhan bank account holders became the flagbearers of digital transformation in the rural areas.

**Dairy Sector**

While digital transactions have seen a jump in several areas of commerce after the government’s announcement on demonetization, the organised dairy sector hasn’t been left behind. Milk farmers affiliated to both the state cooperatives and private companies have opened more than a million new bank accounts and have also received payments in their accounts since November 10. Since middle of last year, total banks accounts opened for dairy farmers have exceeded more than 3 million.

The department of animal husbandry under the agriculture ministry recently had directed National Dairy Development Board (NDDB), Delhi Milk Scheme and all the state level dairy federations to ensure direct payment to farmers’ bank accounts within next couple of months. The government had also urged the country’s biggest dairy

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The author is a Delhi based journalist with wide experience in writing on rural issues.
federation Gujarat Cooperative Milk Marketing Federation, popularly also known as AMUL, to ensure opening of bank accounts for all its 29 lakh odd affiliated farmers for payment towards purchase of milk.

The Managing Director, R S Sodhi, GCMMF, has said. “Since demonetization was announced, we have opened 8 lakh new bank accounts of dairy farmers. Currently, more than 19 lakh dairy farmers are getting paid for milk sold to the cooperatives through bank account.” However he said that the federation has asked banks to open branches in tribal areas of Gujarat so that all the remaining farmers could have bank accounts. Amul pays around Rs 450 crore weekly to farmers for the milk purchase. About Rs 310 crore is now being transferred to farmers’ accounts by Amul on a weekly basis, almost double the level before demonetisation. This apart, Rs 75 crore is now being transferred every 10th day to some 3 lakh milk producers by Chennai-based private dairy major Hatsun Agro Products, in a signal that e-payments are catching up among private players too.

Dairy farmers affiliated to cooperatives are paid around Rs 120 crore daily in a weekly or 10 days, which results in huge disbursal of cash. At present around 60-70 per cent of around one crore dairy farmers who are part of 22 odd dairy cooperatives’ network have bank accounts. Since last few months, the state federations are being encouraged to go for cashless transactions and the government’s move on demonetisation has given a boost to these efforts. NDDB, the apex body of cooperatives have urged all the state federations like GCMMF, Karnataka Co-operative Milk Producers’ Federation, Rajasthan Cooperative Dairy Federation, etc, to urgently open banks accounts of those farmers who are still getting paid in cash.

Cashless Transaction at PDS outlets

Besides, the food ministry has also launched an initiative for ensuring cashless transaction at all the 5 lakh odd Fair Price Shops (FPSs) across the country where beneficiaries covered under National Food Security Act (NFSA) can purchase highly subsidised grains using Aadhar linked bank accounts or RuPay cards issued by banks. Although beneficiaries covered under NFSA pay only around Rs 75 to Rs 90 each month for getting highly subsidised foodgrains, the food ministry wants to ensure that even these small amounts are also not paid in cash.

Under NFSA, each beneficiary monthly gets 5 kg of rice or wheat at the rate of Rs 3 and Rs 2 per kg respectively. However, many states such as Odisha, Chhattisgarh and Tamil Nadu further subsidise the foodgrains.

Andhra Pradesh which has already installed Point of Sale (PoS) machines at all its 29,082 FPSs, has also commenced using Aadhaar enabled PoS machines which is linked to bank accounts of NFSA beneficiaries. By using the card at the PoS machines, beneficiaries can pay for grains purchased under NFSA without paying cash. At present, only 33 per cent out of total 5,27,750 FPSs in the country have PoS machines which electronically record transaction of foodgrains purchased under NFSA. These PoS machines have to be linked with beneficiaries’ banks accounts.

Karnataka along with states such as Maharashtra, Haryana, Rajasthan and Odisha have commenced implementation of Aadhaar-based payments in the public distribution system (PDS). Aadhar-enabled point-of-sale (PoS) machines at 20,778 FPSs in the state would use biometric authentication of 1.08 crore below-poverty-line (BPL) rationcard holders against purchase of highly subsidized foodgrains under NFSA. The state government would link the Jan Dhan accounts of the card holders through Aadhaar.

The Maharashtra government has launched a pilot project to introduce cashless transaction at 84 FPSs using Business Correspondence model or payment through USSD and e-wallet facility. The PDS shops will now conduct transactions through point-of-sale terminals. The FPSs supply subsidised goods to ration card holders and persons below the poverty line. The Maharashtra government is aiming at installing cashless transactions facilities at all 50,000 odd PDS outlets.
Since the demonetization drive was announced, there have not been reports of delays in delivery of grains under NFSA because of cash crunch. More than 71 per cent of 24 crore ration cards have been Aadhaar based and through the linkage of these cards with beneficiaries’ bank accounts and installation of PoS machines, a cashless transaction could be ensured. At present, around 50 to 55 million tonnes (mt) of rice and wheat is supplied to around 82 crore population covered under NFSA.

The Food and Consumer Affairs Ministry has also directed officials to ensure cashless transactions for all official work. The procurement of foodgrains from farmers by Food Corporation of India (FCI) is done through transfer of Minimum Support Price (MSP) to bank accounts while in case of only Punjab and Haryana, the MSP is transferred to bank accounts of arthias or commission agents. Similarly, the Department of Consumer Affairs had procured pulses of Rs 703 crore during recently concluded kharif season by making online payments to farmers. The Ministry had directed officials to ensure cashless transactions mandatory for all contract works for making payments.

Thanks to financial inclusion programme launched earlier, the wage payment to workers under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) have virtually gone cashless with most of the beneficiaries getting wages into their bank accounts. In the financial year 2016-17, more than Rs 32,000 crore have been transferred to 25 crore beneficiaries so far.

**Thrust on Digital Education**

The government is targeting at digitally educating one crore rural citizens, which implies that people are trained as consumer to use all payment options are available to them and what is best suited for them. More than 40 lakh rural citizens and around 1.2 lakh merchants have already enrolled for digital payments.

We have already moved from the awareness creation stage to one where people are actively trying out electronic payment options. The common service centres (CSCs) set up by the Ministry of Electronic and Information Technology are spearheading this campaign.

Recently, the Prime Minister had acknowledged that a ‘cashless’ society is not immediately possible, and appealed to the people to work towards it by being part of a ‘less-cash’ society immediately. “Learn how this digital economy works. Learn the different ways you can use your bank accounts and internet banking. Learn how to effectively use the apps of various banks on your phones. Learn how to run your business without cash,” the Prime Minister had stated. Going by the progress so far, it seems that a sound beginning has been made for making rural India a less cash economy.

(E-mail: sandipdas2005@gmail.com)
Demonetisation: A Step Towards Less Cash Economy

D S Malik

In a concerted drive against corruption, black money, money laundering, and terrorism among others, the Government of India initiated a massive demonitisation drive from the midnight of 8th November 2016. Firstly, five hundred and one thousand rupee notes ceased to be legal tender from the midnight of 8th November 2016. This decision was also, in fact aimed at curbing financing of terrorism through the proceeds of Fake Indian Currency Notes (FICN) and use of such funds for subversive activities such as espionage, smuggling of arms, drugs and other contrabands into India, and for eliminating Black Money which cast a long shadow of parallel economy on our real/formal economy.

The government also accepted the recommendations of the Reserve Bank of India (RBI) to issue new Two Thousand and Five Hundred Rupee Notes. No restriction was placed on any kind of non-cash payments by cheques, demand drafts, debit or credit cards and electronic fund transfer etc.

To ensure welfare of farmers, steps were taken to provide sufficient funds to the farmers to buy inputs such as good quality seeds, fertilizers and pesticides etc for sowing of Rabi crops. Similarly steps were taken to provide funds to traders by increasing the limit to Rs.50,000 per week for withdrawal from current accounts to pay wages to daily wagers and meet their sundry expenditure among others.

The fight against black money was initiated by the present government way back in May 2014, with the formation of an SIT on black money.

A law was passed in 2015 on Disclosure of Foreign Bank Accounts. In August 2016, strict rules were put in place to curtail benami transactions. During the same period, an Income Disclosure Scheme (IDS)-2016 to declare domestic black money was introduced in June 2016 to 30th September, 2016. Declarations of more than Rs. 67,000 crore were made under the IDS 2016.

All these efforts have borne fruit. Over the past two and a half years, more than Rs. 1.25 lakh crore of black money has been brought into the open.

On the one hand, the government has waged a war against the black money and on the other hand, it has laid increased emphasis on promoting digital banking and e-payments.

Taking the initiative, the government took the lead and started this process of digital payments from home. In order to attain the goal of complete digitization of government payments, the Ministry of Finance,

The author is Additional Director General (M&C), Press Information Bureau, Ministry of Information & Broadcasting, Government of India.
Government of India reviewed the existing limit of Rs. 10,000/- (Rs. Ten Thousand only) prescribed regarding e-payment to Suppliers etc. It has now been decided to lower this threshold limit from Rs. 10,000 to Rs. 5,000 (Rupees Five Thousand only). The last review in this regard was made only in August, 2016. Accordingly, all the Ministries/Departments of the Government of India have been now directed by the Ministry of Finance to ensure with immediate effect that all payments above Rs. 5000/- (Rupees Five Thousand only) to suppliers, contractors, grantees/loanee institutions etc. are made by issue of payment advises only.

In its endeavor on moving towards the electronic payments, the Central Government Ministries/Departments have been crediting the salary and other payments for the majority of its employees electronically, directly into the designated bank accounts of the employees. Given the progress made in banking technology, it is assumed that each employee would be in possession of a Debit/ATM card linked to his/her bank account. Government employees are being encouraged to maximise the usage of debit cards for personal related transactions instead of cash which would go a long way in making the employees as ‘ambassadors’ for the digital push and also motivate, encourage the general public in taking-up the cause. All Ministries/Departments are also requested to encourage their employees to make use of debit cards for personal related transactions instead of cash. Ministries/Departments have been asked to liaise with their accredited banks and set-up special camps to facilitate obtaining of and ensure that all its employees are in possession of debit cards. Ministries/Departments are also asked to issue similar advisories to their attached/subordinate offices, PSUs, Autonomous Bodies etc.

The Finance Minister had emphasised that physical currency must shrink while the economy should expand, shifting more and more focus to digital currency. One of the major objectives of withdrawal of legal tender status of Rs. 500 and Rs. 1000 notes was to move the Indian economy further towards digital transactions. Most banks have already begun a promotional exercise by waiving MDR charges on debit cards - up to end December 2016. Banks will now be focussing on significantly stepping-up transactions in mission mode through alternate banking channels such as NEFT, mobile wallets, pre-paid cards, QR codes, pay-roll cards, debit and credit cards and Unified Payments Interface (UPI). Apart from urban areas, banks will increase and sustain their focus on semi-urban and rural areas. This outreach would be backed-up by an advertising campaign from Indian Bankers Association (IBA) including demonstration videos on how to use cards and other modes for cashless transactions.

With these and other steps already underway, there is a clear path towards more digital transactions by all citizens. This will serve the larger objective of making banking activity easier and achieving the goal of financial inclusion that the government is committed to.

With these and other steps already underway, there is a clear path towards more digital transactions by all citizens. This will serve the larger objective of making banking activity easier and achieving the goal of financial inclusion that the government is committed to.

As part of the plan to expand the digital payments eco-system and facilitate the move towards cashless transactions, the government has decided that an additional one million new PoS terminals would be installed by 31st March 2017. Towards this end, banks have already placed orders for 6 lakh PoS machines and another 4 lakh PoS machines are likely to be ordered in the next few days. The country today has about 15 lakh PoS terminals across different merchants to facilitate card based payments.

A special drive has also been undertaken jointly with Ministry of Labour & Employment and States’ Administration to open bank accounts for unorganized labour by holding camps at various locations. A total of 2,73,919 camps have been organized so far in which 24.54 lakh accounts have been opened.

There are 30 crore RuPay Debit Cards which have been issued, including those issued to Jan Dhan account holders. There was a growth of nearly 300 per cent in use of RuPay cards in 12 days. To facilitate the use of this debit card, the banks have decided to waive transaction charges (MDR) up to 31st December, 2016. National Payments Council of India (NPCI) has already waived switching charges for RuPay Cards. Together, these steps will improve the acceptance of debit cards at different establishments.

To promote greater use of debit cards, public sector banks and some of the private sector banks have decided to waive the MDR charges till 31.12.2016. Other private sector banks are expected to do likewise. Consequently, the transaction charges – including the
charges for switching services – were waived till 31.12.2016.

To promote greater usage of payments through e-wallets, RBI has decided to increase the monthly transaction limit for individuals from Rs.10,000 to Rs.20,000. Similar enhancements have also been announced by RBI for merchants.

For convenience of passengers, Indian Railways had decided not to levy service charges of Rs.20 for second class and Rs.40 for upper classes on purchase of reserved E-tickets upto 31st December, 2016. This would facilitate and encourage the passengers to buy e-tickets instead of across the counter purchase through cash.

Daily average number of passengers buying e-tickets online is 58 per cent and across the counter in cash is 42 per cent of the total purchase of tickets. The effort now is to increase the purchase of e-tickets. It is expected that the above measure will encourage people to migrate to cashless transactions.

TRAI has decided to reduce the USSD charges from the current Rs.1.50 per session to Rs.0.50 per session for transactions relating to banking and payments. They have also increased the stages from current five to eight. The telecom companies also agreed to waive the above 50 paisa USSD charge per session for the period up to 31.12.2016. Consequently, USSD charges up to 31.12.2016 were NIL. This provided a very cost effective method of digital financial transaction, especially to the poor people with feature phones (which are currently 65 per cent of the total phones in the country).

A lot of time is spent by vehicles at the check posts and toll plazas. While GST will address the problem at the check posts, certain measures are necessary for ease of payment at the toll plazas on the National Highways. Ministry of Road Transport and Highways is therefore advising the automobile manufacturers to provide ETC compliant RFID in all new vehicles.

All Government organizations, Public Sector Undertakings (PSUs) and other government authorities have been advised to use only digital payment methods such as internet banking, unified payment interface, cards, Aadhar enabled payment system etc. to make payments to all stakeholders and employees. At the point of disbursing the payments, it will be necessary for the authorities to provide the option of payments through cards, internet banking, unified payment interface, cards, Aadhar enabled payment system etc.

To further accelerate this process of digital transactions through use of credit/debit cards and mobile phone applications/e-wallets etc., the Central Government has also declared a package of incentives and measures for promotion of digital and cashless economy in the country.

These incentives/measures are the following:

1. The Central Government Petroleum PSUs shall give incentive by offering a discount at the rate of 0.75 per cent of the sale price to consumers on purchase of petrol/diesel if payment is made through digital means.

   Nearly 4.5 crore customers buy petrol or diesel at such petrol pumps per day who can take benefit of this incentive scheme. It is estimated that petrol/diesel worth Rs.1800 crore is sold per day to the customers out of which nearly 20 per cent was being paid through digital means. In the month of November 2016 it had increased to 40 per cent and the cash transaction of Rs.360 crore per day shifted to cashless transaction methods. The incentive scheme had the potential of shifting at least 30 per cent more customer to digital means which would further reduce the cash requirement of nearly Rs. 2 lakh crore per year at the petrol pumps.

2. To expand digital payment infrastructure in rural areas, the central government through NABARD will extend financial support to eligible banks for deployment of 2 POS devices each in 1 lakh villages with population of less than 10,000. These PoS machines are intended to be deployed at primary cooperative societies/milk societies/agricultural input dealers to facilitate agri-related transactions through digital means.

   This will benefit farmers of one lakh villages covering a total population of nearly 75 crore who will have the facility to transact cashlessly in their villages for their agri needs.

3. The central government through NABARD will also support Rural Regional Banks and Cooperative Banks to issue “RuPay Kisan Cards” to 4.32 crore Kisan Credit Card holders to enable them to make digital transactions at PoS machines/Micro ATMs/ATMs.

4. Railways, through its suburban railway network, shall provide incentive by way of discount up to 0.5 per cent to customers for monthly or seasonal tickets from January 1, 2017, if payment is made through digital means.

   Nearly 80 lakh passengers use seasonal or monthly tickets on suburban railways, largely in cash, spending worth nearly Rs.2,000 crore per year. As more and more passengers will shift to digital means the cash requirement may get reduced by Rs.1,000 crore per year in near future.

5. All railway passengers buying online tickets shall be given free accidental insurance cover of upto Rs. 10 lakh.

   Nearly 14 lakh railway passengers are buying tickets everyday out of which 58 per cent tickets are bought online through digital
means. It is expected that another 20 per cent passengers may shift to digital payment methods for buying railway tickets. Hence, nearly 11 lakh passengers per day will be covered under the accidental insurance scheme.

6. For paid services e.g. catering, accommodation, retiring rooms etc. being offered by railways through its affiliated entities/corporations to the passengers, it will provide a discount of 5 per cent for payment of these services through digital means. All the passengers travelling on railways availing these services may avail the benefit.

7. Public sector insurance companies will provide incentive, by way of discount or credit, upto 10 per cent of the premium in general insurance policies and 8 per cent in new life policies of Life Insurance Corporation sold through the customer portals, in case payment is made through digital means.

8. The central government Departments and central Public Sector Undertakings will ensure that transactions fee/MDR charges associated with payment through digital means shall not be passed on to the consumers and all such expenses shall be borne by them. State Governments are being advised that the State Governments and its organizations should also consider to absorb the transaction fee/MDR charges related to digital payment to them and the consumer should not be asked to bear it.

9. Public sector banks are advised that merchants should not be required to pay more than Rs. 100 per month as monthly rental for PoS terminals/Micro ATMs/mobile PoS from the merchants to bring small merchants on board the digital payment eco system. Nearly 6.5 lakh machines by Public Sector banks have been issued to merchants who will be benefitted by the lower rentals and promote digital transactions. With lower rentals, more merchants will install such machines and promote digital transactions.

10. No service tax will be charged on digital transaction charges/MDR for transactions upto Rs.2000 per transaction.

11. For the payment of toll at Toll Plazas on National Highways using RFID card/Fast Tags, a discount of 10 per cent will be available to users in the year 2016-17.

With all the aforesaid measures, it is expected that this decision of the present Government to withdraw the legal tender status/character of old Rs.5,00 and Rs.1,000 notes will go a long way in expediting and pushing the process of digital banking to new heights in shortest possible time through use of latest technology and increased level of financial literacy.

(E-mail: dprfinance@gmail.com)

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**Swachh Swasth Sarvatra Launched**

‘Swachh Swasth Sarvatra’, an inter-ministerial joint initiative between the Ministry of Drinking Water and Sanitation and the Ministry of Health and Family Welfare was launched in the Capital recently. Another joint initiative, ‘Swasth Bacche Swasth Bharat’, between Ministry of Health and Family Welfare and the Ministry of Human Resource Development was also launched on the occasion.

The objective of the ‘Swachh Swasth Sarvatra’ initiative is to build on and leverage achievements of two complementary programmes – Swachh Bharat Mission (SBM) and Kayakalp – of the Ministry of Drinking Water and Sanitation and Ministry of Health and Family Welfare, respectively. Under this initiative:

(a) Ministry of Drinking Water and Sanitation has declared over 700 blocks as Open Defecation Free (ODF). Community Health Centres (CHCs) in ODF blocks of the country will be allocated Rs 10 lakhs under National Health Mission (NHM) to focus on sanitation and hygiene.

(b) Under Kayakalp, one Primary Health Centre (PHCs) in each district is awarded for meeting quality standards including sanitation and hygiene. Under SBM, the Gram Panchayat in which the PHC which gets awarded under Kayakalp for that district will be noted, and special focus will be given to make it ODF at the earliest.

By merging the goals of Swachh Bharat with the Health Ministry’s focus on health, the needle will move from hospital-care to healthcare, i.e. from treatment of diseases to prevention of diseases by focussing on improved overall health.

Over 70 districts, over 700 blocks, and over 1.3 lakh villages of the country have achieved ODF status so far, and many others are very close to the target.
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Ph.: 011-25825591, 42437002, 8447273027, 9811489560
msriramsias@gmail.com www.sriramsias.com sriramsias.official
Payment Systems in India—Driving “Less Cash Economy”

The payment systems have brought down cash payments and even transactions through cheques are not growing at the levels which were seen earlier. Payment systems are at the forefront of moving towards a “less cash economy”.

The advent of electronic and communication technologies in the banking systems has thrown up a variety of payment systems and has brought in non-bank players, such as, telecom operators, into the payment systems mould. The first steps of introduction of mechanisation through electronics was the introduction of MICR (magnetic ink character recognition) technology for cheque processing in 1986. As this set the tone for introducing computerisation and mechanised processing in the operations of banks, other applications started rolling out with the initiatives and active thrust by the Reserve Bank of India.

RBI started paper-less electronic clearing services (ECS-Cr) in mid 1990s, first for credit transfers i.e., a...
payer paying through electronic media through a bank. This was followed by electronic clearing services (ECS-Dr) where a payer gives a mandate to his bank to debit his account and pay a receiver. This is typically for paying utility services bills such as telephone, electricity, water and also premium, etc. Then came electronic fund transfer (EFT) where a customer of one bank can pay to a customer of another bank through an electronic instruction. Initially, this was available only in about 15 major cities but after 2004 it evolved as NEFT (National Electronic Funds Transfer). As banks moved towards core banking systems, which is centralised accounting of all the branches and outlets of the bank, the possibilities of offering more online solutions opened up. Card based transactions opened up a new horizon in making payments anywhere. Linking of all banks’ ATMs enabled withdrawal of cash from any ATM in the country which proved to be a path breaking disruptive innovation as customers’ visits to the bank came down drastically. The ATM card evolved into the debit card which has become a versatile card as it can be used for withdrawing cash, do shopping through a PoS (point-of-sale) machine and do all kinds of online payment transactions through the internet.

While NEFT serves retail payment requirements, the Reserve Bank of India established a large value payment system, that is, RTGS – Real Time Gross Settlement – system in 2004 March. This is typically used by funds managers of banks and financial companies and also customers for large value funds transfers. As the name indicates, this is the only online inter-bank payment system which is settled on gross basis so as to enable fastest turn around cycle.

For any interbank payment system there has to be a central trusted counter-party which will settle the transaction between two participants. Traditionally, the central bank of the country, which is the Reserve Bank of India in this case, is the settlement agency. This area was opened up with the passing of the Payment and Settlement Systems Act, 2007 under which the Reserve Bank is empowered to authorise payment systems which can settle payments among participants.

The National Payments Corporation of India (NPCI) and the Clearing Corporation of India Ltd. (CCIL) are two of the major authorised organisations permitted by the Reserve Bank to offer payment systems. The NPCI which handles the highest number of retail payments maintains the NFS (National Financial Switch) connecting all the ATMs of all banks. NPCI has rolled out a variety of payment products which include:

- **IMPS – Immediate Payment System**
- **NACH – National Automated Clearing House**
- **CTS – Cheque Truncation System**
- **AEPS – Aadhar Enabled Payment System**
- **UPI – Unified Payment Interface**

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**Definition of Payment System in the Payment and Settlement Systems Act, 2007 Section 2 (i)**

“Payment System” means a system that enables payment to be effected between a payer and a beneficiary, involving clearing, payment or settlement service or all of them, but does not include a stock exchange:

Explanation:-- For the purposes of this clause, “Payment system” includes the systems enabling credit card operations, debit card operations, smart card operations, money transfer operations or similar operations.
Payment Systems Vision 2015-2018 of the Reserve Bank of India

Building best of class payment and settlement systems for a ‘less-cash’ India through responsive regulation, robust infrastructure, effective supervision and customer centricity.

are PayTM, Billdesk, CCAvenue, Instamojo, Paypal, Citruspay, Direcpay, PayUmoney, ePay, Paynetz, etc. Apart from this, there are closed payment systems which operate within an environment such as a transport service, marketing coglomorate, delivery service, etc., which can also have limited purpose pre-paid cards.

A payment system should be authorised by the Department of Payment and Settlement Systems of the Reserve Bank of India. The permission to operate a payment system and for those who want to participate in a payment system is governed by principles which essentially assess the capabilities of the participant and to verify whether his operations will cause any liability or systemic issues to the system. A bank customer or end user has to register for usage of any payment system with his or her bank, if the payment system is offered by the bank. In other cases, they have to register with the service provider.

- **99#** - based on USSD - Unstructured Supplementary Service Data
- RuPay Debit Card
- UPI – Unified Payment Interface as a front end for all bank accounts through one channel

NPCI is also establishing a retail bill payment system “BBPS – Bharat Bill Payment System. This will enable users to pay bills pertaining to any service including government dues, taxes, etc., from anywhere in the country.

Apart from these, there are many payment service providers offering wallet services. Some of them
For example, the trend in the year-on-year growth in the number of transactions in NEFT is shown below:

<table>
<thead>
<tr>
<th>Year</th>
<th>NEFT Volume in Million</th>
<th>NEFT Value in (Rs.) Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>8</td>
<td>478</td>
</tr>
<tr>
<td>2007-08</td>
<td>14</td>
<td>1332</td>
</tr>
<tr>
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<td>3216</td>
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<td>41</td>
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<tr>
<td>2010-11</td>
<td>132</td>
<td>9328</td>
</tr>
<tr>
<td>2011-12</td>
<td>226</td>
<td>17839</td>
</tr>
<tr>
<td>2012-13</td>
<td>392</td>
<td>28889</td>
</tr>
<tr>
<td>2013-14</td>
<td>658</td>
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<tr>
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<td>924</td>
<td>59579</td>
</tr>
<tr>
<td>2015-16</td>
<td>1245</td>
<td>82806</td>
</tr>
</tbody>
</table>

The Reserve Bank of India directly operates the RTGS, NEFT and ECS (Dr & Cr) systems whereas all other payment systems, including cheque clearing, operated by payment system service providers get settled at their end and are finally booked in the Reserve Bank’s books.

As new products have entered the market which have leveraged the platform of ICT – information and communication technology, the purpose of extending banking and financial services to un-banked areas of the country took shape. Banks have extended banking correspondent module where it is not feasible to have a full-fledged branch to reach the un-banked so that minimum banking services can be delivered to reach the goals of financial inclusion.

The proliferation of mobile telephone instruments has opened up a channel to make cash-less payments accessible to all. It is seen that there are more mobile telephones than bank accounts in India. This has given a platform for all the payment systems and mobile wallets to develop software which can be used on mobile telephones or other hand-held computer devices to do their transactions. Users will find it very convenient to make their payments from one account or wallet to another account or wallet. Of course, users have to be careful in dealing with these applications by not sharing their passwords and PIN with anyone and keeping transaction amounts to the least to avoid exposure.

The above payment systems have brought down cash payments and even transactions through cheques are not growing at the levels which were seen earlier. Payment systems are at the forefront of moving towards a “less cash economy”.

The most recent developments in cashless transactions due to demonetisation of specified bank notes shows growing trends and increase of 35 to 40 per cent in some of the electronic payment transaction systems over the past few months.

(E-mail:graghuraj@idrbt.ac.in)
Demonetization, Cashless Economy and Development

B K Pattanaik

The demonetization of high value currencies on the mid-night of 8th November 2016 by the government of India is a watershed in the history of monetary economics of India. The economists, intelligentsia, social scientists, politicians and the common men are in confusion regarding the size of its impact on the black money, counterfeit currency, corruption and terrorist funding and finally on economic growth and development. Demonetization is an act by which government of a nation strips the circulation of one or more than one currency unit of its status as a legal tender. The process of demonetization involves either totally withdrawing currency units or withdrawing currency units and introducing new currency units of the same denomination which are being demonetized or completely replacing the old currency with new currency of different denomination. This process of demonetization is largely done keeping in mind the goal of unearthing black money accumulated through corrupt means. John Eatwell Palgrave’s Dictionary of Political Economy defines demonetization as the discontinuance by a government of the use of a coin and its official withdrawal from circulation. N B Ghodke, Encyclopedic Dictionary of Economics defined that under the paper currency standard, the term “demonetization” implies a wholesale withdrawal of currency notes from circulation. Thorpe and Thorpe (2010) opined that demonetization refers to the withdrawal of currency from circulation which is done to control black market currency and unaccounted money. Not only India but several countries to name a few such as USA in 1969; Zaire in 1990; Australia in 1996; Zimbabwe in 2010 and North Korea in 2010 have resorted to demonetization; while the effort resulted in success in the developed liberalized economies of the USA and Australia it could not ensure any success in the underdeveloped African countries. The first demonetization in the independent India was done in the year 1946 and another one in the year 1978. At that time the currency notes of higher denomination constituted only three percent, of the total currency in the circulation. Notes demonetized in 1946 were of the value of Rs. 143.97 crores as against the total notes issued of the value of Rs. 123593 crores. Again in the year 1978, the higher denomination notes Rs. 1000, Rs.5000 and Rs. 10000 which were reintroduced in 1954 after the demonetization in the year 1948 were demonetized.

The demonetization of high value currency as on that day amounted to only Rs. 146 crores. Therefore, its effect on the inconvenience was minimal. The Direct Taxes Enquiry...
Committee in its interim report admitted “demonetization was not successful then, because only a very small proportion of total notes in circulation were demonetized. As far as the demonetization of November 2016 is concerned, the rupees 500 and 1000 constituted a gigantic share of 86 percent of the notes in circulation during 2016. According to RBI figures as of March 2016, currency in circulation amount to Rs. 16,415 billion: of this Rs. 500 notes accounted for 47.8 percent in value and Rs 1000 notes constituted 38.6 per cent and together they were more than 86 per cent of the value of the notes in circulation. Secondly, size of the economy, the growth rate of the economy and the role of the private sector and services sector to economic growth and development was small in the year 1946 and 1978 as compared to the year 2016. Thirdly, the number of people within the net of the income tax was also not so large during 1946 and 1978. There are more than 11 crore PAN card holders now and the number is on increase. Fourthly, in the year 1946 and 1978 public were already aware that the demonetization will be introduced by the government sooner or later, therefore, the demonetization at that time could not produce any substantial gain to the economy. One of the key features of the demonetization 2016, which is different from the demonetization done in 1946 and 1978, is that it was kept very secret, so that the black money hoarders could not get any time to convert their black money and counterfeit currency into white money.

The important objectives behind this demonetization are: (i) to unearth black money in the economy; (ii) to put check on corruption, and (iii) demolish counterfeit currency used by the organization both inside and neighboring countries in the funding of the terrorist and extremists activities in the country. Over and above, one of the objective is that the taxable income earned from this exercise will be to spent on economic growth boosting the development activities and also the economic upliftment of the poor. Finally, the demonetization endeavour intends to have a cleaner growth and equity in development.

Black money variously known as “black income”, “dirty money”, “unaccounted income” “counterfeit currency” is acquired through corruption, bribe, black market and hording, arms trafficking, terrorism, smuggling, illicit trade in banned substances and money laundering. This unfair income and wealth which does not come under the net of income tax and is accumulated by a small percentage of people-largely corrupt and criminals is stumbling block in the path of the economic growth and development of India. In a nutshell, black money is “unaccounted money” and the income which has escaped taxation and it may hoarded in the form of cash and invested in other precious assets like landed property, house, gold, jewellery and other valuable durable assets. Existence of black money is one of the fundamental reasons for the endurance of high economic inequalities, poverty and unemployment in the country. According to NIPFP, black income is the aggregate of incomes which are taxable but not reported to the tax authority. The Wanchoo Committee in its report on Black Money -1971 described black money as a “cancerous growth in the country’s economy, which if not checked in time, will surely lead to its ruination.” The Committee report envisaged that “black money denotes not only unaccounted currency which is either hoarded or is in circulation outside disclosed trading channels but also its investment in gold, jewellery and even in precious stones made secretly and in land and buildings and business assets over and above the amounts shown in the books.” The Committee suggested the withdrawal of high value currency notes. The Black Money, White Paper of May 2012 brought out by the joint effort of the Ministry of Finance, Department of Revenue and Central Board of Direct Taxes, New Delhi has envisaged that “manifestation of black money in social, economic and political space of our lives has a debilitating effect on the institutions of governance and conduct of public policy in the country”. The Report, therefore, has advocated that the success of an inclusive development strategy critically depends on the capacity of our society to root out the evils of corruption and black money from its very foundations.

**Cashless Economy**

Cashless economy means more and more use of digital mode and less use of cash in transactions. In other words, it does not mean the shortage or less supply of cash but less use of cash and more use of digital transactions i.e. debit card, credit card, internet banking and through mobile phone app. Daniel et.al (2004) has said that it is an economic system in which transactions are not done predominantly in exchange for actual cash. Transaction in cash is one of the vital and major modes of payment during purchases of all goods and services in the developing countries. However, in most of the developed countries of Europe and also in the USA, digital transaction is the main mode of payment during the purchase of goods and services. According to Humphrey (2004) developed countries of the world to a large extent, are moving away from a paper payment instruments toward electronic ones, especially payment cards. The World Bank’s World Development Report-2016 envisages that in many instances, digital technologies have boosted growth, expanded opportunities and improved service delivery. Larger
size of digital economies in the developed economies is one of the factors of less corruption in these countries as compared to developing countries. On the other hand, in the developing countries it is the main source of black money, existence of large size of informal economy; and operation of all terrorist activities and also tax evasion. Therefore, in order to escape from adversaries of corruption and black money and to have more transparent and cleaner economic growth with social justice, less use of cash is one of the suggested measures. In other words, the cash less society will not only ease the burden on the government for printing of currency notes and onus on the people to carry these notes, but will also eradicating black money, corruption, pick pocketing, robbery, tax evasion and curtail the size of informal economy in the developing countries. Use of cash is a facilitator of black money as transactions in cash do not leave any audit trail. As against this, use of bank debit and credit cards will discourage black money and unaccounted transactions, since they will leave adequate audit trials and hence dis-incentivise black money generation. In other words, while demonetization will unearth black money and its source, digital transactions will discourage the promotion of black money in the society. Sweden, where 89 percent is no cash payment, ranks 3rd in Corruption Perception Index. In India, an estimated 22 percent is non-cash payment and India ranks 76th in the Corruption Perception Index. This veritably proves that there is a strong negative correlation between the cashless transaction and corruption. This means higher the cashless transaction lower the corruption and vice versa. Another important benefit of the cashless transactions is that it will reduce the burden of printing, transportation and other expenses incurred in currency operations. It is calculated that the Reserve Bank of India and commercial banks annually spend around Rs. 21,000 crores ($3.5 billion) in currency operations.

Another indicator of cashless economy is cash to GDP ratio. In Sweden, the cash-to-GDP ratio is just 1.73 percent. The cash-to-GDP ratio in India is 10.86, which is more than nine times high. The demonetization and withdrawal of high value currency from circulation would lower the cash-to-GDP ratio. According to Soumya Kanti Ghosh, group chief economist, State Bank of India “after complete re-monetization, the currency levels may settle for a little less than 10 per cent of GDP.”

One of the essential requirements of the cashless economy is financial inclusion. Financial inclusion means people must be linked and be part of the financial system of the country. By opening of accounts in the financial institutions such as banks and post offices, people will be financially included in the mainstream of institutional financial system. The World Bank data shows that

<table>
<thead>
<tr>
<th>Countries</th>
<th>% Non-Cash Payment*</th>
<th>Corruption Perception Index(2015)**</th>
<th>Rank in Corruption Perception Index (2015)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>93</td>
<td>77</td>
<td>15a</td>
</tr>
<tr>
<td>France</td>
<td>92</td>
<td>70</td>
<td>23a</td>
</tr>
<tr>
<td>Canada</td>
<td>90</td>
<td>83</td>
<td>9a</td>
</tr>
<tr>
<td>UK</td>
<td>89</td>
<td>81</td>
<td>10a</td>
</tr>
<tr>
<td>Sweden</td>
<td>89</td>
<td>89</td>
<td>3a</td>
</tr>
<tr>
<td>Australia</td>
<td>86</td>
<td>79</td>
<td>13a</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>85</td>
<td>87</td>
<td>5a</td>
</tr>
<tr>
<td>USA</td>
<td>80</td>
<td>76</td>
<td>16a</td>
</tr>
<tr>
<td>Germany</td>
<td>76</td>
<td>81</td>
<td>10b</td>
</tr>
<tr>
<td>South Korea</td>
<td>70</td>
<td>56</td>
<td>37b</td>
</tr>
<tr>
<td>India</td>
<td>22****</td>
<td>38</td>
<td>76a</td>
</tr>
</tbody>
</table>

*http://www.worldatlas.com/articles/which-are-the-world-s-most-cashless-countries.html (accessed on 15/12/2016)


banking literacy among the general population and connected the common man who was out of the net of the banking system; with the banking system (ii) the deposit of huge amount of money in the Jan Dhan Bank account and opening up a large number of new Jan Dhan Accounts clearly shows that common men who were earlier scared of Bank and lacking banking habit are being brought to the banking system. (iii) it has strengthened the banking system, as many bank branches were facing acute problem of NPA(Non-Performing Assets). The capabilities of banks to lend more will be enhanced which would raise investment in the economy. The rise of savings in the bank will enhance their credit capability and thus promote investment in the economy; (iv) the excess income deposited in the banks can generate taxable income for the government which can be spent on various welfare programmes for the poor in different sectors of the economy; (v) during the re-monetization process the supply of money and liquidity flow to the market will be slow. It will help to control inflation in the economy; (vi) money unearthed through the demonetization if spent prudentely and honestly for the upliftment of the poor, will be helpful to reduce poverty and inequality in the society (vii) people who have earned black money through corruption and unfair means will be exposed and be punished so that it will pave the way towards a corruption free society. It will help to create a corruption free administrative and political environment in the country; (viii) earning through the unearthing of black money and also through raid on corrupt businessmen, politicians and bureaucrats will reduce the fiscal deficit. NITI Aayog Vice-Chairperson, Arvind Panagariya expects that demonetization will bring significant tax gains and help the economy bounce back strongly in the years ahead; (ix) it will enhance the flow of FDI to the economy, as the foreign investment requires a corruption free environment; (x) as this step will check the generation of black money, it will also be helpful to control the outflow of illicit money to other developed country’s foreign bank accounts. The raid on the black money holders will unearth and control “money laundering” and “hawala” transactions also; (xi) the demonetization has inflicted a big blow to the terrorists and naxalites funding who were largely using counterfeit high value currencies for purchase of arms and ammunitions and for the conduction of terrorist camps, training and terrorists attacks. The cash less transactions will check the use of counterfeit currency and discourage terror funding; (xii) demonetization, if done in regular intervals, will check political corruption and spending of illicit money during elections; (xiii) the demonetization and cashless transactions will be helpful to reduce the size of informal economy in the country. (xiii) it will promote social and cultural development in the society. Corruption and black money erodes social and cultural systems. It will put a break on unethical social development; (xiv) it will help the nation to achieve a real and cleaner economic growth rate, not an artificial and dirty economic growth rate achieved with the help of black money. It is a fact that the country is experiencing high rate of growth since 1991, but where is development?. Growth rate is high but pace of development is slow and tardy. High economic growth rate, if it fails to promote development or lead to snail pace development, will not be helpful.

**Table-2: Cash to GDP Ratio in Selected Countries (%)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>1.73</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.39</td>
</tr>
<tr>
<td>UK</td>
<td>3.72</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.82</td>
</tr>
<tr>
<td>Canada</td>
<td>4.08</td>
</tr>
<tr>
<td>USA</td>
<td>7.9</td>
</tr>
<tr>
<td>Singapore</td>
<td>9.55</td>
</tr>
<tr>
<td>Russia</td>
<td>10.56</td>
</tr>
<tr>
<td>India</td>
<td>10.86</td>
</tr>
</tbody>
</table>


upto 2014, only 52.8 percent adult population of India had accounts in the financial institutions. Out of the total only 10.7, 3.4 and 1.2 percent have used debit card, credit card and internet banking system for making a payment. This means that the digital transaction is very meager in India. It needs to be drastically improved.

**Demonetization and Cashless Economy: Perspectives**

The perspectives on benefits of demonetization are as follows: (i) it will check money hoarding and as a result more and more money will come to the banking system in the form of either current or savings account. The savings will push up investment and lead to capital formation in the economy; (ii) the opening of new bank accounts for depositing the banned currencies shows that it has promoted

**Table-3: Financial inclusion in India (per cent of adult age> 15), 2014**

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Financial institution account</td>
<td>52.8</td>
</tr>
<tr>
<td>Has debit card</td>
<td>22.1</td>
</tr>
<tr>
<td>ATM is the main mode of withdrawal</td>
<td>33.1</td>
</tr>
<tr>
<td>Used a debit card to make payment</td>
<td>10.7</td>
</tr>
<tr>
<td>Used a credit card to make payment</td>
<td>3.4</td>
</tr>
<tr>
<td>Used the internet to pay bill or make purchases</td>
<td>1.2</td>
</tr>
<tr>
<td>Saved at financial institution</td>
<td>14.4</td>
</tr>
<tr>
<td>Barrowed from a financial institution</td>
<td>6.4</td>
</tr>
</tbody>
</table>


**Source:** [http://datatopics.worldbank.org/financialinclusion/country/india](http://datatopics.worldbank.org/financialinclusion/country/india)
for the poor to improve their quality of life. Any growth rate achieved through the distributive justice and with less economic inequality is the true growth rate for a developing country like India. Less growth rate with less poverty and lower income inequality is more desirable and better for the Happiness Index than high growth rate with more number of people living below the poverty line and there is huge income inequality between the rich and poor. The nation has already crossed seven decades of its independence and cannot wait for long to allow a few to enjoy all fruits of economic growth and development while a vast majority languish in economic and social underdevelopment. It is high time the nation has to change its economic growth and development strategy.

Suggestions:

i) It should be a continuous exercise by the government and be repeated at suitable intervals to discourage the hording of black money in the form of cash. It will encourage digital transactions and banking habits among the people and improve the banking system also.

ii) The tax net needs to be increased. Simple progressive taxation is suggested. Besides the poor and lower middle income group with annual income of less than rupees five lakh should be exempted from the tax net, so that they can invest it in purchasing household amenities for improving their quality of life. It will also be helpful to promote self employment and small scale business activities. As a simple tax collection procedure, the tax must be deducted at source. It is better that the tax payment system must be very simple. The filling of returns must not only be simple but also be done away with by deducting tax at source will making any payment.

iii) The size of the informal economy needs to be curtailed. All payments to the workers in the informal sector with the business, contractors, landlords, and other rich and higher middle classes houses have to be made digital. Employees have to be encouraged to open bank accounts and employers need to pay them either through e-transactions or in cheques.

iv) In order to promote more and more digital payment, government needs to take steps to reduce the interest charged on the debit and credit cards and particularly credit cards. The low rate of interest through the BPL-Adhar Card link on the people belonging to Below Poverty Line will encourage the use of debit and credit card use among the poor people. Special concessions need to be given to the small businessmen, vendors and petty shop owners, tea and beetle sellers, etc.

v) Adequate number of bank branches need to the opened in rural areas. Because the number of banks per 1,00,000 population in India is only 0.01, while in Germany the ratio is 2.3, that is 230 times larger than that of India. The other non-banking financial intermediaries such as Life Insurance Corporation and Health Insurance companies, General Insurance companies need to be involved in the re-monetization process of the government. Besides, they must also render their help to the banking institutions in the promotion of saving and use of debit and cards among the rural and semi-urban users. A strong regulatory mechanism for the private and cooperative banking system, chit funds, etc. should be put in place so that they should not indulge in nefarious activities of black money.

vi) One of the essential prerequisites for the promotion of digital economy is safe digital transactions. Adequate arrangement have to be made for digital security. Strong action need to be taken for prevention of digital crime and compensation be made to the common men if they lose money because of digital crime. A system of digital investigation and insurance should be created.

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the common man if they lose money because of digital crime. A system of digital investigation and insurance should be created.

vii) The self help groups (SHGs) can be of great help to the people in the promotion of digital banking systems in the rural areas. More and more SHGs must be given the charge of bank mitras (friend) who can extend their help to the bank, post offices and bank correspondents during the re-monetization process and also proliferation of digital economy, use of debit and credit cards for making payment in the purchase of goods and services in the countryside. Besides the rural social infrastructures such as Youth Clubs and Mahila Mandals and Panchayati Raj Institutions should be energized for the propagation of digital rural economy. The “Gram Sabhas” in PRIs(Panchayati Raj Institutions) and “Ward Sabhas” in ULBs (Urban Local Bodies) must take up the issue of digital economy at the village level.

viii) All the line department functionaries such as school teachers, health workers, village development officers, anganwadi workers, etc. must educate the people about the financial inclusion and digital economy. Government has a large net work of village level functionaries and institutions which can take up the challenges of promotion of digital India.

ix) Like Pulse Polio Campaign, the Digital India campaign twice or thrice in a year in a mass scale can be conducted in the country. It is an appropriate way to propagate the Digital India campaign both in rural as well as urban areas. Besides, the digital infrastructure also needs to be improved.

x) India being one of the emerging economies in the world must try to achieve high “transparent and distributive growth rate”, that is the growth rate achieved bereft of black money and with distributive justice. In other words, it must be pro-poor and transparent growth rate with the help of digital transactions. The high growth rate achieved with the help of black money cannot be helpful to reduce poverty and economic inequality.

xi) Strong political will among both the ruling and opposition parties is necessary for the implementation of any economic reform including de-monetization and cash less economy in the country.

Conclusion

The Crisil Report says that “the demonetization move could change the face of the Indian economy”. According to Mauro F Guillen “the move could stifle some business that are legal and clean, if they use cash payment. But everyone will adjust. And while it can hurt some small business and individuals, it is better to do it than not”. According to IMF “we support the measures to fight corruption and illicit financial flows in India.” India is a great democracy where the people at large despite inconvenience supported the demonetization drive by the government for unearthing black money and counterfeit currency.

Demonetization and cash less economy in the long run will have negative impact on black money and positive impact on economic growth and development. By controlling black money, these two measures i.e demonetization and promotion of cashless transaction will help the nation to achieve a cleaner and transparent growth rate bereft of black money. Income earned through demonetization, if spent on various developmental activities such as roads, sanitation, health, education, employment generation, and other livelihood projects and programmes will enhance development and raise the quality of life of the people.

Readings


Ramesh Thakur “Economic and political risks of India’s demonetization” see http://www.indiantimes.com/opinion/2016/11/27/commentary/world/economic-political-risks-indias-demonetization/#.WEpN12UmnIU


https://www.quora.com/Has-any-country-other-than-India-ever-had-Demonetization-of-their-currency-notes-1

https://www.linkedin.com/pulse/demonetization-delhi-disguised-devil-deliberative-dawn-vinnakota


(E-mail: bkpattanaik@ignou.ac.in)
Publications Division Brings Out Book on Historical Evolution of Courts in India

Publications Division has recently brought out a book on the evolution of the Indian Judicial System. Released on the occasion of Constitution Day by Chief Justice of India Justice T.S. Thakur, in the presence of Shri Ravi Shankar Prasad, Minister for Law & Justice and Electronics & Information Technology the book has been designed as a Coffee Table Book which has several photographs of archival value.

‘Courts of India: Past to Present’, written by eminent judges, advocates and legal luminaries among others under the expert guidance of an Editorial Board constituted by the Supreme Court is an attempt to trace the historical evolution of courts in India. The book identifies the diverse court systems prevalent in India, maps its historical origins and contextualizes the present system of courts. The book provides an overview of the history of laws and legal institutions in India. Courts of India seeks to introduce the Indian judicial system to citizens, in as lucid a style as possible.

Publications Division is a repository of books on subjects of national importance and India’s rich cultural heritage. The mandate is to disseminate information through the production and sale of quality books at affordable prices.
Lack of credit, lack of confidence, lack of access to finance—these hurdles are being addressed through the Pradhan Mantri JEEVAN JYOTI BIMA Yojana (PMJJBY). The scheme has been designed to provide insurance cover to the vulnerable section of the society, ensuring that they are protected against the shocks of life. As of November 2016, 1.34 million families have been enrolled in the scheme, and the number is expected to increase significantly in the coming years.

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**World’s Largest LED Street Lighting Programme**

The LED based Street Lighting National Programme (SARP), currently running in the South Delhi Municipal Corporation (SDMC) area, was dedicated to the Nation on 8th January 2017. It is the World’s Largest Street Light Replacement Programme, which is being implemented by the energy efficiency services Limited (EESL), a joint venture under the Ministry of Power, Government of India.

The SARP programme is presently running in Purusa, Himsach, Pradeep, Uttar Pradesh, Assam, Jharkhand, Odisha, Meghalaya, Andhra Pradesh, Kerala, Goa, Maharashtra, Gujarat, and Rajasthan.

A total of 15,539 lakh street lights have already been replaced in the country with LED bulbs, which is resulting in energy savings of 10.64 crore kWh, avoiding emission of 33.35 MW and reducing 2.27 lakh tonnes of greenhouse gas emissions per annum. The energy efficiency market in India is estimated at US$ 7 billion, and an estimated outcome in energy savings of up to 20 per cent of current consumption, by way of innovative business models and government initiatives.

The cumulative savings of Rs. 335 crore in next 7 years and Rs. 50 crore per annum beyond that, through this programme, is expected to help in investment in social development initiatives and that too without the people needing to spend any extra money.

**Road Connectivity Project for Left Wing Extremism Affected Areas approved**

The Cabinet Committee on Economic Affairs, chaired by the Prime Minister, approved a Central Sponsored Scheme namely "Road Connectivity Project for Left Wing Extremism (LWE) Affected Areas" to improve the road connectivity in the worst LWE affected districts from security angle.

The project will be implemented as a vertical under Pradhan Mantri Gram Sadak Yojana (PMGSY) to provide connectivity with necessary overlays and cross drainage structures in 44 worst affected LWE districts and adjoining districts, critical from security and communication point of view. The roads will be operable throughout the year irrespective of any weather conditions.

Under the project, construction/upgrade of 5,411 km and 126 bridges/Cross Drainage works will be taken up at an estimated cost of Rs 2,457.26 crore in the above district. The fund sharing pattern of the road project will be same as that of PMGSY i.e., the ratio of 60:40 between the Centre and States for all States except the eight North Eastern and three Himalayan States (Uttarakhand, Himachal Pradesh & Uttarakhand) for which it is 55:45. The likely duration of implementation of the project in four years for 2016-17 to 2019-20.

The “Road Connectivity Project for LWE Affected Areas” envisaged in U.S. states including the 35 worst affected LWE districts which account for 50% of total LWE violence in the country and 14 districts critical from security angle per the Strategy and state of roads, districts provided by the Ministry of Home Affairs. The roads taken up under the scheme would include other District Roads (1076), Village Roads (93), and upgradation of existing Major District Roads (MDRs) that are critical from the security point of view. Bridges up to a span of 100 meters, critical from security angle would also be funded on those roads.

**Publications Division’s participation in World Book Fair, 2017**

Publications Division (PD), like every year, participated in the World Book Fair, 2017 organized in New Delhi at Pragati Maidan from 7-15 January, 2017. The Division, a pioneer in publishing books on Art, Culture and heritage received very encouraging response from the visitors.

Publications Division is presenting and presenting diverse aspects of Indian Panorama such as bibliography of national leaders, India’s history and freedom struggle, land and people, flora and fauna, science, environment and children’s literature. PD has published several books on Gandhian thought including the Collect Works of Mahatma Gandhi (CWMG) in 100 volumes, in English and Sanskrit. Gandhi Vijaya in Hindi which is considered the most comprehensive and authentic collection of Gandhi’s writings.

The titles of PDG under the ‘India’ series, builds on Modern India series and its monthly published books on Rashtrapati Bhavan and ‘Courts of India’ attracted good readership. The visitors also showed interest in a book brought out by the PDG and a special activity was specially put up as part of PDG’s stall to highlight the a-books of PDG. The visitors also used the opportunity to subscribe to the journals brought out by PDG.

Fourteen books on various topics including children’s books, books on history, culture and contemporary topics were released during the fair. It was also their chance to come to know about the Division’s mission, which is to make everyone’s life better through books. The Division also spread awareness about Digital India.

One of the significant highlights of PDG’s participation was the facility of cashless transactions through Debit/Credit Card and also through Bharat Kosh portal. Out of total sales, on Wednesday alone 17.00 lakhs which was highest ever in the history of PDG.