

Feasibility of Digital Transaction in Fertilizer Sector

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Abstract

Economics of the country is dependent upon the performance of the citizens against the backdrop of infrastructure and the government-related policies, which keep on changing with the change of time. The last decade has witnessed tremendous growth in use of internet and mobile phone in India. Present study mainly focuses on the scope, challenges and opportunities for implementation of cashless transaction culture in rural areas of the country. Random views aired by the farmers reveal that the cashless economy will help in curbing black money, counterfeit money, cash-related robbery, and will consequentially improve the country's economic growth. Challenges that can hinder the implementation of the policy are cyber fraud, high illiteracy rate, indifferent attitude of people, and lack of transparency and efficiency in digital payment system. The study shows that the introduction of cashless economy in India can be seen as a step in right direction. The consumer perception of digital payment has a significant and positive impact on adoption of digital payments. The ease of business becomes the focal point for lifting the national economy scale. Digital transactions facilitate the speeding up the ease of business. Significant contribution of rural India for improving the agriculture based economy of India has been acknowledged. At the highest level, significance attached to Digital India is echoed in the quotation by our Prime Minister, Mr. Narendra Modi which *inter alia* reads, "Earlier the civilizations thrived at the banks of rivers, followed by settlement of colonies at highways. In modern era township shall grow all along the optical fibre network of the country for the ease of business."

Key words: Cashless economy, corruption, black money, India, digital payments

India's finance sector, power sector, the corporate sector and other large volume and critical sectors are all enabled with strong digital network for the benefit and comfort of normal consumer, and is a force to reckon with. While crossing the towns on the route of high speed trains, one comes across the huge hoardings promoting Digital India (Plate 1).

Glance at the history shows that the world moved from stone-age, to barter era, minting coins and further simplifying to circulation of paper currency for commercial transactions. In traditional way for any commercial transactions the individual has to first withdraw cash from the respective bank account and then use this cash to pay at shops. Later the merchant goes to the bank to deposit the cash which he received from the buyer. This process is time-consuming for both the parties and involves avoidable/strenuous efforts on their part. In fact, in the journey of notes from banks to customer to merchant and back to bank coffers deteriorates the quality and texture of the paper currency notes.

The concept of today's trade and payment system, coupled with high-ended technology, needs to review the products on-line, order purchase digitally and execute payment to vendor at the distant place in digital system.

In simple language digital payment is a way of transferring the money in digital form. Both the payer and payee use digital modes to send and receive the money. No hard cash is involved in the digital payments. All the transactions in digital payments are completed on-line. It is an instant and convenient way to make payments.

In digital payments, the money gets transferred from buyer's account to the merchant's account immediately. This process is automatic and neither buyer nor the shopkeeper is required to visit the bank. Digital payment saves the common man from long queues of Automated Teller Machines (ATM) kiosks and reduces the cycle time of each transaction money transfers. In fact, the process saves not only the valuable time but also the undue expenditure of designing and printing of paper notes, and logistics of transporting currency notes.

The socio-economic index of the healthy nation is gauged by



Plate 1. Hoarding on Digital India



observing the factors of sanitation, child mortality, literacy, infrastructure, law and order, ease of doing business and others. The global acceptable concept indicates that water consumed straight from the tap and the presence of crisp and clear paper currency notes (due to least circulation) reflects on the health of economy of the particular country. Digital transactions are a panacea for expediting the speed to ease of business.

Taking a glance at the world scenario, the European Union and

USA are in constant competition with each other for maximizing digital usage. India is a country where 98% of total economic transactions by volume are done through cash (Figure 1).

Our observation is that the storyline of all the projects remains the same. The common man initially resists to the CHANGE as the person is cocooned in his/her own individual comfort zone. It is only after repeated persuasions and allurements, and of course by generating the confidence of general public in the new system, the significance of the project is realized for the benefit of all concerned.

Digital India/Digital Transaction

The same case persists with Digital India campaign, a flagship programme of the Government of India which envisions to transform India into a digitally empowered society and knowledge economy. "Faceless, Paperless, Cashless" is one of the professed roles for Digital India.



Digital transactions certainly facilitate the ease of business in the country. It reduces the expenditure of costly currency notes in circulation, reduces the chances of circulation of counterfeit notes by unscrupulous elements of the society, maintains transparency in transactions, and restricts black money in the country. Keeping this in view, Government of India has encouraged the usage of accurate and faster payments through digital modes. This facilitates to reduce the gap between the *haves* and the *have-nots* spread over the urban and rural sectors of the country. The consistent awareness of usage apps under "Digital India" campaign and equipped with increasing internet network speed across the country holds the key to success.

Today the world has become a global village and all are well connected by the internet network, facilitating business by anyone from any place of the planet. The presence of computers in daily life of the common man now stands indispensable. Taking a step further, the clock, the calendar, the notebook, the camera, the voice call and what not, all have converged into a mobile, a mini hand-held computer. Life gets disturbed the day the mobile hand set, impregnating sizeable features, is misplaced or forgotten at home.

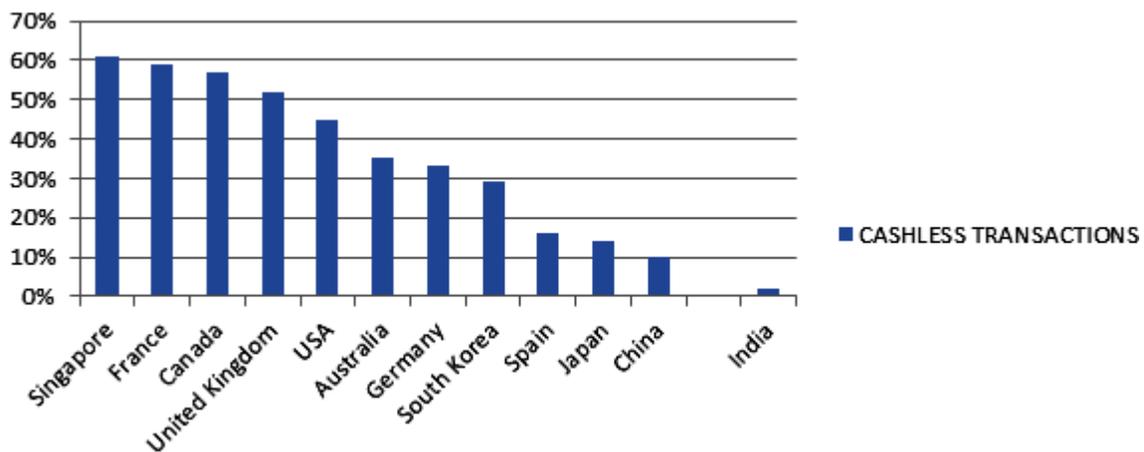


Figure 1. Cashless transactions as percentage of total transactions in different countries
Source: Mastercard Advisor's Measuring progress toward a cashless society



Present Status in India – Urban and Rural Economy

In India, digital transactions are at the nascent stage, and there is a push from varied quarters towards adapting the platform of digital payment solutions.

India has predominantly been cash-driven economy and the culturally deep-rooted trends of cash-based purchases have widely been the economic culture, in both urban and rural sectors. Indian economy is one of the fast growing economies of the world. In the recent past, changes visible to business dynamics in Indian financial system are because of government initiatives to facilitate the digital transactions.

But the crux of the matter that has to be taken into consideration is to effectively execute the system in the rural segments of the country

by engaging the Jan Dhan Aadhaar Mobile (JAM) project of the Government of India. Key to the solution rests with the availability, accessibility, acceptability, affordability and awareness towards the contribution of digital transactions in uplifting the national economy.

A joint study conducted by CII and Deloitte shows that after the demonetization there is a significant rise in the demand from consumers for digital payment modes. Many merchant establishments are keen on using the digital payments as the solution for retaining the customer base.

As depicted in **Figure 2**, customer demands for digital payments are comparatively high than the earlier periods, due to various favourable factors. Timely issuance of payment banks, easing the norms of mobile wallet transactions, increasing the bandwidth to rural locations, and government encouraging public with incentive schemes for using the UPI (Unified Payment Interface), signify huge transformation taking place towards digital payments. Digital transaction is the best way to move towards cashless economy. Moreover, the government is keen and sincere in its efforts to promote

digital payment system. Very rightly, for 2018-19 Prime Minister's Office (PMO) has set the ambitious target of 400 crores digital transactions in the country of which Department of Fertilizers has been assigned 40 crore transactions. The same is proportionately allotted to different fertilizer companies operating in the country.

Benefits of Cashless Economy and Internet Usage

Following benefits accruing from the cashless economy:

- 1. Cost-effective Transfer of Money**
It is understood that for every financial transaction of Rs. 1000/- undertaken by financial bodies results in additional expenditure of Rs. 60/-, thereby increasing the cost of transferring money from one end to another. On the contrary the transfer effected by digital mode of payment reflects an expenditure of even less than Rs. 5/- only upon the financial institutions.
- 2. Increase in Employment Opportunities in Rural Areas**

A large number of small entrepreneurs have generated employment by opening internet kiosks. In interiors of the villages, the village local person collects

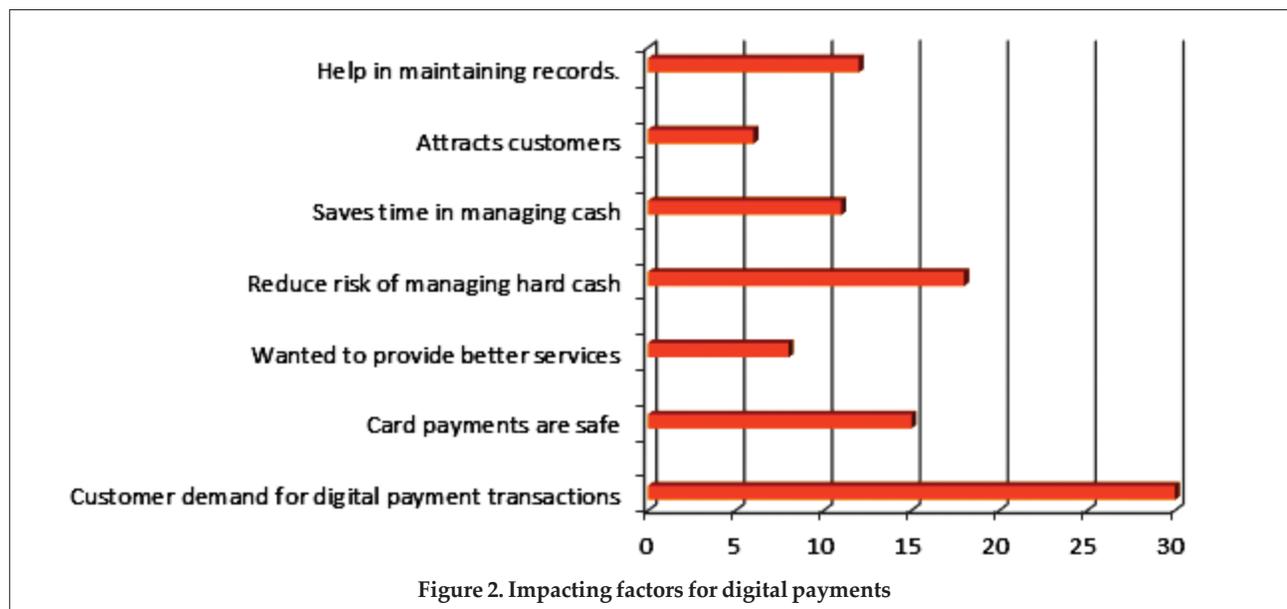


Figure 2. Impacting factors for digital payments

payment from the villagers and deposits the same at the retail counters acting as the common service center.

3. Improvement of Standard of Living

The increased accessibility of internet has facilitated information on health issues of plants, humans and cattle as well. The timely delivery of agriculture produce at market place fetches the right price, saves time and reduces the wastage of goods.

4. Reduction in Risk and uncertainty

The online review of weather forecast, fish catchment area, timely transfer of messages eliminates the uncertainty of the market. Rural India impregnates nearly two-third of the country's population of some 85 crores where much of the challenge lies in achieving cashless transactions for the rest of the decade.

While inaugurating the smartphone plant in NOIDA recently, Prime Minister stated that India will surpass United States of America in terms of number of smartphone users by 2020. It is estimated that rural India users will constitute almost half of all Internet users in 2020. Number of connected rural consumers is expected to increase from 150 million in 2017 to almost 315 million in 2020.

Role of Fertilizer Sector as Driving force in Uplifting Rural Economy by Implementing Digital Transactions

The salient features of the fertilizer sector identified are as under:

- ◆ Fertilizer sector to reboot rural digital transactions
- ◆ Fertilizer sector - catalyst in rural digital transactions integration
- ◆ Fertilizer sector can make



Digital India in rural sector a reality.

- ◆ Bottom of the pyramid to get integrated in Digital transactions via fertilizer sector.
- ◆ Fertilizer sector paves the opportunity for on-boarding the rural masses in digital transformation.
- ◆ Fertilizer sector to lead digital transactions initiative.

Scope of Digital Transactions in Fertilizer

India took the bold step of introducing and implementing fertilizer Direct Benefit Transfer (DBT) project to keep a track and trend of movement of fertilizers, identifying beneficiaries, check pilferages, regulate the over burdening subsidy bills, plan for soil health cards to farmers, soil mapping, and others leading to the usage of balanced dose of fertilizers. Introduction and implementation of new methodology is necessitated for the survival of the fertilizer industry and overall agriculture growth of India. Key to the successful implementation is the authentication of farmer's finger print placed upon the point of sale (PoS) device by server of Unique Identification Authority of India.

Under the DBT roll out in India, over 2 lakh PoS devices have been deployed at the retailers' point widely spread over the entire country. In fact, the fertilizer retail shops equipped with payment facility of PoS devices withholds the scope for additional source of income for merchants.

Bharat Interface for Money (BHIM)

is an app that lets you make simple, easy and quick payment transactions using Unified Payments Interface (UPI). Using BHIM, one can make instant bank-to-bank payments and pay and collect money using just mobile number or virtual payment address (UPI ID). BHIM NPCI has declared four promotional incentive schemes, are the source of income to merchants encouraging to the extent of Rs. 20 per digital transaction engaged at single point. Each of the two lakh fertilizer retail outlets in the country, equipped with POS devices, has the capability of functioning as *common service center* also for dissemination of knowledge.

The strapline depicts "*Knowledge is Power*". More entrepreneurs shall join the stream and avail passive income. The opportunities of inflow of recurring income stand open by extending reward point to customer. Ultimately both the retailer and the customer are benefited from all the angles.

With the added assistance of laptop/computer, the fertilizer outlet shall conduct services as mini bank with multi-purpose functions. With backend modification of software programme, the PoS devices shall serve for digital payment collection and transfer of money, payments of bills and others. The payment to daily wage earner working under MNREGA by the said service centers shall be a boost to local panchayat also. In addition, the pop ups on advertisements and latest Government schemes, insurance and others shall empower the villagers with additional knowledge. The same knowledge shall be converted into practice. The retail outlets shall facilitate the concept of effective implementation of *Lab to Land* leading to the theme *Khad se Swad Tak*.

The 28th April, 2018 edition of the Times of India declared that Dudhli village in Doiwala (District Dehradun) was going to become the first *Gram Panchayat* in Uttarakhand to be fully connected

with Wi-Fi under Centre's Digital India scheme.

Advantages of Digital Transactions

◆ *Digital Record of Transactions:* One of the other benefits of going digital is that all transaction records can be maintained. Customers can track each and every transaction that is made, no matter how small the transaction amount is.

◆ *One Stop Solution for Paying Bills:* Many digital wallets and payment apps have become a convenient platform for paying utility bills. Be it mobile phone bills, internet or electricity bills, all such utility bills can be paid through a single app without any hassle.

◆ *Helps Keep Black Money under Control:* Digital transactions will help the government keep a track of things and it will help eliminate the circulation of black money and counterfeit notes in the long run. The direct access of bank accounts of consumers sets aside the presence of middlemen.

◆ *Beneficiaries Get Direct Benefit of the GOI Schemes:* Digital transactions enable the direct contact of bank accounts and mobile link with main server. The consumers shall be updated with all the new projects and other related information of the Government of India.

◆ *E Shakti Mobile Application:* It shall assist the poor to get loan approval easily.

◆ *Ease of Doing Business:* The improved ranking of India in global market also is the result of implementation of digital transactions. The number of users of digital transactions has increased in the rural sector.

◆ *Reduction in the Out-flow of Paper Currency:* The expenditure on designing and printing of a single Rs. 500 currency note stands at Rs. 2.92/- and that of Rs. 2000 currency note amounts to Rs. 4.02/-. The overall reduction in outflow of

paper currency notes certainly reduces the national expenditure. Further the life of the paper currency in circulation in market is also limited. All the relevant indirect actions result in the preservation of national flora and fauna resources.

Fiscal Incentive for Digital Payments

Faster, Easier, More Convenient: Perhaps, one of the biggest advantages of cashless payments is that it speeds up the payment process and there is no need to fill in lengthy information. Visiting and waiting at ATMs is going to be a story of past. Instead, banking services will be available to customers on a 24x7 basis and on all days of a year including bank holidays.

Economical and Less Transaction Fee: There are many payment apps and mobile wallets that do not charge any kind of service fee or processing fee for the service provided. The UPI interface is one such example, where services can be utilized by the customer free of cost.

Waivers, Discounts and Cashbacks: There are many rewards and discounts offered to customers using digital payment apps and mobile wallets. This comes as boon to customers and also acts a motivational factor to go cashless. Few incentives offered for increase of digital transactions are as under;

◆ On digital transactions up to Rs. 2000, the relevant tax is waived off.

◆ Digital purchase of fuel through credit cards, mobile wallets or e-wallets, discount of 0.75% is granted.

◆ Free accident insurance worth Rs.10 lakh on account of online ticket buyers.

◆ On purchase of new LIC policies online via its site, 8% discount is offered.

Modes of Digital Transactions (Procurement, Payment and Transfer)

1. Banking Cards : Cards are among the most widely used payment methods and come with various features and benefits such as security of payments, convenience, etc. The main advantage of debit/credit or prepaid banking cards is that these can be used to make other types of digital payments. Some of the most reputed and well-known card payment systems are Visa, MasterCard and Rupay, among others.

2. USSD: The digital payment method, *99#, can be used to carry out mobile transactions without downloading any app. These types of payments can also be made with no mobile data facility. This service can be used to initiate fund transfers, get a look at bank statements and make balance queries. Another advantage of this type of payment system is that it is also available in *Hindi*. This can be done on non-android device also. SMS charges may apply.

3. AEPS: Aadhaar Enabled Payment System (AEPS) can be used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions, aadhaar to aadhaar fund transfers, etc. Immense scope exists for AEPS through POS transactions.

4. UPI: Unified Payment Interface (UPI) is a type of interoperable payment system through which any customer holding any bank account can send and receive money through a UPI-based app. The service allows a user to link bank account on a UPI app on his smartphone to seamlessly initiate fund transfers and make/collect requests on a 24x7 basis and on all 365 days a year.

5. Mobile Wallets: A mobile wallet is a type of virtual wallet service that can be used by downloading an app. The digital or mobile wallet stores bank account or debit/credit card information or bank account

information in an encoded format to allow secure payments. One can also add money to a mobile wallet and use the same to make payments and purchase goods and services.

6. Bank Pre-paid Cards: A prepaid card is a type of payment instrument on to which you load money to make purchases. This type of card may not be linked to the bank account of the customer. On the contrary, a debit card issued by the bank is linked with the bank account of the customer.

7. POS Terminals: Traditionally, POS terminals used to be referred to those that were installed at all stores where purchases were made by customers using credit/debit cards. It is usually a hand-held device that reads banking cards. However, with digitization the scope of POS is expanding and this service is also available on mobile platforms and through internet browsers.

8. Internet Banking: Internet banking refers to the process of carrying out banking transactions online. These may include many services such as transferring funds, opening a new fixed or recurring deposit, closing an account, etc. Internet banking is also referred to as e-banking or virtual banking. Internet banking is usually used to make online fund transfers via National Electronic Funds Transfer (NEFT), Real Time Gross Settlement (RTGS) or Immediate Payment Service (IMPS).

9. Mobile Banking: Mobile banking is referred to the process of carrying out financial transactions/banking transactions through a smartphone. Many banks have their own apps and customers can download the same to carry out banking transactions at the click of a button.

10. Bharat Interface for Money (BHIM) App: One can link his/her bank account with the BHIM interface easily on handset mobile. The BHIM app can be used by

anyone who has a mobile number, linked with bank account with debit card. Money can be sent to different bank accounts, virtual addresses or to an aadhaar number. In 29th GST council meeting, Government of India has exempted GST on 4th August, 2018 transaction value paid by consumer to merchant by BHIM app to a ceiling of Rs. 100/- each.

Fear of Digital Transactions

Risk of Identity Theft

The biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transactions, even well-educated people run the risk of falling into phishing traps. With the rising incidences of online frauds, the risk of hacking will only grow as more people hop on to the digital platform. Another weak link is the inadequate redressal mechanism. However, of late, RBI has issued directives that any fraud reported by individual within three days shall be the responsibility of the bank for indemnity to the victim.

Losing Mobile Phone

The dependency upon mobile phone is heavy. Should there be an incident of mobile misplaced/stolen, it can prove to be a double setback. It can not only make the individual susceptible to identity theft, but also be rendered helpless in the absence of physical cash or any other payment option. This can be especially problematic while on travel in smaller towns or villages with lack of banking infrastructure or other payment options. Nevertheless the solution lies in battery back-up.

Difficult for Tech-unsavvy

According to the Internet Live Stats, India has a low Internet penetration of 34.8% (in 2016), and only 26.3% of all mobile phone users have a smartphone (2015). Besides the practical difficulty of going digital, "a bigger block is the psychological shift". The digital medium may prove a challenge for

the tech-unfriendly people, mainly elders, who will need more time to adapt or have the availability of other options to conduct transactions. However, these applications are so user-friendly that anyone who knows how to use a mobile is actually a tech-savvy person.

Overspending

While there is no denying the convenience offered by the card or mobile wallet transactions, it could open a spending trap for an unsuspecting population. The pain of parting with money is felt more acutely if an individual uses physical cash instead of a card. But considering the fact that India is a saving-based economy, chances of overspending will be actually minimal if not zero.

Fear of Common Man for Usage of Digital Payments

In rural areas, one basic reason for the slow adoption rate of electronic fund transfer at point-of sale (EFTPoS) is the consumers' perception that EFTPoS has a higher level of risk (due to technical failure) than other traditional payment methods. But this gets balanced by the risk of theft of actual hard currency. We will need to counsel the rural population on this.

Challenges in implementing Digital Transactions in Rural areas

- ◆ Most of the rural and co-operative banks are not on board of BHIM which needs to be addressed by concerned authorities.
- ◆ There are farmers who pay in instalments in kind (farm produce), as such digital payments difficult in such situations.
- ◆ Poor internet connectivity in remote areas and power cuts pose the biggest challenges. The internet loading speed is very low. The average page load time is 5.5 seconds in India compared to 2.6 seconds in China. Engaging electric

poles for increased internet coverage in villages is a sustainable option.

◆ Digital payment using POS takes 3-4 minutes per transaction. During peak season, it is difficult to cater to a large number of farmers desperate to purchase fertilizers by digital mode of payments.

◆ Transactions are mainly in cash. Large size of informal/unorganized sector entities and workers prefers cash-based transactions.

◆ The concealed mindset of the common persons in rural sector hampers the usage of digital transactions. Much improvement is necessitated in the states of Bihar, Madhya Pradesh, Rajasthan, Odisha, Uttar Pradesh and North Eastern States which lack adequate digital knowledge. Wide campaign is the need of hour to remove their hesitation on use of technology.

◆ Though bank accounts have been opened through Jan Dhan Yojana, few of them are lying unoperational. Unless, people start operating bank accounts, cashless economy is not going to become reality.

◆ Converting India's rural population of nearly 85 crores having diverse commitments and engagements into the digitally literate mass in itself is a herculean challenge.

Generally, the masses get going on three counts namely, i) administrative pressure, ii) by penury benefit, and iii) persuasion by education. The 1st option is ruled out in the democratic demography of India. With respect to 2nd option, the fertilizer industry itself is reeling under financial constraints and as such the cash back benefits and others are difficult to sustain. Third option of educating the farmers to maximize the usage of digital transactions in the daily chores of life by adopting reachable methodology by fertilizer companies is viable. Perhaps it is more apt to quote



Figure 3. CMD, RCF transferring money to DT and DF by BHIM at Mumbai on 16th May, 2018.

Chanakya 'धन से ज्ञान अर्जित नहीं होता, पर ज्ञान से धन अर्जित हो सकता है'

Special drives through schools, colleges, panchayats etc. can help in creating awareness about cashless/banking transactions. Creating awareness in educational institutes shall facilitate early acceptance by young minds as compared to elders. At least our future is secured and improved.

Promotional Campaign of Digital India

Campaigns by Fertilizer Companies for Promoting Digital Transactions in India

All the fertilizer companies in India are engaged in different methods as per their convenience to spread the digital knowledge in the fertilizer sector.

i) Gujarat Narmada Valley Fertilizers and Chemicals Limited (GNFC)

a) Has enabled townships digital payments acceptance infrastructure.

b) Is seeking help from multiple volunteers, including students, for promotion of digital payments in village areas.

c) Initially extended financial rebates for encouraging farmers using digital payments.

ii) National Fertilizers Limited (NFL)

Conducting training programmes for retailers and farmers to promote digital payments.

iii) Indian Farmer Fertilizer Cooperative Limited (IFFCO)

a) Provided co-branded debit card of Bank of Baroda and Rajasthan State Co-op. Banks.

b) Providing free delivery of fertilizers to household on cashless payment.

c) IFFCO has recently launched the Indian Cooperative Digital Platform (ICDP) called www.iffcobazar.in, which is available in 13 major Indian languages with a membership of 2.5 crores. The objective of the portal is to provide a digital platform for communication and commerce between the farmers/consumers and IFFCO and its group companies.

iv) Rashtriya Chemicals and Fertilizers Limited (RCF)

3. As shown in Figure, top management officials are personally supervising and encouraging the digital transactions. RCF has i) printed nearly 1 lakh pamphlets for promotion of digital payments, ii) is regularly bringing out articles in the in-house magazine in local language for awareness of digital usage, and iii) is arranging sun board plates at retail points in Maharashtra for display of BHIM QR code for encouraging farmers to Scan & Pay digitally.

v) Krishak Bharat Cooperative Limited (KRIBHCO) & Adventz Group (MCFL, PPL, ZACL)

a) Conducting lectures and group discussions on digital payments at all the conferences.

b) Helping farmers to open bank accounts.

c) Special cell are being organized to train the CSC stakeholders for digital payments.

vi) Shriram Fertilizers and Chemicals

It is undertaking digital payments promotion at the dealers and farmers' level.

Economic Adviser, DOF expressed in the meeting held on 20th July, 2018 that POS devices be positioned at all common platforms of work place of canteen, colony, etc. He encouraged the Block Level Agriculture officials to engage dialogue with farmers for creating awareness on benefits of digital transactions.

The evaluation of public sector organizations by Government of India on the parameters of digital encouragement has also driven the work force to make focused efforts on promoting use of digital transactions. The novel idea of printing QR codes for money transfer on visiting cards is catching up in the corporate world. Now all the banks are insisting on the customer for usage of debit cards to execute financial transactions.

Promoting Digital Payments Among People

1. NITI Aayog has launched the schemes *Lucky Grahak Yojana* and the *Digi-Dhan Vyapar Yojana* to give cash awards to consumers and merchants who utilize digital payment instruments for personal consumption expenditures. Toll-free helpline number 14444 for digital payments assistance was also launched.

2. Banks and Prepaid Payment Instrument (PPI) are not to levy any charges on customers for transactions of up to Rs. 1000 made through Immediate Payment Service (IMPS).

3. For card payments, transactions of up to Rs. 1000/-, MDR is capped at 0.25% and transactions above Rs. 1000/- and up to Rs. 2000/-, MDR is capped at 0.5% from 1st January 2017 to 31st March 2017.

4. Benefit of lower rate of income tax on digital turnover (from 8% to 6%) for small businesses under Section 44AD of Income Tax Act, 1961 dated 20th December 2016

5. Public sector banks (PSBs) not to charge fees for transactions

settled on IMPS and UPI in excess of rates charged for NEFT for transactions above Rs. 1000/-. For Unstructured Supplementary Service Data (USSD) transactions above Rs. 1000/-, a further discount of fifty (50) paise provided up to 31st March, 2017.

6. Oil marketing companies namely Indian Oil, BPCL and HPCL are now offering an upfront discount of Rs. 5/- on every LPG refill to all LPG customers who will book and pay for their LPG cylinders online.

Measures Required to be Undertaken for Developing Cashless India

◆ Basic cyber hygiene must be taken care of. Non-sharing of passwords with others, non-saving of passwords on public networks and better access to control techniques with strong authentication measures should be implemented by mobile e-wallet companies.

◆ Abolishment of government fees on credit/debit card transactions; reduction of interchange fee on card transactions; increase (or decrease) in taxes on ATM withdrawals.

◆ Tax rebates for consumers and for merchants who adopt electronic payments.

◆ Scaling up the capabilities of POS machines for faster rollouts in country is a must.

◆ Making electronic payment infrastructure completely safe and secure so that incidents of cybercrimes could be minimized and people develop faith in electronic payment system.

◆ The Reserve Bank of India too will have to come to terms with a few issues, from figuring out what digital payments across borders means for its capital controls to how the new modes of payment affect key monetary variables such as the velocity of money.

A Step on the Road to Cashless Transactions towards Farmers

The government has taken a slew of measures to ensure that cash requirements of farmers are not adversely impacted due to the demonetization exercise, even as it has urged farmers to join the movement for cashless transactions in the ongoing sowing season.

About **50 farmers** did their first cashless transaction at the event and bought seeds and fertilizers Minister for Agriculture and Farmers' Welfare, Mr. Radha Mohan Singh and Railways Minister, Mr. Suresh Prabhu at Dadri on 26th November, 2016. On 27th November, 2016, Agriculture Minister attended a seminar in Dehradun, while the Railway Minister was present in Palwal.

To expand digital payment infrastructure in rural areas, the Government of India through NABARD will extend financial support to eligible banks for development 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 85 crore who will have facility for cashless transaction.

Third Party Recognition

In last week of May 2018, delegation from Central Bank of Nigeria toured India for assessing the implementation of digital transactions through POS devices and payments to merchants digitally by farmers in the rural sector. The delegates visited the retail point at Kalyan (M/s Pathare Nursery) and interacted with farmers for the ease of doing business in fertilizer sector.



The delegation was overwhelmed at the concept of the digital transactions introduced by Government of India. The entire process highlights the transparency of the flow of fertilizers, identified beneficiary and the amount paid against the purchase of fertilizers made by the farmer. The visit to Kalyan Nursery was coordinated by RCF and Department of Agriculture, Maharashtra.

Way Ahead

The fertilizer sector with the turnover of nearly 56 million tonnes of fertilizers annually has immense potentiality to give a boost to the nation's agriculture based economy by going digital. Over two lakh POS devices spread across the nation enabling farmers for procurement of fertilizers at retail centers shall act as Micro ATMs at low cost, to serve remote towns and villages where cash machines cannot be provided. Empowered with aadhaar enabled payment system (AePS) mechanism the existing POS devices shall enable the farmer to pay to the retailer the value of fertilizers digitally after the successful aadhaar biometric authentication of farmer's

fingerprint for purchase of fertilizer. Aadhaar enabled payment system (AePS) ensures that digital transactions are PINless and PAINless. The Micro ATMs can be used as Mini Banks for engaging banking services just at the verification of the finger print of user. It has the potential to be the cornerstone of the government's vision of a cashless digital society.

The prospects of fertilizer retail center are bright as each retail point shall act as Common Service Center (CSC) extending updated information and solutions to the overall farm health. The information shall encourage farmers for soil health cards and explore options for sustainable selection of crops. The better quality of seeds, fertilizer and irrigation shall enable farmers to reap a good harvest. The e-NAM facility at fertilizer retail points imbibed as CSC shall update the farmers of the latest value prevailing in nearby *mandis* of the agriculture produce.

The fertilizer retail outlet/CSC shall facilitate the implementation of the concept of Micro credit & Micro Finance evolved by Nobel

laureate Mr. Muhammad Yunus, for uplifting the poor people in the villages. It is apt to quote Muhammad Yunus from his work *Creating a World Without Poverty: Social Business and the Future of Capitalism*, "Poor people are like a bonsai tree. There is nothing wrong with their seeds. Only society never gave them a base to grow on".

The ease of availability of retail points for executing digital transactions and entrepreneurship opportunities in rural India shall certainly arrest the flow of villagers leaving their house for menial work in urban towns. The training activity project under CSR umbrella shall take the rural India ahead of the times towards reducing the percentage of below poverty line of the nation. With Digital India becoming a reality, quotation of Mr. Muhammad Yunus, "One day our grand children will go the museums to see what the poverty was like" will (hopefully) come true.

Conclusion

It is for us, the people of India, to realize that it is in our hands to promote magnificent project encouraged by our Hon'ble Prime Minister, Mr. Narendra Modi. Let us teach our brothers and sisters of this country the benefits of Digital India Vision. This step of cashless economy is going to create ripples. *"Coming together is a beginning; keeping together is progress; Working together is success"*.

*Jai Jawaan Jai Kissan
Jai Digitaal*

The views expressed here are in individual capacity. ■