

Challenges and opportunities – Execution of Digital India into Primary Sector of Indian Economy.

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Abstract- As Gandhiji said “real India lies in villages,” and village economy is the backbone of Indian economy. Without that the development of the rural economy, the goals of economic planning cannot be accomplished. The rural economy entirely relies on agricultural income & growth. Therefore, it is very essential to improve the financial situation into the rural regions of India. Economic state of India has been changed drastically after the sudden decision of demonetization taken by the government. Which has effected almost all the sectors of Indian economy, but agriculture sector being the mostly effected, it has been very difficult to undergo these changes, specifically for the rural regions of the country where the maximum agricultural sector has been operating since very long time. The people operating into the agricultural field can give the maximum financial support to the Indian economy. Now the role of Digital India has been mainly focused to improve this situation and entirely dedicated to implement the digital services all over the country. In this research paper the entire focus is on the opportunities where these digital services can be implemented and develop the country grow Digitally and reach in each and every part of India, especially in the rural regions where it will improve the GDP as well the living state of people and also will result into fulfillment of the mission “DIGITAL INDIA”. And also the emerging ideas have generated new technique to take this major step ahead with lots of opportunities in this competing world.

I. INTRODUCTION

Digital India is a government operated and initiated programme which will has its own agenda which is strongly laid on 9 important pillars. Which has completely focused on all the sectors of the Indian Economy. Namely primary sector, secondary sector as well as the tertiary sector. This research paper mainly focuses on primary sector i.e. entire agricultural sector like crop production, farming, animal husbandry, harvesting, fishing, etc. Digital India is enhancing the entire economy digitally. Digital India focuses mainly on empowering the nation with digital perspective. Had also given importance to e- access to government and government related livelihood services entirely emphasizing on digital literacy, services& also the digital infrastructure. India being the developing nation is growing faster with having the average age of working people falling under 25-35 years of age which is among one of the youngest and enthusiastic population with approach towards change. This will help the entire nation to augment its growth at a faster pace. Agriculture field and its sub sectors holds the maximum % geographically. And also India being rich in the primary resources of environment will definitely the change the current scenario. More than 70% of Indians depend on agriculture; 60% of industries are agro based; 50% of national income is contributed by rural sector and the agricultural sector is the largest foreign exchange earner to India. “Digital India” the words define the future state of India. As it’s for the betterment of the country and the whole of the economy. Primary sector of the Indian economy is the agricultural sector and that being the largest work force of the nation, has the maximum

manpower and has the potential to bring the country’s economy at highest peak. Which will not only improve the economical state but will also become a developed nation unlike other developed countries. The country having the potential to overcome its weakness, they have to move towards the modern world which is completely mechanized with the new technologies and innovations in each and every field. The country being the developing nation has already started up with the mission like DIGITAL INDIA, MAKE IN INDIA, and TRANSFORMING INDIA. etc. has started taking place and initialized into the minds of individuals. It is very important to cope up with the new technologies and innovations and to learn the same, so that we can focus on the project and accomplish the goal in the near future.

Hence, it is very important to start with the largest and most important contributor of the Indian economy i.e. the primary sector of the country being the Agricultural sector. Wherein the scope of growth is very high and achievable. It is very true that there are many hurdles which will come across the path of success, but it is not impossible. If the initiative is positively taken and executed it will definitely change the scenario. The digitization has been the best make over in the entire economy which has taken place wherein it is very easy as well user friendly to make it into practice for all day to day work.

OBJECTIVE

- To study the concept of digital India programme into the field of primary sector.

- To find out the importance of this Digital India programme.
- To find out the challenges faced in implementation of this digital India into the agricultural sector.
- To find out practical solutions and innovative ideas to accomplish the vision of a digital India-a reality.

Challenges faced by agricultural sector

Going digital into the agricultural sector creates an insecurity into their mind with respect to their earnings. The most important thing required is implementation of digital services into the rural regions of India as because the maximum stake of agriculture sector of India is occupied into the rural regions of India, along with the implementation of digital services it is also necessary to have governance and control over the agricultural activities in every core of India. It is very vital to adopt the new technique and technologies and the working methods which changes from time to time and makes the work easier to perform. As even in today's scenario the new technologies have become advanced and fast which helps the agricultural sector to grow with a rapid speed, but it also necessary to accept the changes taking place into the environment and be more flexible to adopt it. The new techniques is time saving as well cost saving which even supports to give the farmers the financial stability and makes it easier to carry forward the same with a great success. Hence it is also necessary to also regulate such changes in so that no one can take disadvantage just for the sake of earning by charging high price to the services and machinery with new technology.

1. High cost of investment/finance or unavailability of sources of finance.
2. Inadequate tangible & intangible infrastructure to support the various activities into farming sector.
3. Traditional / Old farming techniques with slow and less productivity.
4. Limited access to quality farm inputs.
5. Too much dependency on natural resources like rain;
6. Inadequate storage facility and high post-harvest losses due to lack of required infrastructure.
7. Inadequate access and knowledge towards disease control facilities of agro products.
8. Lack of awareness and alertness by farmers for better farming methods & techniques.
9. Lack of implementation of agricultural laws and policies for regulation.
10. Limited market access due to inadequate marketing and agro processing facilities
11. Inability to market the produced goods and product efficiently
12. Low incomes of farmers to purchase the necessary farm inputs
13. Limited financial support/ funding by government and private sector to agricultural sector
14. Low production and productivity resulting in low revenue
15. Low value addition to agricultural produce
16. Limited public agricultural institutions to train them to gain related knowledge & implement it.
17. The country has not yet been zoned on the basis of different agricultural crops.

SELECTED TECHNOLOGY-BASED APPLICATIONS IN INDIAN AGRICULTURE CAN HAVE AN ECONOMIC IMPACT OF \$45-80 BILLION ANNUALLY IN 2025

Sized applications	Potential economic impact (\$ bn annually)	Potential reach	Potential productivity or value gains
 Hybrid and GM crops ¹	1-4	<ul style="list-style-type: none"> • 10% of total of 92 million tonnes of farm produce under genetically modified crops 	<ul style="list-style-type: none"> • 5-10% productivity improvement
 Precision farming ¹	8-30	<ul style="list-style-type: none"> • 20% of total arable land under precision agriculture 	<ul style="list-style-type: none"> • 15-60% yield improvement • 22 million farmers with higher yields
 Real-time market information ¹	10-15	<ul style="list-style-type: none"> • 90 million farmers (60% of total) using real-time market information 	<ul style="list-style-type: none"> • 3% productivity increase • 25% increase in price realization • Input cost reduced by 3%
 Reduced leakage and waste	27-32	<ul style="list-style-type: none"> • \$19 billion leakage in public distribution system (PDS) • \$28 billion of non-PDS food waste 	<ul style="list-style-type: none"> • Up to 90% reduction in PDS leakage • 50% lower wastage in distribution of other farm produce
 Sum of sized potential impacts	45-80		

¹ Integrated with digital farm extension and advisory services.

NOTE: Estimates of potential economic impact are for some applications only and are not comprehensive estimates of total potential impact. Estimates include consumer surplus and cannot be related to potential company revenue, market size, or gross domestic product impact. We do not size possible surplus shifts among companies and industries, or between companies and consumers. These estimates are not risk- or probability-adjusted. Numbers may not sum due to rounding.

Below mentioned are few challenges which are faced by the agricultural sector to improve the current scenario and adopt the digital India techniques by very vast and growing primary sector of the Indian economy:

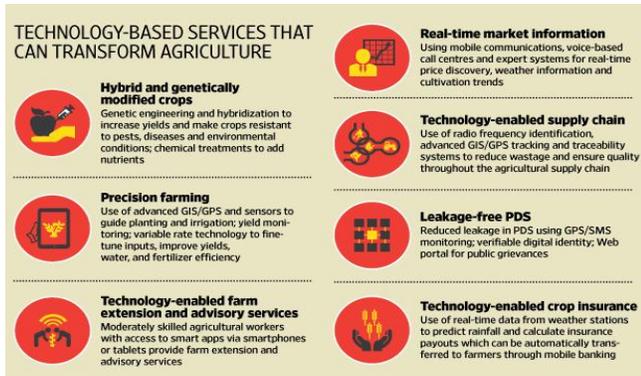
Opportunities available for the agricultural sector to grow digitally.

There are many opportunities which come across in the path of business which are available for the farmers and all those who are related with agro based industries. Where in it helps them to change the techniques and make the farmers more aware about the new techniques & technologies to be adopted for enhancing the traditional method of agriculture. Kissan E-Shop is one of the best example where in the produced and grown crop is being traded and marketed online through this portal.



The main objective of the digital India program is to link rural areas with high-speed Internet networks and improving digital literacy between them. "Economic resources of the

country shall be exploited for the well-being of the poor and needy population. The change will commence from this point.” – Said by Shri Narendra Modi. Digital India thought is about growth in electronic sector such as service, products, manufacturing and job opportunities etc. and also concentrate on three key areas that is Digital Infrastructure as a Utility to Every Citizen, Governance & Services on Demand and Digital Empowerment of Citizens.



1. Encouraging all the farmers to create enough savings for future needs.
2. Scaling and comparing their own outcome and income.
3. Grasping and learning new techniques and technologies to improve the agro- business and new methods of farming.
4. Grabbing the best possible opportunity to adopt the new techniques & Accepting and taking initiative to improve the current scenario of traditional farming techniques.
5. Producing quality agro products, fulfilling all the safety measures.
6. Expanding and accumulating the agricultural products
7. Connecting farmers to direct markets without any intermediaries.
8. Improving infrastructure and logistics system to support jobs and make it more efficient.
9. Eliminating land and labour market barricades.
10. Eliminating barriers for apportionment of capital and resources.
11. Creating skill based human capital and entrepreneurship.
12. Easing administrative burden and making India more investment friendly
13. Increasing the production of agro and farming products.
14. Improving the efficiency & effectiveness of community spending on basic necessary services.
15. Increasing affordable and accessible credit facility to expand and enhance agricultural economy.

16. Universal Digital Literacy

17. Universal accessibility to digital Resources.



Research Methodology

The paper is based on the secondary data and the information is retrieved from the internet via journals, research papers and expert opinions on the same subject matter.

II. CONCLUSION

It is analyzed through this research paper that it is very much possible to completely convert the entire primary sector into digital economy, i.e. digitally equipped and entirely digitally revolutionized, once digitalization is completely acquired by the agricultural economy it will change the scenario and help the sector to operate hassle free. As digital India has the objectives to completely transform the entire system digitally and keeping the hygiene up to or above the benchmark without hampering the quality output and meeting up all the standards of FSSAI and Food Safety Act1990.

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