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## Scope of Online Shopping of Agri Inputs

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**Abstract:** Present research article is planned to know scope of online shopping of agricultural inputs in rural India and to trace the opportunities and challenges for online shoppers to tap the rural agriculture market in India. E-Agriculture is an emerging field focusing on the enhancement of agricultural and rural development through improved information and communication processes. E-Agriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use information and communication technologies (IT) in the rural domain, with a primary focus on agriculture. Future scope, opportunities, challenges, benefits and adoption of online shopping were discussed on the basis of available literature.

**Keywords:** Agriculture inputs; e-commerce; ICT; internet penetration; online shopping; mobile users.

### I. INTRODUCTION

Information communication technologies provide linkages, enhance market access, improve business process and increase product diversity. Internet is working for communicating agricultural information; options for repackaging agricultural information and knowledge for small scale farmers; and has the potential role of an e-repository (of local agricultural content) in India for the purpose of disseminating local agricultural content (Qaisar et al., 2011).

The world currently has 2 billion internet users, of whom 50 per cent live outside the developed world. The global internet population is projected to increase to 26 – 29 billion by 2015 the study on the ‘Impact of Internet on the Indian Economy’ by MCKinsey projected that the internet contribution to India’s GDP will explode to \$ 100 billion by 2015 from \$ 30 billion at present (Shalini, 2012).

According to a recent India@Digital.Bharat (The Boston Consulting Group and Internet and Mobile Association of India) report, with the growing internet users, this will comprise 580 million users by 2018. Online shopping can grow more than hundred-fold in the next 9 years, to reach \$ 76 billion by 2021. Indian internet users have played a significant role in growing the business markets. The Internet is being used as an instrument for: explore new markets, maintain consumer relationships, improving cost efficiency, and delivering customized products and services.

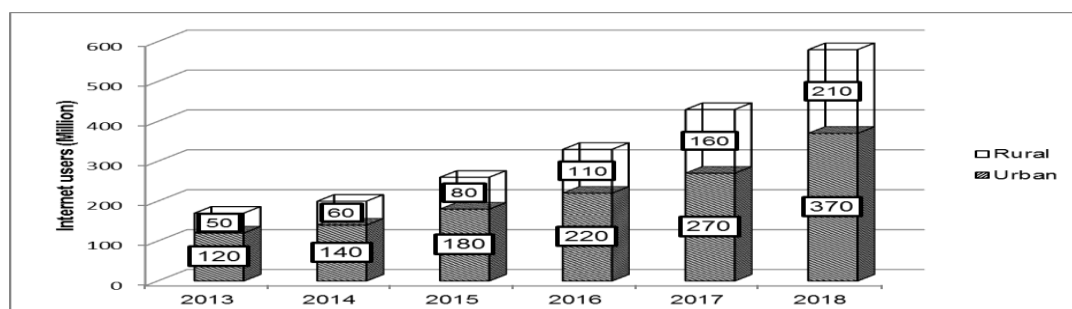


Fig. 1 India's internet population

As the data show, internet by 2018 will be more mature and mobile will be more predominant. Rural users, as a percentage of the Internet population, will rise from 29 percent in 2013 to between 40 and 50 percent in 2018.

**Table 1: Description of internet users in India**

	2013	2018
Older	60 % under 25 years old	54 % over 25 years old
Rural	29 % rural	40 - 50 % rural
Gender Balance	2.9 men online for every woman online	1.9 men online for every woman online
Mobile	60 - 70 % of users	70 - 80 % of users

This sector will open up significant growth opportunities for manufacturers and service providers, which can leverage the wider, targeted and more cost optimal online channels effectively to cater to internet customer base in the villages. India will likely see the golden period of the Internet sector between 2013 to 2018 with incredible growth opportunities and secular growth adoption for E-commerce, internet advertising, social media, search, online content, and services relating to E-commerce and internet advertising.

On the other hand we cannot deny a bitter fact that there is a negligible growth of online shopping in rural India. Where the urban shoppers are enjoying every benefit of online shopping there in rural India majority of consumers even don't know the term 'online shopping'. Technically, the Government at state and central level are not aware about the benefits of growth of online shopping and its positive impact on the Indian economy. Smooth development is possible only when rural areas would be priority for development projects because 68% of Indian population is living in rural areas.

## II. BOARD DIFFERENCE BETWEEN TRADITIONAL RETAILING AND E-TAILING

The table 2 depicts the differences between the traditional retailing and online retail.

**Table 2: Differences between traditional retail and online retail**

	Traditional retailing	Online retailing
Location and Presence	<ul style="list-style-type: none"> <li>Physical branded goods easily identified and found.</li> <li>Most traditional and oldest location for retail.</li> <li>Commands attention in the retail landscape.</li> </ul>	<ul style="list-style-type: none"> <li>Location is the web address, available globally through internet connection.</li> <li>Can establish a presence through cross promotions (links between sites)</li> </ul>
Merchandising	<ul style="list-style-type: none"> <li>Use of store space and proper assortment.</li> <li>Signage other product information tools.</li> </ul>	<ul style="list-style-type: none"> <li>Web page layout</li> <li>Relationship between product and text</li> <li>Signage and other product information tools</li> <li>Category search and sorting mechanism</li> <li>Interactive product locations</li> </ul>
Promotional Activity	<ul style="list-style-type: none"> <li>Pricing strategies and campaigns can be implemented on a daily basis</li> </ul>	<ul style="list-style-type: none"> <li>Pricing strategies and campaigns can be implemented instantaneously depending on internal organizational constraints</li> </ul>
Inventory Management	<ul style="list-style-type: none"> <li>Product must be available at multiple store locations to maximize purchasing opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Multiple inventory ownership options, with most prominent being traditional, "just-in-time" and a hybrid of two.</li> </ul>

Source: Dawn, S.K., and Kar, U. (2011). E-Tailing in India: Its Issues, Opportunities and Effective Strategies for Growth and Development. Zenith: International Journal of Multidisciplinary Research, 1(3), 101-115.

## III. CHALLENGES AND OPPORTUNITIES IN E-RETAILING IN INDIA

Bruke (1999) has identified several impediments for the growth of e-tailing. They are: (i) consumers can not touch and feel products, (ii) orders can take several days to be delivered, (iii) shipping costs are often excessive and, (iv) customer service is often poor and (v) Returns can be difficult. Deighton (1997) has identified a number of consumer characteristics as potential obstacles to Internet growth, including consumer traditional shopping experiences, an aversion or lack of access to the required technology and the perceived risks of electronic shopping.

**IV. FEATURE SCOPE OF ONLINE SHOPPING**

FICCI (2012) stated that India's large and aspiring middle class of 75 million households or 300 million individuals want products that are value-driven. The country's 500 million people under the age of 25 have access to more money that has additionally resulted in independence, aspirations and a demand for product. The Indian retail sector accounts for over 20% of the country's gross domestic product (GDP) and contributes 8% to total employment. The cumulative foreign direct investment (FDI) inflows in single-brand retail trading, during April 2000 to June 2011, stood at 69.26 million USD. The current estimated value of the Indian retail sector is about 500 billion USD and is pegged to reach 1.3 trillion USD by 2020. The penetration level of modern retail (currently 5%) will increase six-fold from the current 27 billion USD to 220 billion USD in 2020. The Indian retail sector is expected to grow at a CAGR of 15 to 20%. Factors driving the organized retail sector include the following:

- Higher incomes driving the purchase of essential and nonessential products
- Evolving consumption patterns of Indian customers
- New technology and lifestyle trends creating replacement demand

Mckinsey & Company (2012) examined that India's base of about 120 million Internet users is currently the third-largest in the world. India is likely to have the second-largest user base in the world, and the largest in terms of incremental growth, with 330 million to 370 million Internet users in 2015. Given current downward trends in the costs of Internet access and mobile devices, India is on the verge of an Internet boom. In an evolution pattern unique to India, users who access the Internet only through a mobile or tablet device will constitute around 75 percent of new users and 55 percent of the aggregate user base in 2015, leading to increasing demand for content that is optimized for a small screen. India has the potential to double its economic contribution from the Internet in the next three years, from 1.6 percent of GDP at present to 2.8 to 3.3 percent by 2015. Despite the large current base of users, the Internet currently contributes a modest 1.6 percent to India's GDP, in line with most aspiring countries. This could grow to 2.8 to 3.3 percent by 2015 if India achieves its potential for growth in the number of Internet users and Internet technology-related consumption and investment over this period, increasing the Internet's contribution to GDP from \$ 30 billion today to nearly \$100 billion in 2015. This would make the Internet-related economy larger than the education sector and as large as the health care sector, in terms of share of GDP at present. Currently, India's information and communication technology (ICT) exports are the most significant component of the Internet's impact on GDP. But private consumption, private investment and public investment have greater potential to grow in future.

**V. ADOPTION ON E-COMMERCE STRATEGIES FOR AGRIBUSINESS FARM**

The rapid development of e-commerce presents challenges to firms, as they try to craft e-commerce strategies. It is especially difficult given the seemingly continual flow of new information technology and software applications. Nevertheless companies forge ahead with their e-commerce strategies, in part fearing they will lose customers to competitors if they do not have an e-commerce strategy. Agribusiness firms, like the rest of the economy, face the challenge changing their business model and practices to account for the rapid growth of e-commerce. Within agriculture, business-to-business sales were predicted to grow from \$34 billion in 2000 to \$124 billion in 2004 (Little, 2000). In 2004, agriculture was expected to be the fifth largest industry sector (following chemicals, computing, industrial equipment, and energy) accounting for 8 percent of the total business-to-business online economy (Goldman Sachs, 1999). The move to the Internet has been guided by many factors. E-commerce provides another avenue to disseminate product information to existing customers and/or link into a new customer base. The quick dissemination of information and communication among businesses and customers has led to expectations of substantial cost savings. Global companies expect to reduce external spending by 9 percent with business-to-business e-procurement investments and the capture of returns on investments exceeding 300 percent (Deloitte Consulting, 1999). As agribusiness companies turn to the Internet for a new channel of business transactions, insight into its usage is important. Today more than ever, businesses are viewing the movement of products and services through a supply-chain management lens. The

supply-chain must effectively perform seven functions: processing/manufacturing, negotiations, transaction, logistics, promotion, financing, and information. As agribusiness companies engage in e-commerce these functions guide its implementation.

Jason Henderson et al. (2000) stated the commercialization of the Internet has caused agribusiness firms to rethink their distribution channel. E-commerce provides firms with the ability to reach new customers and old customers in new ways. In the same vein, e-commerce also allows firms to tap new and old suppliers through new and innovative channels. These possibilities have raised the expectations of improved efficiency and substantial cost savings. The process and function view of the supply-chain is used to guide the analysis into Internet/e-commerce adoption by agribusiness firms. Managers' perception of the impact of Internet/e-commerce strategies on the five functions of the supply-chain is expected to influence the likelihood of Internet/e-commerce adoption. The ability of the Internet to reduce transaction costs through improvements in transaction, information, and negotiation functions of the supply-chain is associated with higher probabilities of Internet/e-commerce adoption amongst agribusiness firms. The ability of Internet/e-commerce strategies to reduce production costs arising from the logistics and promotion functions also encourages Internet/e-commerce adoption. Yet, larger firms with an international scope are most likely to implement Internet/e-commerce strategies.

## VI. MAJOR CONSTRAIN FACED BY FARMING COMMUNITY

A. K. Singh (2012) concluded in his survey that the farmers are facing serious problems that are related to agricultural marketing and supply of inputs and services. The main problems reported are:

- There is still the adequate supply of quality seeds, pesticides, farm implements and other services at right time and reasonable price by Agricultural Department and other agencies of State Government are not ensured.
- There is lack of adequate and timely credit to farmers and there are undue delays in dispensation of Credit. There is also lack of support and guidance from agriculture department on agri inputs and their prices.
- Lack of publicity of Governmental Subsidy schemes related to farm inputs among rural poor, particularly illiterate famers.
- There is lack of sufficient number of Agriclinc and Agribusiness centres in the country thereby farmers cannot access farm input timely and at reasonable prices.
- Farmers are doubtful about price of inputs because most of the dealers of agricultural inputs and pesticides do not display rates of agricultural inputs.
- Farmers are not getting inputs like bio-fertilizers, improved seeds, organic certificates etc.
- There is inefficient and unreliable delivery of farm inputs and agri services at higher prices.
- Inadequate transportation facilities and high costs.
- Other problems are price variation of farm inputs and lack of storage facilities and problem of security of farm inputs.

## VII. CONCLUSION

About 58 per cent of total population is dependent on agriculture in India; among them about 80 per cent are marginal and small farmers category other are large farmers. They have regular demand of agri inputs but they are buying forcefully from the retailers due to credits or loan. Even they face the same problem during of marketing of farm products. Government supporting farmers by different ways but outcomes are not satisfactory. There is still the adequate supply of quality seeds, pesticides, farm implements and other services at right time and reasonable price by Agricultural Department and other agencies of State Government are not ensured. There is inefficient and unreliable delivery of farm inputs and agri services at higher prices. Online retailing of agri inputs is futuristic and very much relevant. Large farmers dependent on farm income, input cost increasing

significantly, output prices rising are enough indicators that inputs are to be used judiciously and intelligently. Online purchases can help farmers save the middleman margins like on line purchases in consumer items.

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