

E-marketing Platform for Better Reach & Benefit of FPOs

Kirti Sharma¹, Anil Kanaujia², Mohan Ji Saxena³, Anup Kalra⁴

^{1,2,3,4} (R&D Centre, Ayurved Research Foundation, Sonipat, India)

*For Correspondence

Correspondence Author

Kirti Sharma, R&D-Executive,
R&D Centre, Ayurved Research
Foundation, Panipat Gohana road
NH-1A, Village Chidana, District
Sonipat, Haryana, India-131306

kirti.sharma@arfmil.in

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Abstract: Agriculture is backbone of nation's economy as it connects all of related industries. India's agriculture system has come a long way. Small farmers have no access to right inputs, markets to maintain their livelihood. The necessity for an FPO arose as a result of farmers' struggles to get their goods into major markets. E-marketing platforms like- Big basket, flipkart, Blinkit/Grofers, etc. and smart phone applications like IIFCO Kisan Agriculture App, Krishi Jagran, Pusa Krishi, etc. can solve this problem. Ayurved Research Foundation, Sonipat, a public charitable trust is providing various marketing platforms to the farmers of FPOs in various districts of Haryana & Uttar Pradesh to sell their produces like cereals, organic wheat, rice, vegetables, mustard, honey, fruits, flowers, medicinal plants, spices, maize, and milk & value added products, etc.

I. INTRODUCTION

India is an influential agricultural powerhouse worldwide, having farmers and all related workers as its backbone. Agriculture connects and communicates with all of the related industries. It is a big part of economy because it helps feed the entire population. From providing raw materials, creating strong supply chain to encouraging economic development, it is important to business and society also. Today, the importance of agriculture in everyday life can't be minimized. Like many other sectors, the agricultural landscape also faces decades-long problems and unexpected challenges that are crucial to rectify like insufficient water supply, over dependence on traditional crops, poor storage facilities, transportation problems, high interest rates, etc [1, 2, 3, 4].

The farming system has come a long way since the green revolution, and various developments in technology and agriculture-aided infrastructure have come to force across the country. India has not only adopted better farming methods, but it has also sought to develop seed quality, irrigation methods, quality produce, marketing advancements, technological inclusions, logistics management, warehousing and many more. Small and marginal farmers with less than two hectares of land account for 86.2% in India.

The smallholder farmers have no access to the right inputs, lack knowledge on modern farming techniques and lack direct market access. These farmers carry on farming activities for their subsistence and sell their produce when they have the need. Farming is just a requirement and not a business opportunity which limits them from realizing their potential and earns a better livelihood. However, they could transform the food and agriculture sector if given the support and right direction [5, 6].



The rice–wheat cropping system (RWCS) is the backbone of Indian farming, especially in the north-western parts of India, especially Punjab, Haryana, and Uttar Pradesh because of favorable agro-climatic conditions, ecological suitability, and availability of natural resources. Farmers in north-western India generally grow rice as a lowland crop from June to October, followed by wheat as an upland crop from November to April. The puddling in rice cultivation destroys soil structure, leading to poor soil aeration and soil compaction.

Therefore, the continuous adoption of the RWCS has resulted in a hardpan at shallow depths that halts the root penetration/proliferation into the soil and thus affects the growth of the succeeding wheat crop. Because of all the challenges posed by the current situation, farmers need new alternatives to conserve natural resources and improve input use efficiencies [7]. Cultivation of medicinal plants, multilayer farming, organic farming, etc. can be an alternative.

Cultivation of medicinal plants has equal importance as that of rice and wheat. Since the Indian subcontinent is well known for its diversity of forest products and the age-old healthcare traditions, there is an urgent need to establish these traditional values in both the national and international perspectives realizing the ongoing developmental trends in traditional knowledge. Apart from health care, medicinal plants are mainly the alternate income-generating source of underprivileged communities therefore; strengthening this sector may benefit and improve the living standard also [8].

Indian government had constituted an Inter-Ministerial Committee in April, 2016 to examine issues relating to “Doubling of Farmers Income (DFI)” and recommended strategies to achieve the same. As per the strategy, Government has adopted and implemented following policies, reforms, developmental programmes and schemes for achieving higher incomes for the farmers directly or indirectly: Pradhan Mantri Fasal Bima Yojana (PMFBY), Promotion of Farmer Producer Organizations (FPOs), Promotion of organic farming, National Beekeeping and Honey Mission (NBHM), Setting up of National Agriculture Market (e-NAM) extension Platform, Agri Infrastructure Fund (AIF), etc [9].

FPOs (Farmer producer organizations) **Fig. 1** can help in empowerment of farmers by leveraging their strengths to enhance crop productivity and thereby realize profitable markets. It is made up of both farmers and non-farmers who work together to offer farmers end-to-end support, including supply of quality production crop inputs at wholesale rate, technical assistance, processing, services and value addition facilities, and marketing. Producer Company’s major goal is to provide farmers with a better income by creating their organization [5, 10].



Figure 1: Benefits through FPOs [5]



FPOs have the potential to transform marginal and small farms from subsistence farming to market-oriented commercial farms, provided that the promotion and nurturing of FPOs is implemented in a mission mode: FPOs should be output-centric and concentrate on creating and managing the whole value chain for the identified product/crop [11]. It makes business sense clearly which promote collective farming. Value addition is the enhancement of the quality of the products that can be exported. Technology is for enhance production which paves the way for branding of credibility and recognition of product. It also boosts up financial inclusion and saves farmers from distress sale [12].

In India, the necessity for an FPO arose as a result of farmers' struggles to get their goods into major markets. It also helps small farmers improve the quality of their food by giving them quality seeds, teaching farmers how to manage soil, use less fertilizer, manure, irrigation, and livestock. After yielding crop/product farmer has a limited amount of time to find out nearest market, current stock details & to determine which market will be more profitable for his crop, due to which they cannot optimize their crop profit at optimum level. Thus it becomes necessary to establish such system which will help to resolve farmer's problem time to time using digital platform and technologies in order to remain updated with changing requirements. During the epidemic, many farmers chose to go digital to overcome challenges and improve their businesses using ecommerce applications. They can sell fruits, vegetables, dairy products, bakery products, etc using these platforms also [5, 13, 14]. Ayurvet Research Foundation (ARF), Sonipat, a public charitable trust having 20 FPOs in 08 districts of Haryana (Sonipat, Panipat, Karnal) & Uttar Pradesh (Saharanpur, Baghpat, Aligarh, Khushi nagar, Maharajganj) is providing various marketing platforms to farmers to sell the produces like cereals, organic wheat, rice, vegetables, mustard, honey, fruits, flowers, medicinal plants, spices, maize, and milk & value added products, etc. There is a huge scope of linking up with various e commerce organization for a wider reach and bulk selling.

E-commerce firm Flipkart has extended its partnerships with Farmer Producer Organizations (FPOs) to enable market access and growth for farming communities and boost access to staples on the marketplace platform. Through these partnerships, Flipkart has been able to source pulses, staples and whole spices, by bringing them onto its platform, in turn impacting thousands of livelihoods of the farmer community. These newer avenues, made possible through e-commerce and technology, have been able to generate increased incomes for farmers and support these communities in their business growth [15].

Diversified conglomerate ITC is also connected through its super app — meta market which was launched in April 2022 for advanced agricultural rural services (MAARS) with 800 FPOs presently across nine states- Andhra Pradesh, Telangana, Karnataka, Rajasthan, Madhya Pradesh, Gujarat, Maharashtra, Uttar Pradesh and Bihar. Farmers registered on ITCMAARS through FPOs get access to services such as customized farm inputs like seeds, crop nutrients and fertilisers, loans through partnership with banks and technology-based services such as drone-based application of fertiliser through tie-ups with agri tech partners and as well as a platform to sell their produce [16].

Online grocery firm Bigbasket is sourcing 60% of its fruits and vegetables requirement directly from farmers under a programme called Farmer Connect from January 2016. Under the programme, farmers bring their produce to collection points set up in the vicinity of their villages. They identify farmers in small towns and remote areas growing specific crops and vegetables that border with tier-1 and tier-2 cities and then procure this supply directly from them. Karnataka's e-Sahamathi, mobile app is to help farmers sell their produce directly to retail chains such as Big Basket, Reliance Fresh, Nature's Basket and Ninja cart. Just like these platforms, farmers can explore: amazon, shopkirana, Blinkit/Grofers, etc. [17, 18, 19].

Smart phone applications can also be used for selling the farmers' produce. A farming app can be the best friend of farmers in farming which can enhance their productivity without spending a single amount of money. These are free of cost, can be accessed from anywhere in India & available in understandable language to farmers. Smart Crop is online marketplace where farmers can post about their products and attract more buyers and can chat privately to negotiate prices safely. Agribuzz-Agriapp helps selling/purchasing of produces for over 12



categories & 110 sub categories. All details regarding selling/purchasing is shared by an email. IIFCO Kisan Agriculture App, Krishi Jagran, Pusa Krishi, Bijak App, Kisan Suvidha, Shetkari, Farmerprice, Digital Mandi, Dhan Mandi, Gram Seva Kisan, Agri Market, etc. are examples of the applications which can be downloaded from anywhere in few minutes [20, 21, 22].

E-marketing of agricultural produce has potential to reduce the most important problem for any farmer i.e. to sell farms produce at good prices as compared to local mandis without any compromise.

II. Conclusion

The farming system has come a long way since the green revolution, and various developments in technology and agriculture-aided infrastructure have come to force across the country. The smallholder farmers have no access to the right inputs, lack knowledge on modern farming techniques and lack direct market access. FPOs (Farmer producer organizations) can help in empowerment of farmers/FPOs by leveraging their strengths to enhance crop productivity and thereby realize profitable markets. There is a huge scope of linking up with various e commerce organizations for a wider reach and bulk selling. During the epidemic, many farmers chose to go digital to overcome challenges and improve their businesses using e-commerce applications. Smart phone applications can also be used for selling the farmers' produce. E-marketing of agricultural produce has potential to reduce the most important problem for any farmer i.e. to sell farms produce at good prices as compared to local mandis without any compromise.

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