'ZYNGBADPA' an Effective Communication Tool in Cold Arid Ladakh

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Abstract

In recent years, Information and Communication Technologies (ICTs) have emerged as effective tools for the dissemination of information on a large scale to a large number of people. ICT is a broad term that encompasses simple mobile phones to computers and to satellite imageries. The use of ICTs can help to provide timely information to the farmers about the weather, outbreak of disease, crop management and market prices of various commodities. This paper illustrates how a simple device like a smart phone can serve the farming community. By creating a WhatsApp group 'ZYNGBADPA', an array of diverse farming services from relevant advice and timely information regarding inputs, diseases and insect pest management to the weather condition and weather based agro advisories and from market information to marketing support is being provided to tribal communities in Leh district of Ladakh region. 'Zyngbadpa' in Ladakhi language means one 'who works with the land', i.e. a farmer.

Keywords: ICTs, WhatsApp, ZYNGBADPA

Introduction

India is predominantly an agrarian economy. According to a report by NITI Aayog (2017), about 69 per cent of the population lives in rural areas. Another report of the Press Information Bureau (2010-11) reveals that the share of the workforce in agriculture stood at 54.6 per cent. The country is dominated by marginal and small farmers. About 85

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per cent of the farmers have land below or up to 2 hectares (Census 2010-11). Timely and accurate information to the farming community and other stakeholders regarding different inputs, market price, weather, government policies, latest technologies, climatic aberrations, value addition and other related and relevant technologies is a prerequisite for enhancing agricultural production as well as augmenting the income of farmers in the country. This extensive task of fulfilling information needs cannot be accomplished with human force alone. The public extension service in the country is already paralyzed with multiple issues like low extension workers to farmers' ratio, multiple roles of the extension agency, lack of accountability and many others. The ratio of extension workers to farmers in the country stands very high at 1:1162 as against the recommended ratio of 1:750 (Nandi and Swamikannu, 2019). Of the 40.6 per cent households who received extension assistance, only 11 per cent of the services came from physical government machinery i.e., extension agents, Krishi Vigyan Kendras (KVKs) and State Agricultural Universities (SAUs) (NSSO, 2014). This calls for an immediate revival of the traditional methods and the use of some innovative techniques for information delivery. In the present era ICT has emerged as the strongest tool for more efficient, time and cost saving information delivery.

According to the Food and Agriculture Organization (FAO, 1993), ICT is defined as those technologies used in collecting, processing, storing, retrieving, disseminating, and implementing data and information using microelectronics, optics, and telecommunication and computers. Low-cost Information and Communication Technology (ICT) tools promise the ability to deliver timely, relevant, and actionable information to farmers throughout the world, at dramatically lower costs than traditional extension services (Aker, 2010; Cole and Fernando, 2012, World Bank, 2016). Among the various ICT tools, WhatsApp offers a futuristic scope for access to a diverse range of information needed in agricultural production. There exists an ample opportunity to utilize WhatsApp for agricultural extension activities. It is a form of a social media tool that enables people to access many types of conversation and share information and facilitate discussion (Andres and Woodard, 2013). In addition, the Indian Council of Agricultural Research (ICAR) and the Krishi Vigyan Kendras (KVKs) have developed 145 mobile apps for farmers (Singh, A.K 2019). The study by Naruka et al 2017 indicated that by the use of WhatsApp farmers are able to seek information on farm operations, clarify their doubts on plants/ livestock disease symptoms and are having immediate access to market related information.

Locale of the Study

The Union Territory of Ladakh is often called cold desert (Shafiq, et.al 2016). Wide diurnal and seasonal fluctuations in temperature are observed with -40°C in winter and +35°C in summer. Precipitation is very low mainly in the form of snow. The air is very dry and relative humidity ranges from 6-24 per cent. The entire area is devoid of any natural vegetation. Irrigation is mainly through channels from the glacier-melted snow. Villages are scattered, isolated and largely inaccessible. Under such a scenario, owing to the difficult terrain of the region and very harsh weather during winters, providing timely information to the farming community in this region by being physically present there with the farmers was a challenge for extension functionaries. To overcome this, a WhatsApp group 'ZYNGBADPA' was created by Dr. Parveen Kumar, SMS Ag. Extension at KVK-Leh to provide timely and relevant information to the farmers located in remote inaccessible areas of the region. The WhatsApp group 'ZYNGBADPA' is serving about twenty villages of Leh district in the Union Territory of Ladakh providing agriculture related information, weather related agro-advisories, market information, diagnostic services, marketing support and many other services. 'ZYNGBADPA' has allowed mass communication to be interactive. Anyone can upload his/her problems, opinions, and suggestions and communicate with many others at a time.

Materials and Methods

Farmers from twenty villages of Leh district are members of the 'ZYNGBADPA' group. The villages include Stakna, Stok, Matho, Chuchoot, Choglamsar, Sakti, Spituk, Chemday, Kharu, Gya, Takmachik, Saspol, Domkhar, Martselang, Phyang, Nimoo, Hemis, Shey, Digger, and Tayakshi. It has been ensured that at least two to three progressive farmers from each village are represented in this group. Farm women and youth have also been adequately represented in this group. About thirty per cent of the members in the group are women. The total strength of the group at present is 100.

Objective

The basic objective of creating this social networking tool was to ensure that relevant and timely information reaches the farming community and the problems of the farming community reach the KVK-Leh for their redressal. Through 'ZYNGBADPA', it is ensured

that farmers are taken care of; they stay connected with KVK-Leh and receive necessary communication.

'ZYNGBADPA'

CARING, CONNECTING AND COMMUNICATING IN THE COLD ARID

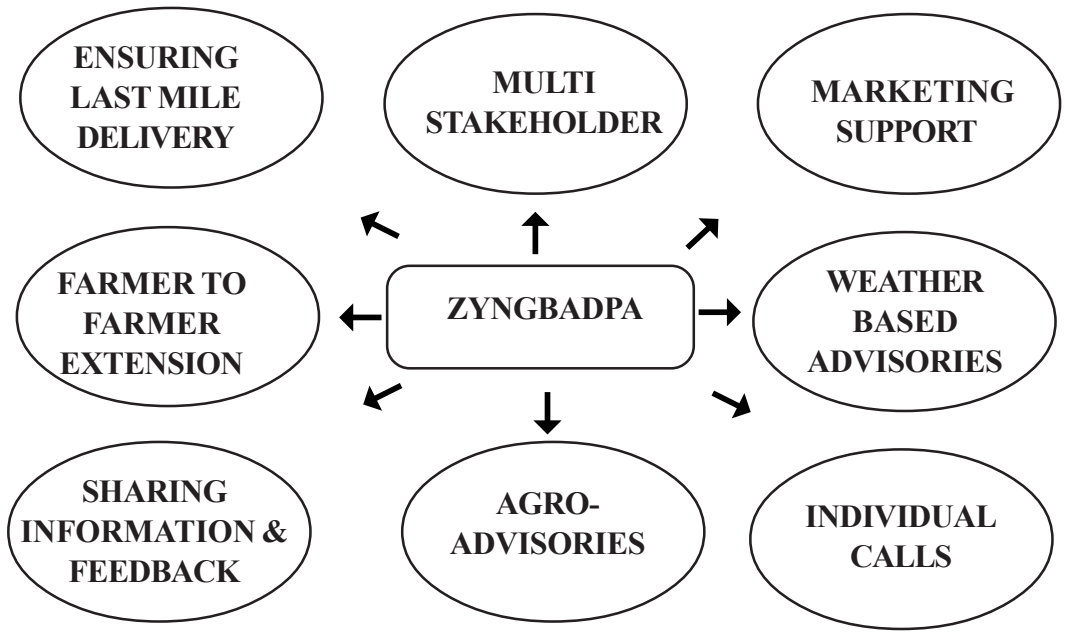

Fig.1: 'ZYNGBADPA' Model of Serving and Empowering Farmers'

Discussion

For a Krishi Vigyan Kendra, a district level body with a team of only six specialists and a limited supporting staff, it is very difficult to reach out to the farming community habituating in different parts of the district. In order to widen the reach of the KVK and to cover the farming community residing in remote inaccessible areas; 'ZYNGBADPA' was created in March 2020. The various pro-farmer activities carried out under 'ZYNGBADPA' are discussed as under:

a. Sharing information and creating awareness: Information related to different aspects of crop production, livestock, horticulture; different varieties developed, new technologies and information regarding various government policies and programmes is shared with the farming community. This helps them to improve their awareness which in turn has helped them to avail the benefits.

b. Responding to the queries: At 'ZYNGBADPA', all the queries of the farmers' are being immediately responded to. All that the farmers have to do is to post their queries in the group. They also click the picture of insect pests or any disease they found in their crops and post it in the group. This enables specialists to have a real assessment of the nature and intensity of the problem thereby arriving at the correct diagnosis and prescribing the appropriate treatment.

c. Farmer to Farmer Extension: Farmer-to-farmer extension is defined as the provision of training by farmers to farmers, often through the creation of a structure of farmer-trainers. The farmer trainers are recognized by different names like master trainer, lead farmer, farmer-promoter, community knowledge worker which implies a different role. In 'ZYNGBADPA' also many a times the solution to the problem of one farmer lies with the other farmer. Members of the group are also master trainers in different fields and provide training to other farmers and extension functionaries.

d. Marketing channel: 'ZYNGBADPA' is also a marketing platform for the farmers. Farmers place their orders in the group and those interested in selling their produce make it available for them. This marketing channel is free of any type of commission from either the seller or purchaser.

e. Weather advisories: The weather-based advisories are also a regular and weekly feature of this social networking site. The weather-based advisories enable the farming community to plan their agricultural operations accordingly

f. Agro-advisories: Regular agro-advisories on different crops including cereals, vegetables, fruit crops and livestock are provided to the farming community through this group. Besides, advisories on locust management, health and nutrition, sanitation, soil health and on many other aspects are also regularly given to the farming community.

g. Effective communication tool during COVID-19: 'ZYNGBADPA' also proved to be an effective tool during the COVID-19 lockdown. Regular advice was given to the farmers about the deadly nature of the virus and on how to contain the spread of the virus. The farming community was contacted through a Zoominar during the lockdown. Relevant literature regarding COVID-19 published in different newspapers was also posted in the group for the awareness of the farming community. During the lockdown when every type of movement was restricted, the scientific community was not able to physically reach them-'ZYNGBADPA' compensated for the physical absence. In the Ladakh region, when the lockdown was enforced, it was the time for preparing and sowing of nursery for vegetables. Through this medium farmers were regularly guided on different aspects of nursery raising. This ensured that the vegetable growers did not suffer.

h. Individual phone calls: Individual phone calls made to the farming community give them a sense of being cared for. They feel that there is someone who cares about them and stands with them in the hour of crisis. Farmers are called individually to know if they are facing some problem on their farm or livestock

i. Celebration of important days: As it is not possible to celebrate important days every time; 'ZYNGBADPA' has given a platform to celebrate important days through the online mode. On World Milk Day (June 1) an online photo contest was organized where the farmers were asked to post pictures of their milch animals in the group. Information about other important days is also shared with the farmers through this group

j. Involvement of all stakeholders: All the relevant stakeholders including officials from the Department of Agriculture, Non-Governmental Organizations working in the region, input dealers, youth and entrepreneurs are a part of 'ZYNGBADPA'. This helps the farmers to develop linkages with them and to strengthen the coordination amongst all.

k. Ensuring last mile delivery of extension services: 'Last mile delivery' means reaching marginal and small, inaccessible and resource-poor farmers with appropriate and timely advice and enabling them to access the inputs they require. 'ZYNGBADPA' ensures last mile delivery of extension services. It has stood with the farming community of the region in their times of crisis by providing relevant and timely information and inputs in the form of seed, seedlings, plant protection material and other items.

Conclusion

WhatsApp as a social media tool is simple and easy to use, has low internet data requirements, and is increasingly popular in rural India. Thus, it has a strong potential to be a viable agricultural extension tool for extension based organizations in general and extension educators, in particular. Worldwide, WhatsApp is the most popular messaging service in over 100 countries. WhatsApp has over two billion users worldwide, with 390 million in India alone (Iqbal 2021). It has become the most preferred mode of communication among the smart phone using farmers. One can share information in multiple forms ranging from text-based messages to audios, visuals; audiovisual and even web links making it an information enriched platform. In addition, information sharing is possible at any place and at any time without worrying about background disturbances. 'ZYNGBADPA' is a fundamental shift in the way communication occurs in this cold arid region and has brought KVK-Leh closer and within the reach of the farming community. It is both serving as well as empowering the farming community.

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