



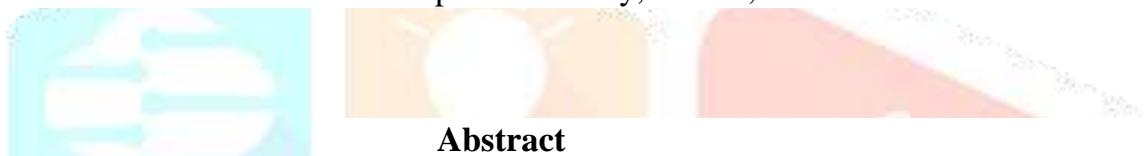
Exploring The Potential Role Media And Communication Can Play In Promoting Better Farming Practices In Bihar.

Prabhat Kumar

Research Scholar

Department of Mass Communication & Journalism

Tezpur University, Assam, 784028



Abstract

Media and communication can influence the behaviour of people. It not just tells “what to think about” but also “how to think about” any issue (McCombs and Ghanem, 2001). It helps to form a mindset on any topic and thus shape opinions. Communication for social change or Development Communication is something where messages if designed in the right way can produce the desired output and lead to a behavioral change. When it comes to Bihar the media can play an active role in making farming a profitable affair and to check migration due to unemployment. The way agriculture is being practiced is changing globally. Production has become very demand- supply oriented. Those who will have the better understanding of it will stay ahead and others will be eliminated. Traditional ways of production and farming need to acclimatise and adapt according to the modern market conditions. New ideas need to be disseminated from the research institutes and labs to the practitioners in the field for implementation and at this juncture the role of mass media becomes crucial. How to convince people to adopt more efficient, productive and economical ways of farming is the role media can play. Growing excessive food grains but which fetches less money has turned farming into an uneconomical business in Bihar. The state has been predominantly an agricultural society. What are the changes which can be brought in the current situation and what can be the role of media and communication in it is the main aim of this article.

Key words: Media, Bihar, Agriculture, Demand-Supply, Unemployment, Profit

Introduction

Corona virus induced lockdown in India forced millions of migrants to quit their work and return to their roots. In many situations the workers had to walk for days and nights covering hundreds of kilometers to reach their homes. Most of these migrant workers were from places like Bihar and Eastern Uttar Pradesh. Why has this kind of migration been witnessed in this region for decades? One of the primary reasons for this is agriculture which is the main economic activity in this belt and has failed to generate enough income and employment. Agro based industries which could have solved this massive problem remained merely in the dreams. The culture of startups and self-entrepreneurship could not become possible due to lack of awareness. In this article we will try to explore some of these possibilities as to what can be done to promote economic welfare, reduce poverty and generate employment in the agricultural sector of Bihar, which according to Encyclopaedia Britannica engages nearly three-fourths of Bihar's population.

Bihar is located in the Gangetic fertile plains surrounded by Nepal in the North, West Bengal in the East, Jharkhand in its South and Uttar Pradesh in West thus making it a landlocked state dependent on monsoons and perennial rivers for which originate in Himalayas. Soil is fertile for crops as it is well drained by rivers like Ganga, Gandak, Bagmati, Mahananda, Kamla, Falgu, Punpun, Son etc. Monsoon rains which arrive by mid June in the state is still the main source of irrigation. Kishanganj district receives the highest rainfall. The reversal of Monsoon wind occurs by mid October.

Forests play a crucial role in determining the rainfall pattern, checking soil erosion and maintaining ground water table factors which are very essential for agriculture. According to the website of Department of Forests, Environment & Climate Change, Government of Bihar "the state of Bihar presently has 6845 sq km notified natural forest area which is 7.27 % of the geographical area of the state. These natural forests are spread in the districts of West Champaran, Kaimur, Rohtas, Aurangabad, Gaya, Jahanabad, Nawada, Nalanda, Munger, Banka and Jamui. The north Bihar except West Champaran is devoid of Natural Forests. The important Tree species of Bihar are Sal, Shisham, Teak, Gamhar, Kadamb, Semal, Neem Peepal, Banyan, Arjun, Asan, Haldu, Mahua and Kend etc." Jharkhand was carved out as a separate state on 15th November 2000 from Bihar. It was a huge loss for Bihar as the mineral rich areas had gone away with this partition. What was left now was mostly the fertile plains or doabs. With mineral based industries gone, the main economic activity in Bihar since then has been dependence on agriculture.

Agriculture in Bihar

During the British colonial rule Bihar was known for Indigo and Jute cultivation. It was estimated that Bihar alone produced 32,699 maunds of indigo in the late 1850s. It was more than 30% of the whole crop. The indigo growing districts Bihar included Champaran, Saran, Darbhanga, Patna, Shahabad, Munger and Tirhut (Shukla, 1988). The European planters forced the Indian peasants to cultivate Indigo on 3/20th part of their land holding (Tinkathia system). Champaran Satyagraha (1917) was launched by Gandhiji against this injustice to farmers. Bihar also had to suffer extreme famines during 1770, 1873-74, 1966-67 due to widespread droughts and crop failures. However in the post Green Revolution phase Bihar has witnessed significant growth in the agricultural sector.

Currently, three cropping seasons are followed in Bihar. Kharif crops are sown in the month of June- July and reaped in October-November Ex: Rice, Maize, Jwar, Bajra, Moong, Arhar etc. Rabi crops are sown in October- November and reaped in March- April Ex: Wheat, Oats, Gram, Mustard, Potato and commercial crops such as tobacco, vegetables etc come under this. Zaid crops are grown between March to June. Ex: Maize, Jwar, Ragi, Cucumber, Watermelon etc.

The most cultivated crop in Bihar is paddy. Rohtas district is known for highest production of paddy followed by Aurangabad and Banka. Wheat is the second most grown crop which is cultivated in the winter season. Rohtas, Bhabhua, Gaya, Darbhanga, Siwan and Saran are some of the districts known for high production of wheat. Maize is cultivated across all three crop seasons in Bihar. Katihar, Madhepura, Khagaria, Champaran are important producer districts of this crop. Important fruits being grown in the state are- Litchi, Mango, Banana, Guava, Lemon, Pineapple, Papaya, Gooseberries, Blackberries etc. Shahi Litchi of Muzaffarpur is famous for its taste. Maldah, Aamrapali, Ratna, Majeera, Langda, Dashahari, Sukul, Seepia, Bombay, Jardalu are some of the varieties of mangoes available. Potato, Onion, Cauliflower, Brinjal, Tomato are some of the vegetables grown on large scale. In Spite of production the agro-processing business remains low in the state. Although there is sufficient production of foodgrains, the proportion of the population involved in this sector and the amount of income and job generated is very skewed. According to Bihar Economic Survey 2019-20 the contribution of agricultural and allied sectors to Bihar's Gross State Value Added (GSVA) was 21 percent in 2017-18 and the share of crop sector in the GSVA was 12.1 percent. Although the contribution to the economy is 21% the number of people employed in this sector is around 80%. Disguised unemployment is the core problem which later results in outmigration in large numbers. What are some of the potential areas for improvement?

Linking agricultural with communication (Agri- Communication)

It has been observed that “the success of agricultural development programmes in developing countries largely depends on the nature and extent of use of mass media in the mobilization of people for development” (Ango, Illo, Abdullahi, Maikasuwa, and Amina 2013). The conventional modes of agriculture where the main focus was on growing food grains fetches little money. There are some new areas which are emerging very profitable in recent times. Globalization has caused change in the dietary habits and consumption behaviour of people. Post the 1991 LPG reforms India has witnessed expansion of its middle class. Purchasing power of people has increased. Another significant change has been rapid urbanisation where more and more people are moving into cities. Literacy levels and education has increased and a significant growth in the media sector has been seen. Cable TV, smartphones etc. have reached every nook and corner of the country. Due to these cumulative factors awareness has grown among people regarding everything including their food choices. People are willing to spend more on healthy food and groceries. This is the reason why there is a growing culture of eating organic fruits and vegetables in metro cities.

Farmer groups in Bihar need to be communicated that if they produce crops organically they can get more returns and also an international market for their product. There are some foods for which demand is on rise such as Mushrooms, Makhana etc. Once proper branding is done and with help of media and communication tools it is marketed properly it will prove very beneficial to farmers as well as consumers. Due to high rainfall and sloped terrain there is huge potential for tea cultivation in Purnia and Kishanganj districts of North Bihar. Flower

cultivation(Floriculture) is a good option for villages adjoining cities. Rose, Gerbera, marigold, carnations, tuberose, jasmine, chrysanthemum can be grown using greenhouse and glasshouses by controlling temperature and humidity. Until now the exotic flowers used for ornamental purposes on several occasions are mostly imported from Karnataka, Tamil Nadu etc. which are leading in this field.

Apiculture, Sericulture, Horticulture, Pisciculture, Sugarcane production are other areas which have the potential to turn into sunrise sectors in Bihar. As per the 2018-19 report titled Sugar Industry at a glance in Bihar currently 11 sugar mills are operational and 17 have closed down. East Champaran is the largest producer. West Champaran, Nalanda, Jehanabad also have registered good sugarcane production in the state. If sugar mills are restarted then this sector has the potential to generate many jobs.

Online marketing of their product which can give better price for their products is another area which needs to be made popular through media campaigns. Attractive packaging and well connected distribution networks can lead to better returns. Mushroom cultivation is changing the destiny of many farmers in Bihar. Likewise there is a need for crop diversification. Banana, Jackfruit, Potato etc. can be converted into chips easily. Some other pulpy fruits such as mangoes and litchi can be converted into packed juices. Small videos can be made on how to set up small agro processing units, what are its benefits, how it can boost the income of farmers etc.



Growing plantation crops and commercial crops is a better idea than merely going for food grains and waiting for the government to declare a Minimum Support Price (MSP). Right now, tobacco cultivation is done in Vaishali, Samastipur, Purnia and Begusarai.

Banana, mangoes, jackfruit, pomegranate, papaya, guava etc. can be grown on large scale as plantation crops to earn more profit. In addition to it, the abundance of ponds in the areas of high rainfall especially in the Mithilanchal region make this area very apt for makhana cultivation and fisheries. Although, it is being done in present times too also but the potential is very underutilised till now. Makhana(Lotus seeds, Fox nuts) have emerged as a very nutritious and healthy snacks option being low in cholesterol, fat and sodium. It is in high demand all over the country. Farmers need to be communicated all these aspects of it right from production to sale of their produce.

With the growing awareness for Ayurveda several medical plants if grown on a large scale can give large returns ex: Amla, Aloe vera, Giloy, Tulsi(Holy Basil), Kalmegh, Pudina, Sarpagandha, Satawar. Their juice can be prepared, packaged and sold by making Self Help Group (SHG) kind of activity. On the other hand the demand for milk and milk products is also on rise with growth in population. Establishing more such dairy businesses would supplement the income of farmers and also give more employment. Sudha Dairy, started in 1983 based on the model of AMUL (Anand Dairy, Gujarat) has turned out to be a successful experiment in this regard.

Among the key challenges which Bihar faces is annual floods in the districts located in the terai region i.e. areas located in the foothills of Himalayas adjoining Nepal. Most of the rivers in Bihar enter via this route. This region has seen huge deforestation in recent times and this is the reason why soil erosion and floods have become very common in this area. Uncertainty of Monsoons is another reason for these floods. Floods are responsible for poverty and out migration in large numbers from the districts like Madhepura, Supaul, Saharsa, Khagaria, Sitamarhi etc. Areas in North Bihar have faced economic backwardness primarily due to this reason as nobody wants to invest in the region due to floods.

Bihar experiences drought in the summer season due to decline in the groundwater table. According to a report published on the website of famous environmental magazine Down To Earth despite a good monsoon in 2019 the groundwater levels have dipped alarmingly in 11 of Bihar's 38 districts (Down To Earth, 24th February 2020). How would agriculture be possible without water? Another big area of concern is the number of small and marginal farmers which is very high in Bihar. Natural resources are limited but the population is ever expanding so there is high pressure on land and water.

Media can help in disseminating new ideas to the farming community as also shown by Diffusion of Innovation Theory developed by E.M. Rogers in 1962 which puts emphasis on how any new idea, behaviour or product gains acceptance in any society. There is a good presence of media in Bihar. It is the Hindi dailies which enjoy the largest readership. The presence and reach of English media is limited. Newspapers with maximum circulation in the state are Hindustan, Dainik Bhaskar, Dainik Jagran, Prabhat Khabar etc. All India Radio has regional stations at Patna, Darbhanga, Muzaffarpur etc. where they also broadcast programmes in regional languages. FM channels which enjoy wide listenership have spread across the state. All the TV news channels can be accessed via cable connection or DTH service. News Channels have also started their regional editions. YouTube has become quite popular specially among youth as a source of entertainment as data prices have lowered in the last few years. But there exists a big digital divide amongst the haves and have nots. According to a World Bank report titled Bihar-Poverty, Growth & Inequality the state is home to over 100 million people, 36 million of whom are poor. It further says since 2005, the pace of poverty reduction in the state has picked up. Despite this, large parts of the state remain very poor. (Bihar-Poverty, Growth & Inequality, 20 May 2016)

Efforts made by the government in this direction

Krishi Vigyan Kendras (KVK) - The main aim behind opening these centres was to work as a communicative link between the nearest agriculture university and the farmers of the region. As of now there are 39 KVK's functioning in the state. These centres help in practical implementation of agricultural research in localised settings. Giving hands on training to farmers on innovative farming methods, new seed varieties, technology, organising seminars & workshops, offering multi sector support, advisory services and solutions are some of the ways in which Krishi Vigyan Kendras function. Basically if we see they work as communication channels between knowledge creation centres to implementation centres.

DD Kisan Channel- One can understand the role of communication and media in agriculture from the fact that the government has always tried its best to reach out to farmers of the nation through the latest media technology available. Krishi Darshan programme was started way back on DD National on 26th January 1967 to discuss agricultural issues. Farmers feed the nation, they are its backbone and hence prioritising their needs on 26th May 2015 DD Kisan was launched. It was a channel dedicated 24*7 to farmers of India giving information on all agriculture related sectors.

Conclusion

Crops which require less water and fertilizer are the need of the time. Water conservation techniques, efficiency in irrigation, advance weather prediction, information on soil health cards, zero budget farming, herbicides, crops based on soil quality are some of the important areas in which agricultural research institutes are continuously working to make the crop production process more efficient. But this knowledge needs to reach to the masses with the help of mass media. Relevant communication strategies should be developed as to how messages can reach the audiences most effectively. Media messages focused on agricultural issues if designed and produced in regional languages and dialects such as Bhojpuri, Maithili, Angika, Magahi, Vajjika etc. has the potential to engage audiences widely. Ifukor (2013) observed, indigenous languages should be used for radio and television news in order to enable that rural dwellers may understand the messages broadcast, because of low levels of literacy. Short- informative videos can convey things in a simple and lucid manner. One of the core areas in which a lot of awareness is needed is how to increase the forest cover and raise the ground water table in Bihar for which media campaigns need to be started.

References-

<https://www.britannica.com/place/Bihar/Economy>

<http://forest.bih.nic.in/BiharatGlance.aspx>

<https://dbtagriculture.bihar.gov.in/Home.aspx>

<https://timesofindia.indiatimes.com/city/patna/Floriculture-centre-to-come-up-in-Nalanda/articleshow/11901431.cms>

<https://www.downtoearth.org.in/news/water/alarming-dip-in-groundwater-levels-in-11-bihar-districts-report-69418>

<http://documents1.worldbank.org/curated/en/781181467989480762/pdf/105842-BRI-P157572-PUBLIC-Bihar-Proverty.pdf>

<http://sugarcane.bih.nic.in/ataglance.htm>

<https://www.downtoearth.org.in/news/climate-change/not-so-sweet-honey-production-falls-40-in-bihar-69741#:~:text=Of%20them%2C%20Bihar%20has%20859,honey%20production%20in%20the%20country.>

Ifukor, M. O. 2013. *Channels of Information Acquisition and Dissemination Among Rural Dwellers*. International Journal of Library and Information Science 5 (10): 306–12.

Minute by the Lieutenant Governor of Bengal on the Report of the Indigo Commission.

McCombs, M., and S.I. Ghanem, 2001, “The Convergence of Agenda Setting and framing”. In S.D. Reese, O.H. Gandy and A.E. Grant eds., *Framing Public Life: Perspectives on Media and Our Understanding of the Social World*. Mahwah, NJ: Erlbaum.

Shukla, P.K., 1988, *Indigo Cultivation and the Rural Crisis in North Bihar in the Second Half of the Nineteenth Century*, Proceedings of the Indian History Congress, Vol. 49 (1988), pp. 463-469 Stable URL: <http://www.jstor.com/stable/44148431>

Mugwisi, Tinashe. (2015). Communicating Agricultural Information for Development: The Role of the Media in Zimbabwe. Libri. 65. 281–299. 10.1515/libri-2015-0094.