



Impact of Media, Market and Monsoon on Agriculture Sector: A Review

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ABSTRACT

Agriculture is the prime importance to human beings. Without agricultural produce, no one can imagine surviving. The influence of monsoon and market on the farm, farmer and farming sector is increasing day by day due to global warming and political interference to some extent. Considering these facts the present review report is focused on the study of the impacts of various aspects of media, market and monsoon on agriculture. This study reports that the media in spite of being the fourth pillar of democracy is not able to play its role properly either intentionally or unintentionally. Media is not giving much importance to covering the farmer's demands, difficulties, the monsoon forecast and the interference of the middleman/ or Dalal (*i.e.* intermediaries) in the market. Consequently, the condition of farmers has reached a critical situation and the cases of farmer's suicide have been increased abruptly in the current decade. This article is, thus, tried to report the farmer's pain and punctuations in their life and also reported how media and the market, like a monsoon, are exacerbating their wound in place healing. This article also discusses how media can take part in agricultural development to some extent.

Key words: Agriculture, Farmer, Impact, Market, Media, Monsoon.

India is the second most populous country after China and it is expected to surpass the China only by 2027. The current population of our country is 1.38 billion (in 2020) and it is predicted that India will add more 238 million people by 2050 (Patel *et al.*, 2017). Such increasing population accelerated the pressure on natural resources throughout the world, but more specifically in India which has only 2.2% of world geographical area and supports 15% and 18% of livestock and human population, respectively (Selvan *et al.*, 2021).

The key source of income in India is agriculture, so farming is called as backbone of Indian economy. To satisfy the need of increasing population increase in the crop yield is very important (Bhimanpallewar and Narasingarao, 2022). The major issue in front of agriculture sector and farmers is not only how to feed such huge population but also how sufficient food grains will be produced by 2050 to secure to food for everyone. This target of food security becomes more challenging when monsoon and market are unpredictable due to global warming and irregularities in the marketing channel, respectively. Markets and monsoons are two monsters for the farmers, farming sector and agricultural developments. Our government and researchers are unable to provide solution to make the farmers free from the grip of these monsters. Market fluctuates due to uncertainty of monsoon thereby putting agriculture sector in crises. In other words, monsoon is the lifeline of Indian agriculture and has multidimensional impact on agriculture. Monsoon, due to delay or poor, where on one side can lead to supply issue and food grain inflation due to less crop production and on the other side good monsoon can reduce the demand of diesel and can checks the government spending. In addition, good monsoon can impact on the income of farmers due to drop in the prices

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of industrially used crops such as cotton, sugarcane, vegetable oil, *etc.*

Further, climate change issues are also involved leading to extreme events which are difficult to predict. Many times due to sudden/drastring change in climate destroyed the whole crops just before the harvesting of the crops. Emphasis on the role of technology and youth in agriculture can be quoted as "if agriculture goes wrong nothing else goes right" and Younger people will join agriculture if it is technology driven".

Mean to say that the agriculture sector is full of uncertainty, where anything can happen at any time due to monsoon and market. In such case media can play an important role to provide correct information of climate/ monsoon predicted by metrological department, to raise farmer's different issues and can provide basic knowledge to the farmers by organizing agriculture related programs. In addition, there is a strong need of information

technologies/media or social media in agriculture promotion and to publicize the policies, plans, decisions, *etc.* of the governments Morris and James (2017). Blogs, pages, groups, WhatsApp, YouTube and Facebook like popular social media platforms are more effective tools for rapid extension of novel technologies and marketing of food and agricultural products, so far (Balkrishna and Deshmukh, 2017; Morris and James, 2017).

The main objective of this paper is to reports the role of market, monsoon and media on agricultural sector.

Media and agriculture

Media can be defined as the medium of communication or mode of expression that passes certain characteristics. Media generally comprises both technical and institutional methods of production and distribution. Media acts like as informer of society and play an important role in democracy like as watch dog for the establishment of democracy and safeguard the existing values in the democracy and it entertain the public by ways of music, drama, film, dance, *etc.* In addition, media also helps in the business and marketing, education, farmer's welfare and in the economic growth of nation. In spite of visual and non-visual classification, media can be defined into three main groups (ICFA, 2017):

- (1) Print media (newspaper, magazine, newsletters, booklets, barouches, handbills or flyers, press release, billboard, books, *etc.*).
- (2) Electronic media (television, radio, films, *etc.*).
- (3) New age media (mobile phones, computers, internet, email, website, e-forums, e-books, blogging, *etc.*).

Print media has great importance in the communication of important agricultural information among the literate farmers. In India, several magazines such as phal, phool,

kheti, modern kheti, Ishika, Agriculture Today, Horticulture today, Indian Horticulture, Indian Farming, Agro India, *etc.* related to agriculture and allied sectors are available almost in language and in all states. But in India where literacy level is low, the print media is almost in effective. The television and radio is most significant method of communication of information in short time. Radio, among the electronic media, is the most powerful communication system not only for those areas where there is electricity problem and literacy level is low but also for those far furlong high literacy areas where newspapers do not reach. Far instant, there are several radio stations (about 96) under the project "Kisanvani" of All India Radio. This project was launched by AIR in collaboration with the Department of Agriculture and Cooperation, Ministry of Agriculture.

Further, social media is another way of mass communication where very large numbers of peoples remain connected for sharing, discussing, generating information, opinion, audio, video, *etc.* This internet based digital-tool ensures receipt of novel ideas, link-ability and high degree of connectedness for content sharing across multiple platforms (Table 1). In spite of the above, there are still more opportunities for the development of media role in agriculture development. For instance, there are few social media app available without internet, media can act as catalyst for resource mobilization, engagements and dialogue can be enhanced by the media, *etc.*

Media helps the people to connect each other's, due to the development in the media, it "brings the globe into our glance" (Ishaq, 2013). Mean to say that media distributes information in a large scale and whole world become very small to reach and connect one another at any time within a minute. Media, having so many amazing characteristics, thus, can help to our farmers and farming sectors not only

Table 1: List of some social media platforms.

Social media platforms	Examples
Social networking sites	Facebook, Google+, <i>etc.</i>
Blogs and vlogs	Bloggers and Wordpress
Micro-Blogs	Twitter, Instagram, <i>etc.</i>
Collaborative projects	Wikis
Social bookmarking	Delicious, Blinklist, <i>etc.</i>
Virtual social worlds	Second life
Social gaming	World of Warcraft, Farmbook, <i>etc.</i>
Content communities	
• Video	YouTube, Vimeo, Vine, <i>etc.</i>
• Photo	Instagram, Flickr, Tumbler, <i>etc.</i>
• Audio	Soundcloud, Podcasts, <i>etc.</i>
• MS Office Docs	-
• PDF	-
• PPT	Slideshare
Forums, discussions, boards and groups	Google Hangout, Blackboard, Discussion groups, <i>etc.</i>
Socially integrated messaging platforms	WhatsApp, Facebook Messenger, Snapchat, <i>etc.</i>
Professional networking	Research Gate, Linkedin, <i>etc.</i> ;
Social news	Reddit, Propeller, Digg, <i>etc.</i>

to avoid its degradation/ devaluation and from becoming non-profitable sector, which is the main cause of suicide of the farmers, but also to enhance the productivity, security of crops and market return to the farmers by providing required technical information at right time and in the right way (ICFA, 2017).

In our country, farmer's suicide refers to catastrophe of farmers committing suicide since the 1990s, often by drinking pesticides due to inability to repay loans mostly taken from the landlords and bank. According to a 1987 -batch Indian Economic Service Officer PC Bodh, about 4 lakh farmers have committed suicide since 1995, for 25 years, in his new book 'Farmers' Suicide in India: A Policy malignancy. He doubts about the effectiveness of the national policy and says India may become farmer suicide capital (Joy, 2019).

Media, therefore, can play a key role in raising the farmer's issues and can contribute a lot in the agriculture sector for better production, marketing and thereby sustained development to avoid farmer suicide. In contrast, only 4.4% of all news was about the farm, farmer, farming and agriculture. The most commonly used words within this news were agriculture, minister, congress and crop. According to veteran journalist P Sainath, most of the Indian newsrooms do not have an agriculture or labour correspondent. Further, a protest organized by 40 farmers from Tiruchirappalli in Tamil Nadu in March, 2017 demanding a waiver of all debts from nationalized banks, a draught relief package of Rs. 40,000 crores. Similarly, In June the farmers in Madhya Pradesh Mandasaur district began a ten-day strike demanding higher prices for their crops and milk as well as draught-relief package. At same time, farmers in Maharashtra began a state wide strike seeking minimum support prices at 50 percent over cost of production, a loan waiver, interest-free credit, higher prices for milk, fully subsidized micro-irrigation equipment and a pension scheme (Joy, 2019).

The media coverage, throughout the protests, focused on the spectacles created by the farmers and the violence, instead of the core reasons behind the protest. Media branded the protesters using word as 'skull protesters' due to worn of skull garlands by Tamil Nadu farmers and adjectives such as 'unique', 'shocking', bizarre and glory to describe the protests. Similar, in the discussion on social media, a distorted picture of protest was reflected as well. As per Media Cloud data, about 94% of the farmer protest stories (*i.e.* 5072) published between March and mid July talked that the farmer's method of protest to gain attention or violence were unconventional. However, farmer's demand for loan waiving, for minimum-support prices and rising cost of production in these stories were included about 36.5%, 27% and 0.7%, respectively.

Such media coverage of farmer's protest without knowing the actual reason of farmers, farmer's suicide and agricultural sector have impacted very badly.

Market and agriculture

Agricultural marketing is very important and efficient way for the farmers by which they dispose their surplus produce

at a fair and responsible price. The condition of farmers and their on agriculture mostly depends on the agriculture marketing. The term of agricultural marketing include all those activities which are mostly related to the procurement, grading, sorting, transportation and the selling of agricultural produce. According to Prof. Faruque "agricultural marketing comprises of all operations involved in the movement of farm produce from the producer to the ultimate consumer. Thus agricultural marketing includes the operations like collecting, grading, processing, preserving, transportation and financing. In India, there are four different systems of agricultural marketing such (1) Village level sale; (2) Market (weekly village markets) level sale; (3) Mandi level sale and (4) Cooperative marketing are prevalent. In our country, there are various types of defects of agricultural marketing in these markets. Some of the main defects agricultural marketing is:

- (1) Lack of storage facility.
- (2) Distress sale.
- (3) Lack of transportation.
- (4) Unfavourable mandis.
- (5) Existence if intermediaries.
- (6) Unregulated markets.
- (7) Lack of market intelligence.
- (8) Lack of organization.
- (9) Lack of grading.
- (10) Lack of institutional finance.
- (11) Unfavorable conditions.

These defects in agricultural marketing are big issues in the improvement of condition of farmers and their agriculture. The improvement in Indian agricultural marketing is, therefore, utmost need of the hour. The knowledge of market is a key ingredient which can be improved with the help of media by publishing farmers based awareness program. Since, the better knowledge of the requirements of the market, the less is the wastages of the product. Our government, however, have some initiative and have created a online platform like eNAM; National agricultural marketing for trading online agricultural produce in India. The e-NAM generally facilitate farmers, traders and buyers with online trading in commodities so that better price discover and smooth marketing can be facilitated. To achieve these objectives, government has connected 200 new mandis across seven states to its national agricultural trading platform (eNAM). Now, the total tally of eNAM enabled mandis is reached to 785 and it is expected to reach about 1000 in the earliest. In addition, a Public Private Partnership is an effective method for funding the implementation of good marketing practices and enlisting the support of the private sector.

Further, for the improvement of farmers condition and their agriculture, farmers are needed to keep up-to-date with the latest market prices for the agricultural process and commodities using TV, Radio and different other social media platform. Since, agricultural marketing is very important for any country. Since the countries that are more advanced in agricultural processing, which is an important

aspect of agriculture, the transport and energy in those countries are more developed than in other countries. Processing generally controls market; market controls economy; economy effect politics and effected or controlled politics caused marketism and consequently dependency (Fig 1).

Marketism says nothing about its own boundaries. It says nothing about what is outside the marketplace, for instance the arts, foreign policy, issues of war and peace, the environment, public safety, law and punishment and so forth. Sometime this marketism snatches freedom of whole country and controls the economy, politics and society. For example; British came in India in 16th century for trade and landed in the Indian subcontinent on August 24, 1608 at the port of Surat. Initially they started their trade as British East India Company traders in spices, a very important commodity in Europe. They used the spices to preserve the meat. Apart from that British East India Company primarily traded in silk, cotton, indigo dye, saltpeter, tea and opium. They used to sale their products after processing for consumption in India and slowly-slowly they had controlled the Indian market and had set up their monopolistic trading position and consequently, they affected the economy and then controlled politics of India. The control of India was a key element in the world power structure, in terms of geography, logistics and military man power. Mean to say that our country became slave due to either lack of knowledge of processing

and value addition or not giving the importance to the processing especially the agricultural processing.

Monsoon and agriculture

Indian farmer mostly influenced by the uncertainty of monsoon. Climate change is still a distant scientific prognosis but it is expect to become a reality. The earth's temperature is increasing due to the anthropogenic increase in the emissions of greenhouse gasses (such as CO₂: carbon dioxide; CH₄: methane; O₃: ozone; N₂O: nitrous oxide and CFCs) and aerosols in the atmosphere. This continuous increase in concentration of green gasses is much cause of concern for the changes in the future climate and its effect on agriculture. It has been reported by the Intergovernmental Panel on Climate Change (IPCC, 2001) that the average temperature will increase by 1.4°C to 3°C for low level emission while for higher emission this increase would be between 2.5°C and 5.8°C. However, there is no clear evidence according to IPCC (2001) for an observed increase in global average temperatures and change in rainfall rates during the 20th century around the world.

In India about 40 per cent of the population involved in agriculture are being supported by dryland agriculture and are mostly small and marginal farmers concentrating mainly on cereal based crop production with high risks of drought (Kumar *et al.*, 2022). According to Kumar *et al.* (2013), the failure of monsoon and small size of holdings, these farmers

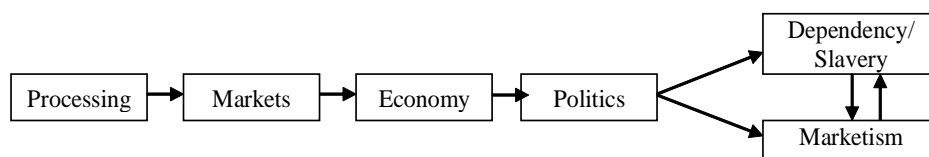


Fig 1: Flow of impact of agricultural processing.

Table 2: Some important facts related to Indian agriculture.

Facts	Status/value	Reference
1. India host percentage of world's population	>18%	Pandey (2019)
2. India's total land area	2.4% of world's total land area	Pandey (2019)
3. Total geographical area	328.72 million hectare	NITI Aayog (2018)
4. Net sown area	139.4 million hectare	NITI Aayog (2018)
5. Gross cropped area	190.8 million hectare	
6. India holds percentage of global fresh water	About 4%	NITI Aayog (2018)
7. Gross value added (GVA) for 2019-20	17.8%	NITI Aayog (2018)
8. Total food grain production in 2020-21	296.65 MT	APEDA (2020-21)
9. Total agriculture and allied products export in FY21	US\$ 41.25 billion	APEDA (2020-21)
10. Percent of Indian dependent on agriculture (directly or indirectly)	58% population	APEDA (2020-21)
11. Sugar production in India (2019-20)	26.46 MT	APEDA (2020-21)
12. Production of horticulture crops in 2020-21 (as per 3 rd advance estimate)	331.05 million metric tonnes (MMT)	APEDA (2020-21)
13. India's processed food market (2020)	US\$ 263 billion	APEDA (2020-21)
14. India's food processing industry employs about	1.77 million people	APEDA (2020-21)
15. India's agri export expected to reach about	US\$ 60 billion by 2022	APEDA (2020-21)
16. Fruits and vegetable production during 2019-20	290.84 million metric tonnes	APEDA (2020-21)
17. India's livestock population	535.78 million	APEDA (2020-21)

barely get sufficient income to sustain their livelihood as a result farmer's suicides are commonly observed phenomenon in India during recent past. Looking into this distressed scenario of dryland agriculture, it is viewed as gambling with monsoon. Agriculture is the backbone of the Indian economy because more than 50% workforce of the country is still dependent on agriculture. Agriculture plays an important role in overall economic and social well being of India. Mahatma Gandhi said six decades ago, "India lives in villages and agriculture is the soul of Indian economy". But, the share of agriculture in India's GDP (Gross domestic product) and employment generation has been declined over time.

The share of agriculture in GDP has declined from 39% in 1983 to 24% in 2000-01 and then to 14% in 2020. Similarly, the share of agriculture in total employment is declined from 63% in 1984 to 57% in 2000-01 and to 42.38% in 2019. Such, declination in GDP and employment in agriculture sector lead to rise in unemployment, a low volume of marketable surplus and to increase the vulnerability global environmental changes (Aggarwal *et al.*, 2004). Table (2) shows some important fact related to current status of Indian Agriculture.

Further, the average consumption of food per capita in India is low about 550 gm/day in comparison to food consumption in China (*i.e.*, 980 g/capita/day) and America (*i.e.*, 2850 g/capita/day). Therefore, the present annual (365 days) requirement based on present consumption level (550 gm) for country (with current population as 1.38 billion) is about 277.04 Million Tones (Mt), which is under the current India's total grain production (*i.e.*, 291.95 Mt). However, this food demand in future will increase with the population and to meet the demand of food for this increased population farmers need to produce 50% more grain. The problem has become acute due to decrease in per capita availability of arable land (0.48 ha in 1950 to 0.15 ha in 2020 and then to 0.08 ha in 2020) and more dependency on monsoon. Less than 40% of total cropped area is being irrigated; more than 60% area is still rainfed and dependent on uncertainties of monsoon.

However, media still do not taking his part in exact covering of monsoon, because, simply put, no one knows how the rains will finally play out by the end of the season. When it comes to the monsoon, "drought looms large" makes for a more compelling headline than "normal monsoon expected" and media, even the non-tabloid media; use the negative headline rather than the positive one in the unending effort. The monsoon is far more complex - and far more impactful than these examples and yet media revels in the daily, unscientific, irresponsible and damaging update. Farmer start worrying about the upcoming monsoon and the media becomes obsessed with the predictions about the monsoon. The more accurate way of predicting monsoons should be within our grasp, knowing when the rains will arrive is important for our farmers for planning their next crop. The media coverage and forecast of dangerous storm and weather parameters (temperature, humidity, *etc.*)

are more important for the safety of crop during the harvesting time.

CONCLUSION

For our country not only agriculture and agricultural processing but also farmer and farming are as important as our freedom. In this era of market and marketism, the self dependent is a credo for avoiding the control of foreigner/ or foreign industries on our markets and consequently their influence on our economy and inter politics. While for self dependency, the processing of raw materials and its consumption within the country is very important. Moreover, the correct predictions of monsoon by media based on upgraded technology and honestly cover of farmers issues are the prime important. In addition, media have to play a crucial role in creating of the awareness among the peoples regarding market, marketism, self-sufficiency and their responsibility towards the farmers like in case of soldiers. Since, agriculture/processing is the only sector which can strengthen the countries industry sector which then can help in boosting of transportation and energy sector and consequently we will become self dependent. This paper, thus, reports that the impact of media, market and monsoon on agriculture has very important and crucial role in the well-being of our country.

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