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Role of social-media and government agencies in combating COVID-19 pandemic crises

Monica Singh, HRC Prabhu and Sandeep Deshmukh

Abstract
The study was conducted in South and North Goa District of Goa. The questionnaire was developed to collect the data from different stakeholders involved in the agriculture sector. Data is collected online through a google form. The responses from the respondents were rated on a five-point Likert scale and certain multiple-choice questions were included in the instrument. The study pointed out that people are believing only government sources for seeking authentic information and affairs on COVID 19 pandemic. However, some fake news is shared through social media which created a negative effect on people during the initial phase of a pandemic. Despite this, the different government agencies and, some policy reforms and initiatives are taken by Central and State Government to fight COVID pandemic played a crucial role in building resilience in the community.

Keywords: Social-media, government role, COVID 19

Introduction
The World Health Organization (WHO) declared COVID-19 a pandemic. To combat COVID 19, Government of India has declared a lockdown from 25th March. The government has carried out lockdown in different phases with certain relaxations. The restrictions on movement disrupted the supply chains, hampering the uninterrupted flow of inputs for and outputs of agricultural activities (Barrett, 2020; Carberry and Padhee, 2020) [1, 2]. Supply of perishable commodities were affected more, challenging the food and nutritional security of the vulnerable sections of the society (Harris *et al*., 2020) [3]. The outbreak of the Covid-19 pandemic is an unprecedented shock to the Indian economy. The economy was already in a parlous state before Covid-19 struck. With the prolonged country-wide lockdown, global economic downturn and associated disruption of demand and supply chains, the economy is likely to face a protracted period of slowdown. The magnitude of the economic impact will depend upon the duration and severity of the health crisis, the duration of the lockdown and how the situation unfolds once the lockdown is lifted. The agriculture sector in India is likely to suffer the most. As the world battles this pandemic and, as economies and livelihoods are disrupted, the pro-poor and vulnerable are suffering the most. Smaller cities and rural areas saw higher inflation (Cariappa et al., 2020a; Narayanan and Saha, 2020). Addition to this, distress reverse migration of labour force to their natives again raised another challenge before policymakers. Considering these challenges, the present study was conducted with the following specific objectives.

Objectives
1. To describe the socio-personal and economic characteristics of different stakeholders,
2. To study the role of social media during COVID 19 lockdown.
3. To study the role performed by different government agencies during the lockdown,

Research Methods
The present study was conducted in South and North Goa District of Goa. The questionnaire was developed to collect the data from different stakeholders involved in the agriculture sector. Data is collected online through a google form. The responses from the respondents were rated on a five-point Likert scale and certain multiple-choice questions were included in the instrument. To avoid the missing data/ information, all questions in the instruments made compulsory to get accurate and reliable data from the respondents. After designing an online Google Survey Form, the link of the questionnaire was sent in the public domain through various social media platform such as WhatsApp.

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The researcher has taken efforts to make it viral as far as possible to cover a wide number of farmers, entrepreneurs, scientists, rural youths and farm women. The link was opened from 17/04/2020 to 20/05/2020 so that an individual can fill their responses. Total of 92 respondents have given a reply to the google survey form and collected data was extracted by the researchers. Data were analysed in SPSS software (V20.0) and frequency, percentage, the mean and standard deviation was worked out.

Results and Discussion
The findings of the study under different head such as the socio-personal and economic characteristics, the role performed by different government agencies and the post-lockdown consequences on the agriculture sector are presented hereunder.

Socio-personal and economic characteristics of different stakeholders: The data on socio-economic characteristics were emerged out of investigation are presented hereunder.

District: The study revealed that highest (92.0%) of stakeholders were responded to an online questionnaire from North Goa district. However, South Goa contributed only 8.0 percent sample.
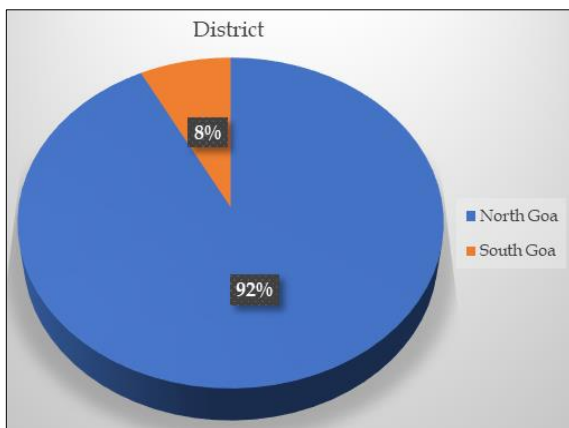

Fig 1: District

Age
It was found that majority (43.48%) of the respondents were belonged in the middle age group of 31 to 45 years, followed by 35.52 percent of the sample were from 46-60 years of age group. Further, 7.61 percent of the respondents were found old age category of more than 60 years and 17.39 percent of respondents came into the young age category of up to 30 years.
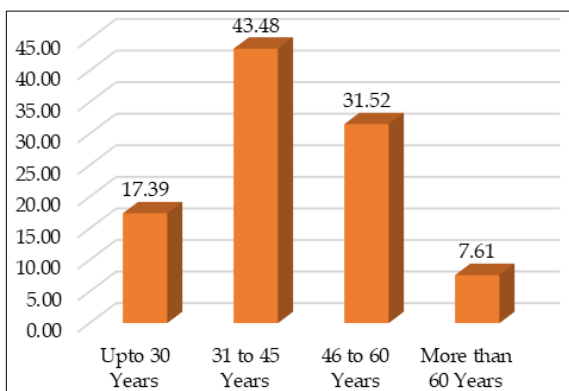

Fig 2: Age

Profession
As regards to profession, the present study reported that more than eighty percent (84.8%) of the respondents have farming as their primary profession, followed by service (3.3%), business (7.6%) and 4.3 percent were engaged in other professions. This leads to summarize that majority of the respondents were engaged in farming and agricultural related profession.
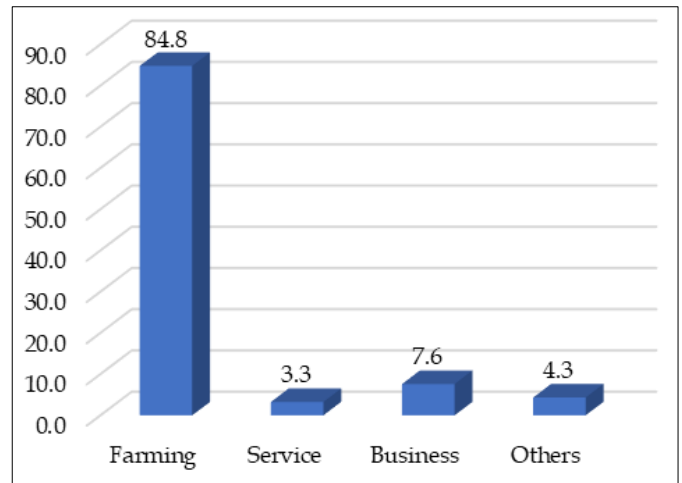
Fig 3: Profession

Landholding
The present study revealed that the majority (44.6%) of the respondents possessed 1.0 to 2.00 ha of land and 37.0 percent of the sample possessed operational landholding up to 1.00 ha. Small 7.6 and 7.6 percent of the respondents were belonged from 2 to 4 ha and more than 4 ha of landholding category, respectively. However, 3.3 percent of the respondents were found as a landless.
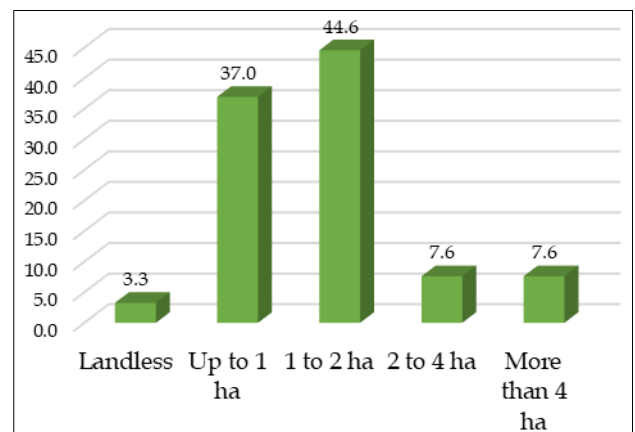
Fig 4: Landholding

Crops were at harvesting and marking stage during a lockdown
In the present study, the efforts were taken to collect the information on which crops were at harvesting and marketing stage with lockdown period. It was assumed that synchronized harvesting and marketing of crops with lockdown period may have an adverse impact of yield as well as the net profit of the farming community. The study revealed that the majority (80% and 56.7%) of the respondents were reported that they had cashew and vegetable crops at harvesting and marketing stage during the lockdown period. Both crops are principal and commercial crops in goa have adversely affected either by labour shortage or due to middleman monopoly. Coconut and

mango were another commercial crops in Goa; 53.3 percent and 43.3 percent of the respondents were reported that it was at harvesting and marketing stage during the lockdown and affected to a great extent due to labour shortage.
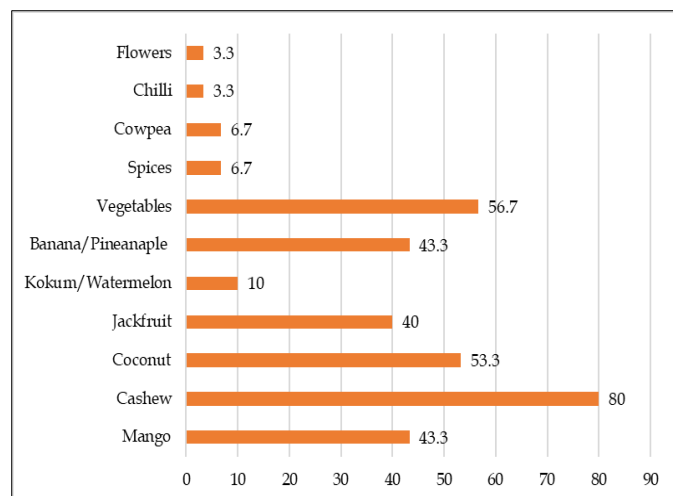

Fig 5: Crops during Lockdown

Further, 43.3 percent of the respondents said that banana, pineapple and jackfruit were at harvesting stage during the lockdown. The harvesting and marketing stage of a high-value commodity like watermelon, cowpea and spices were also synchronized with lockdown period in Goa.

Agribusiness enterprises

A large (30.4%) of the respondents have not possessed any kind of agribusiness enterprises. However, a small percent of the respondents possessed dairy (41.3%), poultry (15.2%), processing (8.7%) and piggery (4.3%).
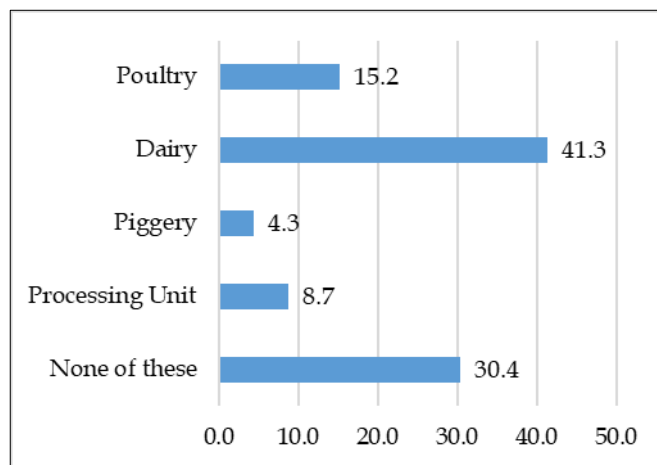

Fig 6: Agribusiness enterprises

Role of social media in Disseminating Information

Over the last decade, social media has played a crucial role in spreading awareness and knowledge about public health; however, it has also been misused for spreading fake news, hatred and creating racism during epidemics and civil unrest. Therefore, we studied the impact of social media during pandemic lockdown and data is presented in Table 1.

Table 1: Role of social media in Disseminating Information

Sr. No	Item	Responses (N=92)					Mean Score	SD	Rank
		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree			
1.	I believe only on government sources for authentic data regarding corona	7 ()	00 (0.00)	11 (12.0)	38 (41.3)	36 (39.1)	4.04	1.09	
2.	I feel that fake news spread through socially created a negative impact on society	00 (0.00)	4 (4.3)	7 (7.6)	35 (38.0)	46 (50.0)	4.33	1.09	
3.	Electronic media (TV, Radio, e-paper, internet) helped farmers to give the right information	00 (0.00)	33 (35.9)	9 (9.8)	27 (29.3)	23 (25.0)	3.43	1.21	
4.	I think Facebook, WhatsApp and Smartphones are the future of agricultural marketing	4 (4.3)	9 (9.8)	7 (7.6)	46 (50.0)	26 (28.3)	3.88	1.06	
5.	I felt there is a need for online delivery of farm inputs and repairing services	00 (0.00)	30 (32.6)	4 (4.3)	40 (43.5)	18 (19.6)	3.50	1.14	
6.	Aarogya Setu app helped get information on COVId-19	6 (6.5)	14 (15.2)	10 (10.9)	42 (45.7)	20 (21.7)	3.60	1.17	

It was observed that the majority (41.3 and 39.1%) of the respondents agreed and strongly agreed that 'They believe only government sources for seeking authentic information on COVID 19 pandemic' having MS=4.04. This indicates India as a world's largest democracy, people have full faith in the government sources for seeking authentic information about any crises or emergencies. Further, it was a fact that the pandemic of social media panic travels faster than the COVID-19 outbreak. India-a country which has over 350 million social media users and a large proportion of which are unaware of fact-checking sources. Therefore, half of the sample was strongly reported that 'Fake news is also shared through social media which created a negative effect on society' (MS=4.33) during the pandemic lockdown.

A large percent (25 & 29.3%) of the respondents were strongly agreed that Electronic media (TV, Radio, e-paper, internet) helped farmers to give right information' (3.43). In India,

Television, Radio and e-Papers are broadcasting factual information among the public domain. During the lockdown, these e-media has played a critical role in communication factual information of Covid-19, precautions and guidelines given by the governments and also, they raised public issues to the government. This e-media also communicated agriculture and market-related information to the farming community. More than fifty percent of the respondents strongly responded that 'Facebook, WhatsApp and Smartphones are future of agricultural marketing' (MS=3.88), they felt there is a need for online delivery of farm inputs and repairing services (MS=3.50) and Aarogya Setu app helped get information on COVId-19 (MS=3.60). 'Aarogya Setu' is an Indian open-source Covid-19 "Contact tracing, Syndromic mapping and Self-assessment" mobile app developed by the National Informatics Centre (NIC). The purpose of the app is to spread awareness of Covid-19 and to deliver health services to the

people of India. NITI Aayog also revealed the effectiveness of app and stated that "the app has been able to identify more than 3,000 hotspots within 3–17 days of its launching.

Role of Government Agencies during Lockdown
Governments in India plays an important role in bridging the access gap that saves millions at the bottom of the pyramids. Government has taken all necessary steps to face the challenges and threats posed by the growing pandemic of COVID-19. In this study, the efforts have been made to know the people's perception about the role performed by the different government agencies while combating Covid-19 pandemic. The vast majority (66.3%) of the surveyed sample were strongly responded that 'The district administration, health departments and police force has taken a lot of efforts to fight corona' (MS= 4.07). This has been done through the National Health Mission under the Union Ministry of Health and Family Welfare that provides for village-level healthcare facilities.

Table 2: Role of Government Agencies during Lockdown

Sr. No	Item	Responses (N=92)					Mean Score	SD
		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree		
1.	The government provided food essentials through ration shop	4 (4.3)	15 (16.3)	21 (22.8)	48 (52.2)	4 (4.3)	3.35	0.95
2.	The government allowed farmers to sell their produce with curfew passes	15 (16.3)	12 (13.0)	4 (4.3)	58 (63.0)	3 (3.3)	3.23	1.22
3.	The district administration, health departments and Police has taken a lot of efforts to fight against corona	00 (0.00)	8 (8.7)	00 (0.00)	61 (66.3)	23 (25.0)	4.07	0.77
4.	The relaxation given by Govt has helped the farmers in the supply of agricultural commodities	7 (7.6)	2 (2.2)	14 (15.2)	58 (63.0)	11 (12.0)	3.69	0.98
5.	Government agencies created awareness regarding safety measures against corona	4 (4.3)	6 (6.5)	4 (4.3)	49 (53.3)	29 (31.5)	4.01	1.01
6.	Agro-advisories provided by ICAR/KVK/ Agri department are effective for farmers	4 (4.3)	12 (13.0)	13 (14.1)	38 (41.3)	25 (27.2)	3.73	1.12
7.	Goa Dairy played an important role in the collection of milk from farmers	00 (0.00)	7 (7.6)	4 (4.3)	43 (46.7)	38 (41.7)	4.21	0.84
8.	Goa State Horticulture Cooperation Limited played an important role in collecting, buying and marketing locally grown vegetable	4 (4.3)	10 (10.9)	8 (8.7)	33 (35.9)	37 (40.2)	3.96	1.15

India's last-mile healthcare delivery mechanism was carried out by the auxiliary nurse, an accredited social health activist, Anganwadi workers, and Community Resource Person (CRPs). In addition to state authorities, doctors and local administration, the front-line workers (FLWs) from all the departments of state government have played an integral role in containing the pandemic. Similarly, fifty percent (52.2%) of the studied sample responded strongly that 'Government has supplied food grains through ration shop' (MS=3.95). This has been done through the public distribution system (PDS) which takes care of food security in the country. Further, the majority (53.3%) of the respondents were agreed and 31.5 percent were strongly reported that 'Government agencies made public to aware of COVID 19 safety measures' (MS=4.01). The concrete efforts have been taken by the ICMR, Union and State Governments, and media persons to make public be aware of 'dos' and 'don'ts' guidelines issued by the WHO. In all, different government agencies created an extensive awareness of handwashing, masking, social distancing, sanitization, behavioural practices for coughing or sneezing and safe disposal of used tissues or masks.

Agriculture is a pillar of the India economy. Therefore, providing technological backstopping and advisory to the farming community during such pandemic is one of the responsibilities of the National Agricultural Research and Extension System (NARES) in the country. This study reported that 41.3 percent of the respondents were agreed and 27.2 percent was agreed that 'Advisories given by the ICAR, SAUs, KVKs and Line department are useful for farmers during pandemic lockdown' (MS=3.73). The ICAR, SAUs and especially KVKs in the country has regularly provided information regarding Covid-19 precautions, advisory of technology, climate and market through the various platform of social and electronic media. This supported farmers to do agricultural operations timely and also helped to get market intelligence. New marketing strategies also identified by farmers under the guidance of these institutes. Similarly, large percent (63.0%) of the sample was strongly reported that 'Relaxations given by Govt has helped the farmers in the supply of agricultural commodities' (MS=3.69). The Government of Goa has time to time given relaxation e.g. e-passes to farmers for transportation and marketing of their produce (MS=3.23). Besides, majority of the sampled respondents said that Goa Dairy played important role in collection of milk from farmers (MS=4.21) and Goa State Horticulture Cooperation Limited played an important role in collecting, buying and marketing locally grown vegetable (MS=3.96). This indicates that every department of government has played a pivotal role, delivered all essential services as far as possible and supported community to became resilient against Covid-19 pandemic.

Conclusions
The study pointed out that people are believing only government sources for seeking authentic information and affairs on COVID 19 pandemic. However, some fake news is shared through social media which created a negative effect on people during the initial phase of a pandemic. Despite this, the different government agencies and, some policy reforms and initiatives are taken by Central and State Government to fight COVID pandemic played a crucial role in building resilience in the community. The study revealed that people expressed satisfaction regarding role performed by the different front-line departments such district administration, health departments and police force to fight corona, creating awareness of COVID 19 safety measures, the effectiveness of 'Arogya Setu' app for receiving alerts, the supply of food grains and essential commodities, and agro-advisories provided by the ICAR, SAUs, KVKs during the lockdown. Time to time relaxations

given by the Government has helped the farmers in the supply of agricultural commodities to end-users.

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