

EXTENSION AND ADVISORY SERVICES AMID COVID-19: EFFORTS OF KVKs IN RAJASTHAN, HARYANA AND DELHI



To counter impacts of COVID-19 on agriculture, KVKs in Rajasthan, Haryana and Delhi are playing a proactive role. In this blog, Dr M S Meena and Dr S K Singh discuss this and suggest what more could be done to address the challenges.

CONTEXT

India's ongoing lockdown to control the spread of coronavirus is threatening its agriculture sector. As it overlapped with the time of crop harvesting, the lockdown derailed threshing, harvesting and marketing operations. Lack of agricultural labour to help in harvesting and transportation of agricultural produce has worsened the situation. Meanwhile, poultry farmers in some states have been badly hit due to misinformation, particularly on social media, that chicken are carriers of COVID-19. India has taken early action to limit the spread of COVID-19, ordering a 21-day nationwide lockdown for its population of 1.3 billion people starting 25 March 2020. Central and state governments have recognized the challenge and responded aggressively. Till 18 April, 11,906 cases of corona were active, 1991 cured, 480 deaths had occurred and one migrated. The nationwide lockdown has now been extended till 3 May. The lockdown period has been of great stress to farmers and farm families. The ICAR-Krishi Vigyan Kendras (KVKs) of Rajasthan, Haryana and Delhi states are proactively engaged with the Government of India, state governments and other local institutions to combat COVID-19.



INITIATIVES OF KVKs TO COMBAT COVID-19

KVKs of Rajasthan, Haryana and Delhi are proactively engaged in issuing location specific advisories on crop, livestock, fisheries and other associated issues using information & communication technologies (ICTs). KVKs' are sharing information on markets, availability of critical inputs, maintaining social distance, facilitating the installation of Aarogya Setu app, immunity enhancing protocol, etc. Apart from these, a few KVKs are also engaged in specific activities to respond to COVID-19. These are discussed below.

Providing advisories

In accordance with directives issued by the Government of India, [ICAR-ATARI, Zone-II, Jodhpur](#) provided advisories in English and Hindi to KVKs of Rajasthan, Haryana and Delhi. Advisories are uploaded on websites of ICAR-ATARI, Jodhpur and KVKs. Advisories issued by Govt. of India and state government (Box 1) were delivered through various means of communications like WhatsApp, mKisan, print media, radio talk, phone calls and other ICT platforms. Advisory services issued by KVKs is evident from table 1.

Box 1. Some advisories issued for states of Rajasthan, Haryana and Delhi

1. ICAR advisory to farmers for Rabi crops (Ministry of Agriculture & Farmers Welfare)
<https://pib.gov.in/PressReleaseDetail.aspx?PRID=1609604>
2. Guidelines applicable for farmers and farming sector during lockdown period due to COVID-19
<https://icar.org.in/content/guidelines-applicable-farmers-and-farming-sector-during-lockdown-period-due-covid-19>
3. State Advisory for Farmers during COVID-19 lockdown
<https://kvk.icar.gov.in/download/StateAdvisoryforfarmers.pdf>
4. Lockdown support: farmers dial in to agri-experts for help
<https://www.mssrf.org/content/lockdown-support-farmers-dial-agri-experts-help>
5. Instructions regarding prevention of spread of infection of COVID-19 during festivals in near future- '06/04/2020'
http://csharyana.gov.in/WriteReadData/Instructions/COVID-19/e_10939.pdf
6. Orders of officers deputed as District Incharge for Planning, Coordination and Monitoring the activities for prevention/control of COVID-19 - '03/04/2020'
<http://csharyana.gov.in/WriteReadData/Transfers%20and%20Promotions/Services-II/10932.pdf>
7. Addendum to guidelines on the measures to be taken by Ministries/Departments of Government of India, State/Union Territory Governments and State/Union Territory Authorities for containment of COVID-19 epidemic in the country - '26/03/2020'
http://csharyana.gov.in/WriteReadData/Instructions/COVID-19/e_10906.pdf
8. CCSHAU to distribute free masks for families residing in the university campus
<https://www.apnnews.com/ccshau-to-distribute-free-masks-for-families-residing-in-the-university-campus/>
9. COVID-19: Health Ministry issues advisory for aged people
https://economictimes.indiatimes.com/news/politics-and-nation/covid-19-health-ministry-issues-advisory-for-aged-people/articleshow/74884370.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
10. Indian govt exempts agriculture-farming, allied activities from Covid-19 lockdown
<https://www.thestar.com.my/news/regional/2020/03/29/indian-govt-exempts-agriculture-farming-allied-activities-from-covid-19-lockdown>

Table 1: Extension and advisory services issued by KVKs of ICAR-ATARI, Zone-II, Jodhpur (10th April 2020)

States/ KVKs	WhatsApp		mKisan	Print	Radio talks	Other ICT platforms	Call centres/toll free number contact
	Total groups	Total farmers	Total farmers	Total news papers	Number	Total farmers	Total farmers covered
Rajasthan 44	110	22120	299	249	5	4600	540
Haryana (19)	45	8750	5000	42	-	1890	223
Delhi (1)	5	340	0	5	-	134	34
Total (64)	160	31210	5299	296	5	6624	797

Source: Primary data

कृषि विज्ञान केन्द्र ने काश्तकारों को लिए सुझाव

काश्तकार फसल कटाई के दौरान बरतेंगे सावधानी, तो दूर रहेगा खतरा



रबी फसल कटाई का चल रहा है दौर

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इंदौर, सौराष्ट्र डिवीजन की पारना के साव फसल कटाई के दौरान कृषि विज्ञान केन्द्र के वैज्ञानिक।

ये बरतें सावधानियाँ

- फसल की कटाई यथा संभव मशीनी औजारों से करें।
- फसलों की कटाई देरी औजारों से करने की आवश्यकता है, वे कटाई से पूर्व एवं बाद में उपकरणों को सोने/साफ करने से छोड़ें। वह उपकरण नहीं हैं, तो पर में उपकरण काफ़ी धोने के डिटेन्ट के घोल में अच्छे तरह धो लें।
- फसल कटाई के दौरान घने गूँघरो को बहिष्कार करने से भी बचें।
- फसल कटाई के दौरान मुँह को अपने मुँह टुमट्टे आदि से अगली तरह बांध लें।
- खेतों से घर लौटने पर हाथ भी धोने से आ रहे हैं उसमें सही एक तुरंत से अलग दिशा में मुँह कर बैठें।
- घास की स्प्रैडिंग, कलक, मिगल आदि को बहिष्कार करने से घने के बाद ही इस्तेमाल करें।
- अधिक से अधिक गर्म पानी का ही इस्तेमाल करें तथा नमकीन पानी के गरारे करें।
- दोस्तर को तेज धूप के दौरान किसी पेश या छत्र में बैठने दें, तो परस्पर दूरी बनाए रखें।
- कटाई के दौरान बाँधी जाने वाली घुसी या मुँह को कम बजाने बनान। इतनी तक ही बहकें जितने आवश्यक हैं उतनी करें।
- खेतों में काम में जाने वाले औजारों का परस्पर स्वयंसेवा नहीं करें।
- मनुष्यों को नियमित रखने के लिए बाँधी गई घन या रस्सी को भी बहिष्कार करने से बचें।

दूरगम्य क्षेत्रों में काश्तकारों के लिए से खेतों में रबी की फसल कटने योग्य हो गई है और बड़ी संख्या में काश्तकार फसल कटाई करने में जुटे हैं। इस दौरान बरती जाने वाली विशेष एयरिफायर को लेकर कृषि विज्ञान केन्द्र के वैज्ञानिकों का ध्यान है। वे किसानों को सावधानी से इन विशेष एयरिफायरों का इस्तेमाल करने की सलाह दे रहे हैं। काश्तकार इन सुझावों के अनुसार फसल कटाई का काम करें, तो वह कोरोना संक्रमण से अपनी हड्डि तक बच सकते हैं।

तुरंत चिकित्सक से करें संपर्क

कटाई में बचता कि यदि किसी काश्तकार या उनका अग्रज का रोग लक्षणों को खोजने के लिए तुरंत चिकित्सक से संपर्क करें। परस्य दाने के लिए देरी फसल कटाई, संतरा आदि का मनुष्य उपयोग करें।

कृषि कार्य के दौरान रखें सोशल डिस्टेंस और सुरक्षा

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प्रतापगढ़. इस समय कोरोना के संक्रमण को रोकने के लिए देश भर में लॉक डाउन घोषित किया गया है। जिसके चलते लोगों को घरों पर रहने की सलाह दी गई है। लेकिन रबी फसलों की कटाई व श्रमिकों का समय भी है। इसे ध्यान में रखते हुए खेती संबंधी कार्यों के लिए किसानों को कई रूप से सलूत दी गई है। कृषि विज्ञान केन्द्र के वरिष्ठ वैज्ञानिक एवं प्रभारी डॉ. योगेश कनौजिया ने बताया कि कुछ सावधानियों को अपनाते हुए खेती के कार्य को पूरा कर सकते हैं। सरकार द्वारा दिए दिशा-निर्देशों, व्यक्तिगत स्वच्छता, मास्क का उपयोग, साबुन से उचित अन्तराल

पर हाथ धोना तथा एक दूसरे से सामाजिक दूरी बनाए रखने पर विशेष ध्यान दें। जिससे उन्हें खेती का नुकसान भी न हो और वायरस के संक्रमण से भी सुरक्षित रह सकें। फसल कटने एवं खाना खाते समय एक व्यक्ति से दूसरे के बीच कम से कम 1 मीटर की दूरी रखें। अलग-अलग पट्टियों में काम करें। खाने के बर्तन अलग-अलग रखें तथा प्रयोग के बाद साबुन के पानी से अच्छी तरह साफ करें। पानी की बोतल रखें और मुँह पर मास्क का प्रयोग करें। खेत में पर्याप्त मात्रा में पानी एवं साबुन या सेनीटाइजर की व्यवस्था रखें। उपयोग में आने वाले कृषि यंत्रों को भी साफ करें। समय समय पर उपकरणों साफ करते रहें।

Inspiring SHGs to help common people

Capacity building of farmers, farm women, youth and other stakeholders is one of the main tasks of all KVKs. KVKs are also involved in promotion of self-help groups (SHGs) and farmers producer organisations (FPOs). As face masks and sanitisers were not available in most of the markets, KVK, Kota took timely initiatives to inspire SHG members and ex-trainee for the preparation of face mask and sanitisers.

Dr. Mahendra Choudhary, in-charge of the KVK stated, "We are inspiring our ex-trainees and 100 SHGs in the district to prepare face masks and sanitisers. The KVK is involved in knowledge management through application of ICT tools to cover more area." (Box 2).

Box 2. Efforts of KVK, Kota

Bhoomi SHG at Nayagao have prepared 3000 face masks of which 500 were distributed among farm women, sweepers and others in need while 2500 were given at hospitals, grain markets, staff of jail and medical workers at a minimum cost @Rs.10 per piece. Another SHG, Albeli group at Thegada, made 8500 face masks. They distributed 500 masks among farm women, vegetable distributors and other needy persons of the area. About 8000 masks were supplied @Rs.12 per piece to other local institutions like Bharat Vikas Parishad hospital, Kota Heart hospital, Sudha hospital, Anta krishi upaj madi, etc.

Dr. Gunjan Sanadhya—Subject Matter Specialist (Home Science), stated that the KVK is supporting these women in preparing homemade sanitisers, educating them on nutritional and other aspects. KVK is delivering advisory to 100 SHGs through WhatsApp groups, she stated.



Bhoomi SHG member preparing face mask: Kota district, Rajasthan

An ex-trainee of KVK, Jhalwar, is preparing sanitising rooms to protect common people from COVID-19 infection (Box 3).

Box 3. Efforts of KVK, Jhalawar

Mr Ravinder Goswami, a trainee of KVK, Jhalawar, who is also an innovator and progressive farmer of Jhalawar district, has been inspired by the KVK to prepare a sanitising room costing Rs.10,000 -15,000. He adopted polyhouse technology from KVK and is now utilising the agriculture equipment for this purpose. Many items like fogging systems, sprayers, pipe and tank are available with him. He prepared six sanitising rooms and installed at the gate of city and other important places sanitise at entry. Now the demand of his sanitiser room is increasing and other organisations like Nagar Parishad also asked him to develop 15 sanitising rooms. One sanitising room was established at Jhalarapatan Police Station where the police staff get sanitised.



Sanitiser rooms at Jhalawar district

KVK, Hanumangarh-I, inspired Sangaria-based Gurunanak Kisan Club to engage in preparation and distribution of face masks. Dr. Anoop Kumar, in-charge of the KVK, said, "Club members are very eager to help common people by providing face masks and the KVK is providing technical help."

Box 4. Efforts KVK Hanumangarh-I

KVK, Hanumangarh-I, and Gurunanak Kisan Club, Bhakarawali, are making a joint initiative to combat COVID-19. KVK, Hanumangarh motivated Ms Urmila Vishnoi from Sangaria to engage in preparation and distribution of face masks from 24 March 2020. She distributed more than 1500 face masks among local people.



Smt Urmila Vishnoi— Making face masks



Kisan Club at Hanumangarh district

Box 5. Efforts of KVK Bundi

Dr. Kamla Mahajani—Subject Matter Specialist (Home Science) working at KVK, Bundi, noted, “We are promoting our ex-trainees and master trainers through WhatsApp and other ICT means to fight COVID-19.” We trained women trainees in preparation of hand sanitisers at home through video calling. Mrs Rinku Meena from Kesorai Patan is one of the trainees involved in preparation of hand sanitisers.

Mrs Anita Paliwal, a resident of Mayza village also prepared and distributed 1000 face masks during lockdown period.



Master trainer promoted by KVK, Bundi, to fight COVID-19

KVK collaboration with All India Radio

KVKs, Chittorgarh, and KVK, Pratapgarh, are collaborating with All India Radio (AIR) Chittorgarh for delivering agro-advisory services to the farming community (Box 6).

Box 6. KVKs and AIR, Chittorgarh, to combat COVID-19

Through Kisanwani programme of All India Radio, Chittorgarh, Subject Matter Specialists of KVKs have provided the following advisories:

- How to store agriculture produce (Dr. S.K. Agarwal)
- Weather forecasting and preservation of fruits and vegetables (Dr. Priyanka Swami)
- Health safety and agricultural operations (Dr. R.L. Solanki)
- Fruits and vegetables preservation (Mrs. Deepa Indoriya)

The reach of AIR, Chittorgarh, is 80 to 100 km, where the advisory was delivered to a population of nearly 20 lakh in the area.

All India Radio Chittorgarh @Ai... · 1d
दिनांक 9 अप्रैल 2020 को सायं 7 बजे से 7.30 के मध्य, किसानवाणी कार्यक्रम में आप सुन सकते हैं, भेंटवार्ता, मौसम पूर्व अनुमान और आगामी मौसम के बारे में जानकारी देंगी डॉ प्रियंका स्वामी, मौसम वैज्ञानिक, कृषि विज्ञान केन्द्र, चित्तौड़गढ़, और आपसे बातचीत कर रहे हैं, तेजराम मीना।

Measures to avoid infections on KVK premises, public places and in stray animals

KVKs are committed to providing realistic, up-to-date information and resources to support essential work during the pandemic. KVKs are involved in spraying chemicals to avoid any contamination on their premises, equipment and other public places. However, there is a great need to make farmers aware in disposing off the used materials (infected items like mask, gloves etc.) to prevent from

contamination with livestock or other animals. An advisory issued by KVKs asked the farmers to: “Wash hands properly with soap or use sanitizer before and after carrying out field operations. Maintain at least one metre distance between workers. Prevent unknown persons from entering fields. Don’t spit, shake hands or hug each other during field operations.”



Livestock sanitation measures at KVK, Hanumangarh-I

Maintaining social distancing at KVKs’ farms and farmers’ fields

Social distancing helps to minimize contact with those having COVID-19 infection. KVKs have persuaded their employees and farmers to practice social distancing while doing farm operations. This message was also conveyed to other stakeholders.



Tomato grading operations at KVK, Jaipur-I



Milk outlet operations at KVK, Jaipur-I

Installing Arogya Setu App and protocol for immunity boosting

Arogya Setu app launched by the Union Health Ministry on April 2 helps users identify whether they are at a risk of COVID-19 infection. KVKs have informed farmers and other stakeholders in the respective districts to use the app. Till 14 April, 2020, a message for downloading the Arogya Setu app was sent to 26,290 farmers of which 5815 have downloaded it.

[Ministry of AYUSH has developed a protocol](#) for immunity boosting measures for self-care. All 64 KVKs of Zone-II are making efforts to popularize these efforts among farming community.

Table 2: Efforts of KVKs in downloading Aarogya Setu app in Rajasthan, Haryana & Delhi states (on 10 April, 2020)

State (s)	Total KVKs	Total KVK Staff	Staff downloaded App and registered	Farmers to whom message diffused	Total farmers downloaded app and registered
Rajasthan	44	419	380	4500	1860
Haryana	19	183	165	3640	1520
Delhi	1	16	14	257	89
Total	64	618	559	8397	3469

Source: Primary data

Other location specific initiatives of KVKs

KVKs are taking initiatives based on the situation and needs of each district. KVK, Udaipur-I, for instance, has already taken the steps to make a farm machinery bank with various agricultural machinery (cultivator, seed drill, multi crop threshers tractor, mould board plough, etc.) to help farmers. KVK, Sikar, is engaged in distribution of fodder to stray animals. Similarly, other KVKs are also involved in implementing location specific interventions to deal with COVID-19.

MORE WORK TO BE DONE BY KVKs AMID COVID-19

All KVKs of Rajasthan, Haryana and Delhi are actively engaged in collaborating with many other organisation. However, KVKs should do more to address this challenge.

- Most states have introduced measures to market agricultural goods. KVKs should assist farmers with registration in online portals to help them market their farm produce
- KVKs should encourage more SHGs, FPOs, kisan clubs to help their members in downloading Aarogya setu app.
- ICAR has a large network of 64 KVKs across Rajasthan, Haryana and Delhi that can be used as quarantine centres, if need be.
- Specific advisories (crop, animal, fishery-based, etc.) must be issued in local languages to farmers, farm women, youth and other stakeholders through ICTs.
- KVKs and other departments must ensure timely availability of agricultural equipment and inputs for minimum cost. For this purpose, other ICT platforms must be used in addition to print media, forums, WhatsApp groups, mKISAN web and FM radios.
- KVKs must train other organisations to produce face masks and sanitisers.
- KVKs are providing quality seeds of green gram, small millets and other crops to partner farmers for conducting cluster front line demonstrations. However, seed produced in farmers' fields in participatory mode will also have to be promoted through farmer-to-farmer extension.

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