

REGIONAL MUSHROOM *MELA* AND *KISAN GOSHTHI*: ENABLING FARMERS TO ACCESS TECHNOLOGY AND ADVISORY SERVICES

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ABSTRACT

Melas (Field days) and *kisan goshtis* (Farmer-expert interactions) have been key activities of agriculture research institutes to spread awareness about the technologies among clients and to address their problems. The Directorate of Mushroom Research initiated the concept of regional mushroom *mela* and *kisan goshtis* during 2010. Unlike the national mushroom mela, the regional mushroom melas were organised among the cluster of mushroom growers in Haryana, Punjab and Jammu & Kashmir with three key objectives of spreading the advanced technology among the rural farmers, addressing the problems encountered by mushroom growers in cultivation by expert advises and promoting mushroom consumption among masses. Five such *melas* were organised during 2010-11 with prior planning, preparation and publicity. About 200-350 mushroom growers other farmers, entrepreneurs, several officials, scientists and technical staff from different government organisations, financial institutions, krishi vigyan kendra took part in the mela. It was observed that, less than 10 per cent of women participated in the mela except one place (Khanpura, Punjab) where nearly 18 per cent women attended. With respect to the age group, the young people aged between 15-35 years outnumbered the other age groups in all the five melas. The event was organised to synchronise with the seasonal mushroom growing activities in the area. The majority of the participants at all the venues expressed happiness and approval about the timing of the event, benefits for participants, participation in future events, facilities and arrangements during the mela and recommending to others for participation in future events.

Keywords: mushroom, regional *mela*, *kisan goshti*, consumption fair, advisory services

INTRODUCTION

Extension programs seek two general objectives. The first is to provide technical education services to farmers through demonstrations, lectures, contact farmers and other media. The second is to function in an interactive fashion with the suppliers of new technology, by providing demand feedback to technology suppliers and technical information to farmers to enable them to better evaluate potentially useful new technology and ultimately to adopt (and adapt) new technology in their production systems [1]. Agricultural research institutes and State Agricultural Universities in India organize *melas* (Field days) and *kisan goshtis* (Farmer-expert interactions) as means of extension programmes to spread awareness about the technology generated at institute among their clients and to address their problems.

The ICAR-Directorate of Mushroom Research, Solan (HP) organizes a National Mushroom Mela during September every year at its campus in Solan. This mela aims mainly to showcase the improved technologies in the production, protection and post harvest processing of different cultivated mushrooms. A *kisan goshti* is organized during the mela with an objective to provide opportunity for all the stakeholders to interact with the scientists and experts of the Directorate and other organizations. The annual mushroom mela is attended by large number of mushroom growers, entrepreneurs, spawn and compost suppliers, mushroom businessmen and scientists. An impact assessment of this *mela* for more than ten years revealed that, the mushroom growers and entrepreneurs felt the need of organising such *melas*, *kisan goshtis* and promoting mushroom consumption at regional level especially among the cluster of mushroom growers [2].

Sensing this felt need of the stake holders, the Directorate of Mushroom Research, initiated the concept of regional mushroom *mela* and *kisan goshtis* during 2010. Unlike the national mushroom mela, the regional mushroom melas were organised among the cluster of mushroom growers in Haryana, Punjab and Jammu & Kashmir with key objectives of spreading the advanced technology among the rural farmers, addressing the problems encountered by mushroom growers in cultivation by expert advises and promoting mushroom consumption among masses. The present paper aims to evaluate

five such regional mushroom melas organised during 2010-11.

METHODOLOGY

The regional mushroom *mela/kisan goshti*/ mushroom consumption fair were organised at a central place accessible to large number of mushroom growers in the region. The preparations for organising the mela were done with the support of progressive mushroom grower as the host of the event, officials of department of horticulture/ agriculture, financial institutes, development agencies, etc. Wide publicity was given in the region to make the growers aware about the mela being organised. The latest technologies developed in the mushroom cultivation were presented in the form of demonstrations, displaying of posters, distribution of samples, etc. In order to bring awareness about the mushrooms among common people, several posters were displayed to show the health benefits of mushroom, variety of value added products from different types of mushrooms, cultivation technologies of different mushrooms, spawn production technology, etc. A registration kit containing all the complementary literature of ICAR-DMR, Solan, a writing pad and a pen was given to all the people attending the mela. All the publications of ICAR-DMR including the mushroom recipes were kept for sale in the stall. Mushroom fortified biscuits, mushroom pickle and other protein enriched processed products of mushrooms were kept for sale for the visitors. Mushroom recipe was served in the lunch as a means to show the delicacy of the vegetable. Either a State Minister, Secretary of the government department or key officials of ICAR or other University was invited to all the events as guest of honour.

In the present study, the evaluation of all the regional *melas* was carried out with respect to participation by mushroom growers/ entrepreneurs and their distribution, chief source of information about the mela, the feedback by respondents attending the *mela* about the season or timing of the event, usefulness of the event, and suggestions for future organisation of the event. Descriptive statistics is employed for analysis and to draw suitable conclusions.

RESULTS AND DISCUSSION

The results of the study are analysed and discussed under various headings as listed in the methodology. The details of the events along with the timing, host of the event, place and date are presented in Table 1.

Table 1. Details of Mushroom *mela, kisan goshti* and mushroom consumption fairs during 2010-11

Sl. No	Month and Year	Details of the event	Host of the event	Place and state
1	January, 2010	Regional mushroom <i>mela</i> and <i>kisan goshti</i>	K S Chauhan, progressive farmer, mushroom grower	Aterna village, Sonapat District, (Haryana)
2	January, 2010	Regional mushroom <i>mela</i> and <i>kisan goshti</i>	Vijender Dhankad, progressive farmer, mushroom grower	Gannaur village, Sonapat District, (Haryana)
3	February, 2011	Regional mushroom <i>mela</i> and mushroom consumption fair	Harsunjith Singh Thiara, progressive mushroom grower	Thiara mushroom farm, Khanpura village, Dt Hoshiarpur (Punjab)
4	February, 2011	Regional mushroom <i>mela</i> and mushroom consumption fair	HAIC (Cooperating centre of DMR, Solan)	Haryana Agro Industrial Corporation, Murthal (Haryana)
5	October, 2011	Regional mushroom <i>mela</i> and <i>kisan goshti</i>	Department of Agriculture, Govt. of J&K	Krishi Bhavan, Talab tillo, Jammu (Jammu & Kashmir)

Field days are usually opportunities to hold demonstrations on a slightly larger scale, and are usually run in a more informal and less highly structured manner. The purpose is often to introduce a new idea and a new crop, and to stimulate the interest of as many farmers as possible. Experimental stations or other government centres may be used for field days, but it is more usual and profitable for them to be held on the land of a local farmer. There is a greater chance of making an impact if the field day is held on a farmer's land, and if the farmer plays a part in running it and explaining the purpose [3]. Hence, the regional mushroom melas were mostly organised at progressive growers field to have good impact over others and to

demonstrate improved practices. At Murthal and Jammu, the premises of Haryana Agro Industrial Corporation (HAIC) and Department of Agriculture, Government of Jammu were made use to organise these melas as they were most accessible to large number of mushroom growers in the adjacent locality.

Participation of mushroom growers/ entrepreneurs

The participants attending the mushroom *mela* or *kisan goshti* were either mushroom growers or entrepreneurs involved in supplying inputs for mushroom cultivation like spawn, wheat straw, gypsum, inputs for construction of mushroom houses/ huts, machinery suppliers etc. The data on the distribution of participants attending the *mela* is presented in Table 2 and as average age and gender in Fig.1. The number of officials and scientists attending the events were not included in the data.

Table 2. Distribution of participants attending the mushroom *mela/ kisan goshti* based on gender and age group

Sl. No	Place and state	By gender		By age group in years			Total participant farmers
		Male	Female	15-35	36-50	51 or above	
1	Aterna village, Sonapat district, (Haryana)	224 (91.80)	20 (8.20)	118 (48.36)	83 (34.02)	43 (17.62)	244
2	Gannaur village, Sonapat district, (Haryana)	206 (92.79)	16 (7.21)	101 (45.50)	68 (30.63)	53 (23.87)	222
3	Thiara mushroom farm, Khanpura village, Dt Hoshiarpur (Punjab)	150 (82.42)	32 (17.58)	74 (40.66)	66 (36.26)	42 (23.08)	182
4	Haryana Agro Industrial Corporation, Murthal (Haryana)	325 (91.04)	35 (9.80)	171(47.90)	126 (35.29)	60 (16.81)	357
5	Krishi Bhavan, Talab tillo, Jammu (Jammu & Kashmir)	230 (91.63)	21 (8.37)	112 (44.62)	96 (38.25)	43 (17.13)	251

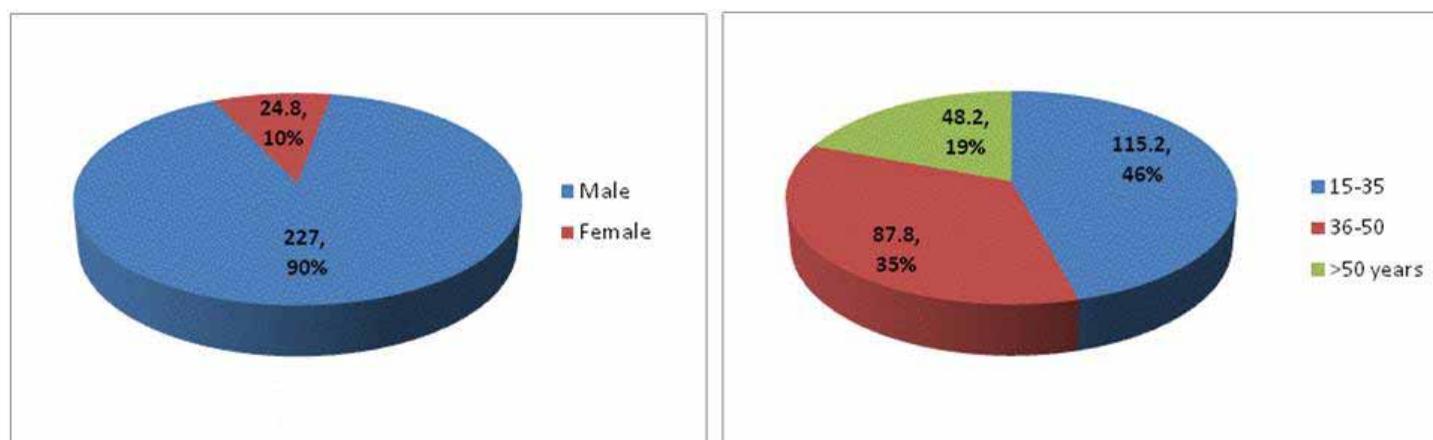


Figure 1. Distribution of participants attending mushroom *mela* (average 5 melas) according to gender and age group

From the data, it is observed that less than 10 per cent of women participated in all the *melas* except at one place (Khanpura, Punjab) where nearly 18 per cent women attended. With respect to the age group, the young people aged between 15-35 years outnumbered the other age groups in all the five melas. Participants between 36-50 years were also in considerable proportion (30-40 per cent) followed by the people above 50 years. Though, the participation of young aged people is a welcome trend, the lesser participation of women needs to be addressed as mushroom cultivation is

deemed as women friendly enterprise, offering potential employment and livelihood opportunities for women folk. The social and cultural constraints could be possible reason for lesser participation of women in such events. Similar results were observed by Khan *et al.* [4] and Koyenikan and Edioghon [5] under similar circumstances

Source of information

The organisation of the events were preceded by wide publicity through letters, e-mails, farm to farm contact, news paper advertisement, banners at various places and publicity through officials of department of agriculture/ horticulture and other institutions vested with such work. Though, the farmers were apprised about the event by multiple sources, the single chief source of information as mentioned by the respondent is mentioned in Table 3.

Table 3. Chief source of information about the *mela* for respondent farmers

Sl. No	Place and state	Chief source of information about mela					Total responding farmers
		DMR staff	Dept official	News paper	Neigh-bours	Others	
1	Aterna village, Sonapat District, (Haryana)	62	18	9	29	22	140
2	Gannaur village, Sonapat district, (Haryana)	76	12	2	12	9	111
3	Thiara mushroom farm, Khanpura village, Dt Hoshiarpur (Punjab)	80	46	2	10	14	152
4	Haryana Agro Industrial Corporation, Murthal (Haryana)	28	74	14	17	7	140
5	Krishi Bhavan, Talab tillo, Jammu (Jammu & Kashmir)	23	127	5	22	4	181
	Total (Per cent)*	269 (H ≈ 37%)	277 (H 38%)	32 (4H %)	90 (12H %)	56 (8H %)	(724)

* Per cent figure given in parenthesis is rounded off to nearest round figure.

The majority of the farmers indicated that, either DMR staff (37 per cent) or officials of state department of agriculture and horticulture (38 per cent) were the chief source of information about the mela. Sizeable proportion of people said that, they got the information from their neighbours (12 per cent) and few from the newspapers (4 per cent) and other sources (8 per cent).

Impact of regional mushroom *mela*

Besides, the number of mushroom growers participated; the impact of the regional mushroom mela and the kisan goshthi is assessed based on the timing of the event, feedback on facilities and arrangements, perceived benefits among the respondents and their willingness to suggest others to participate in such events in the future. The details of the feedback are presented in Table 4.

Season or timing of the events

The organisation of such melas and goshthis were synchronised with seasonal growing of white button mushroom (*Agaricus bisporus*) in North Indian states of Haryana, Punjab, Himachal Pradesh and adjacent areas of national capital New Delhi. Farmers in this area take up seasonal mushroom production starting from October to March extending at times up to April depending upon prevailing weather conditions. It was observed that, generally composting and shed construction begins in October and cropping starts from November. Coinciding with second month of first cropping, they prepare another lot of compost and fill it after disposing compost of first crop. However, in Himachal Pradesh peak winter month- December is

Table 4. Feedback of respondents' perception about the mela

Sl. No	Farmers' perception about the event	Locations									
		Aterna		Gannaur		Khanpura		HAIC		Jammu	
		Yes	No								
1	Appropriate nos. of timings of the event	58 (41.4)	82 (58.6)	64 (48.9)	67 (51.1)	89 (62.2)	54 (37.8)	42 (30.7)	95 (69.3)	125 (82.2)	27 (17.8)
2	Benefitted with the regional melas/goshthis	115 (82.1)	25 (17.9)	103 (78.6)	28 (21.4)	123 (92.5)	10 (7.5)	98 (71.5)	39 (28.5)	142 (93.4)	10 (6.6)
3	Willingness to participate in the next regional mela	124 (88.6)	16 (11.4)	107 (81.7)	24 (18.3)	119 (89.5)	14 (10.5)	106 (77.4)	31 (22.6)	136 (89.5)	16 (10.5)
4	The facilities and arrangements in the mela were good	131 (93.6)	9 (6.4)	91 (69.5)	40 (30.5)	120 (90.2)	13 (9.8)	119 (86.9)	18 (13.1)	131 (86.2)	21 (13.8)
5	Willing to recommend to others to participate in such events in future	130 (92.9)	10 (7.1)	107 (81.7)	24 (18.3)	122 (91.7)	11 (8.3)	105 (76.6)	32 (23.4)	135 (88.8)	17 (11.2)

(values in parenthesis are per cent values)

avoided for cropping as the temperature dips very low (<10 °C). In Jammu, single crop is taken by majority of the farmers during November–January.

The majority of the participants from three places disagreed to the statement that, the timing of the event was appropriate. The majority of the respondents at Khanpura and Jammu stated that, the timing was appropriate (Table 4). Since, the season was half way at the time of the organisation of mushroom mela in the first four events, the majority felt that, such an event at the beginning of the season will help the growers. The mela and kisan goshthi was planned ahead of the season elicited better response among the farmers with respect to the timing of the event.

Impact of the mela

The majority of the farmers agreed that they were benefitted with such *melas* and *goshthis* and would recommend to others to participate in such events in the future (Table 4). The majority of the respondents also expressed willingness to participate in the next regional mushroom *melas* and *kisan goshthis*. The respondents expressed satisfaction over the facilities and arrangements during the mela.

Suggestions for future events

In the open ended response, several suggestions were elicited from the farmers. Few of the suggestions with higher frequency and relevant to the event are discussed below. The majority of the respondents suggested to plan and organise such event either before the start of the winter season or immediately after the onset of winter season. The suggestions at the earlier events, helped to plan the event at Jammu during October month of 2011. Some suggested to give publicity through television and other news media. The live demonstrations of different varieties near the venue were requested for seeing the results for comparison. Few suggestions were received on logistics and other arrangements. It emerged during the organisation of these events that, a local growers achievements must be recognised in the form of appreciation or an award.

CONCLUSION

Such regional melas, focussing the location specific issues and problems can be highly beneficial to the farming community. Besides helping farmers to access the advances in mushroom cultivation, people get to aware about the importance of mushrooms in the diet and thus augmenting mushroom consumption in our country. The concurrent organisation of *kisan goshthi* becomes a welcome interface and facilitate direct and face to face interaction of farmers with scientific community.

Further innovations and amendments to suit to; each component of mushroom enterprises (spawn, compost, machinery, post harvest processing), stakeholders, region, constraints prevailing, etc. would bring higher impact among the mushroom farming community in the rural areas.

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