Level of Satisfaction among Farmers Towards University's *Kisan Mela*

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The importance of Kisan Mela as a tool for extension education and raising farmer awareness has long been established. It aids them in expanding their knowledge of various cultural customs, cutting-edge concepts, newly created technologies, and government policy initiatives. The objective of the present study was to determine respondents' levels of satisfaction and investigate the constraints perceived by the visitors of the *Kisan Mela* at Birsa Agricultural University, Ranchi. Information's were collected through a pre-tested, semi-structured interview schedule from 120 randomly selected respondents. The three-point continuum method was used to calculate the level of satisfaction, with the most satisfied, satisfied, and not satisfied categories, receiving scores of 3, 2, and 1, respectively. Ranking was done using the total weighted mean score (TWMS).

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Respondents were asked to share their opinions on various aspects of the constraints listed in order to analyze them. It was found that majority of respondents were most satisfied with location of venue, timing of events, orientation of different stalls and behaviour of different *Kisan Mela* organizing persons. However, overall the farmers were satisfied with *Kisan Mela*. About 54.17% *Kisan Mela* visitors, said that they were not faced any difficulty during *Kisan Mela*. The measure constraints perceived by the visitors were lack of drinking water facility (24.17%), high price of products/seeds (17.5%), non-availability of desire quality of seeds (10.0%) and routine work of agriculture is disturb (9.17%). Hence it was suggested that drinking water facility should be there in *Kisan Mela*, seeds/products should be available at low price and the presence of some food stalls in the *Kisan Mela*.

1. INTRODUCTION

Majority of Indian farmers live in villages and their main occupation is agriculture and allied activities viz., veterinary, poultry, dairy and fisheries. In our country agriculture is considered as backbone and according to Ministry of Statistics and Programme Implementation Government of India 2020-21 report, it (agriculture, forestry and fisheries) contributes about 20.19% in total GDP with gross value added (GVA) Rs. 3,616,523 Crores. While fish and fish products alone contributed 7.28% to the agriculture gross value added (GVA) and 1.24% to the national GVA at current prices of the country during 2018-19 [1].

The research organization, different institutions and government are always trying and putting their efforts to enhance the production from agriculture and also from the allied sectors, by incorporation of innovative ideas, developing the new technologies and other means, which not only boost the income of the farmers but also uplift their living standards. Agricultural information (AI) plays a vital role in the development of agricultural sector and also helps in improving the livelihoods of farmers. AI is very dynamic in nature, due to increased awareness of farmers of their needs. According to their requirement most of the farmers uses both formal and informal sources of information to gather their agricultural based information [2]. Getting a reliable, timely and relevant agricultural information can helps significantly to the farmers in several ways to reduce their risk and uncertainty, while taking a good decisions. The term "Technology" can be defined as the combination of theoretical and practical knowledge, skills, and artefacts, which can be used to develop products and services along with their production and delivery systems. Diffusion of agricultural information, ideas, improved and innovative technology by using latest communication technology can play a crucial role in agricultural development [3]. "Technology can be epitomized in people, various material, thought and physical processes, plant/firm, equipment and tools" [4].

Birsa Agricultural University (BAU), Ranchi has three main mandates these are Teaching, Research and Extension education. "*Agrotech Kisan Mela*" is one of the most important extension education activities of the university for the transfer of technology to farmers or potential users. Organizing a *Kisan Mela* or Kisan Goshthis (it is discussion type of interaction between farmer and scientist/expert group in which farmers problems are listen by scientist or expert group and possible solution suggested to the farmers) is a method of mass communication. It has been key activity of agriculture research institutes to spread awareness about the new technologies, among farmers and address their problems [5]. It also acts as a platform for the farming community for awareness creation and adoption of innovative agro-techniques. *Kisan Mela* provide an opportunity to the industrial firms dealing with agriculture and allied sectors to display their products which spread awareness among the visiting farmers about the utility of these products. It is an organized educational activity for involving and educating farmers, extension workers, input agencies, developmental departments and Non-Governmental agencies [6], also the different stakeholders. Similar statement is given by Tanusha and Chander [7], reported that this type of farmers' fair attracts a large number of farmers/potential users, experts or scientists, students, and extension personnel from the several Krishi Vigyan Kendra (KVK) and the agriculture and allied departments. Sattari et al. [8] stated that famers' fair is an important tool in transferring latest technologies to farmers is

gaining momentum over the years. Gangil et al. [9] concluded in their study "on perception of farmers regarding utility of *Kisan Mela* and stated that *Kisan Mela* is playing an effective role in information dissemination but must be updated every year to attract more attention of farmers". Considering its importance an exploratory study was carried out with the objective, to understand the level of satisfaction among farmers and to identify constraints perceived by the farmers visiting *Kisan Mela*.

2. MATERIALS AND METHODS

Birsa Agricultural University, Kanke, Ranchi organize 3 days *Kisan Mela* every year in February month. The present study was carried out in the year 2023. A simple random sampling method was used to select the respondents. The respondents were mostly farmers who visited *Kisan Mela.* The respondents were personally interviewed to know the satisfaction level of *Kisan Mela,* their response *(*visitors) about different component of the event, with the help of pre-tested, semi- structured interview schedule. A total of 120 respondents were interviewed in successive three day duration of *Kisan Mela* i.e, 40 respondents interviewed in each day. For assessing satisfaction level of farmers' data was collected in three point scale i.e., most satisfied (MS), satisfied (S) and not satisfied (NS), and the scoring system followed 3, 2, and 1 respectively. The total weighted mean score was calculated and then ranking was done on the basis of total weighted mean score. Further, total weighted mean scores were calculated for each aspect by adding up frequencies and multiplied with respective scores and divided by maximum possible score obtained by that aspect assigned by all respondents. Total weighted mean score (TWMS) was calculated with the help of following formula-

$$\text{TWMS} = \frac{\text{freq of MSx3+freq of Sx2+ freq of NSx1}}{\text{Maximum possible score given by all respondents to a particular indicator}}$$

Where,
Freq = Frequency, MS= Most satisfied, S= Satisfied, NS= Not satisfied

To analyze the constraint perceived by the farmer's they were asked to mention their perception on different aspect of the constraints indicated in the list. Then the collected data was statistically analyzed with the help of frequency and percentage.

3. RESULTS AND DISCUSSION

3.1 Profile of Respondents

It was found that majority (51.67%) of the respondents belongs to middle age group (36-50 years) followed by young (28.33%) and advanced category between 51 to 65 years (19.17%) and only 0.83% belongs to old age group (> 65 years). Ansari and Paswan (2018), also reported that majority of the respondents belongs to the middle age group and very low per cent belongs to old age group. As regards to education qualification 45.83% educated up to matriculation followed by graduation and above (25.83%), intermediate (15.83%) and primary level (12.50%). Similar findings reported by Ansari and Paswan [6] in their study on perception of farmers about usefulness of university *Kisan Mela*. None of the respondent found to be illiterate. "Education pattern of respondents showed that well educated persons were also involved in agriculture and allied sector. Education is the major tool to improve the production system and also helpful to disseminate technologies at faster rate among educated farmers" [10].

Agriculture is the main occupation for majority (65.0%) of respondents. About 10.0% respondents were engaged in agriculture as well as animal husbandry for their earning, 9.17% respondents involved in business for their livelihood. Only 2.5% respondents engaged in agriculture, animal husbandry as well as in fisheries. 7.5% respondents reported about other activities as occupation such as daily wages work. The study indicated that modern rural society persons were involved in diversified work related to agriculture and allied sectors. Similar findings reported about Pratap et al. [10]. Table 1 further showed that the majority (46.67%) of the respondents were visited *Kisan Mela* for the first time, while number of visit by the respondents varied from 1 to more than 10 times. This result is similar to the findings of Pratap et al. [10]. Only 6.67% respondents visited *Kisan Mela* more than ten times which indicates *Kisan Mela* provide useful platform to gather large number of information.

Table 1 revealed that the purpose of *Kisan Mela* visit varies from person to person. Most of the respondents visited *Kisan Mela* for seeing new technology (23.33%) followed by purchase of good quality seed (20.00%) and for the sake of entertainment (17.55%), to participate in animal's

Table 1. Profile of respondents

Level	Frequency	Percentage
Age		
Young (up to 35 years)	34	28.33
Middle (36-50 years)	62	51.67
Advanced (51-65 years)	23	19.17
Old (>65 years)	1	0.83
Education of Respondents		
Primary	15	12.50
Matriculation	55	45.83
Intermediate	19	15.83
Graduate and above	31	25.83
Occupation		
Agriculture	67	55.83
Animal Husbandry (AH)	6	5.00
Fisheries	4	3.33
Service	7	5.83
Business	11	9.17
Other	9	7.50
Agriculture & AH	13	10.83
Agriculture, AH & Fisheries	3	2.50
No of *Kisan Mela* attended		
1	56	46.67
2	14	11.67
3	21	17.50
4	3	2.50
5	8	6.67
6	2	1.67
7	2	1.67
8	1	0.83
9	1	0.83
10	4	3.33
>10	8	6.67
Purpose		
Purchase of seed	24	20.00
Purchase of animal breed	16	13.33
Purchase of machinery	10	8.33
See new technology	28	23.33
Entertainment	21	17.50
Participation in exhibition	18	15.00
Other	16	13.33
Type of information obtained		
Improved seed variety	42	35.00
Agriculture & allied technology	61	50.83
Disease control	6	5.00
Other	31	25.83
Category		
SC/ST	61	50.83
OBC	34	28.34
Gen	25	20.83
Gender		
Male	106	88.33
Female	14	11.67

exhibition (15.00%). "*Kisan Mela* is a better platform for the farmers to select different crop seeds on the basis of seed characteristics like yield, irrigation-need, fertilizer-need, crop duration and taste of produce" [11]. "It indicates although there is huge investment in terms of money, man power and time in organisation of a *Kisan Mela,* yet it is capable to fulfil number of needs of farmers involved in agriculture and allied sector" [10]. Table 1 further indicated that respondents got information in various areas such as improved agriculture and allied technology (50.83%), followed by improved seed variety and others (25.83%) on nursery plants and different categories of animal's exhibition. Very few (5.00%) reported about getting information on disease control.

The study also revealed that majority of the respondents belongs to scheduled caste or scheduled tribe (53%) and came from Ranchi district (39.17%). It was observed that male respondents were more (88.33%) as compared to female (11.67%).

It is clear from the Table 1, that majority of the visitors were between 36-50 years old, educated up to matriculation and from agricultural background. Most of the visitors were new or visited to *Kisan Mela* first time to see new technology and purchase seeds.

3.2 Level of Satisfaction

"Evaluation of farmers' satisfaction is very important for number of reasons such as the farmers is the ultimate beneficiaries of the farmers fair so they are the right persons to judge its performance, their personal experience about the *Mela* and their satisfaction level tells the future plan to continue the above type of activity" [10]. Table 2 represent the satisfaction level of farmers attending *Kisan Mela* at Birsa Agricultural University, Ranchi. It was found that majority (62.5%) of respondents were most satisfied with venue of *Kisan Mela* whereas 34.17% satisfied and 3.33% respondents shows un-satisfaction. On the basis of total weighed mean score, venue of *Kisan Mela* got 1st rank in overall satisfaction criteria. In *Kisan Mela* participants came from different places of state, so they consider various factors in regards of venue. The Table 2, revealed that 60.83% respondents were most satisfied and 3.33% not satisfied with timing of events. The programmes of *Kisan Mela* scheduled from 9:00 AM to 5:00 PM. Even afterwards there is cultural events for

entertainment of participants. It ranks 2nd on total weighed mean score. The table further revealed that 50.83% respondents were most satisfied and 1.67% not satisfied with orientation of different stall in *Kisan Mela* ground. In the *Kisan Mela* available space is utilized in best possible manner so that a greater number of stalls or maximum variety can be displayed for the farmers and ranked 3rd on total weighed mean score. Availability of products variety were displayed in different respective stalls. The 32.5% respondents were most satisfied, 63.33% were satisfied and 4.17% were dissatisfied with it. It ranks 8th in overall satisfaction level.

The results further revealed that 33.33% of the respondents were most satisfied, 63.83% satisfied and 5.83% respondents were not satisfied with availability of quality seeds in *Kisan Mela* which comes under 9th rank in overall satisfaction level. "The above satisfaction pattern might be due to diversified need of the farmers about quality and variety of seeds. The animal exhibition is an important event of *Kisan Mela* for its success" [10]. The results also showed that 20.0% of the respondents were most satisfied, 64.17% satisfied and 15.8% not satisfied with arrangement of animal's exhibition. It ranks 12th in overall satisfaction level.

About 65.0% of the respondents showed satisfaction level in the area of information regarding new strains of crops/animal and only 7.5% of the respondents were not satisfied. Similar trends were reported by Pratap et al. [10] in their study on level of satisfaction among farmers attending *Kisan Mela* organised at Sardar Vallabhbhai Patel University of Agriculture and Technology (SVPUAT), Meerut district of Uttar Pradesh. It ranks 11th in overall satisfaction level.

Most of the respondents were satisfied with arrangement of green fodder for animal. It ranks 10th in overall satisfaction level. Table 2 further revealed that 50.83% respondents showed satisfaction level regarding information provided in *Kisan Mela* at BAU followed by most satisfied (40.83%) and 8.33% were not satisfied. It ranks 7th in overall satisfaction level. Nearly 53.33% respondents were satisfied with information regarding new technology development in agriculture and allied sector. Only 41.67% respondents were most satisfied with information regarding new technology developed in agriculture and allied sector whereas 5% respondents not satisfied. Majority of the

Table 2. Level of satisfaction among visitors of *Kisan Mela*

Sl. No.	Area of Satisfaction	Most Satisfied	Satisfied	Not Satisfied	Total Score	Weighted Mean Score	Rank
1.	Location of venue	75 (62.50%)	41 (34.17%)	4 (3.33%)	311	2.59	I
2.	Timing of events	73 (60.83%)	43 (35.83%)	4 (3.33%)	309	2.58	II
3.	Orientation of different stalls	61 (50.83%)	57 (47.50%)	2 (1.67%)	299	2.49	III
4.	Availability of products variety	39 (32.50%)	76 (63.33%)	5 (4.17%)	274	2.28	VIII
5.	Availability of quality seeds	40 (33.33%)	73 (60.83%)	7 (5.83%)	273	2.28	IX
6.	Arrangement of animals for exhibition	24 (20.00%)	77 (64.17%)	19 (15.83%)	245	2.04	XII
7.	Information regarding new strains of crops/animal	33 (27.50%)	78 (65.00%)	9 (7.50%)	264	2.20	XI
8.	Arrangement of green fodder for animal	33 (27.50%)	79 (65.83%)	8 (6.67%)	265	2.21	X
9.	Information provided in Kisan Gosti	49 (40.83%)	61 (50.83%)	10 (8.33%)	279	2.33	VII
10.	Information regarding new technology development in agriculture and allied	50 (41.67%)	64 (53.33%)	6 (5.00%)	284	2.37	VI
11	Behaviour of different *Mela* organizing persons	61 (50.83%)	56 (46.67%)	3 (2.50%)	298	2.48	IV
12	Overall effect of *Kisan Mela*	56 (46.67%)	62 (51.67%)	2 (1.67%)	294	2.45	V

Table 3. Constraints perceived by *Kisan Mela* visitors

Sl. No.	Constraints	Frequency	Percentage
1.	No constraints	65	54.17
2.	Non availability of desire quality seeds	12	10.00
3.	High price of products/ seeds etc.	21	17.50
4.	Lack of drinking water facility	29	24.17
5.	Sanitation facility	2	1.67
6.	Routine work of Agriculture is disturb	11	9.17
7.	Lack of time	2	1.67
8.	Other	5	4.17

(50.83%) respondents were most satisfied with behaviour of different *Mela* organizing persons towards them, followed by satisfied (46.67%) and 2.5% respondents unsatisfied with behaviour of organizing persons. Majority of the respondents (51.67%) were satisfied with overall effect of *Kisan Mela,* whereas very few persons (1.67%) unsatisfied with overall effect of *Kisan Mela.* Evaluation of client satisfaction level can address the reliability and responsiveness of services or the willingness of providers to meet clients' needs [12]. Overall farmers were satisfied after visiting *Kisan Mela* organised by BAU, Ranchi.

"The respondents visited *Kisan Mela* with different purposes which fulfilled on the same platform. These fairs cater the needs of young, adult and old, women, men or youth. Interactive sessions among scientist and farmers helped both in understanding the conditions on the field and test the applicability of the knowledge. These fairs also help farmers in enhancing their knowledge on new schemes or programs. Such fairs often attract an umpteen number of farmers, scientists, students and extension personnel from the KVKs and the agriculture and allied departments" [7].

3.3 Constraint Perceived by *Kisan Mela* Visitors

Farmers visited *Kisan Mela* reported no constraints (54.17%). It revealed that the *Kisan Mela* is well organised and meets all visitors needs. The 10% visitors felt that the exhibition did not have desired quality of seeds. This is because of diversified agriculture pattern prevailing in the region where *Mela* organized. Farmers fare is a good platform for buying and selling variety of seeds of different crops and vegetable. The 17.5% *Kisan Mela* visitors perceived that visit to farmers fare is expensive due to high price of products/seeds. This is a typical restraint since farmers were served natural and organic products, which were more expensive than hybrid varieties. Pattnaik et al. [13] also revealed about the high travel cost as a Major constraint felt by the participants. About 24.17% visitors were complained for poor drinking water facility. Sattari et al. [8] and Bhawana [14] also reported about lack of drinking water as constraints in their study. The provision of drinking water was enough, but it could be upgraded for the upcoming Kisan Mela because it's possible that visitors won't know where the water arrangement is? Poor sanitation facility and lack of time as a constraint reported by 1.67% visitors. Setting up of portable toilets on the *Kisan Mela* ground can improve sanitation facility. Other constraints such as unavailability of waste disposal, lack of food arrangements, less stall space etc. were reported by 8.33% visitors. Similar finding were also reported by Pratap et al. [15].

The organizers put lots of effort for effectively implementation of these *Kisan Mela*. They were under pressure to ensure presence of large number of farmers. The result of the study will help them to understand farmer's perspective in regard to satisfaction level as well as constraints faced by them.

4. CONCLUSION

The study concluded that the farmers visited *Kisan Mela* organized by BAU, Ranchi were satisfied. Lack of drinking water facility, high price of products/seeds, non-availability of desire quality of seeds and disturbance in routine work of agriculture are the major constraints which can be reduced by proper arrangement of drinking water facility, inviting more number of exhibitors from different sector and organizing *Kisan Mela* during lean season. Although the events of *Kisan Mela* were organized successfully there is a need to look into the arrangements of foods for farmers, sanitation facility and drinking water facility in future. The proper arrangements of all these will help to increase satisfaction level of the farmers and thus attract large number of visitors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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