



Continuing Education Article

Organizing Milk Competition in Dairy Animals: Experience of a Milk Competition at University of Agriculture, Faisalabad, Pakistan

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INTRODUCTION

Animal shows have been extremely important segments of breed development efforts throughout history. The University of Agriculture Faisalabad, Pakistan, has been organizing farmer's shows for the last two years and intends to continue it as a regular event for augmenting the teaching and extension activities of various disciplines of agriculture. Milk competitions are very important components of such shows as these attract thousands of people and help students and teachers interact with the farmers and other stakeholders.

Milk competitions are held among dairy animals, mainly in cattle and buffaloes, throughout the country. Different organizations and farmer groups regularly organize milk competitions. Methodology of holding milk competitions is different in different locations. The purpose of these competitions is to recognize the best animals of a breed and to arouse the sense of keeping high producing animals among the masses. These competitions also provide an opportunity to appraise the maximum genetic potential of the animals in terms of their milk production. This also provides an opportunity for the livestock farmers to interact and share their experience with each other in the field of livestock production. However, guidelines for conducting such events vary under different socio-cultural conditions and are rarely described in papers. This paper describes different technical and managerial aspects of organizing buffalo milk competitions at the University of Agriculture of Faisalabad, Pakistan, from March 27-31, 2009.

ANNOUNCING THE COMPETITION DATE

The show was decided to be held in the March, 2009. The date of the milk competition was finalized just one month before the show. The farmers, who had participated in the milk competition last year (2008), were informed about the date of milk competition through phone calls and formal invitation letters from the organizers of the milk competition. The local offices of Livestock and Dairy Development Department were also involved to inform and attract the farmers in milk competition. But coincidentally, March was the month of cattle shows and

milk competitions in many cities of the Punjab province. For example, the cattle shows and milk competitions at Multan, Sahiwal and Sargodha were also scheduled to be held in the month of March. The dates of the cattle show at Multan overlapped with the show at the University of Agriculture, Faisalabad and thus participants of the milk competitions were divided among different places of the competition.

FORMULATION OF THE BY LAWS

One of the important aspects of organizing cattle shows successfully is the rules and by-laws. The rules and by-laws for the milk competition were formulated by the organizing committee of the cattle show in the light of the previous year's experience. The Organizing Committee consisted of experts from the University and representatives of Livestock and Dairy Development Department, who had a long experience of holding milk competitions at local and national level. The by-laws of the milk competition were written in Urdu language very clearly and copy was provided to every participating farmer at the time of registration of their animals for milk competitions. The minimum limit for milk production at each milking was set at 10, 11 and 12 Kg for Sahiwal cows, buffaloes and crossbred cows, respectively. The animals producing below these minimum limits were disqualified for the competition. This condition became the most controversial among the farmers and the organizers of the milk competition. The farmers at the time of registration of their animals accepted the condition of minimum milk production at each milking. Rather some of them wanted to have this limit raised. But when their animals could not qualify minimum milk production limit at the first milking (supposed to be emptying the udder before the actual start of the competition), the owners of the milch animals started to pressurize the milk competition organizing committee for relaxing this condition. Even they shouted and raised slogans against the University administration that organizing committee of the milk competition had leagued with some farmers and wanted to favor them. They even insisted to have their representation in the organizing committee and in the appeal committee.

However, the experience of giving representation to the farmers in the organizing committee in the last year's milk competition was very bitter. Every farmer wanted to have the rules framed that suited his interest better and would oppose the rules that could go against his interests. Therefore, this time the farmers were not invited in the meeting for formulation of by-laws of the milk competitions. Following by-laws were made:

By-Laws for holding milk competition during cattle show 2009 at the UAF

1. The animals participating in the milk competition should be present on 28.3.2009 at 2.00 PM in the animal arena of the breeder camp at the cattle show
2. The milking schedule will be as follows:
3. Animals participating in the milk competition should reach in the milk competition ring half an hour before the start of milking.
4. The maximum duration of milking for buffaloes is 20 minutes.
5. The milkman of the animal will remain the same throughout the milking competition and can't be changed.
6. If the animal lets down milk with the help of its calf or on concentrate, the condition will be similar throughout the milk competition and if with calf, it will be allowed to suckle the dam only once.
7. For the animals participating in milk production, the minimum milk production per milking will be 10, 11 and 12 kgs for Sahiwal cows, Nili-Ravi buffaloes and cross-bred cows, respectively.
8. In addition to milkman only one person will be allowed to enter in the milk competition ring along with one animal.
9. Injection of any kind (oxytocin) for milk let down is not allowed.
10. In case of any dispute, the decision of appeal committee will be considered final.
11. Any body not abiding by the aforementioned by-laws will not be allowed to participate in milk competition.

REGISTRATION OF THE ANIMALS

For the registration of animals, a deadline was fixed. A registration desk was opened at the Directorate of farms and a performa was designed which required information about the animal and its owner (Annex-I). The livestock farmers registered their animals at the registration desk before the start of the show. By paying a token money of Rs 500 per animal, the animals were registered for milk

competition. The information of the animal and its owner was recorded in a register with all the particulars of the animals and their owners. Each animal was allotted a unique Identification (ID) Number for the milk competition Fig.

TAGGING OF ANIMALS

Animal identification is very important in a milk competition. An ID numbers written on leather tags was put in the neck of each animal using a plastic strip and sealed with a sealing machine. The size of the tags was 3x3 (Fig. 1). The ID numbers were written with an indelible marker. The plastic strip used for sealing bales of paper or cloth for their easy transportation was purchased for this purpose. Thus, the plastic strip could be cut but was not transferable from one animal to other. This was done to avoid changing of animals across milking. The milkman and the supporting person were also given ID numbers and only the relevant and authorized persons were allowed to enter the milk competition ring. This helped in restricting the unauthorized person in the milk competition arena.

PREPARATION OF THE VENUE

Keeping in view the number of animals registered for the milk competition, the area for temporary housing of the animals and for holding milk competition was earmarked. A tent of 18 x18 ft was allotted to one milking animal. The tents were provided with electricity. The tents were fixed strong enough to withstand against wind storm and rains. The floor was kaccha that had the ability to absorb water in case of rain. Alternative arrangements were made for the animals during rain and windstorm. A place was earmarked for watering and bathing the animals near the breeder camp.

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Species	Emptying of Udder-I	Emptying of udder-II	Emptying of udder-III	1 st Milking	2 nd Milking	3 rd Milking
X-bred Cows	March 28, 11.00 PM	March 29, 7.00 AM	March 29, 3.00PM	March 29, 11.00PM	March 30, 7.00 AM	March 30, 3.00 PM
Sahiwal cows	March 29, 5.00 AM	March 29, 5.00 PM	-	March 30, 5.00 AM	March 30, 5.00 PM	-
Nili-Ravi Buffaloes	March 29, 6.00 AM	March 29, 6.00 PM	-	March 30, 6.00 AM	March 30, 6.00 PM	-

PROVISION OF VETERINARY SERVICES

Veterinary officer along with its supporting staff and emergency medicines was available in the breeder camp for at least 16 hours a day and then was available on call during the rest of the night time during 24 hours.

PROVISION OF FODDER

The University provided a field of Berseem fodder to the farmers for their animals free of cost. The farmers also had the option to purchase the fodder from the market if they wanted it so. Thus, many of the farmers opted to purchase the fodder from the market or brought from their own fields. The farmers said that berseem provided by the University was over-mature and their animals did not like it.

MILK COMPETITION RING

At the time of each milking, the animals were brought in the milking ring (Fig. 2 and 3). Two persons were allowed per milking animal. The animals were required to be in the ring at least half an hour before the start of milking. This was required to keep the farmers from indulging into malpractices to increase the milk production of their animals by using oxytocin.

The pegs, in the milk competition ring, were fixed in rows in such a way that monitoring of the animals for transparent milk competition was easy. The milking buckets and other utensils used for milk were printed with the number of the animals in a very visible way with an indelible ink or paint. Before the start of the milking, the milking buckets were inverted high in the air to ensure that there was no water in them. After the milking process was over, all the milkmen stood in a queue with their respective milk buckets near the weighing scales. All the other persons were kept away from the place of milk recording.

WEIGHING SCALES

Milk production was recorded in kilograms, Measuring the milk in liters than in kilograms makes it difficult to measure the milk precisely when it has foam over its surface Thus, digital weighing scales were used for weighing the milk. A backup scale was available all the time. Furthermore, a mechanical scale was also available for any unforeseen situation. The weighing scale was calibrated before bringing in the arena. One person was officially deputed to weigh the milk and announcement it on behalf of the committee, using a battery driven audio system. Another person was deputed for recording the milk of animals into a register/notebook.

SECURITY DURING THE MILK COMPETITION

To control the mob around the milking ring during milking time, help of the university security staff was sought. Milkmen and cattle attendant of the University Dairy Farm were also invited to facilitate the confirmation

of emptying of udder during each milking and keeping an eye on the livestock farmers so that they do not indulge in any malpractice.

RESULTS OF THE MILK COMPETITION

The buffalo securing first, second and third position in milk competition produced 30.28, 29.75 and 29.16 Kg of milk during 24 hours, respectively. The buffaloes securing first and second position belonged to Muhamad Rafique Gujjar Chak No. 208/RB. District Faisalabad and the buffalo securing third position in milk competition belonged to Riaz Hussain Kamoka Chak No. 227/RB, Faisalabad (Fig. 4).

The Sahiwal cows securing first, second and third positions produced 24.77, 24.71 and 23.08 kg of milk during 24 hours, respectively. All the three cows belonged to Aftab Ahmad Khan Wattoo of Jahangirabad Wattoo Farm, Khanewal (Fig. 5).

Only one cross-bred cow could fulfill the minimum milk production criteria to qualify for the milk competition. Thus, there was only one x-bred cow left in the milk competition. She produced 44.72 kg of milk in three milking during 24 hours. This cow belonged to Riaz Hussain Kamoka, Chak No. 227/RB, Faisalabad (Fig. 6). There was no second and third position in the milk competition of the cross-bred cows.

PRIZE MONEY, SHIELDS AND CERTIFICATES

After the milk competition, the winner animals were decorated with colorful ribbons and rosettes by the chief guest. This time the chief guest of the milk competition was Professor Dr. Iqrar Ahmad Khan, Vice Chancellor of the University of Agriculture, Faisalabad. Livestock farmers feel honored by the presentation of the Vice Chancellor. Drum beating, dancing and chanting slogans followed the event.

Shields, certificates and cash prizes were distributed among owners of the winning animals. The prize money for the first second and third position in milk competition for buffaloes was Rs. 20,000, 10,000 and 5,000, respectively. In addition, trophies were also awarded to the owners of the winning animals in the milk competition.

DISCUSSION

Coordination among organizing committee

Coordination among the organizers is necessary for smooth running of the event. There should be one team leader and the other should work under his/her supervision. Everybody should not be allowed to act as decision maker. The time to time decisions, if required, should be made by minor consultation and implemented with one voice otherwise the farmers may try finding weaknesses in the organizing committee and try to blackmail the situation according to their own wishes. There should be an official appeal committee to handle the disputes arising during the competition. The appeal perform and appeal fee should be provided in the by-laws.



Fig. 1: Cow wearing ID in her neck



Fig. 2: View of the buffaloes being milked in the milking ring



Fig. 3: View of the cows being milked in the milking ring and crowd of the fans around the ring watching the milk competition.



Fig. 4: Buffalo holding first position in the milk competition being decorated with red color ribbon (Professor Dr. Iqrar Ahmad Khan, Vice Chancellor, University of Agriculture, Faisalabad is also seen in he background).



Fig. 5: Cow securing first position in milk competition wearing red ribbon in her neck with her owner Aftab Khan Watto (third from the left in front row).



Fig. 6: Crossbred cow securing first position in milk competition wearing red ribbon in her neck with her owner Riaz Hussain Kamoka (third from the right in front row behind the cow) with his friends and relatives.

Announcements during milking process

When the milk of their animals is being weighed and recorded, the owners of the animals like to have their names announced. The announcer should clearly name the farmer with their surname and address. Farmers feel honored when their names are announced with their animals. A professional announcer should be hired to add fun in the event.

Organizing the stage

Chairs, sound system and water availability in the milk competition ring should be arranged depending upon the situation of the competition. All the arrangements should be checked by the milk competition committee before the start of the milk competition.

Animal IDs

The ID tags should be visible and non-transferable among the animals. The ID tags, after putting into the neck of the animals with a rope or metal wire that is neither a source of discomfort nor so loose around the neck of the animal, should be sealed. The purpose is to

avoid changing the animals during milk competition by the farmers. The milkman and the supporting person should have their IDs displayed so that only the relevant and authorized persons could enter the milk competition arena. This restricts the entry of unauthorized persons in the milk competition arena.

Housing in the breeder camp:

Housing requires special attention. The space requirements for the milking animals coming for milk competition are different from normal standing space requirements in a routine shed. They require more space and privacy during such shins. The owners of the animals also stay with their animals and they also need space to entertain and receive their guests at their "DERA". It was observed that a tent of 18 x18 ft was a minimum requirement for a milking animal. The tents should have a proper arrangement for electricity, lighting and spare power plugs. The tents should be fixed strong enough to withstand against wind storm and rains. The floor should preferably be kaccha but should have the ability to absorb water in case of rain. Alternative arrangements are necessary for housing of the animals during rain and windstorm. These animals are very sensitive and can get disturbed by any physical signal like rain or wind storm. There should be proper place for drinking water and bathing the animals. All the aforementioned facilities are essential in a camp where the milch animals stay during the milk competition.

Fodder Supply

Depending upon the facilities, the fodder can be supplied free of cost or on payment basis by the organizing institution. The fodder can be supplied in the arena or at a nearby convenient place. The fodder was supplied free of cost by the University. But surprisingly, the milking animals did not like this fodder because it was 'over matured' according the owners of the animals. Then, they fetched fodder of their own choice from the open market, which was troublesome for them. Keeping this experience in view, the farmers should be provided alternative source or fodder at a convenient place.

Milking Ring

The farmers using oxytocin to their animals try to bring the animals in the milking ring late by reducing the interval between the actual milking and their entry into milk competition arena. Therefore, if the animal with oxytocin injected, stay un-milked for half an hour, it will reduce its milk production instead of increasing it. The

organizers should make foolproof arrangements for discouraging the use of oxytocin in the milking animals. If the animals are brought in the milk competition ring exactly half an hour before the milk competition, the malpractice of injecting oxytocin can be minimized. The farmers use performance modifiers like slow release bST for their milking animals to increase their milk production. The animal experts have different opinion about its use. However, controlling the use of bST is difficult; therefore, it should be allowed to be used in the milking animals.

There should be enough supporting staff to look after the transparent milking process. There should be at least one person for every two milking animals in the milking ring to watch that no body is indulging in any malpractice to increase milk production of their animals by adding water or other unfair means.

Security issues

There should be foolproof arrangements for the security of the animals in the tents and the security of the organizers in the milk competition ring. The animal fans try to rush in the milk competition ring and interfere in the process of milk recording. The mob is usually uncontrollable during the competition. The farmers whose animals get disqualified in the milk competition get furious and threat the organizing committee for dire consequences. Therefore, foolproof security arrangements are necessary for avoiding any untoward incident.

Prize money:

The prize money for the first second and third position in milk competition was Rs. 20,000, 10,000 and 5,000, respectively. The prize money is too low. The prize money was squeezed keeping in view the budgetary position of the cattle show. The prize money should be raised to Rs. 100,000, 50,000 and 30,000, for first, second and third positions, respectively. This motivates the farmers to bring their animals in the competitions.

Conclusion

While arranging milk competition is fun, arrangements need serious team efforts to maintain the honour and dignity of person(s) and institution(s) involved. The milk competitions motivate the farmers to have more productive animals of the respective species and or breed. Thus, these competitions help in breed development efforts and exchange of ideas among academia, researchers, farmers and extension workers.

Registration Form, Cattle Show-2009 at the UAF

Annex-I

Name of farmer: _____
 Son/daughter of: _____
 NIC Number: _____
 Postal Address: _____
 Phone: _____
 Competing for: Class of animals: _____
 Name of competition: _____
 Number of animals: _____ Registration fee paid: _____
 Declaration: I myself and my representative(s) will abide by the rules of the competition.
 Signature of the Farmer: _____ Date: _____