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Dr. Vineet Bhasin
Principal Scientist (A&B)

8/7/2016
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To,

The Director
Central Institute for Research on Goats
Makhdoom, Farah, Mathura - 281122
FAX No. 0565-2763246

Subject: Approval of the proceedings of the Annual Review Meeting of
AICRP on Goat Improvement held on May 11-12, 2016 at
Mannuthy, Thrissur, Kerala.

Sir,

This has reference to your e-mail of dated 01.06.2016 on the subject mentioned above. In this regard, I am to convey the approval of the Council to the duly edited and corrected proceedings of the Annual Review Meeting of AICRP on Goat Improvement held on May 11-12, 2016 at KVASU, Mannuthy, Thrissur, Kerala.

This issues with the approval of the DDG (AS).

Yours faithfully,

Vineet Bhasin
(Vineet Bhasin)

ICAR (G)
Encls.: As above

AICRP on Goat Improvement
ICAR-Central Institute for Research on Goats
Makhdoom, Farah, Mathura 281122 UP, India

F. No. 10-42(PC)/2015-16

Dated: May 16, 2016

Proceedings

**The 16th Annual Review Meet (ARM) of ICAR-AICRP on Goat Improvement held at
College of Veterinary and Animal Sciences, KVASU, Mannuthy, Thrissur Kerala –
680651
on May 11-12, 2016**

The ARM was organised in the seminar hall of the College of Veterinary and Animal Sciences, KVASU, Mannuthy. Dr. Joseph Methew, Registrar, KVASU, Mannuthy was the president of the inaugural function and Dr R. S. Gandhi, ADG (AP&B), ICAR, New Delhi was the guest of honour for the inaugural function. Dr. K. Deveada, Director of Academics and Research, KVASU, Mannuthy, Kerala, welcomed all the delegates including Dr R. S. Gandhi, ADG (AP&B), Dr. M. S. Chauhan, Director, CIRG, Dr Vineet Bhasin, Principal Scientist, Dr. P. K. Rout, I/C AICRP on Goat Improvement along with unit Incharges of different AICRP units, other university officials and students. The programme was started with invocation and the lighting of lamp. Dr. R. S. Gandhi, ADG (AP&B) in his inaugural deliberation emphasised that the livestock is the major force for poverty elevation and emphasized establishment of nuclear flock, conservation of threatened breeds, value addition and capacity building of different stakeholder. The Director CIRG, Dr. M. S. Chauhan emphasized upon need for work on linkage development and create models of goat farms in each village for accelerating adoption of improved practices and organized marketing. He also emphasized for implementation of artificial insemination in genetic improvement programmes as scarcity of bucks is an emerging problem in field.

The programme was followed by release of total ten (10) publications of PC Unit and other AICRP units namely, Annual PC Report and Goat Production Management Information System (GMIS) Manual (Version 1.01). Malabari Goat Field Unit, Osmanabadi Goat Field Unit, Andaman Goat Field Unit, Black Bengal Goat Field Unit, Kolkata, Gaddi Goat Field Unit, Palampur, Marwari Goat Field Unit, Bikaner, Sangamneri Goat Field Unit, Rahuri and Surti Goat Field Unit, Navsari.

The inaugural session ended with vote of thanks by Dr. K. Anil Kumar, Associate Dean, College of Veterinary and Animal Sciences, KVASU, Mannuthy, Thrissur, Kerala.

The technical session I was chaired Dr R S Gandhi, ADG (AP&B), co-chaired by Dr M.S. Chauhan, Director, CIRG and Dr Vineet Bhasin, Principal Scientist, ICAR. The session started with the formal introduction of software "Goat Production Management Information System (GMIS)" by honourable Asstt. Director General ICAR, Dr. R S Gandhi, Dr M. S. Chauhan, Director, ICAR-CIRG and Dr Vineet Bhasin, Principal Scientist, ICAR. The project coordinator report was presented by Dr. P. K. Rout, I/c AICRP on Goat improvement with brief introduction of the programme, action taken report on 15th ARM Proceedings, RAC and QRT Recommendations, Salient achievement, Impact, Monitor & Evaluation, deliverable during 2016-17 and future action plan. The technical section II was started in which all the field unit presented their report i. e (i) Andaman Goat Field Unit, ICAR-CARI, Port Blair, (ii) Assam Hill Goat Field Unit, AAU, Khanpara, Guwahati, (iii) Black Bengal Field Unit, Kolkata, (iv) Black Bengal Field Unit, Ranchi, (v) Changthangi Goat Field Unit, SKUAST-K, Leh (J&K), (vi) Gaddi Field Unit Palampur, (vii) Ganjam Field Unit, Bhuvneshwar, (viii) Himalayan Local Goats Field Unit, IVRI, Mukteswar, (ix) Malabari Field Unit, Trichur, (x) Marwari Field Unit, Bikaner, (xi) Osmanabadi Field Unit, Phaltan, (xii) Sirohi Field Unit Vallabh Nagar, (xiii) Surti Field Unit, Navsari and (xiv) Uttarakhand Local Goats Field Unit, GBPUA&T, Pantnagar.

The technical session III was also chaired by the same delegates Dr. R S Gandhi, ADG (AP&B) in which Barbari farm Unit, ICAR-CIRG, Makhdoom, Jamunapari Farm Unit, ICAR-CIRG, Makhdoom and Sirohi Farm Unit and ICAR-CSWRI, Avikanagar presented the progress report for the year 2015-2016. In this session, details of GMIS Software and its modules were demonstrated to all the delegates. The necessary queries regarding GMIS were also clarified. The following recommendations were emerged from AICRP Meet.

A Plenary Session was also held in which Vice-chancellor Shri. S.K. Biswas closed the session and following recommendations were made.

MAJOR RECOMMENDATIONS:

1. The management intervention should be worked out to increase the weaning weight, to increase weight at mating and to control the abortion problem in the farmer's flock.
2. Goat keeper centric requirements such as LED torch, shoes, mosquito net, water bottle, shoes, umbrella and other daily required items need to be provided.

3. Efforts should be made in the direction of linking up of registered farmers with value chain.
4. There is a need to take up collaborative research work and publishing the research papers involving all the incharges of AICRP.
5. All the units should follow the new health management proforma and reporting will be done as per the format.
6. Tagging of all the animals should be a regular activity and tagging with year of birth, month of birth will provide an edge for the data recording under field conditions.
7. During the kidding season, the field staff should be in regular contact / visit the flocks daily for close monitoring and providing assistance / recording of data
8. Buck distribution / exchange among field flocks of different clusters should be done regularly on yearly basis and preferably a buck should not be used in one flock for more than two major breeding seasons.
9. Conduct training / awareness programmes for goat keepers. PI should organize one awareness camp in each cluster every month.
10. Preventive health care such as vaccination and deworming should be carried out regularly and maintain records of all the activities undertaken in each farmer's flock.
11. Baseline data on available resources, practices and production systems to be collected for different clusters in the next 3 months and the report should be submitted to the coordinating unit.
12. The centre should initiate identification and rearing of young males in farmer's flock and provide necessary inputs to farmers who have shown keen interest in this practice.
13. Milk recording should be initiated immediately in all the field flocks.
14. Strategic supplementation like mineral blocks, rock salt licks, etc. should be provided to each flock.
15. A Co-PI from health, nutrition, LPM stream may be included in the project for imparting training in areas of production system characterization, health care and organizing awareness programmes.
16. The PI of the project should make efforts to form a registered cooperative of the registered goat keepers under the project.
17. The field staff may be provided digital weighing balances of maximum 50 kg capacity for proper weighing of animals and also provide plastic milk feeding bottles for kid feeding. The balance needs to be calibrated every year.
18. Documents on Package of Practices for the breed/agro-climatic zones should be developed for backyard goat rearing, semi-intensive goat rearing and intensive goat rearing.
19. Targeted deworming approach should be adopted by each unit, therefore all the PIs should standardize FAMACHA test for each agro-climatic zone.

20. Data pertaining to production and reproduction since inception of the project should be uploaded on GMIS software before Sept. 2016.
21. Second instalment will not be released before getting final AUC from the units.
22. Highlight the other activities such as Best Practices, Success Stories, Package of Practices of each unit on ICAR, CIRG, AICRP, GMIS websites.
23. There should be linkage between Sirohi Farm Unit, Avikanagar and Sirohi Goat Field Unit, Vallabhnagar to exchange bucks for free of cost.
24. Manpower pattern should be uniform in all the units and should be appointed at least one data enumerator for one village on contractual basis. The remuneration for enumerator will be Rs. 8000/-per month or as per minimum rate fixed by state government /university.
25. All units have to take up new selection objectives and have to carry out the programme in modified manner.
26. A feasibility study on goat skin quality will be carried out by CIRG scientists within 3 months and should apprise to Council.
27. As the project will be completing by March, 2017, therefore a mid-term review will be held at CIRG during September, 2016.
 - All the units will present the details of their work done during last 10 years (as applicable).
 - Analyse the achievement, impact evaluation and lesson learnt during the period.
 - Formulating the action for the next phase.
28. Registered farmer's name along with mob. No. and Adhar no. should be immediately uploaded on GMIS Software.

UNIT-WISE RECOMMENDATIONS:

1. Andaman Goat Field Unit, ICAR- CIARI, Port Blair, Andaman & Nicobar Island

The report was presented by Dr. Jai Sunder, PI of Andaman Goat Field Unit. Following recommendations have been made:

- i. Body weight of does needs to be improved or mating of does should be delayed.
- ii. Intervention during last stages of pregnancy by providing flushing and mineral mixture in order to reduce kid mortality below 10%.
- iii. Include one more cluster.
- iv. The effort should be made to develop specific management strategy for goats during rainy season.
- v. Milk yield recording should be carried out.
- vi. Check the data reporting in different tables for necessary modification.
- vii. Technology adoption rate should be accessed.
- viii. Baseline data & production system characterization should be carried out.
- ix. The performance of the unit was satisfactory.

2. Assam Hill Goat Field Unit AAU, Khanpara, Guwahati, Assam

The report was presented by Dr. N. Nahardeka, PI of Assam Hill Goat Field Unit, AAU, Khanpara Guwahati, Assam. Following recommendations have been made:

- i. Selection criteria for goat colour should be as per breed characteristics / market demand.
- ii. Check the data on total birth during the year and birth weight recording during the year.
- iii. Management of inbreeding in flock should be carried out effectively.
- iv. The appropriate technologies should be demonstrated in the farmer's flock during different season.
- v. Milk yield recording should be carried out.
- vi. Maintain the details of exchange of bucks between clusters.
- vii. Check the data reporting in different tables for necessary modification.
- viii. Technology adoption rate should be accessed.
- ix. Baseline data & production system characterization should be carried out.
- x. The performance of the unit was satisfactory.

3. Black Bengal Goat Field Unit, WBUV and FS, Kolkata, West Bengal, Kolkata

The report was presented by Dr. P. K. Senapati, PI of Black Bengal Goat Field Unit, WBUAFS, Kolkata. Following recommendations have been made:

- i. Milk yield recording should be carried out.
- ii. Per doe productivity needs to be improved.
- iii. Effective distribution of bucks should be carried out.
- iv. Strategic supplementation should be provided during pregnancy stage.
- v. Linkage with KVK and other organization needs to be strengthened.
- vi. Maintain the details of exchange of bucks between clusters.
- vii. Check the data reporting in different tables for necessary modification.
- viii. Technology adoption rate should be accessed.
- ix. Baseline data & production system characterization should be carried out.
- x. Performance was not satisfactory.

4. Black Bengal Field Unit, BAU, Kanke, Ranchi, Jharkhand

The report was presented by Dr. L. B. Singh, PI of Black Bengal Field Unit, Ranchi. Following recommendations have been made:

- i. Data needs to be re-analysed.
- ii. Data recording should be improved.
- iii. Maintain the details of exchange of bucks between clusters.
- iv. Check the data reporting in different tables for necessary modification.
- v. Technology adoption rate should be accessed.

- vi. Baseline data & production system characterization should be carried out.
- vii. Performance was poor.

5. Changthangi Goat Field Unit, SKUAST, Kashmir, Leh-Ladakh, Jammu & Kashmir

The report was presented by Dr. Feroz Seikh, PI of Changthangi Goat Field Unit. Following recommendations have been made:

- i. Mention the selection criteria by which bucks will be selected to increase the pashmina yield.
- ii. Intervention to increase the doe weight at mating is necessary.
- iii. The males from Choumor and Koyul clusters need to be procured and distributed in other clusters for improved fiber diameter.
- iv. Production performance of breeding bucks should be analysed.
- v. Weaning weight is less, hence some good practices to improve the same need to be adopted.
- vi. Develop criteria for selection of bucks based on pashmina yield and quality and implement the same.
- vii. Milk recording should be provided in at least 100 does/year.
- viii. Technology adoption rate should be accessed.
- ix. Baseline data & production system characterization should be carried out.
- x. The performance of the unit needs to be improved.

6. Gaddi Field Unit, HPKV, Palampur, Himachal Pradesh

The report was presented by Dr. P. K. Dogra, PI of Gaddi Field Unit, HPKV, Palampur, Himachal Pradesh. Following recommendations have been made:

- i. Milk yield recording should be carried out.
- ii. Maintain the details of exchange of bucks between clusters.
- iii. Genetic parameter estimation should be carried out.
- iv. Develop farmer's specific kit during migration of Gaddi goats.
- v. Technology adoption rate should be accessed.
- vi. Baseline data & production system characterization should be carried out.
- vii. The performance of the unit was satisfactory.

7. Ganjam Field Unit, OUAT, Bhubaneswar, Orissa

The report was presented by Dr. D. K. Karna, PI of Ganjam Field Unit. Following recommendations have been made:

- i. Implement all the suggestions given during field visit (April, 2016) within 3 months.
- ii. Quarterly reporting to the headquarter regarding implementation of recommendations.
- iii. Budget utilization is poor.

- iv. Milk yield recording should be carried out.
- v. Technology adoption rate should be accessed.
- vi. Baseline data & production system characterization should be carried out.
- vii. The performance of the unit is not satisfactory.

8. Himalayan Goat Field Unit, ICAR-IVRI Campus, Mukteshwar, Uttarakhand

The report was presented by Dr. A. K. Sharma, PI of Himalayan Goat Field Unit. Following recommendations have been made:

- i. Tagging, effective recording and implementation of technical programme should be carried out by July 30, 2016.
- ii. The genetic group detail description should be provided.
- iii. Buck distribution should be taken up immediately.
- iv. Target kid mortality below 5% and weaning weight not lesser than 9 kg.
- v. Lesser number of data is collected. Collect more records and compare with Pantja goat.
- vi. Proper selection criteria should be developed.
- vii. Technology adoption rate should be accessed.
- viii. Baseline data & production system characterization should be carried out.
- ix. The performance of the unit needs to improved.

9. Malabari Field Unit, KV&ASU, Mannuthy, Thrissur, Kerala

The report was presented by Dr. Thirupathy Venkatachalapathy, PI of Malabari Field Unit, Thrissur presented the report. Following recommendations were made:

- i. Identify more number of BPL farmers and register them.
- ii. Write down success stories on "Goat as a companion animal."
- iii. Importance of goat milk and urine needs to be highlighted.
- iv. Technology adoption rate should be accessed.
- v. Baseline data & production system characterization should be carried out.
- vi. Technology adoption rate should be accessed.
- vii. The performance is satisfactory.

10. Marwari Field Unit, RAJUVAS, Bikaner, Rajasthan

The report was presented by Dr. G. C. Gahlot, PI of Marwari Field Unit. Following recommendations have been made:

- i. Data need to be checked /corrected and population mean, selection differential has to be calculated again.
- ii. Tagging and identification of animals.
- iii. Total birth and birth weight should be recorded.

- iv. Recording yield data and using corrective measures to lower rate of abortions under field conditions.
- v. Data analyzed needs to be rechecked.
- vi. Technology adoption rate should be accessed.
- vii. Baseline data & production system characterization should be carried out.
- viii. The Performance of Unit was poor.

11. Osmanabadi Goat Field Unit, NARI, Phaltan, Maharashtra

The report was presented by Dr. Chanda Nimbkar, PI of the project. Following recommendations were made:

- i. Twelve months body weight recording should be carried out and adequate number of animals should be covered and must be reported during the next meeting.
- ii. Morbidity and mortality recording should be reported properly.
- iii. Exchange of technology between units.
- iv. Technology adoption rate should be accessed.
- v. Baseline data & production system characterization should be carried out.
- vi. The performance of the unit was satisfactory.

12. Sangamneri Goat Field Unit, MPKV, Rahuri, Maharashtra

The report was presented by Dr. S. Mandakmale, PI of Sangamneri Goat Field Unit. Following recommendations were made:

- i. Birth weight should be recorded.
- ii. Effective management tips in farmer's flock to manage the abortion.
- iii. Birth weight should be recorded.
- iv. Selection differential is not calculated properly.
- v. Redeploy the staff from AICRP Unit to the University.
- vi. Technology adoption rate should be accessed.
- vii. Baseline data & production system characterization should be carried out.
- viii. The performance of the unit was satisfactory.

13. Sirohi Field Unit, RAJUVAS, Vallabh Nagar, Rajasthan

The report was presented by Dr. R.K. Nagda, PI of Sirohi field unit. Following recommendations were made:

- i. The unit should produce and supply more number of elite bucks to farmers and other agencies.
- ii. This unit should actively collaborate with Sirohi Farm Unit at CSWRI, Avikanagar.
- iii. Technology adoption rate and inbreeding should be checked in field flock.

- iv. Technology adoption rate should be accessed.
- v. Baseline data & production system characterization should be carried out.
- vi. The performance was observed to be satisfactory.

14. Surti Goat Field Unit, N.A.U., Navsari, Gujarat

The report was presented by Dr. K. K. Tyagi, PI of the Surti Goat Field unit. Following recommendations were made:

- i. Address the problem of pneumonia during winter.
- ii. Define the selection criteria of Surti goats in field flock.
- iii. Technology adoption rate should be accessed.
- iv. Baseline data & production system characterization should be carried out.
- v. The performance of the unit was satisfactory.

15. Uttarakhand Goat Unit, GBPUA&T, Pantnagar, Uttarakhand

The report was presented by Dr. S. K Singh, Co-PI of the Uttarakhand Goat Unit. Following recommendations were made:

- i. Tagging of animals should be done till June.
- ii. Mortality should be reduced to lesser than 10%.
- iii. Data need to be corrected and re-analyzed.
- iv. Recording of each and every observation from the field.
- v. Technology adoption rate should be accessed.
- vi. Baseline data & production system characterization should be carried out.
- vii. Milk yield recording to be rechecked and breed potential to be evaluated.
- viii. The performance of the unit needs to be improved.

16. Barbari Farm Unit, ICAR-CIRG Makhdoom, Makhdoom, Farah, Mathura

The report was presented by Dr. M.K. Singh, PI of Barbari unit presented the report. The comparative performances over the years were presented. Following recommendations were made:

- i. Calculate genetic trend in milk yield and body weight over the years.
- ii. Strengthening of Multiplier flocks. Define the selection objectives of the project.
- iii. Estimation of variance and co-variance components.
- iv. Performance was satisfactory.

17. Jamunapari Farm Unit, ICAR-CIRG, Makhdoom, Farah, Mathura

The report was presented by Dr. M. S. Dige, Co-PI of the project. The comparative performances over the years were presented. Based on the discussions following recommendations were made:

- i. Performance recording needs to be carried out in adopted flocks by employing data enumerators.

- ii. The performance of the unit was satisfactory.

18. Sirohi Farm Unit, ICAR- CSWRI, Avikanagar, Rajasthan

The report was presented by Dr. S. S. Misra, PI of the Sirohi farm unit. The following recommendations were made:

- i. The unit needs to improve the performance of animals.
- ii. The unit needs to improve the housing and constraint of staff.
- iii. The unit should actively collaborate with Sirohi field unit at Vallabhnagar.
- iv. The unit has to immediately adopt farmers and two-three KVK's for validation of technologies and breed improvement in farmers flock.
- v. The performance of the unit was satisfactory.

16th Annual Review Meet ended with vote of thanks by I/C PC Dr. P. K. Rout. On this occasion Hon'ble ADG and Director CIRG gave their blessings to all units.

List of Participants

S. No	Name of Participant
1.	Dr. R S Gandhi, ADG (AP&B), ICAR, New Delhi
2.	Dr. M. S. Chauhan , Director , ICAR-CIRG, Makhdoom, Farah, Mathura
3.	Dr. Vineet Bhasin, Principal Scientist(AG&B) , ICAR, New Delhi
4.	Dr. P. K. Rout, I/C AICRP, CIRG, Makhdoom, Farah, Mathura
5.	Smt. Prabha Chauhan, Section Officer, ICAR, New Delhi
6.	Dr. Jay Sundar, Andaman Goat Field Unit, ICAR- CIARI, Port Blair, Andaman & Nicobar Island
7.	Dr. N. Nahardeka, Assam Hill Goat Field Unit AAU, Khanpara, Guwahati, Assam
8.	Dr. P. K. Senapati, Black Bengal Goat Field Unit, WBUV and FS, Kolkata, West Bengal, Kolkata
9.	Dr. L.B. Singh, Black Bengal Field Unit, BAU, Kanke, Ranchi, Jharkhand
10.	Dr. F. D. Sheikh, Changthangi Goat Field Unit, SKUAST, Kashmir, Leh-Ladakh, Jammu & Kashmir
11.	Dr. P. K. Dogra, Gaddi Field Unit, HPKVV, Palampur, Himachal Pradesh
12.	Dr. D. K. Karna, Ganjam Field Unit, OUAT, Bhubaneswar, Orissa
13.	Dr. A. K. Sharma, Himalayan Goat Field Unit, ICAR-IVRI Campus, Mukteshwar, Uttarakhand
14.	Dr. Thiruparthi Venkatechalapathy, Malabari Field Unit, KV&ASU, Mannuthy, Thrissur, Kerala
15.	Dr. G.C. Gahlot, Marwari Field Unit, RAJUVAS, Bikaner, Rajasthan
16.	Dr. Chanda Nimbkar, Osmanabadi Goat Field Unit, NARI, Phaltan, Maharashtra
17.	Dr. Sanjay Mandakmale, Sangamneri Goat Field Unit, MPKV, Rahuri, Maharashtra
18.	Dr. R. K. Nagda, Sirohi Field Unit, RAJUVAS, Vallabhnagar, Rajasthan
19.	Dr. Kuldeep Tyagi, Surti Goat Field Unit, N.A.U., Navsari, Gujarat
20.	Dr. S. K. Singh, Prof ,Uttarakhand Goat Unit, GBPUA&T, Pantnagar, Uttarakhand
21.	Dr. M. K. Singh, Barbari Farm Unit, ICAR-CIRG, Makhdoom, Farah, Mathura
22.	Dr. Mahesh Dige, Scientist, PC Unit, ICAR-CIRG, Makhdoom, Farah, Mathura
23.	Dr. S.S. Misra, Sirohi Farm Unit, ICAR-CSWRI, Avikanagar, Rajasthan
24.	Mr. Shantanu Kumar Singh, PC Unit, ICAR-CIRG, Makhdoom, Farah, Mathura
25.	Madhumita Singh, PC Unit, ICAR-CIRG, Makhdoom, Farah, Mathura