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

F. No. 10-42(PC)/2014-15

Dated: Oct 6, 2015

### Proceedings

# The 15<sup>th</sup>Annual Review Meet of AICRP on Goat Improvement held at ICAR-Central Institute for Research on Goats (Mathura) on Sept 7-8, 2015

At the outset, in the inaugural session Dr S. K. Agrawal, Director, CIRG, Farah, Mathura welcomed Dr KML Pathak, DDG (AS), Dr R. S. Gandhi, ADG (AP&B), Dr Arjava Sharma, Director, NBAGR, Karnal, Dr SMK Naqvi, Director, CSWRI, Avikanagar, Dr Vineet Bhasin, Principal Scientist, ICAR, all the in charges of AICRP units, I/C AICRP on Goat Improvement and scientists of the institute. The programme was started with invocation and the lighting of lamp. Dr S K Agarwal, Director CIRG presented briefly the achievements of this project and the institute. Dr R. S. Gandhi, ADG (AP&B) in his inaugural deliberation emphasised on research on goat improvement through self-help groups, formulation of multiplier flocks, conservation of threatened goat breeds, value addition of goat milk and meat, capacity building of stakeholders and development of package of management practices. Dr KML Pathak, DDG (AS) in his address congratulated the CIRG for the significant achievement of the goat improvement project contributing toward higher productivity in terms of higher body weight gain and milk yield. Dr KML Pathak in his inaugural deliberation emphasised to work towards conservation of goat breeds, better value addition and popularizing goat milk. Dr KML Pathak, DDG (AS) released PC report, CIRG at a glance along with Sirohi Bakari Palan book.

The inaugural session ended with vote of thanks by Dr S K Singh, Principal Scientist and I/C AICRP, CIRG, Farah, Mathura.

The technical session I was chaired by Dr KML Pathak, Co-chaired by Dr S.K. Agarwal, Director, CIRG and Dr R S Gandhi, ADG (AP&B). Dr. M.K. Singh and Dr. P. K. Rout was the Rapporteur for this session. The PC report was presented by Dr. S. K. Singh, I/c AICRP on Goat improvement. The research output, evaluation of performance, budget Utilization, etc. were presented and discussed in detail.

The technical session II was chaired by Dr.R S Gandhi, ADG (AP&B) co-chaired by Dr Arjava Sharma, Director, NBAGR. Dr M S Dige was the Rapporteur for this session. Assam Hill Goat Field Unit, Khanpara, Black Bengal Field Unit, Kolkata, Black Bengal Field Unit, Ranchi, Gaddi Field Unit Palampur, Ganjam Field Unit, Bhuvneshwar, Malabari Field Unit, Trichur, Marwari Field Unit Bikaner and Osmanabadi Field Unit, Phaltan,Sirohi Field Unit Vallabhnagar, Surti Field Unit,Navsari Himalayan Local Goats, IVRI, Mukteshwar, Uttarakhand Local Goats, GBPUA&T, Pantnagar, Andaman Goat Unit, CARI, Port Blair, Changthangi Goat Unit, SKUAST-K, Leh (J&K), Barbari farm Unit, CIRG, Makhdoom, Jamunapari Farm Unit, CIRG, Makhdoom and Sirohi Farm Unit and CSWRI Avikanagar presented the progress report for the year 2014-2015. Following recommendations were emerged from deliberations.

#### **MAJOR RECOMMENDATIONS:**

- PC unit should provide proforma for identification and characterisation of the breed especially for new centres. Format for identification and characterization developed by NGABR for goat will be used and will be circulated to all the PI of each unit in October,2015 for future use.(Action: I/c AICRP)
- PC unit should provide proforma for the socioeconomics survey to all the units and all units should carry the socioeconomic survey and impact assessment. The proforma for base line data collection, socio-economic analysis, and economics of goat rearing will be circulated within November, 2015. (Action: I/c AICRP)
- **3.** There should be uniform proforma for the Annual report as well as power point presentation. Format for Annual Report and power point presentation have been circulated earlier; however the same will be circulated by end of December, 2015. (Action: I/c AICRP)
- **4.** All the units will carry out proper data analysis and interpretation and genetic progress.(Action: PI of All the AICRP units)
- All the units should submit the annual report by end of April and AUC by 31 July. (Action: PI of All the AICRP units).
- **6.** All units should develop at least 3 monographs/leaflets per year in local language and distribute them to the farmers. (Action: PI of All the AICRP units).

- **7.** All units should submit the budget utilization and fund position quarterly. (Action: PI of All the AICRP units).
- **8.** Action Taken Report (ATR) should be presented in tabular format. (Action: I/c AICRP and Unit In-charges)
- **9.** The status paper on each breed **may be prepared** by each unit by 31 March, 2016. (Action: PI of All the AICRP units).
- 10. PC should ensure timely release of funds to the unit after receipt of funds from ICAR HQRs. (Action: I/c AICRP)
- Semen preservation of improved buck should be initiated by all the units and ensure required doses to NBAGR, Karnal. (Action: All units of AICRP)
- 12. PC unit should organise trainings to the project workers (RA, SRF, Technical Officers, Data enumerators, Veterinary Officer ) at CIRG on different aspects of Scientific Goat Rearing. Two trainings will be organised by the PC Unit on breed characterization, data recording and economic impact analysis. (Action: I/c AICRP)
- **13.** Information on anthelmintic resistance and physiological response needs to be collected for each region.(Action: **all units on consultation with CIRG, Makhdoom**)
- 14. The letter may be written to VC's of the respective universities regarding poor performance of Marwari Unit, Bikaner and Ganjam Unit, Bhubaneswar under intimation of ICAR HQRs.(Action: Director, CIRG)
- **15.** A 30 minute film on AICRP goat **may be shot and completed by 2016.** (Action: I/c AICRP)

#### **UNIT-WISE RECOMMENDATIONS:**

#### i. Assam Hill Goat Field Unit, Khanpara (Assam)

The report was presented by Dr. N. Nahardeka, PI, Assam Hill Goat unit. The unit has adopted Batabari (Dighirpar) of Darrang district and Khetri of Kamrup district of Assam as the four field clusters under the project covering 209 beneficiaries. The unit has shown considerable improvement in goat production. Following recommendations have been made.

- i. The per doe productivity should be estimated.
- ii. Estimation of variance/covariance components for different traits.

iii. Impacts analysis of improved breeding and socioeconomic studies should be carried out and documented.

# 2. Black Bengal Field Unit, Kolkata

The report was presented by Dr. Uttam Sarkar, Co-PI of the project, WBUAFS, Kolkata. A new village Beliapukur with 86 does of Murshidabad district was adopted in collaboration with KVK, Digha. He indicated the budget constraints in salary head. Performance of the unit was not satisfactory. Following recommendations have been made.

- i. Efforts should be made to improve the production performance of goats in adopted area.
- ii. The Audit Utilization Certificate should be submitted in **requisite** format.
- iii. The genetic parameter such as heritability should be was not properly estimated and estimation of variance/covariance components for different traits also needs to be done.
- iv. The number of CO-PI in the project should be reduced and work should be assigned to each CO-PI in the project.
- v. Work should be carried out strictly as per technical programme.
- vi. In charge AICRP may visit the farm and submit his report regarding the performance of farm to council latest by 30<sup>th</sup> November, 2015.

# 3. Black Bengal Field Unit, Ranchi

The report was presented by Dr. L. B. Singh, PI, Black Bengal Field Unit, Ranchi. There are four clusters namely in Beko (Jamshedpur), Plajori (Deoghar), Tiko (Lohardaga) and Chamguru (Ranchi). They informed that during a year 46 bucks were exchanged between centers to avoid inbreeding. Regular health care facilities, vaccination and dipping have been provided to the flocks. Performance of the unit was satisfactory. Following recommendations have been made.

- i. Estimation of variance /covariance components for different traits.
- ii. Impacts analysis of improved breeding and socioeconomic studies should be carried out and documented.
- iii. The unit should adopt farmers with bigger flocks and include areas where the animals have comparatively higher body weights.

#### 4. Gaddi Field Unit, Palampur

Dr. P. K. Dogra, Prof. (Animal Breeding) and Uncharged of the unit presented the report. Because of migratory nature of flocks it was difficult to follow up goats during migration. He informed that unit had purchased 25 male kids from the migratory farmers flock for production of breeding bucks and 16 breeding bucks were distributed to the farmers after final selection. He also presented performance of Gaddi goats in field area. The performance was satisfactory. Following recommendations have been made.

- i. Unit should **purchase and** exchange goats from different regions **for distribution** to the farmers.
- ii. Unit should devise mechanism to follow-up goats during migration for performance recording and for the provision of requisite technical inputs.
- iii. The unit should outline new plans for the farming society the regions in coming years.

#### 5. Ganjam Field Unit, Bhubaneswar

Dr. D.K. Karna, In charge of Ganjam unit presented the report. The unit has adopted three new villages Bharasa, D Guhariapat and K Guhariapat in the Khallikote cluster. The unit was able to provide adequate health control measures. Because of large flocks, and bushy landscapes, animal identification was a little problem. **Performance of the unit was not satisfactory.** Following recommendations have been made.

- i. Animal identification and performance recording should be followed as per technical programme and need to be relooked and checked at regular intervals
- ii. Authentication of the recorded data should be ensured.
- iii. Estimation of **variance**/covariance components for different traits.
- iv. Impacts analysis of improved breeding and socioeconomic studies should be carried out and documented.
- v. In charge AICRP may visit the farm and submit his report to council latest by 30<sup>th</sup> November, 2015.

#### 6. Malabari Field Unit, Thrissur

Dr. Thirupathy Venkatachalapathy, PI, Malabari Field Unit, Thrissur presented the report. The project is **being undertaken** in six field centers viz. Thalassery, Badagara, Tanur, Parambra, Thalaiparamba and Kottakkkal located in the North Kerala. During the year 16 training session were conducted **for** 395 farmers and Samagrerafoat village scheme has been launched to establish 20 elite Malabari goats breeding units. The performance is satisfactory. Following recommendations were made.

- i. Efforts should be made to adopt farmers with larger flock size and socioeconomically backward regions.
- ii. The tupping percentage is very low, unit should educate farmers regarding heat detection and encourage them to increase flock size.
- iii. Estimation of with 86 Does variance/covariance components for different traits.
- iv. The AUC need to be submitted timely.

### 7. Marwari Field Unit, Bikaner

The report was presented by Dr. G.C. Gahlot, PI of Marwari Field Unit. The discussion was on part of budget and salary head. One new centre has been established in Dalalsar village of the Churu district. The Performance of Unit was satisfactory and the following recommendations have been made.

- i. Proper animal identification, pedigree recording should be carried out on priority.
- ii. Performance recording should be done on the basis of actual age and not on dentition pattern.
- iii. Validation of milk production and growth and reproduction records should be done.
- iv. Impacts analysis of improved breeding and socioeconomic studies should be carried out and documented.

#### 8. Osmanabadi Field Unit, NARI, Phaltan

The report was presented by Dr. Chanda Nimbkar, PI of the project. She presented the body weight growth, milk and reproduction data. The unit works in four village clusters Wadgaon in Solapur district, Kamone in Solapur district and Sakat and Borls in Ahmadnagar district. Training of village level project staff and interested goat owners in goat health and providing first-aid were conducted. This unit has started using and disseminating AI technology in field. The performance of the unit was satisfactory and following recommendations were made.

i. The Unit should have at least three clusters in the home tract of the breed.

- ii. Superior animals should be purchased from the farmers and reared for buck production.
- iii. Large number of goats should be included in the project.
- iv. AI should be validated under field condition.

# 9. Sangamneri Field Unit, Rahuri

Dr. S. Mandakmale, PI of the Unit presented the report including data on body weight growth, milk and reproduction. The unit works in four clusters viz. Sangamner, Shrirampur, Rahuri and Belha located in 3 districts Ahmadnagar, Nashik and Pune. It was observed that the data needs to be properly analysed for different traits and covariance component should be estimated. The unit should distribute fresh bucks for replacing old bucks. The performance of the unit was satisfactory and following recommendations were made.

- i. Unit should produce bucks for breed improvement in **the** home tract.
- ii. Impact analysis should be carried out.
- iii. Impacts analysis of improved breeding and socioeconomic studies should be carried out and documented.
- iv. Estimation of variance/covariance components for different traits.

# 10. Sirohi Field Unit, Vallabhnagar

The report was presented by Dr. R.K. Nagda, Incharge Sirohi unit. The performance was observed to be satisfactory and the following recommendations were made.

- i. Expenditure should not exceed the budget allotted to this unit.
- ii. Animal Identification, pedigree and performance recording should be continued.
- iii. The unit should produce and supply more number of elite bucks to farmers and other agencies.
- iv. Estimation of variance/covariance components for different traits.
- v. This unit should actively collaborate with Sirohi **breed** Farm Unit at CSWRI, Avikanagar.

# 11. Surti Field Unit, Navsari

Dr. K. K. Tyagi, In charge of the Surti unit presented the report. The unit has shown significant improvement. The area covered under project has got further scope for

improvement. The lactation performances of goats were recorded. The performance of the unit was satisfactory and the following recommendations were made.

- i. The animal identification need to be implemented immediately.
- ii. Efforts should be made to strengthen goat breed society in the area.
- iii. The provision for money Rs 5000-6000 may be utilized from contingency for the formation **and registration** of cooperative societies to maximum 1 lakh per year.
- iv. Write a booklet on the scientific development of surti goat.

# 12. Barbari Farm Unit, CIRG Makhdoom

Dr. M.K. Singh, in charge Barbari unit presented the report. Performance of present generation goats was compared with **the** base population. Improvement was observed in growth and lactation traits. The pedigree analysis was done **on date** for 16 generation data and inbreeding was estimated. Performance was satisfactory and the following recommendations were made.

- i. Efforts should be made to utilize budget.
- ii. The Unit has to adopt two-three progressive farmers/NGOs for evaluating breed performance in farmers flock. Necessary funds from allocated budget may be used for this purpose.
- iii. Estimation of **variance**/covariance components for different traits.

# 13. Jamunapari Farm Unit, CIRG Makhdoom

The report was presented by Dr. P.K. Rout, PI of the project. The comparative performance over the years was presented. Improvement was observed in growth and lactation traits and **the** performance was satisfactory. Based on the discussions following recommendations were made.

- i. Efforts should be made to utilize budget provided to unit.
- ii. The Unit has to adopt two-three progressive farmers/NGOs for evaluating breed performance in farmers flock. Necessary funds from allocated budget may be used for this purpose.
- iii. Estimation of covariance components for different traits.
- iv. The performance was satisfactory.

#### 14. Sirohi Farm Unit, CSWRI, Avikanagar

The report was presented by Dr. S.S. Misra, Incharge of the unit. A comparison was made for body weight growth and milk production over the years. Performance was satisfactory. The following recommendations were made.

- i. The unit needs to improve the performance of animals.
- ii. The unit needs to improve the **animal** housing and staff constraints.
- iii. This 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.

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

The report was presented by Dr. Rajesh Singh, PI of the project presented the performance recording and baseline data collection regarding the newly registered Pantja goat. The performance was satisfactory. Based on the discussions following recommendations were made.

- i. The unit should document the economic status of the goat farmers.
- ii. The unit should start to select 30-50 superior bucks based on type of birth and weaning weight.
- iii. The unit needs to improve the housing and infrastructure in timely manner.

# 16. Changthangi Goat Unit, SKUAST-K, Leh

The report was presented by Dr. Feroz Seikh, PI of the project presented the performance recording of the Changthangi goat. The performance was satisfactory. Based on the discussions following recommendations were made.

- i. The unit should document the economic status of the goat farmers.
- ii. The unit should start to select 30-50 superior bucks based on type of birth and weaning weight.
- iii. The unit needs to improve the housing and infrastructure in timely manner.
- iv. The reasons mortality in kids should be checked/ analyzed.
- v. The selection criteria in breed should be finalized.

14<sup>th</sup> Annual Review Meet ended with vote of thanks by I/C PC Dr. S. K. Singh On this occasion Hon'ble ADG and Director CIRG gave their blessings to all units.

#### **Name of Participant** S. No Dr. K. M. L. Pathak, DDG (AS), ICAR, New Delhi 1. Dr. R S Gandhi, ADG (AP&B), ICAR, New Delhi 2. Dr. S. K. Agarwal, Director, CIRG, Makhdoom, Farah, Mathura 3. Dr. Arjava Sharma, Director, NBAGR, Karnal 4. Dr SMK Naqvi, Director, CSWRI, Avikanagar 5. Dr. Vineet Bhasin, Principal Scientist(AG&B), ICAR, New Delhi 6. Dr. S. K. Singh, I/C AICR, CIRG, Makhdoom, Farah, Mathura 7. Dr. Chanda Nimbkar, Osmanabadi Field Unit, Phaltan –(MH) 8. Dr. M. K. Singh, Pr. Scientist, CIRG 9. Dr. S. P. Dixit, Pr. Scientist, NBAGR 10. Dr. P. K. Rout, Pr. Scientist, CIRG 11. Dr. Sanjay Mandakmale, Senior Scientist, Sangamneri Field Unit, MPKV, Rahuri 12. Dr. G.C. Gahlot, Marwari Field Unit, Bikaner (Rajasthan) 13. Dr. L.B. Singh, Black Bengal Field Unit, Kanke Ranchi 14. Dr. Jay Sundar, CIARI, Port Blair 15. Dr. R.K. Nagda, Sirohi Field Unit Vallabhnagar Udaipur Raj.) 16. Dr. D.K. Karna, Ganjam Field Unit Bhuvaneshwar (Orissa) 17. Dr. Mahesh Dige, Scientist, PC Unit, CIRG 18. Dr. P. K. Dogra, Gaddi Field unit Vidyalaya Kangra Palampur (HP) 19. Dr. N. Nahardeka, Assam Hill Field unit, Burnihat, Kamrup (Assam) 20. Dr. S.S. Misra, Sirohi Unit Avikanagar–(Via-Jaipur) Tonk (Raj.) 21. Dr. D. V. Singh, Prof GBPUAT, Pantnagar 22. Dr. Thiruparthy Venkatechalapathy, Malabari Field Unit, Wayanad (Kerala) 23. Dr. Uttam Sarkar, Black Bengal Field Unit, Balgachia, Kolkata (WB) 24. Dr. Brajesh Singh, Prof., GBPUA&T, Pantnagar 25. Dr. A. K. Sharma, IVRI, Mukteshwar 26. Dr. Kuldeep Tyagi, Surti Field Unit, Navsari 27. Mr. Pravesh Sethi, PC, Unit CIRG 28. Mr. Shantanu Kumar Singh, PC Unit, CIRG 29. Madhumita Singh, PC Unit, CIRG 30. Mr. C S Sagar, PC Unit, CIRG 31.

# List of Participants