

Popular Article

Denizen Donkey: a potential genetic resource in Marathwada Region of Maharashtra

> Dr Prajakta Jadhav, Dr Archana Kadam and Dr G R Channa College of Veterinary and animal Sciences, Udgir (MS) Maharashtra Animal and Fishery Sciences University, Nagpur https://doi.org/10.5281/zenodo.11114828

Donkeys are referred to as 'beast of burden'. They are a good source of pack animals in marsh and mud occupied places. Minimum maintenance cost is required for rearing of these animals and they tend to be very faithful to their owner. They demonstrate very good draught power; they are immune to many diseases and also possess high stress bearing capabilities [Rattan *et al* 1998, Gupta *et al* 2000]. The total Donkey population of India is 1.12 lakhs of these, 18 thousand donkeys belong to state of Maharashtra and the state ranks second followed by Rajasthan with respect to number of Donkeys (20th Livestock Census). The population trend and ranking of various states of India with respect to donkey population have kept fluctuating since last few censuses and there have been a marked fall in number of Donkeys in all states in 20th Livestock census as compared to the 19th census.

In India decreased demand, indiscriminate and un-systematic breeding, poor health and management practices etc. are believed to be the reasons for this constant reduction in population [Pal *et al* 2013]. Brook India, (NGO working for betterment of Equine population in East and African countries) appended theft and illegal slaughter too as the reason for decline in population along with reduced utility and grazing land. Donkeys around the world are slaughtered for gelatin found in their skin called '**ejiao**', which is used in traditional Chinese medicine.

An estimated 100 million working equines worldwide are transporting goods to market, working in the construction, agriculture and waste management industries, and operating as taxis [Annual Report. (2019)]. In Marathwada, the donkeys are traditionally reared by washer-man community and pot makers. These animals are also used in brick kilns. The major utility of these animals is for carrying sand from the river bed and transportation of silted clay soil for preparation of 1596



bricks. They prove beneficial for transportation of goods/material through a narrow lane/road where automotives cannot reach. They also prove to be useful in swampy and water logged areas or in rainy season for transfer of goods.

Donkeys also find their place in the cultural heritage of Marathwada. In Wida village of Kaij tehsil of Beed district, on occasion of holi, the 'newest son-in-law' in the village gets a donkey ride and the tradition has been followed for over 90 years. (India times). The sale and purchase of Donkeys are done at Donkey markets and the major markets are located at Malegaon (Nanded), Jalna, Jejuri (Satara) and Madhi (Ahmednagar). The markets are held once in a year. Hot spot for trading of Donkeys in Marathwada is Malegaon.

Donkey population of Marathwada has a greater potential to be identified as a breed. They are seen in all parts of Marathwada and the population is densely distributed in Parbhani, Nanded, Latur and Jalna district as compared to Beed, Jalna, Osmanabad, Aurangabad, and Hingoli. The typical features of these donkeys include grey to brown coat colour. A dorsal line on the back starting from the head up to tail is prominent in grey or brown coloured animals. Other features include white ring around eye and muzzle. The area on the belly and between fore legs and hind legs is white in colour. Ear shows a marked dark outline. The area around the lower jaw is also white in colour. In Marathwada, the donkeys are traditionally reared by washer-man community and pot makers. These animals are also used in brick kilns. The major utility of these animals is; carrying sand from the river bed and transportation of silted clay soil for preparation of bricks. They are also used for shipping of bricks, agricultural products and by-products, including grains and straw, roughes etc. they prove beneficial for transportation of goods/material through a narrow lane/road where automotives cannot reach.

These donkeys are observed to be very docile and calm and loyal to the work. Donkeys are very sincere and obedient to follow the orders of their owner to carry out any type of draft work. The donkey owners usually rear donkey in small herd size say 4-6 but some of them who rear these donkey as their family conventional business also have a herd of 25-30 donkeys. Semi-intensive type of system is followed for rearing of these animals.

These animals are even migratory and are usually migrated to the river bed for transportation of soil that's the reason why they are sufficient in numbers in banks of Godawari *i.e.*, Paithan, Nanded. They are abundantly found in Mukhed district of Nanded on the bank of river Manjara. They can travel an average distance of 10Kms per day. An adult animal can lift upto 40-80 kgs of weight effortlessly and can work for 4-9 hours daily. The owners usually start the work early in the morning 1597



and try to finish it before noon. These donkeys are then let loose for grazing. Some families prefer to feed them with wheat bran or pulses husk which are generally considered as the agricultural byproducts.

In college of Veterinary and Animal Sciences, Udgir from the period 2020-2022, research work on Donkey population of Marathwada was carried out. The results revealed that there was considerable amount of variability in the population. Genetic diversity exhibited in the population under study is a positive sign for long-term survival of the population as this diversity serves to be the raw material for adaptation and evolution in changing environmental conditions. It was also seen that the Marathwada population of donkey has a potential to be recognized as a breed so that the conservation and welfare strategies for these genetic resources could be planned.

Due to modernization and automation of the transportation, donkeys couldn't find their dignified place in policy making which had led to the decline in the population of the species. Sever conservative measures are required to be implemented for restoring the progressive bottlenecking of these animals. There are three registered donkey breeds in India and several other lesser known populations. Indian donkeys can be broadly classified as brown type and grey type donkeys. They play a major role in Indian rural economy. After initiation of "*Mission towards Zero Non-Descript AnGR of India*", by NBAGR in Aug 2021, it is necessary to catalog these animals as breed and to study their genetic variability. There is a need for planned diversity study, classification and registration of donkey population in Maharashtra and eventually in India on top.

If the identified population of donkey is registered and welfare schemes are implemented by the government agencies, to promote the welfare of animals, the population will augment for sure. And this sincere livestock genetic resource will secure a courteous position in animal husbandry sector.



Grazing donkeys

1598





Donkeys with their owner from the Beed district of Maharashtra



Donkey with its owner

1599



Reference:

- Rattan, B., Gupta, A.K., Yadav, M.P., Uppal, P.K. and Malik, P. (1998). Lower susceptibility of donkeys to equine herpes virus and equine infectious anaemia virus in comparison to horses. *Proceedings of Third Coloquio International on Working Equines*. Mexico, p 112–16.
- Gupta, A. K., Rattan, B., Malik, P., Kaur, D., Singh, B.K. and Yadav, M.P. (2000). Experimental infection of donkeys with EHV-1 of horse origin - A study. *Journal of Equine Science*. 11 (2): 29–34.
- Pal, Y., Legha, R.A., Lal, N., Bhardwaj, A., Chauhan, M., Sanjay Kumar, Sharma, R.C. and Gupta, A.K. (2013). Management and phenotypic characterization of donkeys of Rajasthan. *Indian Journal of Animal Sciences*. 83 (8): 793–797.

Annual Report. (2019). Published by The Brook (https://www.thebrooke.org).

(https://timesofindia.indiatimes.com/city/vadodara/at-71-in-7-yrs-sharp-decline-in-donkeypopulation-in-state/articleshow/89576380.cms)

1600

