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The goat population of India is more than 135 million (19th Indian Livestock Census), which is second highest after China. Till date 28 breeds have been recognized, leaving the rest majority of goat breeds non-descript whose genetic potential is yet to be fully explored (Singh et al., 2018). These 28 goat breeds have evolved with respect to different geographical and climatic situations and have specialized adaptive features according to the topography. These characteristics allow them to give sustained production under the varying agro-climatic conditions of their habitat. Goats play a very important role in the livelihood of a large proportion of small and marginal farmers and according to the statistical data around 23% of agriculture household reported livestock as their principal source of income. Mostly the goats are reared in rural areas and less in urban areas with distribution of 66.5 and 33.5 % respectively (19th Indian Livestock Census).

The goat is called poor man’s cow and with a reason, it is very sturdy, disease resistant, prolific breeder and twinning/triplets is common. The feed conversion efficiency of the goat is excellent in all climatic conditions. Goats have high dry matter and fibre digestibility and thus can subsist on poor weedy vegetation which cuts down the cost of production. With meat as major product for which it is reared goat also supplies A2 milk of high quality and hides which are used in the leather industry and also exported to other countries thus contributing to the GDP. The dung from the animals is an excellent source of nitrogen and a very important product in the rural agriculture. At the onset of sowing season it is very common practice in rural India to keep the goat or sheep flock in the agricultural land for 3-6 days so that the land is enriched in nitrogen content and manure which boosts the growth of new crops significantly.
The goat population is steadily increasing over the years due to several reasons like ease of rearing and management, ability to thrive on wide range of roughages and fodder, efficient feed conversion into high biological value animal protein. Also, there is no religious taboo regarding goat meat consumption in India. Similarly there is potential economic growth in the goat meat and milk industry and more and more traditional and large organised farmers and multinational corporate are adopting and improving the agribusiness. The ability to easily adapt and produce with varying environmental conditions makes goat industry one of the fastest agro/livestock industries in India.

Ruminants contribute a substantial portion of the agricultural greenhouse gases like methane and carbon dioxide. The global warming potential of methane is several times more than carbon dioxide. Ruminants as a natural process during enteric fermentation produce both the gases. But as compared to dairy cattle which are reared for milk and meat the enteric methane and carbon equivalent generated by goat population is very less making the rearing more beneficial from clean agriculture perspective. With changing climate which is affecting all aspects of agriculture, livestock and production industry, reduction in carbon equivalent and methane production can be deciding factor for the development and enriching of goat industry in India and conservation strategies of native goat breeds.

Concurrently there is ever increas-
ing demand for animal products as food due to rise in the human population and economics. Harsh tropical exposure and traditional rearing practices adopted predominantly for goat rearing affect the animal health, growth and production. This is coupled with lack of proper breeding policy, inadequate number of breeding bucks, indiscriminate breeding and intermixing among breeds with local animals, etc. All these factors are potent threat for the native breeds of goats. So with all the background information and changing environmental conditions it is important to determine the status and characterize the indigenous goats genetic resource, which is essential for planning domestic animal diversity conservation plans. The conservation of genetic resources should be practised and implemented urgently at local, national and international platform. But the conservation program is aggravated due to factors like non availability of breed wise Indian Livestock Census Reports, seasonal migration of flocks, high slaughter rate, increase in ratio of non-descript to de-descript goat breeds, etc which makes the population studies very difficult and in turn implementation of adequate conservation measures for the breed/species.

Conservation of native breeds is more important as it is less likely to be chosen against commercial ones. So, while conservation of both exotic goat breeds and non-descript goat breeds is necessary, special attention needs to be given to our indigenous breeds. Conservation of animal genetic resources includes not only preservation and maintenance of existing breeds but also their proper improved management. The overall aim is sustainable utilization, restoration and enhancement of populations of indigenous animal species. Commercially exploited goat species such as Cashmere and Pashmina are more popular amongst both producers and consumers alike because of the high economic output. Over exploitation and cross-breeding have led to a decline in the numbers indigenous breeds of our country. Other factors that dictate the need for conservation, such as the ac-

Table 3. Enteric methane and carbon equivalent emitted by goat and dairy cattle in India (gigagrams)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO2 eq</th>
<th>CH4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2006</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>1998</td>
<td>0.00</td>
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</tbody>
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tual number of animals (obtained by census), rate of decline in their population, sex ratio, geographical distribution, rapid changes in environmental conditions and threat from other species. Market competition created through introduction of exotic breeds, difficulties associated with low production potential of indigenous breed, and changes in the farming systems have resulted in a steady decline in the number of purebred goats and dilution of genetic material.

With all the advantages over the exotic breeds still it is fact that, breeds that directly economically benefit the human population are more likely to survive in the longer run than those that don’t. With the modern commercial era different multinational companies and other major market share holders brainwash the farmers and smaller businessmen into believing that the breeds they breed and supply are superior for production over those that are native to the environment. While production capacity of exotic breeds surpasses that of indigenous breeds, the native ones are superior in other aspects like,

- Native breeds have evolved over centuries to be suited to particular climatic conditions, and hence better utilize their energy in processes other than maintenance and acclimatization to their surroundings.
- Due to natural selection, they have much superior disease resistance, since their immunity is innate and not induced.
- They can be easily procured and tamed, and are easier to maintain than exotic ones that need extensive care and housing.
- Production cost is reduced as vaccines are not necessarily inevitable, and feeding can be done entirely by grazing.
- Comparatively hardier than exotic breeds and able to withstand extreme climatic conditions of the geographical region.
- Thrive well under traditional and semi modernized rearing methods where housing, management and nutrition are optimum to average.
- They have higher survival rates, prolific breeders and are better at taking care of their young ones.

Increase in efforts to conserve native breeds will not only conserve biodiversity but will also help many small
farmers earn a sustainable livelihood and reduce total dependency on only agriculture. The role of veterinarian in the climate change scenario is becoming more important, that along routine health care he has to imbibe and imprint the significance of conservation of native goat breeds. This in the longer run will help change the attitude of the farmers, lead to new stringent government policies and potentiate the economic gains from livestock sector which will be beneficial to the ever increasing human population and demands.

REFERENCES