

Stray cattle management

and their economy

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Ever increasing number of cattle in general and its progeny in particular, roaming on the streets of towns and cities as stray cattle is a serious menace to the environment, transport system and general living of people. It is a country-wide problem, spreading from rural areas to metropolitan cities. Due to their low productivity and old age, owners just push them out to the streets. The problem of stray cattle is expected to be increased in near future, if they are not made economically viable.

Keywords: Behaviour, Management, Stray cattle

INDIA is a vast reservoir of cattle genetic resources with 192.49 million heads. This population includes 142.11 million indigenous (43.94 million male and 98.17 million female) and 50.42 million crossbred (3.46 million male and 46.95 million female) cattle (20th Livestock census). Due to mechanization of agricultural activities and implementation of artificial insemination approximately 30% breedable cattle, most of the male cattle, out of 47.4 million are surplus except those few thousands, which are involved in semen freezing and draft activities. Furthermore, many female cattle become surplus on account of their poor production and old age. Stray cattle menace also arises whenever the question of total ban on cow slaughter arises. In the absence of proper policies and usages, the surplus cattle have now become liability.

Stray cattle are unfit and their rearing is uneconomic, therefore,

their owner set them astray and they freely move on the roads and grazing farmer's crops causing accidents and crop losses. As per constitution's Directive Principle of State Policies, Article 48 states that, State shall endeavour to organise agriculture and animal husbandry on modern and scientific lines and shall, in particular, take steps for preserving and improving the breeds, and prohibiting the slaughter of cows and calves and other milch and draught cattle. So it is the duty of every citizen to protect these stray cattle and try to make them economically viable.

Management of stray animals

Shelter may be prepared on road side in fallow or government land in town or city area to control the menace of roaming on road and dung in shelter can be collected for better utilization and benefits.

For stray cattle or buffalo that are reported to be sick or injured, animal management team will visit and try to locate the animal. Officers on special duty will require assessing whether the animal can be treated on site or

needs to be caught and returned to an animal management centre for treatment. Occasionally, injury or sickness may be so severe or untreatable that euthanasia by a Veterinary Officer might be required on the spot in the interests of the welfare of the animal. A dedicated team effort with the aim of long-term management of cattle and buffalo is required to ensure that they co-exist with local residents in harmony. To achieve this goal, multiple approaches will be adopted and implemented in phases.

Some silent points with respect to management include

1. Use of scientific survey to know distribution and number of cattle.
2. Use of GPS collar to track movement including distance travelled, route adopted and area in habitat or area of liking.
3. Controlling population by castration of males and sterilizing female cattle by surgery and chemical sterilization as well is very essential.
4. Special person may be appointed for on road control of animal or in problem area.
5. Relocation of cattle from problem area to other allotted place.
6. Fencing or use of cattle grid nearby roads.
7. Isolation of animals and feeding



Stray cattle on the road

kitchen residue and special provision for green fodder/grazing facilities may be provided.

8. Re-domestication may be tried.
9. Animals may not be utilized for training or research for the veterinary near by area. As it may spread the infection to domestic animals. Sterilization may be practiced by veterinarians.
10. A ban should be imposed on rearing cattle, pig and horse rearing in city area.
11. License system should be established for rearing domestic animals in city area.
12. Gosadan should be full utilized and new gosadan need to be established.
13. Training regarding management of stray cattle and their control is required.
14. Rehabilitation or for adoption of cows at gosadan will need to explore.
15. Animal welfare fund need to raised and generated.
16. Sexed semen should be made available for producing predominantly female progeny which ultimately reduce number of stray cattle.
17. All cattle keepers were supposed to keep their cattle tethered especially near town and city.
18. Fine should be charged to animal owner involve in stray cattle menace
19. Adoption of stray animals should be strengthened.
20. Helpline can be started regarding dangerous stray animal in particular area.
21. Proper identification system to the cattle should be applied and tagged with name of owner in form of rumen bolus or ear chip identification device to track the owner.
22. A license system should strengthen for keeping or purchasing animals especially for welfare status and maintenance of milk quality at door.
23. Five freedoms should be maintained at farmer door step or at shelter or NGO running stray cattle farm like freedom from hunger and thirst; freedom from thermal and physical discomfort;

freedom from injury, disease and pain; freedom to express most normal patterns of behavior and freedom from fear and distress.

24. NGO should be introduced in the area for catching, controlling, feeding and treating stray animals by expert veterinary doctors.
25. Development of integrated cattle centres (Gokul Grams) for keeping at least 40% of stray cattle in total herd other animals may be productive with the purpose of conserving indigenous breeds.

Behaviour of stray animals

Behavior of stray animals are like normal animal or more refine and selective as compared to normal animals as they have choice to shift as per comfort status of environment. Stray animals by default prefer soft contented and loosen up bedding. They usually reported to prefer sand bedding which is kept for construction purpose. They generally also prefers road side *kacchha* bedding as compared to *pakka* road, however they prefer raised metal road surface during the time and after rain during rainy season.

Stray animals may sits on garbage damping ground as it provide soft ground to the animals. Cow prefers to stay closer to road side garbage fire created by local people during winter to avoid low temperature exposure. Almost all behaviors are displayed by the animals with respect nine system of behaviors like ingestive behaviour, eliminative behavior, sexual behaviour, care giving or epimiletic behaviour, care soliciting or etepimiletic behaviour, agonistic behavior, allelomimetic behaviour, shelter selecting behaviour and investigatory/ exploratory behaviour.

They also show refined behaviour like:

- Care dependency relationship: Especially with calf and young ones
- Dominance-subordinate relationship
- Sexual relationship: This relationship is common among cyclic animals
- Leader-follower relationship
- Relationship between two different

Way forward

1. Electricity generation
2. Biogas
3. Urine distillate
4. Vermicomposting
 - Rich in all essential plant nutrients
 - Excellent plant growth promoter
 - Improves quality of produce
 - Improves soil structure, texture, aeration and water holding capacity
 - Prevents soil erosion
 - Minimizes incidence of pest and diseases
 - Increases organic content of soil
5. Cowdung pot
6. Cowdung Agarbatti
7. Panchagavya

Plants

- Yield enhancement
- Extended shelf life
- Taste improvement
- Drought hardiness

Animals

- Increased milk production
- Faster weight gain
- Immune booster
- Increased conception rate

Other solutions: Difficult to resolve this problem. Hence,

- Reduce the crossbreds
- Stop procreation
- Advise blanket stoppage of crossbreeding
- Promote 'Reverse Crossbreeding'
- Care for indigenous and local cattle populations
- Characterize the undefined breeds
- Enhance utility of local populations in terms of A2 milk, dung and cow-urine, Value addition
- Fallow to Fodder

CONCLUSION

Stray should not be considered as burden to the society. It must be managed in scientific way in special shelter farm with purpose of conserving our indigenous breed as these breeds are resistant to heat stress and teak problems and protects our biodiversity which ultimately maintain ecosystem

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