



Constraints Perceived by the Kennel Owners in Rearing of Indigenous Dog Breeds (Rajapalayam, Kanni and Chippiparai Dog) in Southern Districts of Tamil Nadu

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ABSTRACT

The increased demand for indigenous native dog's breeds like Rajapalayam, Kanni and Chippiparai, leading to flourishing of more kennels in and around the breeding tract of the above breeds. The breeders without an experience in dog breeding are also involved in this dog breeding business and some of them face number of problems in running the business and meet with fiscal loss. Individuals who run the kennel with successful managerial practices and marketing tactics can only survive in this business. Considering the above problems in mind, a study was carried out to list out the major constraints perceived by the kennel owners of the indigenous dog breeds so as to sketch out a package of practices in indigenous dog breeding business. A study was carried out to identify the major constraints perceived by the dog breeders of the above indigenous dog breeds. The data were collected by pre-tested interview scheme from 39 kennel owners randomly selected from the breeding tract viz Virudhunagar, Tirunelveli and Thoothukudi districts of Tamil Nadu. Prime constraints listed in the previous study were used to get response from the kennel owners. Kennel owners with more than five year of experience and maintaining more than 25 adult breedable dogs were interviewed. The constraints perceived by the kennel owners were collected and Garrett's ranking technique was followed to rank the constraints perceived by them in their business. The study revealed that, majority of the dog breeders reported that, the unavailability of timely veterinary care (83.80%) is the major problem in dog breeding business followed by high cost involved in establishment of kennel (70.15%), difficulty in getting KCI registration for their dog (58.23%), unavailability of Vaccine (56%), frequent disease problems (50%), unethical business tactics by the competitors (48.33), inbreeding and inherited diseases (45%), pup Mortality(40%), poor breeding performance of dogs (35%), low demand and low price for the pups (28%) and unaware about scientific management (17%).

Key words: Constraints, Dog breeding, Indigenous breed.

The Rajapalayam, Kanni and Chippiparai dogs are more familiar among the pet owners and breeders as guard dogs due to their delightful appearance and hardy nature. These dog breeds are found in the southern district of Tamil Nadu (Virudhunagar, Thoothukudi and Tirunelveli district), India. History is replete with information about the origin of these dog breeds but no solid evidence exists to prove its exact origin. The increased demand for indigenous native dogs breeds like Rajapalayam, Kanni and Chippiparai, leading to flourishing of more kennels in and around the breeding tract of the above breeds. Lockdown and work from home during the COVID-19 pandemic gave more leisure time to the public and this led to more interest among the public in rearing pets including dogs and these all will result in more demand for indigenous dog breeds. The breeders without an experience in dog breeding are also involved in this dog breeding business and some of them face a number of problems in running the business and meet with fiscal loss. Individuals who run the kennel with successful managerial practices and marketing tactics can only survive in this business. Considering the above problems in mind, a study was carried out to list out the major constraints perceived by the kennel owners of the indigenous dog breeds so as to sketch out a package of practices in indigenous dog breeding business.

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The present study was carried out in 39 randomly selected kennel owners maintaining the indigenous dog breeds like Rajapalayam, Kanni and Chippiparai dog breeds in Virudhunagar, Tirunelveli and Thoothukudi districts of Tamil Nadu. The constraints perceived by the breeders were collected by direct interview and Garrett's ranking technique was followed to rank the constraints perceived by the breeders of indigenous dog breeds. The breeders were asked to rank the factors that were limiting the breeding business of the above dog breed. These orders of merit

were transformed into units of scores by using the following formula.

$$\text{Per cent position} = \frac{100 (R_{ij} - 0.50)}{N_j}$$

Where

R_{ij} = Rank given for the i^{th} factor by the j^{th} individual.

N_j = Number of factors ranked by the j^{th} individual.

The per cent position is converted into scores by referring to the table given by Garrett and Woodworth (1969). Then, for each factor, the scores of the individual respondents were added together and divided by the total number of respondents for whom scores were added. These mean scores for all the factors were arranged in descending order, ranks were given and the most influencing factors were identified.

The problems faced by the kennel owners are listed in the Table 1. Difficulty in getting KCI (Kennel club of India) registration is perceived as a problem by 58.23 per cent of the surveyed population and due to this their pups are fetching a low price. KCI (Kennel club of India) registration is essential for tracking the pedigree of a dog in India. Apart from this, KCI registration is compulsory to take part in any dog shows organized by KCI.

Unethical business tactics by the competitors is ranked in 6th position by the breeders. Many of the breeders doing this breeding business did not follow the animal welfare recommendation and scientific managerial practices and the pups purchased from these sources may develop some behavioral or health issues (Mention specific behavioral disorders and health issue with relevant references). Experiences during the socialization period (3-12 weeks of age) are known to play a vital role in shaping behavioral development (Scott and Fuller, 1965). "Dominant aggression" (aggression directed toward people, especially the dog's owner and owner's family members) was more common among dogs acquired from pet stores (11/20; 55%), compared with animal shelters (34/129; 26.4%), breeders (119/394; 30.2%), friends or relatives (21/99; 21.2%), or bred at home (10/49; 20.4%, $P = 0.02$). Pet store-acquired dogs also more often demonstrated social fears (fear of strangers, children and unfamiliar dogs) compared with dogs from other sources

The findings of McMillan (2017) revealed that the source of the puppies seems to be correlated with the prevalence of behavioral problems. According to Mc Millan et al (2013), dogs coming from unknown sources are more likely to develop behavioral disorders later in life as fear and aggression.

Urfer et al (2007) revealed that, Irish Wolf hound is increasingly susceptible to early death, low fertility and inheritable diseases that correspond to their incredibly high genetic Coefficient of inbreeding (COI). This is caused by the unique history of their creation from a small population and inbreeding to quickly gain certain characteristics. Inbreeding depression has been detected in many species in the form of reduced fertility like sperm abnormality

Table 1: Calculation of garret value and ranking of constraints faced by kennel owners maintaining Indigenous dog breeds.

Problem	Rank given by the respondent											Total	Per cent	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th			
Unavailability of timely veterinary care	581	664	249	415	249	166	83	249	279	166	166	3267	83.80	I
High cost involved	432	360	288	360	360	288		216	72	216	144	2736	70.15	II
Unethical business tactics by the competitors	520	390	260	325	130	130	65	65	0	0	0	1885	48.33	VI
Difficulty in getting KCI registration	531	413	236	265	177	177	118	118	118	59	59	2271	58.23	III
Unavailability of vaccine	392	280	224	168	168	112	168	168	168	112	224	2184	56	IV
Disease problems	600	350	250	200	100	100	100	100	50	50	50	1950	50	V
Inbreeding and inherited diseases	495	405	270	225	180	135	45	0	0	0	0	1755	45	VII
Pub Mortality	120	120	160	200	120	240	240	200	80	40	40	1560	40	VIII
Poor breeding performance of dogs	70	70	140	210	105	175	70	140	140	175	70	1365	35	IX
Low demand and low price for the pups	56	84	56	56	56	140	112	140	168	112	112	1092	28	X
Unaware about scientific management	85	102	68	102	51	68	51	34	17	34	51	663	17	XI

(Fitzpatrick and Evans 2009) and increased incidence of congenital disease (Khlal and Khoury 1991).

Ignorance about scientific management is ranked at 11th position and only 17% of the respondents considered this as a constraint. In contrast to this, the study of Sakshi et al (2017) revealed that lack of knowledge on scientific dog rearing management was the prime constraint and ranked at first place.

Unavailability of vaccine against all diseases was perceived as a problem by 56% of the respondents and this was supported by the findings of Selvakkumar (2021), in which only 60 per cent of the dog owners were vaccinated their dog against all diseases due to the unavailability of all vaccines with the nearby sources.

CONCLUSION

In conclusion, unavailability of proper veterinary care is perceived as a major problem by the breeders and this will be resolved in future due the establishment of new Veterinary colleges in Tirunelveli and Theni districts of Tamil Nadu state. Implementing an easy registration process by KCI is the timely need for the registration of indigenous Dog breeds.

Conflict of interest: None.

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