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REALIZATION, APPROACH AND EXERCISES OF SHARECROPPERS SYSTEM ABOUT THE CONTROL OF CATTLE TRYPANOSOMOSIS IN BODOR DISTRCT, FUNAKAYE L.G.A, GOMBE STATE, NORTH-EAST, NIGERIA

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ABSTRACT

This study required to appraise Tsetse and trypanosomosis and to examine the socio economic realization, approach and exercise of cattle trypanosomosis in Bodor District. In this analysis, a total of 89 sharecroppers were questioned all from Bodor village. The questionnaires were administered by the researcher and veterinary officers. Before the commencement of the interview, the objectives of the research was fully explained to each contestant and permission of the candidate was achieved. Results: 59.6% of the respondents were male, only 14.3% were female. 57.3% had adequate realization awareness about Tsetse fly bite, though, 55.10% identified tsetse fly and 50.6%, 51.7% and 53.9% list a local name of Tsetse fly, while 12.4% do not have idear. 79.8% agreed that Tsetse has an effect to the cattle. 82.0% realized the indigenous of Tsetse control in the area, however 71.9% and 75.3% mentioned three ways of controlling Tsetse using indigenous ways. 11.2%, 70.8% and 73.0% respectively accept and realized Tsetse and AAT influence technologies). Findings of this study perfectly specify that knowledge and exercise making of the sharecroppers on regulate of cattle Tsetse and trypanosomosis strategic and integrated control approach involving community should be advocated.

***Keywords**: Realization, Exercise,* Sharecroppers, *Knowledge, tsetse fly, trypanosomiasis, Bodor, Disrict, Gombe, Funakaye, Bajoga*

1.0 INTRODUCTION

Animal African Trypanosomosis (AAT) is in the mist of the humid which is found in the study of [12] this is ignored by [12], according to [17]is prevalent [3] and is economically significant in the study of [16] diseases disturbing the life of livestock in several African countries, including Nigeria, kenya and Tanzania. The contributing representative in cattle include the following;*Trypanosoma congolense, T. brucei* and *T. vivax stated by* [2,19]. Other types of trypanosomes will also be existing or present and control extra native animals such as *T. simiae* which produces nagana in pigs and some othe species [9] and another specie of trypanosome is *Trypanosoma evansi* which produces surra infection in camels, horses, cattle and buffaloes found in the study of [5]. In humans nature, *T. brucei rhodesiense (in some parts of East Africa)* and *T. brucei gambiense* (in some parts of West Africa) produce Human African Trypanosomiasis and are the etiological means for sleeping sickness, this determined in the study of [4,3]. In Nigeria, the infections decreases the social economic position of rural and agro-pastoral trivial holder farming schemes. In view of [11], For example, 4.4 million livestock has been estimated and 4 million people in Tanzania are at danger from Trypanosomosis [11]. The total estimated loss per annum in Tanzania from African Animal Trypanosomiasis owing to humanity and compact milk produce is estimated at US $ 7.98 million [11]. These shows the special effects have generated in several countries, including Nigeria and Tanzania, to progress and ratify mechanisms strategies such as vector mechanisms and treatment of revolting animals. The tsetse fly (*Glossina* spp.) is the principal vector for trypanosomes. Abundance of the tsetse vector, and the public of trypanosomes they transport and transmit is partial bioenvironmental factors and crowd existence, stated by [15], this is observed in the studied of [18], exactly as time of year [13]. By this, expectation on herders is to trade off the availability of good grass with the hazard of experience to trypanosome contagion

1.1 Trypanosome and Trypanosomosis

Trypanosomes are extracellular protozoan parasites of the species *Trypanosoma*. Attractive into attention the manner by which they are communicate to the vertebrate crowd, there is two main collections of trypanosomes that are diverse; salivaria collection transmitted by saliva and stercoraria the collection transmitted by fences of the biting flies through nursing on crowd. The two class are well recognized to source African trypanosomosis and American trypanosomosis respectively, stated by [10]. Primarily salivarian trypanosomes are communicated regularly by

tsetse classes. The African trypanosomeshint into two diverse diseases; African Animal Trypanosomosis (AAT), produced by at least lone species in all three sub species while Human African Trypanosomosis (HAT) produce by species of *Trypanozoon* sub types only. The pathogens accountable for while Human African Trypanosomosis (HAT) belong to *T. brucei* composite covered of classes which are morphologically inarticulate. Concluded the use of molecular tools two HAT method are notable by discovering the Serum Resistance Associated (SRA) gene [20]

2.0 Materials and Methods

2.1 Study Area

Bodor is a district of Funakaye, a Local Government Area in the Northern part of Gombe State, Nigeria. The Local Government is 9 kilometres (5.6mi) South of the Ashaka Cement factory, located on longitude $10^{o}51'9.59"$ N and Latitude $11^{o}25'32.99"$ E.

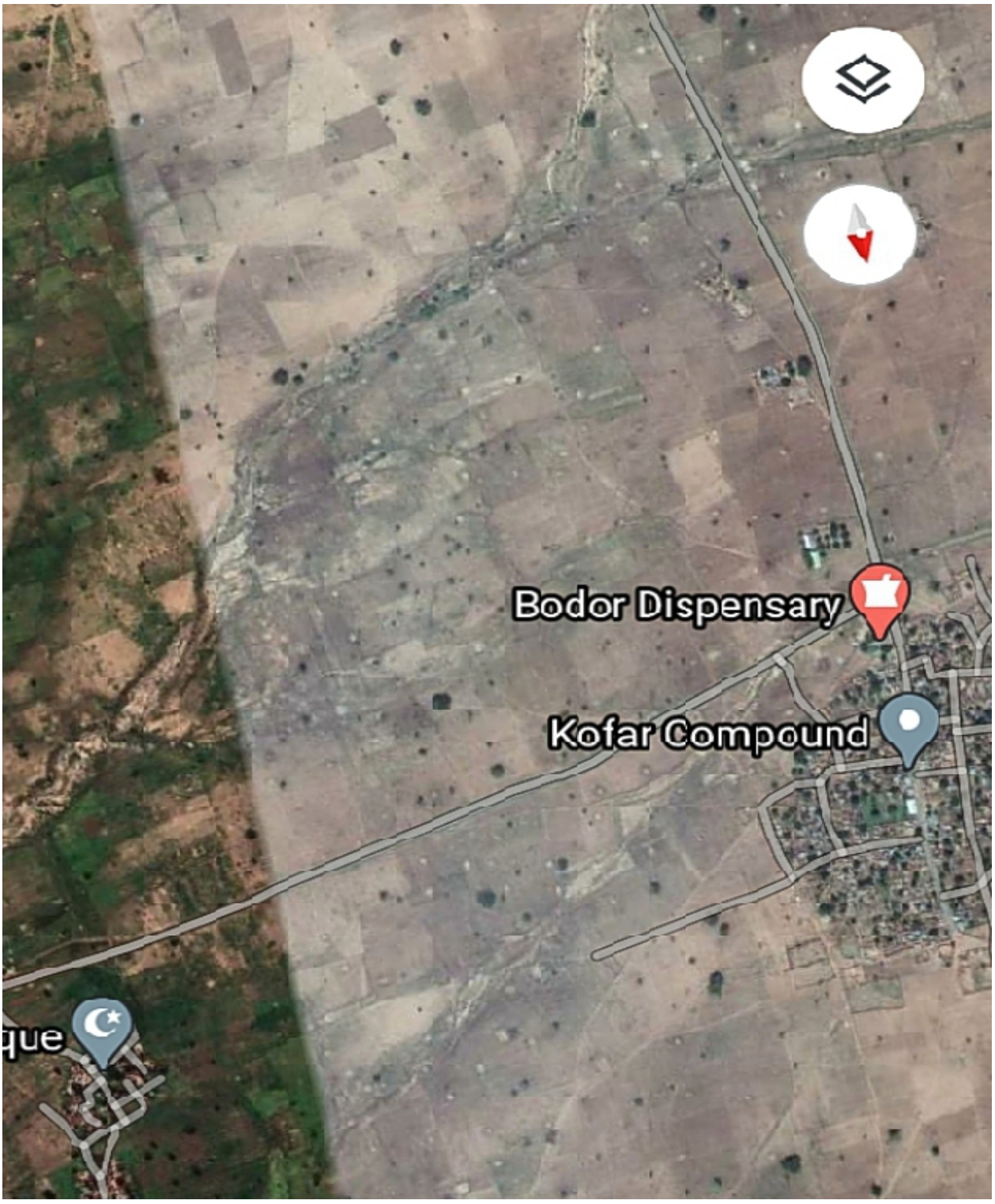

Plate 1: Map of the Sampling Area

2.2 The Design method of the study:

A structural questionnaire was administered full of 89 chance the farmers. The selected farmers which include (Male and Females in the study area), categorized based on their ages. The structural questionnaire determined primarily on sharecropper's awareness, approach and opinion on the livestock administration, existence of cattle trypanosomosis, disease transmission, periodically, control methods, sources and type of traditional technology in preventing cattle from tsetse fly attack. The questionnaires were administered by the researcher and veterinary officers. Before the commencement of the interview, the objectives of the research was fully explained to each contestant and permission of the candidate was achieved.

2.3 Policy of Sampling and Sample Scope:

A multistep random sampling technique was applied as in the study of [6] to select the districts, peasant associations and farmers. Based on the formula found in the studied by [1], for questionnaire analyzed, total of 89 farmers were randomly nominated for the successful and authenticated interviewed from the study area.

2.4 Analysis of Data

All data collected through the structural questionnaire were examined using line graphs to describe continuous data in this research (Zangiacom, 2015).

3.0 Results and discussions

3.1 Results

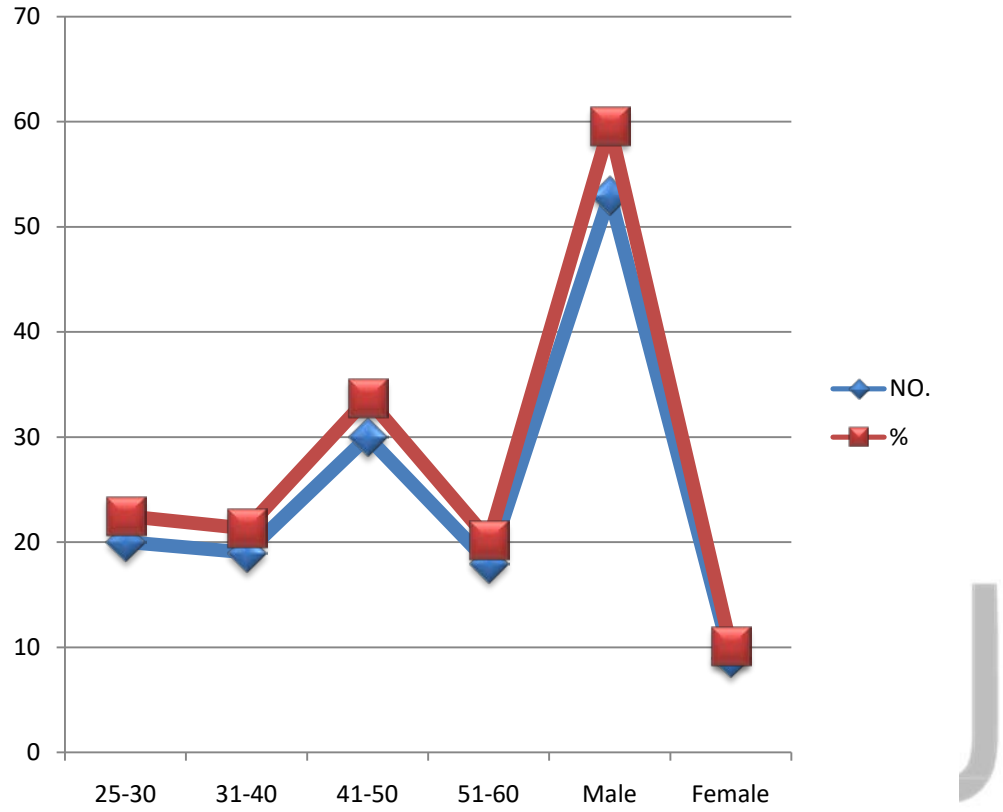

Fig. 1 Respondents Biodata

Fig. 1 shows that Male results 59.6% has the highest percentage while Female 10.1% with lowest percentage. Ages ranges from 25-30, 31-40, 41-50 and 51-60 (22.5%, 21.3%, 33.7%, 20.2 and 1.1%) respectively. The ages ranges from (25-30 to 51-60) 41-50 has highest percentage, and all are on their deserved age to control the activities cattle from contact of trypanosomosis. Only 1.1% is above 60yrs.

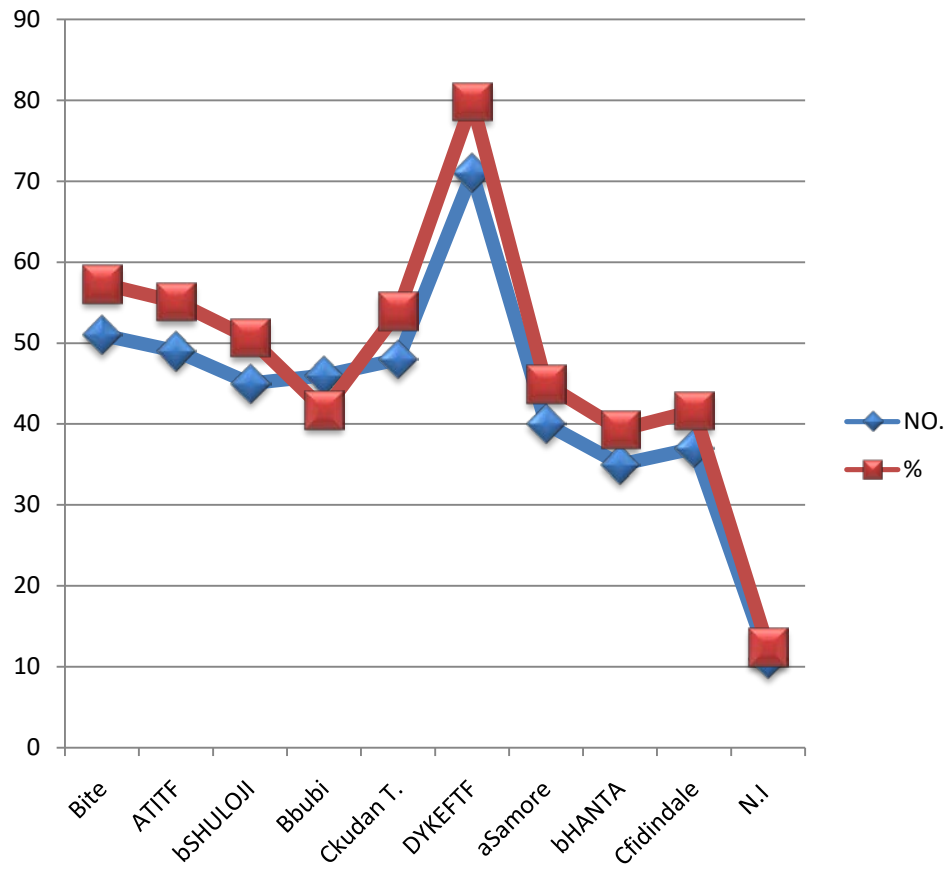

Fig. 2 Awareness of Tsetse and control method

(ATITF=Are you able to identify tsetse fly, DYKETF=Do you know effects of tsetse fly, a) Suloji, b) Shuloji c) fidindale NI=No idea)

In fig. 2, the results shows that 57.3% of the respondents have high of knowledge and realization of tsetse fly bite, 79.8% agreed that tsetse has an effect to the cattle. 55.1% identify tsetse fly and 50.6%, 51.7% and 53.9% and their indigenous or local names (Hausa and Fulfude language).

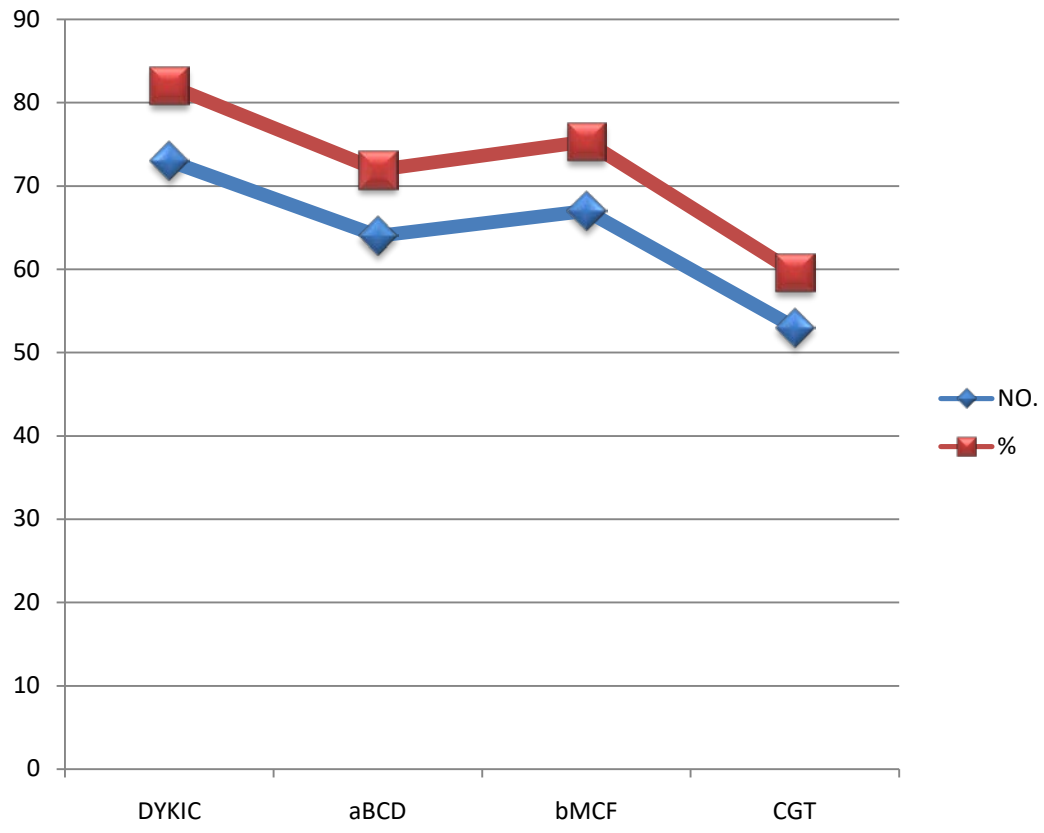

Fig.3 Use of indigenous technologies for Tsetse and Animal trypanosomiasis

(DYKIC=Do you know indigenous control, a) Burning of cow dung, b) Making of camp fire, c) Grazing time)

From Fig.3, 82.8% of the respondents knows tsetse fly in the area, and 71.9 %, 75.3% and 59.6% (Burning of cow dung, Making camp fire and Grazing time) know indigenous control and were able to exercise practical.

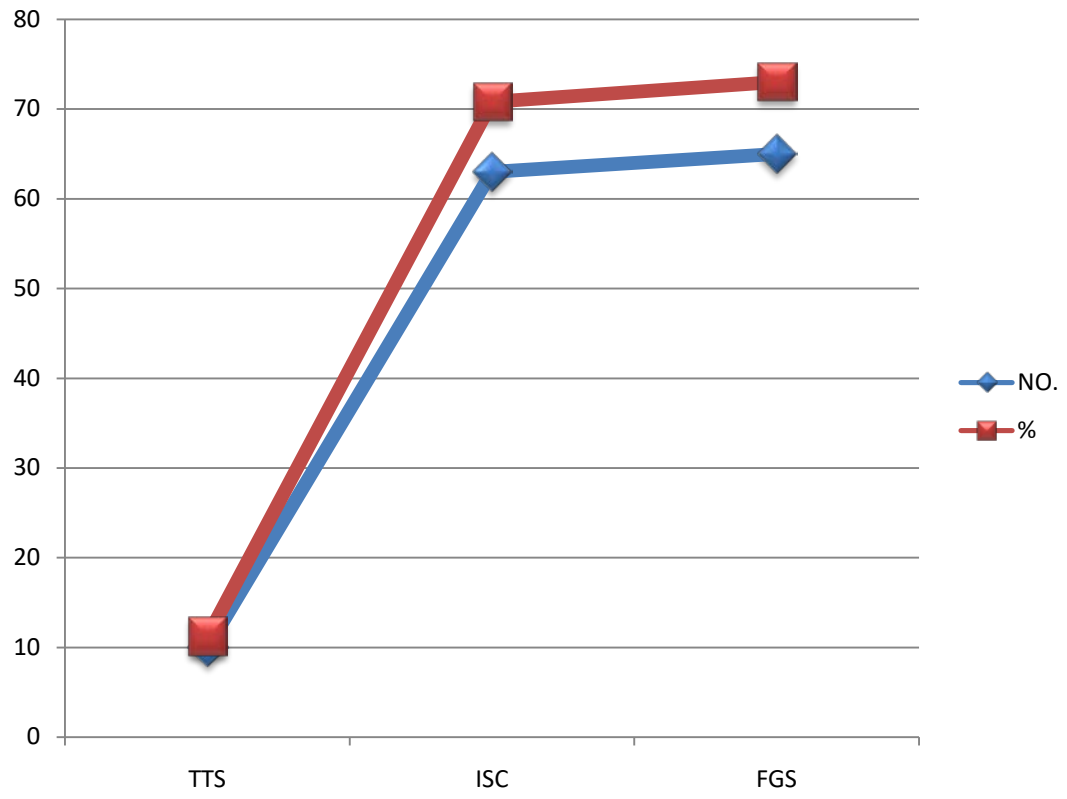

Fig.4 Accept and reality of Tsetse and AAT Influence Technologies

(TTS=Trap, target and screen, ISO=Insecticide spray in cattle, FGS=Floating and ground spraying, AAT=Animal African Trypanosomosis)

Fig.4 shows the results acceptability and realization of Tsetse and African Animal Trypanosomosis technologies by the respondents of the study area, which has 11.2%, 70.8% and 73.0% (Trap, target and screen, Insecticide spray in cattle and Floating and ground spraying) respectively, this mean the respondents were fully accept and realized the influence technology of tsetse and AAT on cattle

3.2 Discussions

The present study, from Fig. 1, the results 59.6% has the highest percentage while Female 10.1% with lowest percentage. Ages ranges from 25-30, 31-40, 41-50 and 51-60 (22.5%, 21.3%, 33.7%, 20.2 and 1.1%) respectively. The ages ranges from (25-30 to 51-60) 41-50 has highest percentage. At this point, male respondents are considered and dependable in controlling and managing the cattle in one way or the other (staying in one place or during migration). A similar observation was found determined by [8]. Respondents In fig. 2, shows that 57.3% of the

respondents have high of knowledge and realization of tsetse fly bite, 55.1% identify tsetse fly and 50.6%, 51.7% and 53.9% and their indigenous or local names (Shuloji, Bubi and Kudan tsando). In the present study, significant number of respondents knew and realization the causal link between biting flies (55.1%) and cattle trypanosomosis show the grazing area which is the dangerous to the cattle. Related study was determined by [7] in Nigeria and [6] in Ethiopia where they realized that cattle sharecroppers had a good knowledge on tsetse and cattle trypanosomosis. From this study, Fig.3, 82.8% of the respondents knows tsetse fly in the area, the respondents aware of tsetse fly and the native way of preventing the cattle from trypanosomosis attract. A similar research found in Tanzania by [16] and Nigeria [8] and 71.9 %, 75.3% and 59.6% (Burning of cow dung, Making camp fire and grazing time) know indigenous control and were able to exercise practical. Tsetse fly control is very important, in looking to the respondent, knowing the techniques of controlling cattle from trypanosomosis using the native or indigenous technologies. Related research work determined by [5]. Livestock maintenance is a basis of living in Bodor district for several of its citizens where the exercise of maintaining more than one or more native animal looks to be a technique of deviating revenue bases. While the task of cattle trypanosomosis was high, the probabilities of shrinking sleeping sickness are extreme as well owing to possession of dissimilar local species. Fig.4 shows the results acceptability and realization of tsetse and AAT technologies by the respondents of the study area, which has the results 11.2%, 70.8% and 73.0% (Trap, Trap, target and screen, Insecticide spray in cattle and Floating and ground spraying) respectively, this mean the respondents were fully accept and realized the influence technology of tsetse and Ttrypanosomosis control on cattle. The study showed that 70.8% and 73.0% of respondents from Bodor district knew control method against tsetse flies. Extremely few 11.2% specify that they used target and screen, which is new in the area of the study. A similar observation found by [7]. Human going-on, shooting, bee retaining, charcoal scorching, farming and control both tsetse-human relations, thus rising dangerous of getting Human African Trypanosomosis [14]

4.0 Conclusion

The existing study was evaluated the sharecroppers' realization, approach and exercises towards the mechanism of the cattle trypanosomosis and tsetse fly in Bodor District. The study shown that trypanosomosis is the supreme principal disease restriction of livestock, preventive the complete agricultural activity and cattle health in the study districts. Therefore, beside awareness conception of the sharecroppers on the mechanism of cattle trypanosomosis. Struggles should be

made to realize tripanosomosis mechanism approaches in Bodor and strengthen the ongoing mechanism program in the study area.

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