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The Socio-Cultural and Economic Significance of Goats Among the amaXhosa People of South Africa: A Review

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Abstract: The interplay between the traditional utility of goats and cultural beliefs influencing their economic and social significance has been largely overlooked in research, including in South Africa. Factually, studies have been inclined to ignore the intricate relationships that exist in goat keeping and the economic as well as the socio-cultural impact among households and subsistence farmers of the “amaXhosa” people. Given the regions’ exceptional political and economic past and the present search to promote food sustainability and hunger reduction, a focus on the convergence of goat as an essential livestock commodity and its socio-cultural and economic prospects is worthwhile, and most especially considering the negative impact of the post-global pandemic COVID-19 era and its effect on food availability and hunger in this part of the world. In this light, a literature review of the socio-cultural and economic importance of the goat is being expounded so as to advance germane insights into the relationships that exist between the goat and its role to boost socio-economic prospects among the amaXhosa people from the Eastern Cape province of South Africa. The study underscores the need to understand the prevailing economic and socio-cultural significance of goats among the amaXhosa people and how it influences their financial status, health benefits, and consumption pattern of the animal and its products (milk and meat) while addressing some prevalent challenges that may limit their potential and contributions to tackle malnutrition and food insecurity in the region.

Keywords: Caprine, Socio-Cultural, Economic, Rural Households, Consumption, Nourishment

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Introduction

The role of goats in the economic, health as well as social welfare of several developing countries cannot be over emphasized. According to [1], statistics showed that goat number in South Africa is estimated to be about 6.6 million with majority (64%) of them in the local communities. Consequently, the number of goats estimated to be within the Ciskei and Transkei region (the two distinct sub-regions) of the Eastern Cape province (EC) of South Africa is 3.15 million [2]. Most households raising goats (59%) in this area practice subsistence, small-scale and communal husbandry which is basically an extensive system of goat farming. Aside from goat (with a proportion of 38%), the province has the largest amount in numbers

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of sheep (29%) and cattle (24%) of the overall livestock in the whole country [3]. The reason is largely because the agricultural landscape of the region supports livestock production.

A historical reflection of the amaXhosa people showed that majority of them are dwellers originally settled in the Eastern part of South Africa (Eastern Cape). The province is geographically situated on the south eastern shoreline of South Africa. Likewise, the Eastern Cape province is known to have a landmass of approximately 169 580 km2 [4]. The province came to existence by the merging of the two former separated homelands known as the Ciskei and Transkei region. Literature indicates it that, the amaXhosa people have settled in this area as far back as 1593 and are of the Nguni descendants comprising of three (3) other ethnic groups residing at the border of the province including the Zulu, the Ndebele, as well as the Swati [5, 6]. According to the body known as Statistics South Africa, the number of amaXhosa people residing in the Eastern Cape province is about seven million [4]. Of the entire population in the EC, over 88% were Black Africans, with women constituting 52% of that group. The larger percentage of females in this province is a mirror of the migrant labour structure mostly common in this area. According to a survey finding of households measuring both the income and expenditure of dwellers in the province, the EC is ranked as the second poorest province in the entire country, and the poverty level is benched at about 58% [4]. Figure 1 give a description of the location of the Eastern Cape province in the map of South Africa.

Goat farming among the amaXhosa people (Eastern Cape province of South Africa) have been used to improve the livelihoods of households, subsistent and communal farmers [7]. This region possesses sustainable land suitable for animal production [8]. Conversely, goats are important livestock that can also be used to boost the welfare of rural dwellers and advance balance diets and food security. Among the local goat genotypes found in the EC province includes Xhosa lob ear, Boer, Nguni, and the Non- descript (crosses between several breeds) local goats. Looking at the Nguni goats for instance, it is known to possess a small body frame and is characteristically hardy in nature [9]. Apart from their body frame, the Nguni are known for their unique trait to acclimatize well in punitive weather situations [9, 10].

Conversely, Boer goats are generally known as the “meat goat” because they are mainly raised to produce meat for sale and home consumption. Some important characteristics of the Boer goats is that, they are hardy and naturally resistant to disease infections [11]. Another very much recognized local goat genotype in the EC province is the Xhosa lob ear goat. This goat genotype possess a bigger body frame and are rightly adapted to their immediate environments. Of interest is the fact that, the Xhosa lob ear goats possess attractive fur colour pattern which make them distinct from the other indigenous goat genotypes. All the local goat genotypes have over the years become well adapted to their prevailing environments which made it easy for most households, subsistent and communal farmers to raise them without investing so much on their feeding, medications and maintenance. Figure 2 show the pictures of some selected goat genotypes found in the EC province.

For a long time, goats has played a significant economic role to boost the welfare and livelihoods of most rural households and subsistent farmers. However, in the current paper, we expounded the significance of goat and its socio-cultural as well as economic role among the amaXhosa households, subsistent and communal farmers in this area. This manuscript used a narrative from the collections of information on the significance of goats to the amaXhosa people. A snow-ball method of literature sampling was adopted to gather useful data/information for the study. The collection of literatures for this review stance from publications dating back to 1976 and 2024.

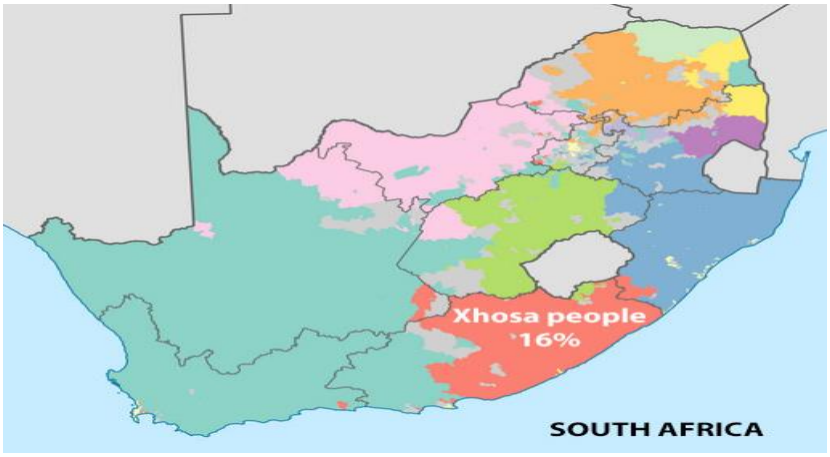

Fig.1: A map of South Africa denoting the Eastern Cape province of the amaXhosa people

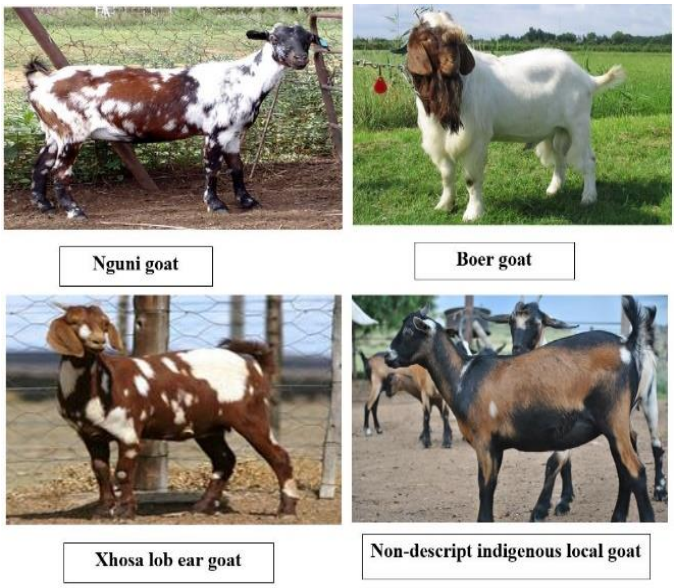

Fig. 2: Images of some selected goat genotypes found in the Eastern Cape province of South Africa

Economic Significance of Goats Among the amaxhosa People from the Eastern Cape Province

With the rise in global food insecurity, undernutrition, loss of jobs, high cost of food and the current covid-19 pandemic, it is certain that most people will source for other means of survival in order to cushion the effect of the negative economic impact caused by the corona virus pandemic (Covid-19) in 2019. Goat farming could be an option to consider for many and especially for people whom nature have sufficiently gifted with arable land resource, but whose lands are largely under-utilized. Subsequent sections in this manuscript describes the significant roles goats play in the livelihoods of households, subsistent, and communal livestock/crop farmers from the EC province.

Cash

Goats provide income in the form of cash to support family needs such as nutrition, education, and clothing [12]. Many amaXhosa households and goat farmers have improved the financial status of their families through the sales of goat [8]. The sales of live goats happens majorly in some months (April, June and December) of the year which also coincides with the holiday periods. Interesting to note, is the fact that these periods also match the time when migrant employees residing in big cities of South Africa visit their family members in the rural areas [8]. Several households and subsistent farmers from this region and in South Africa as a nation utilize this opportunity to sell their goats at a good rate [13]. However, the prices of goats still vary and depend on a number of peculiar dynamics such as sex, age, size of the goats, colour of goats, season of sale, and whether the seller sees the buyer as village allies or friend [14].

It is vital to state that, morphological variation have crucial socio-cultural as well as economic worth and meaning to the local dwellers and as such, they have precise consideration and preference for goat colours [15]. According to Mahanjana and Cronje, it was observed that goats with white colour coats were well sort for in line with it use for sacrificial purposes, leading to relatively high prices being paid for them by the amaXhosa people [8].

As of 2004, goat price for castrates that were up to 2 years of age goes for about R1200 each [7]. Meanwhile, the current price of goats have significantly increased in the region due to various economic strains over the years and based on some market price determinants such as period of sales, type of goat sex etc. A recent study pegged the price of goats to range from R1600 to R2000 [16]. In contrast, the prices of goats from other provinces of South Africa (for instance in Kwa-Zulu Natal), ranges between R1250 - R2300 [17]. The variation in prices may be due to some factors such as the variation in the population numbers of goats in these different provinces, the level of acceptance of goat products (milk and meat), goat colour, breeds, sizes, and the variations in cultural practices connected to the frequency of usage of goats for various local functions.

According to a report [14], cultural symbols and artefacts derived from goat products (meat and milk) are pervasive amongst most Zulu people (from the Kwa-Zulu Natal province of South Africa) which is somewhat different from the beliefs and cultural perceptions of the amaXhosa people from the Eastern Cape province of South Africa. The amaXhosa goat owners and households often use the income from sale of live goats for family groceries, transportation to nearby cities, school fees and/or uniforms for their wards as the monthly government social grants may not cover all the family needs [7, 16]. This observation is also similar to that of some financially constrained Zulu people from the Kwa-Zulu Natal province of South Africa [17]. Although, the economic value (in currency) of goat may differ from one province to another in South Africa, the common practice is that, they are used to generate cash for household needs among most rural communities.

Milk

Milk from goat is commonly known as “ubisi bebhokwe” among the amaXhosa people. The use of milk from local goat genotypes plays a moderate role in the South Africa’s agricultural and nutritional perspectives, predominantly among the amaXhosa households in the Eastern Cape province [7, 18], which is a home to about 39% of goat population in the country [19]. While principally raised for meat purpose, local goats are gradually being recognized for its use as milk for consumption and other beneficial purpose such as economic as well as health significance [18, 20].

The EC province accounts for the highest goat numbers in South Africa, yet milk yield from local goat genotypes remains low [7, 18]. Most households produce about 0 - 1 liter of milk daily from local goats, with an estimate of 32% of people preferring the milk when compared to those from cattle [21]. Interesting to note is the fact that, indigenous genotypes such as the Nguni goats are for dual purpose (meat and milk), but with low milk yield estimated around 0.5 - 1.5 liters/day [22]. One reason for the use of indigenous goat for milk purpose in this region (even though the milk yield is small) is the fact that most households have limited financial means to acquire the conventional dairy goats for milk production [22]. To most households that raise goats in the Eastern Cape province, exotic dairy breeds (including Toggenburg and Saanen) are more expensive as well as very susceptible to local infectious diseases and parasites when compared to the indigenous, well-adapted and more affordable genotypes such as Xhosa ear-lopped, Nguni, and Boer goats among others [22]. Again, milk from commercial cows in the grocery stores are also expensive for to afford. For most households in this region, goats are managed in low-input farming systems, with about 95% of the people living in communal areas where they milk their goats for subsistence purpose [7]. The ease of management and the drought resilient ability of these goat genotypes make them vital for resource limited households [18].

With respect to the pattern of consumption, the cultural practice among the amaXhosa people from the Eastern Cape province is that, goat milk is consumed during rituals and as a source of protein, though this pattern is less common when compared to cattle milk [23]. Meanwhile, when compared to households from other provinces of South Africa from other communities (such as Venda and Pedi regions), the amaXhosa people integrate less goat milk to their daily consumption pattern [22]. From the aspect of its nutritional perceptions, despite its high nutritional value, it was discovered that only 41.7% of consumers from EC province are willing to consume goat milk, with most people habitually citing “goaty” smell of the milk as reason for not consuming the milk [20]. More nutritional awareness and health profits of goat milk in diets (e.g., suitability for lactose intolerance) has been proposed to influence the choice of more people to consume the milk [20].

Goat milk has also been used for income generation in most societies of the world [24]. For the amaXhosa people, goat milk is largely for home consumption [20]. Sales of goat milk are majorly done in an informal setting in this region, with prices ranging from R8.50 - R9.50/liter [23]. Due to sensory (odour) and cultural bias for goat milk and its products some people in the Eastern Cape province are not willing to purchase or consume them [18]. However, according to some studies in some parts of the region, a good proportion of people from the region are willing to purchase goat milk and its products if the sensory barrier (odour) is addressed and if they are aware of its nutritional profits [18, 20].

Talking about the utilization of goat milk as nutritional resource to tackle the issue of malnutrition and food insecurity, several studies have reported its nutritional and health benefits [25]. Goat milk possesses healthy, medicinal and beneficial properties required for human profits and especially for children and old people [25-26]. The nutritional composition of local goat milk from some genotypes have also been analyzed. The result of the nutritional composition of milk from local goat genotpes (Nguni, Boer and Non-descript indigenous local goat), shows that they are rich in nutrients that are beneficial to consumers when they are consumed [22, 27, 28]. However, caution should be taken when consuming the milk in its raw state due to the possibility of contracting pathogenic organisms when they are not pasteurized [28]. Tables 1, 2 and 3 gives details of some rich-nutritional composition of milk from some goat genotypes raised by amaXhosa people residing in the EC province

of South Africa. According to Greyling et al. [27], with the increase rate of poverty, malnutrition as well as the rise in human population in South Africa and especially among rural communities, alternative sources of animal protein such as goat milk is significant to the livelihood of people and to help feed and uplift their nutritional requirements.

Although the daily milk yield from local genotypes (Nguni, Boer etc) may be relatively low, milk produced are comparable in terms of good quality, when compared to that of dairy goats [28]. Under a well-managed and more intensive feeding system, coupled with a well-balanced diet regime, milk yield can be significantly improved. More so, with respect to the abundance and adaptability traits of local breeds to the unfavorable weather conditions (including heat wave and drought) in most region of the country and especially in the rural areas, these breeds can be utilized to improve the situation of malnutrition in these areas and also serve as a potential avenue for income generation.

Judging from some of the selected afore-mentioned literatures, it is obvious that goat milk from the EC province of South Africa remains an underutilized resource, despite its nutritional prospect. Howbeit, if some of the bottlenecks in form of low milk yield production, consumer sensory perceptions, and availability among others could be addressed, this will unlock its role in communal development and nutrition availability. Future investigation should be geared to prioritize breed enhancement, consumer sensitization, and to an extent effect policy frameworks that will integrate goat milk into national dietary systems.

Table 1: Selected nutritional composition of milk from three goat genotypes raised on natural veld from the Eastern Cape province

S/N	Component	Boer	Nguni	Non-descript indigenous goat
1	Lactose (%)	5.04	5.31	5.02
2	Protein (%)	3.59	3.54	3.39
3	Solid-non-fat (%)	9.48	9.62	9.23
4	Fat content (%)	2.28	4.30	4.56
5	Moisture content (%)	88.44	86.64	85.30
6	Fat free dry matter content (%)	9.26	9.00	10.12
7	Magnesium (%)	231.21	136.76	218.73
8	Calcium (%)	26.99	23.32	23.27
9	Sodium (%)	283.02	213.97	282.77
10	Potassium (%)	346.74	368.02	369.48
11	Iron (%)	0.34	0.32	0.52

Source: (Extracted from [22, 28] Mmbengwa et al., 2008; Idamokoro et al., 2017).

Table 2: Nutritional components of selected classes of fatty acids, ratios and atherogenicity index of milk from three goat genotypes raised on natural veld from Eastern Cape province

S/N	Fatty acid ratios	Boer	Nguni	Non-descript indigenous goat
1	Total Saturated Fatty Acids (SFA)	73.77	68.65	71.73
2	Total Mono Unsaturated Fatty Acids (MUFA)	22.90	27.92	23.90
3	Total Poly Unsaturated Fatty Acids (PUFA)	3.31	3.41	4.35
4	Total Omega-6 Fatty Acids (n-6)	2.13	2.19	2.82
5	Total Omega- 3 Fatty Acids (n-3)	1.19	1.22	1.53
6	PUFA/SFA	0.04	0.05	0.06
7	n-6/n-3	1.83	1.91	1.94
8	Atherogenicity index	2.60	2.34	2.35

Source: (Extracted from [28] Idamokoro et al., 2017).

Table 3: Nutritional components of selected classes of fatty acids of milk from three goat genotypes raised on natural veld from the Eastern Cape province

S/N	FAME (% of total fatty acid ratio)	Boer	Nguni	Non-descript indigenous goat
1	Butyric	0.69	0.66	0.76
2	Caprylic	2.43	2.23	2.58
3	Caproic	1.60	1.47	1.64
4	Capric	9.32	8.23	9.44
5	Lauric	3.80	3.39	3.83
6	Tridecoic	0.02	0.01	0.02
7	Hendecanoic	0.01	0.01	0.01
8	Myristic	9.49	7.90	9.56
9	Myristoleic	0.01	0.03	0.04
10	Palmitoleic	0.48	0.47	0.56
11	Palmitic	27.99	24.79	26.07
12	Pentadecylic	0.88	0.82	1.03
13	Margaric	0.86	0.81	0.89
14	Heptadecenoic	0.19	0.19	0.23
15	Elaidic	0.06	0.20	0.15
16	Linolelaidic	0.07	0.21	0.11
17	Oleic	21.90	26.59	22.64
18	Vaccenic	0.25	0.43	0.26
19	Stearic acid	16.19	17.92	15.26
20	Linoleic	1.78	1.26	1.97
21	Conjugated linoleic acid	0.16	0.63	0.53
22	Nonoadecanoic	0.13	0.11	0.10
23	Arachidic	0.29	0.18	0.39
24	α-Linolenic	1.12	1.09	1.40
25	Eicosatrienoic	0.05	0.04	0.12
26	Arachidonic	0.06	0.03	0.07
27	Docosapentaenoic	0.04	0.07	0.09
28	Heneicosanoic	0.02	0.04	0.08
29	Eicosopentaenoic	0.01	0.05	0.03

Source: (Extracted from [28] Idamokoro et al., 2017).

Meat

Globally, chevon is known to have significant nutritional qualities desirable by consumers. Local goat genotypes from the Eastern Cape province are often raised under natural veld conditions and are generally not given any veterinary care that will boost their health in most cases [29]. As such, goats raised in this type of extensive system of production are regarded as 'green produce', which attract its acceptability by some chevon (consumer) lovers who value the consumption of healthy meat/food from animals raised under natural veld. The 'naturalness' of chevon directly fits into most consumers' lean towards healthier food preference. The nutritional profits of goat meat together with the fact that they are raised mostly on natural veld make chevon from this part of the world an ideal option for meat eaters who are conscious of their health [29]. Nonetheless, the preference for chevon in most tribes of South Africa (especially the amaXhosas) is somewhat low as a result of some cultural misconceptions such as toughness, colour, unappealing, off-odours, and off-flavours [20]. There should therefore be a precedence to put into perspective the quality concerns about chevon, particularly traits such as tenderness, colour and odour (among the amaXhosa people) as they all contribute to the acceptability of the product in a nation like South Africa [30]. Table 4 presents some nutritional composition of chevon from some goat breeds found in the EC province.

Table 4: Selected nutritional composition of chevon from three goat genotypes from South Africa

S/N	Component	Boer	Nguni	Non-descript indigenous goat
1	Moisture (g/100g)	69.4	74.2	69.8
2	Protein (%)	22.8	19.5	24.3
3	Fat (%)	10.5	4.4	7.9
4	Ash (g/100g)	0.95	1.02	0.97
5	Myristic acid (C14:0)	6.1	6.0	6.0
6	Palmitic acid (C16:0)	21.3	19.5	19.5
7	Palmitoleic acid (C16:1)	3.3	3.1	3.1
8	Margaric acid (C17:0)	2.3	2.4	2.4
9	Stearic acid (C18:0)	20.4	11.0	20.0
10	Oleic acid (C18:1)	36.7	37.7	37.7
11	Linoleic acid (C18:3)	3.4	2.3	3.9
12	Saturated fatty acids (%)	54.7	57.7	53.6
13	Unsaturated fatty acids (%)	45.3	ND	46.4
14	Monounsaturated fatty acids (%)	41.9	34.2	42.5
15	Polyunsaturated fatty acids (%)	3.4	8.14	3.9

(Sources: Extracted from [31-34] Tshabalala et al., 2003; Webb et al., 2005; Webb, 2014; Veldsman et al., 2023). ND: Not Determined

Aside from the reported nutritional composition in chevon from indigenous goats listed in table 4, local goat meat (such as Nguni) is also a verifiable source of key nutrients including iron (2.89 mg/100 g) and zinc (4.02 mg/100 g), respectively [34]. Other significant nutrients in chevon (e.g. Nguni) are omega-6 fatty acids and omega-3 fatty acids constituent with 0.25% and 0.07%, accordingly [34]. Despite, the rich nutrient composition of chevon from local goats as compared to other red meat (beef), their general acceptance level from indigenous amaXhosa people is still low. It has however been argued that this nutritious animal protein resource have been largely underutilised but, if properly explored, it serves as a significant food source that possesses the potential to contribute toward increasing dietary diversity, improve nutrition as well as food security [34, 35]. Some of the ways to promote its consumption is by sensitizing the general populace and educating them on the nutritional and health benefits of local chevon.

Goats Used for Controlling Bush Encroachment

For several years, bush encroachment is seen as a serious concern among livestock, crop and subsistence farmers in the EC because of its invasive nature [36]. An estimated 47% of the total surface area of this region is said to be covered with grass/bush and woody plants [37]. The problem of bush encroachment by invasive plants can lead to biome shifts from open vegetation to closed woody vegetation [38] thereby changing the functions as well as biodiversity of the natural vegetation which may cause reduction of plant productivity as well as economic worth from natural velds [39]. The suppression of palatable nutritious herbs and grasses by encroaching woody plant species often unpalatable and indigestible to livestock is referred to as bush encroachment [40]. The serious threat caused by bush encroachment to the pastoral economy and crop production is a major reason for sourcing interventions and viable methods for controlling bush encroachment in most societies affected by this menace [41].

Although for many years, goats are seen as a threat to natural velds and soil, but recent study has shown that most local goat genotypes are very useful and capable livestock that play a vital role in the utilization and enhancement of bushveld in the EC province [12]. The reason being that goats possess a very unique characteristic as a browser and not a grazer [42]. Another important trait of indigenous goats for their use to control bush encroachment in the EC province is their ability to efficiently utilise poor quality feed resources compared to other livestock [43]. Goat genotypes including Angora, Non-descript local and Boer goats have been utilized either as a secondary or primary farming strategies in the improvement of optimum land use systems in the bushveld localities of the EC province [12, 37]. This beautiful attribute of local goats as animal agents used to control bush encroachment serve to economically save crop farmers a lot of money they would have used to buy herbicides or cut these invasive woody plants which have the potential of limiting their crop yields intended for either home consumption or for commercial purpose.

Manure

Home garden is an essential vocation to the amaXhosa people in the Eastern Cape province. Most households, subsistent and communal farmers grow their own food (e.g. vegetables, carrot, beetroot, cabbage etc.) to support their families. However, in order to boost their home grown food, most households and local farmers (who are mostly constraint financially) use resources like locally available materials as fertilizer to improve soil nutrients bearing in mind that most soil in the Eastern Cape province is relatively poor in Phosphorus (P). One of the available materials used as fertilizers for improving soils by local amaXhosa households and crop farmers is the goat manure. It has been observed that goat manure as fertilizer have been used to improve soil and help gardeners produce healthier plants and crop yields [44]. One major reason why the use of goat manure in most Southern African nations including the amaXhosa people is common is because they do not only give finer pelletized droppings, but they also do not attract insects or burn their crops when compared to other types of manure from other livestock [45]. Goat manure as an organic fertilizer have also been used in other countries like Indonesia to improve food yield such as rice [46].

Goat manure is the second, next to cattle manure used by subsistent amaXhosa farmers in terms of availability. Likewise, in another study, it was observed that the use of goat manure for farming considerably decreased the sorption of phosphorus in two phosphorus fixing soils in the EC province [47]. The result of this findings could be a booster to improve the availability of added phosphorus to green plants for home food production among the amaXhosa people. In addition, Iyamuremye et al. [48], reported that, the addition of goat manure to soil enhanced the availability of phosphorus by improving the biological cycling of soil with fertilizer phosphorus.

Further explanation by Gichangi et al. [47] in their study carried out in the Eastern Cape province showed that manure from goat stimulated the propagation of useful microbes in the soil, thereby immobilizing a substantial concentration of included inorganic phosphorus which protected it from conversion to less-labile phosphorus forms. However, the positive effect (propagation of useful microbes) of goat manure was greatest when the inorganic P was added at low rates. Iyamuremye et al. [48] in their study consequently, explained that, the release of useful microbes into the soil on the addition of goat manure could be as a result of the fact that, the biomass seemingly upsurges phosphorus availability by halting soil inorganic phosphorus and releasing it later via mineralization during biomass turnover. Hence, the mixture of goat manure with low rates of phosphorus fertilizers may provide a cost-effective approach for rising fertilizer P use efficacy via improved biological cycling of P in most households and among subsistent farmers among the amaXhosas and elsewhere.

Gichangi et al. [47] also observed that the mixture of inorganic P with manure from goat excreta gave up to 100% more biomass phosphorus when compared to those with goat manure or inorganic P alone. This gives an indication that the mixture of goat manure and inorganic P will help to improve soil nutrient for improved crop yield. Better comprehension of how goat manure improves the accessibility to added P through its process of P-fixing mechanism in the soils may lead to the use of this locally abundantly available resource to proliferate soil nutrients as well as fertilizer phosphorus utilization which is useful for food production in the region [44]. This scientific revelation could help researchers, subsistent farmers and households to use less inorganic P fertilizer in their farms and gardens thereby reducing cost of food production in the region. Effective and strategic policies by government and other stakeholders tailored to assist subsistent farmers in this region will further improve the use of this manure for efficient crop production.

The Socio-Cultural Usefulness of Goat During Traditional Ceremonies Known as “Rites of Passage” Among the Amaxhosa People

The Use of Goat During Childbirth Rites (Efukwini)

One of the cultural rites on the use of goats among the amaXhosa people is in its usage after childbirths. This cultural practice is known as “Efukwini” which means a sacred space/place (usually a hut) for giving birth by amaXhosa women [6]. A mother is usually secluded in a “special hut” for ten (10) days after birth to conclude the end of the exercise [6]. During this period of ten days, a goat is usually slaughtered for the mother to eat in connection with the seclusion exercise, this is a practice grounded in ancestral appeasement/ worship for the newly born. Furthermore, part of the activities that will be done during this spiritual exercise is that, the umbilical cord will be ritually burnt or buried; this act is done to protect the newly born baby from perceived enemies or spiritual attacks [6]. It is instructive also to note that, after ten (10) full days when the mother exit the seclusion hut, a goat (white in colour precisely) is killed and she will be made to eat part of the meat (the right front leg of goat) known as the “intsonyama” [49]. This ceremonial rite is performed to appreciate their ancestors with the believe that they are responsible for safeguarding both the mother and her newly-born baby. Consequently, it is generally believed

that, if these ceremonial rites are not carried out, the child will be exposed to continuous bed-wetting and will generally be a stubborn child [49]. Of interest is the fact that civilization and the practice of Christianity is rapidly changing some of this age long cultures in South Africa. In recent years, amaXhosa woman are now allowed to birth in maternity centers or hospitals if they choose to [50]. A practice which is currently seen as a safer, morally justified and better option (health-wise) for child delivery by some quarters in the nation of South Africa, especially by the Christians [50].

The Use of Goat During Young Male Initiation Rites (Ulwaluko)

Another cultural role of goat by the amaXhosa people is during the circumcision ceremonies of the passage of a male child to adulthood which is generally done for boys between the ages of 15 to 25 years old [51]. This male initiation process known as “Ulwaluko” is done in secluded areas usually in the bush or mountains [6]. The initiates known as “abakweta” are secluded, and goats are used as sacrifice to honour their ancestors for a “successful circumcision” exercise for the male child. Goats used for this ceremony is usually white-coated in colour as this is believed to be a symbol of purity [6]. Meanwhile, before a young boy is taken to the bush for seclusion and circumcision (for about 4 - 6 weeks), the specific part of the goat meat that will be eaten by the boy is the right shoulder (known as isiphika) which is usually roasted in fire on a locally-made cooking stand [6]. One popularly known reason why the amaXhosa people practice this cultural rite of circumcision is that, they believe that the initiates (young males) will be protected from evil spirits by their ancestors [49].

Similar to the childbirth cultural rites, of recent, families are now being encouraged (through government sensitization, practice of Christianity, medical advice) to carry their young male child to hospitals for circumcision due to some incidences of death of young people recorded during the traditional exercise of circumcision [52]. However, most families still allow their young male child to practice the old cultural method of circumcision because of perceived or anticipated evil that they believe may befall their ward [53], or due to the stigma of them being ridiculed in the society if they do not undergo the popularly known traditional rites. The people who do not go through the local traditional rites are often mocked and usually seen as a boy and not as a man even in their adulthood [50].

The Use of Goat During Young Female Initiation Rites (Intonjane)

The initiation process for young ladies is not that elaborate when compared to the two previously discussed ones, but it involves the seclusion of young female initiates and animal (goat in particular) is sacrificed to appease the ancestors, as well as reinforce communal identity of the girl after the ceremony. This female initiation rite is called “intonjane” which is meant for a young girl’s rites of progression (passage) to womanhood and it is usually performed between her first menstruation and her marriage to a man [54]. The cultural rite for this ceremony involves separation of the young initiate for one or three (3) weeks contingent on the agreement with her family [55]. The exercise which involves the killing of a goat is done on the first or second day of initiation with the young girl (initiate) given the right shoulder of the slaughtered animal known as “umshwamo” (meat roasted on a locally made fire) to eat with a stick because she is forbidden to eat it with her handsv [6].

Conversely, other important aspects of the socio-cultural usefulness of goats in South Africa and among the amaXhosa people is to appease ancestors (izinyanya) during ceremonies such as weddings, funerals, harvest celebrations [56]. This practice of sacrifices to ancestors is commonly used to attract favours, and for mediating between the people and their ancestors. Again, goat meat (inyama yebhokwe) is used for social cohesion during events to foster unity among communities. During such ceremonies, goat meat is shared among people to strengthen communal unity and ties. At large, the role of goat in this region extends beyond its nutritional benefits to embodying cultural relevance, continuity as well as respect for customs.

Despite the multi-facet socio-cultural and economic roles that goats play among the amaXhosa people, several constraints facing the utilization of this animal still exists. These constraints include among others diseases [57-58], low milk production [28], biased sentiment on chevon and milk consumption [20, 28, 59], drought/feed shortage caused by varied seasons [60, 42], poor livestock management leading to high rate of both kids and adult mortalities of goats [12, 61].

Conclusion

There is paucity of literature expatiating the multi-faceted social-cultural and economic roles of goat and its products as it impacts the livelihood of most households, subsistent and communal farmers in most communities of the EC province of South Africa. This study expounded the intricate relationship that exist between the prevailing economic, and socio-cultural significance of goat and the amaXhosa people and how it influences the economic worth, health benefits and consumption patterns of the animal and its products (milk and meat) by people while also highlighting some prevalent bottle-necks that

may limit its prospects and contributions to address the issue of malnutrition and food security. Despite the unquantified and valuable prospects of goat to contribute to the protein nutrition of the generality of the people in this region some factors such as bias in the form of taste, odour etc. (meat, milk), still limits its full utilization by most people. An aspect that may require future investigation is the evaluation of the hygienic conditions of goat meat eaten from the traditional method of slaughter during local events and during circumcision of initiates (male and female). This is because of the unhygienic way of processing such meat which may increase the risk of food-borne illness when they are consumed by people. Reports on the unhygienic method of slaughtering goat leading to the exposure of consumers to food-related sickness when the meat are consumed by people have been report for another province in South Africa, but not for the EC province [56]. An adoption of a cleaner and hygienic environment for slaughtering goats during traditional ceremonies is recommended to avoid a possible risk of the spread of foodborne illnesses. This may further help promote a better eating habit of clean and healthy chevon by the amaXhosa people. Another aspect of research that could be of interest would be to investigate (if there are) any possible repercussions on people when they get to their adulthood (male or female) whose parents did not allow them to go through the tradition rites of circumcision. This aspect of investigation should cover results of repercussions on their general well-being including socially, financially, health-wise and in other areas, since it is commonly believed that such people may not secure the fortune, blessings and/or protection of their ancestors.

Furthermore, some explicit recommendations that climax how the socio-cultural and economic significance of goats can be conserved, strengthened, and incorporated into development initiatives for the AmaXhosa people can be detailed further.

Firstly, the government, NGOs, stakeholders and related institutions can reinforce cultural preservation plans on the usefulness of goats to up-coming generations. This could be achieved by involving both rural and urban community leaders as well as cultural institutions to document, train and teach the core traditional practices involving the significance of goats to upcoming generations via cultural education schemes/programs. This approach will help to sustain the cultural and symbolic identity of the usefulness of goats to the AmaXhosa people and it will also ensure that traditional knowledge is not forgotten with time.

Secondly, concerned agencies together with the government can provide training on enhanced goat breeding, workable management systems, disease control, and sustainable grazing practices. The reason for this will significantly help to improve goat production that will further enhances food security and revenue for people in that region.

Furthermore, the integration of goats into local economic development through the establishment of local goat markets will help to give jobs and increase economic resilience for the AmaXhosa people.

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