A Look Back at the Rich Culture, Tradition and Livelihood of Gawda and Dhangar Communities of Goa

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I hereby declare that the data presented in this Dissertation report entitled, "A Look Back at the Rich Culture, Tradition and Livelihood of Gawda and Dhangar Communities of Goa" is based on the results of investigations carried out by me in the M.Sc. Environment Science at the School of Earth, Ocean and Atmospheric Sciences, Goa University under the Supervision of Dr. Nitin Sawant and the same has not been submitted elsewhere for the award of a degree or diploma by me. I understand that Goa University or its authorities will not be responsible for the correctness of observations / experimental or other findings given the dissertation.

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This is to certify that the dissertation report "A Look Back at the Rich Culture, Tradition and Livelihood of Gawda and Dhangar Communities of Goa" Is a Bonafide work carried out by Miss. Karishma Gajanan Sangodkar under my supervision in partial fulfilment of the requirements for the award of the degree of Masters of Science in the Discipline Environmental Science at the School of Earth, Ocean and Atmospheric Sciences, Goa University.

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PREFACE

In this we delve into the intricate relationship between humans and animals within the unique ecosystem of Mollem, located in the picturesque region of Goa, India. Through a comprehensive study of the traditional knowledge, cultural beliefs, and practices of the Gawdas and Dhangars communities, we aim to shed light on the complex dynamics of human-animal interaction in this biodiverse landscape.

By exploring the socio-demographic profiles, traditional practices, and livelihood dependencies of these indigenous communities, we uncover the deep-rooted connections that exist between humans and animals in Mollem. Through interviews, observations, and ethnographic analysis, we seek to understand how these communities view, interact with, and rely on animals for various aspects of their daily lives.

This document serves as a testament to the rich cultural heritage and environmental stewardship of the Gawdas and Dhangars communities, highlighting the importance of preserving traditional knowledge systems in the face of modernization and environmental challenges. Join us on a journey through the vibrant tapestry of human-animal relationships in Mollem, where tradition, belief, and sustainability intertwine to create a harmonious coexistence between communities and wildlife.

ACKNOWLEDGEMENT

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Furthermore, I extend my heartfelt gratitude to the participants who generously allowed me to interview them and share their experiences. Their contributions were essential to collecting the data that forms the foundation of this dissertation. Finally, I would like to thank my parents, friends, and classmates for their unwavering support throughout this journey. Their encouragement and belief in me helped me persevere during challenging times.

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ABBREVITATIONS

WGDP	Wildlife and Grassland Development Project
TB	Tuberculosis
TEK	Traditional Ecological Knowledge

ABSTRACT

This study explores the vital role of animals in the lives of the Gawda and Dhangar communities residing in rural Goa, India. Focusing on the townlets of Mollem, Satpal, Palsakata, and Kajumol within the Dharbandora and Sacorda panchayats, the research investigates human-animal interactions through face-to-face interviews, observations, and conversations with key informants. Findings reveal a unique system of traditional veterinary practices alongside rich cultural practices, folklore, and stories related to animals. By examining the socio-economic profiles of the Dhangar pastoralists, the research sheds light on the intricate relationship between these communities and their environment. The analysis highlights the diverse ways animals are used for medicinal purposes, environmental protection, and daily sustenance, showcasing a deep-rooted connection between the people and the fauna of Mollem. Through ethnographic analysis and descriptive statistics, this study contributes to a better understanding of the traditional knowledge systems and practices of these indigenous communities, emphasizing the importance of preserving and respecting their cultural heritage in the face of modernization and environmental challenges.

Key words: - Traditional knowledge, Animal utilization, Cultural beliefs, Livelihood dependence, Gawda, Dhangar, Community.

CHAPTER 1: INTRODUCTION

1.1 General

Nestled in the green embrace of the Western Ghats, Mollem is carving out a niche for itself in the eastern part of Goa, India. This region has a stunning geographical location characterized by its proximity to the Arabian Sea coast and its integration into the larger Western Ghats Mountain range. The Western Ghats, a UNESCO World Heritage Site, run parallel to India's west coast and act as an important ecological barrier and biodiversity hotspot. Mollem's location in these hills gives it a unique ecosystem characterized by lush forests, waterfalls, and meandering rivers.

Imagine a place where the majestic peaks of the Western Ghats host a tangle of verdant forests. This is exactly Mollem's attitude. Its eastern borders border the state of Karnataka, while the Arabian Sea reveals its secrets just a few kilometers to the west. This coastal proximity influences Mollem's climate, creating a warm and humid atmosphere that supports a vibrant diversity of flora and fauna. The Western Ghats themselves act as sentinels, protecting the region from the harsher elements and contributing to the rich biodiversity that thrives within the boundaries of Mollem.

While Mollem's specific historical significance as a settlement may be limited, its location within the Western Ghats gives it a deeper historical context. The Western Ghats themselves have served as an important passage and refuge for various communities throughout Indian history. It is believed that ancient trade routes, such as the one connecting the Malabar Coast with the Deccan Plateau, traversed these mountains and may have passed near the Mollem area. Furthermore, some indigenous communities may have

lived in the Western Ghats for millennia, with their traditions and knowledge intertwined with the local flora and fauna.

However, Mollem's documented historical significance is more indicative of its ecological importance. The region's dense forests and diverse wildlife may have played a role in the livelihoods and cultural practices of neighboring kingdoms or empires. For example, the presence of certain medicinal plants or valuable woods may have attracted the attention of historical rulers.

Mollem is of ecological importance and acts as a vital cog in the intricate machinery of the Western Ghats. Get a deeper insight into its ecological significance here:

Biodiversity Hotspot: Mollem lies in the cradle of the Western Ghats, considered one of the eight “hottest hotspots” of biodiversity in the world. This results in a breathtaking diversity of life forms, encompassing a rich variety of flora and fauna. The region features tropical evergreen, semi-evergreen, mixed moist deciduous, and dry deciduous forests teeming with unique plant and animal species. From towering trees that support a vibrant undergrowth to hidden streams that support diverse aquatic life, Mollem offers a microcosm of nature's bounty.

Haven Sanctuary: Due to its ecological gem status, a significant portion of Mollem comes under the protective umbrella of Bhagwan Mahaveer Sanctuary and Mollem National Park. This protected area status protects the region's delicate ecological balance and limits activities that could harm the environment. It enables forests to regenerate naturally, endangered species to thrive and vital ecological processes to continue.

Watershed Guardian: Mollem acts as a vital watershed for Goa and plays a crucial role in conserving the state's water resources. The region's dense vegetation acts like a sponge, absorbing rainwater and slowly releasing it into aquifers that feed rivers and streams like the Mandovi, Goa's lifeline. This ensures a constant supply of clean water to the local population and surrounding ecosystems. Additionally, Mollem's healthy forests help prevent soil erosion and protect rivers from excessive sedimentation.

Powerhouse of Climate Regulation: Mollem's green expanse plays a crucial role in regulating the local climate. The dense forests act as carbon sinks by absorbing carbon dioxide, a major greenhouse gas, and releasing life-giving oxygen. This helps mitigate the effects of climate change and maintains a cooler microclimate in the region. The presence of trees also moderates temperature extremes, providing shade in scorching summers and absorbing heat in the colder months.

Ecological Corridor: Mollem serves as an important ecological corridor connecting fragmented forests and allowing wildlife movement. This gives animals access to important resources such as food, water, and breeding grounds, promotes healthy populations, and maintains the delicate balance of the ecosystem. This movement also promotes genetic diversity, ensuring the long-term viability of species.

1.2 THE DHANGARS

The Dhangars, identified as a Particularly Vulnerable Tribal Group (PVTG) in India, have resided in the Mollem forests for generations. Their existence is closely connected to the environment. Historically, they engaged in a semi-nomadic way of life, migrating periodically with their flocks of sheep and goats. This seasonal movement

contributed to a profound understanding of the forest's assets and an admiration for its intricate equilibrium.

Knowledge Holders: The Dhangar societies are custodians of a valuable reservoir of customary ecological knowledge (TEK). Transmitted across successive lineages, this expertise includes the utilization of medicinal flora, ethical collection methodologies, and comprehension of fauna conduct. The Dhangars exhibit proficiency in tracking and can recognize diverse traces left by wildlife, enabling them to traverse the woodland effortlessly.

Shifting Landscape: In contemporary times, the Dhangars have encountered obstacles because of limitations on grazing activities within the sanctuary and evolving governmental regulations. Nonetheless, their deep-rooted cultural affinity with the forest endures. They persist in actively contributing to conservation endeavors by engaging with wildlife officials and imparting their Traditional Ecological Knowledge (TEK).

Sheep and Goat Husbandry: For centuries, sheep and goat herding has been the cornerstone of life in Dhangar. Their expertise lies in breeding, raising, and managing these animals. They have a deep understanding of the needs of their herd, ensuring their health and productivity

Nomadic or semi-nomadic lifestyle: Traditionally, Dhangars were nomadic or semi-nomadic. They followed seasonal patterns and migrated with their herds to find pastures with sufficient grazing land. This movement secured optimal resources for their livestock and helped maintain ecological balance

Symbiotic relationship with the land: The pastoral practices of the Dhangars were not just about subsistence; they coexisted with the land. Their sheep and goats grazed on grasslands, and the animals' dung enriched the soil, benefiting future agricultural cycles. This cyclical pattern illustrates their sustainable approach

Agro-pastoralism: While sheep and goat farming were the focus, some Dhangar communities also practiced agriculture. This approach, known as agropastoralism, provided a diverse source of income and food. Crops such as grains and legumes could be grown alongside primary livestock farming

Seasonal Agriculture: Their agricultural practices were often seasonal and complemented their livestock activities. This could include growing crops at times when their herds were on established grazing lands

Regional differences: The extent of Dhangar's involvement in agriculture varied by region. In some areas, these may have been primarily pastoralists, while others may have taken a more balanced approach between pastoralism and agriculture.

1.3 THE GAWDAS

The Gawdas, a prominent community in Mollem, are traditionally engaged in agricultural pursuits, cultivating land on the outskirts of the sanctuary and focusing mainly on subsistence farming. Their historical agricultural methods have coexisted harmoniously with the diverse wildlife in the area.

Living in a State of Harmony: The Gawda communities exhibit a profound reverence for the environment, as reflected in their agricultural techniques. They often

utilize traditional approaches that reduce harm to the environment and encourage biodiversity. For example, they may grow crops that attract beneficial insects or maintain buffer zones near forest boundaries to support wildlife habitats.

Navigating Limits: The growing interaction between humans and wildlife can lead to conflicts, especially when wild animals damage crops. The Gawdas are pivotal in managing such conflicts through traditional means or by seeking recompense for their losses.

Adaptation and Progress: With increasing development pressures, the Gawdas are adjusting their agricultural methods to ensure the sustainability of their livelihoods. They may consider cultivating alternative crops that are less susceptible to wildlife damage or embracing new technologies to improve their yields.

The Gawdas were traditionally a community closely linked to the land:

Agriculture: The fertile soil of Goa provided the Gawdas with the perfect setting for agricultural excellence. They grew a variety of crops such as rice, coconuts, and cashews and formed the backbone of Goa's agricultural sector.

Social Hierarchy: The Gawda community may traditionally have a social hierarchy, with some subgroups such as the Gavlis occupying a special position.

Unique Funeral Customs: Unlike most Hindus who cremate their dead, the Gawdas traditionally practiced burial. This is another aspect that distinguishes them from other Hindu communities.

Empowering Women An interesting feature of the Gawda social structure is the emphasis on women's rights. Gawda women traditionally participated in economic activities and even inherited property

Cultural Festivals: Gawda culture is vibrant, with festivals such as Shigmo, a colorful spring festival that showcases its rich heritage. Their language, Konkani, is an essential part of their cultural identity.

A thorough understanding of how Dhangars and Gawdas interact with the wildlife in Mollem is essential. They have a wealth of traditional knowledge and cultural beliefs, as well as ongoing struggles that shed light on the complex relationship between humans and animals in this unique ecosystem. By acknowledging their contributions and encouraging collaboration, we can create a future in which human communities and wildlife can flourish together.

1.2 AIM

To study human animal interaction in different communities at Mollem

1.3 OBJECTIVES

- To understand the socio-demographic profile of Dhangars in Mollem.
- To document traditional practices and beliefs related to animals among the Gawda and Dhangar communities in Mollem.
- To assess the dependence of the Gawda and Dhangar communities on animals for livelihood and substance in Mollem.

1.4 HYPOTHESES

Different societies have unique ways of interacting with animals based on their cultural values and beliefs.

1.5 SCOPE OF THE STUDY

- The study will help to explore how these communities traditionally view and interact with animals. This includes investigating cultural practices, folklore and stories related to animals.
- The outcome will be useful to understand how the Gawdas and Dhangars rely on animals for their livelihood. This could involve animal husbandry practices, use of animal products, and the role animals play in daily life.

CHAPTER 2: LITERATURE REVIEW

India is the country where over a million communities are laboriously involved in traditional healthcare. These include Vill bone setters, herbal drug interpreters specializing in hostility, palsy, nonage ails, eye conditions, bane mending, etc., and midwives. About 21 species of creatures are used to treat 34 different foods for mortal health. “Medicines are deduced from three sources – beast, mineral and factory. creatures, honey, milk and milk products, corrosiveness, fat, bone gist, blood, meat, excretions, urine, skin, semen, bones, tendons, cornucopias, claws, hooves, hair, down and gallstones are also used in drugs.” According to Sharma (1992). According to WHO. About 70 to 80 of the world's population uses folk drug. Since ancient times, creatures and beast products have been important corridor of the medical force used by people around the world (Lev, 2003). There are over a million communities in India that are laboriously involved in traditional healthcare. About 60,000 Vill bone setters, 60,000 herbal drug interpreters specializing in hostility, palsy, nonage conditions, eye conditions, bane mending,etc., and about midwives (Costa- Neto, 1999). The cure of mortal affections using rectifiers grounded on drugs attained from or eventually deduced from creatures is called zootherapy. (Costa- Netu EM. 2005). Rathore (1986 set up that Raika pastoralists were substantially illiterate and lived a vagrant life in jungles. Thebaud (1988) reported on the socio- profitable metamorphosis of pastoralists, leading to farther marginalization. Kunzru etal.(1989) observed differences in beast power grounded on profitable status and access to coffers. Sperling and Galaty(1990) noted changes in traditional livelihood patterns of pastoral groups due to outside influences. Hogg (1992) bandied how African pastoralists make opinions grounded on available coffers yearly. Solanki,G.S. & Chutia,P.A.V.I.T.R.A.(2009). Studies on ethnomedical aspects and zootherapy in ethnical communities in Arunachal Pradesh, India. International

Journal of Ecology and Environmental lores, 35(1), 67- 76. Solanki,G.S., & Chutia,P.A.V.I.T.R.A.(2009). Studies on ethnomedical aspects and zootherapy in ethnical communities in Arunachal Pradesh, India. International Journal of Ecology and Environmental lores, 35(1), 67- 76. Some important uses of wildlife derivations in Nigeria are artistic carnivals (e.g. masquerades, plaintive observances and the installation of traditional autocrats) and the performance of traditional solemnities (e.g. traditional drug, incantation and conciliation of traditional gods and witches), particularly in pastoral areas. For illustration, pantomimist feathers(Poicephalusspp.) are used as special corridor in making masks for facades in some communities in the southern part of Nigeria (Irun-Akoko, Ogbagi- Akoko, Ado- Ekiti, Egbe- Ekiti – all in Ondo State Nigeria). The skins of bushbuck (Tragelaphus scriptus) and pata monkey(Erthrocebus patas) are sacred conditions for a huntsman's burial form (Adeola, 1987). The derivations of wild creatures – similar as tusks, hooves, skins, feathers and raspberry beaks – are used for colorful purposes in Nigeria. For illustration, the tusks and skins of mammoths (Loxodonta africana) are used for establishing traditional autocrats, the tusks of hippos (Hippopotamus amphibius) are used for aphrodisiacs and beautifiers, while the skins of leopards (Panthera pardus) and Napoleons (P. leo). used in the United States to attach traditional autocrats carried by lords (Obas) and used to make shoes, bags, and downtime fleeces (Adeola, 1987). Skins from hyenas (Crocuta crocuta), serval pussycats (Felis serval), and colorful antelopes and reptiles are used to make shoes, bags, and pocketbooks, and can be worn as apparel. Traditional autocrats, original herbalists and nimrods like to embellish their houses with creatures.

CHAPTER 3: METHODOLOGY

The study was conducted in three townlets Mollem, Satpal, Palskata, and Kajumol, which belong to Dharbandora and Sacorda panchayat. Data were generated through face-to- face interviews, party observation, relations, and conversations with crucial snitchers and anatomized using simple frequentness, probabilities, and descriptive analyses. The socio- profitable profile of Dhangar pastoralists, including age, family type, family size, educational status, and lamb power, was examined. Data were collected through semi-structured interviews and group conversations. colorful sources of information used by the pastoralists were linked, including vill panchayat staff, veterinarians' synthesis, other lamb possessors, crucial vill labor force, and social media. Data were collected through face-to- face interviews using open- concluded questionnaires. An in- depth interview was conducted to collect detailed information about the use of traditional knowledge in environmental protection, the dispersion of this knowledge, and possible changes in the future. The named repliers were people of different periods and positions who had detailed information about the terrain and its conservation through traditional knowledge. Information was also attained from original leaders and connections. Snowball slice was used to collect data. The system allowed enumerators to elect implicit samples from the population, and the sample also helped retain people with lesser knowledge. The data was collected from the repliers. The data analysis methods were ethnographic analysis. Ethnographic analysis is about furnishing a detailed and in- depth description of everyday life and practice (Hoey, 2019). The data were epitomized, cross-checked, synthesized, and converted into a narrative description. Cross-checks were carried out to validate the data attained from compliances, in- depth interviews, and party compliances. Descriptive statistics and probabilities are also used.

CHAPTER 4: ANALYSIS AND CONCLUSION

4.1: ANALYSIS

The present study describes the traditional knowledge of treating various kinds of diseases using different animals and their products of inhabitant. Information of all the local names of the animal parts used to cure and methods of preparation was provided by the informants. in this study, different animal species are being used for different medicinal purposes and to protect the environment by believing different myths and beliefs. These animals are being used as whole bodies or body parts by products like milk, blood, organs, etc. For the treatment of different kinds of alignments including tuberculosis, constipation, weakness etc.

Table 4.1: Demographic status of the respondents from study area

		Villages		
Demographic Features	Total Percentage	Palsakata	Satpal	Kajumal
Respondents	185	75	44	66
		40.54%	23.78%	35.68%
		Gender		
Male	99	40	31	28
	53.51%			
Female	86	35	13	38
	46.49%			

Table 4.2.: Distribution of respondents according to their socio-economic profile.

Variables	**Villages**		
	palasakata	**Satpal**	**Total**
Age			
Young (18-36	12	9	21
Middle (37-54)	43	21	64
Old (55-72)	20	14	34
Family type			
Nuclear	22	34	56
joint	53	10	63
Family size			
small (1-4)	14	10	24
Medium (5-8)	22	28	50
Large (>8)	39	6	45
Education status			
Illiterate	35	28	63
primary school	10	19	29
Secondary school	6	3	9

The socio-economic profile of Dhangar pastoralists including age, family type, family size, educational status, and sheep ownership was analyzed. According to Tables 4.1 and 4.2., most of the respondents (76.16%) were in the middle age group (37-54 years), followed by the elderly (40.46%) (55-72) and the rest (25%) in the younger age group.

Joint family structure was found to be more common among Dhangars (75%) followed by the nuclear family system (66.64%). A total of 119 participants were randomly selected from two different villages (Palasakata and Satpal) and represented different age groups and genders. Dhangars often live in joint families. Most of them are completely dependent on sheep and cattle for their livelihood as these are their main source of income. Each residence houses at least 15-40 cattle, chickens, and chicks. According to the study conducted in the specified village, there is at least one dog and one cat in each place of residence.

Table 4.3: Total number of respondents

Villages	Total no of interviewers	Respondents	Male	Female
Palasakat	100	75	40	32
Satpal	100	44	31	13
Kajumol	100	66	28	38

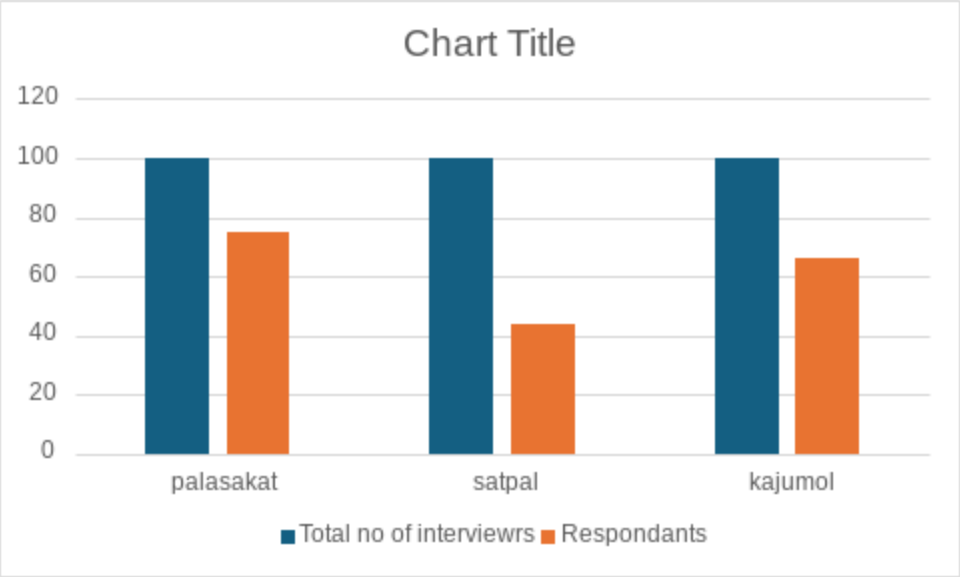

Fig 4.1: Total number of interviews taken.

A total of 100 interviewers were randomly selected from each village. A total of 185 respondents were found. Most of the respondents were found in Palasakata village, followed by Kajumol and the least were from Satpal village. Except for Kajumol village, there were more male respondents.

Table 4.4: Herd size and composition

Villages		
Livestock species	**Palasakata**	**Satpal**
Goat	631	40
Cattles	72	30
Buffaloes	61	65
Dogs	103	49

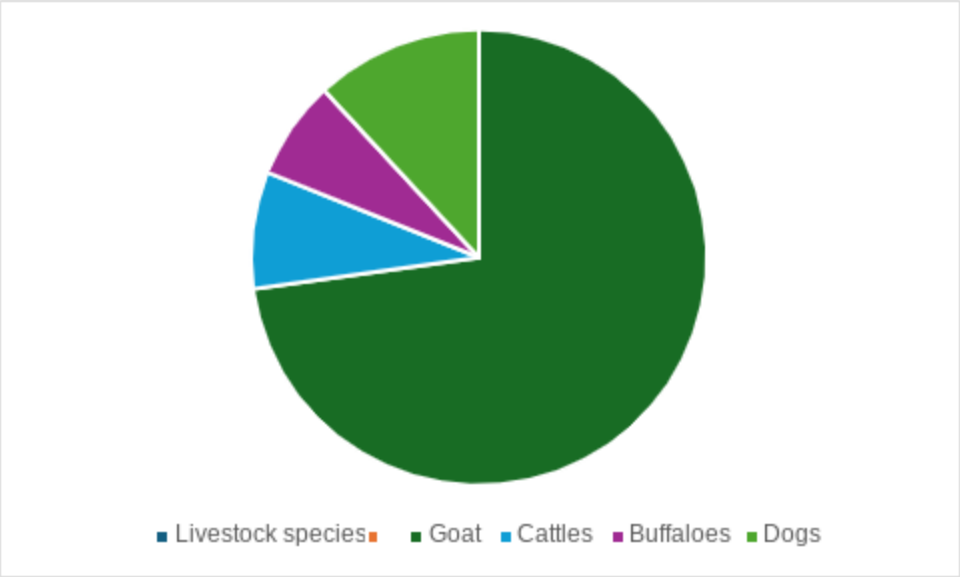

Fig. 4.2: Livestock species used

The lifeblood of the Dhangar community is closely linked to animals, particularly goats, and cattle. These animals serve as an important source of income and contribute significantly to their way of life. Goats are versatile providers, offering meat for consumption or sale, while their milk can be used for direct consumption or processed into products such as cheese. Additionally, some Dhangar families may raise goats for their wool, which can be used for textiles or sold for further processing.

Cattle, on the other hand, offer a wider range of products. The Dhangars rely heavily on milk production from cows and buffaloes, which can be consumed fresh, sold directly, or used to make various dairy products such as ghee (clarified butter) and butter. In addition to milk, livestock manure is a valuable resource that is used, especially in rural areas, as fuel for cooking and heating their homes. This dependence on animals for various purposes highlights their central role in the economic well-being and daily life of the Dhangar community.

The Dhangars do not rely exclusively on animal husbandry to secure their income. They also practice agriculture, which is an additional source of income and livelihood. Some Dhangars may also own buffaloes and Jersey cows in addition to their goats, further diversifying them livestock and agricultural products.

The Dhangars do not rely exclusively on animal husbandry to secure their income. They also practice agriculture, which is an additional source of income and livelihood. Some Dhangars may also own buffaloes and Jersey cows in addition to their goats, further diversifying them livestock and agricultural products.

The government's recognition of the Dhangars' way of life is evident in the financial assistance programs offered to both the Dhangar and Gawda communities. These programs, which provide around Rs 5,000 to Rs 10,000, help sustain their livelihoods and contribute to the overall well-being of these communities. The rich cultural heritage of the Dhangar community is also reflected in its vibrant festivals. A notable festival is 'Gaja', a festival known for its captivating performances. During Gaja, the Dhangars dress up in unique costumes perform a special dance and invite people from neighboring villages to witness and take part in the celebrations. This festival serves as a platform for cultural exchange and strengthens the social fabric within the community.

Dasara is of immense importance to the Dhangar community. It is not only a time for animal worship and expression of gratitude, but also for communal celebration. Families come together to prepare various traditional dishes, especially for Dasara. These dishes include 'Takachi Kadi' (buttermilk curry), 'Aambil' (sour mango curry), 'Batata Bhaji' (potato curry), 'Dudh Bhat' (rice cooked in milk), 'taak' (buttermilk).) and “loni”

(homemade clarified butter). This communal meal strengthens community bonds and marks a joyful occasion during the festive season.

The Dhangar community, known for its expertise in animal husbandry, sells goats at a maximum price of Rs 18,000 to Rs 20,000. Interestingly, male goats fetch a higher price than female goats in this area. Similarly, the community also trades in poultry, with roosters being sold at a price ranging between Rs 5,000 and Rs 8,000, depending on the size of the bird.

Fig 4.3: Cattles in backyard

Fig 4.4: Hens in the backyard

Fig 4.5: Goats in the backyard

Fig 4.6: Old Dhangar couple

Fig 4.7: Voice of Dhangar

Fig 4.8: House of Dhangar

Fig 4.9: Oldest Dhangar

Fig 4.10: Mand

Fig 4.11: cultural costume

Fig 4.12: Holistic place

Fig 4.13: Drying cow dung

Fig 4.14: Dasra costume

Fig 4.15: Dasra celebration

Fig 4.16: Goat manure

Fig 4.17: Department of animal husbandry

Fig 4.18: Naag panchami

Fig 4.19: Gau puja

Table 4.5: List of Government schemes

S.No	list of schemes
1	Kamdhenu Scheme (sudharit)2021
2	Revised schemes for incentives to milk producers
3	Pashupalan scheme
4	Incentives to green fodder cultivation
5	Dairy equipment scheme
6	Financial assistance for rearing broilers, layers and low input technology poultry birds (2018)
7	Financial assistance for infrastructure of poultry farm (2018)
8	Revised modern dairy scheme and purchase of dairy farm equipments
9	Subsidy for transportation of ready polluter feed from outside the state of Goa by poultry farmers
10	Varah Palan scheme

11	Interest subsidy on loans for agriculture and allied activities
12	Establishment of backyard poultry unit
13	Community dairy farming schemes (2021)
14	Gopal Ratna award scheme
15	Grama shakti- supply of low input technology poultry birds to rural farmers (2018)
16	The Goa stray cattle management scheme,2013
17	The Goa small animal rescue management scheme,2014
18	Short scheme of mission rabies
19	The disaster management scheme
20	Goatry scheme
21	Dairy kits scheme
22	Purchase of milch animals under WGDP
23	Renovation of cattle shed under WGDP

Table 4.6: List of animals and their uses.

English name	**Scientific name**	**Local name**	**Part used**	**Uses**
cow	*Bos indicus*	Gai	Milk	Cow dung for purifying homes
				helps in immune system
				Natural Fertilizer
				Fuel for cooking and heating

				Building Material
				Biogas production
				Religious Significance
Goat	*Capra indicus*	Bakri	bones	Use to cure tuberculosis.
			Milk	given to children over age 1 since it is easier to digest
				Offered during religious ceremonies or festivals
				used in cooking
				Land Management
			Goat manure	fertilizer for many plants helps improve soil structure and water retention.
Honeybee	*Apis cerana indica*	Mava mus	Nector	Religious offerings
				Honey for wound healing
				used in cooking and souce of income
Hen/Cock	*Gallus Gallus domesticus.*	Komdi/ Komo		Religious offerings
				Cooking
				Source of income
				Used as pest control
Snake		Saanp		Symbol of protection

				natural predators of rodents and insects like rats, mice, and pests
Peacock	Pavo cristatus	Mor		symbol of beauty and prosperity
				Aesthetics and Decoration:
Crab	Brachyura	Kulli		source of food
Crow	Corvus	Kavlo		considered as good and bad omen
				Religious offerings

Cow: Cows occupy an important place in Goan culture. During Deepawali, the festival of lights, hand-made lamps called “diyas” are traditionally made from cow dung paste. These lamps symbolize the victory of good over evil and light over darkness. Goans also practice “Go Puja,” a ritual of worshiping cows as a sign of respect for these animals, which provide milk and are considered gentle and caring. Although cow dung is believed to have cleansing properties due to its natural antiseptic properties, its medicinal use is limited in modern Goa.

The cow is revered not only for its nutritious milk but also for its symbolic meaning. Cow's milk plays a prominent role in religious rituals and sacrifices and represents purity and livelihood. The cow itself is considered a symbol of fertility and embodies the life-giving properties of nature and the wealth of the earth. This reverence for cows reflects their deep connection with Goan culture and spirituality.

Cows are considered sacred because of their role in cleansing. Cow's milk and its derivatives, particularly ghee (clarified butter), are believed to possess cleansing properties that remove natural impurities. This belief is manifested in religious practices where deities

are bathed not with water but with cow's milk, curd (yogurt), ghee, or even 'Panchamrit'. Panchamrit, a symbolic brew, combines the purity of cow's milk. It consists of milk, curd, butter, honey, and sugar and offers a multi-layered purification for the divine idols. These practices reflect Goans' deep respect for cows and belief in their purifying and sanctifying power.

In Goan communities, cow dung and urine are not just waste products but have significant value due to their perceived bactericidal and other beneficial properties. Some believe that these substances have cleansing powers that go beyond physical effects. This belief is reflected in a unique ritual that required unmarried women to stand in water mixed with cow dung. This symbolic act is seen to remove impurities, not only physical dirt but also potential negative energies or obstacles that could hinder marriage prospects. While the scientific validity of these beliefs is disputed, the ritual highlights the deep-rooted cultural significance of cows and their byproducts in Goa.

Natural Fertilizer: This is perhaps the most common use of cow manure. Cow manure is rich in organic matter and nutrients such as nitrogen, phosphorus, and potassium and is a fantastic natural fertilizer. Villagers often compost cow dung with other organic materials such as straw and leaves to create a nutrient-rich manure that nourishes plants and improves soil fertility.

Fuel for cooking and heating: In many villages, dried cow dung cakes are used as fuel for cooking and heating. These dung cakes burn slowly and efficiently, providing a clean and renewable source of energy. This is particularly helpful in areas where access to traditional cooking fuels such as LPG may be limited.

Building Material: Cow dung mixed with mud and straw can be used as a natural plaster to coat walls and floors in village houses. This plaster acts as a cost-effective and effective insulator, keeping homes cooler in summer and warmer in winter. In addition, the manure has some insect-repellent properties, helping to deter pests.

Biogas production: Cow manure can be used in biogas plants to produce biogas, a clean-burning fuel. This biogas can be used for cooking, lighting and even generating electricity. Biogas production is a sustainable way for villages to meet their energy needs while reducing their dependence on fossil fuels.

Goats are a familiar sight in the Gawda community and serve a variety of purposes beyond simply providing meat. Goat meat is a staple of Gawda cuisine and plays an important role in curries, stews, and other savory dishes. Beyond culinary uses, some community members even use goat bones as a traditional anti-tuberculosis remedy. These bones cooked in broth are believed to be easier to digest for children over a year old. However, it is important to consult a doctor if you have any medical concerns.

The importance of goats in Gawda culture extends beyond the realm of nutrition and medicine. These animals feature prominently in religious ceremonies and festivals and are sometimes offered as sacrifices to celebrate these special occasions. This practice reflects the deep respect and cultural importance accorded to goats within the Gawda community.

Goats contribute to the Gawda way of life through their grazing habits. By grazing vegetation, they contribute to underbrush control and landscape maintenance and play a role in land management within the community.

Natural Fertilizer: Goat manure is an excellent fertilizer for many plants. It is rich in nutrients such as nitrogen, phosphorus and potassium, which are essential for plant growth. Compared to other animal fertilizers, goat manure is drier, easier to handle, and has a less pungent odor.

Soil improvement: Goat manure helps improve soil structure and water retention. This can be particularly advantageous in sandy or clay soils.

Honey holds a special place in Goan culture that goes beyond its delicious taste and also impacts religious practices, healthcare, and even the economy. Honey is often offered to deities in temples in Goa and during festivals. The sweetness of honey is considered a symbol of purity and devotion, a way to express reverence and invoke the blessings of the divine. This tradition reflects the deep respect Goans have for this natural product.

Beyond its spiritual significance, honey has long been used in Goa for its supposed medicinal properties. Traditionally, honey is applied to wounds to promote healing. Its antibacterial and anti-inflammatory properties can be beneficial, although consultation with a doctor is always recommended in case of medical problems.

Honey's versatility extends far beyond religious offerings and wound care. It is a staple ingredient in Goan cuisine and adds a touch of sweetness and depth of flavor to various dishes. From sweet treats to savory curries, honey enhances the culinary experience. Additionally, honey production can be a source of income for some Goans, especially those who practice beekeeping. The ability to grow and sell honey provides economic benefits and contributes to the livelihoods of some members of the community.

The humble hen plays a more important part than just furnishing breakfast. These feathered musketeers have an integral place in religious traditions and culinary practices and indeed contribute to the original frugality. cravens can be offered as offerings during religious observances and carnivals. This practice reflects the belief in its emblematic value and the desire to bring the blessings of the godly. Beyond the realm of religion, cravens are a foundation of Goan cookery. Fresh eggs are a crucial component in numerous dishes and are valued for their versatility and protein content. From ethereal omelets to racy curries, eggs add uproariousness and depth of flavor to Goan dishes. For some families, keeping cravens allows them to enjoy a steady force of fresh, home-raised eggs, which contributes to a sense of tone adequacy and succulent home cuisine. The profitable benefits of cravens go further than simply furnishing eggs for consumption. Some communities in Goa raise cravens for marketable purposes and vend eggs or indeed the cravens themselves at original requests. This income generation can be a precious source of livelihood, especially for families living in pastoral areas. While egg products and religious immolations are important uses, cravens offer another surprising benefit of pest control. Their natural rustling instinct leads them to peck at insects like bees, worms, and beetles. This can help control pest populations in auditoriums and neighborhoods and provides a natural and environmentally friendly result for keeping unwanted insects down. Snake Snakes are frequently seen as symbols of protection in Goa. Images of snakes beautify some homes, which are believed to ward off wrong. Goa is home to colorful species of snakes that play an important part in rodent control. People worship snakes during the jubilee “Nag Panchami”. It's believed that one shouldn't cut down trees during the jubilee since snakes are set up on the trees. However, it brings bad luck, if they get hurt during this day. The

peacock's bright colors and ornate tail feathers have earned it a place as a symbol of beauty. His glowing definition is evocative of the prodigies of nature and the perfection of the beast area. Beyond aesthetics, the peacock is also considered a symbol of substance. Its majestic presence is believed to bring good luck and cornucopia, making it a sought-after motif in homes and businesses in Goa. The emblematic value of the peacock carries over into the area of aesthetics and decoration. Artisans from Goa incorporate peacock images into colorful ornamental rudiments. It's believed that the peacock has further medicinal use when the body is burning than the feather when the peacock helps to relieve the pain. crows can be viewed as a good or bad auspice depending on the number of crows and the environment. “Seeing a single crow is frequently considered a bad auspice, but seeing two could be a sign of good luck,” says Compora. “Seeing three indicates impending change.” still, also it shows your ancestors' displeasure with you If the crow sitting in the house looks south and addresses. In such a situation, if a crow comes to the roof of the house, you should give it food and water. In Hindu tradition, crows are believed to serve as couriers between the physical and spiritual worlds. It's believed that when we offer food to these black-winged brutes, they carry the substance of our immolations to our departed ancestors.

4.1.1 The decline of traditional beliefs and artistic myths

Modernization has infected traditional beliefs and artistic myths about guarding the terrain. The construction of roads and transmission lines has forced people to cut down saved trees and worms on the timber. The traditional beliefs and artistic myths guarding these different communities differ and contradict each other. The indigenous people and ancient people are the main liaisons of this knowledge, but due to modernization people no longer believe in them but rather concentrate on scientific information. numerous educated

canvassers said that grounded on outside scientific knowledge, it was pointless to believe in these immolations to colorful divinities and it was high time that the vill switched to ultramodern scientific knowledge in all development conditioning. These ideas have led to a decline in knowledge about the conservation of rudiments of a terrain. Another factor in the deterioration of traditional beliefs and artistic myths is the lack of institutions. People have been passing on this knowledge orally for periods, but much of the information has been lost. When asked about the history of all the rituals performed, veritably many people knew about them, and the 19- 40 age group had no idea whether this knowledge helped cover the terrain or not. To cover the terrain more, it's high time to also include traditional knowledge and artistic myths.

4.2 CONCLUSION

The commerce between humans and creatures in Gawda and Dhanagar communities in Goa goes beyond bare practicality. It's a shade woven from vestments of tradition, artistic belief, and the base of their livelihood. Cows, with their perceived chastity and fertility symbolism, are central to religious practices. Their milk and soil are significant in rituals and reflect their deep connection to the artistic identity of these communities. Likewise, scapegoats could be offered during carnivals and cravens could be incorporated into certain rituals related to unattached women. These practices demonstrate the interconnectedness of mortal and carnal life within the artistic frame of the Gawda and Dhanagar communities. Still, the relationship goes beyond the emblematic. creatures play a pivotal part in supporting the livelihoods of these communities. Raising cows for milk, scapegoats for meat, and cravens for eggs provides a steady source of income. For some, honey product notions can also be a source of profitable security. This dependence

promotes responsibility towards the creatures and shapes practices around their care and weal. As the world grapples with issues of sustainability and best well, the Gawda and Dhanagar communities must find a balance between tradition and responsible practices.

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