

Assessment of the Traditional Goat Production Systems in Rural Areas of District Sant Kabir Nagar

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Abstract

Description of goat populations in rural areas of district Sant Kabir Nagar is necessary for providing information on common goat types and their characteristics and may be essential for the pointing and accomplishment of any intervention strategies willing to preserve and manage goat genetical resources at the rural districts based level. District Sant Kabir Nagar is a district in eastern Uttar Pradesh. The district is known by its present name on account of Sant Kabir, the well known Sant (poet) and philosopher, lived at Magahar in the district. Sant Kabir Nagar was created on September 5, 1997 from district Basti including 131 villages from tehsil Basti and 161 villages from Bansi tehsil of district Siddharth Nagar. The district lies among Gorakhpur in the east, Basti in the west, Siddharth Nagar in the north and Ambedkar Nagar in the south. According to the district statistical department of district covered an area of 1659.15 sq. km. According to census of 2011 the district has a population 1706706 person of which 865195 are males and 841511 are females of which 120054 persons, resided in urban areas and 1586652 in rural areas. Goats are among the main meat-producing animals in India, whose meat (chevon) is one of the choicest meats and has huge domestic demand. Due to its good economic prospects, goat rearing under intensive and semi-intensive system for commercial production has been gaining momentum for the past couple of years. High demand for goat and its products with potential of good economic returns have been deriving many progressive farmers, businessmen, professionals, ex-servicemen and educated youths to take up the goat enterprise on a commercial scale. The emerging favourable market conditions and easy accessibility to improved goat technologies are also catching the attention of entrepreneurs. A number of commercial goat farms have been established in different regions of the country.

Keywords: *district, rural, assessment, traditional, goat, sant kabir nagar, production, systems, India*

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INTRODUCTION

Goat farming involves the raising and breeding of domestic goats (*Capra aegagrus hircus*) as a branch of animal husbandry. People farm goats principally for their meat, milk, fibre and skins.

Goat farming in rural areas of district Sant Kabir Nagar can be very suited to production alongside other livestock (such as sheep and cattle) on low-quality grazing land. Goats efficiently convert sub-quality grazing matter that is less desirable for other livestock into quality lean meat. Furthermore, goats can be farmed with a relatively small area of pasture and with limited resources. As with other herbivores, the number of animals that a goat farmer can raise and sustain is dependent on the quality of the pasture. However, since goats will eat vegetation that most other domesticated livestock decline, they will subsist even on very poor land especially like in rural areas of district Sant Kabir Nagar. Therefore, goat herds remain an important asset in regions with sparse and low quality vegetation of Sant Kabir Nagar. Three-quarters of the population here eat goat meat. It comprises 5% of Uttar Pradesh meat consumption and 8% of red meat. Goat meat contains low amounts of saturated fatty acids and cholesterol. It is considered to be a healthier alternative to other types of red meat. The taste of goat kid meat has been reported as similar to that of spring lamb meat. In some localities in rural areas of district Sant Kabir Nagar the word "mutton" is used to describe both goat and lamb meat. However, some compare the taste of goat meat to veal or venison, depending on the age and condition of the goat.[1] The flavour is primarily linked to the presence of 4-methyloctanoic and 4-methylnonanoic acid. Goat meat can be prepared in a variety of ways in the culture of rural areas of district Sant Kabir Nagar, this includes many methods of stewing, baking, grilling, barbecuing, canning, and frying; it can be minced, curried, or made into sausage. Because of its low fat content, the meat can toughen at high temperatures if cooked without additional moisture. One of the most popular goats farmed for meat Boer, introduced in Uttar Pradesh in India during 1990s. Another one Kiko is also considered a meat breed, as is the myotonic or "fainting goat" commonly found in rural areas of district Sant Kabir Nagar.

Goats are magnificent creatures that have been raised in India since a long time. Goats are being raised commercially in almost every corner India. In addition, commercial goat farming is slowly becoming popular especially in Uttar Pradesh regions. As the population grows, so does the demand for food. Commercial goat farming has the potential to play an important role in meeting the rising food demand. Goat farming has numerous perks and disadvantages. The main advantage of goat farming is the high market demand in rural areas of district Sant Kabir Nagar and the availability of a wide variety of goat breeds. Goats are small animals.[2] As a result, they require less space like in rural areas of district Sant Kabir Nagar than certain other domestic animals. They have less housing needs like in rural areas of district Sant Kabir Nagar, thus a house with the bare minimum of amenities will suffice. Goats require less feed because they are smaller animals. In India, Uttar Pradesh regions, there are several goat varieties that can thrive on low-quality feed as well. Goats are versatile animals that are raised for a variety of reasons. Another advantage of goat farming business is its multipurpose usage. Its meat and milk for which goats are commonly farmed in various regions in India. The majority of goat breeds demand less attention and management especially in rural areas of district Sant Kabir Nagar, Uttar Pradesh. They are quite easy to look after, and even women and children may do so. Some goat breeds are popular for meat production, while others are suitable for milk production, and yet others are suitable for both meat and milk production.[3]

Selecting dual-purpose goat breeds is an excellent idea to produce both meat and milk. Dual-

purpose goat breeds include Beetal, Sirohi, Barbari, Marwari, Mehsana, Kutchi, Gohilwadi, and Zalawadi, all found in Uttar Pradesh maximum of them in rural areas of district Sant Kabir Nagar. In some places, exotic goat breeds (such as Boer and others) are also available. Meat and milk from goats are in high demand on the U.P. market. As a result, people don't have to bother about selling their goods. There are no religious restrictions on goat products, and they are widely consumed in India especially in U.P. (in rural areas of district Sant Kabir Nagar). Goats are extremely robust creatures that can adapt to practically any temperature. Goats have a quicker growth rate than other animals. They mature swiftly and multiply in the flock in a short amount of time. Goats reaches maturity in a short period of time. Commercial goat farming is a key source of employment for the locals in rural areas of district Sant Kabir Nagar in U.P. particularly for the educated unemployed.[4]

Goats produce about 2% of the total annual milk supply. Some goats are bred specifically for milk. Unprocessed goat milk has small, well-emulsified fat globules, which means the cream remains suspended in the milk instead of rising to the top, as in unprocessed cow milk; therefore, it does not need to be homogenized. Indeed, if goat milk is to be used to make cheese, homogenization is not recommended, as this changes the structure of the milk, affecting the culture's ability to coagulate the milk and the final quality and yield of cheese. Dairy goats in their peak milk production (generally around the third or fourth lactation cycle) average—2.7 to 3.6 kg (6 to 8 lb)—of milk production daily—roughly 2.8 to 3.8 l (3 to 4 U.S. qt)—during a ten-month lactation, producing more just after freshening and gradually dropping in production toward the end of their lactation. The milk generally averages 3.5% butterfat. Goat milk is commonly processed into cheese, butter, ice cream, yogurt, cajeta and other products. Goat cheese is known as fromage de chèvre ("goat cheese") in France. Some varieties include Rocamadour and Montrachet. Goat butter is white because goats produce milk with the yellow beta-carotene converted to a colourless form of vitamin A.[5]

Male goats are generally not required for the dairy-goat industry and are usually slaughtered for meat soon after birth. In U.P. the billy goats from the dairy industry are slaughtered each year. Most goats have soft insulating hairs near the skin and longer guard hairs on the surface. The desirable fibre for the textile industry is the former; it has several names including "down", "cashmere" and "pashmina". The guard hairs are of little value as they are too coarse, difficult to spin and difficult to dye. Goats are typically shorn twice a year, with an average yield of about 4.5 kg (10 lb).

In other parts of India, the cashmere is called "pashmina" (from Persian pashmina, "fine wool"). In the 18th and early 19th centuries, Kashmir (then called Cashmere by the British), had a thriving industry producing shawls from goat-hair imported from Tibet and Tartary through Ladakh. The cashmere goat produces a commercial quantity of cashmere wool, which is one of the most expensive natural fibres commercially produced; cashmere is very fine and soft. The cashmere goat fibre is harvested once a year, yielding around 260 g (9 oz) of down. Angora goats produce long, curling, lustrous locks of mohair. Their entire body is covered with mohair and there are no guard hairs. The locks constantly grow to 9 cm or more in length. Angora crossbreeds, such as the pygora and the nigora, have been selected to produce mohair and/or cashgora on a smaller, easier-to-manage animal.[6]

However, the skin of goats is a valuable by product of goat farming in rural areas of district Sant Kabir Nagar of Uttar Pradesh in India. Historically, up until 1849 all Rolls of Parliament were written upon parchment usually made from goat skin. Another popular use in India is for drum

skins. Parchment is prepared by liming (in a solution of quick lime) to loosen the hair follicles. After several days in this bath, the hair can then be scraped off and the under surface of the skin scraped clean. After that the finished skins are sewn into a wooden frame to dry and shrink.

Parchment is still available today, but skins can carry a small risk of harboring anthrax unless properly treated.

The majority of goat farmers in rural areas of district Sant Kabir Nagar , U.P. raise their animals in the conventional way. And the majority of the farmers keep their goats under strict supervision. They are oblivious to the past system. There is also a lack of expertise regarding how to efficiently run a goat farming business. There are numerous agriculture extension offices, universities, and research institutes to choose from. However, the majority of individuals do not take use of government programs. The majority of goat farmers in rural areas of district Sant Kabir Nagar, especially those who are just starting out, make mistakes when it comes to selecting the correct breed for their business. As a result, they do not produce well. Then they go out of business. After making the decision, some beginners immediately begin raising goats. This is not a good idea, and newcomers with little experience with goat rearing in rural areas of district Sant Kabir Nagar face high costs and fatality rates. And they usually make less money or even lose money. There is a lack of adequate veterinary care in the rural areas of district Sant Kabir Nagar. This is also one of the major drawbacks of goat rearing. In some cases, a good market is not always available in rural areas of district Sant Kabir Nagar. As a result, producers confront difficulties in marketing their goods. This is not a smart way to manage a prosperous goat farming operation. These are the most typical drawbacks of goat rearing also in rural areas of district Sant Kabir Nagar. [7]

Discussion

Commercial goat farming nowadays in rural areas of district Sant Kabir Nagar is becoming very popular day by day. As goat farming is a proven highly profitable business idea so, the popularity of this business is increasing rapidly in U.P. especially in rural areas of district Sant Kabir Nagar. It is also one of the finest and established livestock management department. Goat farming business is one of the traditional occupations of many people in rural areas of district Sant Kabir Nagar. It is also the only economic activity of these people in rural areas of district Sant Kabir Nagar. Like poultry farming, goat farming business is also very profitable and can employ a large number of unemployed educated people, which will help to eradicate unemployment problem from the country as a whole. Wish a happy goat farming business in India especially in U.P. rural areas of district Sant Kabir Nagar. Goat farming here is a well-established, antiquated form of farming especially in places where dry land farming system is practiced. It is generally practiced by farmers who have a very small area of land for farming. Sometimes landless laborers also undertake goat farming since the risk, initial investments etc. are much lower than other forms of farming. Goats are hence rightly called as “poor man’s cow” since it has promises of good return that can serve as investment source especially rural areas of district Sant Kabir Nagar in Uttar Pradesh.[8]

India occupies first position in terms of goat population and milk production. Chevon (goat meat) is most preferred and widely consumed meat in the country especially in rural areas of district Sant Kabir Nagar. Since ancient times goat milk has traditionally been known for its medicinal properties and has recently gained importance in human health due to its proximity to human milk for easy digestibility and it’s all round health promoting traits. Still research is

needed to explore and validate medicinal properties of goat milk for projecting it as therapeutic milk for human health. Demand for goat milk and milk products for internal consumption and export is expected to rise in coming years from rural areas of district Sant Kabir Nagar, U.P. Goat husbandry provides glimpses of future hope for employment generation, nutritional security and prosperity to the millions of small and marginal farmers in rural areas of district Sant Kabir Nagar, Uttar Pradesh. Among all species of farm animals, Goats have the widest ecological range and have been poor people's most reliable livelihood resource since their domestication during Neolithic Revolution about 10 millennia ago. Goat plays a significant role in providing supplementary income and livelihood to millions of resource poor farmers and landless laborers of rural India especially in rural areas of district Sant Kabir Nagar. Small ruminant rearing ensures self-employment and acts as a cushion in distress situations like drought and famine in rural areas of district Sant Kabir Nagar, U.P.[9]

In last few years, goat production in U.P. has gained momentum in the form of a commercially viable enterprise as evidenced by increasing interest of young entrepreneurs to develop knowledge and skill in this species. In many small-herd dairy goat enterprises, not all does must be milked, so meat is often the main product. Along with meat, the sale of breeding stock from small herds of dairy goats may be an important income source especially in rural areas of district Sant Kabir Nagar. This versatility allows the producer to plan and operate a more stable economic production unit. In some parts of the world, all breeds may be raised for fiber, meat, and milk and cheese production. Kids of all breeds can be used for meat basically in rural areas of district Sant Kabir Nagar. However, meat goat carcasses are generally leaner and more muscular than dairy goat carcasses. India ranks on top in goat population. The demand for meat, milk and fiber is increasing progressively and expected to further rise in future in view of sizable increase in per capita income and health consciousness of people. The consumers are preferring products that are "clean, green and ethical". As such goat producers are shifting to husbandry practices that do not compromise the welfare of animals in rural areas of district Sant Kabir Nagar, Uttar Pradesh. Medicinal properties of goat milk increased the interest of society to use it as therapeutic health food nutraceutical; moreover, biotechnologists are focusing on designer milk for human health in different scientific fields and institutes of Uttar Pradesh.

Goats possess distinct social, economical and biological advantages. They can be maintained on a limited area and can sustain on wide variety of vegetation in varied agro-climatic conditions. Goat meat (chevon) is one of most preferred meat type by the consumers in rural areas of district Sant Kabir Nagar, U.P.. The goat milk is easily digestible due to smaller size of fat globules and serves as a ready source of family nutrition. In U.P., both demand and production of goat meat have shown steady increase during the last decade and despite the rising production trend, the state would need to double the number of goats to meet the projected requirement of goat meat for growing human population in the coming decades. Traditionally goat has served as source of livelihood and financial security to large section of society, mainly comprising of resource-poor people especially in rural areas of district Sant Kabir Nagar. In the present scenario of changing agro-climatic conditions, this small ruminant farm animal has tremendous potential to be projected as the „Future Animal“ for rural and urban prosperity. The backyard goat rearing is steadily turning as the fast growing „livestock industry“ in the state of Uttar Pradesh. Goat husbandry in U.P. is essentially an endeavor of millions of small holders who rear animals on “Crop Residues” and “Common Property Resources”. [10]The small holders produce milk, meat, fiber, skin etc for the community with virtually no capital, resource and formal training. More often goats are reared for production of meat, but they also serve as ready source for milk to

meet the family requirement. In U.P., goats are reared by men and women with diverse working and professional background. The production systems are as numerous as the socioeconomic and varied agricultural situations in the country. However, they can be broadly classified into the following:-

1. **Tethering:** This is common where probably because of intensive cropping, it is a convenient means of rearing goats from the stand point of control, minimum labour input and utilization of feed in situ. It is thus a sedentary system. A variation of this method is combining tethering with grazing up to 5 goats at a time, led by ropes held by women and children. It is also seen in rural areas of district Sant Kabir Nagar, U.P.
2. **Extensive production :** This involves low carrying capacity in situations where land is marginal and is plentiful. It is characterized by low rainfall and various browse plants. The system is used by nomadic people, usually in very low rainfall areas or during winter months when crop residues are available.
3. **Intensive production:** The goats are fed in confinement with limited access to land. It involves high labour and cash inputs. Cultivated grasses and agroindustrial byproducts are fed in situ. This system also has the advantage of allowing control over the animals.
4. **Semi-intensive production:** This system is practiced to some degree in most of the situations, but the nature and extent of integration depend on the type of crops grown and their suitability to goats. The advantages of this system are increased fertility of land via the return of dung and urine, control of waste herbage growth, reduced fertilizer usage, easier crop management, increased crop yields, and greater economic returns.[11]

Results

There are some benefits of domestic or commercial goat farming in rural areas of district Sant Kabir Nagar, Uttar Pradesh. To start goat farming business reading of the benefits of raising goats.

§ Goats are multi purpose animal which can produce milk, meat, fiber, skin together.

§ Compared to cow and other livestock farming, goat farming requires less space and additional facilities. They have a less demand of housing and other management. In small scale production they are also able to share their homes with their owners and his/her other livestock.

§ Production costs like infrastructure, feeding and treatment are less.

§ No requirement to think about marketing farm products. Because there are already an established market in the country for marketing the products.

§ It is really very easy to maintain a goat farm compared to other farm animals.

§ Goats can adopt themselves with almost all types of agro-climatic conditions. And diseases are less in goats.

§ They are smaller in size but reach slaughter age faster.

§ Goat products like meat and milk has no religious taboo. And highly accepted for consumption throughout India, especially in rural areas of district Sant Kabir Nagar, Uttar Pradesh

Almost all sections of the society in rural areas of district Sant Kabir Nagar, Uttar Pradesh consume goat meat and there is no religious taboo over it all over India. In addition goat meat is

lean meat and has lower cholesterol content. · The initial investment required for a goat farm is much low than dairy farming. · It is not necessary to start a farm with herd of 6-10 goats if started in specific rural areas of district Sant Kabir Nagar, Uttar Pradesh. A farm can be started with just one goat in rural areas of district Sant Kabir Nagar, Uttar Pradesh and gradually increased to a herd or develop into large commercial units in whole of Uttar Pradesh. · Goats can tolerate bitter taste to a greater extent than other animals. Hence, they consume almost every type of plants that are not eaten by other animals. · Since they are careful eaters they can live in almost all types of climatic conditions. · Goat milk contains small fat globules that are easily digestible. Hence goat milk is medically recommended for senior citizens and infants. · Goat droppings are rich in phosphorus, nitrogen and potassium. Hence it is excellent organic manure. Goat manure has high demand in organic farming. · Generally, goats start milking by the age of 16-17 months. · They are productive breeders and give birth to three kids within two years and producing twins is a usual feature as seen in rural areas of district Sant Kabir Nagar, Uttar Pradesh and other areas in India. Considering all the above advantages, it can be said that goats ensure good economic returns in a short period of time.

Starting a Goat Farm in rural areas of district Sant Kabir Nagar, Uttar Pradesh

While beginning a goat farm, the following points must be paid special attention:

Selecting the Goats-

Goats must be healthy and lively. However before procuring it is better to check with the local government about regulations. While procuring it is advisable to get two goats. Goats are social animals and need company. They would try to escape if kept in solitary confinement. Hence at least two goats must be kept in enclosures.[12]

Male: Female Ratio

Goats are of three types: · Females or does · Uncastrated males or bucks · Castrated males or wethers. For milk production, it is not necessary that the does must be impregnated by bucks. Ideally one buck to every 30 does is a healthy ratio for goat farms usually maintained in rural areas of district Sant Kabir Nagar, Uttar Pradesh

Age of Goats

Younger goats around eight weeks old are cheaper and friendlier to procure than older goats. However, these younger goats need care for about a year or two. Following this period they can be bred, sold as meat or used for milk production especially in rural areas of district Sant Kabir Nagar, Uttar Pradesh

Choosing the Right Breed

Select Breeds

There are numerous goat breeds available in India. But all goats are not suitable for commercial production. Some goat breeds are highly productive and very suitable for commercial farming in India and especially in rural areas of district Sant Kabir Nagar, Uttar Pradesh

- Jamunapari Goat: Jamunapari goat is a native goat breed of India. It is a highly milk and meat productive goat. But they are raised mainly for their highly milk production capacity. A female goat can produce about 2-3 litter milk daily. An adult male weights about 65-90 kg

and female goat weights about 40-60 kg. It can be bred in rural areas of district Sant Kabir Nagar, Uttar Pradesh

- **Boer Goat:** Boer goat is a South African goat breed but suitable for farming in India. They are meat productive goat breed. And adult Boer goat weights about 110-115 kg and a female goat weights about 90-100 kg and can be bred in rural areas of district Sant Kabir Nagar, Uttar Pradesh
- **Black Bengal Goat:** Black Bengal goat is a Bangladeshi goat breed. This goat breed is considered as an important small livestock in Bangladesh. They are very suitable for meat, milk, skin and fiber production. This goat breed can adopt themselves with almost all types of climate easily. Their meat and milk are very tasty and has a great demand. They are brought in rural areas of district Sant Kabir Nagar, Uttar Pradesh and reared to increase population.
- **Beetal Goat:** Beetal goat is a native Indian goat breed. They are highly milk productive goat breed. Also suitable for highly meat production. They are able to produce about 2.5-4 liter milk daily. An adult male goat weights about 65 kg and female about 45 kg. They have high use for milk production in rural areas of district Sant Kabir Nagar, Uttar Pradesh [13]
- **Saanen Goat:** Saanen goat is a dairy goat breed of Switzerland. But suitable for commercial milk production in India. They can produce milk highly like Jamunapari and Alpine goat. They are able to produce about 3.8 liters milk daily. An adult male Saanen goat weights around 70-90 kg and female around 60-70 kg. Goats belonging to breeds like Malabari, Black Bengal, Jamunapuri, Osmanabadi, etc. give very rich milk and good meat. Hence they are reared for both milk and meat purposes. Breeds like Cashmere or Angora are raised for their hair since it is very popular for its use as a fabric. They have been transported in rural areas of district Sant Kabir Nagar, Uttar Pradesh and bred further.

Conclusions

A house is maintained especially by methodical process in rural areas of district Sant Kabir Nagar, Uttar Pradesh. Primary objective of a house is to protect the animal from sun, wind and rain. The house must be built at an elevation so that it does not suffer from problems of water logging. Locally available materials like elephant grass, paddy straw, bamboo, wood, etc. are used for construction of houses. No elaborate housing arrangements are needed for small units. The goat sheds must have a good amount of ventilation. The slope must be arranged such that water can drain away easily and it should be easy to clean the place. In case of group housing a space of 1.8 sq.mt. per doe must be provided while a floor space of 2.4 sq. mt. must be provided for the bucks. An area of 1.8 X 1.8 sq. mt. is sufficient for 10 kids. However, overstocking must be avoided as it results in cramped up spaces and suffocation. Sick animals must be quarantined immediately since diseases spread very easily among goats. Goats can grow well and produce maximum by feeding well balanced and nutritious food in rural areas of district Sant Kabir Nagar, Uttar Pradesh. Various rules are followed:-

Always ensure availability of all types of necessary ingredients in their food. Most successful modern goat farmer feed their goats 12% to 18% protein containing feeds. Add all types of necessary vitamins, minerals and other necessary ingredients in proper ratio. Ensure sufficient supply of green grasses or other green foods. Never try to feed them contaminated or expired foods. Making a pasture or grazing place will be effective for higher production. Ensure sufficient amount of clean and fresh water available according to the daily demands of goat

along with providing good foods. Goats are meticulous eaters and can tolerate more amount of bitterness than other animals. Hence, they can thrive on the agricultural by-products, waste and other such feed. In addition they are stronger and hence can withstand all types of weather conditions. [12] Their tongues are adapted for grazing and their upper lip is mobile. Hence they can graze on extremely short grasses, bushes, shrubs and trees. The goats must be provided with leguminous fodder in addition to grains like pulses, wheat, maize, etc. They generally prefer fodder of leguminous crops than straw or maize silage. In addition they need feed composed at least 14-15% protein along with high mineral composition like iodized salt, bone meal, zinc oxide, ferrous carbonate, high grade limestone, copper sulphate and vitamins. The growers are given 100 gm per day of concentrate mixture while adult does and bucks are given concentrate ration of 200-250 grams per day. On an average, each goat consumes 5-7 Kg of green fodder and a liter of water per day. Statistically speaking an acre of fodder is sufficient to feed 35 goats. The business has spread in Sant Kabir Nagar and surrounding areas in U.P. Goats entrepreneurs nowadays in Sant Kabir Nagar, U.P. follow specific rules and regulations:-

Caring for Goat's Kid

The new born kid must be fed with colostrum immediately after birth and for upto 5 days thereon. This would help the goat develop better immunity. After the initial five days, the amount of doe's milk provided to the kid must be 1/10th of the kid's body weight.[13]

Pregnant Doe

Pregnant does must be given a concentrated mixture of 250-300 grams a day. The amount must be reduced gradually from a week before parturition and the amount of fodder must be increased. This facilitates easy delivery.

Breeding Management

Selecting the right buck and doe is the secret to successful breeding. Goat doe attain maturity between 6-10 months of age. However this also depends on size, body weight and breed. Goat bucks attain maturity after 12 months. It is ideal to have two kidding annually with an interval of 8-9 months for optimal production. The peak breeding season for goats is during the months of March to May and September to November. The estrous cycle generally occurs every 17-21 days. The heat period lasts for 18-36 hours in a doe. Usually a teaser buck is used to detect the onset of heat in a doe. For increasing the conception rate the doe must meet the buck only after 10-15 hours of the onset of heat. The gestation period lasts for 155 days. While the females can be used for breeding purposes for 5-7 years, males can be used for as long as 8-10 years.

Choosing the Breeding Stock

Ideal breeding stock would be the ones that are at prime stage of production or are ready to breed. They must be in good health and have a good vigour. Pedigrees are ascertained at the time of purchase. Once purchased, the animals are vaccinated against diseases, especially infectious diseases. The newly purchased stock is kept under observation for 15 days to check for animal behavior, diseases and also to give time to the animals for settling down. They are culled from the breeding stock after attaining 6 years of age and they are replaced with a new stock. Male and female ratio must be maintained at optimum level in the farm. The male bucks must be replaced every 2-3 years to avoid in-breeding. This helps maintain the best performance production.[11]

Kid Management

The mucus from the nose and mouth of the newborn kid must be cleaned immediately after its birth. The does must be allowed to lick them so as to develop a mother-kid bond and also for easy identification by the mother in future. The naval cord must be cut 2.5 cm away from the body of the kid. Tincture iodine or other such antibiotic must be applied to prevent infection and naval illness. The udders of the doe must be cleaned and disinfected with antiseptic lotion after delivery. Immediately after birth and for the next 5 days the kid must be given colostrum. However over feeding must be avoided. If more than 2 kids are born then provisions must be made for extra goats. They can be bottle fed formula milk for as long as 2 months. During winter, the kids must be provided with sawdust, straw or gunny bags as bedding materials to protect them from frost. Energy drinks like glucose must be given to the kids during summer to avoid heat stroke.

Male kids are generally reared for better meat quality. They are not generally wanted in the breeding flock. Hence they are castrated between the age of 1-2 months.

Veterinary Service

Availability of veterinary service is a must for setting up commercial goat farming business in rural areas of district Sant Kabir Nagar, Uttar Pradesh. So, ensure proper veterinary service for goats. Stock all types of necessary vaccines and medicines in your farm. This will help if something goes wrong and maximizing productions from commercial goat farming in India. The sheds must be washed thoroughly and disinfected at least once a month. The food and water managers must be cleaned regularly. Goats are prone to endoparasite infection. Hence deworming must be done once in every six months. Kids are dewormed every month while does are dewormed just before breeding. In order to avoid lice, ticks, mites, etc. the animals must be sprayed with ectoparasitic drugs like acaricides regularly. Vaccinations against diseases like goat pox, plague, FMD, etc. must be done periodically. Zoonotic diseases like salmonellosis, brucellosis etc. must be prevented since they are infectious and spread easily. Stray animals must not be allowed to enter the farm to keep infections in check. Sick goats must be isolated as soon as the infection is detected and timely medication must be administered.[10]

To conclude the following points must be remembered while raising a goat farm in rural areas of district Sant Kabir Nagar, Uttar Pradesh:

Choose breeds that are local to the geographical location and best suited to the weather conditions of the place. · Animals must be procured from certified and licensed centers. · The stock must be such that about 15-20% breeder does can be added every year. · The stock must be flexible so that the older animals and poorly performing animals can be replaced without many hassles. · Keeping a headcount of more than 150 goats becomes difficult for management. Hence the count must be kept below 150. · Flocks must be allowed to graze early in the morning and in late evenings during summer. · Grazing must be done near a source of water so that the goats get enough water to drink. · During the period of pregnancy, growth, lactation and other such crucial stages, the goat must be provided fresh pastures. · The new born kid must be provided with sufficient amount of dry grass and straw for bedding purposes. · Cleaning of newborn's nose and mouth immediately after birth must be conducted properly. The colostrum must be fed within the first half hour of birth. · After the first five days, the kids must be gradually separated from the mother and allowed to suckle once in every six hours. This can be continued for the next one week or so and gradually reduced before totally weaning away. · Animals of different age groups

must be kept in the right flock for their proper care and management. · During monsoon, goats are likely to develop foot rot. Hence they must be passed through copper sulphate solution. Once upon a time, goat farming was considered to be a lowly and neglected occupation. However, realizing the benefits of goat milk, meat and other by-products, it is considered as a respected occupation. There are several low investment enterprises among which goat farming tops the list. Goat farming is especially a good business to start with for the unemployed youth whose number is simply increasing by the day.[9]

GOAT MEAT A Healthy Choice

Goat meat is a good alternative to traditional meats. It is leaner nutritious meat and has been a staple red meat in the diet of many cultures in rural areas of district Sant Kabir Nagar, Uttar Pradesh. Goats have been a source of meat since the beginning of civilization. Goats are raised in U.P. without hormones for their meat and milk. Goat meat is a healthier alternative to other red meats like beef, lamb, and pork. It is naturally lean, very nutritious and has a range of health benefits. The meat has less fat, less saturated fat, more iron, and about the same amount of protein compared to beef, pork, lamb, or chicken. While, the fat and cholesterol content in lean red meat is comparable to poultry and fish, red meat has acquired a negative reputation. Whether this is warranted, needs to be explored. Meat contains about 20-23 per cent protein and varying amounts of fat (5-30 per cent). However, the nature of fat differs. Red meat fat is more saturated than poultry fat, while the fat in fish is primarily unsaturated in the form of fish oil. Meat is an excellent source of B-complex vitamins, vitamin B12, niacin, zinc and bio-available heme iron — a form of iron which is far more readily absorbed compared to iron found in plant foods.

For women and teenage girls who suffer from anaemia, lean red meat may be an important source of iron. Meat protein is high quality i.e. it provides all the essential amino acids that cannot be made by the body. Meat is also a source of conjugated linoleic acid (CLA), a group of fatty acids that are found in milk and milk products and ruminant animals. CLAs have been found to be useful in reducing cholesterol and body fat, and in addition, may possess potentially anti-carcinogenic properties. Despite its impressive nutritional benefits, meat eating has been associated with heart disease, diabetes and cancer. Substantial evidence from recent studies showed that lean red meat trimmed of visible fat does not raise blood cholesterol and LDL (bad) cholesterol levels. Infact, it is low in saturated fat, and if consumed as a part of a healthy diet, is associated with reductions in LDL (bad) cholesterol in individuals with high and normal cholesterol levels. Scientific evidence increasingly suggests that lean red meat is a healthy and beneficial component of any well balanced diet as long as it is fat trimmed and consumed as a part of a varied diet. As is well known — ‘the dose makes the poison’. People who experience increased risk of colon cancer are those who consume more than 250 gm of red meat everyday.

The quality of meat and its processing also counts. Scientific evidence reveals that processed meat such as sausages, bacon and salami increase risk of bowel cancer more than red meat. They are not only high on fats but also contain potentially carcinogenic (cancer causing) components such as nitrites. It is recommended that cured or processed meats be eaten as a condiment or flavouring with foods rather than as a main dish. Organ meats such as liver and kidney are relatively low in fat but high on cholesterol, and should not be eaten more than once a month. Among red meats, lamb stands out for its high nutritional value. Lamb is obtained from young animals less than 14 months of age. Sheep/goat beyond two years of age is sold as mutton. It is darker in colour, stronger in flavour and less tender. Meats from shoulder, shank and neck are leaner compared to the breast. Since much of its fat is on the outside of the meat, it can be

trimmed before cooking. An increasing number of experts, however, are saying that goat meat has a number of nutritional benefits. Low in calories, total fat, saturated fat and cholesterol than traditional meats, goat meat has higher levels of iron when compared to a similar serving size of beef, pork, lamb and chicken. Comparatively, goat meat also contains higher potassium content with lower sodium levels. Offering more nutritional value and greater health benefits, goat meat has a number of health benefits, which include. When it comes to fat, goat meat is leaner than other meats. It also has far lesser calories, which means it is ideal for those trying to stick to a diet.[8]

While red meat is known to be high with saturated fat that increases cholesterol levels and leads to heart disease, goat meat is said to have very low levels of saturated fat and will pose no harm to your heart health. The low levels of saturated fat in goat meat is said to improve blood cholesterol levels and ease inflammation. With cholesterol levels shooting through the roof in most households, it is important to watch your diet. Goat meat comprises very little cholesterol and hence, can be consumed regularly. Goat meat also contains higher levels of iron than chicken. Iron is an important nutrient especially for women — a lack of iron reserves is known to cause anaemia. The meat is also packed with proteins — another important nutrient the body needs on a daily basis. Goat meat comprises Vitamin B, which is known to help one effectively burn fat. So, a little portion of the meat is good for those wanting to lose some weight. It is packed with Vitamin B12, which is known to help you get healthy skin.

Indigenous knowledge systems are time immemorial and are passed from generation to generation by word of mouth, and learnings from elderly farmers in the society in rural areas of district Sant Kabir Nagar, Uttar Pradesh. Indigenous knowledge systems have the potential of “the more you explore, the more information you get”. Hence more exploration by the extension scientists associated with livestock development on indigenous animal husbandry practices and beliefs is certainly warranted, as observed in rural areas of district Sant Kabir Nagar, Uttar Pradesh.[13]

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