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Abstract

Buffalo is playing a critical role in the national economy by creating milk, meat and draft power. Out of all out milk delivered in the Pakistan in 2020, buffalo contributed approximately 68 %, trailed by steers (27%) and sheep/goat/camel (5%). Because of high fat substance of bison milk, it is the most favored species in Pakistan. In any case, there are sure issues identified with this species, for example, late period of development, long calving stretch and quiet warmth. In Pakistan, Pure Buffalo milk is sold by the local dairy farmers in the form of loose milk only. This study discussed the importance and benefits of buffalo milk in comparison of cow's milk and the real opportunities for the new entrepreneurs and startups who want to setup their own business in Pakistan. Pakistan's yearly milk creation in 2015-16 was around 54 million tones, making it one of the world's significant milk makers. Buffaloes and cows are the significant milk delivering creatures, with 62% milk delivered by buffaloes and 34% by dairy animals. In the course of recent years, milk creation in Pakistan has ascended by 36 %. Farmers are not well equipped to avail benefits. India and Pakistan produce about 80% of all buffalo milk worldwide, followed by china, Egypt, and Nepal, where you find more dairy buffaloes than cows (Ariane Lang, 2020). Buffalo is viewed as the dairy creature for 21 century because of its higher flexibility and efficiency in the changing climatic conditions. There is a huge assorted variety in the Buffalo hereditary assets and south Asia is the home of profoundly yielding source promising bison type of Murrah and Nail Ravi. The analysis has shown that milk produced by buffaloes is the best, as it carries 60% less cholesterol compared to cow milk. There is a strong reason why large companies only sell cow milk in packaged form even there is a huge demand for buffalo milk. The study concludes that Buffalo milk has a higher fat, protein, lactose, vitamin, and mineral content than cow's milk. It's also whiter and has a thicker consistency, which makes it perfect for the production of fat-based dairy products. Moreover, Cow milk differs from buffalo milk in richness and composition. Buffalo milk has lower cholesterol but more calories and fat compared with cow's milk.

Keywords: *Buffalo milk, Cow milk, Cholesterol, Packaging, Marketing*

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1.0 Background to the Study

This study discussed the importance and benefits of buffalo milk in comparison of cow's milk and the real opportunities for the new entrepreneurs and startups who want to setup their own business in Pakistan. Pakistan's yearly milk creation in 2015-16 was around 54 million tones, making it one of the world's significant milk makers. Buffaloes and cows are the significant milk delivering creatures, with 62% milk delivered by buffaloes and 34% by dairy animals (Sana, Qadir, Mumtaz, Evans & Ahmad, 2021). In the course of recent years, milk creation in Pakistan has ascended by 36 % (Pakistan monetary study 2015-16). Farmers are not well equipped to avail benefits. India and Pakistan produce about 80% of all buffalo milk worldwide, followed by china, Egypt, and Nepal, where you find more dairy buffaloes than cows (Ariane Lang, 2020). Buffalo is viewed as the dairy creature for 21 century because of its higher flexibility and efficiency in the changing climatic conditions. There is a huge assorted variety in the Buffalo hereditary assets and south Asia is the home of profoundly yielding source promising bison type of Murrah and Nail Ravi (Waqas, Pervaiz, Zia, & Iqbal, 2021).

Buffalo is assuming a main job in the national economy by creating milk, meat and draft power (Vargas-Ramella, et al., 2021). Out of all out milk delivered in the nation, buffalo contributes around 68 %, trailed by steers (27%) and sheep/goat/camel (5%). Because of high fat substance of bison milk, it is the most favored species in Pakistan. In any case, there are sure issues identified with this species, for example, late period of development, long calving stretch and quiet warmth. These issues can be explained through effective administration. At present, there are 26.3 million wild oxen in Pakistan, having a decent creation potential. In Pakistan, buffalo not just satisfy the protein necessities of the human populace by milk and meat, but on the other hand are have an extraordinary offer in giving the footing capacity to different rural purposes (Tariq, 2022). Almost certainly, we have the best varieties (Nili Ravi and Kundi) at world level yet they are not delivering as per their latent capacity, for the most part because of miss-the executives. In different pieces of the world the greater part of the wild ox populace is swamp type. They are for the most part utilized for draft purposes. Regardless of these issues, there is opportunity to get better. Because of their adaptable characteristics they are properly called as Black Gold of Pakistan (Saeed, Kamran, Qasim, Naheed & Mahmood, 2022).

According to Ullah, Brummer and Ahmed (2021), in Pakistan, Pure Buffalo milk is sold by the local dairy farmers in the form of loose milk only. There are no such companies which offer packaged buffalo milk. Milk supplied in the market in not hygienic. Since, there is a huge demand for the milk; people are even willing to buy the milk from local dairy farmers. Due to centuries old history and taste there is a large market share for the buffalo milk in the entire country. It contains higher all out solids than cow milk, which makes it thicker. Buffalo milk has 100% a larger number of fats content than dairy animals' milk, which makes it creamier and thick (Rehman et al., 2022). Out of the all out milk delivered, 97% is in the casual segment like free milk which is additionally sold in both country and urban territories. In actuality, 3% of the absolute milk created is cooked by bundled milk organizations like Nestle, Milk pack and Olpers by Engro Foods.

Milk produced by buffaloes is the best, as it carries 60% less cholesterol compared to cow milk (Basharat Japal, 2014). There is a strong reason why large companies only sell cow milk in packaged form even there is a huge demand for buffalo milk. "Usually, the farm owners prefer cows over buffalo as the former produces more milk" (Basharat Japal, 2014). In 2016, Punjab Food Authority guaranteed that profoundly respected tetra pack organizations including Haleeb, Olpers

were destructive for human consumption. The most troubling part is that during UHT process, the dietary benefit of milk is lost. Valid, the microbes' are executed, yet we have to understand that only one out of every odd sort of microorganisms' are murdered, yet we have to understand that few out of every odd sort of microscopic organisms is awful for us. The UHT procedure executes the great ones as well. We took a small-scale brand called "The Pure Buffalo Milk" with a slogan of "Pure is life" operating in the area of Islamabad. They came up with a alternative solution to the tetra pack milk. It uses pasteurization procedure to evacuate the destructive microbes. The warming procedure is called High-Temperature short time. The dietary benefit and fundamental catalysts do get influenced however it is viewed as a superior alternative than tetra pack milk.

Pure buffalo milk utilizes Pasteurization procedure to evacuate the hurtful microscopic organisms (Brar, Mehta, Singh, Sivakumar & Phand, 2021). Milk is additionally warmed however the temperature utilized is extensively lower than UHT temperature. The purification milk is warmed to 72 degree Celsius for 15 seconds and UHT milk is warmed to 141 Celsius for 4 seconds. The warming procedure is called High-Temperature Short Time (HTST).The dietary benefit and fundamental proteins do get affected however it is viewed as a superior alternative than the Tetra pack milk. Additionally the purified milk has no additional stabilizers or supplements, for example, soya milk. Sanitized milk must be put away under refrigeration and has a generally short timeframe of realistic usability. Conversely, UP or UHT milk (warmed to 125–138 °C for 2–4 s can be amassed as long as 3 months under refrigeration and milk exposed to ultra-high temperature (UHT) treatment (warmed to 135–140 °C for a couple of moments can be put away for 3–6 months at surrounding temperatures (Sen, 2021). HTST is the most well-known purification procedure in the dairy business. HTST represents High Temperature, Short Time. It is otherwise called streak purification. It is a technique for sanitizing short-lived refreshments like foods grown from the ground juices, lager, fit and wine.

Sanitization makes the item alright for utilization and stretches out the time span of usability contrasted with unpasteurized items. It expels decay microorganisms. This was first presented in 1993 and watched 99.99% decrease of unsafe microorganisms. This is a quicker and vitality effective strategy, and it keeps up the shading and kind of most items. A few organizations use UHT Pasteurization process. It is likewise know as Ultra-High-Temperature (UHT) Pasteurization. This regularly includes warming milk or cream to 140 C (284 F) for 4 seconds. The milk is bundled in sterile hermetically-fixed compartments. Hence, it very well may be stockpiled as long as 90 days without refrigerating conditions. UHT is generally utilized in Milk Pasteurization however it tends to be utilized for organic product juices, cream, soy milk, yogurt, wine, soups, nectar, and stews. UHT milk was first utilized in 1960.

APRIL 24, 2019

MILK: 7 IN 10 PAKISTANIS (71%) CLAIM THAT BUFFALO'S MILK IS USED IN THEIR HOUSEHOLD.

What type of milk is used in your household?



SOURCE: GALLUP & GILANI SURVEYS - SAMPLE SIZE: 1178
Nationally Representative Sample covering both rural and urban respondents across Pakistan's four provinces.



Milk: 7 in 10 Pakistanis (71%) claim that buffalo's milk is used in their household. (GALLUP & GILANI PAKISTAN POLL)

As per a Gilani Research Foundation Survey did by Gallup and Gilani Pakistan, 7 of every 10 Pakistanis (71%) guarantee that buffalo milk is utilized in their family. A broadly delegate test of people from over the four regions was inquired, "What type of milk is used in your household?" In response, 71% said that buffalo's milk is utilized in their family, 18% said cow's milk, 5% said goat's milk, 4% said packaged milk and 1% said camel's milk. 1% said that they did not know or wish to respond.

Pakistan is the fourth biggest milk delivering nation on the planet. Roughly 80% milk is created at little scope in provincial areas, 15% peri-urban and 5% in the urban regions. Normal yearly milk creation during 1960s and 1970s was 6.6 million tons in 2018-19, a quadrupling in three decades. Milk structure has likewise changed between 1985 with a minimal increment in dairy animals milk and decrease in bison milk (67% buffalo, 31% bovine and 2% goat, sheep and camel in 1985-86, to 60% buffalo, 36% cow and 4% goat, sheep and camel in 2018-19. About 97% milk is promoted in crude structure and rest is prepared (UHT), with 15 to 20% wastage in certain regions.

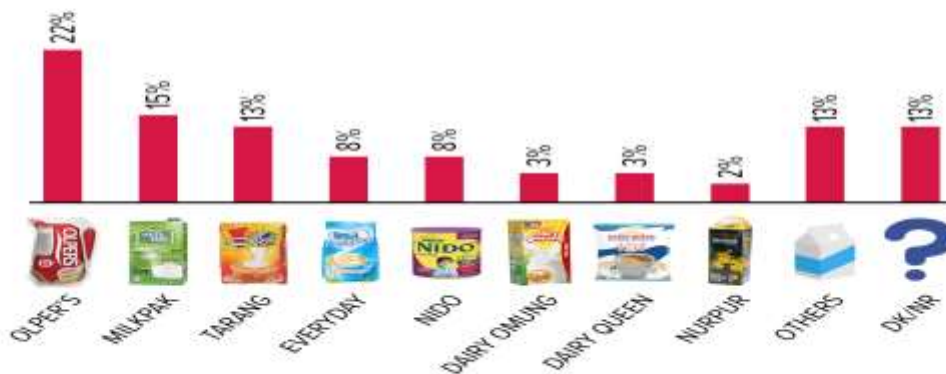
Out of the all out milk delivered, 97% is in the casual segment like free milk which is additionally sold in both rustic and urban regions. Unexpectedly, 3% of the absolute milk created is cooked by bundled milk organizations like Nestle, Milk pack and Olpers by Engro foods. Pure Buffalo Milk isn't confronting huge danger from enormous organizations.

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APRIL 26, 2019

MILK CONSUMPTION: 22% PACKAGED MILK CONSUMERS IN PAKISTAN CLAIM TO USE OLPER'S MILK.

Please tell us the name of the packaged milk that you use.



SOURCE: GALLUP & GILANI SURVEYS - SAMPLE SIZE: 1178
 Nationally Representative Sample covering both rural and urban respondents across Pakistan's four provinces.



2.1 Theretical Framework

Porter's five strengths are a business analysis model that helps explain why different industries are able to maintain different levels of profitability. The model was published in Michael E. Porter's book, "Competitive Strategy: Techniques for Analyzing Industries and Competitors" in 1980. The Five Forces model is commonly used to assess the manufacturing structure of a business and its organizational strategy. Porter has demonstrated that these forces are part of every industry and market. They influenced the strength of competition and decided the profitability of any industry. The five forces are also used to calculate the level of competition, attractiveness and profitability of an industry. The first of the five forces relates to the number and ability of competitors to undermine a business. The more competitors there are, the more the equivalent products and services they offer, the less the strength of a business. Suppliers and consumers want competition from a supplier because they can deliver a better product or lower prices.

The competitors of pure buffalo milk are the seller of milk in packaging and the seller of milk in loss. The strength of a business is also affected by the strength of new entrants to its market. The less time and money it takes a competitor to enter a business and become an effective competitor, the more significantly the position of an established business could be weakened. An industry with high barriers to entry is ideal for existing businesses in this industry, as the business would be able to chain. The next factor in the five-force model is the ease with which suppliers can raise costs inputs. It is affected by the number of suppliers of a key input to a good or service, the uniqueness of these inputs and how much it would cost a business to switch to another supplier. The fewer suppliers in an industry, the more a company would be dependent on a supplier. As a result, the supplier has more power and can increase the cost of inputs and push for other business benefits. On the other hand, when there are many suppliers or at low cost to switch from one competing supplier to another, a company can reduce its input costs and increase its profits.

One of the five powers is the ability of consumers to lower prices or their level of control. The

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number of buyers or customers a company has, the size of each customer and the cost of finding new customers or markets for its production are affected. A smaller and stronger customer base means that each customer has more power to negotiate at lower prices and better deals. A business with many small independent customers will find it easier to charge higher prices to increase profitability. The last of the five forces focuses on replacements. The replacement of goods or services that can be used in place of the products or services offered by a company constitutes a threat. Companies producing goods or services that do not have close substitutes will have more power to raise prices and obtain favorable terms. When close alternatives are available, consumers may be able to give up buying a business product and the power of a business will be weakened.

2.0 Empirical Review

Marketing of Buffalo and Cow Milk

Price influences the amount of your item is sold, to whom it is sold, what administrations must go with it and eventually how much benefit you make. On the off chance that you are at present building up another item or administration you will realize that setting a cost can be one of the most troublesome choices you make in business. Then again, you might be in a place that having set a value, it is currently hard to make essential modifications without imparting an inappropriate signs to your market. When evaluating is taken care of delicately it can dramatically affect the productivity of your firm. There are no trustworthy standards for setting the correct cost, as various organizations at various occasions use evaluating to accomplish very various targets. There are four key variables which influence your choice, and all must be deliberately considered before pushing ahead.

The pricing strategy used will be Market-Skimming pricing, and further we will adjust our price with promotional pricing; which says that temporarily pricing product below the list price to increase the sale. Company will provide pure buffalo milk in less price to attract more customers and to get a large share in the market. By doing this we will be able to capture not only the customers but also able to occupy spaces on retailers shop and after some time we will adjust the price according to our need.

Setting an image in the mind of the customer is most important part for the new developed products. The price of our product is moderate to convey a good impression in the minds of our consumers and people can afford. After pricing packaging is essential part we will use attractive and eye catching box for our buffalo milk. For the promotion purpose we will conduct a survey in different cities and we will give awareness to the people about our product and also install free camps to taste our product for the first time

Distribution Strategy

Distribution Strategy (Place)

The customers will expect to find the products

- At all times in retail stores and shops
- The product will be offered in a packaging of 1 liter and 250 ml
- In surroundings that enable them to make a good choice between products
- With instructions given at the back of the package

The product will be sold directly through retailers, internet and mail order. The reason behind not

going for a specialist intermediary is that it would add to the overall.

Packaging Strategy

Packaging strategy is one of the most important strategies for new product. Milk available in market has no proper packaging; therefore it creates a lot of difficulties for customer to carry and protect the milk. There are no such companies to offer pure buffalo milk in packaged foam. So we will offer milk in Tetra packaging.

Loan financing

A farm requires an enormous one-time use to begin. Purchasing a current dairy farm makes the assignment easier, and can set aside cash in case you're willing to do a few fixes yourself . The company must be careful regarding cash flow operations and investments. If there is possibility of getting some loan, they must go for the loan. It will help the company to run the operations smoothly. But the company should also look for other options like generating some liability; To avoid outflow of cash.

Businesses generally obtain property rights in long-lived assets through acquisitions financed by internal sources or by funds borrowed from outside. Accounting issues related to long-term asset acquisitions. Leasing is an easy way for businesses to obtain long-term assets. Unlike purchases that transfer ownership rights to the user of the long-lived asset, leases that are not purchases in substance provide for the right to use property by tenants. In general, the rental conditions oblige the tenants to make a series of payments over a future period; therefore, they are similar to long-term debt. However, if a rental contract is structured in a certain way, it allows the lessee to engage in off-balance sheet financing because certain rental contracts are not recorded on the balance sheet as long-term debt. Business leaders often want to use off-balance sheet financing to improve the financial condition of their business; however, as noted earlier in the document, effective market analysis indicates that off-balance sheet debt is built into consumer decision models to assess the value of a business. Leases are divided into different categories based on the difference between the elements of the lease. In addition to these, there are sale and leaseback and direct rental, single investor and leveraged rental, and domestic and foreign rental.

A lease is a very important financing choice for an entrepreneur with zero or insufficient capital to finance the initial investment needed in factories and machinery. In a rental agreement, the lessor finances the asset or equipment and the tenant uses it in return. In other words, leasing is an arrangement in which the tenant who needs the equipment or des machines receives the financing of the agreed rents from the lessor. These leases are called finance leases. There are many such structures and therefore there are many forms of rental. Let's look at the different types of leases. A finance lease, also known as a full payment contract, is a form of contract under which the lessor transfers almost all of the risks and benefits associated with the asset to the lessee. In general, at the end of the economic life of the asset, the title is transferred to the lessee. The term of the lease is extended over most of the life of the estate. A donor here is just a financier. Large industrial equipment is an example of a finance lease, on the contrary, the responsibility and rewards of an operating lease are not entirely transferred to the tenant.

Compared to the finance lease, the duration of a lease is very limited. The lessor depends on many different tenants to recover its cost. The property belongs to the lessor as well as its risks and its remunerations. Here, a lessor not only acts as a financier, but also provides additional services that are necessary when using the asset or equipment. The musical apparatus rented under contract with

the respective technicians is an example of a simple rental contract. In the sale and leaseback contract, the tenant sells his assets or equipment to the (financial) lessor with an advanced lease contract for a fixed rent per period. The entrepreneur exercises it when he wants to free up his money, invest in equipment or assets, to use it anywhere and for any purpose. However, a direct rental contract is a clear rental agreement where the lessor owns the asset, or the lessor acquires it. The lessor and the equipment suppliers in the first case are one and the same person and this case is called "bipartite lease". There are 2 parties in a bipartite contract. While there are three distinct parts to this particular situation, viz. Equipment supplier, lessor and tenant. And the tripartite lease is called. Here, the manufacturer and the equipment rental company are two separate groups.

Sales and lease back

If company is unable to get enough loan or it need cash to retain within the business; moreover don't want to invest the loan in the property plant and equipment. Company must go for a sales and leaseback option to avoid outflow of cash unnecessarily.

Operating lease

Dairy farming requires a huge capital speculation. Land, building, gear, and buffalo are costly and hardly any new dairy farmer will have the capital required to buy everything when they begin in business. Many starting ranchers start by buying their buffalo first and leasing the homesteads and land. These underlying animals are your farms value.. There is a option for the company to simply go for operating lease for land and pasteurization machine. Generate revenue from the business; use the land and machine and simply pay rent at the end of each month through already generated revenue.

Research species and bread

Contact government foundations, college horticultural augmentations, and set up dairy cultivates and request information to assist you with settling on the choice:

- Rule out varieties that can't flourish in your atmosphere.
- For each breed, partition yearly upkeep cost by yearly milk creation to discover creation cost per unit of milk.
- Is there neighborhood interest for the variety's milk (in view of species and milk fat %)? Shouldn't something be said about for margarine and cheddar (where a high fat % is helpful)?

3.0 Findings and Discussion

Buffalo is assuming a main job in the national economy by creating milk, meat and draft power. Out of all out milk delivered in the nation, buffalo contributes around 68 %, trailed by steers (27%) and sheep/goat/camel (5%). Because of high fat substance of bison milk, it is the most favored species in Pakistan. In any case, there are sure issues identified with this species, for example, late period of development, long calving stretch and quiet warmth. These issues can be explained through effective administration. At present, there are 26.3 million wild oxen in Pakistan, having a decent creation potential. In Pakistan, buffalo not just satisfy the protein necessities of the human populace by milk and meat, but on the other hand are have an extraordinary offer in giving the footing capacity to different rural purposes. Almost certainly, we have the best varieties (Nili Ravi and Kundi) at world level yet they are not delivering as per their latent capacity, for the most part because of miss-the executives. In different pieces of the world the greater part of the wild ox

populace is swamp type. They are for the most part utilized for draft purposes. Regardless of these issues, there is opportunity to get better. Because of their adaptable characteristics they are properly called as Black Gold of Pakistan.

The analysis has shown that milk produced by buffalos is the best, as it carries 60% less cholesterol compared to cow milk (Basharat Japal, 2014). There is a strong reason why large companies only sell cow milk in packaged form even there is a huge demand for buffalo milk. "Usually, the farm owners prefer cows over buffalo as the former produces more milk"(Basharat Japal, 2014). In 2016, Punjab Food Authority guaranteed that profoundly respected tetra pack organizations including Haleeb, Olpers were destructive for human consumption. The most troubling part is that during UHT process, the dietary benefit of milk is lost. Valid, the microbes' are executed, yet we have to understand that only one out of every odd sort of microorganisms' are murdered, yet we have to understand that few out of every odd sort of microscopic organisms is awful for us. The UHT procedure executes the great ones as well. We took a small-scale brand called "The Pure Buffalo Milk" with a slogan of "Pure is life" operating in the area of Islamabad. They came up with a alternative solution to the tetra pack milk. It uses pasteurization procedure to evacuate the destructive microbes. The warming procedure is called High-Temperature short time. The dietary benefit and fundamental catalysts do get influenced however it is viewed as a superior alternative than tetra pack milk.

4.0 Conclusion

Based on the outcome of the analysis, this study concludes that Buffalo milk has a higher fat, protein, lactose, vitamin, and mineral content than cow's milk. It's also whiter and has a thicker consistency, which makes it perfect for the production of fat-based dairy products. Moreover, Cow milk differs from buffalo milk in richness and composition. Buffalo milk has lower cholesterol but more calories and fat compared with cow's milk. Buffalo milk is consumed in south Asia, with India, China and Pakistan being the biggest producers. In terms of properties, 100% more fat content than cow's milk; can be preserved for longer in Buffalo milk. Buffalo milk is extremely rich in calcium, and is a good source of minerals like magnesium, potassium, and phosphorus. It can also be concluded that Buffalo milk has less cholesterol, more fat, more calories and it is good for healthy bones, dental health, cardiovascular health, and weight gain. This is in comparison to the cow's milk which contains more cholesterol, less fat, fewer calories. Though a cow's milk is beneficial for healthy bones, dental health, reducing obesity in children, protection from thyroid diseases, and cardiovascular health.

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