

“Analysis of market potential of dairy products at Headquarter of Lower Subansiri District in Arunachal Pradesh” (Pilot Survey)

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Abstract: Milk and dairy products are some of the most popular and consumed food products. They can be consumed at any age. It brings a significant contribution to the health of the consumer. The main objective of this study was to identify socio economic and demographic that influence consumer for dairy products. The study was conducted by using a tailor made questionnaire. This report document data and other information gathered from survey of households in Ziro, lower subansiri, District, Arunachal Pradesh. The survey was conducted as part of research project aimed understanding the present situation of dairy market in Ziro. The survey data provide insights into the purchasing behaviour and attitudes of consumer in Ziro with respect to dairy products. The study was focused on these four categories, frequency of consumption, most preferred brands and availability of products and mode of purchase of personal care household dairy products.

Keywords: Dairy products, Buying behaviour, Consumer, Demand, survey data.

INTRODUCTION

The dairy products sector is extremely vibrant and it's experiencing a real increase in popularity. Numerous studies conducted by FAO, WHO and IDF show that global Dairy products consumption and productions have a significant increase. According to OECD and FAO forecasts, we will see a significant increase in dairy consumption in Arunachal Pradesh. Over the past five decades, annual milk and dairy products consumption (excluding butter) has declined considerably in Arunachal Pradesh. While milk and butter consumption has decreased, the cheese consumption is high. The Indians are still the world's largest consumer of milk and dairy products. The Indian are now the largest cheese consumer with 45.5% of global consumption. The other major consumer of cheese is north part of India (36%), [5]. Arunachal Pradesh accounts for 8% of this dairy products market. The main objective of this study is examine the decisional psychological factors correlated with the personal factors in the process of purchasing dairy products in Arunachal Pradesh. This study is based on socio- economic and demographic factor that influence consumer preference for dairy products. To realize this market survey used a self made questionnaire. A questionnaire is a research tool that consists of a series of questions in order to gather certain information from the the society and to be calculated for statistical analysis of respondent. As a research tool, the questionnaire has a number of advantage such as it is easy to communicate, it does not require much effort on the part of the interviewer and often has standardized answer. This study is focused on to investigate the buying behaviour of buyers of the Dairy products in the Lower subansiri District of Arunachal Pradesh. This report document data and other information gathered from a survey of 50 households in Ziro, Arunachal Pradesh. The survey was conducted in the fall of a research project aimed at understanding the evolution of dairy market. The research proposals were to collect dairy market data for key in Ziro, Arunachal Pradesh.

BACKGROUND

Milk is the secreted fluid of the mammary glands of female mammals. It contains nearly all the nutrients necessary to sustain life. Since the earliest times, mankind has used the milk of goats, sheep, and cows as food. Today the “milk” is synonymous with cow's milk. The milk of other animals is spelled out that is sheep milk or goat milk, when supplied commercially. In Ziro, Arunachal Pradesh, the yield of milk per cow in kg/ year has increased steadily as result of selective breeding and improvements in feed. Cow milk was the best performers at rupees 100 kg, in Ziro.

MILK

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Proteins of various sizes are dispersed in milk serum. They are called micelles and consist mostly of calcium salts of casein molecules. Furthermore, milk contains lipoprotein particles, also called milk microsomes, which consist of the residues of cell

membranes, microvilli, etc., as well as somatic cell, which are mainly leucocytes. Various proteins, carbohydrates, minerals and other ingredients are solubilised in milk serum. The specific density of milk decreases with increasing fat content, and increases with increasing amounts of protein, milk sugar and salts. The specific of Cow's milk.

In Arunachal Pradesh, west kameng and Twang, Ziro. Districts are inhabited by many maror thibes like Monpa, miji, sherdukpen, aka and khowa and minority tribes like Takpa, Lishipa, Chugpa, etc. However, Monpa tribe is presently the dominant tribe of the area. Historically, Monoas are the aborigines of that area and once ruled a kingdom called Monyul, or Lhomon that existed from 500BC to 600 AD. It was believed that Monyul stretches from present day Twangup to West Bengal, Assam, part of Sikkim and even the Duars plains at the Himalayan Foothills. The Monpa people are followers of Tibetan Buddhism of the Gelugpa sect, although several members of the BhutMonpa are followers of Bon and Animism. The yak raisers, known as the Brokpas, are a pastoral community belonging to the Monpa tribe. In Arunachal Pradesh the traditional ways of processing and storing of milk product can be described together. Brokpas usually process milk only when sufficient quantity is collected, which is usually 2-3 days or even a week's collection, stored without boiling. To make butter they use indigenously made cylindrical milk churners called Zopa. Many brokpas prefer the milk to be a little fermented for processing. Butter is churned out by pushing the plunger/dasher, fitted to the churner, up and down the churning container, with the milk, for more than a thousand times. [4]

STATEMENT OF PROBLEM

A study to investigate the consumer buying behaviour towards Dairy products in Ziro lower Subansiri, District, Arunachal Pradesh.

OBJECTIVES OF THE STUDY

The researcher, after having lived in the Ziro for a number of years for academic purpose observed that dairy products in the valley for dairy production has been established in city, Ziro. So with the intention showcasing the consumer buying behaviour at national level the has taken place.

REVIEW OF LITERATURE

1: Archana Mourupoju(2020), publishes original scientific research on all aspects of the biology, wellbeing and technology of lactating animals and the foods they produce. Authors can have a track on their valuable submissions any time to finally co-operate for processed article submission. Online system entitles the reviewers to download the relevant manuscripts and submit their opinions to the editor. Editor can manage and monitor the complete submission/review/revise/final publication process. A total of 110 research scientists from all over the world reviewed the 19 articles published in volume 9. Average publication lag time of an article was further reduced to 2- 3 weeks. Advances in Dairy Research, also announces its new association with Longdom Publishing Group for Archiving, Journal maintenance, financial purpose and support. Journal runs its website <https://www.longdom.org/advances-dairy-research.html> parallel for Editorial and review work process so as to maintain its highest standard of scientific work. [1]

2: Rakshitha Kotha(2021), It stimulates and pays farmers who produce the highest valuable sort of milk for the co-op. This is especially critical as we move away from commodity items and toward high-priced products that necessitate very high-quality milk. Since the program's inception, the percentage of farmers who receive a bonus has risen to nearly 85 percent. Being there during milking is typically the best approach to investigate problems, and this was a regular aspect of the consultants' duties. [6]

3: Azage Tegegne(2016), Ethiopia has 54 million cattle and ranks fifth in the world. About 12 million cows annually produce 4.2 billion liters of milk, with 75% used for household consumption. About 99% are indigenous breeds kept by smallholder farmers and produce about 1.5 liters/head/ day. In urban and peri-urban areas, Zebu x Holstein-Friesian crossbreds are used for market-oriented dairy production. Most are kept by smallholders who own 3 to 5 cows and the major feeds are grass hay, crop residues and concentrate feeds (wheat bran, maize and oil seed cakes). Milking is by hand and cows produce 5 to 10 liters per day. These producers often supply to processing plants who often test for acidity and adulteration. At farm level, milk quality is affected by poor hygiene in milking and milk handling, poor quality and cleanliness of milking and milk handling utensils. [2]

4: Young W Park(2016), Compositions of milk of mammalian species are affected by a variety of factors. Yield and composition of milk varies with species, diet, breed, season, locality, individual animals within breed, stage of lactation, parity, environmental conditions, feeding and management conditions, etc. [1-5]. The basic composition of goat milk is similar to that of cow milk. On the average, caprine milk contains 12.2% total solids, which is consisted of 3.5% protein, 3.8% fat, 4.1% lactose and 0.8% ash. Cow milk has lower protein, fat and ash, and higher lactose than goat milk does. Nutrient content of the diet has an important effect on lactation performance, milk composition, digestion and metabolism of dairy animals. Hence, it is essential to determine requirements of each nutrient in the diet of lactating animals, especially in crude protein levels. [7]

5: Essi Evans(2016), New Values for Rumen Undegraded Protein In the past, soluble protein was assumed to be largely degraded in the rumen. Because a large portion of the protein in canola meal is soluble, it was considered to be a better source of rumen degraded protein (RDP) than rumen undegraded protein (RUP). Newer research has clearly demonstrated that a portion of soluble protein from feed ingredients remains undegraded, and that this varies with the protein source. For canola meal, the undegraded soluble fraction is high. Hedqvist and Udén [7] first revealed that portions of the soluble-protein fraction were not degraded in the

rumen for some vegetable proteins. This has been confirmed at other institutions [8-10]. The extent of degradation of the soluble fraction for canola meal and rapeseed meal was shown to average only 40% of the total, with the undegraded contributing to the RUP fraction.[3]

METHODS

The data contained in this research was obtained from a study both online and face to face and which consisted in completing a questionnaire by consumers of dairy products in Ziro. This study was attended by 200 people residing in Ziro, between 18-25 years, 26-40 years, 41-55 years, over 55 years old and different level of studies vocational School, high school, university studies, postgraduate studies. This questionnaire included questions about the reason for purchasing dairy products, purchasing frequency, how often dairy products are consumed, dairy preference: packaged or unpackaged and the place of purchasing.

METHODOLOGY

Research Design: The study is a survey in people of Ziro.

Setting: Professors, Clerks, Staffs and Students (from Ziro, and almost all the districts of Arunachal Pradesh)

Sampling Techniques: Non-Probability selective sampling

Sample Size: 200

Tool for Data Collection: Questionnaire is being prepared focusing the following

- (i) Frequency of Consumption,
- (ii) Distribution channel used,
- (iii) Mode of purchase

ASSUMPTION

It is assumed that the respondents are Honest and unbiased in their responses.

DATA COLLECTION

The collection of data is based on both primary and secondary.

Primary Data

Primary Data is collected through researcher itself by Questionnaire.

Secondary Data

Secondary Data is collected through reference of book, newspaper, magazines, Online. Both quantitative and qualitative data is collected.

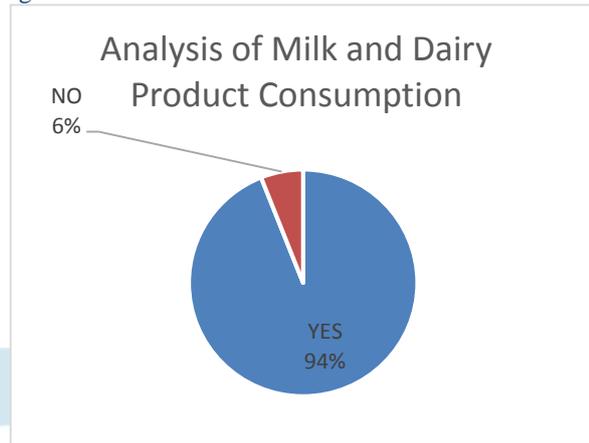
ANALYSIS AND INTERPRETATION

The respondents are highly aware of the consumption of Dairy Products in Ziro, especially the Students and all staff of Indira Gandhi Technological and Medical Sciences University. The respondents are highly full dairy consumed products. They prefer to buy in cash in all Ziro, shops.

Analysis of Dairy Product Consumer

Responded samples from our survey, we found most of them (94%) consume milk and dairy products.

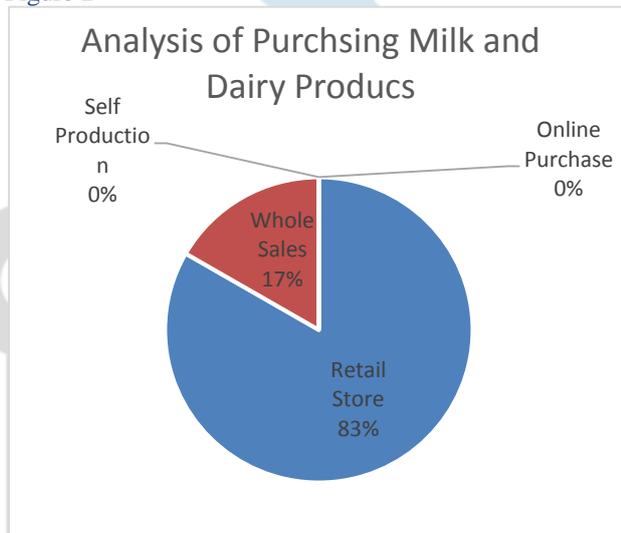
Figure 1



Analysis of Dairy Products

According to survey (83%) of the people Purchase Dairy products from Retail store, where as(17%) are wholesales customer.

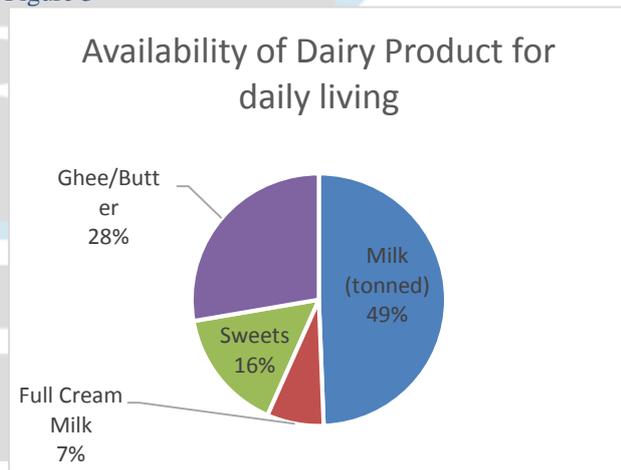
Figure 2



Availability of Dairy Products

As per our survey (49%) of the customer get Tond milk, (28%) in the form of Gee/ Butter, (16%) in the form of Sweets and reaming (7%) gets the form of Full Cream milk. As daily consumption.

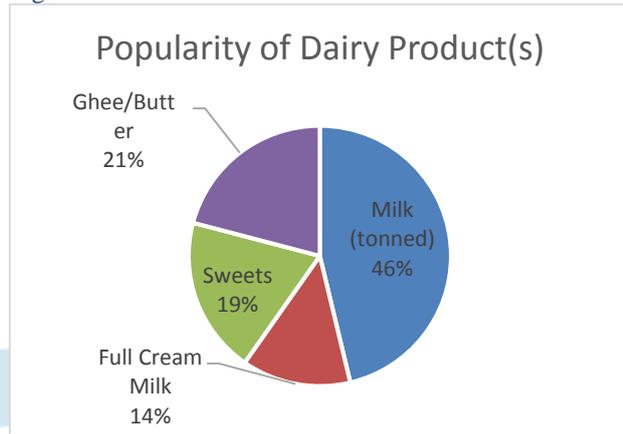
Figure 3



Popularity of Dairy Products

As per our survey the most popular dairy products are (46%) in the form of Toned milk, (21%) in the form of Ghee/ Butter, (19%) in the form of Sweets, (14%) in the form of Full Cream milk.

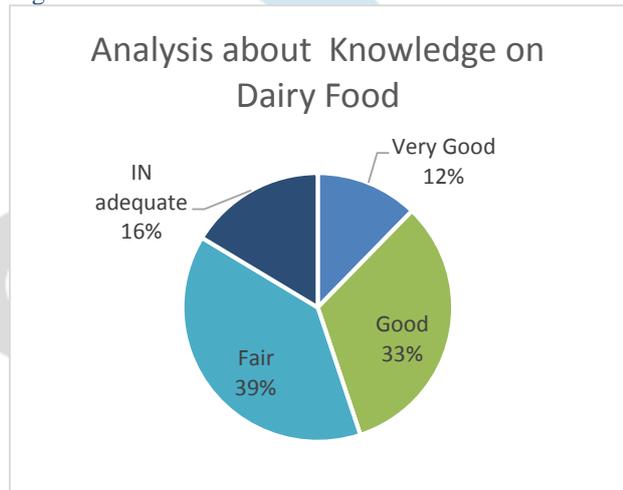
Figure 4



Knowledge on Nutritional information

The survey reports says that (12%) very goods knowledge, (33%) of them have good knowledge, (39%) have Fair Knowledge, were as (16%) have poor knowledge on dairy food.

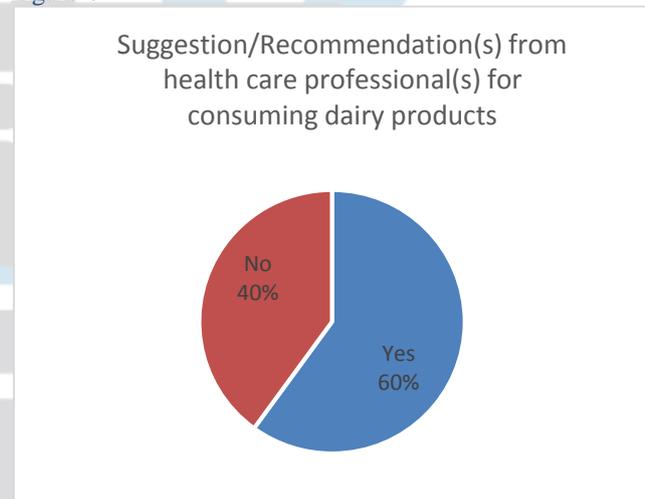
Figure 5



Consumable advice from health professional

According to the survey (60%) of the population, advise to consume milk and dairy products by Health care professional

Figure 6



Easy availability

As per survey finds (70%) sample says have No problem on milk availability.

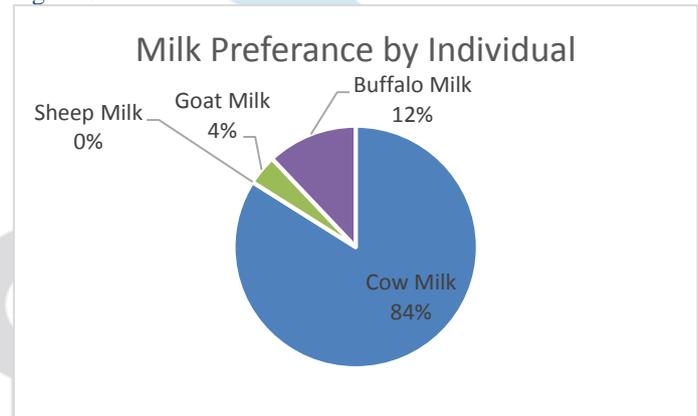
Figure 7



Milk Preference

Our survey finds 84% of them prefer Cow milk, and remaining 12% prefer Buffalo milk, and 4% for Goat milk.

Figure 8



Milk Consumption by Family Members

As per our survey reports (92%) people are says family member consumption milk.

Figure 9

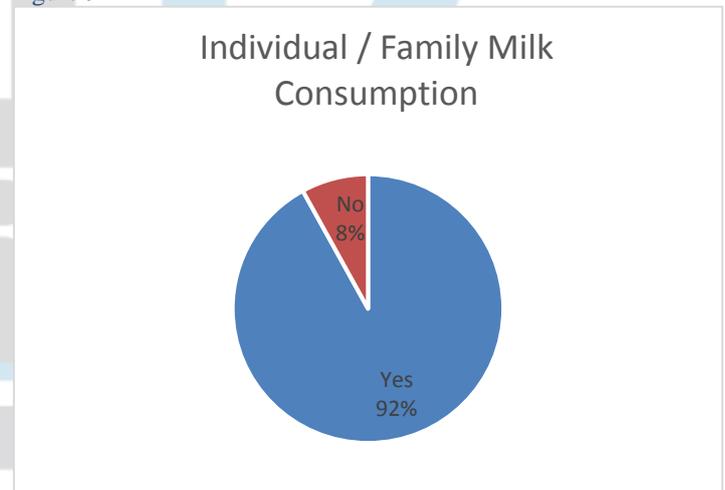
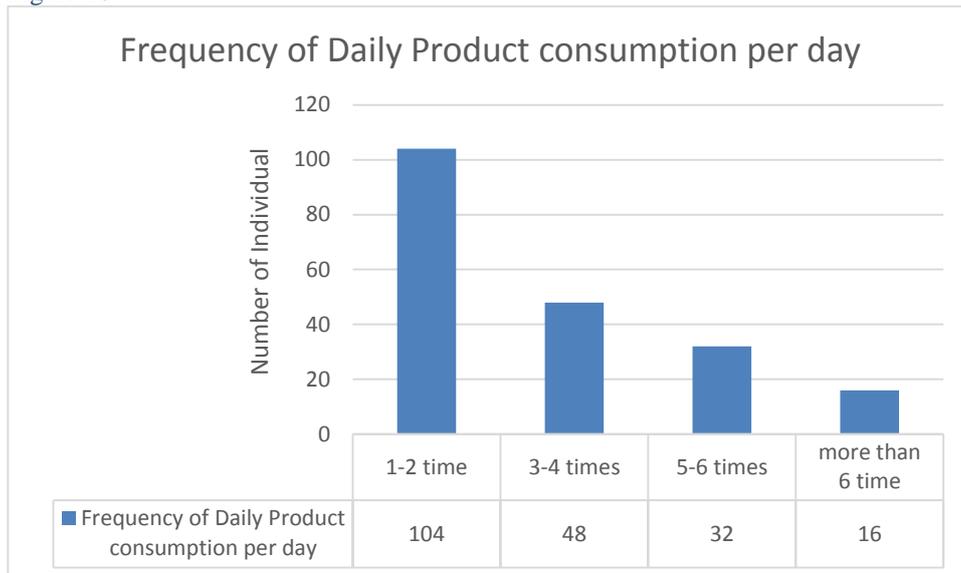


Figure 10



Our survey report found that, out of 200 members, 104 of them consumption milk 1-2 times per day, 48 people self-reported that they consume 3-4 times per day, where as 32 says that they consume 5-6 times per day and remaining 16 of them says that they consume more than 6 time per day.

FINDINGS

90% of the responding uses daily for daily living in the form of Toned milk, Butter, Sweets, etc. Respondents are using national brands such as Amul, Nandini (Good life), and Nestle Every Day (milk powder). In general 70% of localities are using Toned milk, 27% are using dairy in the form of Butter/Gee and remaining 3% are using in the form of cosmetics care. 80% of them purchase from market and remaining 17% are purchasing from local dairy where as 3% are not interested to purchasing. 90% of the localities are buying milk in cash only.

DISCUSSION

In order to realize the market survey, we decided to use a questionnaire because is the simplest and the best know method of analysing the desire to buy and trends in the milk and dairy products consumption.

In Arunachal Pradesh, Based on Ziro, extensive experience, the foregoing methodology provides IGTAMSU, Ziro, and other institutions responsible for conducting dairy research with a general methodology for characterising consumption systems. The working document begins with the identification of functional parameters, performance indicators, and the formulation of core hypotheses, and then sets out methods of analysis, data requirements and potential data sources for filling these information objectives. Sample design is discussed, in selective random sampling alternative methods of data collection are examined, and a household survey instrument is provided as a model for the collection of household consumption data. Screen designs for entry of data collected using the household survey instrument and a limited number of programmes for analyzing the data are made available to users of the methodology upon request.

SUMMARY AND CONCLUSIONS

Milk and dairy products are increasingly appreciated by consumer around the world. This is also visible at Ziro, level due to the market survey conducted on a sample of 200 people who have a stable residence in this place. The obtained results were influenced by the education level, but also by the age of the respondents. The main reason for purchasing these foods are the benefits they have which shows that more people are focused on safe foods and on food products that can bring a bigger nutritional contribution. Another very important thing that shows consumer's orientation towards safe products is that more and more people opt for packaged foods, so their microbiological load is much better controlled and food poisoning can be avoided. Using a questionnaire to this market survey was the best choice because it is easy to complete and does not require much time for response to. In order to obtain optimal results in a market survey it is necessary to take account as many consumer related factors. This factors also influenced the results of this market survey, some answers being influenced by the educational level and the age of the respondents.

LIMITATION OF STUDY

The study is limited to due to very small sample size, no funding, limited resources, lack of research lab, local poor marketing strategies, challengeable geographical area, language barriers and so on.

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