

# POLICY PAPER

## REVIVAL OF DAIRY SECTOR FOR ECONOMIC DEVELOPMENT



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## A. BACKGROUND

Pakistan is an agricultural country where agriculture sector contributes about one fifth in country's GDP and is believed to be the backbone of the rural economy as it provides employment to 42.3% workforce. Livestock is the largest shareholder in the agriculture with enormous contribution of 58.3% in the agricultural GDP. Over 7.5 million farming families are directly involved in livestock farming whose majority is small holders and landless. It truly reflects that a rural population of nearly 40-45 million is directly dependent on livestock farming for the livelihoods. Milk is by-far the single most product of the livestock sector that alone exceeds the combined value of all major cash crops in the country. At the same time, milk is the essential food item at every household level including rural and urban society and is considered as basic source of nutrition for the kids and teenagers besides being a key source of essential nutrients for all age groups.

Pakistan is third largest milk producer in the world producing over 50 billion liters of milk annually. Historically, the dairy farming has been dominated by small holders having herd sizes 1-6 and milk has been produced at conventional and subsistence level. As a result of various dairy development initiatives since 2005, tremendous improvement had been witnessed in dairy farming where commercial and corporate sector in dairy farming has emerged. The country has seen phenomenal growth in investment in dairy farming during last one decade. The emerging commercial scale farmers had positively influenced the whole livestock farming sector in terms of transforming practices, sharing modern knowledge and skills and attracting international service providers. The trend of investment into the dairy farming continued until 2013; since then the growth started declining and the non-enabling environment for dairy farming has brought the sector at the verge of devastation. This has put the livelihoods of millions of farmers at risk.

It is worth-mentioning that declining livestock sector is indicative of adverse consequences impacting the socioeconomic balance in the country. It is indeed high time that Government should realize the need of an immediate revival of livestock and dairy sector that will not only boost the rural economy but will also substantially contribute towards healthy and prosperous Pakistan. This policy paper encompasses the major challenges currently hampering the growth of this sector along with key recommendations that can considerably help in revival of the dairy sector.

## B. KEY CHALLENGES

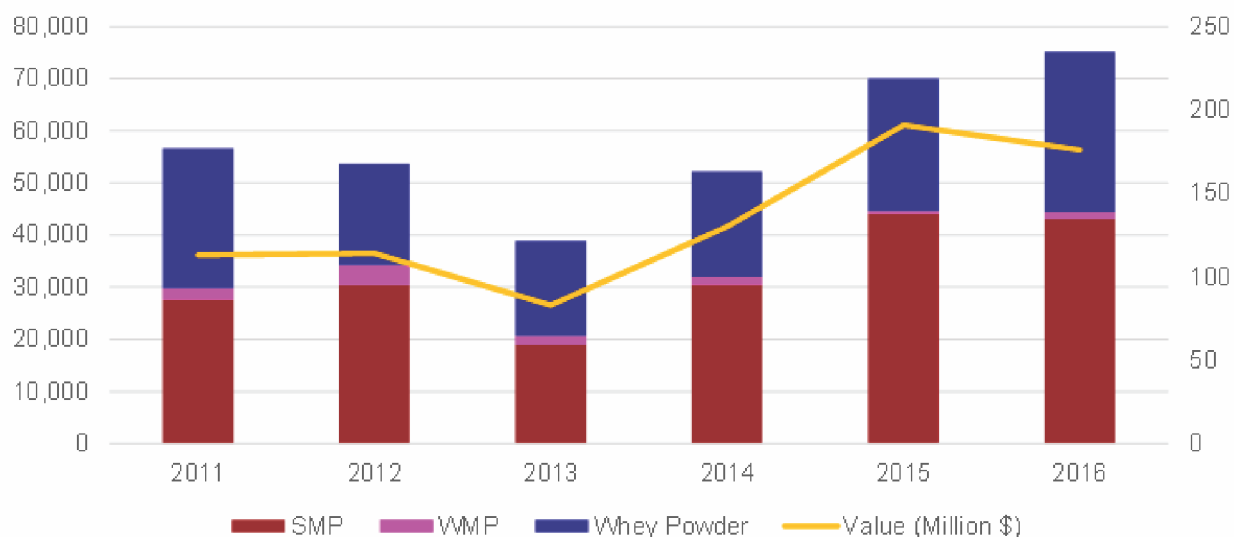
The current situation of the dairy sector is heavily linked to non-conducive policies that have gradually shaken the interest of commercial and organized farmers while conventional farmers started panic sales of their animals.

### 1. Import of Milk Powders and Whey Powders:

Import of milk and whey powders in the country at very low percentage of custom duty, has played a vital role in sabotaging the growth of local dairy sector in the recent years. Low prices of milk powders in international market, in absence of high tariff of custom duties in Pakistan, enabled local dairy processors and milk traders to import powder and heavily replace the fresh milk purchase from local farmers with imported powders. Furthermore, the increasing trend of selling tea-whiteners and dairy liquid products instead of milk by the processors also significantly contributed in decreasing demand of locally produced fresh milk. On top of this, influx of powder also triggered its massive consumption in unorganized/informal loose milk, confectionary and industrial milk consumption segments. This whole situation on one hand damaged dairy farmers while on the other hand it adversely impacted the consumers being supplied with white liquids in the name of milk. According to the United Nations COMTRADE database, import of milk and whey powders in Pakistan during last few years is given below:

Year	Skimmed Milk Powder		Whole Milk Powder		Whey Powder	
	Quantity (Tons)	Value (Million \$)	Quantity (Tons)	Value (Million \$)	Quantity (Tons)	Value (Million \$)
2011	27,706	89.1	2,083	6.4	26,784	17.0
2012	30,412	87.9	3,766	12.2	19,516	13.4
2013	18,888	62.2	1,735	5.7	18,257	15.1
2014	30,441	108.6	1,497	4.5	20,191	16.9
2015	44,226	167.3	407	1.3	25,420	22.1
2016	43,068	147.0	1,287	4.4	30,841	24.2

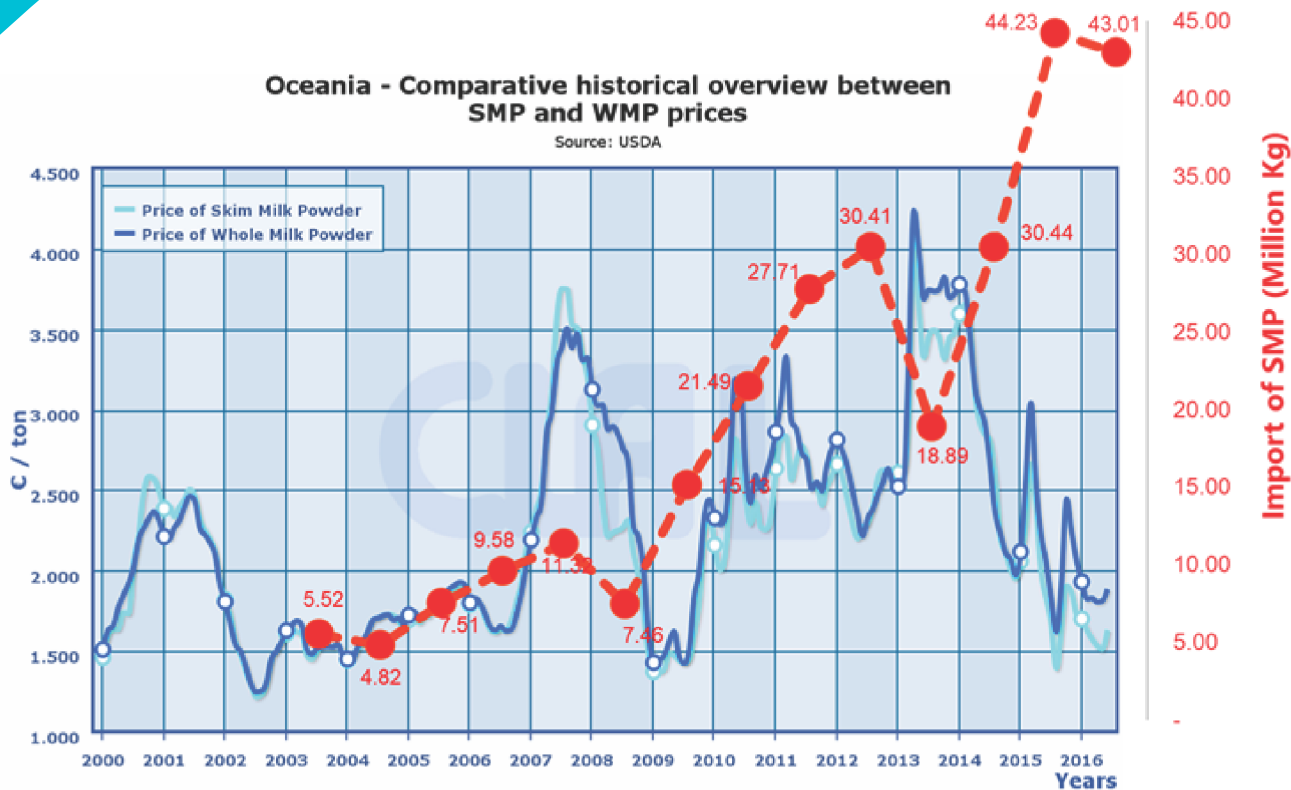
Import of Milk & Whey Powders in Pakistan (Tons)



Furthermore, it is observed that powder imports in Pakistan has a clear link with prices in international market, i.e. when prices are low in international market, the import increases substantially and vice versa. The below charts further clarifies the inverse correlation of import volumes and prices in int'l market.

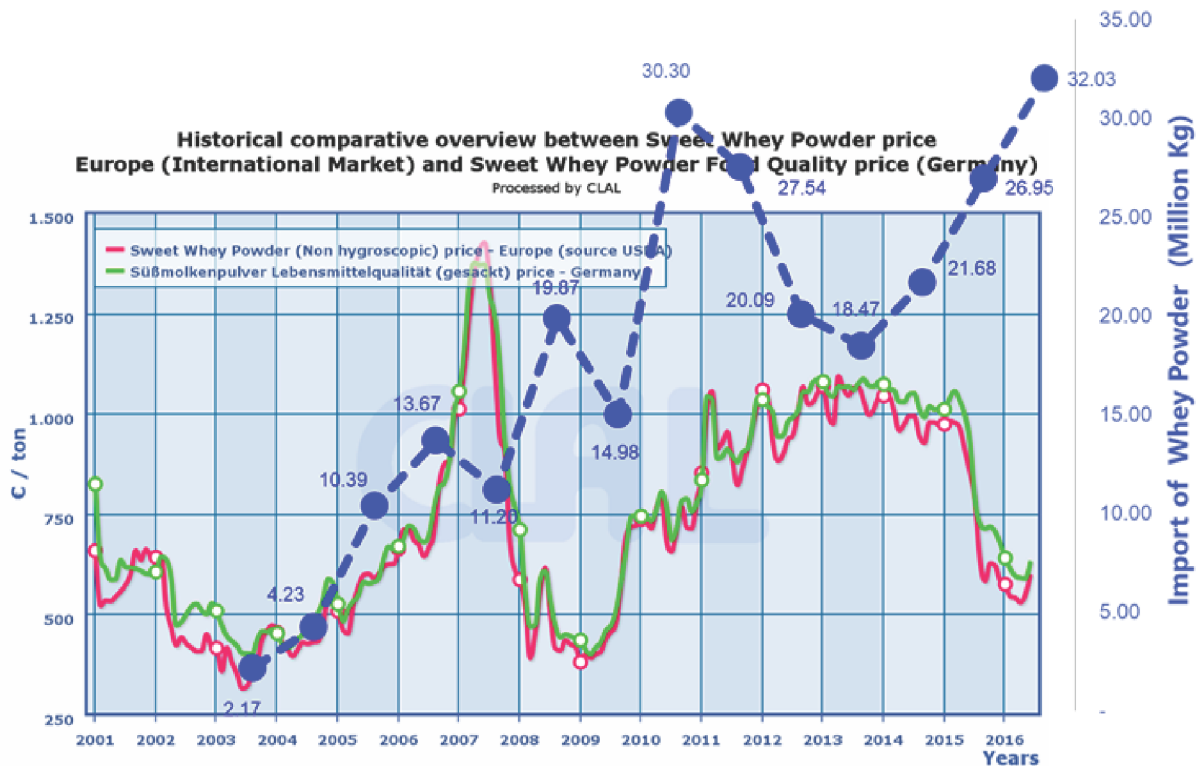
### Oceania - Comparative historical overview between SMP and WMP prices

Source: USDA



### Historical comparative overview between Sweet Whey Powder price Europe (International Market) and Sweet Whey Powder Food Quality price (Germany)

Processed by CLAL



It reflects that from 2013 to 2016 the import of powders have almost doubled in three years' time. We have spent over 175 Million Dollars in importing these powders only in 2016 while 692 Million Dollars have been spent in last five years on import of milk and whey powders. Despite of having one of the largest animal population-base and huge local production of milk, the import of powders indicates manipulation in the value chain resulting in net economic loss both for producers and consumers. The use of SMP&WP in the dairy processing industry, dairy related products, biscuits, sweet making, confectionary industry and tea whitening segment has deprived the local farmers from getting right price of the milk and eventually triggering the discouraging wave into the developing dairy farming sector. On top of this, unregulated cheap powders have deeply penetrated in loose milk segment that is neither organized nor regulated with any quality checks, leading to severe food safety and public health issues.

It is pertinent to mention that Pakistan is facing severe malnutrition especially in kids and youth. As consumption of pure milk and milk based fat and protein is largely being replaced with vegetable fats / palm oil and other non-dairy items, the malnutrition is only getting worst in the country. Downfall of livestock & dairy farming will pave the road to severe malnutrition. This is likely to make Pakistan milk deficit and promoting manipulation in dairy supply chain whereby increasing rural unemployment and risking food security, particularly comprising the kids' nutrition who are already malnourished.

The farming communities and the stakeholders have been raising their voice to highlight this situation and urging the government to take necessary steps by imposing 100% custom duty on import of milk and whey powders in order to protect local dairy farmers like India and Turkey have imposed 68% and 150% duties respectively. Unfortunately, this genuine demand by the farmers has long been ignored by the government. On high demands, the government finally imposed an additional 25% regulatory duty on the imports of powder milk through Finance Act 2016-17 thereby elevating overall duty level from 20% to 45%. However, this is still not sufficient to completely restore and develop the local dairy sector.

## **2. Exemption of Sales Tax instead of Zero-rating:**

The supply of fresh milk and milk products has been zero-rated for sales tax since 2006. This policy decision had triggered new investments in the organized dairy sector, both in farming and processing. It is noteworthy that despite being the third largest milk producing country, Pakistan has limited quantity of milk (4-5%) entering into formal supply chain for processing and value addition while majority of milk supply and consumption is made in loose/ unprocessed form. The investments in modern dairy farming, milk collection and dairy processing during last one decade helped in improving the quality of locally produced milk, preventing quality losses during handling & transportation and providing adequate value added products that are safe and healthy for the consumers.

However, Government has abolished the zero rating status of milk and milk products (PCT Code: 04.01) through Finance Act 2015-16 and 2016-17 and has categorized this as "Exempt" under Sales Tax Act of 1990. The organized dairy sector being in the tax net is required to pay several kinds of duties and taxes at the importation and purchase of raw material for producing high quality milk. With the zero-rated sales tax status, this sector was able to claim the refund for sales tax already paid on the inputs. However, with abolishing of zero-rating, dairy farmers and processors are no longer able to claim the sales tax refunds that means they are forced to book additional expense of sales tax in their costs leading to substantially decrease profitability of raw milk production or processed milk.

This has drastically increased the cost of the milk processing industry, which eventually is resulting in to the increasing trend of prices of packaged/hygienic milk & milk-based products. There is even a bigger void between processed milk prices and loose milk prices, which has not only resulted in sharp decline of the industry but has reversed the conversion of unprocessed milk into documented formal sector processed milk. Lower profitability and decline in volumes has severely impacted the investments in sector and has marked the initiatives aimed in development of milk farming communities and cool chain infrastructure. The present situation, if not addressed, will lead to shed severe wave of discouragement for the existing and new investors. This means that efforts, which have been done in transforming dairy sector on modern lines in the past decade, will be wasted.

### 3. Livestock Farming is not treated as Agriculture

Pakistan is an agriculture-based economy where agriculture sector plays an important role in national GDP and work-force employment. Seeing the key role of agriculture in national economy particularly rural economy, agriculture sector is being provided with various benefits including subsidies, reduced electricity tariffs, reduced duties, income tax exemption, reduced & exempt duties on agricultural machinery etc. Livestock is the fundamental contributing sub-sector of the agriculture having 58.3% share within the agriculture. Despite of enormous contribution of livestock sector within agriculture, livestock farming is not treated as agriculture farming, hence aforementioned benefits that are provided to the agriculture sector are not applicable to the livestock sector, which is totally irrational and is a clear discrimination.

It is important to note that with increasing population, the landholding per family continues to be decreased and the crop production is no longer a viable and preferred source of income for the farmers. On the other hands, vast majority of the livestock farmers are landless or owns a small piece, hence dependence on livestock farming is increasing day by day. The performance of livestock sector and its increasing role within agriculture sector, despite of the discrimination, proves that there is enormous potential that could be provoked once livestock farming is treated as agriculture and similar policies are applied on this as well. As we move forward, it appears that livestock farming will need to be focused as prime agriculture sub-sector that can provide adequate employment to the rural youth as well as contribute in massive economic development of the country.

### 4. High Cost of Production

Milk production in Pakistan is subject to high cost of production due to a number of factors; the main being high cost of raw material / inputs for the livestock and dairy farming. There are several essential items being used in the livestock production that are imported and are subject to various types of duties and taxes that have rapidly grown in the recent years. This has led to increased costs for the milk producers nationwide. On the other hand decreased demand by the buyers, as an outcome of influx of imported and smuggled powders, has resulted in negligible increase in farm gate prices of milk in the recent years. This effectively means that increased cost of production with stagnant sale prices has quickly diminished the margins for the milk producers at all levels. As a result of this phenomenon, dairy farming's commercial viability is challenged and farmers are forced to closedown their businesses and/or planned expansions are not happening at an expected rate. That gives a major blow to the dairy development initiatives taken during last one decade.

There is a serious need to review the cost of milk production and wave-off the unnecessary burden being put on the dairy farmers in terms of duties and taxes on the raw material, feed items, consumables and equipment for the livestock & dairy farming. In absence of an enabling policy, there is a serious threat to the survival of dairy sector, which eventually means the loss of livelihoods of millions of farmers resulting into rapid rural unemployment and more urbanization. At the same time, this for sure is going to worsen the already serious issue of malnutrition in the country. Below is a list of major items that are utilized in livestock & dairy farming along with the existing rates of duties and taxes.

RATES OF CUSTOM DUTIES					
HS Code	Description of Items	2014-15	2015-16	2016-17	2017-18
0511.1000	Bovine Semen	1%	2%	3% + 1%	3% + 1%
2304.0000	Soya (Preparation of Animal Feeding)	5%	-	11%	12%
2309.9020	Minerals (used for animal feeding)	5%	10%	10%	10%
2309.9090	Calf Milk Replacer (product for animal feed)	5%	10%	10%	10%
2303.3000	Brewing or Distilling Dregs and Waste (DDGS) – animal feed	-	12% +1%	12% +1%	12% +1%

RATES OF SALES TAX					
HS Code	Description of Items	2014-15	2015-16	2016-17	2017-18
0511.1000	Bovine Semen	17%	17%	17%	17%
2304.0000	Soya (Preparation of Animal Feeding)	5%	10%	10%	10%
2309.9020	Minerals (used for animal feeding)	0%	5%	10%	10%
2309.9090	Calf Milk Replacer (product for animal feed)	0%	5%	10%	10%
2303.3000	Brewing or Distilling Dregs and Waste (DDGS) – animal feed	-	10%	10%	10%

RATES OF INCOME TAX ON IMPORT					
HS Code	Description of Items	2014-15	2015-16	2016-17	2017-18
0511.1000	Bovine Semen	5.5%	5.5%	5.5%	5.5%
2304.0000	Soya (Preparation of Animal Feeding)	5.5%	5.5%	5.5%	5.5%
2309.9020	Minerals (used for animal feeding)	5.5%	5.5%	5.5%	5.5%
2309.9090	Calf Milk Replacer (product for animal feed)	5.5%	5.5%	5.5%	5.5%
2303.3000	Brewing or Distilling Dregs and Waste (DDGS) – animal feed	-	5.5%	5.5%	5.5%

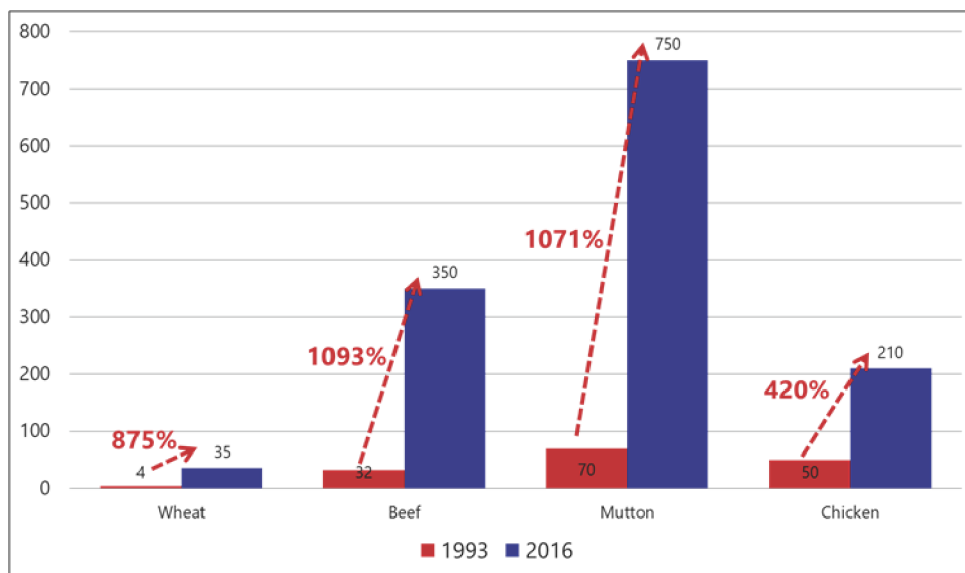
This is evident of the fact that majority of raw material particularly feed items used for animal feeding in livestock & dairy sector are subject to substantial duties and taxes that are overburdening the farmers.



## 5. Price Capping of Milk & Meat

Prices of milk and meat are being regulated/controlled by the local governments in cities despite of the fact that there is no price control mechanism for the inputs being supplied to livestock farmers. It is irrational and unjustified to control the prices of the end product of the farmers especially when no such control is being made on the input supplies to the farmers. In absence of a demand and quality driven price mechanism, there is less focus on quality and ultimately consumer also suffers. The supply shortage and inefficient market are fundamental outcomes of such policies. Moreover, the price capping results into economic loss for the producer whereby at the same time it triggers black market and adulteration and ultimately results into net economic loss for the consumers as well. This means that price capping is leading to the decrease of total economic surplus / welfare in the country on both ends, i.e. producer and consumer, both are exploited by the middleman.

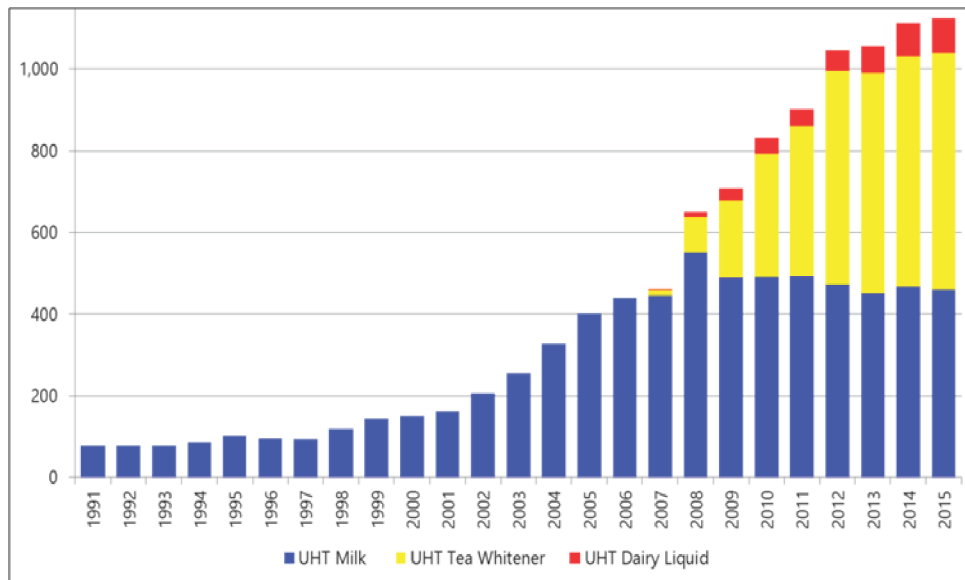
Although, prices are being capped with the mentality to keep milk and meat in their reach of urban consumers. However, they are not actually being benefitted with this approach as urban consumers are not able to get the quality products and they are forced to pay more for the inferior quality through widely practiced adulteration, malpractices and supply shortages. At the same time, they are overcharged in the name of 'so-called' quality and consumers are paying high prices considering the 'pseudo' quality. If prices are de-capped and consumers are made aware of the actual quality, the demand for the quality products will rise. While this may lead towards short-term price increase, however it will attract more investments in the farming sector and eventually the prices will be rationalized when supply is increased in the medium to long term. That is the only way to provide good quality milk and meat to the consumers at affordable prices or else consumers will continue being exploited in the name of quality. Poultry sector is a very good example to be studied where price capping is not applicable and the prices are determined based on demand and supply of the market.



If we analyze the data for last twenty years, as shown in above graph, we would realize that price de-capping in poultry has actually helped in less increase in the prices as compared to other essential food items. For example, between 1993 and 2016, prices of wheat, beef and mutton increased by 875%, 1093% and 1071% respectively while poultry prices increased by 420% only. This is a reality that today poultry sector is providing the best quality yet cheapest protein to the masses and there is no doubt in proclaiming that without incentivized poultry sector's development, common man would not have been able to consume any animal origin protein. If we do not start developing milk and meat production on the same lines today, we are inviting a serious disaster on both economic and nutritional fronts for our citizens.

## 6. Lack of Consumer Awareness and Quality Standards

From 2007 onwards there has been a shift in focus of Pakistani dairy processors from selling milk to selling recipe products - made out of SMP&WP and Vegetable fat etc. These products are generally called Tea Whiteners and Dairy Liquids.



The above graph represents the historical growth in UHT sales (million liters annually) and depicts that how the share of other than milk products have substantially increased. According to estimation by dairy industry experts, in 2015-16, the share of recipe products (other than milk) in liter-age term had gone up to 59% in total UHT sales while plain white milk was only 40%. Since these recipe products are made using SMP&WP and vegetable oils; for dairy processor the cost of production of these products is far below the raw milk prices, which ultimately deprive dairy farmers of a better price for their raw milk. Ironically, the vast majority of consumers have been considering these non-dairy products as milk as deceptive marketing was portraying such products as milk. This has a lot to do with lack of awareness among the consumers making them unable to differentiate between milk and non-milk products. This lack of awareness has been exploited by the dairy processors to penetrate in the masses and increase share of non-milk products in comparison with the milk.

The influx of varied qualities of milk powders and whey powders from different countries including India and its heavy usage in the dairy processing industry had triggered milk traders and industrial milk consumers in the open market to reconstitute milk at household level by replacing milk fat with the vegetable oil and selling to the consumers as replacement of fresh loose milk purchased from farmers. The consumers who were buying fresh/loose milk from the gawala or milk shop had no idea whether the milk is pure or had passed any quality standards. The consumers' unawareness about quality standards and lack of availability of any such awareness program for the consumers continued depriving them from getting genuine milk and milk products. When consumers were not aware of the quality of milk, the suppliers had no thrust for quality milk intake and hence farmer had no incentive in producing quality milk. This discouraged dairy farmers across the board.

Recently the Punjab Livestock & Dairy Development Department, Punjab Food Authority and University of Veterinary & Animal Sciences Lahore have started working on this front where consumers are being made aware of the differentiation between genuine milk & dairy products and non-dairy products. At the same time, sou-motocase in the Supreme Court of Pakistan on milk quality etc. has attracted media and public attention as well. This has substantially decreased the sales of tea-whiteners and dairy liquids as low as half of the original volumes in one-year period as consumers are becoming aware that these products were not milk. There is a dire need to continue the consumer awareness and initiate the milk quality standards to be promoted among the consumers and trigger the production and supply of high quality milk in-par with the international standards. This will kick-start the revival of dairy sector at gross-route level leading towards economic development at a larger canvass.

## 7. Lack of Support in Local Processing / Value Addition

Globally the milk and milk-based value added products play a key role in the economy as well as nutritional requirements of the public. Unfortunately, despite being the third largest producer of the milk, Pakistan has significantly lower milk processing and value addition. It is estimated that hardly 5% of the total milk goes to the formal sector for processing while rest of the 95% milk is handled and consumed in unprocessed form. During last one decade, the Government had incentivized the processing sector by declaring milk and milk based products as 'zero-rated' for sales tax. This attracted new investments in the dairy-processing sector particularly in local milk powder production facilities. Two global giants in the dairy sector including Nestle and Royal Friesland Campina made heavy investments in Pakistani market in the recent years. We need to attract more investments in dairy processing, milk value chain, milk cooling infrastructure, value addition of milk etc. especially under CPEC.

There is an enormous potential to produce value added dairy products like butter, cheese, yogurt, etc. that can be exported as well. However, the Government has imposed 10% sales tax on the locally manufactured pure milk powder / infant formulas for children which is quite a contrast to the supportive policies and will hamper the local production of infant formulas utilizing locally purchased high quality raw milk from commercial and corporate farmers. There is a need to draw clear lines on encouraging local milk processing and value addition using locally produced milk, instead of importing value added dairy products or powders.

New avenues of promoting quality milk production and grading of milk according to the nutritional standards needs to be explored. For example, Pakistan is house of one of the largest buffalo population in the world producing premium quality milk with over 6% of fat. Such high quality milk needs to be promoted on its value and a premium market needs to be developed. Similarly, camel milk and goat milk have medicinal usage and hence be supported in value addition for the relevant industries.

### C. RECOMMENDATIONS

In order to address the aforementioned challenges, following recommendations are being made to the Government of Pakistan for the revival of dairy sector for economic development in the country and ensuring long-term food security and improving nutritional standards of the future generations.

1. Customs and Regulatory duties on import of Milk Powders (PCT Code: 0402.1000) and Whey Powders (0404.1010) should be raised from existing 45% to 100% and such import shall be regulated through strict veterinary health and food safety standards.
2. Zero-rating status shall be re-transposed for raw milk and milk products by moving these products into 5<sup>th</sup> schedule of Sales Tax Act 1990.
3. Livestock farming should be treated as Agriculture and hence with all facilitation for agriculture sector should also be applicable to the livestock farming including reduced electricity tariffs, exemption of income tax, waved-off and/or reduced duties & taxes on machinery and raw material etc.
4. Duties and taxes on import of raw material such as feed items, dairy machinery and consumables for the livestock/dairy-farming sector shall be abolished or reduced.

5. Prices of milk and meat shall be de-capped and be determined on demand and supply framework to trigger investments and improve quality with rationalization of the prices in medium to long term.
6. Focus shall be given on quality control and consumer awareness at national level to help consumers purchase quality food items.
7. Local dairy processing and value addition needs to be supported instead of importing value added products. Imposition of 10% sales tax on locally manufactured pure milk powders / infant formulas for children using local milk, shall be abolished and be treated the same way as locally processed liquid milk.
8. Long-term national dairy development policy needs to be prepared and implemented whereby all stakeholders including Government, Academia, Research, Private Sector and Farmers shall adhere to the national policy without interruptions and reversal to achieve long-term milestones.

#### **D. REFERENCES**

Economic Survey of Pakistan | National Bureau of Statistics | United Nations Comtrade | Duty Calculator | CLAL Italy | Pakistan Dairy Association | Corporate Dairy Farmers Association| Punjab Livestock & Dairy Development Department |



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