

Proposal



Poultry Sector

Issues in Pakistan

Views & Recommendations

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Head Office

Small & Medium Enterprise Development Authority

Government of Pakistan

43-T, Gulberg II, Lahore 54660, Pakistan Tel: 111 111 456 Fax: 575 3545 & 575 3587

Web site: www.smeda.org

Pakistan Poultry Sector Strategy Proposal

Pakistan Poultry Industry - Past and Present

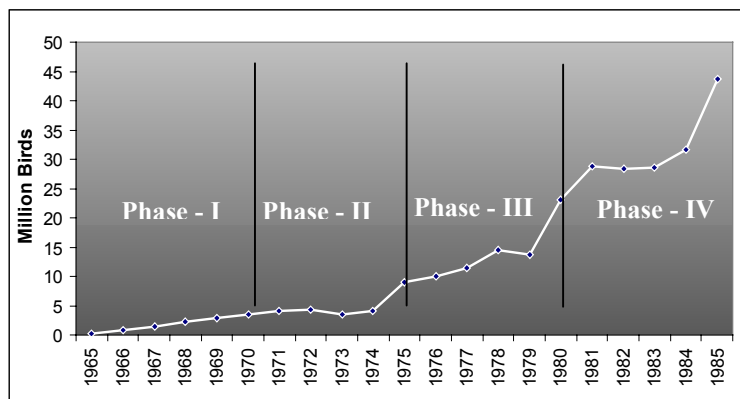
Poultry is a domesticated species of birds reared for production of eggs and meat etc. Even though term poultry is mostly used for chicken, it also includes other avian species like turkey, duck, guinea-fowl and geese.

The most popular species among poultry in Pakistan is chicken. Production of poultry on commercial basis and on a large-scale level started in Pakistan only after 1963, before that poultry was raised/produced in small flocks as a backyard venture or sideline farming of birds. These birds were later known as the Desi (Local) variety so as to distinguish it from the birds produced from imported strains. Generating income was not the main objective of rearing backyard flock. This Desi poultry production, by and large, served common objectives, which were to provide chicken meat for guests and senior family member to replenish energy lost in labour. These Desi birds are scavengers and feed on crop residues and kitchen wastes.

The growing population base and rising income levels resulted in high and escalating demand for more mutton, beef and wheat. Commercial poultry farming blessed with favourable incentives by the then Government of Pakistan emerged on the scene as a potential source of protein food to complement rising meat demands.

A report "The Pakistan Poultry Industry" *A Policy Analysis Framework* prepared in 1987 by Economic Analysis Network of Chemonics International Consulting Division based at Washington D.C. in collaboration with the United States Agency for International Development, Islamabad, very precisely divided Pakistan's poultry industry development era into four phases from 1965 to 1985. These four phases are illustrated in figure-1.

Figure-1: Layer and Broiler Population 1965-85



Source: Poultry Report by Chemonics International Consulting Division 1987

Phase - I: described as an Introductory Phase is marked by a series of major policy decisions such as:

1. Parent Stock import was allowed.
2. State-owned land was offered on lease for poultry farming
3. Income from poultry farming was exempted from Income Tax levy
4. Meatless days were announced for red meat
5. Serving of red meat was prohibited at parties numbering more than 150 guests
6. Directorate of Poultry Production was established for extension services.

The effect of these incentives was a rapid expansion of poultry production. Feed mills and Hatcheries were established. Drugs and vaccines were freely available in the open market. However, phase-I also entailed stiff competition as the capacity of the feed mills increased enormously with no corresponding increase in the supply of raw materials resultantly feed mills had to cut down capacity utilisation. The farm products also received consumer resistance to purchase since farm eggs and chicken were perceived as "artificial". Consumer paid only one half the price of Desi products for farm raised products. This situation called for more incentives to the poultry industry, which included:

1. Supply of electricity to the poultry producers at agricultural or concessional rates.
2. The establishment of Poultry Research institute.

Phase -II brought in institutional development. More poultry and animal research institutes were established all over Pakistan. The phase-II could be characterised by both success and failure. Incentives offered in previous phase-I were further enhanced by:

1. Exemption of sales tax

Production of farm birds increased enormously at 70% compounded growth rate over the period 1965-70. Increase in egg and chicken production followed

the increase in number of commercial poultry farms, number of hatcheries and feed mills. Pakistan started exporting poultry products but as a result of that local / domestic prices of poultry increased and Government reacted by putting a ban on the export of poultry products with a view to lower domestic prices. The consumer resistance to poultry products and the effect of ban on poultry exports contributed in heavy losses to the poultry farmers.

Phase - III is marked with production boom. The investment into this sector continued on the increase.

However disease problems, high relative price of poultry feed, continued consumer resistance, discontinuation of poultry exports, deteriorating feed quality, limited supply of feed ingredients and marketing problems brought along financial setbacks to the poultry farming in Pakistan. Table-1 exhibits the effect of the above situation where egg and

Table-1: Poultry Products and Feed Price Ratios

Poultry Product and feed Price Ratios 1970-1985						
Year	Product Prices		Feed Prices		Price Ratios	
	Eggs (Rs/Doz)	Chicken (Rs/Kg)	Layer Mash (Rs/50Kg Bag)	Broiler Finisher (Rs/50Kg Bag)	Egg / Mash (Ratio of Rs/Kg)	Chicken / Finisher (Ratio of Rs/Kg)
1970	2.7	4.2	30.0	34.0	6.8	6.1
1971	2.6	4.1	33.1	35.1	5.9	5.9
1972	2.5	4.6	34.1	36.1	5.5	6.4
1973	3.3	6.0	49.5	53.9	5.1	5.6
1974	4.2	7.9	55.9	60.0	5.7	6.6
1975	4.3	9.2	72.9	80.2	4.5	5.8
1976	4.7	9.8	82.8	89.1	4.3	5.5
1977	4.9	11.5	97.0	103.3	3.8	5.5
1978	5.1	13.1	94.0	98.5	4.1	6.6
1979	5.0	13.5	97.2	106.8	3.8	6.3
1980	6.6	14.4	105.4	118.2	4.7	6.1
1981	6.6	14.5	120.3	137.0	4.1	5.3
1982	6.3	15.4	130.6	147.4	3.6	5.2
1983	8.5	17.8	134.8	151.5	4.8	5.9
1984	7.9	18.1	153.7	169.5	3.9	5.3
1985	6.9	18.0	146.7	167.5	3.5	5.4

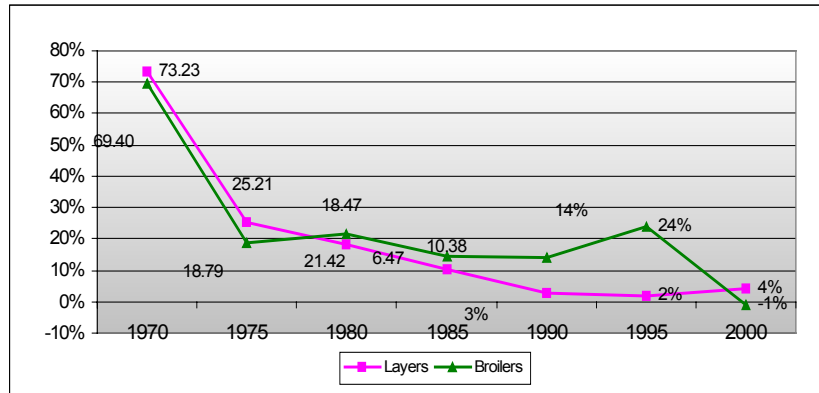
Source: Poultry Report by Chemonics International Consulting Division 1987

chicken meat price ratios to feed declined and poultry farmers/producers had to bear heavy losses. The ratio of egg prices to mash price dropped to 3.8 from 5 to 6 ratio levels of earlier on.

In phase - IV the compounded poultry population growth rate that had once attained at a level of 70% per annum during the time period of 1965-70 dropped down to 14% during 1980's. No developments were achieved in marketing products. Potential areas/markets away from cities were still not being accessed due to non-availability of and weak transportation infrastructure and non-existent storage facilities. Other problems highlighted in the previous phases also persisted.

The population of Layer and Broiler during the period onward from 1985 to 2000, maybe termed as Phase-V, remained on the increase but at a decreasing and lower growth rate. Figure-2 shows that the average growth over the 5-year period from 1990 to 1995 increased but perhaps with hiccups and choking

Figure-2: Layer and Broiler Population Growth



Source: Pakistan Poultry Institute, Islamabad 2000

breath. However, this may not depict the real picture as the populations between the year 1994-97 shows an exponential growth rate of 45% for broilers. This boom in production growth is accounted for heavy expansion of existing production units and new investments in integrated processing units such as by **M-Artal** and **Be Be Jan**. Whereas, the growth rate of layer over the 1994-97 period has been observed to be relatively modest at 11% from 1994-97.

During the phase-V poultry industry received mix of blessings and reprehensions. The income tax once imposed on poultry business was withdrawn in 1988 under clause 99 of 2nd schedule to the income tax ordinance 1979. However, it was added that the exemption would only be granted for 5 years to those poultry businesses, which were or will be established during the fiscal year of 1983/84 to 1987/88. In the subsequent years, income tax exemptions were announced on the same pattern, these were:

Clause 102A (1988) exemption of income tax for 8 years for the businesses established during 1988/89 to 1992/93.

Clause 102B (1994) exemption of income tax for 8 years for the businesses established during 1993/94 to 1994/95 in the rural areas only.

Clause 126D(J) (1995) exemption of income tax for 8 years for only those poultry businesses incorporated as private limited companies.

These income tax incentives encouraged flow of investment into the poultry sector but on the other hand, duties were being levied on the import of poultry raw materials, parent stocks and machinery etc. The industry experienced a mix of good and bad news; one establishment was enjoying income tax exemption while other had to pay. During 1996 sales tax was introduced on poultry feed and processed chicken. Local taxes such as district council tax, octroi, union council tax were also levied.

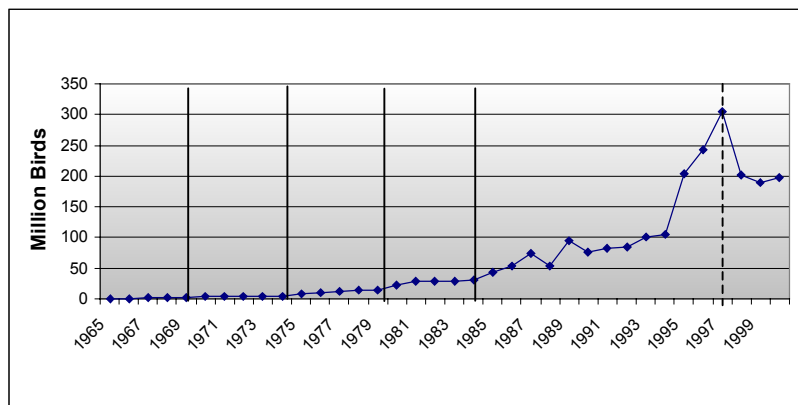
The sales tax, though withdrawn later on in 1997, resulted in high poultry production costs. The electricity tariff for poultry farms and hatcheries was rescheduled to industrial connection with 10% commercial tariff. Hatcheries that were once under total industrial tariff category from then onwards had to pay 10% commercial electricity charges under industrial category. This increased day-old chicken prices.

The modernisation, which was taking place halted because of relatively increasing costs against decreasing profit margins. The increased cost of production couldn't possibly be transferred onto the consumer since the poultry meat prices are dependent and governed by the demand and supply of poultry products in the local markets.

The major setback to the poultry industry started from the enactment of "Prohibition of Wasteful Expenditure on Marriages Ordinance". It appears that the poultry sector that was already exhibiting declining growth rate lost a substantial portion of its market share due to the enactment of above ordinance.

The production of broilers and layers came down to 184.7 & 13.9 million birds in the year 2000 from 290 & 14 million birds in the year 1997 respectively. Population of broilers declined drastically and accounted for negative growth of 36.3%. Figure-3 highlights the bird population trend from the year 1996 to year 2000.

Figure-3: Layer and Broiler Population 1965-2000



Source: SMEDA Survey 2001 and PPA 2000

The Product

The poultry industry produces two major products – meat and eggs. The major commercial breeds maintained are Broilers for meat and Layers for eggs. Poultry birds are classified into several species, types and classes. Breeds are further classified into varieties and within varieties into various strains. The generation line of these breeds come from Pure line, which produces grand parents for parent stocks and parent stock end up in producing the final product. The generation line can be seen in figure-4. It is observed that one female

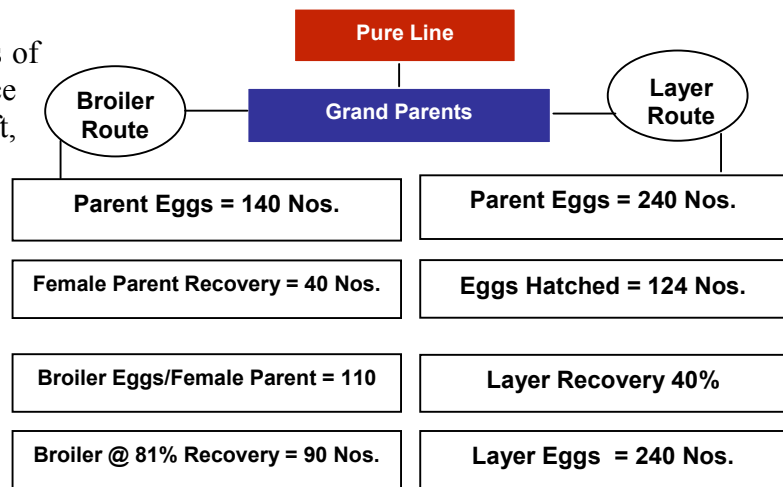
grand parent of broiler produces **3,600** broilers ($40 \times 90 = 3,600$), which accounts for **3.78** Metric Tons of Chicken Meat ($3,600 \times 1.75 \text{ kg (live weight)} \times 60\%$ (% of meat) = 3.78 Mt). On the other hand, one female parent of layer produces **12,000** eggs ($124 \times 40\% \times 240$).

Poultry birds classified, as Broiler is the major source of chicken meat. Broilers are produced within seven weeks of their placement. It has been observed that some farmers have managed to even produce 1.75 kg weighing broiler within 40 days of their placement. These strains of birds are of either sex, produce tender meat having soft, pliable smooth-textured skin. The industry people also call broiler a *feed conversion machine*.

The feed conversion ratio (FCR) of broiler is about 2.5, which means that with 2.5 kg of feed the bird gains 1 kg of live weight (the best minimum achievable FCR in an ideal condition under international standards is 1.8). However, it does not mean that broiler farmers achieving FCR of 2.0 would be better than from the one achieving FCR of 2.5 since cost of poultry feed is the most important factor to assess the economically best achievable ratios of FCR.

Layers produce eggs. Egg production takes more time following, more or less, an annual cycle. Layers are kept for approximately 18 weeks in a grower house before they are brought to production.

Figure-4: The Poultry Breed Generation Line



Industry Structure

Broilers and Layers are produced at farms. The farmers get day old broiler and layer chicks (DOC) from hatcheries. Hatcheries maintain their breeder farms or in some cases purchase their hatching eggs from breeder farms and breeder farms depend on producers of parent stock. Feed mills are also the major players of the poultry industry though dependent on the poultry industry's demand for their product. The major component of cost of production of chicken meat and eggs accounts for feed costs. Broilers, layers and breeder stocks extensively consume feed.

The marketing of chicken is still following the traditional channels of distribution. In most of the cases, broilers are distributed into the markets through middleman (Arthi) and wholesalers. The produce is brought into the cities and sold to the retailers. The role of the arthi is to identify a farm and negotiate the price. The chicken is sold to consumer in live

form through wet market - street slaughtering. The time spent in getting broilers from the farm to the retail shop is brief. Although collection and handling of birds has improved with the use of loader vehicles, but it is an established fact that greater the distance between the poultry producer and consumer, the more complicated is the marketing system including their collection, handling and transportation to the consumer or processing plants. The processing plants produce dressed chicken (slaughtered and cleaned). However, a very small amount of dressed chicken is available in the local retail market. The integrated processing units distribute frozen and dressed chicken packed in whole or cut-ups to the consumer through retail shops under their brand names.

In-spite of relative growth in the volume of broiler and egg sales over the years, there is no evidence traced that marketing facilities for poultry products have expanded. Apart from the establishment of the only two integrated processing units out of which one has already taken a corporate decision to close down the operations, no such investment is foreseen in the coming future.

Investment

Total investment in the poultry industry amounts to Rs.35 billion - see table-2. It is interesting to observe that in-spite of the number of intrinsic weaknesses in the industry infrastructure as stated above, a steady and modest growth in investment pattern is noticed apart from variant highs of 1995 & 1997 and negative lows of 1998.

The enormous growth in the preceding years accounted for continued number of new entrants and constant flow of capital into the establishment of hatcheries, feed mills and breeder / parent stocks. Attraction of large business interests to the commercial poultry industry as a result of reduced taxation and other fiscal incentives also motivated the investment.

Unlike other businesses such as textiles, poultry farming usually do not require big capital expenditures. It was very convenient for SME (small & medium entrepreneurs) to invest in the poultry farming sector with little amount of capital, such trend also contributed to the investment growth curve in the poultry sector.

Table-2: Investment in Poultry Industry

Years	Million Rs	Annual Growth Rate
1976	1,160	
1981	2,808	
1985	4,326	
1992	17,595	
1993	18,500	5%
1994	19,700	6%
1995	25,120	22%
1996	27,000	7%
1997	32,000	16%
1998	31,624	-1%
1999	33,767	6%
2000	35,055	4%

Source: SMEDA 2001

The growth in the production of farm-raised broilers and layers can also be attributed to improvements in the people's awareness of the importance of nutritious food, and to the fact that price of farm-raised chicken was affordable to the people of middle-lower income levels. However, relatively little investment was channelled into the marketing facilities and product promotions.

The rise in the investment levels during the years 1995 - 1997 resulted due to the supply being lower than the demand, which drove the prices of the chicken and eggs to high levels.

Table-3 shows the increase in wholesale prices of chicken by 22% during the year 1995. The price of chicken at wholesale level in 1995 increased with the margin of Rs.7 over the preceding year.

Current Situation

At present there are about 15,732 broiler farms that produced 198.6 million broilers in the year 2000 down from 290 million birds in the year 1997.

Table-3: Broiler Prices 1990-2000

Average Broiler Prices 1990-2000			
	Live Rs/Kg	Meat Prices (Rs/Kg)	Growth Rate
1990	25	33	
1991	26	35	4%
1992	27	36	4%
1993	30	40	11%
1994	32	43	7%
1995	39	52	22%
1996	42	56	8%
1997	41	55	-2%
1998	43	57	5%
1999	47	63	9%
2000	47	63	0%

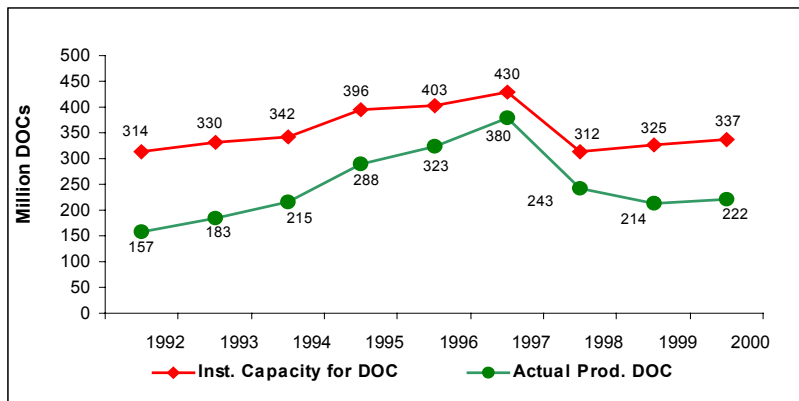
Source: SMEDA 2001

In 1999, 4,391 layer farms produced 3,182 million eggs, which is 38.5% of the total egg production of Pakistan's Desi and Farm eggs combined. However, the poultry industry reports huge capacity under-utilisation. The operational capacity of hatcheries and feed mills is reported to be far below its total installed capacity.

During this current phase of poultry industry's capacity under-utilisation, a number of production facilities such as farms, hatcheries and feed mills seized to operate. The number of hatcheries almost remained the same and just increased by only 3% over the years from 1997 to 2000. The present number of hatcheries is 284 and these units, however, are still running at low capacity.

Figure-5: Hatcheries Installed Capacity and Actual Production

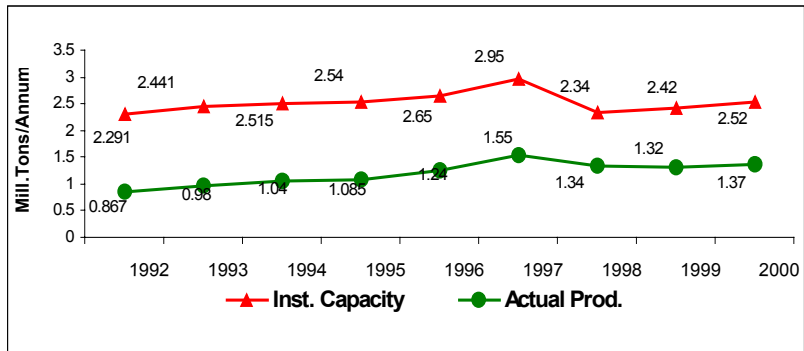
Figure-5 shows that 284 hatcheries in Pakistan are running at almost 60%, i.e., nearly half, of the installed capacity. It is same in the case of 171 feed mills, which are running at about 54% of their installed capacity (see figure-6 on the next page).



Source: PRI, Islamabad, 2000

The primary reason for the low/ under performance of the poultry sector is due to the rising cost of production with relatively constant or decreasing retail prices in absolute terms. The price trend of Pakistan live broiler can be seen in figure-7.

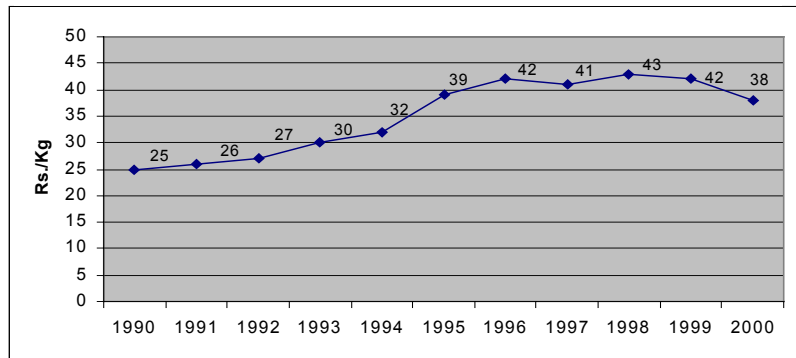
Figure-6: Feed Mills Actual Production and Installed Capacity



Source: PRI, Islamabad, 2000

It is interesting to note that the ratio of Chicken meat prices to finisher ration and egg prices to mash price dropped further to 3.4 and 4.4 respectively from 5 to 6 ratio levels (see table-4).

Figure – 7: Pakistan Live Broiler Prices



Source: Pakistan Poultry Association, 2000

The continued under-capacity production of poultry industry demonstrates a number of social and economic concerns. The contribution of poultry sector to the GDP is presented in table-5 on the next page.

Table-4: Poultry Product and Feed Price Ratio from 1986 to 2000

Year	Product Prices		Feed Prices		Price Ratios	
	Eggs (Rs/Doz)	Chicken (Rs/Kg)	Layer Mash (Rs/50Kg Bag)	Broiler Finisher (Rs/50Kg Bag)	Egg / Mash (Ratio of Rs/Kg)	Chicken / Finisher (Ratio of Rs/Kg)
1986	6.6	15.0	152.0	179.0	3.3	4.2
1987	8.3	18.0	163.6	191.6	3.8	4.7
1988	9.3	19.0	187.5	216.5	3.7	4.4
1989	10.3	25.0	199.5	232.0	3.9	5.4
1990	9.7	25.0	205.8	245.4	3.6	5.1
1991	10.0	25.2	237.5	276.3	3.2	4.6
1992	13.4	27.3	268.2	302.6	3.8	4.5
1993	13.4	29.9	280.6	318.3	3.6	4.7
1994	16.1	34.0	316.3	348.0	3.8	4.9
1995	17.3	37.3	361.0	391.6	3.6	4.8
1996	18.6	40.6	429.5	454.5	3.3	4.5
1997	20.5	42.8	476.6	504.4	3.2	4.2
1998	24.9	47.3	458.6	493.6	4.1	4.8
1999	24.8	44.1	462.0	497.0	4.1	4.4
2000	21.4	45.0	477.0	512.0	3.4	4.4

Source: Poultry Report by Chemonics International Consulting Division 1987

According to industry figure, about 67,391 unskilled and 12,253 skilled workforce have been unemployed since 1997. If the poultry industry runs at its optimum capacity, it would create new job opportunities for 177,273-unemployed skilled and unskilled workforce.

The poultry industry people maintain that the major causes that have effected the performance of the poultry industry are:

1. The enactment of "Prohibition of Wasteful Expenditure on Marriages Ordinance" The Ban on serving meals on the occasion of marriages.
2. The levy of 35% import duty on the Soya Bean Meal.
3. The levy of 10% commercial electricity tariff on the poultry farms and hatcheries.
4. The lack of technical knowledge of poultry production & management.
5. The inability to control outbreak of various poultry diseases.
6. The lack of a law, to avoid an ordinary farm to be close to a breeder farm or GP farm (minimum distance regulation).

Table-5: Poultry Sector Contribution to GDP

Contribution to GDP	
Poultry Value (Rs million)	57,000
Poultry Share in GDP	1.80%
Employment	150,000
Skilled	27,273
Unskilled	122,727

Source: Economic Survey of Pakistan, 2000

Above numerated issues brings about, one way or the other, a significant addition to the cost of production in the poultry industry.

The Issues of Concern

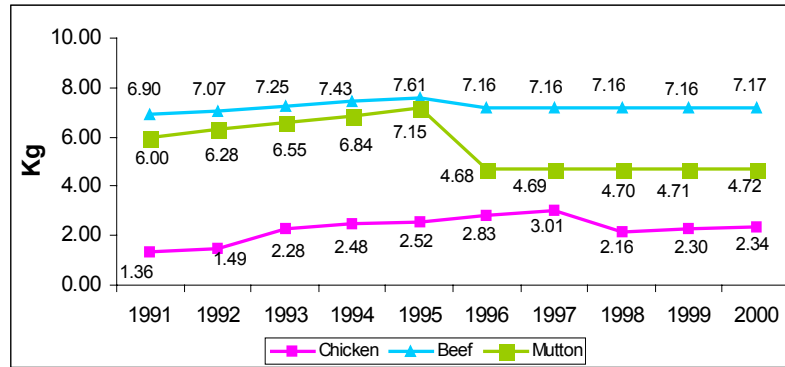
The poultry industry express it's deep concern on the prevailing situation of continued under capacity utilisation across the value chain. The poultry industry sought the following decisions to be made by the government. It believes that once the following issues are resolved, poultry industry will be able to achieve its capacity utilisation in order to uphold itself.

1. Withdrawal of 35% regulatory duty on import of Soya bean meal, 15% regulatory duty on import of grandparent day-old chicks, 25% duty on import of anti-coccidials, medicines / vaccines & disinfectants, 10% duty on import of vitamins, growth promoters and amino acids.
2. Lifting of ban on serving meals on the occasion of marriages enacted under "prohibition of wasteful expenditure on marriages ordinance".
3. Provision of incentives system to poultry sector in order to encourage exports of poultry products.
4. Refrain from reviving / levying any roadside local taxes on the poultry industry
5. WAPDA to stop discriminatory treatment and charge similar percentage of commercial units from poultry farms and hatcheries, as is being charged from other consumers of B1 & B2 industrial supply tariff categories. (Copy of WAPDA notification no. 2467-96 dated 7-05-1997 attached as annexe-I vide which the poultry farms, hatcheries and breeder farms were specifically levied with 10% commercial tariff for B1 & B2 industrial connections instead of 3%

and 1% as is being charged from other consumers of B1 & B2 category respectively).

Figure-8: Per Capita Consumption

It is observed that various factors have a bearing on the demand and supply of poultry products apart from seasonal variances. The per capita consumption trend of chicken meat, beef and mutton from the year 1991-2000 is presented in figure-8.

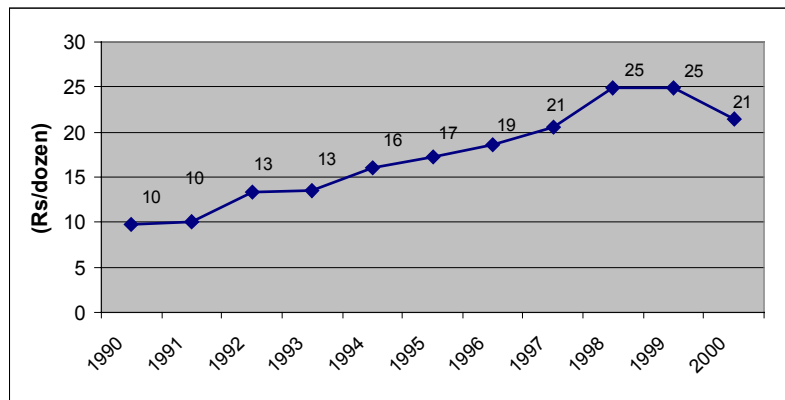


Source: Agricultural Statistics of Pakistan, 2000/2001

The past trends, assessed through least square estimation of the demand function for chicken meat reveals that consumption is significantly associated with income and supply of beef. One unit decrease in the supply of beef is associated with 0.89% increase in the supply of chicken meat. A one percent (1%) increase in per capita income is associated with a 2.2% increase in the consumption of chicken meat. It is observed that with beef supply held at 7 kg per capita. National annual income increasing at a constant growth rate of 4.46% and at existing inflation levels of 4.7%, the per capita availability of chicken will increase by 4.2% annually and predicted amount of chicken meat per capita available in the year 2010 will be 5.83 kg. In summary, the poultry meat industry is sensitive to the growth of income that supports increases in demand.

Egg availability in Pakistan has been growing at an annual average rate of 4% during the years 1992 to 2000. The production of farm eggs in year 2000 was estimated at 3,261 million eggs i.e., 23 farm eggs per capita. The growth in production slowed as egg prices levelled off and declined. Figure-9 show the average annual farm eggs wholesale prices from year 1990 to 2000.

Figure-9: Annual Avg. Farm Egg Wholesale Prices (1990-2000)



Source: Pakistan Poultry Research Institute, Islamabad, 2000

Least square estimations of the demand function for egg reveals that the level of consumption is significantly associated with income and price of poultry feed. The decrease in feed prices and increase in national income predicts continued and higher growth rates in per capita egg availability.

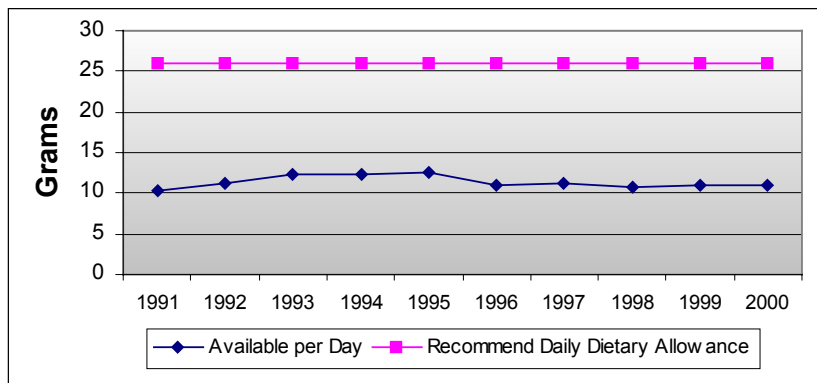
Above explained scenarios show that per capita availability of chicken meat and eggs are significantly effected by changes in the value of factors such as income level, beef supply, feed prices and inflation level. One percent (1%) increase in the retail price of chicken meat is associated with nearly equivalent decrease in the quantity demanded.

According to the recommended standards of National Research Council of America and World Health Organisation (WHO), reported by Institute of Public Health, Lahore: the daily recommended protein requirement of adult males or females is 0.8 grams per Kg of body weight. Therefore, a young male of 70-kg weight and young female of 50kg weight would requires 56 grams and 40 grams of protein per day respectively.

As per the standards published in "*Recommended Daily Dietary Allowances*" Revised 1989 by Food and Nutrition Board, National Research Council of America, "*one half of the above recommended protein quantity i.e., approx. 26 grams should be from animal source (classified as first class protein source) and rest from the plant sources (classified as second class protein source)*".

However, the exiting daily availability of protein quantity per capita in Pakistan driving from animal source including beef, mutton, poultry and fish combined amounts to 11 grams. The figure-10 shows the gap between recommended and available levels of daily protein allowance in

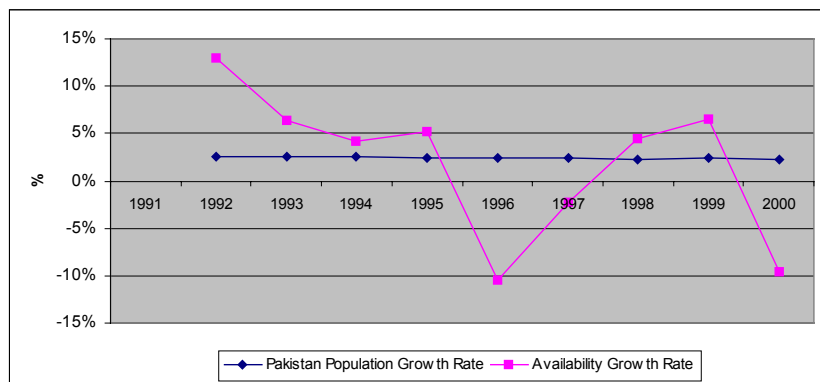
Figure-10: Recommended Daily Dietary Protein Allowance from Animal source Vs Existing Availability in Pakistan from 1991-2000



Source: SMEDA Survey 2001

Pakistan over the period from 1991 to 2000. It has been observed that there has been continued protein deficiency of about 14 grams per day from animal source in Pakistan.

Figure-11: Pakistan Population & Meat (beef, mutton, fish & poultry) Production Growth Trend 1991-2000



Source: Economic Survey of Pakistan 1999-01 & Agriculture Statistics of Pakistan 1999-01

According to the Institute of Public Health Lahore, the animal source proteins are essential for the growth of babies especially after infancy and for pregnant and lactating mothers. The figure-11 shows the growth rate

of population of Pakistan in comparison with growth rate of meat production combined for beef, mutton, fish and poultry. It can be noticed that population somewhat displays a linear and consistent growth trend, whereas meat production hardly show positive trends and in-fact drifts down to negative -11% and -10% in the year 1996 and 2000 respectively. This scenario presents that as long as the meat production maintains positive and higher growth trend above and over population growth rate, the protein deficiency gap will reduce. But the meat production growth levels are not maintaining a balance with the population growth levels and will lead to an escalation of meat prices in the future, which should be a cause of concern for planners of respective departments of Pakistan.

Issue 1: Soya Bean Meal Import

Feed accounts for about 70 to 75% of the total cost of producing layers and 45 to 55% for broilers. Chicken feed is composed of more than 40 different ingredients. These can be grouped into six classes of nutrients: -

1. **Carbohydrates:** principal source of energy in poultry ration, cereal grains like maize, sorghum, wheat and broken rice are rich in carbohydrates content.
2. **Fats:** also a source of energy. Fats and oils can be oxidised to a greater degree than carbohydrates.
3. **Mineral:** The role of minerals includes functioning of body metabolism, development of skeleton structure & eggshell, regulation of enzymes and for the maintenance of neuromuscular activities. The important minerals are phosphorus, sodium chloride, manganese and zinc. Marine shell or ground limestone is a source of calcium. Steamed bone meal can also supply both phosphorus and calcium requirements. Common salt is used for sodium and chlorine supplementation.
4. **Vitamins:** essential for the maintenance of normal health, growth and reproduction. Natural ingredients like yeast, fish soluble, berseem meal and milk by-products are rich sources of vitamins. However a commercially available vitamin premix, containing all vitamins in the chemically synthesised pure form is added to poultry rations to ensure the availability of the necessary vitamins.
5. **Water:** makes up 55 to 75% of the chicken body weight and 65% of egg content. It is required for digestion, absorption, transport of nutrients, metabolic processes, regulation of body temperature, maintenance of body shape and elimination of waste products from the body.
6. **Proteins:** Basic nutrient for growth, egg production, repair of worn-out tissues and regulators of body processes. In broiler starter ration used during the first four to five weeks, the recommended level of protein varies from 22 to 25%. In broiler finisher ration, a lower protein level ranging from 20 to 30% is recommended. The recommended protein level in diets for replacement pullets in the starting period (0-8 weeks) ranges from 20-33% and in the pullet-developing period (8-20 weeks) ranges from 14 to 16%.

Oil seed meals like Soya bean meal, sunflower meal, cottonseed meal, peanut meal, mustard meal and maize gluten meal are commonly used as a source of protein. The animal

protein supplements usually added to poultry ration include fishmeal, meat and bone meal, blood meal and poultry by-products meal.

Soya bean meal, which is 100% imported (Pakistan hardly grows any Soya beans, the 1999 production was only 5,000 Mt), is being largely consumed by poultry industry as a vital source of protein in Pakistan. The import of Soya bean meal in Pakistan was allowed back in 1989. Although there is a handsome amount of cottonseed, sunflower, rape seed and canola meal available in the local market, but the feed millers continued to prefer Soya bean meal due to the reason that other meals have anti-nutritional factors. According to industry figures, as little as 0.001% free Gossypol from cottonseed meal in the diet of hens causes yolk colours to change from yellow to black, rendering the eggs unmarketable. Some experienced scientists of poultry nutrition suggested maximum limits. They maintain that cottonseed meal can be used no more than 7.5% and sunflower meal at 9% as an average canola at less than 10%. Mix of these ingredients could be included within the higher limits for each ingredient, but with total ant-nutritional factors considered while formulating the inclusion rates would further limit usage. While all are restricted at maximum, a minimum inclusion of 10% is recommended for Soya bean meal with maximum being 30% or above under certain circumstances.

In Pakistan Soya bean meal is the largest source of high biological value protein in poultry feed. It consists of fat extracted Soya beans that have ground to meal or pelleted. India is the largest supplier of Soya bean meal to Pakistan. As per the industry figures, in the year 1997 to 98, 1998 to 99 and 1999-2000 the total value of Soya bean meal import amounted to Rs.1, 466 million, Rs.1, 231 million and Rs.1, 219 million respectively. On an average, reputed feed mills consume 12% Soya bean meal in the total dietary ingredients of the poultry feed, which forms about 20% of the total raw material cost.

The import of Soya bean meal was subject to 10% import duty under S.R.O.639 (1) 96 dated July 25, 1996,

S.R.O 218 issued in March 28,1997 came as an amendment to S.R.O.639 (1) 96, vide which, duty was raised to 20%. However, another amendment in the above S.R.O was issued on the same day i.e., March 28, 1997 vide S.R.O.222 and duty was reduced from 20% to previous level of 10%.

The S.R.O.639 (1)/96 was rescinded on September 2, 1999 through S.R.O.1007 (1)/99 vide which duty levied on import of Soy bean meal was raised to 35%.

Other related notifications included:

S.R.O.555 (1)/98 of June 12, 1998 vide which a number of poultry feed ingredients was fixed at 10% ad val. Soya bean meal was not included in the list.

S.R.O.374 (1)/2000 of June 17, 2000 vide which concession on tariff was given under SAPTA. Relief of 3.5% was allowed on import of Soya bean meal from countries of SAARC origin.

The National Tariff Commission (NTC) levied the import duty on Soya bean meal initially as a "regulatory import duty". The poultry industry maintains that the regulatory duty on import of Soya bean meal was exercised to bail out Pakistan Oil Seed Board (PODB) which imported Soya bean meal from USA under PL480 scheme. However, it is noted that after the stocks of Soya bean meal under PL480 were exhausted the regulatory duty was converted later on into the statutory import duty by the Central Board of Revenue (CBR) and regularised without the consent or approval of NTC.

At present the existing duty on Soya bean meal consumed for poultry feed is 31.5% due to the fact that about 100% of the import of Soya bean meal is done from India.

The existing import items for poultry industry and their prevailing statutory rate of duty are shown in table-6. During the year 1999-2000, 123,034 Metric tons of Soya bean meal was imported from India at the rate of US\$177.86 per Mt which amounted to US\$ 21.9 million.

The estimated working of import duty levied on imports of poultry items, for demonstration purpose, is presented as follows:

		<u>Duty Received</u>
Soya bean Meal (1999-2000)	US\$ 21.9 million	US\$ 6.90 million
Vaccines / Medicines*	US\$ 10.0 million	US\$ 1.00 million
Live Poultry (Day-old Chicks)**	US\$ 1.50 million	US\$ 0.23 million
Hatching eggs**	US\$ 0.40 million	US\$ 0.06 million

* FBS 1997-98, ** FBS 1998-99

Total estimated revenue collected against Import Duty = \$ 8.19 million

Given that the demand of poultry products being highly associated with the prices, the sum of duty collected US\$ 8.19 million i.e., Rs. 466.8 million (@\$=Rs.57) represent a significant additional input cost to the

Table-6: List of Imported Raw Material by Poultry Industry

Sr.#	Items of Import	H.S Code	Import Duty	Concession Rate of Duty
1	Soya Bean Meal	2304.0000	35%	31.5% (SAARC Origin)
2	Grandparent Day-old Chicks	0105.1190	15%	-
3	Anti-Coccidials	3003.2000	25%	10% (on Regd. Item)
4	Vet. Medicines / Vaccines	3003.2000	25%	10% (on Regd. Item)
5	Disinfectants	3808.4019	25%	-
6	Vitamins	2936.0000	10%	-
7	Growth Promoters	3003.2000	10%	-
8	Amino Acids	2922.4100	10%	-
9	Others Chemicals	Misc.	35%	

Source: SMEDA Survey 2001 (position before the announcement of budget for year 2001-2002)

poultry production. The quantity of Soya bean meal imported in 1999/2000 accounted for 8% in terms of weight of feed produced and the value of Soya bean meal in 50-kg feed bag worked out to be Rs.49.8 at 31.5% duty. Had there been 0% duty the value of Soya bean meal in a feed bag would be Rs.37.8. Therefore, the price of 50-kg feed bag could be

reduced by Rs.12, rest being constant. Hence the saving on cost could be passed onto the consumer in order to augment demand.

Cultivation of Soya bean in Pakistan was initiated commercially as a trial with an objective of getting oil from Soya beans. Growing Soya bean purely as an oil seed crop was the major mistake. Soya bean should not be assumed as an oil seed crop although it is a source of edible oil in the world. Its like cotton - cottonseed oil is considered as a by-product and cotton is not grown for oil. Similarly once the markets for Soya bean meal are established, the oil may be considered as by-product. In 1998 the total world export of Oil-cake of Soya beans amounted to US\$ 6.44 billion as against total export of Soya bean Oil (refined / crude) valued at US\$ 3.0 billion and Soya beans at US\$ 8.0 billion in the same year.

Major reasons for the failure of Soya bean cultivation in Pakistan are:

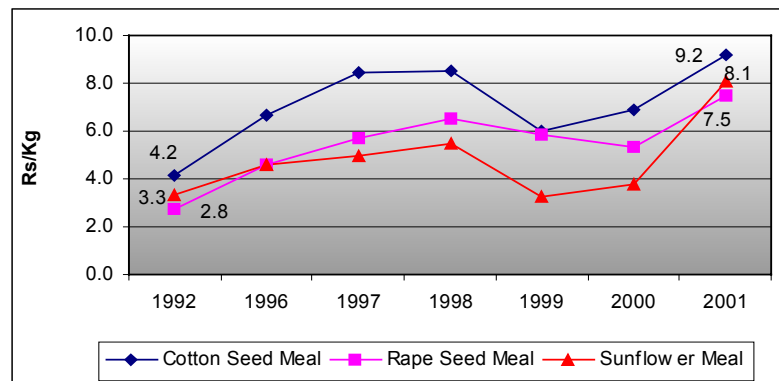
1. Planting of Soya bean in spring in cotton growing areas and competing with cotton. The short stature early maturing variety was planted so that it vacates the field before the field was needed for cotton, but it turned out to 110 days variety instead of 90 days and therefore, sowing of cotton got delayed. To avoid this situation farmer harvested immature Soya bean crop and faced huge losses.
2. Absence of experienced staff at the extension services who could provide required know how to the farmers.
3. Soya bean cultivation should have been tried with long roots draught varieties as is being cultivated in Zimbabwe & Taiwan. These varieties should have been grown in the areas of Katcha lands (river reign), Potohar Plateau, Baluchistan & NWFP.

The import of Soya bean meal also called for a concern of local Solvent Extractors. The interests of the Solvent Extractors Industry and Poultry Industry are at conflict. The Solvent Extraction Association alleges that the import of Soya bean meal from India adversely effected the production of oil-seeds because of suppression of oil-seed meal prices. They believed that meal prices remained below the cost of production and therefore they demand incentives to the producers of oil-seeds by banning import of Soya bean meal or at-least by increasing the level of import duty.

On the other hand, Pakistan Poultry Association (PPA) maintains that no adverse effects were seen on prices of locally produced oil-

seed meals due to import of Soya bean meal. A study by PPA reveals that the prices of oil-seed meals increased at a higher rate than the period when Soya bean meal was not being

Figure-12: Indigenous Oilseed Meal (Avg. Prices)



Source: Pakistan Poultry Association (PPA) 2001

imported. Figure-12 shows that the local oilseed meal prices are increasing at an average rate of 14-18%. The price trends clearly pointing to a manifestation of continued short supply to demand. The prices of cottonseed meals in 1998 registered a downward trend because of high toxicity levels and also due the fact that production of poultry sector dropped phenomenally. However, the overall rising trend in local meal prices may be attributed to the fact that the use of imported Soya bean meal improved the nutritional quality of poultry feed, by reduced mortality and reduced cost of production. Thus providing an impetus to rapid expansion of the poultry industry and placing higher demand on local oilseed meals within the given nutritional constraints.

Under the maximum limitations (technical constraints) to the usage of meal other than Soya bean meal in poultry feed, it is observed that the increase in cost of Soya bean meal would not increase the demand for locally produced oil-seed meals. The usage of Soya bean meal continued, even though the prices of Soya bean meal has always remained 50-70% higher than that of locally produced oilseed meals. It is perhaps understood that as to why poultry industry would still insist on using Soya bean meal at even higher prices in a situation where reduction in the cost of production is the only immediate rescue seen for capacity utilization. The above analyses envisages the following options:

Options:

1. Reduction of duty on Soya bean meal to 0%
2. Reduction of duty on Soya bean meal to 10%, whereas 10% being collected thereon is utilized for research & development and for incentives to farmers in order to encourage local production of Soya bean crop.

It has been observed that even local oil extraction of imported Soya beans is not competitive in comparison with other oil seeds due to its low oil recovery of about 15% to 18% as against 44% and 36% of Canola and Rape seed respectively.

Table-7 provides Soya bean meal costs in comparison with other oil seeds.

Table-7: Soya bean meal cost comparison

Soya Bean Meal Cost Comparison			
	Canola Oilseed	Soya bean	Local Oilseed
Price of Raw material C&F US\$/Mt	270	208	
Price of Raw material C&F Rs./Mt	16,470	12,688	15,000
Duty	1,320	1,320	-
Import Incidentals	550	550	-
Cost of Bags	180	180	180
Stevedoring + Inland Transport	1,200	1,200	200
Total Price up-to Factory	19,720	15,938	15,380
Processing Cost : Seed to Oil	2,000	2,000	2,000
Less Product Sales			
Meal	3,250	7,560	2,700
Soap	150	150	150
Net Cost of Oil	18,320	10,288	14,530
<i>Cost of Oil per Mt.</i>	<i>41,636</i>	<i>51,440</i>	<i>38,237</i>
Price of Meal per Mt.	5,909	9,450	4,500

It is ascertained that Soya bean meal, which is hardly available in the local market, is a vital ingredient consumed for the production of poultry feed. The WTO agreement calls for tariff reduction/elimination, Pakistan being the signatory of WTO agreement will have to comply with the agreement by reducing its tariff structures to nil in the coming few years.

Under the above scenario, reduction of duty on Soya bean meal to "nil" under option no.1 is recommended. The import duty on other products consumed by poultry industry such as vaccines and mineral does not account for a significant amount of value, therefore gradual reduction of duty on these products to nil is recommended over the next three years period.

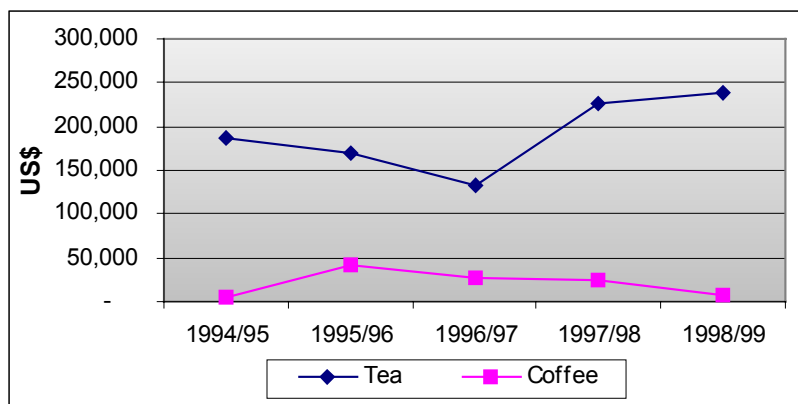
Issue 2: Uplift of Ban on Serving Food on Marriages.

Removal of ban on serving meals on the occasion of marriages enacted under "prohibition of wasteful expenditure on marriages ordinance". It has been observed that the said ordinance has also contributed adversely in the development of poultry industry. The enactment of above ordinance brought about drastic drop in the population of poultry birds. The production of broiler and layer came down to 198.6 million birds in year 2000 from 290 million birds in the year 1997 accounting for negative -31.5% decline. This drop entailed heavy drop in the operational capacities of hatcheries, feed mills, broiler, layers and breeder farmers.

Not only the poultry industry bears the adverse affects of above ordinance but also the other allied businesses, directly or indirectly related with poultry industry had to put up with the above ordinance. For example, the tent and crockery rental & catering businesses, merchants of cooking raw material, traders and farmer of Bamboo used for tents, manufacturers of glass, ceramic and steel crockery etc. also have to bear with lost capacities. Unemployment levels have risen in the catering staff evidently for semiskilled and unskilled personnel such as cook's helpers & waiters.

It has also been observed that the provision of serving Soft Drinks and Tea-Coffee has accounted for increase in Pakistan import bill. The import of Tea registered tremendous increase from the year 1997. Pakistan's import of tea and coffee amounted to US\$ 250.8 million in the year 1997/98 - an increase of US\$ 89 million from the previous fiscal year of 1996/97. Figure -13 shows the amount and trend of Tea and Coffee imported during the year 1994-99:

Figure-13: Pakistan Tea & Coffee Import 1994-99



Source: Federal Bureau of Statistics 1998-99

Following options may be adopted to undo the lost potential.

Options:

1. Complete removal of ban on the serving of meals enacted under "wasteful expenditure on marriages ordinance". OR
2. To allow strictly "one dish" being served on the weddings. OR
3. Keep the ban intact and continue import of Tea, coffee and soft drinks concentrates along-with increased use of sugar in Mithai (sweets) & Bakery items being served.

Before opting for an option, we may have to answer the following:

- Can Pakistan continue to afford spending significant amount of increased foreign exchange on the import of Tea from the 1996-97 levels?
- Could it be possible to readily provide lost employment to all those who were associated directly or indirectly with poultry industry and are from society's lowest income bracket.
- Would it be wise to ignore export potential of poultry products, which could be achieved by producing low cost products attained through economies of scale and production efficiencies.

The answer to the above is negative.

Permission to serve "one dish" under above-mentioned Option no. 2 is highly recommended. Limitation of "one dish" would bring about controlled expenditure on the weddings and as a result will provide relief to the poultry sector and other directly associated sectors of catering - catering staff, crockery, tent rental services companies, lighting arrangement/rental companies and wedding halls etc.

Issue 3: Provision of incentives system to poultry sector to Encourage Exports.

Pakistan Poultry Export Potential

The total world import of poultry reported by ITC in 1998 (International Trade Center, Geneva) amounted to US\$ 8.8 Billion. (See below, Table - 8 for world's category-wise

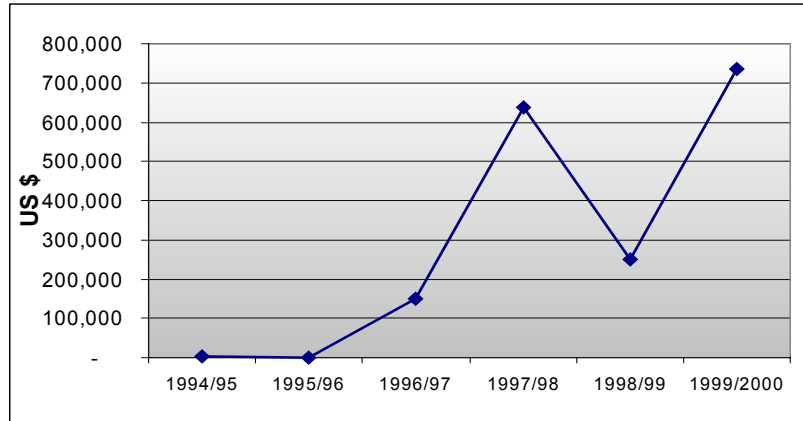
Table - 8: World Poultry Imports 1994-1998 (US\$ Million)

Category	1994	1995	1996	1997	1998
Poultry, live, to 185g	358	401	434	434	421
Poultry, live, over 185g	424	465	505	505	454
Poultry, whole, fresh, chilled	386	477	498	434	457
Poultry, whole, frozen	725	936	968	648	539
Poultry, parts, fresh, chilled	1,046	1,188	1,409	1,440	1,518
Poultry, parts, frozen. (ex. Liver)	3,113	3,646	4,600	4,718	4,137
Poultry livers, frozen	36	42	10	3	2
Bird's Eggs, in Shell	859	880	1,148	1,064	956
Egg, unshelled; yolks, dried	83	82	115	142	112

poultry imports). Whereas, Pakistan's total poultry sector exports amounted to only US\$ 0.73 million in the year 1999/2000 out of which 92% of exports accounted for day-old-chicks & Hatching Eggs (as reported by FBS in 2000). Pakistan in the past had shown great potential for exporting hatching eggs.

The world market for processed poultry and hatching eggs is quite lucrative to indulge in and persuade Pakistan's poultry sector to gear itself for poultry exports. But Pakistan's exports of poultry products show an irregular export feature, see figure - 13 for Pakistan poultry product's exports over the period from 1994/95 to 1999/2000.

Figure - 13: Pakistan Poultry Exports from 1994/95 to 1999/2000



Source: Federal Bureau of Statistics 1999/2000

The following table-9 shows the category wise exports of poultry products from Pakistan. It is observed that hatching eggs and day-old-chicks accounts for 45% and 47% of the total Pakistan Poultry exports respectively. Despite the existing infrastructure

availability and constraints pointed out above in the area of transportation and storage facilities in Pakistan, the exports of hatching eggs may be done on a regular basis and handled with less losses relatively as compared to live birds, which requires much sophistication and care.

Table - 9: Pakistan Poultry Export Categories in US\$ From 1994/95 to 1999/2000

US \$	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	Share %
Poultry (DOC)	2,203	837	148,521	627,031	250,244	341,853	47%
Hatching Eggs	-	837	-	9,171	368	328,880	45%
Bird Eggs Dried	-	-	-	2,308	-	30,772	4%
Poultry Meat	-	-	1,068	-	-	32,104	4%
Total	2,203	837	149,589	638,510	250,612	733,609	100%

Source: FBS 1999/2000

The world market of Hatching eggs amounts to nearly US\$ 950 million. The exports of hatching eggs by selected countries of the world, reported by the United States Department of Agriculture (USDA 2000) can be seen in the annex. II. It may be noticed that the exports of only these selected countries amounted to seven billion Eggs.

During the fiscal year 1999/2000, Pakistan exports of hatching eggs registered an exponential growth amounting to US\$ 0.329 million as compared to US\$ 8000 in the previous year. The country wise exports of Pakistan hatching eggs during the period from

1997/98 to 1999/2000 is presented in the Table - 10. It is observed that the average FOB export price for hatching eggs from Pakistan ranged from US\$ 0.067 per egg for Yemen to US\$ 0.11 per egg for Dubai¹. These prices are far below average international trade price of FOB US\$ 0.16 per egg and C&F price of US\$ 0.19 to US\$ 0.20 per egg. The hatching egg exports of Netherlands to selected countries in the year 1998 & 1999 (Jan to June) amounted to 92.3 million & 86.3 million eggs respectively (see Annex - III). It is observed that the average FOB price per hatching egg received by Netherlands amounted to US\$ 0.175 (17.5 US cents) per egg.

Table - 10: Country Wise Exports of Pakistan hatching Eggs

It may be concluded from above data that the export price of US\$ 0.11 per egg from Pakistan is highly competitive. But in fact, the exports of hatching eggs from Pakistan is

RS/\$ rate	43.2		46.8		51.8		Unit Price 1999-2000	
	1997-98		1998-99		1999-2000		Rs	\$
Country	Qty Kg	Rs."000"	Qty Kg	Rs."000"	Qty Kg	Rs."000"	Per Egg	Per Egg
Ajman	3,880	437	-	-				
Bangladesh	28,656	3,031	-	-	74,104	6,679	4.87	0.094
Dubai	38,658	2,904	-	-	1,228	132	5.81	0.11
Yemen	30,860	2,156	-	-	43,304	2,766	3.45	0.067
Saudi Arabia	5,000	329	-	-				
Sharjah	3,200	314	-	-				
Afghanistan			10,500	235	405,504	7,460	0.99	0.019
Switzerland			900	133				
US \$ "000"		212		8		329		

Source: FBS 1999/2000

being done at prices highly below the cost of production in order to bear less losses than selling in the domestic markets. The exports took place only at times when prices of day-old-chicks produced from hatching eggs have fallen in the domestic market far below the cost of production and yielding revenue of even less than what is recovered through exports of hatching eggs. This has been one of the reasons for Pakistani hatching egg exports not to be a regular export.

The cost of production of hatching eggs in Pakistan amounts to about US\$ 0.193 per egg calculated at Rs./\$ = 64.2 (see Annex - IV). With the present cost of production of US\$0.193 and packing and forwarding cost of \$0.01 per egg the total cost of production amounts to US\$ 0.203 per egg. The cost of freight, for example, from Lahore/Islamabad to UAE/Saudi Arabia at an average rate of Rs 31/Kg, amounts to US\$ 0.033 per egg (Rs 31x 25kg / 360 eggs / 64.2 = US\$ 0.033). Thus total C&F cost per egg amounts to **US\$ 0.236**.

Exporters of poultry products from Pakistan have also managed to explore new and potential export markets such as Philippines, Iran and Iraq. Since the different destinations have different freight rates, therefore, export to these countries is largely determined by

¹ Note: the FOB prices for Afghanistan are ignored since the reported data includes major share of table eggs since exports of hatching eggs and table eggs are being reported by FBS under the same head.

freight costs, which are on the higher side, in order to export poultry items to these countries on a regular and long-term basis.

Under the above scenario, Pakistan makes net loss on the exports of hatching eggs. The major causes for higher cost of production have already been addressed earlier in this report. However, Annex - V provides the workings of cost portion based on tariff structure of year 2000/2001. It is seen that the portion of cost ensuing from major duties and levies amounted to Rs. 1.34 per egg i.e., US\$ 0.021 per egg.

The recent revisions in the tariff structure announced for poultry industry in the annual budget 2001/2002 has resulted in reduced production costs. But yet, the portion of costs, attributed to the remaining duties and levies, amounts to Rs. 0.73 per egg i.e., US\$ 0.011 (see Annex - VI for revised cost workings).

The difference of US\$ 0.012 per egg resulted from recent changes in tariff structure ($\$ 0.021 - 0.011 = 0.01$) brings the cost of production down to US\$ 0.18 per egg. The cost of production of eggs, free from all diseases, is still on a higher side in order to aim for regular exports or to offer profitable competitive prices to enter the world markets as compared to the world average export price of US\$ 0.16 to US\$ 0.18 per egg.

Other major concern is related to "withholding tax deducted against export proceedings from poultry. It has been pointed out that withholding tax amounted to 0.5% is being charged on export proceedings from commodities listed under "agriculture" head. Whereas, on the other hand, poultry products are listed under the head of "others" and highest slab of withholding tax at 1.25% is being charged from the poultry export proceeds.

Options:

Above situation warrants that in order to export poultry products from Pakistan and also to make exports a regular, competitive and sizeable, yet profitable feature, one of the following options may be considered:

1. The cost of production will have to be reduced by at least US\$ 0.028 per egg (2.8 cents) through:
 - (a) Zero rate import duties on all inputs of poultry items.
 - (b) Rationalization of WAPDA electricity tariff.
 - (c) Freight subsidy to be given to the freight carriers for poultry exports.
 - (d) Withholding tax on poultry export proceeds to be deducted under the head of agricultural commodities @ 0.5%.

2. Or some restitution may be paid against exports at 2.0 cents per egg to bring down the cost of production to US\$ 0.152 per egg (15.2 cents).
 - (a) Export rebates may be offered.

Note: according to the information received from DEFRA (Department of Environment Food and Rural Affairs, UK the subsidy being offered by European Union to the exporters of hatching eggs is US\$ 1.90 for 100 hatching eggs (see Annex VII for poultry export refunds).

However, the inherent inefficiency of the poultry sector at each link of the value chain can not be ignored. If the poultry products are exported on a regular and continuous basis from Pakistan the benefits will surely pass on to the whole value chain. This will result in attaining the previous lost levels of production capacities, which in return will ensure production efficiencies and Pakistan poultry industry in the future (3 to 4 years) may not have to depend on any rebates and restitution.

Another major poultry product is the "processed (slaughtered / dressed) chickens". The largest share of world poultry import accounts for "frozen poultry parts" which amounts to US\$ 4.1 billion. The total processed (slaughtered) world poultry import market accounts for US\$ 6 billion. There are only a couple of broilers processing facilities in Pakistan. These chicken processing facilities are even operating below their capacities. A hygienically and clean processed chicken, free from all diseases and residual effects of medicines is also needed in the local market. The culture of street slaughtering, which brings with it an unhygienic environment, will have to be discouraged. Licensing arrangement of poultry retail shops may do this.

Investment into the poultry sector will have to be attracted through incentive programs. Exports of poultry products to be given priority, especially the priority should be given to the hatching eggs, day-old-chicks and chicken meat.

The trade incentives, by-and-large, may also include:

1. Investor friendly regulatory environment.
2. Level playing field for all stakeholders.
3. Access to formal credit on favorable terms.
4. Development of chicken processing infrastructure on commercially viable basis.
5. Equity investment on "no questions asked" basis.
6. Subsidy on freight (subsidy to be given to the shipping companies).
7. Controlled environment storage facilities at the airports.

Issue 4: Refrain from reviving / levying any roadside local taxes on the poultry industry.

The suspended system of roadside tax collection, which included Export Tax, levied by District Councils, Octroi Tax by Union Councils, Town Committees and Metropolitan Corporations lacked transparency. Unlike other products, Poultry sector includes highly perishable commodities like day-old-chicks and hatching eggs. The safe and timely distribution of these products is of vital importance. According to the poultry industry, it had to deal with number of local tax collection posts situated deep into the rural areas. At

these posts, the driver and vehicle loaded with thousands of highly perishable poultry commodities like day-old-chicks were stopped for the purpose of counting in the open extremes of temperature endangering life only to extort higher sums than specified in local tax schedule. In addition to other constraints, local taxes in the past had also been a major constraint in the development of poultry sector and in-fact contributed adversely.

The poultry industry fears revival of roadside tax collection once the devolution of power to district level occurs under present government's "Devolution Plan" under National Reconstruction Bureau. The poultry industry expresses its strong apposition against such revival.

Options:

Since the issue has already been resolved in the past, no option needs to be presented. However, it is recommended that before reviving the existing roadside collection of local taxes, a detailed appraisal be made on how to collect taxes. The taxes could be collected by a ticket system against the delivery challan etc. This issue needs to be thrashed out on the basis of trust by relevant Government department and stakeholders.

Issue 5: Electricity Tariff

As per the notification issued by the Secretary WAPDA dated 7-05-1997 (copy enclosed) the amendments in the definition and conditions of supply of tariffs B-1 and B-2 came into effect. The notification reads as:

For the existing clause-1 of "DEFINITIONS" in industrial supply B-1 and B-2 the following shall stand substituted:

"Industrial supply" for the purpose of this tariff, means a supply for bonafide industrial purposes in factories including the supply required for the offices and for normal working of the industry and also for water pumps and tube-wells operating on three phase 400 volts, other than those meant for the irrigation or reclamation of agricultural land.

Three percent (3%) and one percent (1%) of total units consumed shall be charged at general supply tariff A-2 for B-1 and B-2 tariff categories respectively.

However: the notification clearly mentions under separate heading that: The supply at one point under above tariff of B-1 and B-2 shall also be available to poultry farms, hatcheries and breeding farms **but ten percent (10%) of the total consumption shall be charged at general supply tariff A-2.**

The above amendment in the definitions and tariff appears as if these amendments were only brought into effect for specifically levying higher rates to only poultry sector with rest of the businesses set aside on the other hand. On the face of it, the notification reflects a discriminatory treatment with poultry sector.

It is observed that if hatcheries and other poultry setups are entitled for B-1 or B-2 tariff categories accordingly, than why these are put under separate tariff slab? The matter may be resolved with National Electricity & Power Regulatory Authority (NEPRA).

In our view poultry setups, which qualify for industrial connection under tariff B-1 or B-2 should at-least be treated equally as other industries under same tariff category. This will in turn make economic production of poultry more feasible to recoup lost production capacities and also to produce economical export surplus to compete in the international markets.

Conclusion:

The report highlights various vital issues relating to poultry industry of Pakistan. This is a short preliminary study on the subject and provides views and recommendation for the Government. The study envisages the following alternative lines of approach:

1. The Government may continue with its existing policy and carry on with its ad-hoc fixing approach. However following outcomes may be projected as a result of this scenario:
 - ◆ The production of poultry products will very slowly move up and those lost levels of past production will not be regained in the coming years.
 - ◆ New investment in the hatcheries and poultry feed-mills will continue to rise at decreasing percentage in relation with other economic factors such as population & GDP growth etc.
 - ◆ The revenue collection of Government against import duty on poultry raw materials will come to a standstill due to reduced production capacities.
 - ◆ The prices of chicken and day-old-chicks may come to relatively stable levels but on the higher side.
 - ◆ Due to lost economies of scale, cost of chicken products will go beyond the purchasing power of lower & middle income families and a large number of consumers will be deprived of a healthy nutritional diet.

2. The Government takes corrective measures:
 - ◆ The duty on import of Soya bean meal to be reduced to 0% or at-least to 10%.
 - ◆ A direct support to Soya bean growers should be announced on the following basis:
 - Rs.100 per 40kg for Soya bean for first two years, Rs.80 for year-3 and Rs.60 for 3 years. Subsequently the support could be lifted. The support should be given to the growers at the point of purchase in terms as per international lending agencies requirement of support price. The total cost to Government for this support price would amount to Rs.390 million in order to make available required quantity of Soya bean meal (at present Soya bean meal consumption of poultry industry is 125,000 ton per annum). In doing so, Pakistan would avoid its foreign exchange spending of US\$ 20.1 million per annum on purchase of Soya bean meal from India.

- Government should conduct substantial Research and an Extension program for the development of Soya Bean cultivation for higher yields.
- ◆ The roadside collection of taxes should continue to be suspended.
- ◆ The poultry processing equipment, plants and machinery should be exempted from import duty. This will encourage private sector to invest in poultry sector. It will also introduce quality culture and bring a change in buying habits of local consumers to hygienic poultry products.
- ◆ Upgrade hygienic and sanitary standards maintained by the Municipal Corporations and Committees. It has been revealed that the Punjab/Sind/N.W.F.P/Baluchistan Animals Slaughter Control Act, 1963 and Animals Slaughter Control Rules, 1965 and their subsequent amendments thereof does not cover the Poultry sector. There is no rule or laws available, that may govern, control and implement sanitation and hygienic protocols regarding production, slaughtering, marketing and distribution of poultry products i.e., Chickens. A law may be established to implement hygienic and sanitation standards in the poultry industry at the federal and provincial levels.
- ◆ The delivery time of flocks to the retail shops is of vital importance. Once taken out of farms for delivery, poultry birds loose weight during transportation, all the way from wholesale markets to the retail shops. These losses increase further while waiting at the wholesale marketplaces, bad caging and non-conditioned environment. In order to reduce these losses refrigerated transport, conditioned & clean environment is needed. Government should provide incentives to refrigerated transport services providers and also to equip Trains with cold storage wagons so that poultry products are also transported to far flung areas in conditioned environment.
- ◆ The investment incentive, discussed earlier above, will support and encourage poultry exports, and contribute in offsetting poultry sector import bill.
- ◆ Government to allow "one dish" being served on the weddings. This would bring about controlled expenditure on the wedding and in result will provide relief to the poultry sector and other directly associated sectors.
- ◆ The alarming concern of poultry industry is the declining production in absolute relative terms to population growth, inflation and demand. Reduction of cost is of vital importance to attain economies of scale. In this situation, where any extra cost would act as an impediment to growth of poultry industry, separate and higher electricity tariff i.e., 10% commercial tariff is charged for B1 & B2 industrial connections. Whereas, 3% and 1% is being charged against B1 & B2 category respectively from industrial consumers other than poultry. This discrimination must be sorted out.

Finally while this document presents brief proposal and recommendations, there is a need to conduct a comprehensive study on the subject in order to formulate more detailed strategy to guide Pakistan to look after the interest of all the stakeholders of the poultry sector. And also to prepare a strategic plan in order to explore and tap export markets for Pakistan poultry products starting with hatch-able eggs and day-old chicks.

Annex. I

WAPDA Notification No.2467-96/GMCS/Tariffs/G-243 dated 7-05-1997

Annex. II

TOTAL EGG EXPORTS
Selected Countries (Million Eggs)

	1996	1997	1998	1999	2000(p)	2001(f)
NORTH AMERICA						
Canada	393	323	367	454	600	650
Mexico	-	-	-	-	-	-
United States	3,037	2,734	2,626	1,940	2,062	2,040
Subtotal	3,430	3,057	2,993	2,394	2,662	2,690
SOUTH AMERICA						
Brazil	15	20	7	24	30	35
Colombia	9	10	13	20	25	26
Subtotal	24	30	20	44	55	61
EUROPEAN UNION						
France	50	340	320	368	380	390
Germany	219	179	160	172	100	100
Italy	62	105	5	5	5	5
Netherlands	895	986	1,602	1,894	1,310	1,760
Spain	23	8	1	30	23	23
United Kingdom	29	71	530	81	85	90
Subtotal	1,278	1,689	2,618	2,550	1,903	2,368
EASTERN EUROPE						
Bulgaria	87	82	10	10	10	10
Poland	23	5	25	32	30	30
Romania	230	180	10	-	-	-
Subtotal	340	267	45	42	40	40
FORMER SOVIET UNION						
Russia	50	50	50	50	50	50
Ukraine	106	42	4	12	11	9
Subtotal	156	92	54	62	61	59
MIDDLE EAST						
Turkey	400	465	611	355	380	440
Subtotal	400	465	611	355	380	440
ASIA						
China	677	957	898	774	984	1,036
HongKong	31	10	5	2	2	3
India	45	260	315	267	285	305
Indonesia	-	-	4	-	-	-
Japan	-	-	-	-	-	-
Malaysia	450	447	468	587	575	585
Republic of Korea	-	-	-	-	-	-
Taiwan	9	10	13	3	4	4
Thailand	65	50	99	28	100	50
Subtotal	1,277	1,734	1,802	1,661	1,950	1,983
TOTAL	6,905	7,334	8,143	7,108	7,051	7,641

Source: FAS post reports, official statistics, and inter-agency analysis (USDA 2000)

1) EU trade excludes intra-EU trade, (p) Preliminary (f) forecast

Annex. III**Export Hatching Eggs from Netherlands to Country of Destination**

Country	1998		1999		Value per Piece US\$
	Eggs x1000 Pieces	Value US\$ "000"	Eggs x1000 Pieces	Value US\$ "000"	
Belgium & luxembourg	10,589	2,041	12,774	2,103	0.16
Germany	13,428	2,535	12,761	1,855	0.15
Austria	11,888	2,391	8,115	1,441	0.18
Italy	2,724	630	5,388	911	0.17
Greece	3,504	936	3,813	867	0.23
France	520	73	2,463	37	0.02
Denmark	125	48	433	162	0.37
Spain	1,166	310	133	25	0.19
Other EC Countries	27	6	77	16	0.21
Total EC Countries	43,971	8,970	45,957	7,417	0.161
kuwait	7,563	1,422	6,895	1,272	0.18
S.Arabia	4,911	822	5,133	861	0.17
Libya	6,551	1,336	4,608	1,148	0.25
UAE	1,489	300	3,708	728	0.20
Indonesia			3,431	595	0.17
Israel			3,314	578	0.17
Brunei	3,180	698	1,674	391	0.23
Ghana	1,527	300	1,614	275	0.17
Malta	1,839	364	1,478	295	0.20
Trinidad	1,504	293	1,236	214	0.17
Russia	11,345	2,104			
Other Third Countries	8,448	1,932	7,243	1,351	0.19
Total Third Countries	48,357	9,571	40,334	7,708	0.191
Grand Total	92,328	18,540	86,291	15,126	0.175

Source: Poultry International Magazine, USA 1999.

Annex. IV**The cost of production of hatching eggs in Pakistan**

Cost of Production of Broiler Hatching Eggs	(Rs.)
Cost of Feed Consumed Per Mother (feed 69 kg @ Rs. 10.44/Kg)	720
Portion of Feed Cost Consumed by Father (@ additional 15% of Mother Feed)	108
Cost of Parent Stock US\$ 3.17 (including 15% Duty + 10% Mortality)	204
Medication and Vaccinations	92
Electricity cost per Parent Stock	104
Labour Cost per Parent Stock	52
Management, Financial & Administration Cost per Parent Stock	83
Total	1,363
Cost per Hatching Eggs (110 Eggs per Mother)	12.39
Cost per Hatching Eggs in US\$ (@ Rs.64.2/\$)	0.193

Source: Pakistan Poultry Association and SMEDA Survey 2001.

Annex. V**Duty Draw-backs on Poultry Products and Inputs @ Tariff Structure of Year (2000- 2001)**

Parameters			
Rs. To US Dollar (as on August 3, 2001) (Rs)		64.2	
Parent Stock Age (Weeks)		65.0	
Feed Consumed per Bird till 65 weeks (Kg)		69.0	
Hen Housed Hatching Produced per Pullet (Nos.)		110.0	
	Unit	Rs	US\$
Soya Bean Meal			
Soya Bean Meal per Bird	Kg	17.25	
Duty on Soya Bean Meal per Pullet @ 31.5 % on US\$ 208/Mt		72.56	
Duty on Feed Consumed by Father @ additional 15% of Mother Feed		10.88	
Duty Factor per Hatching Eggs		0.759	0.012
Growth Promoters etc.(Vitamins - Minerals - Antioxidant)			
Value of Premix per Kg of Feed	Rs	1.00	
Premix Consumed per Pullet	Kg	1.38	
Value of Premix per Pullet	Rs	69.00	
Duty of Premix per Pullet	Rs	6.90	
Duty Factor per Hatching Eggs		0.063	0.001
Vaccine Medicines etc.			
Amount used per Pullet Housed	Rs	92.00	
Duty on Medicines	Rs	9.20	
Duty Factor per Hatching Eggs		0.084	0.001
Electricity			
Electricity units used per Pullet	Units	12.00	
Cost of Electricity per Pullet (as per WAPDA notification no.2467-96)	Rs	70.90	
Electricity Charges of 7% per Pullet in result of Notification no.2467-96 under B1 Cat.	Rs	5.65	
Electricity Cost Factor per Hatching Eggs vide Notification no.2467-96		0.051	0.001
Sales Tax Factor per Hatching Eggs		0.097	0.002
Parent Stock			
C & F Price per Parent Stock + Mortality Cost	\$	2.75	
Duty per Parent Stock Housed @ 15%	\$	0.41	
Duty Factor per Hatching Eggs		0.24	0.004
Packaging Materiel			
Sales Tax per Box of 360 Eggs	Rs	8.40	
Sales Tax Factor per Hatching Eggs		0.023	0.0004
Paper Egg Trays			
C & F Price per 140 Egg Trays	\$	3.00	
Duty on Egg Trays @ 35%	\$	1.05	
Duty Factor per Hatching Eggs (@ 30 eggs per Tray)		0.019	0.0003
Total Draw Back		1.34	0.021

Source: SMEDA Survey 2001

Annex. VI**Duty Draw-backs on Poultry Products and Inputs @ Tariff Structure of Year (2001- 2002)**

Parameters			
Rs. To US Dollar (as on August 3, 2001) (Rs)		64.2	
Parent Stock Age (Weeks)		65.0	
Feed Consumed per Bird till 65 weeks (Kg)		69.0	
Hen Housed Hatching Produced per Pullet (Nos.)		110.0	
	Unit	Rs	US\$
Soya Bean Meal			
Soya Bean Meal per Mother (Pullet)	Kg	17.25	
Duty on Soya Bean Meal per Pullet @ 10% on US\$ 208/Mt		23.03	
Duty on Feed Consumed by Father @ additional 15% of Mother Feed		3.46	
Duty Factor per Hatching Eggs		0.241	0.004
Growth Promoters etc.(Vitamins - Minerals - Antioxidant)			
Value of Premix per Kg of Feed	Rs	1.00	
Premix Consumed per Pullet	Kg	1.38	
Value of Premix per Pullet	Rs	69.00	
Duty of Premix per Pullet	Rs	6.90	
Duty Factor per Hatching Eggs		0.063	0.001
Vaccine Medicines etc.			
Amount used per Pullet Housed	Rs	92.00	
Duty on Medicines	Rs	9.20	
Duty Factor per Hatching Eggs		0.084	0.001
Electricity			
Electricity units used per Pullet	Units	12.00	
Cost of Electricity per Pullet (as per WAPDA notification no.2467-96)	Rs	70.90	
Electricity Charges of 7% per Pullet in result of Notification no.2467-96 under B1 Cat.	Rs	5.65	
Electricity Cost Factor per Hatching Eggs vide Notification no.2467-96		0.051	0.001
Sales Tax Factor per Hatching Eggs		0.097	0.002
Parent Stock			
C & F Price per Parent Stock + Mortality Cost	\$	2.75	
Duty per Parent Stock Housed @ 10%	\$	0.28	
Duty Factor per Hatching Eggs		0.16	0.003
Packaging Materiel			
Sales Tax per Box of 360 Eggs	Rs	8.40	
Sales Tax Factor per Hatching Eggs		0.023	0.0004
Paper Egg Trays			
C & F Price per 140 Egg Trays	\$	3.00	
Duty on Egg Trays @ 30%	\$	0.90	
Duty Factor per Hatching Eggs (@ 30 eggs per Tray)		0.014	0.0002
Total Draw Back		0.73	0.011

Source: SMEDA Survey 2001

Annex. VII

POULTRY - EGGS AND POULTRY MEAT TARIFFS AND REFUNDS
Export refunds for eggs, egg products and poultry meat as at 1st August 2001

Eggs		Destination	EURO/100 units
0407 0011 9000	Hatching eggs	A02	2.15
0407 0019 9000	Hatching eggs	A02	1.00
			EURO/100 kg
0407 0030 9000	Shell eggs	E01	7.00
		E03	8.00
		E05	3.50
0408 1180 9100	Egg yolk (dried)	E04	30.00
0408 1981 9100	Egg yolk (other) - liquid	E04	13.00
0408 1989 9100	- frozen	E04	13.00
0408 9180 9100	Other than egg yolk - dried	E06	33.00
0408 9980 9100	- other	E04	8.00

Eggs, & egg products destinations codes:

- E01 Kuwait, Bahrain, Oman, Qatar, the United Arab Emirates, the Republic of Yemen, Hong Kong, and Russia
E03 South Korea, Japan, Malaysia, Thailand, Taiwan, the Philippines and Egypt
E04 All destinations except Switzerland and Estonia
E05 All destinations except Switzerland, and Lithuania, and those shown under E03 above and E01 below
E06 All destinations except Switzerland, Estonia and Lithuania

Egg element of non-Annex I production, albumins and yolks.		Destination	Euro/100kg
0407 0030	Shell eggs - other	02	7.00
	a) on exportation of ovalbumin of CN codes 3502 1190 and 3502 1990	03	8.00
		04	3.50
	b) on exportation of other goods	01	3.50
0408 1180	Egg yolk (dried)	01	30.00
0408 1981	Egg yolks (other) - liquid	01	13.00
0408 1989	- frozen	01	13.00
0408 9180	Other than egg yolk - dried	01	33.00
0408 9980	- other	01	8.00

Egg element of non-annex I products' destination codes:

- 01 Third countries
02 Kuwait, Bahrain, Oman, Qatar, the United Arab Emirates, the Republic of Yemen, Hong Kong and Russia
03 South Korea, Japan, Malaysia, Thailand, Taiwan, the Philippines and Egypt
04 All destinations except Switzerland and those shown under 02 and 03 above

Source: DEFRA (Department of Environment Food and Rural Affairs, UK 2001)

Live Poultry		Destination	EURO/100 Units
- Chicken fowls			
-- Grandparent/parent female chicks			
0105 1111 9000	Laying Stocks	03	1.00
0105 1119 9000	Other	03	1.00
-- Other			
0105 1191 9000	Laying Stocks	03	1.00
0105 1199 9000	Other	03	1.00
- Turkeys			
0105 1200 9000	Turkeys	03	2.15
- Other			
0105 1920 9000	Geese	03	2.15

Meat and edible offal		Destination	EURO/100kg
0207 1210 9900	Frozen 70% whole chicken	02	20
		03	20
0207 1290 9190	Frozen 65% whole chicken	02	20
		03	20
0207 1290 9990	Otherwise presented	02	20
		03	20

Poultry destination codes:

01 All destinations except the United States of America

02 Angola, Saudi Arabia, Kuwait, Bahrain, Qatar, Oman, the United Arab Emirates, Jordan, the Republic of Yemen, Lebanon, Iraq and Iran,

03 Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine,

04 All destinations except the United States of America, Bulgaria, Poland, Hungary, Romania, Slovakia, the Czech Republic, Slovenia, Croatia, Bosnia and Herzegovina, Yugoslavia, the Former Yugoslav Republic of Macedonia, Lithuania, Estonia and Latvia, Switzerland and those of 03 above.

CN codes and descriptions:

Product descriptions are defined in European Commission Regulation 2685/87 on the tariff and statistical nomenclature and on the Common Customs Tariff, as amended, and Commission Regulation 3846/87 establishing an agricultural product nomenclature for exports refunds, as amended.

Source: DEFRA (Department of Environment Food and Rural Affairs) UK 2001

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