A Review of Chicken Meat Marketing in Myanmar

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Abstract:- Economy of Myanmar mainly depends on Agriculture sector and the sector contributes 23.3% of country's GDP. Livestock and fisheries sub-sector falls under Agriculture sector and contributes 7.8% of Agriculture sector GDP. Poultry production which is under livestock and fisheries sub-sector significantly increases year on year as because of growing demand of poultry and poultry products in the country. Population growth, changing eating behaviour of people, and increased purchasing power of consumers attract small to large scale chicken raising farmers to invest more on chicken production. Per capita consumption of all other meat including poultry was increased to 60.64 kg in 2017-2018. As per 2017-2018 record of Livestock Breeding and Veterinary Department (LBVD), total poultry population showed 351.51 million birds composting of 91.66% of chicken, 7.24% of duck and 1.1% of other avian species. Chicken meat production became 1802.70 thousand metric tons in 2017-2018. Therefore business minded national and foreign investors pay attention to make investment in hatcheries, feed mills, and chicken production to hold booming market opportunities for poultry production business in the country. Growing demand of consumers create growth of poultry businesses and this business development accelerate economic development of the country. Consequently the country will be able to offer more income, employment and business opportunities to her own people as well as for the people from other countries who have interest in doing poultry business in Myanmar.

Keywords:- Chicken, Poultry Production, Consumption, Demand, Market Opportunity, Poultry Business, Myanmar.

I. INTRODUCTION

Myanmar is the largest country in South East Asia with a total land area of 677,000 square kilometers. Estimated population of Myanmar in 2017-2018 is about 53.39 million consisting of over 100 ethnic groups. The country is largely depends on Agriculture as agriculture sector is main source of income for the country. Agriculture sector which includes crop production, livestock and fisheries, and forestry, accounted for 23.3% of Myanmar GDP in 2017-2018. Among them, livestock and fisheries sub-sector contributed 7.8% of Agriculture sector GDP in

2017-2018. Though livestock and fisheries sub-sector is currently contributing relatively small share of the agriculture sector, it can be seen that the sub-sector is growing as the growth rate of sub-sector was increased from 2.0% in 2016-2017 to 3.7% in 2017-2018 as per record of Central Statistical Organization (CSO, 2018).

II. POULRY PRODUCTION IN MYANMAR

Most of common livestock such as pigs, goats, sheep, and poultry are raised traditionally in small numbers. Smallholder farm families depend on these to satisfy household consumption and/or for extra income. Therefore livestock production is one of the income generating sources for landless and marginal farmers in the rural areas. In Myanmar, income per capita particularly in urban area is growing rapidly and may be because of that, growing demand and growth of purchasing power of consumers in the country is also increasing. As demand for livestock products is also increased, livestock subsector can be expected to increase in importance to meet growing domestic demand. Livestock subsector attracts not only small farmers but also business minded people who would like to make investment in livestock production because of growing demand and potential market opportunities for livestock products. This subsector development creates employments and offers income opportunities for the people. In addition to that, this subsector development is expected to be able to accelerate economic development of the country.

Apart from all kind of animals involved in livestock production, poultry production was significantly increased and is being intensified. Poultry population includes all types of avian species such as chicken, duck, turkey, Muscovy duck, geese and quail and all avian species are widely raised in both rural and urban areas. As per record of LBVD, total poultry population of Myanmar in 2005-2006 was 94.24 million birds and the population was significantly increased to 351.51 million birds in 2017-2018 which composed of chicken (322.04 mil birds, 91.66%), duck (25.45 mil birds, 7.24%), and other avian species (3.86 mil birds, 1.10%). From this record, it can be learnt that chicken population was significantly increased about 4 times from 84.83 million heads in 2005-2006 to 322.04 million heads in 2017-18 out of other avian species. The trend of poultry population in Myanmar was shown in Figure 1.

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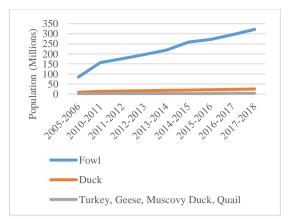


Fig 1:- Myanmar Poultry Population Trend, 2005 to 2017 Source: Livestock Breeding and Veterinary Department (LBVD, 2018)

Turkey, geese, Muscovy duck and quail contributes small portion of overall poultry inventory as most of the farmers raised them mainly for home consumption or to get alternate income source for the family. Turkey, geese and Muscovy duck are mostly found in Ayeyarwaddy, Bago and Yangon Regions and Mon and Karen States. Most of quail productions can be found in Sagaing, Mandalay and Ayeyarwaddy Regions. Native chicken and duck population are concentrated mostly in rice producing areas such as in Ayeyarwaddy, Bago, Sagaing and Yangon Regions where there have abundant of animal feed resources. Many of urban families and rural families raise layer and/or broiler chicken as major source of income for their livings and for commercial business. About 70% of total chicken population is found in five States and Regions such as in Yangon, Bago, Mandalay, Shan and Sagaing Regions.

LBVD and CSO has reported in 2018 that total meat production of the country in 2017-2018 was 3237.47 thousand metric tons which was increased from 1113.52 thousand metric tons of 2005-2006 meat production (See Figure 2).

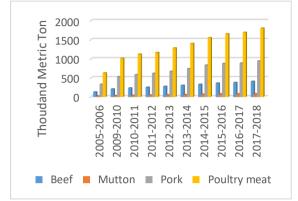


Fig 2:- Meat production by species in Myanmar, 2005 to 2017

Source: Central Statistical Organization (CSO, 2018)

Presently poultry meat contributed highest percentage of total meat production of Myanmar and composition of share percentage of each meat in 2017-2018 was poultry shared 56%, pork shared 29%, beef shared 13%, and mutton shared 3%. Chicken meat and chicken egg production dominate over duck meat and duck egg production in Myanmar. Production of chicken meat was increased about 3 times from 565 thousand metric tons in 2005-2006 to 1642 thousand metric tons in 2017-2018. Turkey and geese meat production also increased over the time whereas duck meat and duck egg production was also increased about 2.5 times. Poultry meat and eggs production was shown in Table 1.

Item	Unit	2005-	2010-	2013-	2014-	2015-	2016-	2017-
		2006	2011	2014	2015	2016	2017	2018
			-					
Total Poultry meat	MT('000)	630	1121	1402	1552	1656	1693	1803
Chicken meat	MT('000)	565	1017	1273	1413	1511	1547	1642
Duck meat	MT('000)	61	98	122	129	135	136	150
Turkey/Geese meat	MT('000)	4	6	7	10	10	10	11
Total Eggs	Million	4396	7827	9871	10766	11616	12318	12645
Chicken eggs	Million	3963	7126	8990	9828	10616	11295	11571
Duck eggs	Million	433	701	881	938	1000	1023	1074

Table 1:- Myanmar Poultry Products by species, 2005 to 2017 Source: Central Statistical Organization (CSO, 2018)

Compare to consumption of chicken meat and eggs in developed countries, Myanmar's consumption of chicken meat and eggs is lower. However, because of growing demand and growth of purchasing power of consumers in the country is increasing, per capita consumption of poultry and poultry products are also increased accordingly. As per

Myanmar Livestock Statistics of LBVD (2018), per capita consumption of eggs including chicken and duck eggs was 132 eggs in 2010-2011 and was increased to 238 eggs in 2017-2018 and per capita consumption of all other meats including poultry was 33.17 kg in 2010-2011 and was increased to 60.64 kg in 2017-2018. (See Table 2)

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Item	Unit	2010-	2013-	2014-	2015-	2016-	2017-
		2011	2014	2015	2016	2017	2018
Meat (including chicken)	Kg	33.17	49.86	54.15	59.16	59.88	60.64
Eggs (including chicken egg)	No	132	197	210	232	244	238
Milk	Kg	26.81	39.04	42.10	47.27	47.84	47.63

Table 2: Per capita consumption of meat, eggs and milk in Myanmar Source: Livestock Breeding and Veterinary Department (LBVD, 2018)

III. CHICKEN PRODUCTION SYSTEM

At present, there are 3 types of poultry production system could be found in Myanmar: (1) free range production system or backyard poultry production, (2) Semi-intensive (range plus intensive) production system of small scale commercial poultry production, and (3) Intensive production system of commercial poultry production.

Under free range, small scale backyard poultry production system, nearly all farm families in rural areas rise about 20-30 village chickens per family household. Farmers normally raise village chicken breeds such as Sittaguang, Tike-kyet, Le-pyaung, Einpinwa, Nyaung-kan, Shwe-tasoke, Tanyin, and other village chicken species. Each chicken flock consists of all types of chickens such as hens, cocks, growers, and chicks. Chickens are kept under the houses or cowsheds or trees or chicken house which is made of bamboo and thatch. Chickens scavenge for foods in the gardens or backyards or vacant places in the compound. In addition to that, they are provided water, broken rice or left over foods (also called saar kwyin, saar kyan in Myanmar language) or rice every day. Anyone in the farm families take responsibility for cleaning, feeding and watering. Though the number of animal raised is very minimal, it is enough for family consumption. The surplus animals could be sold in the local areas to get extra income for the families. This type of small scale and marginal poultry production allows farmers to have self-sufficiency, improve nutrition, sustainability and self-sufficient livelihood. Compare to meat price of layer (spent hen) and broiler, farmers get highest market price for native chicken as they are low productive of chicken numbers and quality with tougher and good texture of meat.

Semi-intensive (range plus intensive) production system falls under small scale commercial chicken production. This type of poultry production system is more developed than traditional village chicken production. Most of farmers have some experiences of poultry production and their main objective for poultry production is for selling of poultry meat and eggs to people in nearby areas. Farmers normally raise 100-500 layer chickens, they purchase day old chickens from hatcheries or local distributors. Farmers prefer to build slatted floor chicken houses and they fence their farmyard around the chicken house and allow chicken to scavenge food in the gardens or orchards or vacant places and bring them back in the evening. Many farmer purchase nutritionally balanced commercial chicken feed from company or local distributors and some farmers purchase

raw material such as corn, broken rice, rice brand, dried fish or fish powder, etc. and prepare chicken feed by themselves. Farmers pay more attention for feeding, watering, sanitation, animal health, egg collection and good farm management for better promoting eggs and meat production. Layer farmers are able to manage chicken to produce eggs about 65-70% of flock under this type of production.

Intensive production system on battery cage or evaporated closed-house with large-scale poultry production falls under industrialized chicken production. As the objective of chicken production is highly market-oriented, intensive chicken production system is more developed and used advance technology in poultry breeding. Farmers follow standard animal housing instruction such as automatized housing, feeding and drinking water system, animal husbandry and management practices, and have high level of biosecurity practices in their compounds. Farmers raise from 5000 to 50,000 chicken under the intensive production. Nutritionally balanced commercial feed and micronutrient loaded water are provided to the chickens, therefore farm owners are able to control weight and size of individual chicken depend on market requirements and demand. From this type of chicken production, farmers are able to manage egg production about 95% from layer poultry flock and high meat production of broiler poultry meats obtaining high feed conversion rate (FCR) from broiler poultry flock.

IV. CHICKEN MARKETING

The main objective of raising chicken by farmers in rural areas is for family consumption. Traditionally, farmers sell chickens or chicken eggs to neighbors or someone within the community who come and buy at their farms when they have available stocks after family consumption. Apart from the individual buyers, retailers, collectors or traders who live in the same villages or neighboring villages or towns come and buy chicken directly at chicken farms.

In general, about 30% of farm owners directly sell chickens to local retailers as they can get about 50-100 Myanmar Kyats per head above the farm gate price. However, sometimes farmers could not collect cash immediately from local retailers and have to wait some time to get payment. To avoid delay payment and needs of cash by farmers, many farmers prefer to contact local collectors or traders to sell out their chickens. Depends on distance from nearby markets to their farms, markets demand, availability of local collectors and traders and needs of cash, farmers decide the time to sell out their chickens.

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Normally bicycle owning collectors or traders who live in the same village collect chickens at the farms in the very early morning or very late evening. Some motorcycle owning collectors or traders collect about 20-50 chickens at the farms and transport chickens to a longer distance which is about 20-30 miles away from their residence. Car owning collectors or traders collect chickens with bamboo or plastic crates at the farms from nearby villages, towns, and district, and transport chickens to market sellers or wholesalers in their areas or nearby township markets. Nowadays car owning collectors or traders collect chickens at the farms during night time and deliver/sell the chickens at the markets very early in the morning.

Based on the season, price fluctuation is very common in Myanmar. Low price season lasts for 5 months from March to July and high price season runs for 3 months from October to December. Sometimes temporary price depression could be seen because of oversupply of fish, induce oversupply of chickens due to diseases outbreaks or importation of chicken to a specific area in the country. Farm gate price of chicken depends on type of chicken such as native chicken, layer chicken (spent hen), semi-broiler and broiler chicken. Price range is from Myanmar Kyats 1,850 - 4,600 per kg depends on type of chicken. Consumers believe that native chickens (local chickens) have good taste, tougher meat texture, and low fat content and therefore they are willingly to pay highest price for native chickens. Semi broiler chicken get a little bit higher price than commercial broiler chicken and spent hen in Yangon markets.

V. YANGON LIVE BIRD MARKET

Yangon City Development Committee (YCDC) is composed of 20 different departments for proper management of Yangon city and takes responsibilities to manage live birds markets in Yangon metropolitan area. Among them, Market Department takes direct supervision role to manage 3 live birds markets and 168 wet markets in the city. Veterinary and Slaughter Houses Department take responsibilities to provide veterinary services and care for the markets in Yangon area.

Mingalartaungnyunt live bird market (LBM) is the largest wholesale market in Yangon and offers large area of slaughtering facilities to its marketers. The market is located in a residential area which is near the bank of Pazundaung creek. The market was established in 1989 and has a total area of 74,800 square feet. There are about one hundred thousand of poultry moving in and out of the market every day which compose of commercially raised chickens such as broiler and layer chickens (96.4%), native village chickens (2.6%), and ducks (1%) and live birds mainly come from Yangon, Bago and Ayeyarwaddy Regions. Majority of incoming live birds are sold live to other wholesale markets such as Kyeemyintaing and Hlaingtharyar LBMs, and remaining live poultry are slaughtered and go out of the market as dressed carcass. Local meat sellers (retailers) from

168 wet markets, restaurants, hotels, and barbecue vendors collect live or dressed poultry from this market every day.

For hygienic purposes and to reduce livelihood of disease outbreaks, market management makes sure that the market is clean daily and disinfects incoming poultry trucks by pump-spraying at the entrance gate of the market compound. In addition to that, the management organize weekly cleaning of the market with disinfection. During weekly market clean day, they make sure that market infrastructures, vending stalls and poultry carrying crates are thoroughly cleaned with disinfection. In co-operation with Veterinary and Slaughter Houses Department of YCDC, veterinarians of LBVD of Ministry of Agriculture, Livestock and Irrigation (MOALI) collect samples at the market every month for prevention and control of highly and low pathogenic avian influenza viruses.

VI. CONCLUSION

As per record of CSO, present population of the country is 53.39 million in 2017-2018 which was increased from 51.99 million in 2014-2015. To fulfill food requirement for growing population and to have food security in the country, it is necessary to find out ways to fulfill the needs. As because of economic policy of the country, and availability of land and human resources, the country is able to attract national and foreign investors to make investments in agriculture sector and offers potential business opportunities for them. Along with agriculture sector development, livestock and fisheries sub-sector is also growing because of national and foreign investments. Total cumulative investments (as of 31 March 2018) for livestock and fisheries sub-sector from 2005-2006, 2010-2011, and 2013-2014 to 2017-2018 reached to 604826.20 million kyats and 585.42 million Dollars (CSO, 2018). Therefore, it can be assumed that this sub-sector development will be able to create employment and income opportunities for the people.

Income per capita particularly in urban area is growing rapidly and may be because of that, growing demand and growth of purchasing power of consumers is also increasing. Population growth, growth of purchasing power of consumers and changing of eating behavior of people especially younger generation demands livestock and livestock products mainly poultry products than old days. Per capita consumption of all other meat including poultry was increased about double from 33.17 kg in 2010-2011 and was increased to 60.64 kg in 2017-2018. To fulfil growing domestic demand, chicken meat production is also increasing accordingly. As per record of CSO, 2018, total chicken meat production was increased about 3 times from 565 thousand metric tons in 2005-2006 to 1641 thousand metric tons in 2017-18 and estimated to have more production in 2018-2019. To get higher poultry production, poultry farmers need to invest more for day-old-chickens, animal feed, animal health care, and so on. Therefore, market opportunities to do poultry production business is booming in the country.

Demand for raw material for animal feed such as corn and soybean is also increasing and it encourages local farmers to crop and produce more raw materials for animal feed. All these requirements attract business minded people to invest for poultry parent stocks, hatcheries, feed mills, producing of good quality of poultry and poultry products, producing of good quality seed for animal feed and etc. More investments for poultry production businesses are expected to come to the country and expecting that the growth of poultry businesses are able to support farmers who involve in poultry production as well as farmers who produce raw materials for animal feed in the country.

REFERENCES

- [1] Burgos, S., Otte, J., and Roland-Holst, D. (2009), "Poultry, HPAI and Livelihoods in Myanmar A Review"
- [2] Central Statistical Organization (2018)
- [3] Community Development for Remote Townships Project (MYA/01/002), "Village Chicken Rearing Booklet"
- [4] Dr. Hla Hla Thein, "Myanmar Livestock Industry Overview", available at:http://www.asiabeefnetwork.com/wp-content/uploads/2017/08/ Myanmar-Livestock-Industry-Overview-Dr-Hla-Hla-Thein-Dr-Thet-Myanmar (Aug, 2017)
- [5] FAO ECTAD in Myanmar, Yangon and Mandalay HPAI Risk Assessment Report (Oct, 2010)
- [6] Food and Agriculture Organization of the United Nations, Food Outlook (May, 2019) – Biannual Report on Global Food Markets
- [7] Larvie International (29 April 2015), "Report, Myanmar Poultry Expert Visit 15-19 March 2015"
- [8] Livestock Breeding and Veterinary Department, Ministry Of Agriculture, Livestock and Irrigation (2018), "Annual Report, 2018"
- [9] Livestock Breeding and Veterinary Department, Ministry Of Agriculture, Livestock and Irrigation LBVD (2018), "Myanmar Livestock Statistics, 2018"
- [10] Livestock Breeding and Veterinary Department, Ministry Of Agriculture, Livestock and Irrigation (November, 2018), "National Livestock Baseline Survey Report"
- [11] OECD- FAO Agricultural Outlook 2019-2028
- [12] Thiha (22 October, 2018), "Myanmar Animal Feed Demand still Growing at Healthy Clip"