



Status of Animal Feed Industry In Malaysia

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Department Of Veterinary Services Malaysia
Ministry of Agriculture & Agrobased Industry MALAYSIA



General View

- The agriculture sector in Malaysia is one of important component providing gainful employment and to ensure the adequacy of the nation's food supply
- Gross domestic product (GDP) for Agriculture sector has grew to 5.5 % in third quarter 2013 influenced by Livestock, fishery and other agriculture subsector.
- International comparisons* derived from FAOSTAT showed that Malaysia's production of some livestock commodities is placed in the top 15 list in Asia, such as the duck meat(second), chicken meat(seventh), eggs (tenth),pork(11th) and buffalo milk(12th)



Livestock Population

Type of Livestock	2008	2009	2010	2011	2012
Buffalo	131,229	127,152	125,900	123,213	122,778
Cattle	851,227	860,491	836,910	768,403	784,684
Goat	477,480	514,233	496,194	476,431	505,034
Sheep	131,278	136,285	123,475	126,412	124,787
Swine	1,988,889	1,831,308	1,922,321	1,801,247	1,792,666

Table 1: Livestock Population (2008-2012)



Livestock Production

Type of Production Livestock	2008	2009	2010	2011	2012
Beef (Metric Tonne)	38,250	42,178	46,510	48,835	51,277
Mutton (Metric Tonne)	1,958.40	2,161.90	2,386.50	2,744.40	3,156.10
Pork (Metric Tonne)	195,070	206,026	234,000	231,000	233,183
Poultry Meat (Metric Tonne)	1,162.57	1,202.00	1,295.60	1,334.47	1,374.50
Chicken/Duck Eggs (‘Million Eggs)	8,715	9,270	9,826	10,358	10,710
Milk (‘Million Liter)	56.49	62.30	67.00	70.87	75.00

Table 2: Livestock Production 2008-2012



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The Feed Industry

- The requirement for animal feed in Malaysia is estimated to be about 7 million tonnes annually. In 2012, Malaysia imported about 4.6 million tonnes of feedstuff and exported about 2.36 million tonnes.
- The main users of animal feed are the intensive livestock industries particularly poultry and pig (more than 90%)
- Major raw feed ingredients such as corn and soya were not produced in Malaysia due to local feed-grain production were not financially or economically feasible at the present level of productivity



Feed Exportation & Importation ('MT)

Product	2010		2011		2012	
	Export	Import	Export	Import	Export	Import
Soybean meal	25,380.2	1,104,591.8	28,513.2	978,552.6	41,423.3	1,132,032.4
Bran and residues of wheat	12,271.2	83,625.2	8,453	75,419.8	3,070.8	54,654.7
Corn	5,069.8	2,995,358.2	6,549.6	2,906,272.4	15,700.4	3,240,271.7
Palm kernel cake	2,157,149.6	15,451	2,178,003.2	19,740.5	2,220,538.5	4,039.9
Other animal feed	5,562.2	63,212.7	2,731.37	41,322	5,605.03	47,312.48
Other complete animal feed	45,200.3	128,352.7	53,817.7	150,102.5	75,996.5	128,694.5
TOTAL	2,250,633.30	4,390,591.60	2,278,068.07	4,171,409.80	2,362,334.53	4,607,005.68

Table 3: Exportation and Importation of Feed Ingredients in 2010-2012(Metric Tonne)



The Feed Industry

- Currently locally produced feedstuff in abundance is palm kernel cake (PKC), a by-product from the palm oil industry.
- Production of PKC/PKE are affected by palm oil plantation and palm oil production.
- PKC/PKE price has been fluctuating in the past 5 years most likely affected by world demand which depends on season or climate changes e.g. demands will be higher during autumn and winter or natural disaster.



PKC/PKE Production in Malaysia

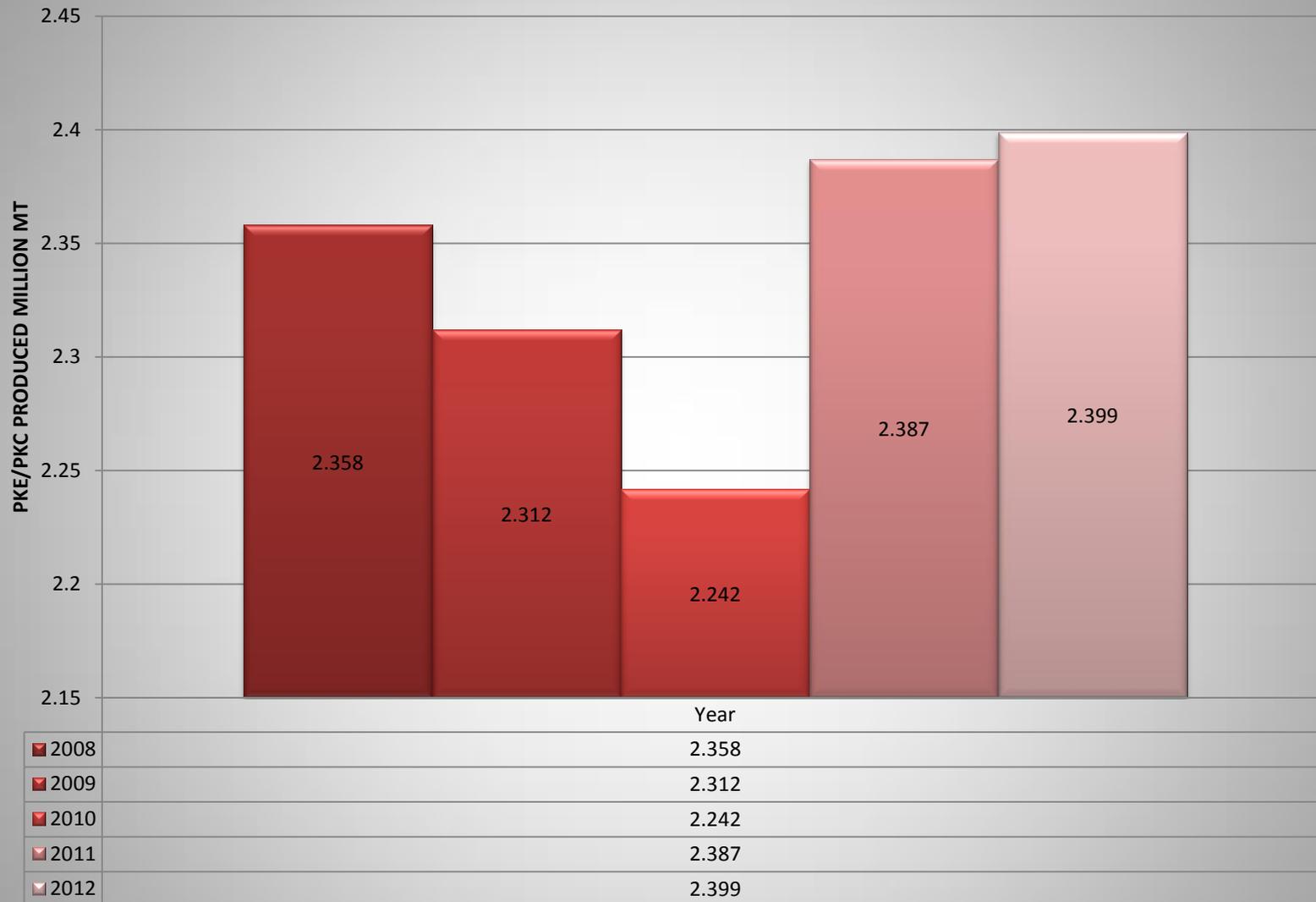


Table 5 : PKC/PKE production (Million MT) in Malaysia (2008-2012)



PKC/PKE Price

PKE PRICE 2008-2012

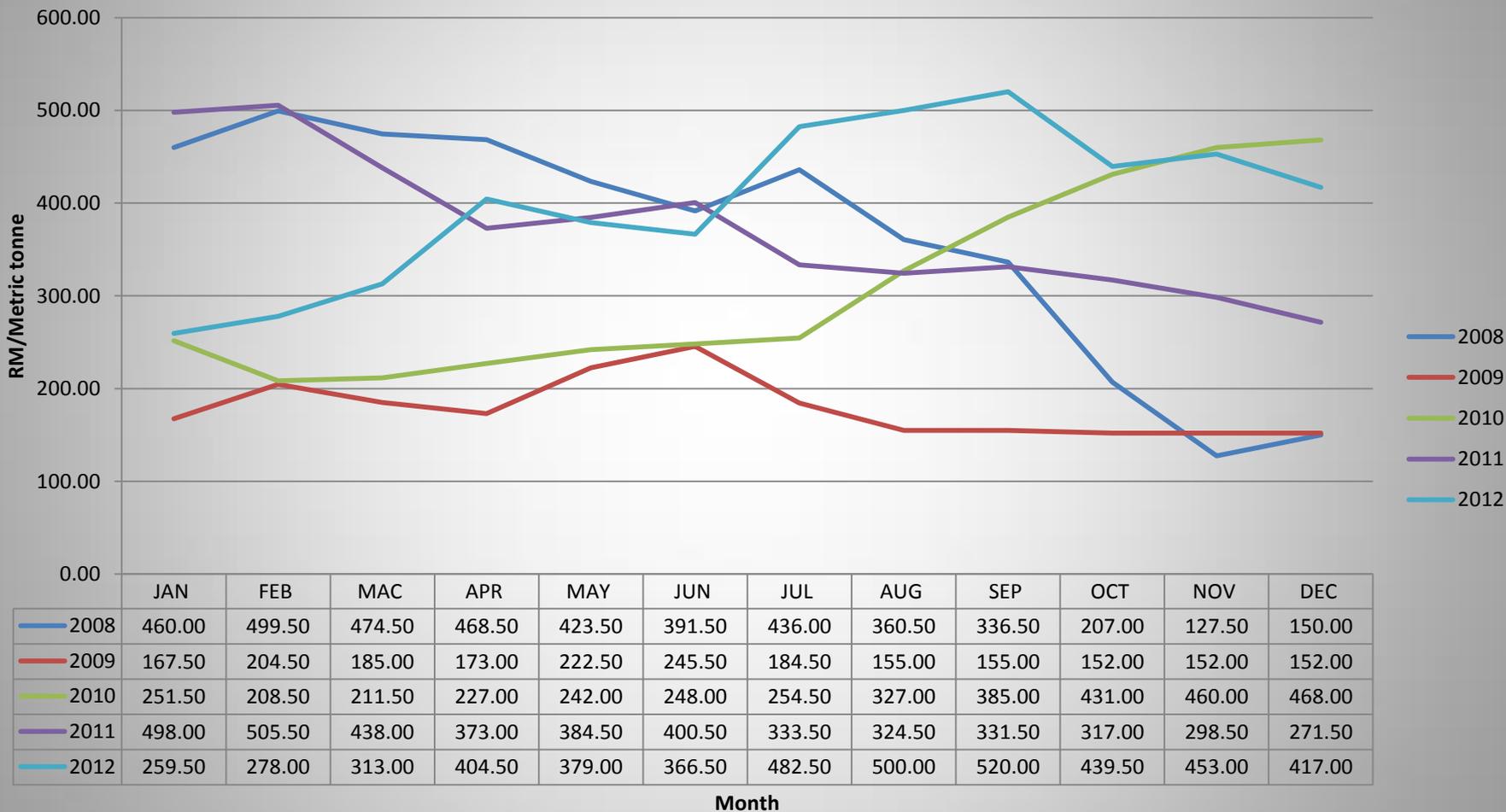


Table 6 : Price (RM/MT) PKE (2008-2012)



The Feed Industry

- Ongoing researches on PKC/PKE as animal feed :
 - Evaluation of various mannanase levels on growth performance and feed efficiency of broilers fed PKE based diets
 - Evaluation of mannanase on growth performance and feed efficiency of broilers fed diets with 3 different levels of PKE
 - Growth Performance of Tilapia fed with diets formulated with MPOB-HIE and CPO
 - Proximate composition and Amino Acid Profile of Fermented MPOB-Q-PKM™
 - The growth performance of broiler starter and finisher chicken fed with different level of MPOB-Q-PKM™
 - Quality of broiler finisher pellet formulated with different levels of MPOB-HIE
 - MPOB-HIE Supplementation on milk yield in milk of lactating *Jersey Cows*
 - MCT of palm product as non antibiotic growth promoter in broiler starter chicks
 - Development of β -Mannanase enzyme derived from PKC as a microbial carbon source and its effects in broilers





Feed Quality Assurance

Feed Act 2009

- To establish Feed Board, regulate feed quality by controlling the importation, manufacture, sale and use of feed and feed additive, ensure that feed satisfies nutritional requirement of animal, is not harmful to animals and is not contaminated so that animals and animals products are safe human consumption and other usage, and other matters incidental thereto



Feed Quality Assurance

- **Feed Act 2009**

- **5 Regulations :**

- Feed (Licence To Import Feed Or Feed Additive) Regulations 2012
 - Feed (Manufacture and Sales of Feed or Feed Additive) Regulations 2012
 - Feed (Prohibited Antibiotics, Hormones and Other Chemicals) Regulations 2012
 - Feed (Labelling of Feed or Feed Additive) Regulations 2012
 - Feed (Methods of Analysis of Feed and The Form of Certificate of Analysis) Regulations 2012



Feed Issues and Challenges

- Feed Price
 - Price of raw material for feed has been increasing every year and causing feed price hikes.
 - Dependency to imported raw material due to non-economically feasible local feed-grain production.
- Feed Quality
 - Raw material price hikes may jeopardise feed quality as feed producer struggled to maintain profit margin and to cater demands from farmers



Feed Issues and Challenges

- Propose solution
 - Collaboration between D8 countries
 - Country with abundance suitable land collaborate with other country with capital and expertise to develop and produce raw material for feed which will benefit both countries in terms of secure and cheaper raw material





Conclusion

- Dependency on imported raw feed material such as corn and soybean are due to unsuitable climate, high cost of production and inefficiency
- More researches are required to identify and improve the grain varieties in order to suit local agro-climatic conditions, improve annual yields, improve methods of preserving grain and further exploit agrobased industry wastes as animal feed
- Collaboration between D8 countries in producing raw material for feed should be enhanced in order to overcome feed price hikes





THANK YOU

TERIMA KASIH

