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POLICY ANALYSIS MATRIX FOR LIVESTOCK INDUSTRY IN PENINSULAR MALAYSIA

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by

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DEDICATION

I dedicate this thesis to my beloved mother (Suyatmi Sofyan) and father (Darul Arief) who have given loves for my success, warm kisses to my dear wife for her love, and big hugs to AUBAMA for great support to me.
Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

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Chairman : Professor Zainal Abidin Mohamed, PhD
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The main objective of this study was to assess the comparative advantage of livestock sectors in Peninsular Malaysia. The study analyzed livestock productions, namely broiler, layer, beef cattle, and goat in Negeri Sembilan, Perak and Selangor. This study used a Policy Analysis Matrix (PAM) to determine whether livestock productions have comparative advantage if produced under large, medium or small production scale.

The primary data were collected through an in-depth interview with farmers using structured questionnaire. Data were collected from 39 broiler farmers, 18 layers farmers, 39 beef farmers, and 40 goat farmers in Peninsular Malaysia.
The results of the study indicated that the non-ruminant sector which consists of broiler and layer sub-sector showed positive results on the ratio of social profitability for all types of farm scale. These results mean that the broiler and layer farm were profitable if managed in either small, medium, or large scale. The ruminant sector on the other hand showed that, the beef farm would only generate profit if managed in a large scale. While goat production is capable of generating profits if managed in large and medium scale of operation.

Domestic Resource Cost (DRC) ratio as the comparative advantage indicator shows that broiler farm in large scale has DRC ratio of 0.24 and layer farm in medium scale has DRC ratio of 0.26. In the ruminant sector, goat were produced in large scale has DRC ratio of 0.43 while beef produced in large scale with DRC ratio of 0.81. All of farms have a comparative advantage when their ratio implies that the value added per unit of products is larger than the value of domestic resources used to produce that unit. As a result, broiler farm in large scale with DRC ratio of 0.24 has a greatest comparative advantage in the Malaysian livestock industry. Based on the level of comparative advantage, this study recommends that the Malaysian livestock industry should focus on poultry to manage the broiler farm. Moreover, the government was asked to provide support for production, distribution and trade of broiler can take place with more profitable.

Data asas adalah terkumpul melalui temu duga mendalam dengan para penternak menggunakan soal selidik yang distrukturkan. Data dikutip dari 39 penternak ayam pedaging, 18 penternak ayam penelur, 39 penternak lembu, dan 40 penternak kambing dalam semenanjung Malaysia.
Kajian bermula dengan menganalisa nisbah keuntungan untuk setiap subsektor di pasaran antarabangsa. Keputusan pertunjukan kajian sector non ruminansia yang mengandungi ayam pedaging dan ayam penelur menunjukkan kesan positif pada nisbah keuntungan social pada semua jenis skala perniagaan. Hasil positif ini bermakna bahawa perniagaan ayam pedaging dan juga ayam penelur boleh menyediakan keuntungan bila dikendalikan dalam skala perniagaan yang kecil, menengah, ataupun komersial. Manakala sector ruminansia menunjukkan bahawa, menteran lembu hanya akan menjana keuntungan jika dikendalikan dalam perniagaan berskala komersial dan menteran kambing mampu menjana keuntungan jika dikendalikan dalam skala perniagaan menengah dan komersial.

Berasal daripada mengkaji nisbah Kos Sumber Dalam Negeri (DRC) sebagai penunjuk kelebihan bandingan dalam pengeluaran ternakan, ladang ayam pedaging berskala komersial mempunyai nisbah DRC bernilai 0.24 dan ladang ayam penelur berskala menengah mempunyai nisbah DRC bernilai 0.26. Dalam sektor ruminansia, kambing yang dikeluarkan dari ladang berskala komersial mempunyai nisbah DRC bernilai 0.43 manakala lembu yang dikeluarkan dari ladang berskala komersial mempunyai nisbah DRC bernilai 0.81.

Sebenarnya, kesemua ladang-ladang tersebut mempunyai satu kelebihan bandingan apabila nisbah mereka menandakan nilai tambah seunit produk-produk lebih besar dari pada nilai sumber dalam negeri yang digunakan bagi mengeluarkan unit itu. Menurut Tsakok (1990), tingkatan kelebihan bandingan setiap subsektor terbesar jika nisbah DRC mendekati titik nol. Hasilnya, ladang ayam pedaging berskala komersial dengan nisbah DRC bernilai 0.24 mempunyai suatu
kelebihan bandingan terbaik dalam industri ternakan Malaysia. Berpangkalan pada kelebihan bandingan, kajian ini mencadangkan bahawa tumpuan industri ternakan Malaysia ialah menguruskan ladang ayam pedaging. Berkenaan hal tersebut, kerjaan dimintai untuk menyokong kegiatan pengeluaran, pengagihan dan perdagangan ayam pedaging sehingga boleh berlaku dengan lebih menguntungkan.
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I certify that a Thesis Examination Committee has met on 8 March 2011 to conduct the final examination of Zulheri Adha on his thesis entitled “The Policy Analysis Matrix for Livestock Industry in Peninsular Malaysia” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Putra Malaysia (Higher Degree) Regulation 1981. The Committee recommends that the student be awarded the Master of Science.

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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledge. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.

ZULHERI ADHA

Date: 8 March 2011
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