UNIVERSITI PUTRA MALAYSIA

ASSESSING COMPETITIVENESS OF LIVE SHEEP EXPORT IN SELECTED STATES IN SUDAN USING POLICY ANALYSIS MATRIX

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ASSESSING COMPETITIVENESS OF LIVE SHEEP EXPORT IN SELECTED STATES IN SUDAN USING POLICY ANALYSIS MATRIX

By

ELSEDIG ELBADAWI AHMED AWAD

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

December 2012

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DEDICATIONS

To my beloved father Elbadawi, mother Laila, brothers, sisters, my sincere wife Sara and beloved son Mohammed

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Abstract of thesis presented to the senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

ASSESSING COMPETITIVENESS OF LIVE SHEEP EXPORT IN SELECTED STATES IN SUDAN USING POLICY ANALYSIS MATRIX

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December 2012

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The agriculture sector in Sudan, like in most developing countries, plays an important role in the country's economic development, functioning as food supplier, employment and export earning and a source of raw materials for the other industries. It contributed 49.8 percent to the Gross Domestic Product (GDP) in 1999 and had declined to 30.1 percent in 2009. The livestock sector represents an important and integral component of the agriculture exports. Its share in the country's GDP was 20.9 percent in 2002 and it dropped to 16 percent in 2009. The livestock share in the total agriculture exports dropped around 59 percent from US$ 83 million in 2002 to US$ 49 million 2008. The major objective of this study is to evaluate the competitiveness of sheep export in three

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selected states in Sudan, which are Khartoum, Gadarif and North Kordofan. Other objectives are to measure the comparative advantage and to provide policy recommendations to improve the competitiveness of sheep export in Sudan. The study employed secondary and primary data, which was collected in 2010. The Policy Analysis Matrix (PAM) was applied to determine the competitiveness and policy effects. The Nominal Protection Coefficient (NPC) and Effective Protection Coefficient (EPC) were used to analyse the policy effects. While the Domestic Research Cost (DRC) was used to determine the comparative advantage. The findings of this study illustrate the analysis of private profitability which shows that sheep of all sizes generate profit. The government interventions on sheep's production in terms of taxes have negative impact on the competitiveness of sheep export in the selected states. Financially, the highest profit recorded in North Kordofan which is SDG 80.23 per head. The results of DRC indicator suggest that Sudan enjoys comparative advantage in production of sheep in selected states. North Kordofan has proven to be more effective in saving the foreign exchange, followed by Khartoum and Gadarif. The study recommends that the Government has to revise the tax structure, improve infrastructures and logistics, increase supportive measures (R&D to improve productivity), provides incentives and seeks markets to improve the competitiveness of sheep exports.

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Abstrak tesis yang dikemukakan kepada senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

MENILAI DAYA SAING EKSPORT KAMBING BIRI-BIRI DI NEGERI TERPILIH DI SUDAN MENGGUNAKAN MATRIKS ANALISIS POLISI

Oleh

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Sektor pertanian di Sudan, seperti di negara-negara membangun yang lain, memainkan peranan yang penting dalam pembangunan ekonomi iaitu ia menyediakan, bekalan makanan, peluang pekerjaan, pendapatan eksport dan bahan mentah untuk industri berasaskan pertanian. Pada tahun 1999, sektor ini telah menyumbang sebanyak 49.8% kepada Keluaran Dalam Negara Kasar (KDNK) namun, menjelang 2009 sumbangannya menurun kepada 30.1%.

Penternakan haiwan komponen utama eksport pertanian Sudan. Sedekad yang lalu, syer ekspot yang disumbangkan oleh penternakan dalam KDNK menurun daripada 20.9% pada tahun 2002 kepada hanya 16% pada tahun 2009. Syer

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jumlah keseluruhan eksport ternakan menjunam daripada USD 83 juta kepada USD 49 juta dalam jangka waktu yang sama. Matlamat utama kajian ini adalah untuk menilai kebersaingan eksport kambing biri-biri di daerah terpilih di Sudan dan mengukur faedah berbanding dan kesan polisi kepada pengeluaran biri-biri di Sudan. Kajian ini menggunakan data primer dan yang telah dikumpul pada tahun 2010 di mana sejumlah 148 pengeluar, 68 pemborong dann 25 pengeksport terlibat. Analisis Matriks Analisis Polisi atau 'Policy Analysis Matrix' (PAM), dan petunjuk (DRC), (NPC), (EPC), (SCB) digunakan dalam kajian ini untuk menganggar penglibatan kerajaan dan faedah berbanding.

Dapatan kajian menunjukkan bahawa penglibatan kerajaan dalam pengeluaran biri-biri memberi impak negatif. Analisis keuntungan swasta menunjukkan bahawa penternakan semua saiz biri-biri mendatangkan keuntungan. Daripada segi kewangan, keuntungan tertinggi telah direkodkan di Kordofan Utara dengan jualan pada SDG 80.23 per unit. Dapatan daripada indikator DRC menunjukkan bahawa Sudan memiliki kelebihan berbanding dalam pengeluaran biri-biri di negeri-negeri terpilih. Kos pengeluaran yang rendah dan operasi yang efisien menjadi sumber kepada faedah berbanding. Kordofan Utara terbukti lebih berkesan dalam melakukan penjimatan pertukaran wang asing dan diikuti dengan Khartoum dan Gadarif. Kajian ini menunjukkan

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bahawa pihak kerajaan sewajarnya; mengecualikan pengeluaran biri-biri daripada cukai memandangkan sektor ini merupakan komoditi yang strategik, memperbanyakkan pemberian insentif bagi menggalakkan pengeluaran kambing biri-biri dan mengekalkan dan kestabilan pertukaran wang asing dan membuka pasaran antarabangsa yang baru untuk mengelakkan masalah pada masa akan datang.

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I certify That a thesis Examination Committee has met on 18th December 2012 to conduct the final examination of Elsedig Elbadawi Ahmed Awad on his thesis entitiled "Assessing Competitiveness of Live Sheep Export in Selected States in Sudan Using Policy Analysis Matrix" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A)106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy..

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DECLARATION

I declare that the thesis is my original work except for quotations and citations, which have been, duty acknowledged. 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.

ELSEDIG ELBADAWI AHMED AWAD

Date: 18 December 2012

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