

Dedication

**To my parents, I hope their souls will
rest in peace.**

To my sisters and brothers.

To my wife and sons.

Contents

	Page
Dedication.....	i
Contents.....	ii
Acknowledgments.....	iv
Abstract in English	v
Abstract in Arabic	vi
Abbreviations.....	vii
List of table	viii
List of appendix tables	x
List of figures.....	xii

Chapter One

1. Introduction

1. Introduction	1
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Chapter two

2. Theoretical Background and Methodology

2.1 Sudan suitability for sugar production	2
2.1.1 Climatic condition in Sudan	2
2.1.2 Water resources in Sudan	2
2.1.3 Soils suitability	2
2.1.4 Prospective of sugar industry in Sudan	3
2.1.5 Sugar industry in Sudan	3
2.2 The Sudanese Sugar Company	4
2.2.1 Company mission	4
2.2.2 Factories and subsidiary units	5
2.2.3 Organization structure at Sudanese Sugar company	5
2.3 The case study (Guneid sugar factory)	7
2.3.1 Historical background	7
2.3.2 Organization structure at Guneid sugar factory... ..	8
2.3.3 Sugar manufacturing at Gunied	10
2.3.3.1 Raw material	10
2.3.3.2 Varieties	11
2.3.4 Outlines about sugar manufacturing and operations	11

2.4 Previous studies	14
2.5 Methodology	16
2.5.1 Sugar unit cost calculations	16
2.5.2 Cane unit cost calculations	17

Chapter Three

3.Results and Analysis

3.1 Introduction	18
3.2 Sugar unit cost calculations	18
3.3Cane unit cost calculations	33
3.4Comparison between sugar unit cost at GSF, KSF and International data available	45

Chapter Four

4. General Discussion, Conclusion and Recommendations

4.1 General discussion.....	49
4.2 Conclusion.....	49
4.3 Recommendations.....	50
4.3.1 At the farm level	50
4.3.2 At the factory level	50
4.3.3 At the general level (whole organization)	51

Appendixes

Appendixes	55
References.....	70

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Abstract

The title of this study is, Evaluation of Sugar Production Cost at Gunied Sugar Factory.

The nature of the problem can be briefed in these points: no documented work has indicated the production cost of one ton sugar in Sudan, cost of producing cane crop is not reported and to what extent the cost of cane affects the total cost of production is not fully investigated.

The objective of this study is find unit cost of sugar and cane over the last nine years at Gunied sugar factory, identifying cost elements that have significant effect on sugar cost and comparing results with local Sudanese Sugar Factories, and available data of international cost.

It was concluded that:

- There is no significant difference in production cost of sugar at Guneid and other factories in Sudan.
- The unit cost of sugar produced at Guneid and other local factories is higher than the international ones. The cost of one ton sugar is 150%-220% to the international ones.
- Cane production cost in Guneid represents 65% to 72% of total production cost. As compared to international one, which is about 40% .The cane cost may be one of the main factors of sugar high cost.
- The cost of agricultural department cost center, represent 40% to 50% of the total sugar production cost.

Recommendations is to :

- To investigate factors affecting cane cost and means of reducing it.
- Utilization of by-products for more revenue.

ملخص الدراسة

عنوان هذه الدراسة هو تقييم تكلفة إنتاج السكر في مصنع سكر الجنيد. تتلخص مشكلة الدراسة في انه لا توجد دراسة علمية توضح تكلفة إنتاج السكر في السودان. كما لا توجد دراسة توضح تكلفة إنتاج محصول قصب السكر. والى مدى تؤثر تكلفة إنتاج قصب السكر في السكر المنتج. أهداف هذه الدراسة هو إيجاد تكلفة طن السكر وطن قصب السكر بمصنع سكر الجنيد خلال التسع سنوات الماضية و التعرف على العناصر التي تؤثر بفعالية على هذه التكلفة ومقارنة النتائج مع المصانع المحلية الأخرى و مقارنتها كذلك بالتكلفة العالمية.

و قد توصلت الدراسة إلى النتائج الآتية:

- ليس هنالك فرق كبير في تكلفة طن السكر وطن القصب بين مصنع سكر الجنيد ومصانع السكر الأخرى بالسودان بما فيها مصنع سكر كنانة .
- تكلفة طن السكر المنتج في مصنع سكر الجنيد وبقية المصانع السودانية اعلي من تكلفه السكر المنتج عالميا وتتراوح هذه التكلفة بين % 150 _ 220% من التكلفة العالمية .

- تمثل تكلفه إنتاج القصب من % 65 الى 72% من التكلفة الكلية لإنتاج السكر في حين ان تكلفة إنتاج القصب القياسية في بلدان العالم المنتجة للسكر لا تزيد عن 40% من تكلفة إنتاج السكر الكلية، مما يعنى ان ارتفاع تكلفة إنتاج السكر سببها تكلفة إنتاج القصب.

وقد أوصت الدراسة بالآتي:

- الاستغلال الأمثل للمنتجات الجانبية مثل اليقاس والمولاص في صناعات أخرى مثل كالايثانول والخميرة وإنتاج الكهرباء لزيادة العائد المالي وبالتالي خفض التكلفة.
- عمل دراسة لتحليل عوامل تكلفة القصب ودراسة الوسائل التي تعمل على تخفيض هذه التكلفة.

Abbreviations

C ⁰	Centigrade degree
Ha	Hectare
SSC	Sudanese Sugar Company
Kg	Kilogram
E.U	Europe Union
USA	United State of America
CaO	Calcium Oxide
Km	Kilometer
\$	US Dollar
Lb	Pound
t	Ton
USD	United States Dollar
SDG	Sudanese Pound
GSF	Guneid Sugar Factory
Dept.	Department
NHSF	New Halfa Sugar Factory
SSF	Sennar Sugar Factory
ASF	Assalaya Sugar Factory
KSF	Kennan Sugar Factory
d	Day
y	Year

List of Tables

Table (2-1)	4
Production volume and general information about sugar industries in Sudan.	
Table (2-2)	15
Total sugar production cost in USA, crop 1989	
Table (3-1)	19
The total sugar cost production ($\times 10^6$ SDG) according to cost centers at GSF in the years 1998-2006 and proposed budget 2007	
Table (3-2)	21
The representation (%) of the cost centers in the total sugar production cost at GSF in the years 1998—2006 and the proposed budget	
Table (3-3)	23
Total sugar cost production ($\times 10^6$ SDG) according to cost elements material, Payroll and expenses at GSF in the years 2000--2006	
Table (3-4)	24
The representation (%) of the cost elements. Materials, Payroll and other expenses in the total sugar production cost at GSF in the years 19982006 and the proposed budget 2007	
Table (3-5)	26
Total sugar production cost ($\times 10^6$ SDG) according to cost centers at NHSF, SSF and ASF. in the years 2005—2006 and proposed budget 2007	
Table (3-6)	28
Sugar production cost per ton (SDG and USD) at GSF from 1998--2006	
Table (3-7)	30
Sugar production cost (SDG and USD) per ton at NHSF in the years 2003—2006 and proposed budget 2007	
Table (3-8)	30
Sugar cost (SDG and USD) per ton at SSF in the years 2003—2006 and proposed budget for 2007	
Table (3-9)	31

Sugar cost (SDG and USD) per ton at ASF in the years 2003—2006 and proposed budget for 2007

Table (3-10)32

Sugar cost (SDG) per ton at GSF, NHSF, SSF and ASF in the years 2003—2006 and proposed budget for 2007

Table (3-11)34

Total cane production cost (X10⁶SDG) according to contribution of cost centers at GSF in the years 1998—200

Table (3-12)35

cane production cost per ton (SDG and USD) at GSF in 1998--2006

Table (3-13)37

The total cane cost contribution (%) in to the total production cost at GSF, in the years 1998---2006

Table (3-14)39

The cane cost per ton (SDG) at NHSF in the years 2005, 2006 and proposed budget 2007

Table (3-15)40

The cane cost per ton (SDG) at SSF in the years 2005, 2006 And proposed budget 2007

Table (3-16)41

The cane cost per ton (SDG) at ASF in the years 2005,2006 And proposed budget 2007

Table (3-17)42

The cane cost per ton (SDG) at GSF, NHSF, SSF and ASF in years 2005,2006 and proposed budget 2007

Table (3-18)43

The total cane cost contribution (%) in the total production cost at four factories GSF,NHSF,SSF and ASF in the years 2005,2006 and proposed budget for 2007

Table (3-19)45

Sugar cost (SDG) per ton at GSF and Kennana in the years 1998—2004.

Table (3-20)47

Sugar cost (USD) per ton at GSF and World sugar price (USD) in the years 1998—2006.

List of Figures

Figure (2-1)	6
The standard processes for manufacturing sugar	
Figure (2-2)	9
Organization structure in Sudanese Sugar Company	
Figure (2-3)	13
Organization structure in Guneid Sugar Factory	
Figure (3-1)	20
Total sugar production cost (SDG) according to cost centers at GSF in the years 1998-2006 and proposed budget 2007	
Figure (3-2)	22
Contribution (%) of cost centers in the total production cost at GSF for the period 1998-2007	
Figure (3-3)	24
Total sugar production cost (SDG) according to cost elements at GSF for the period 2000-2006	
Figure (3-4)	25
Contribution (%) of cost elements in the total production cost at GSF for the period 2000-2006	
Figure (3-5)	27
Total sugar production cost($\times 10^6$) according to cost centers at NHSF,SSF and ASF in the years 2005-2007	
Figure (3-6)	29
Sugar production cost per ton (SDG) at GSF in the years 1998-2007	
Figure (3-7)	32
Sugar production cost (SDG) at GSF, NHSF, SSF and ASF in the years 2003-2007 and proposed budget 2007	
Figure (3-8)	36
Cane production cost (SDG) at GSF in 1998-2007	
Figure (3-9)	38
Cane cost and the total production cost (SDG) at GSF in the period 1998-2006	
Figure (3-10)	42
Cane cost per ton (SDG) at GSF, NHSF, SSF and ASF in the years 2005-2007	

Figure (3-11)	44
Total cane cost to total sugar production cost at GSF, NHSF, SSF and ASF in the years 2005-2007	
Figure (3-12a)	45
Sugar cost (SDG) per ton at GSF and Kennana in the years 1998—2004.	
Figure (3-12b)	46
Sugar cost (SDG) per ton at GSF and Kennana in the years 1998—2004.	
Figure (3-13a)	47
Sugar cost (USD) per ton at GSF and World sugar price (USD) in the years 1998-2006.	
Figure (3-13b)	48
Sugar cost (USD) per ton at GSF and World sugar price (USD) in the years 1998—2006	

List of Appendixes

Table (1)	52
The cost elements at agriculture and workshops cost centers.	
Table (2)	53
The cost elements at irrigation and production cost centers.	
Table (3)	54
The cost elements at financial and administration cost centers.	
Table (4)	55
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 1998.	
Table (5)	55
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 1999.	
Table (6)	56
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2000.	
Table (7)	56
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2001.	
Table (8)	57
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2002.	
Table (9)	57
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2003.	
Table (10)	58
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2004.	
Table (11)	58
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2005.	
Table (12)	59
Total sugar production cost (X10 ⁶ SDG) according to cost centers at GSF in the year 2006.	

Table (13)	59
The rate of SDG per one USD in the years 1998—2006.	
Table (14)	60
Total working days, area harvested, cane per acre, cane crushed, sugar produced, recovery (%) and break down (%) at GSF in the years 1998—2006.	
Table (15)	61
Total working days, area harvested, cane per acre, cane crushed, sugar produced, recovery (%) and break down (%) at NHSF in the years 1998—2006.	
Table (16)	62
Total working days, area harvested, cane per acre, cane crushed, sugar produced, recovery (%) and break down (%) at SSF in the years 1998—2006.	
Table (17)	63
Total working days, area harvested, cane per acre, cane crushed, sugar produced, recovery (%) and break down (%) at ASF in the years 1998—2006.	
Table (18)	64
Total working days, area harvested, cane per acre, cane crushed, sugar produced, recovery (%) and break down in% at SSC in the years 1998—2006.	
Table (19)	65
Area harvested, cane per acre, cane crushed, sugar produced, recovery (%) at KSC in the years 1998—2006.	
Table (20)	66
Total sugar production cost (SDG) according to cost centers at NHSF,SSF,ASF. in the years 2005-2007.	
Table (21)	67
Total sugar production cost (SDG) at the four factories, GSF, NHSF, SSF and ASF in the years 2003—2007.	
Table (22)	67
Total sugar production (tons) at the four factories, GSF, NHSF, SSF, ASF and SSC in the years 2003—2007.	

Table (23)	68
Sugar production cost at KSF (SDG) per ton for years 1998-2004.	
Table (24)	68
World sugar production, population, export, per capita and consumption.	
Table (24)	69
World sugar price (USD) per ton in the years 1995-2006	