

المملكة العربية السعودية
جامعة الملك فيصل

**منهج مقترح لقياس التكاليف و المنافع الناجمة عن
الآثار البيئية للمنشآت الصناعية : دراسة تطبيقية
على القطاع الصناعي بالمملكة**

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: د/ علاء الدين محمود زهران

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المبحث الأول

**التنمية والبيئة ودخان متعارضان أم متكاملان
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سابعاً: أسباب التلوث البيئي الصناعي في المملكة

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جدول رقم (1): نوعية وكمية المخلفات الصناعية الصلبة وشبه الصلبة الناجمة عن بعض أفرع الصناعات التحويلية في دول مجلس التعاون (طن / السنة)

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.(Greening Industry)

(Environmental Pollution)

(Natural Resources Depletion)

(Accounting for Environment)

(Environmental Accounting)

المبحث الثاني

المحاسبة عن البيئة ودورها في حماية بيئة المملكة

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(Noise pollution)

(Industrial Waste)
(Cost Reduction)

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(Waste Dumping)

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.(Bebbington & Tan, 1996)

. (Gray & Bebbington,)

(Internal cost)

(External cost)

.(Bebbington, 2001)

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Sustainable Profit

Sustainable Income

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(Environmental Accounting)

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(Social Accounting)

" (Gray, et al., 1993)

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(Gray et al, 1995 EPA, 1997) :

ج/ مستويات تطبيق المحاسبة البيئية

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Sustainable Income

Sustainable Profit

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المبحث الثالث

**النموذج المحاسبي المقترح لقياس التكاليف والمنافع
الاجتماعية و البيئية للقطاع الصناعي بالمملكة**

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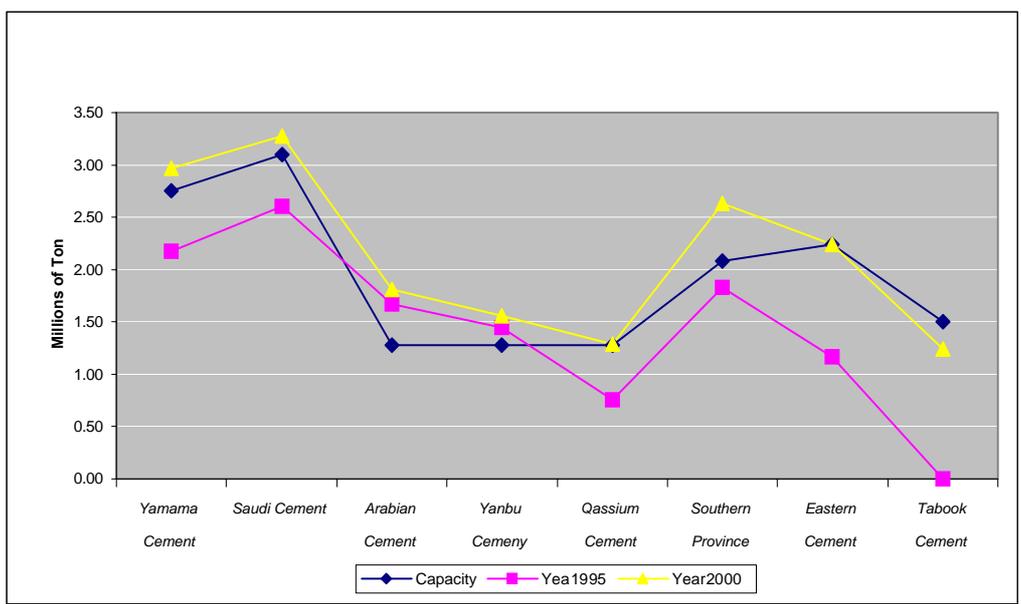
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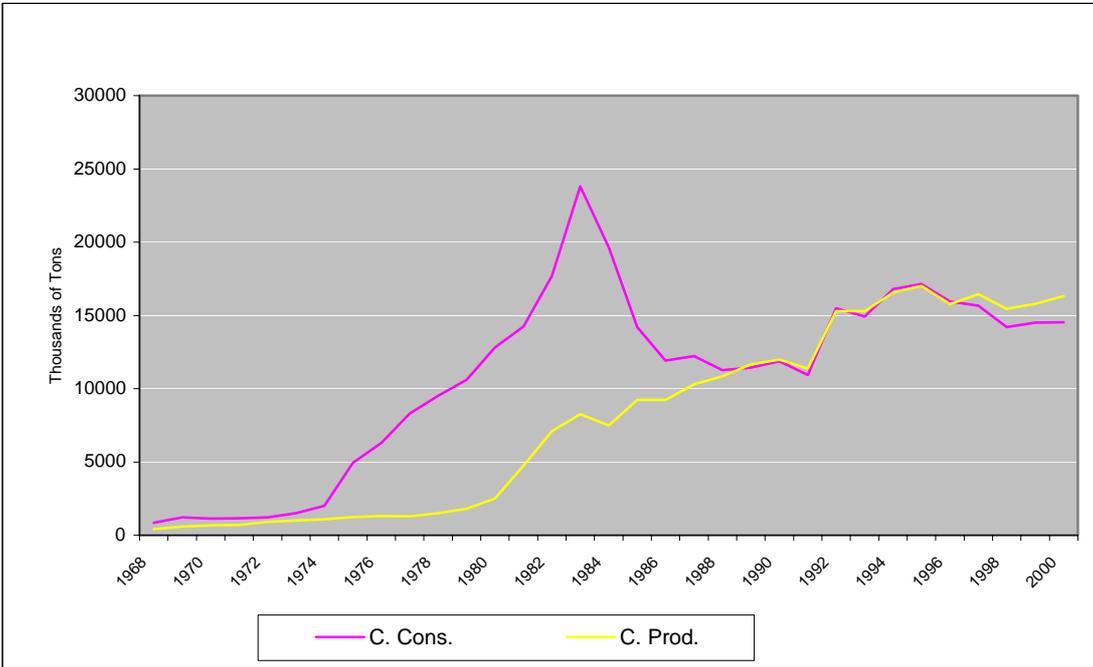
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مرحلة التحجير

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(Niskala & Pretes,) (Gamble et al., 1995)

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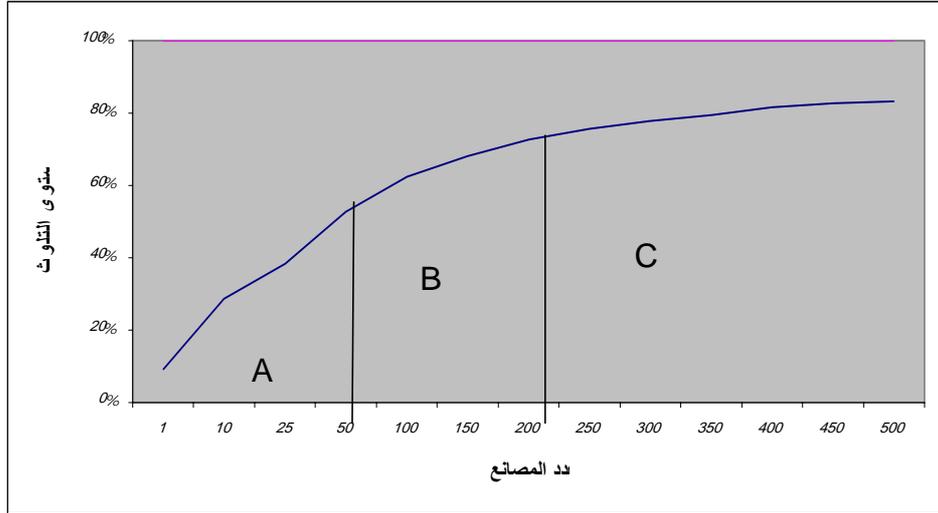
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" Small is Stupid: Blowing the Whistle on the Green" (Beckerman, 1995)

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The Effect on Productivity

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Property Value

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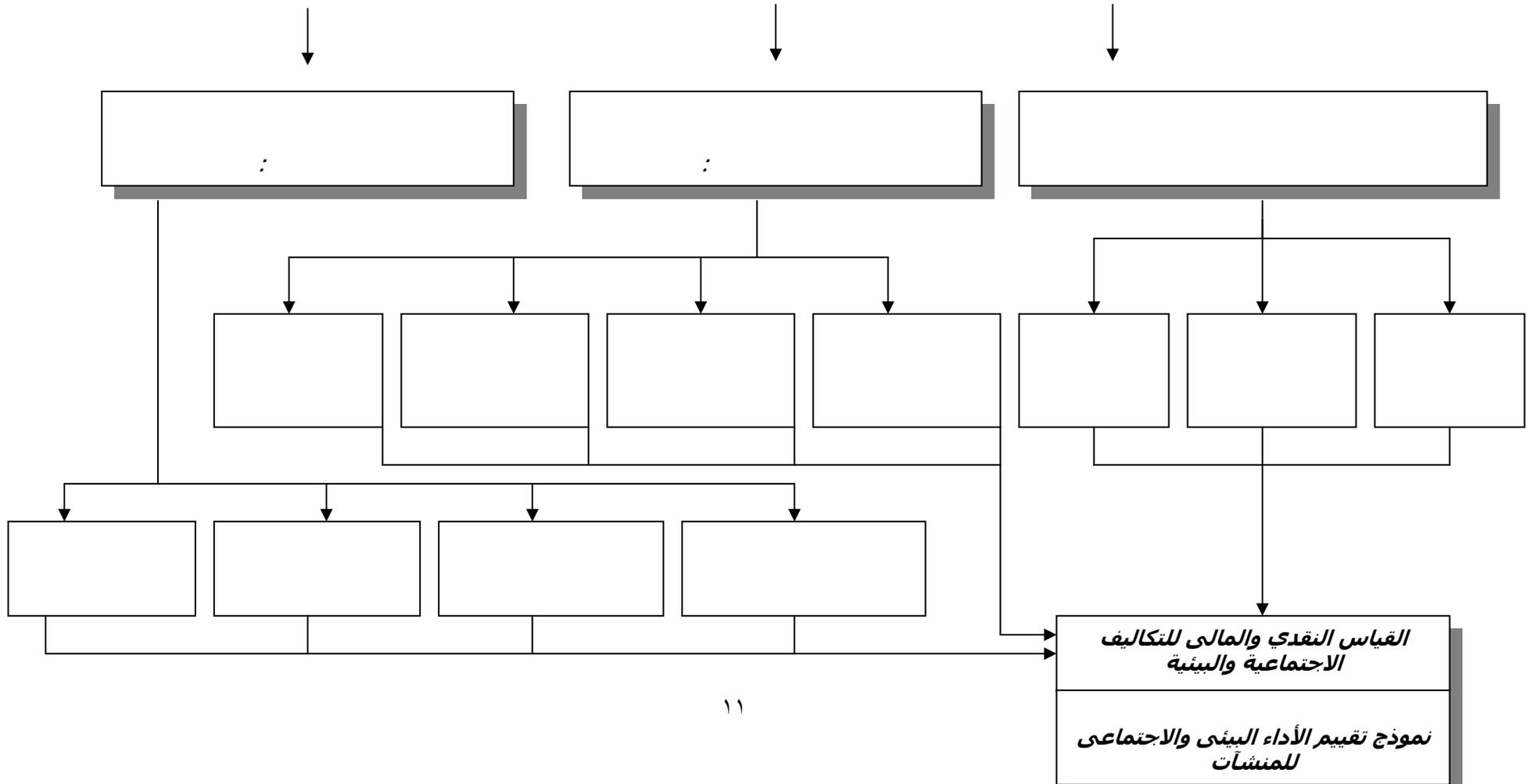
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يمر قياس التكاليف الاجتماعية والبيئية للقطاع الصناعي بالمملكة بالخطوات والمراحل المنهجية التالية



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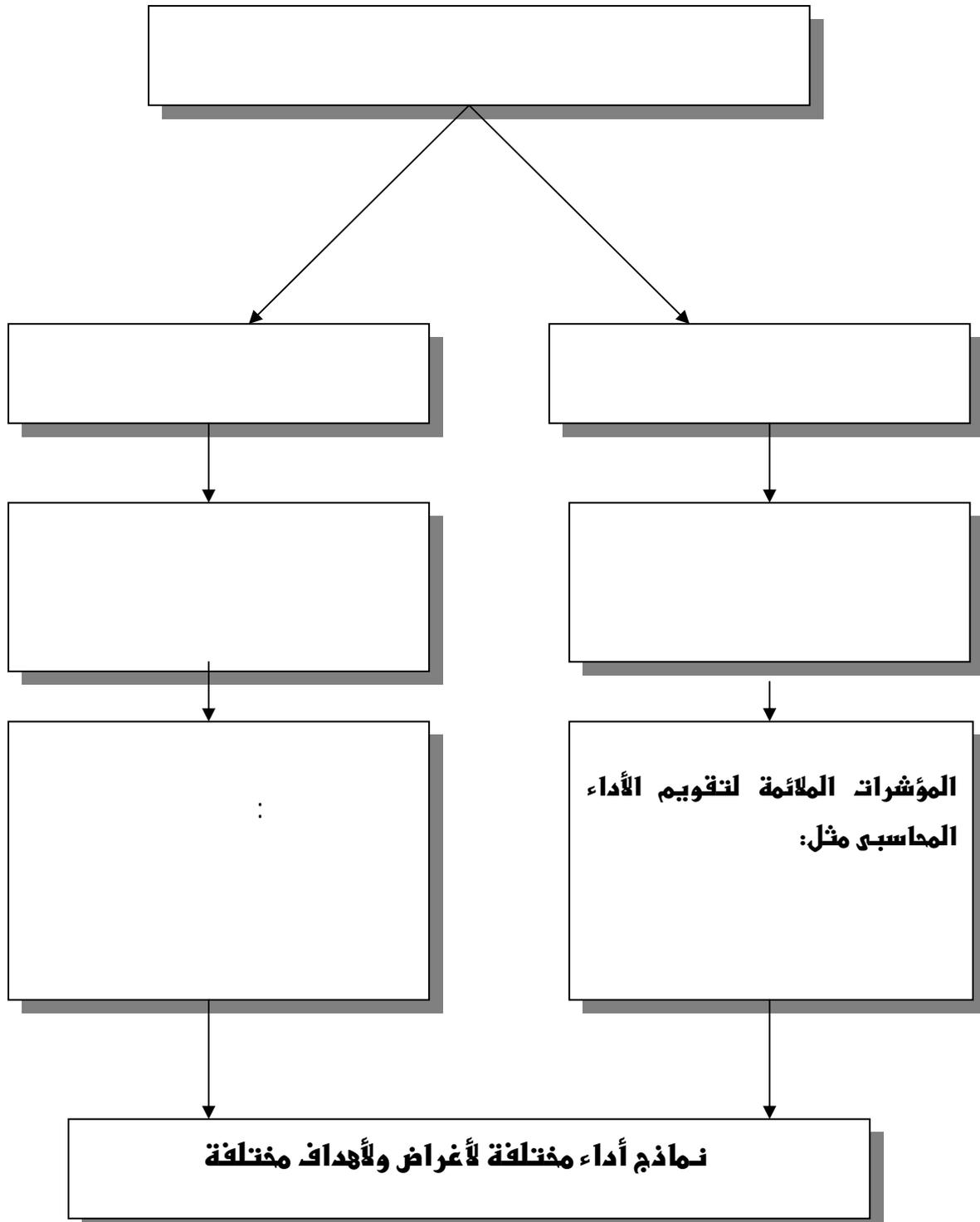
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ج/تقييم الأداء البيئي والاجتماعي لمنشآت القطاع الصناعي بالمملكة

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ثالثاً: إجمالي التكاليف البيئية لعام ٢٠٠٣م

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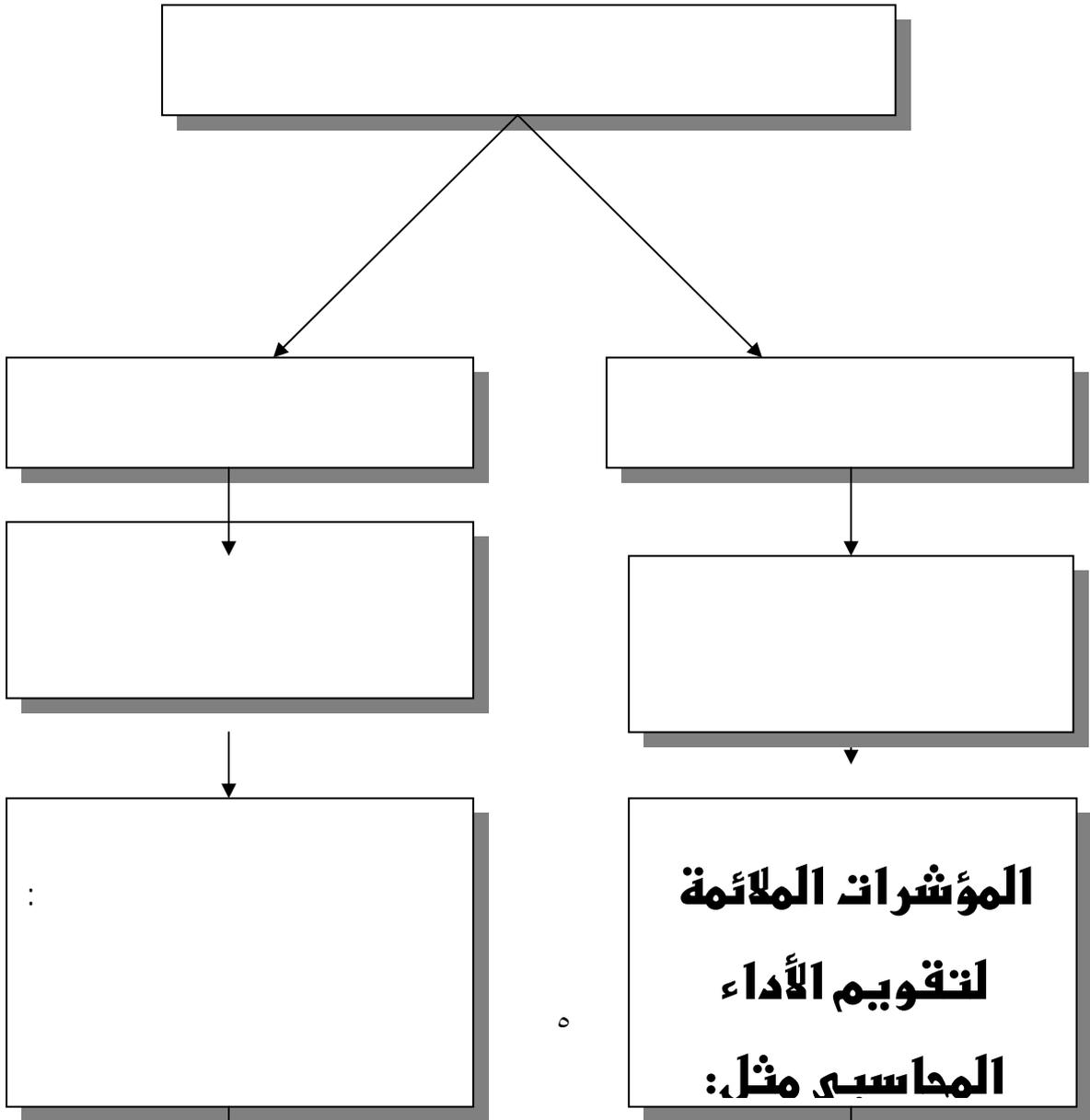
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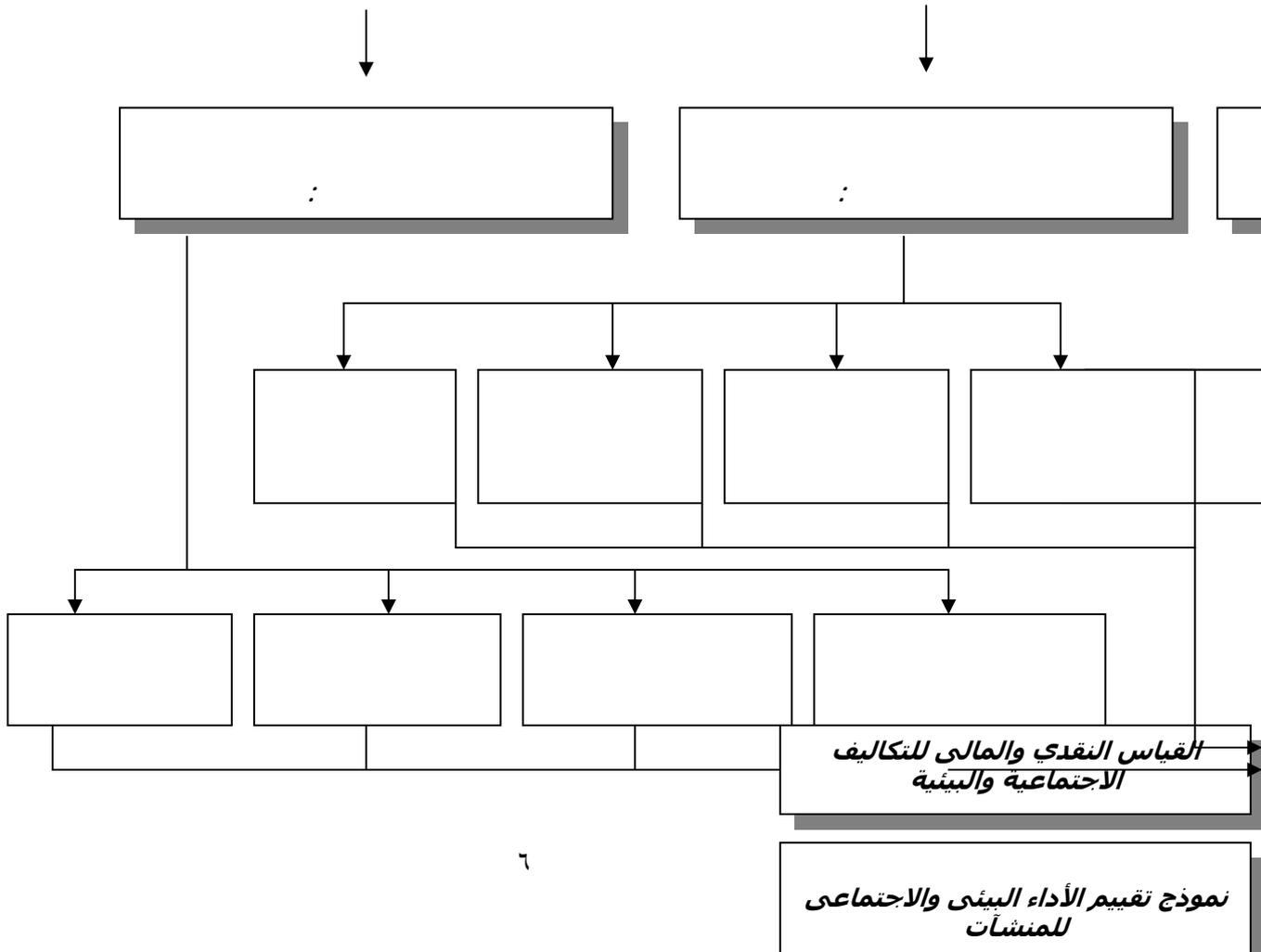
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الاجتماعية والبيئية القطاع الصناعي بالمملكة يمر بالخطوات والمراحل المنهجية التالية



المراجع العربية والأجنبية

أولاً: المراجع العربية

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ملاحق الدراسة

ملحق رقم (١)

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ملحق رقم (٤-٣)

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السنوات		متوسط الدخل السنوي	الدخل بالقيمة لحالية
1	0.952381	30000	28571.43
2	0.907029	30000	27210.88
3	0.863838	30000	25915.13
4	0.822702	30000	24681.07
5	0.783526	30000	23505.78
6	0.746215	30000	22386.46
7	0.710681	30000	21320.44
8	0.676839	30000	20305.18
9	0.644609	30000	19338.27
10	0.613913	30000	18417.4
11	0.584679	30000	17540.38
12	0.556837	30000	16705.12
13	0.907029	30000	27210.88
14	0.530321	30000	15909.64
15	0.481017	30000	14430.51
الإجمالي			323448.6

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السنوات		متوسط إنفاق الفرد السنوي على التعليم	تطور متوسط إنفاق الفرد السنوي على التعليم
1	1.340096	6000	8040.574
2	1.477455	6000	8864.733
3	1.551328	6000	9307.969
4	1.628895	6000	9773.368
5	1.710339	6000	10262.04
6	1.795856	6000	10775.14
7	1.885649	6000	11313.89
8	1.979932	6000	11879.59
9	2.078928	6000	12473.57
10	2.182875	6000	13097.25
11	2.182875	6000	13097.25
12	2.292018	6000	13752.11
13	2.406619	6000	14439.72
الإجمالي			147077.2

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السنوات		متوسط إنفاق الفرد الاستهلاكي سنويا	تطور متوسط إنفاق الفرد الاستهلاكي سنويا
1	1.05	3350	3517.5
2	1.1025	3350	3693.375
3	1.157625	3350	3878.044
4	1.215506	3350	4071.946
5	1.276282	3350	4275.543
6	1.340096	3350	4489.32
7	1.477455	3350	4949.476
8	1.551328	3350	5196.95
9	1.628895	3350	5456.797
10	1.710339	3350	5729.637
11	1.795856	3350	6016.119
12	1.885649	3350	6316.925
13	1.979932	3350	6632.771
14	2.078928	3350	6964.409
15	2.182875	3350	7312.63
16	2.182875	3350	7312.63
17	2.292018	3350	7678.261
18	2.406619	3350	8062.174
الإجمالي			101554.5

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السنوات	معدل الخصم	متوسط الإنتاجية	أيام العمل السنوية	التكلفة
1	0.869565	1000	300	1043478
2	0.756144	1000	300	907372.4
3	0.657516	1000	300	789019.5
4	0.571753	1000	300	686103.9
5	0.497177	1000	300	596612.1
6	0.432328	1000	300	518793.1
7	0.375937	1000	300	451124.4
8	0.326902	1000	300	392282.1
9	0.284262	1000	300	341114.9
10	0.247185	1000	300	296621.6
11	0.214943	1000	300	257931.9
المجموع				6,280,454

ملحق رقم (٢-٣)

ملحق رقم (٢-٣)

ملحق رقم (٣-٣)

ملحق رقم (٣)

ملحق رقم (١-٣)

Table (1): Developments of Cement Production During 1989 – 1995.

	<i>Yamama Cement</i>	<i>Saudi Cement</i>	<i>Arabian Cement</i>	<i>Yanbu Cement</i>	<i>Qassim Cement</i>	<i>Southern Province Cement</i>	<i>Eastern Cement</i>	<i>Tabook Cement</i>	<i>Total</i>
<i>Capacity</i>	2750000	3100000	1280000	1280000	1280000	2080000	2240000	1500000	15510000
<i>Actual Production 1989</i>	2176727	2605790	1673740	1446000	760263	1830448	1168518		11662000
<i>Actual Production 1990</i>	1869421	2611278	1437379	1241000	1127075	2161533	1530009		11983000
<i>Actual Production 1991</i>	1923068	2660476	1174376	1404000	1090192	1725491	1453677		11371000
<i>Actual Production 1992</i>	2565000	3257000	1357000	1183000	2151000	2151000	223000	1327000	15300000
<i>Actual Production 1993</i>	2732700	3187636	1217454	1395273	1217454	2167636	2197273	1138574	15304000
<i>Actual Production 1994</i>	2976000	3898200	1662000	1732000	1246000	2587000	2916000	450000	16567000
<i>Actual Production 1995</i>	2966000	3274000	1813000	1563000	1287000	2629000	2241000	1246000	17019000

Source: Saudi Arabian Monetary Agency, Annual Reports And Cement Companies Annual Reports

Table (2): Cement Production And Consumption 1968-2000 (Tons, 000s)

<i>Year</i>	<i>Cement Consumption</i>	<i>Cement Production</i>	<i>Year</i>	<i>Cement Consumption</i>	<i>Cement Production</i>
1968	847	415	1985	14211	9232
1969	1213	590	1986	11909	9230
1970	1139	675	1987	12226	10305
1971	1153	703	1988	11254	10854
1972	1215	916	1989	11429	11662
1973	1500	1000	1990	11881	11983
1974	2000	1100	1991	10938	11371
1975	4950	1250	1992	15500	15300
1976	6300	1300	1993	14922	15304
1977	8292	1292	1994	16796	16567
1978	9510	1510	1995	17150	17019
1979	10600	1800	1996	15954	15770
1980	12800	2500	1997	15672	16441
1981	14250	4750	1998	14195	15450
1982	17700	7100	1999	14500	15786
1983	23810	8262	2000	14536	16311
1984	19622	7504			

Table (3): Real State Development Fund

<i>Year</i>	<i>Credit Disbursed</i>
1979	7.686
1984	8.971
1985	7.414
1986	5.605
1987	3.972
1988	3.282
1989	3.979
1990	2.446
1991	5.496
1992	8.867
1993	21.954
1994	13.095

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