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معلومات تطور تربية دجاج المبيض (بيض الإستهلاك) في منطقة ورقلة

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57 D " (-5B6

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57 * " (-7B6

58 5 =E " (-8B6

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Résumé

L'étude menée sur la connaissance des contraintes de développement de l'élevage de poulet pondeuse dans la région du Ouargla. A permis de dégager 2 principaux contraintes a savoir :

1- L'élévation des charges du production : En effet l'élevage avicole dans la région du Ouargla est très payant ce la peut explique par :

- La période de l'élevage est très longue et par fois combines par l'élévation des prix des fourrage.

- Les conditions climatique de la région du Ouargla surtout les hautes température dans les période hivernale qui exigent la refroidissement électrique.

- Les charges du transport .

2- La compétition et l'irrigulation des prix a la ventes les éleveur locale exposé de vant la compétition des producteurs d'autre région. Ce dernier n'ont pas les même problème d'élévation des charges.

La baisse de production est le résultats de mauvaise gestion technique et économique.

Mots clés: Poule pondeuse, élevage, gestion du production, contraintes

Summary

The survey led on the connaissance of the constraints of development of the raising of chicken pondeuse in the region of the Ouargla. To permitted to clear 2 main constraints has know:

1 - the elevation of the loads of the production: Indeed the poultry raising in the region of the Ouargla is very paying this can it explains by:

- The period of raising is a lot of language and by time schemes by the elevation of the prices of forages them.

- The conditions climatic of the region of the Ouargla especially the high temperature in the season histivale that requires the electric cooling.

- The loads of the transportation.

2 - the competition and the irrigulation of the prices has the sales the breeder local exposed of vant the competition of the other region producers. This last doesn't have the same problem of elevation of the loads.

Encore it of production is the results of bad technical and economic management.

Key words: Hen pondeuse, raising, management of the production, constraints



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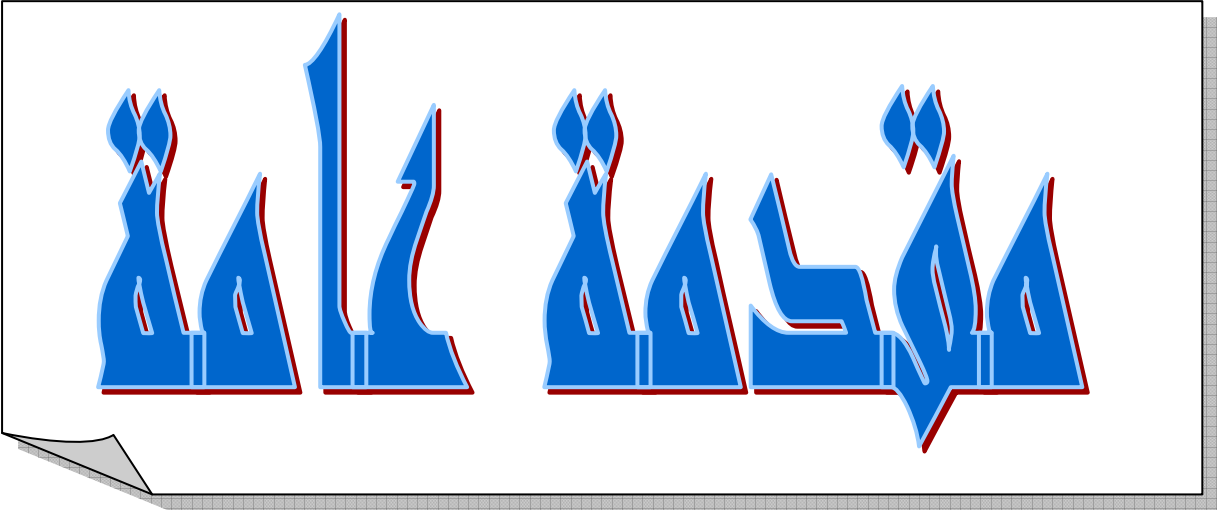
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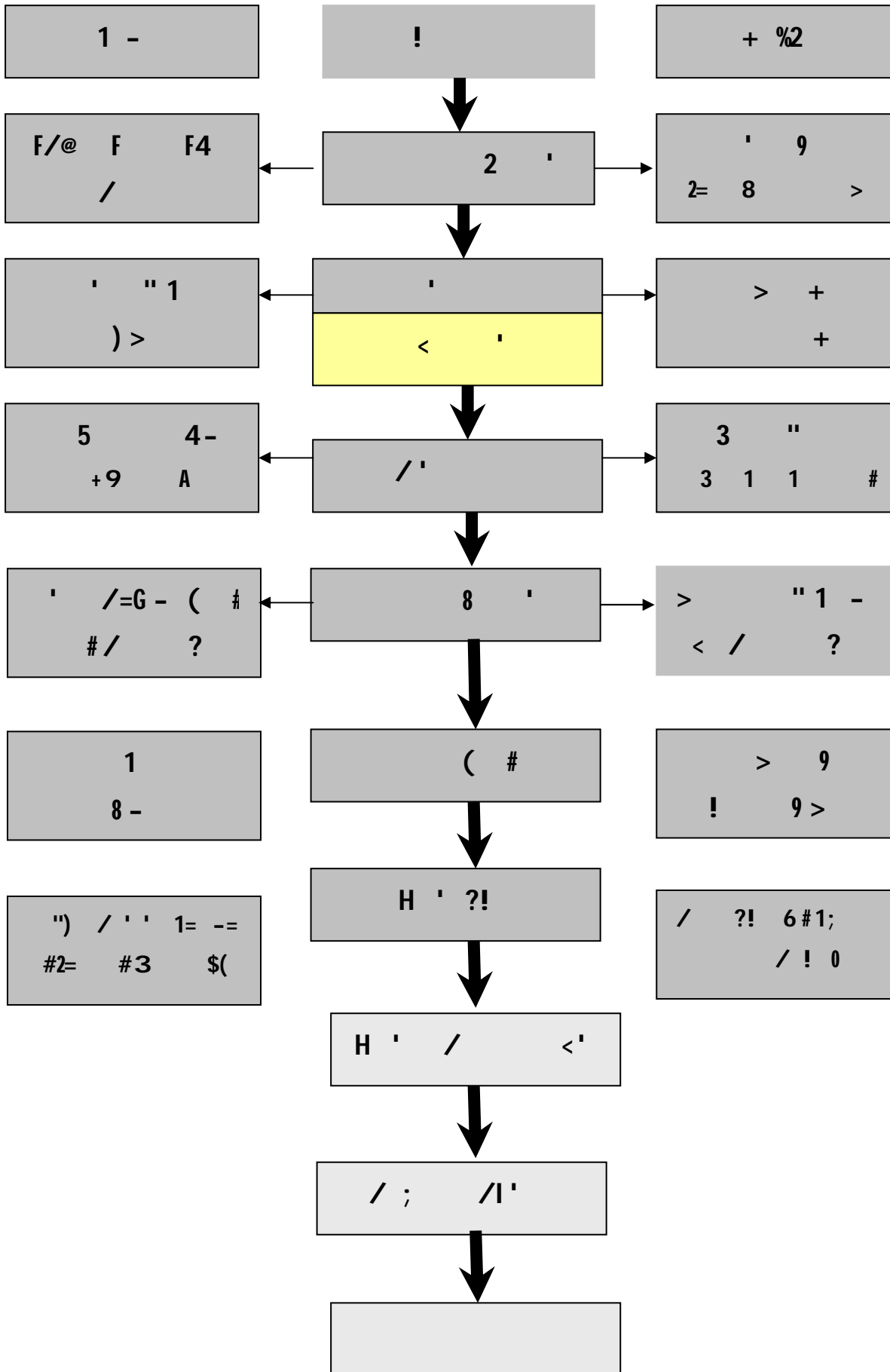
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الجزء الأول

الدراسة النظرية

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2100000		1993
3200000		1994
2640000		1995
1705000		1996
1900000		1997
2200000		1998
2400000		1999
2020000		2000
216000	8.400	2001
322000	9.000	2002
3305844	12.025	2003

M.A 2004 \$;

\$1 1

* (? >\$% T \$ 9 J // (. K * (+ >\$% %' 7
 K "" (V \$ 0 K :/4 %' 2002 8(\$ 1990 7 K ""
 3305844 # \$ 2003 (0 9 A"((R ' 0 V \$ 0

B 3

7= 9 6 R (8 K * (7 \$E02D < 1

E³10D 7	"	=	E³10D 7	"	=
208		=	00		0
87			200		.
588		N(32		= LE
73			425		# 0
758			975		(
00			354		
367		7 4	302		
13		K	11		
00		+	684		
902	0	*	419		
507			00		9 (
43		. =	78		(
38		. (40		7 (
55		9 (36		9 (
202			493		(
72		.	223		¢
36		40 5	16		"
449		(16		
440			957		. =
104		! 7	49		
09			567		
24		9 (7	381		
25		L	175		
353		7 L	187		
12025					

(M.A 2004) \$;



((C #! 7 (70 >\$% 102- %' 7
 T\$ ((9 "(/4 ("(9 7= . ('
 . 6l A A 7 2 9 6 #! K * ((>\$%
 * (70 >\$% T\$ '] "(K 9 (*(+
 K * (! (9 6 M 4 J 9 6 3" K
 V 2 . (R '0 9 6 +H H9 (H 0)9 6 2003
 \$ 9 @"(6 (/4 HK H H L 9 6 V> \$
 B. !#!
 \$7 L@ - C2.2
 E K \$E 7(N \$ 9 (40 7 K (
 0 \$ 154 # \$ 7 ? (7(3 70 T\$ H /N(#! "
 7(7 <(\$ 7 %12.2 \$ <(\$ 7 %5 # \$
 B E K \$E 7 <(\$ 7 %35-17 # \$
 ((9 = 9 \$ 5 =0 3\$(#! ' K 70
 ; K 8 J = 70 M/ R 'E \$ 9 (A 2 <
 9 #! ' <08+ !3+H5 =E 3\$(07 9 E %'
 M/ . !A 2 D(#! (M% (6 70 H7= C/N
 BJ = J . !#! K" K 70
 9 (A 2 K M% (@"(#! ' (#(J E 7 7
)#4 R 'E \$
 B \$ 2 3 # = -
 B 7(8 (\$ -
 BM ((6 \$ 7 . L -
 &2 \$ 0 @"(C " C 2 >
 . K M% (>\$% X H C/N 9 #! # \$ 7(
 B 3 9 #! (

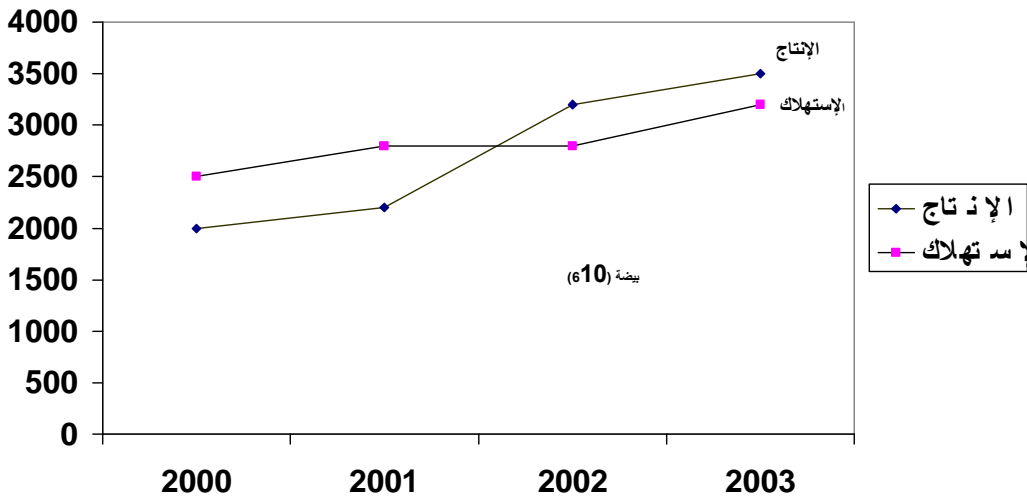
A 9 7 L@ - , E03D < 1

-	E ³ 10D - 7	E ³ 10D ' 7	/ '-
5.5	2435000	2020000	2000
6	2871000	2160000	2001
7	2760000	3220000	2002
7	3101000	3305844	2003

E2004 AMA D \$;

\$1 1

* (? 70 ((#! K 70 >\$% %' 7
 (<! / ;(% (3 9 2 2002 J =
 M% (8 J = 8+ 9 0 #(! N V > K *
 R 'E \$ 9 (2 K 0K " K



- ' 7 18 \$E01D < ' 6' '

\$ ' 9 , C3

\$ C1.3

(= ; 9 (#(9 = 7 7 \$ * (((

"; (1977 7 2= #! 9 > 7 ";

9 2(! (/ (:/4 7 C Z (V V (9! E

7 ; D3 \$ 8 (J = (:/ '

9 4 4 #(\$" F /4 #! 7 = 7 :(

B 2= #! 7 (=(' A 7 ; #!

B 6 #! D3 \$ *(+ =(7 \$E04D < 1

"	E/	D /	"	/ '-
0			0	1997
70000			70000	1998
73600			73600	1999
72000			780000	2000
77400			92200	2001
211447			238500	2002
146185			161300	2003
219530			254400	2004

A2004 F+A A \$;

\$1 1

#! \$ * *(+ 70 >\$% J \$ 104- %' 7

H 219530 # \$ 2004 *(S 09 ((

*(+ ! ((#(' 9 ! > (7 (/4

BJ 7 / * < 5 ; ((9 (! 8 ! 7 ; 0



\$7 C2.3

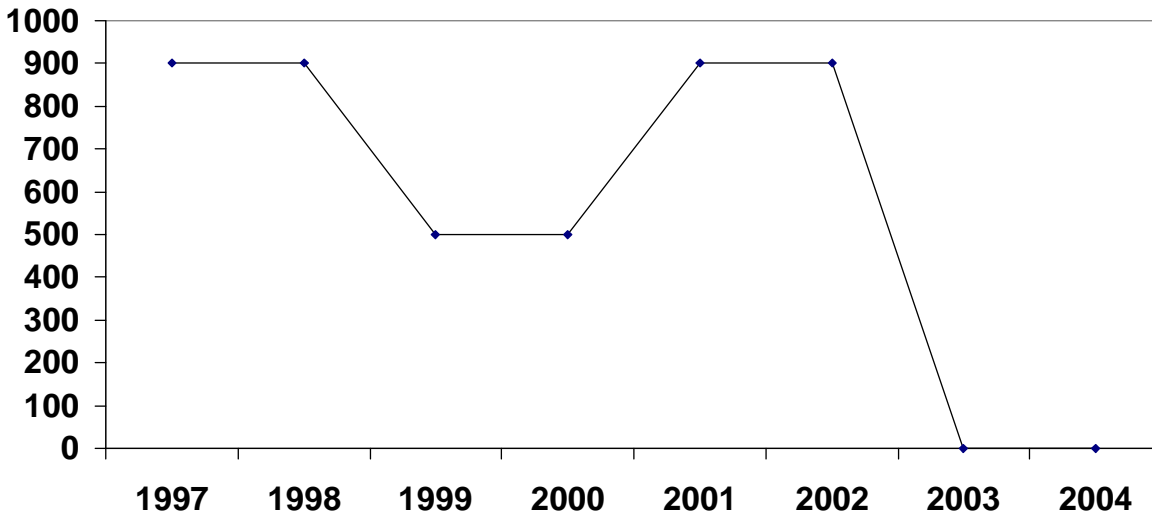
9 > T\$ H; \$!; K * ((H\$ * 2
 . = 7 2 ((6 #! 90 1984 7
 . (@"(J 7 2 #! 90 V 2(V 2= #! 7 A ((! = 1 2 HD " HD/N " H9 = " - *(?
 \$ (*(? 2 T\$ 1. !- \$ E = 8+ 0
 B9 2" \$ #! K E (2 T\$ \$ (? @ (2= #! K * # 2 M/
 (? # ((9 >(" K A3 * D 32 V 14-12 7 (? (H _ @
 B< \$ 7 "(S <2 (((" :/4

B 6 #! K *(+7 \$E05D < 1

E ! D E ³ 10D '5	"	/ '-
912	4800	1997
912	4800	1998
456	2400	1999
484	2600	2000
913	5000	2001
854	4800	2002
0	0	2003
0	0	2004

2004 F+A A \$;

\$1 1
 L 8+1998 7 J//(. K *(+70>\$% %' 7
 (*(? . (2002 8(\$ V3 "" . *(? 70 0 2002
 B (' J K * (7 7 #' (



< = 9 7 '#18 E02D < ' 6' '

- \$III 4

\$! C1

9 2 7 >!\$ 4 K * 9 D 7 K N 7+

0 K D *(? 7 7 0 8 \$ (\$ C= +

11956

\$ -B

(8 ' "; = 8 7 (#! ; \$ 5 = ((

= 9 =(3\$ 8 ' ! (. > C (M/

B

\$(#2! E (6 J 3\$ D #! @

9 7 (' 70 # 8 7 7 = 3\$ 9"

) (= 7 6 3\$ D \$ (" 0 "2

B C : . (/ " ! 3 E 7 (70J a

B C = 7 a

BR '0 (C3\$ 7 a

B \$ 0#! 3\$ 3(8 (0 a

B (" 9 \$ A a

B4 L = E : . /" a

B (5 E 7 a
 \$E ! D ' 0 N
 (. #! >(\$ (" 9 #! C (7E V >
 <M / # ' #C (8 (? J <M D 7 (\$
 9 0 C 0 A V (: (7 70 J
 11977 % # % -B 7 ! "2
 \$ 2 N
 #! ' 7 ((C (J \$ 7 (>\$ 0
)# (
 - 3) E06D < 1

E#P P D 2	-	3 ')
3 b 6.50 b 40.20	² 262.00	2400
3 b 12 b 40.20	² 482.4	4800
3 b 13.36 b 54.15	² 723.5	10240

ITPE 1994 \$;

\$! 2 * -2 N
 . 2 7 2((D @ V (05 2
 7 9/ \$ ' 7 7 /M H8 2 K E @
 9 5 1 150 8+80- V E 7 70 J
 B 4 0 " 3 3 E
 /4 7 K E F= 7 1 15-10- E A"(70 J
 BD 3 E 7 (T\$ \$ ' 7 3 0D . @"(?
 11977 % # % -
 \$+ - , N
 76 HM / 7 @"(6 3" 1 (3-2.20- 7 7 @"((
 B ' D (0 Q (. (#! \$ 7 @"(



8 0 \$E J = 0Y " J = 7 D #! (

V(V # 7 Y " /4 #! 7 0Y ! *

9 ! 05 2 0< (6 . >(# 0 7

V> .2 0 3 ; 7 7 (! ' ' 9 "= F (

70J !. 2 5 = 7 ' (\$ 7 %70 E <3 (

7 (!3X M/ 7 7 R 0. 2 7

J (#(5= #! & ' 8 (\$. 2 H. 2 * 7 <

B< ! %(A = E : . F 7 M/ <!

11977 % # % -

\$1 N

7 &2 \$ = K 7 \$(3\$ #! 3

5 0 0 (7 7 (H ' \$ N(;W

1Lunes de verre- B*

/ K * (+ 8+ Q(#(40 7

< ' ' \$ 9 J 2(70 W(V' 2(\$

>"\$ M/ D(D ;0 C/N 7 9 . + 8+ Q(

0 \$ 7 (70 70 J !. ! D ;0 M/ \$

K *(6 % 5' ((6 M/ * ' #! <

7 4 L = E ' 8 >!\$ M/ HW V

1 1956 \$ - BR 'E

\$ 9 ' N

² 1 /! A ;(1.50 0 1.20 @"(+ 8 /! 7 (

4 L = ' F 6 M M /! 9 \$(! #! # = N ² 10 #!

. >(5N F(" V ! \$(/! :/4 7 (

B \$(7 (J E



\$/@! 0 #C2

* (+ 96% (7 7 ; 3" \$7 2 6" 9 C1C2
2 " 5! (J (2 5 K \$0 5! K
; 5 K \$ = "(2= #! 2 9 /+V '
F= #=N H 100 - 50 K E 7 A"(3 E F= .

K \$ J

! ((J N #! K \$ ' 8+ = = 2 A M 5
B K \$ 8+ 2 : 7 " =2 8(\$ # .

)V 0 0V 7 9%3" * '+\$Q 0<2 9 C2C2

2 6 #! 15 - 10 5 = " 0 5 ' A3 \$& 5

BM / @ ;

5 = 7 * ' ; H 50 - 40 E 7 5 0 5 ' (\$ 2 5

2(7 = 0 (> M 4 9 = K #! 0 9\$ 0

8+ 9%3" J\$ 9\$ 'E 7\$ 7 = (9%3"

! = (9 = 7 R '0@ 0 M 4 70 5 C 70 =

= &" 0 " 0 M \$(M _ 2 0 M(% 7 = 5! 9%3"

1 1977 % # % - B< (& ' C #! <2 5 < \$

\$/ C3

E # 0 9 (((2 # M 4 \$ <- C1C3

* 0 7" * 7 # = K \$ 7 4 % ((

K = #! . (' =(9 E \$(/ # =

B1 E #! - R 'E # # 7 5

\$ \$ 7 82 7 3 @ 0 22 7 W (+* *(\$

= #! A 82 R (A! 70 J 7(\$ 7 1.5 0

= 3 M/ H C= > 7 =2 8 0 R (#! <(7 (70 = 8

2.5 - 2 # \$ 82 K \$ ' : 5 7 70 0 8

B=2

@ J \$ 7 (J ' * 7 =(0 #4 \$+ C2C3
 # " ((1 \$ #! = 7 (K * . #! =
). 7 @ 0 M 4 H 30
 B =(. •
 B7 ' 9 / . •
 B 0 . •

9 \$ #! W * (\$? ; C3C3
 = = /" # " (6 2! ((E . (/N(#! ((

= 2 <! 7 '(1 - 2 7 ' & '! H C
 ((2 "(6 8(\$ 12 - 10 7 7 '((6 7 8

7 @ # = +7 ' 7 #4 7= 8 - 5 7 #!
 7 ' 8+ = " J\$ = ' < M(% 0 *
 #! * ' 1 - J (7 R ' E . & ' "

7 V 7 70J * ' #! < (! \$ #! 0H D E
 7 E \$ ' < (3!E 7 < M 6+ H \$

" #C J\$ c 2 = ' 9 N(7 V
 8 08+ " A! (# (. 2 9 (#C 4 =2 9 =
 B ' 3 J 0
 \$/ C4

3 & " E 7 0 4 - 3 7 7 # 4 7 a
 A (7 7 708 (A3 M 7 & " E 7 7 "
 H9 5 - 4 & " ! ; H = 7 9 (* ' K
 = 0 # 0 7 ' = Z (' & " E J 8 . (

B 10 C = & '(= = 8 2 (

= (C 8 + #4 ' #! # (a
 H C = = N3 : = (1 nipples- 9 \$ 8 0 & " E
 * ' D (T \$ 1 - * ' C 7 (= 3 0



V 0 0 V A &"2 * ' \$ K \$ \$ # (=
 7 7 9%3" * '+ > H = = 8 J M \$(= =
 != (= M 4 70 8+ \$ 9%3" 8 9\$ 5 =
 8 ; = &"0 " M _ 2 0M(% 7 = 5 ! 9%3"
 1 1977 % # % - B * '
 \$Q 0<= C5
 8+9%3" =2 T\$ \$ 8 (; M 7 &" 7
 5 #(8+ C &"2 3 0 V 0V A (" E
 &"6 70T\$ 40 b 40 b 40 7 (: 0&"2 V[0V A K
 #! \$= &"E d = @ J \$ "(\$ R (#! 7 (
 B 2 &"0H &"E H5 = 9 / &" H\$
 11977 % # % -
 H4800 9 =)7 J \$ 9 = 7 @ 0 M 4 M /
 A V[! > 7 T\$ 102400 9 = H2400 9 =
 1 ITPE1994 -BK
 \$M C6
 D J\$ (0 A! (#(8 (("2 9 #! (
 - >\$ ' 9 (T \$(60 J :/4 >\$ 7
 (7 (3" 1 , 1000-2000 7 (((
 B \$
 9! 8+D A! 7 (=N3 \$ 7 (70 J
 \$ ((D" 9 \$ =N3 >\$ '
 B 4 (= \$ E (D"
 \$1 R) C7
 8; 8 >\$ ' 9;(9 ((N (#! \$(
 J\$ N (J = 7 \$ 9 @"(\$
 8+ >\$ ' \$ (8(\$ * ' 8+ 7' D



4 '[> (H. (! 7 (9 ((A=2(H =
 B/ 4 (A=2 ; %; 5C 10 7 R 8 (=2 >
 \$ C8
 #! V(V' = (7 * (+ V \$ F 0
 ' ' 7 (\$! \$ 5= #! ' .
 V ;(;Q /4 < " = 7 ; \$ \$ V > C>\$
 J N(#C/N \$(M/ \$ (? 2 8 V
 4 ((J C (C>\$ ' \$ 8
 %' 7 ' #(C E ' J (2 9 7 7
 9 7 9\$ " 0 9 :/4 5! >\$ 8+D
 (D 9 =2 9 (#4 "(= 9/ 0 0M(%
 >\$ ' \$ 9 >" (7 H >\$ 8+ ' 7
 ! #(2= 9 2= . " (0 12-10 # \$ 8+
 K" # (= < (8 D 9 . " C>\$
 T\$ 2= = \$ #! 7 \$ 0 8+ \$
 B% 80 = 9 /+ ' 7 \$ 0 8+ D" 7 2
 2 = # ((E \$(9/ C 9 M 4
 11992 -B >\$ ' \$



\$ \$IV 4

)=\$ = (\$ 7 6 (7

0 H1² -A (#! 9 5 7 K E 8 (#! \$ 98 C1

B&"2 #! 9 4 7 (& "E #! (

(! #"! (\$ 7 6 0 (\$ (#(40 7 (\$ C2

-15 ; \$ F (\$ 7 K"" 70 3" *(?

* (+ 8 ;Q(\$ 7E V >⁰ 24 7 (60 8 18

B 3 \$ 8 ;Q(K

1ITPE 1994- 1K *(+ #! &2 e \$-

Y1-0.5 7 7 &2 <M f 27 7 \$ 9 /+

7 2 8 ;Q ! L \$ 7 (M/ #!

7 (' \$ 7I W ((' \$

(& "0 #! 18 8 \$ A"((70 6 M/ >\$ 8+ '

BM \$(6 7 \$ 7E

\$ C3

(7 E ' 8 (T\$ (3 C (

L J 3 9 N = / D * ' M/ D

B. #! ,³ 10-7 D(#! D 7 ,³ 6-4 # \$ 7 7

!(7 %! 9 = 8 (\$ (#(#! = (V >!

(D" 9/ 2N #! 6+ >(" D 7 :/4

N \$ (9/ \$ (" #! 9 = + 7 6 /

B >(

70 J <M O(D A! (2 V >

9 /M 9 = 7 C 9 (7 (7 8

W . 2 #! (3" <M 1 ,³ 10000- 7 ; 0 C (#! (

8 (7 ! D" = (9 (/+ 8(\$ 7 7

7 V C 9 (< (C 4 J 0 J 70 8 7

6 8(\$ #C (7 ; 0 (6 /' Q 7 J 9 =
 #! = 7 0 5 " J :/4 . ((
 8(\$ #C (@=2 \$ #! (9 \$(! 3" / "2
 11977 % # % - B . (0 (@=2 ;07 . ""(
 \$ C4
 (%70-60 7 (C>\$ #! 4 !(J = 7+
 %; ! 7 2 T\$ 7 (C>\$ #! = \$(("(
 # \$ 0 ,D³ 6.5 "(H 2-1.5 7 #(3
 7 V(/ : "(@ #4 :/4 #!³ 150
) (
 B C>\$ 7 " = 7 %40 # \$ 2 D ' -1
 = 100 7+ C= 7 " = 7 % 60 2(5 = -2
 B D (15 24 #! " K
 K E R A g 2 g (C>\$ #! = + 7
 D(! #! V ' C>\$ #! = @"(70 "("=
 11982 2 % -B< \$ 7 C= >"(\$ 2
 \$ (! 5 C5
 \$ (! 5 H ' C1.5
 4 ;W V > > "2 9 #! D 3? 0 /"(
 #! V V D 3? J (D 3? #! \$(# ' D 3
 Q! # Y \$ / # C E V > (!
 K 0(7 #! K A3 8 = A! 8+c= ' D 3? 0
 J M/ K *(+ 8 ;W< <2 (J \$ N
 B D 3 S 0 \$(
 \$ (! 5 ? C2.5
 A #! >(D 3? A (7 70 J \$ 7 2 6 " "" 9 •
 #! 3-2 4 D 3+ 3 E 7 A (8+ T\$ D\$ 0



= R (7 2.5-2 @"(7 7 J *(? (!
 7 70 A (3! '[7 ! \$(J
 F . >(J (04 '[\$ 7 K E 7 2 8
 BD 3 8 N ;Q 6 8(\$
 = 3-2 = #! R (8+ 7 J \$ 9 •
 # ' D #! 0. 8 D 3 J (7 70# = D 3 7
 VC < ((= 7M M/ V V(#' D 82 = 7
 BBB 0 8 (\$ = 7EV > D 3 * ' 8+
 9 = 7 E 7M . 2 7 8 (D 3? F 7EV >
 K #! M/ 7 0(" E 7 ; 0D 3
 J (4 R ((60 J 7\$ 7 ! E #!
 B = \$ #! = 8 ;Q < E 5 \$ M (
 \$ R C6
 O(8+ C/N \$(K ((\$7 > @"
 4 K * 2 K 4 C/N 2 #! 8 0 (; 0
 2 :/4 #! # M/ * = M% (% < O(K @ / *
 \$ \$ 7 L 9" K 7 *(+ 8 E % 9"
 7 - 2 7 (+ J \$C = M/ " 7 2 M
 11973 0 \$0-BK 7 8 ;M #! 1 C/N 2 T \$
 D/N @ *(+8 (2 = 8 ;Q(#(407
 M/ 8 4 (#(3 8 <C (\$+ R 2 /
 8 C (\$+ A 92" * 2 7 (70 3 7
 T \$ 9 (" 9 4 7(C/N 9 7
 #! 4 ! (J / = \$ K 7 (#! ' (9 :/4 70
 V 2(7 7 70 6 # ; *(+ # = (8(\$ 2 / D/N
 B` 2.3 - 2.1 # \$

K * /N(9 (\$+\$E07D < 1

340 - 320	%2(+ =
, Y 18-16-5	' 7 (
, A 850-750	7
, A 400-350	7
, Y 4.1 - 3.8	

ITPE 1994 \$;

9! 7 % 65 ;(0 (? \$ 7 /N(40 7 (

% 35 ;((R 'E 9! 70 7 \$ #! 7 *(+A #!

; 00(. D/N 70 < ! M 6 7 J \$:/4 . ('

! ; 0 ;Q /N(#! (? 70 /4 8 R 'E 9

7 M/ 7 *(+ #! C ' E J \$ 8 V ! (

<(4 0V! (/N(70 ; \$ (. > 9\$(V ' " \$

< (#(\$ #! (8 (V 9\$ 0 +

E 1973 0 \$0 D

\$(C7

7 (D 40 7 2 7 7 7 * /N(#! D 40

(* \$(/N(40 (! * D/L #! # 0 <

) (E J Z M/ <

BD/N 34 8 (-1

BK 7 (8 (-2

B \$ J = (. =(M/ -3

8 \$ (/+K 7 A=2(70 (9;

B 3 9 (\$ #;; 7 (%



7 (\$ (! \$ 0 #! V ' * D
 * (\$ (M / \$ c! 7 % 3! \$ 3
 A (/ (46 J M / H C \$ 8 +
 7 ("> # E #! D X M / % (8 *
 C = 7 D A /+ K E #! (4 " K ((6 8 (\$ "(
 % 70 -60 8 (\$ C = V 2 (K * (+ 7 48
 B: 7
 = 5 = 7 J 5 = 7 : 8 \$ C =
 #! : "(5 5 = 7 : " < 0 2 #!
 1 1981 0 - B 3
 \$ < C 8
 3! E 7 < % *% ! (6 7 K 0 > 7 E V >
) (= @ (X K E : / 4 7
 8 7 J 7 7 V \$ V \$ #! 8 7 J •
 K * J \$ * (7 / \$ % ; ! BBB = 2! \$ K N *
 B " #!
 5 " 60 8 2 (\$ 9 / = \$ 7 70 J •
 B F / (> @ (+ 3" BBBA 0 4 7 #!
 \$(E V > (8 + = ' 7 / \$ •
 B 2 # E A = 2 7 6 K 0
 8 + ; % N 3 = 7 & '(F •
 V C V 8 2 (0 T \$ 3 = F / 8 E 4 C > \$
 & '(8 (\$ N = K ! (/+ H R
 B 6 (\$ 8 (J 7 E V > F / V !
 B F / 8 + 8 + = 7 / \$ •



8;(R '0 7 (= & "0 ' V(V A •
 " (M/ 4 =(5 # I F/ 7 & "E M/ 7
 BF /
 H % (6 \$ & '(H 7 ' % •
 == /\$0 & '(* ' % * ' /\$
 B 0 D=L M/ 7
 B = (V ' ' 8+ C 0 ' V(V A •
 M/ C>\$ ' 8+ = ' A % 9D ? /'(•
 11976 % # % -BM 9 \$(! 8 M J (\$+ 3'
 T%; = \$ # \$ ` "(D +7 6 * A 7 D (6
)J=((:/4 A 0
 B9%3" * '+ /4 = 3 E = a
 B& "E F 8 N +a
 B =N3 D & "E >\$ L a
 \$ C9
 /4 9 (M/ \$ =(= ' 7 6 . >() 8 D 32
 BD 7 7 (\$ 7 9 (=(•
 1 ITPE1994 - B1= (]3 - ; 5\$ " >\$ =(•



/ 9 7 2 6 " , ' \$V 4
 < (\$ 70 (2 8+9 = #! 8 / C= *(\$ •
 BK E 8 8 (#(= 7 9 (" % Z
 #(= 7 0(U K](K λ •
 BK E #! 8 (#(= 7 9 = # (•
 B 3 E 9 3 7 < 7 9 = 7 K A •
 8 8 (#(7 =2 #! 5 " 7 V 0 9 = #! 5 " 7 0
 BK E 9 "= (8+M/A K E
 B7 λ λ 7 #! •
 2 K *(+96% (# : (6 4 9 = #! (•
 B (E V
 BK E #! / 8 9 = #! / * •
 BK E #! (7 9 = #! &2 •
 #(= 7 0(K 7 F3 5 ! 6 < λ K *(? •
 % D" 8 V 0 M/ (HK E 8 0 9 = #! 8 (•
 11977 % # % -BD 3? /N((> 0/"(7 \$ # '

الجزء الثاني

الدراسة التطبيقية

- ' 9 : ' \$I 4
\$ 9 R ?< C1
C 7 800 # \$ (C # J #! A2(6
)#4 ! N (; \$+
B54-19 -⁰5 = =' 10 -57 -⁰31 K C
H² 163233) 2(\$ 8 6 A ((
12004 D \$S # = 7 -B 399172 # \$
\$ ' - C2
(D(" \$. \$ U 6 ((
7 (C 8 >(= E = (2 M/
#4 A ! #! ' L
7 \$ 9 #! \$ 5 " 8+ !3+ !
BM / # "

12000-1990- 9 N(= (9% (7 \$E08D < 1

B 2=

-	8.2	18.8	13.5	63.7	9.7	3	/ R
9'	7.8	25	16.4	61	15	3.1	E °D
)	9.2	28.1	18.6	50.9	7.1	2.8	E °DS ;
-	18.6	35.2	26.9	41	3.3	3	E °D -
/)	23.9	42.7	40.01	34.3	00	2.7	%
	24.7	45.12	41.05	33	1.1	3.3	E D < -
,	22.5	40.02	38	35.8	2	3.2	E 8. DM
&	20.4	36.08	33	39.7	11	4.6	
1 9)	14.1	30.1	28.12	40	25.7	6	
*	12	29.08	25.09	45.3	14.2	3.4	
& 09	3.2	26.04	17.05	51	5.5	5	
0'	5.7	18.04	13.32	50.2	9	4.2	

E2001 < ; 2 D \$;

\$1 1

\$ 9 = (70 > \$ % %' 7

8 0 1f - 28.6 R 2 \$ = (0 1f - 14.1)

B9 0 %' 9 \$

%' 9 8.6 / / (# ! = (0

B W !0

L 4 (7 L0 D(. ' # ! %' 0

1 - \$ 4 (7 . ! # ! 0 H L
 B% 51.3 = = (. U ! = 0
 \$ - C3

A C (L 9 / " " (6 ((
 \$ 1PH - 9 / 3 7 C3 8 C (\$
 11995 . -B (9 C ("(
 \$ ' 8 C4

) 2004 * (? T\$ W 6 (; 8 6 / \$((

E 'D	
239314	J \$
40092	9 3'
30116	. % E
831987	(

2004 . B B

\$ ' 8 C5

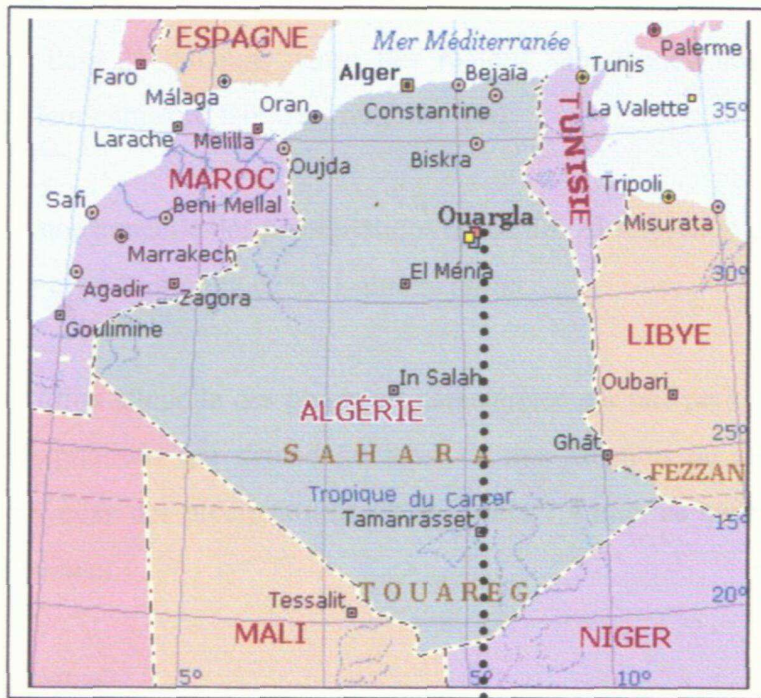
T\$ 2= #! \$" 9 (7 \$ 9 ((\$

) 2004 * (?

= 282287	D \$ \$
= 44725	D 3 \$
(9641120	J \$
` 116940	.
= 293309	

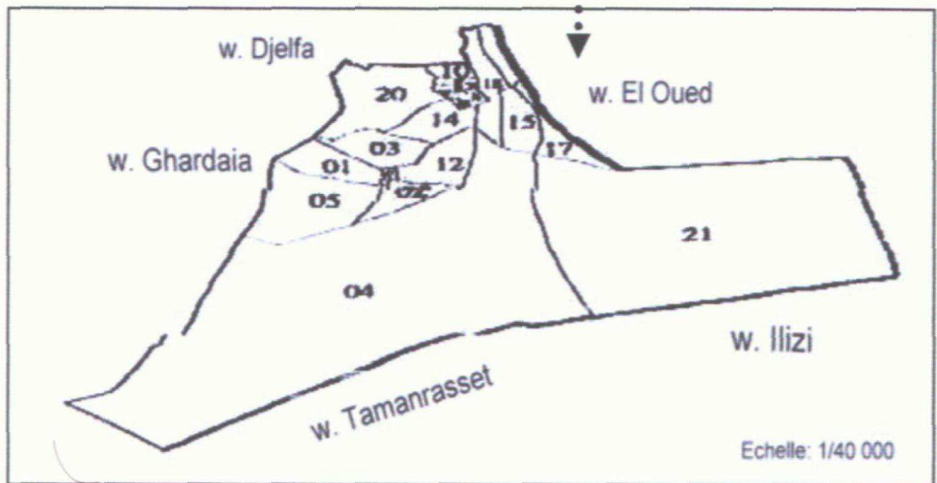
2004 . B B

7 ; 0D3 \$ M% (70 > \$% 108- %' 7
&2 / D3 \$ 0@"(? (2= #! D \$ \$ M% (
B* (?
@"(? D \$ \$ D M (< (T\$ \$ = 8+ !3+
BD3 \$ 2 C/N (



Carte A

Echelle: 1/ 50 000



Carte B

Echelle: 1/40 000

Les communes de la région de Ouargla	
01-	Ouargla
05-	Rouissat
03-	N'goussa
02-	Ain Beida
11-	Sidi Khouiled
12-	Hassi Ben Abdellah

Carte A : Carte politique de l'Algérie (Encarta, 2004)

Carte B : Division administrative de la wilaya de Ouargla (D.P.A.T, 2001)

< ' 9 R ?< T! \$E01D <

' / / \$II 4
\$1 C1

(=(D . 2(#(5C \$ \$(T\$ / 2 #
) (9 =' (6 #! M% (6 K 0(*
\$ - ' C1C1

/4 #! '(9 8+ (@ 3 / ('

4 2(#(9 8 D H 6 \$%" F 7

J /4 8+2002 / 9" (2= #! K * (70 7 (
! 09 :/4 ! 07

7

A 2 2= #! K * # 7E > (6
' 0 9 / (7 '(7 70 8+ ! 3+ \$ *
/4 7 9 7 ((7 (R '09 = #!
=

C = (7 ;%; 6+ (6 7 7 (5 = /4 7

1 ;# - - 5= 8 7 (
\$> < ?! C2C1

A 7 /4 #! 2 E K 8 @%=?
07 7 A 5 2\$(C E \$06 3\$ 7 /4 #! 7 ('
) (=2 8 9 7 08 \$
\$:(-
(9 2(-
*(? . (-
(#(-
(7 #'(J -
B101- 5\$ 5 2\$(= < (-

\$ ' > C3C1

\$ /4 (' ;%; 5= R (8 9 \$(0

K (# ! (6 #2(J &' ! ! 9 8

B5 2\$(7 0

) C

)

)

3N ((= ((T\$ = 7 7 2= :/4 (

2= :/ . 3 ' = \$(#(

70 : &' ! 7 (= 2 J 7

B \$%" F . = 7 I 8 (

8 A ((>\$ M(1990 / K * (2 \$1 2

4800 (#(4800 @ 7 = 8 (\$² 600 \$

BK

= ((T\$ = 7 12 2= :/4 (\$

: &' ! 9 \$ (' (\$%"

B \$%" 9= . = 7 I 8 (# 70

8 A ((>\$ M(1988 / K * (2 \$ '8

2400 (#(2400 @ 7 = 8 (\$² 540 \$

BK

' 9 L !; ((T\$ = 7 3 2= :/4 (\$ 8 '

F . = 7 I 8 (# 70 : &' !

B \$%"



B 2= #! K * # 7 9 7)E09D < 1

3' - E D	' U	U	,	
4800	1997	1986		101- #
2400	1999	1986	; #	102-#
4800	2002	1990		103- #

' \$III 4
\$ C1

9 7 3 ' (1K HJ \$ H\$ - \$ 9 (9\$ 0 70
 9 (8 (J = 8+ R 0 H "
 #! E Q ;(8+A! / D# H#C/N M% (% \$
 ' 7 *(+/'0 / 9 =' :/ (H (
 (4 M/8 0 < 3 7 F 0 #\$\$" *(? #!
 B 6 R (8 (:/4
 K * # . = 7 (9 2 5 = 40 8+5 =(M/
 B 2= #!
 \$ ' 9 3 / V2
 ((9 #(C>\$ 8+ #(9 9 7 %= \$?<
 ! R '0 + ((H2= #! K * (
 B >\$ A # (' &'
) (' A 9 407
 K " 7 >\$ ' ! ' 9 L ' C>\$ J L0 •
 B ' < (/ (7 2 \$
 C 5 = (9 =(>\$ 5= 7 •
 B 2 9 ' A !(8
 #! D : [8 (\$ (7 0 #! (C>\$ J L0 •
 B (#! 7 < ((C>\$
 B5 (7 07 •
 7 '(! 7 2 # 8 (\$ (6 C>\$ J L0 •
 BBB Z @ (H 7 H ? . % E
 B (>\$ ' L 9\$ &2 •

\$ 3 4 C3

\$* -2 C1.3

> T \$ H8 @ \$ 8 (7 (((

B C > \$ D % = 9 2(4E 7 2(2= #! 7

7 6 T \$ > \$ # ' R (8 4 > /4

2= #! (D 7 7 7 ! C > \$ D

B7 = \$E #(6 J = 4

\$E, D C2.3

J 2; 8 D 32 (? J 2 C > \$ J L 0

L C > \$ M 4 H (9 \$ #! J ((#(

2 #! 2(= . ' /4 D ' 07 J 2; 8 (\$

((T \$ 2= = (= \$E C > \$

7W 7 \$0 (7 D 7= \$E

" D /4

B \$! 7/+ D(\$

L 7 8 (\$ C > \$ 7W 7 M T \$ 7 0

09/ \$ > \$ 2(= " ' #!# (H 30-20 7

(12 3 (40.1 # \$ > \$ = T \$

B 4800 9/ > \$:/4 7 (3 # \$ "(

\$+ - C3.3

> \$ M 4 \$ FC" 7 . 2 8 (\$ C > \$ >

B \$ ' A <" 0 9 6 # . 2 8 (\$

(> \$ % '% 7 . 2 7 ' (\$ 7 70

#(\$ 7 . ""(8 (\$ 6 2= C > \$ J L #!

" ' /4 \$ FC" 7 . 2 70 L . 2 5 = 7 ' (

B C > \$ D &' ! 2(=

\$! 2 C4.3

2 /4 . >(#! (D (C>\$ 9 3 0 >

B 2 3 0 \$ >\$ 2

\$1 C5.3

! >\$ 8+ ' \$ ' 7 A (7

(/ 7 " = #! 7 7 7 (D 8 (\$ \$ >\$

8 (\$ (6 R 'E C>\$ J L 0 = \$ = 8 >!\$ \$

B 2 = " ' # ! # (

\$ 9 ' C6.3

8 (7 > /4 D M \$(J \$ 7 (= (

!; HU /! J E H >\$ K - J \$

*

/! 7 @ 0 ;%; C>\$ #! 1 J (J \$ 8

B1 N H = (H -

/! 7 \$E10D < 1

03 3	02 3	01 3	
24	11	20	9 ' "
9' 16	11	12	=
R; 9 ' 8		R; 08	

2 9" 103- 102- 3\$ 2 = 4 :

3\$ ' (#! \$(# (/! (

A J (101- 3\$ #! /! 70>\$% 2 #!

B 2

J \$ @ ((D * ' ? 5 = 7 (M 4)# (8 C > \$

03 3	02 3	01 3	
R; 4 3	4	R; 10	M "

#! C 9 0 = 96[D 96l 8+ ! 3?
 B. !#! >\$:/4 = (101- >\$
 8 (\$ # (\$ 103- 3\$ 70 >\$% 101- %' 7
 B 2(= #! < (\$/ C4
 = C > \$ #! 9 = 7 7 5 2\$ (%' 7
 7 D 5 = 7 D/N 7 9 = :/4 2400 = 4800
 6 \$ = ! K A 0 J E : (#! 9 \$ 5 =
 K 7M M/ K A ' ! N 8+ K \$ 8 (\$
 B A \$/ C 5
 9 = #! \$ (0 8 (\$ C > \$ 7M 5 2\$ (J \$
 ' \$ #! \$ (< 7 8 (\$ \$ > \$ M 4
 >\$
 9 ' 8+D A (7 3(: 9 ' 8 C > \$ A (\$
 BR ' 0 K LE ((9 ' 3 9 = #! # (N

\$ - C6

\$ 1 - C6A1

E . > (# \$ ` "(# 7 * 2(

>\$ ' E N (' 9 (6 # 0 ; 2 (

(' E = \$% 6 0 (\$% (' 6

A ;%; D/L / < '(1K D/L- D/N J 8+ ! 3+

A 5 (D * D # 2 C% . > 7 W

9 \$(> (8 (4 #(6 * #

2(6 * 7 J * M/ # %

B 0 18

A (8 # 2 >\$ 8+ *

B&" % !; J \$ = ' *

\$ C2.6

\$ C1.2.6

#! ' A"((* (? T \$ 7 % \$ ((

70 7 (5 2\$(7 / 7 9 \$ (8 D \$ 2=

"(:/4 ((H⁰ 30 -28 7 2= #! C>\$ ' \$

9\$(#C = # M 4 2 #! 2(= A 2

\$ 8 >!\$ /4 70 T \$ \$ #! \$(>

B 2(= A 5 =(4 ⁰ 24-20 7

\$ C2.2.6

7 6 2= #! * # 7 70 >\$ 6 5 2\$(%' 7

7 2 6 M/ ! 2= = > >\$ ' = 2 40

>\$ ' = 7W # M 4 2 #! = 2

B% 65 #4

\$ 98 C3.2.6

4 /4 &" #! 9 4 > 7 2= #! 7

B = @ J \$ 2 = #!

\$ C4.2.6

5 = 7 7 3(2= C>\$ #! C (7 7 9\$ (%' 7

' U J \$ 7 7 J E /! F(! D * ' 7

5 = 7 /! 6 J E F(" 7 2 6 7 (%; !

7 R '0 2 = M 4 >\$ ' D N(8 (# (

B C 9 5 =

= A (2 7 6 # (>(L C>\$ #! C (

B 2

\$ (! 5 C5.2.6

D 3 7 "(6 J \$ (" L0 2= #! C>\$ 7E >

J \$ >\$ ' D 3? 8 (C F (#!

7 (* (? L 8 * D 3? 7 7 9\$ (

* (+ #! * ' / /4 #! 15-14 8 A"((11

B* A L 8+K

A J ((D 3? 70 >\$% 7 9\$ (%' 7

B 2 =

\$ R C6.2.6

. 70 6 / # 2 #(E 40 7 /N(((

B7 2 D/N \$% #

C 2= 8+ (#(. % E 7 7 9\$ (J \$

E /N(# = 7 7 L . % E 70 2 (L

2 9 \$ D 5 = 7 . % E :/4 J (6 _ W (

9 \$ >(6 (34 W 2= 8+A 7 . % E

B! = 8+ ! 3+ = #!

D /+ 7 , Y 95 # \$ 2 2= #! K * #
 D/L 7 * ; A (@ E L 8+ 0 7 /4
 Y 125 # \$ 2 #! 0 ; 0 21 * 8(\$ K (
 B* 5 (L 8+ \$:/4 #! 82 K (D/L 7
 B 4800 2 . 7 \$E11D < 1

E .B D +	2
450	!
500	
600	#"
600	"!
600	
600	!0
600	
600	7
600	
600	9 0
600	(

7 9 =(A 2 (2 . 70 >\$% %' 7
 K * # J L0R < 4 (2 #! ((0 0
 B , Y 125
 \$(C7.2.6
 : 7 '(' 9 ' 7 (2= #! K * # J L0
 <(7 ' (7 M ! >\$ @ J \$ 9 ' :/4 \$0 . ('(
 (' 7 ' /4 7 H (1000 <(7 ' M 4 (500
 7 : A (7 3 N 7 ' 70 * ' #! 7 '
 (%' 7 !(D 7 70 J = #! (9 \$ 5 =
 B9 (! J \$ < ((6 D 70 0

(\$ 2= #! : 7M 7 9\$ (#! D J \$
 # ? D# '(I 5 = A /4 % E 7 8
 B 2(= A J (4 * 2 : 70 4
 \$; < C8.2.6
 # . = 7 (L L = 70 7 (5 2\$(%' 7
)# !7 &2 /4 2= #! K *
 #! 2 L /4 >\$ J #! 2(K \$07 (6 7 J L0 •
 2(J /\$E 2(\$ 9 C 7 ; 7E 2(=
 B* ; >\$ 8+K E
 B == /\$E ' % (•
 8 ' (\$ ' 9 = E =(•
 B=2! D E L (•
 B " = J = 7 * &\$! •
 B=2! (+ K 09 C = T \$ (•
 B !> J 9 "= (8 = 9\$(9%3" (•
 Q \$ E 0@"(J 3" (E (•
 B E
 7 7 (7 J L0 7M / \$% 7 9 = (•
 B N A= &2 J 9 = #! E K . (•
 \$/@ - 9 C7
 7 (5 2\$(07 / 7 70 7 (5 2\$(%' 7
 8 9% ((! (\$ T \$ H 7 3 #! 2(9% ((!
) (9
 B :(-
 B#\$ ` "(] (-
 B* '] (-
 B* -



B9 \$ 2] (-

B9 \$ 2 (-

B 2 . % E -

B* (? * 7 -

B* (? * 7 -

B9 * -

B9 -

B = 9 -

B = 9 > \$ % -

B #! (K -

B (D (] (-

B@ * -

9% ((! (7 7 7 7 M 4 9 :/4 8+ !3+
(. (7 T \$ H 3\$ (6 & ' #! 3+

B ' -

\$; @ C8

0 T \$ * (? 8 # ? 4 ; R #! 2(40 8 ((

8 (0 H *(+8 \$ 7 \$(8 (

B (# 2((

7 6 7 70 4 2= R (8 >\$% D# 7

4 M / A K * (< ((/ J / #! (4?

&2 8+ !3+ H7 R # 2(R (. 3 # &2

D# 4 . *(? 4 (#! 9 4 J E :/4 H#\$%" ?

B (& 2(K * (/

; <= \$VI 4

\$ C1

08 2 7 6 (0#! 5%= %

) 4 7 4 7 8 ((

B1= ='(2(H - J -

B1* (? - J -

\$ C2

0 8 (\$ (== '(7 6 (+ 0 6

R 7 96% 3!0 >\$ A J ('6 7 2(

5 9 = (6 7 /'E K Z (2 C A W

B \$(9 ? J \$@ (= (A

7 2= #! 5 2\$(7 / 7 70 5= /4 7

83 " C>\$ 72(6 M / 8 ((<(40 L J /

D/N 7 9 7 (7 70 T\$ E Q (#!

' / . (4 C 9 9 (\$6 7 ; 0 D

B< 07 =

\$1 2 * G C3

* (' ; 0 Q 8+ " 7 (* \$(

9 2" @"(8+ Q (= E . (@"(J K

/ K 2 8 7 (2= #! 7 J L 0 7 M / ; 0

B 9

K 2 8 4 (7 " 7 7 M 5 2\$(%' 7 2 #!

7 9 7 #" (6 #4 #(' W 7 +

= /4 . (9 :/4 . (A #! 7 H 9 . =

B 2= #!

\$E7 2D C4

J =(# \$" @ 6 E 2 (

BD D ! (H \$ HA T \$ 7 ('6

H '[8 + # 7 . (' (# 3 E 7 "(6 70 /4 #!

. = 7 < 9\$ 7 ' < W 4 (7 ; 7 M !

2= #! 7 \$W D 5 = 7 N(7 \$" F

B

\$ C5

)7 8+ 2(*(? 7 40 ((

@ == '(2 T \$ D" 2 ' 9/ 0 •

B *(S (/ : 8 . ?

7 W 9 5 =(7 2 7/ 4 \$ 0 •

B 2(7 4Q L # (@ . 7 0@ J\$

A /4 \$ * (7 ; 0 J =((K * (

B] -BBBK A H ! > H /N(>\$ ' ; E 8+

" J L 2= #! 7 L0 < 4 7

7 N(K * (#! ' 9/

J (5 = 7 7-5 7 N(>\$ #! T\$

7+ 7 2(# 2; 8+ 2(7 D N(6 J A

A3 4 (8+ ! 3+ (#! 7 2(7 ; 0 4Q < " R

8! (4 >\$ 7 W 2 6 7 7 M 4 70 T \$ 7

B 5 2\$

\$+ C6

'0 2= #! K * # R *(? . (J \$ 07

< 9 # /4 70 2= #! 7 \$0 . = 7 ! 9

2002 (7 8 '(7 '[' 4800 9/ >\$

B 6 R (8

B< " # . = 7 2002 9 9 = :/4 70

\$ 3 + C1.6

#! '(2 8+ 0 >\$ D 70# 9\$ (#! D J \$

: 7 ' 9 D + ? 4 (>\$ D (7W /4

K A (' ! L D 8+ !3+ #C 4 4 (

B (7 200) 9 + " (K 7 '(' " \$

' (\$% 4800 9/ >\$:/4 70

B2002 L 8+1990 %N((H

#[> (08 (\$ 4800 9/ = &' ! 0

(0 1990 40 (('E :/4 7M # < J \$

= " (9 9 (\$% 7 9 T%;

B (7 100

% 6,66 e 15,1 M%(4S C

*B 33h333B133 e 15 , 2.000.000,00 e M%(46

)# (#! F3 15 %' M%(46

>\$. (7 \$E12D < 1

'	& '- L@%=-		/ '-
1.866.666,67	133.333,33	2.000.00000,	90/91
1.733.333,33	33,333.133	1.866.666,67	91/92
1.600.000,00	33,333.133	1.733.333,33	92/93
1.466.666,67	33,333.133	1.600.000,00	93/94
1.333.333,33	33,333.133	1466.666,67	94/95
1.200.000,00	33,333.133	1333.333,33	95/96
1.066.666,67	33,333.133	1200.000,00	96/97
933.333,33	33,333.133	1066.666,67	97/98
800.000,00	33,333.133	933.333,33	98/99
666.666,67	33,333.133	800.000,00	99/00
533.333,33	33,333.133	666.666,67	00/01
400.000,00	33,333.133	533.333,33	01/02
266.666,67	33,333.133	400.000,00	02/03
133.333,33	33,333.133	266.666, 67	03/04
0,00	33,333.133	133.333,33	04/05

7 40 4 2002, 2001 >\$ M%(4 70 >\$% %' 7
 B (
 BM%(46 #! 9 ' = 70 8+ ! 3+
 \$(R + C2.6
 M/ 6 7C 1 E /N(# = 7 - D/N 70
 8+ A 7 D/N J 9 ! \$ D 2 <W #
 #! (D/N 70 \$ * 20000 2(" (:(
)113-
 (. 7 \$E13D < 1

. E>D	. E>D	2
135	4.5	!
155	5	
186	6	#"
168	6	"!
186	6	
180	6	!0
186	6	
180	6	7
186	6	
180	6	9 (
186	6	(
180	6	((
'< 2108	'- . 5	

BD /N " (7 \$E14D < 1

AE D 5 -	'< . -	'- . E>D -
4B216B000hi i	2B000hi i	2108
105B000hi i		2 .
4A321A000VWX		(R 5 0

\$(0 C3.6

D " (7 \$E15D < 1

E D 5 0	E D	E D , 8	(
11B000hi i	10	1B100hi i	7 (
37B500hi i	25	1B500hi i	15 \$ -7 (
15B000hi i	150	100hi i	9 (!
1B700hi i	10	1B700hi i	=
80A500VWX			

\$ R (0 C4.6

[> (= 7E > >\$ # E M \$ D ((
 9 :] 3 M / (C (/ ? 8+ ! 3+D =
 B116- #! D . (

D " (7 \$E16D < 1

E D 0	2
41B300hi i	# " H H !
50B750hi i	! 0 H H " !
98B061hi i	H 7 H
75B520hi i	(0 H (H 9 0
265A631VWX	

/4 "((D 70>\$% 116- %' 7
 B. 0#! \$ E#! (= > A
 \$0 C5.6
 5000 'E /4 7M # 8 0#(9 J \$
 B117- #! ? " (/ # ; % ; C
 D " (7 \$E17D < 1

E D & '- L@ -=	8@8 . 0
20B000hi i	5B000hi i

 \$ 0 C6.6
 8000 <(83 2(T \$ 05 >\$ #!
 B C
 " (7 \$E18D < 1

'- . 0	1 & 2	1 "
96B000hi i		
96B000hi i		
96B000hi i	8B000hi i	05
96B000hi i		
96B000hi i		
480A000VXX		

 \$ 0 C7.6
 7 # A 5 (* D 2= #! # 2
 B119- #! . (
 * " (7 \$E19D < 1

0	.	-	"
1B824B000hi i		380hi i	4800



20B000hi i	2 " (
1A844A000VXX	5 0



\$> 2 0 C8.6

#! \$3

? " (

L 6 7

7 5 =E J (

B120-

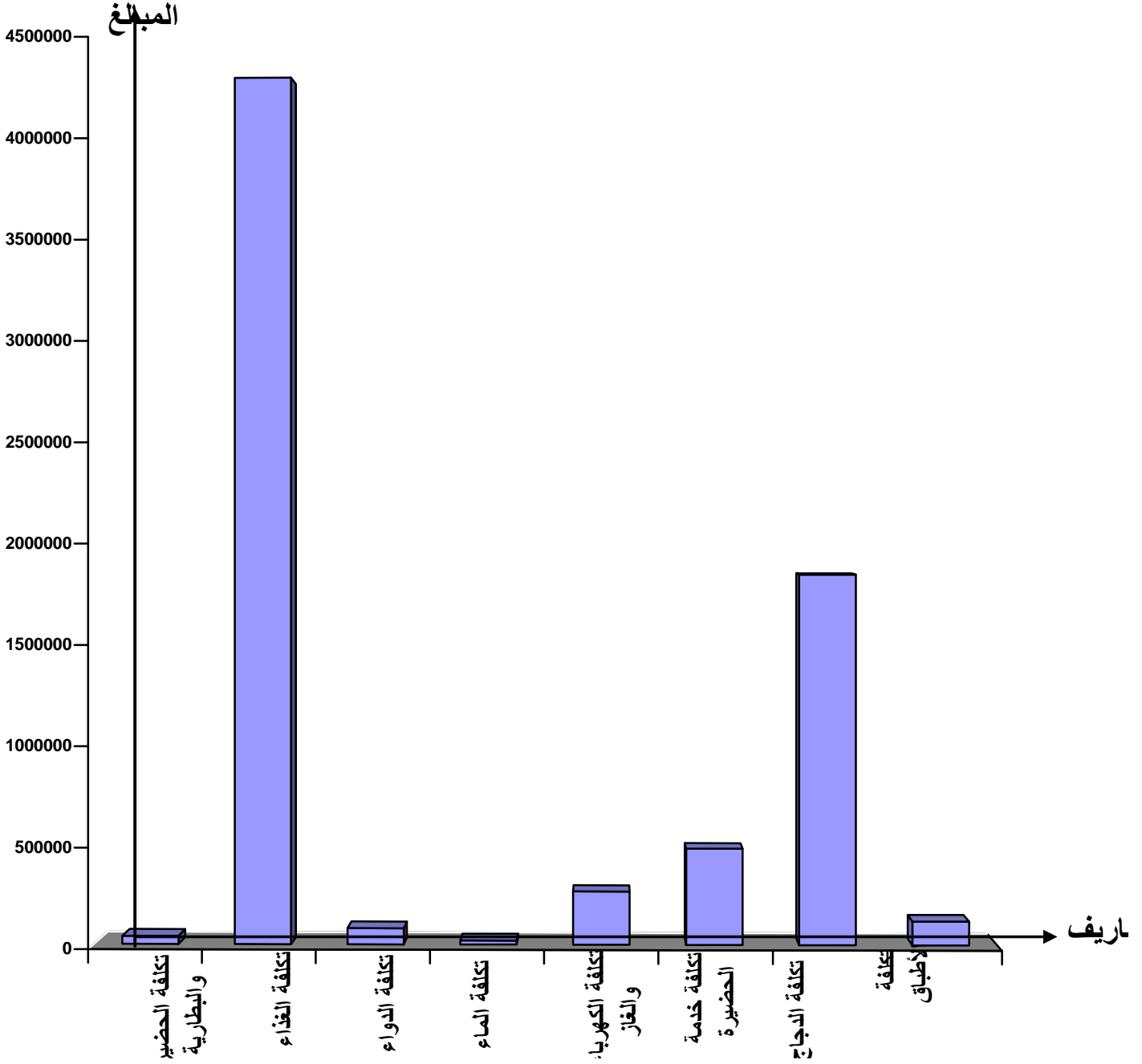
5 =E " (7 \$E20D < 1

5 0	. , 8	> 2 "
114B000hi i	4hi i	28500
5B000hi i		2 " (
119A000WX		

\$ 'Y 5 0 C7

*(S ? " (7 \$E21D < 1

'- . 0	+ ;
* 40B000hi i	>\$ " (
* 4B321B000hi i	D/N " (
* 80B500hi i	D " (
* 20B000hi 0	D " (
* 26B5631hi i	N D " (
* 480B000hi i	>\$ ' " (
* 1B844B000hi i	* " (
* 119B000hi i	5 =E " (
* 7.170.131,00	5 0



رسم بياني رقم (03) يوضح التكلفة الإجمالية

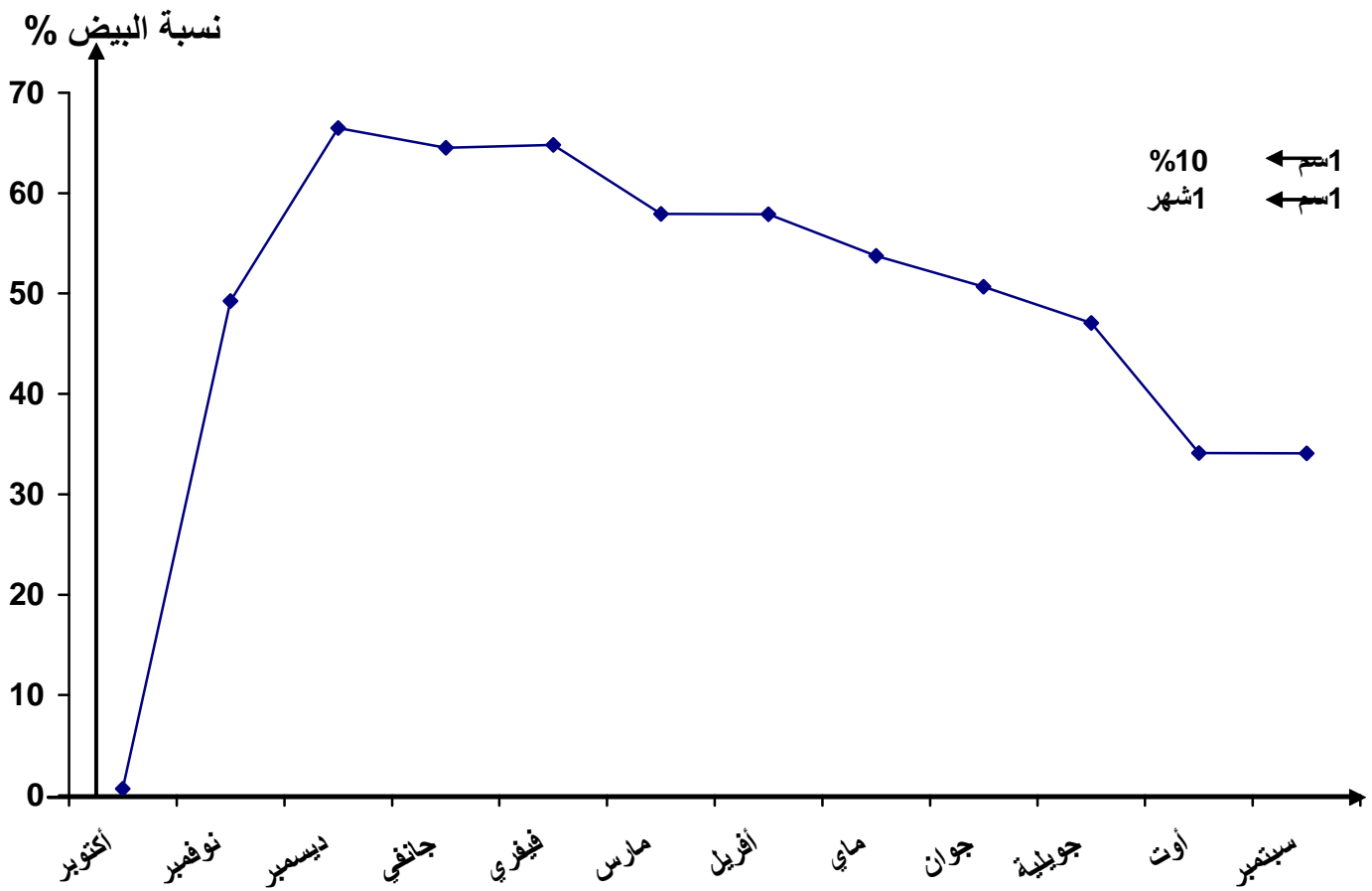


\$ ' - 6 " >
 . 7 0 (\$ (D / N " (7 0 > \$ % # % ' 7
 D " ((; . . 7 ; 0 ; (0 0 % 59.5 2 (T \$
 B ? . 7 % 25 # \$ 2 *
 "(2= # ! K * # * (? . (7 0 M /
 \$ D E M / 8 . % E " (@ "((= ((
 130000 # \$ # ! ; (# (2 . 2= # 5 (8
 . (7 % 3.6 # \$ (9 # (D (! @ "(8 + ! 3 + *
 7 / 5 = # A 2 ' 7 & 2 (. : / 4 * (?
 A . % E A 7 C > \$ 7 2 . 7 7 "
 K " # (C 9 J = (6 / U = 8 + ! 3 + 7 3 \$ (
 BD (!
 \$ ' 5 C 8
 \$ 7 '# C 1.8
 W M / # C / L 4 L 0 \$ 9 (4 0 7 K * (+
 K 7 (+ # = (# (96% (' 8 + #
 #(TETRA-SL @ 7 < (' 96% 7 # < \$
 / 4 0 (K @ R ' E 96% 2 (+ ; ((
 B J
 # R * (? & ' # ! D 8 D
 B122- # ! ' %' (K
 B % 10 9 9 \$ 3 @



B 4800 %' (K 7 \$E22D < 1

E%D	-'	E D ' 7	2
0,68		1016	(0
49,26		70940	!
66,47		98920	
64,51		96004	#"
64,81		93340	"!
57,93		86200	
57,90		83390	!0
53,76		80000	
50,69		73000	7
47,06		70030	
34,11		50770	9 0
34,09		50350	(
		! 854000	'5 5



7 - ' T! E04D < ' 6' '

\$ 6 " >

T \$ " 3 9 E #! K (70 > \$ % 8 \$ % ' 7

#! 9 ' * 7 \$ 7E V > M / % 0BPj 8 \$ 9N

#! * (? 70 > \$ % T \$ % 49.268 + # ; #! 9 " ; * (?

7 2 #! 0 ; % 66.47 < / * (? ` 7 0 T ; 8(\$

#! ; % 50.69 8 + A (#! T \$ 7 A

B % 34.09 (#! 9 T \$ 7 2

< 0 T \$ T ; 7 W (% 70 > \$ % 0C (7

5 (L 8 + (; 9 2 2 . 70 L * (? & 2 9

* ; W (* (? & 2 \$ E % ' < 0 V 3 0 > \$ % *

B 3 \$ ' C 9 " 7 L \$

' 7 (K 5 (7 W # < J \$

9 A 9 2 " + 5 = 7 K A 0 (A % (

H 0 (! L ' K 7 '((V L = J \$ 0

B122- #! F3 4 D K 5 (7 0(' K ' F3 \$E22D < 1

E A D 1	! . A -	7
3B300B000hi i	5h50	600000
1B521B480hi i	6hi i	253580
4B821B480hi i	# ? '	

J 2 ((3 420 # \$ 2 K \$ 3 @

BA (\$%

\$ 1 C2.8

A ; \$ \$(8 + * 5 (((7 D (?

B5 #! < 0 (8 + 0

(\$ 0 A 5 "(? (> \$ * A 7 W # < \$

B123- #! F3 ' * B 80

@ * # ? ' 7 \$E23D < 1

E A D 5 1	.E A D , 8	"
345.600hi i	80hi i	4320

\$ " /@! 0 1 C3.8

\$ 9%3" \$(7 A 5 "(? 9%3" 5 ((

9 \$ T%; 9%3" * (+ <W # /4 #!

124- #! F3 ' \$ *B 1400

9%3" ' 7 \$E24D < 1

= 1	' .E A D -	'-./@! 0	./@! 0
50B400hi i	1B400hi i	36	9 \$ 03

\$ 5 1 C9

*(S # ? ' 7 \$E25D < 1

E A D1	'5
4B821B480hi i	K
50B400hi i	9%3"
345B600hi i	@ *
5B217B480hi i	# ? '

\$! 0 4 - C10

* 854B000hi i e (K

* 345.600,00 e @ * '

* 50B400hi i e 9%3" A '

* 7.170.131,00 e *(S ? " (

* 5.217.480,00 e # ? '

e 150B400hi i | 345.600,00- - 7.170.131,00 e K ? " (

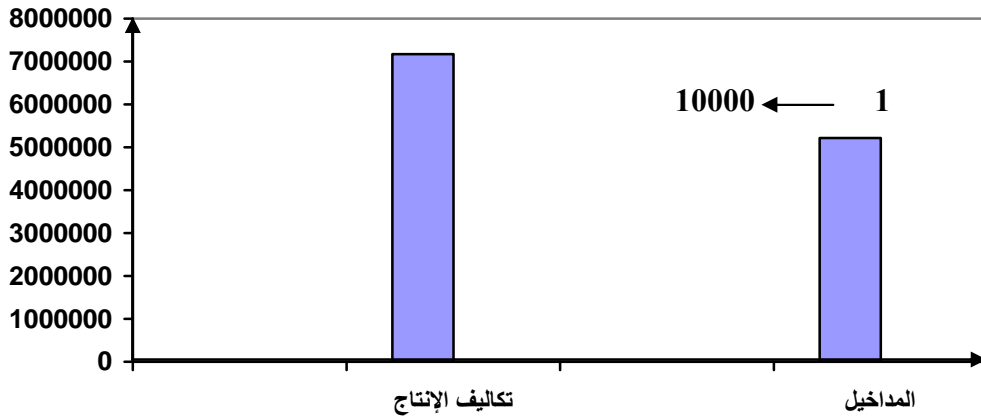
B* 6.774.131,00

B C 7,93 e 854B000hi i ,6.774.131,00 e \$ 3 " (



* 8hi i # \$ \$ 3 " (70 (%' 7
 8 ' = 70 M/ H ! J * 7hi i R (6 5 #!
 * 2B052B251hi i # \$ ' :/4 9 T\$ H#
 \$ C11
 J \$ # N(7 A = A 0 (7 (?
 B114- #! \$3 # (8 9 #(C"
 B %' 4800) *B) C" 7 \$E26D < 1

E A D 0	E A D1	E A D +	"	'
-1.952.651,00	5B217B480hi i	7.170.131,00	4800	K *



1 ; T! \$E05D < ' -

70 0 " 3 < V= # 70 0((0C(%' 7
 8 * (? . (@"(+J (7 195 # \$ @ #! ' #
 5 (' * (? 5 ((#(E K " +8+ !3+ ' J \$
 \$(A 0 7M # (:/4 8 0 (* (? 70 T\$ K
 /4 #! < 0 . > # 70 \$:/4 #! M/ C" 0 '
 7 #'(# (:/4 > A 7 J L A @
 7 'I \$ 4 HR '096 #! = K * (B 2= #!

\$; @ C12

(' C>\$ \$0 8 9 0 #((6 %' 7

#! (:/4 < (7 ; ((#(6 #! K *

* " (7% ? ' *(? . (70 7 (#! (:/4

. !3+D 07 2= = J "(D

@"(8+ !3+ 2 J=((#(D E .% Z D 2

#! \$ E #! ' 2= #! \$ J D (!

(3 " #(! J E J// (*(? K "" 2

&' ! . = 7 # J L > #! R 'E 5= 7 7 2

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. 2 / 5C 70 7 (7 7 A 52\$(%' 7

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B (6

6 ' R '0 5= #! K * # 2 #!

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/ <= > \$V 4

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 6 #! K * (. (70 7 ((6 %' 7
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 2= ' D E 4 2= # < 70 D . % E
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) //(E #! ! -
 8 \$ E 70 6 #! ! J=(5 (7
 #! K # (70 M/ HJ= K M/ * (J \$
 7 (7 = (5 (5 8+7 0 2= E K "" 8+ 0 K #! # (R '0 5= 7
 "(*(? . (7 7 (7/ 2= # (R C" K "" # (K "" 5C 7 7 <0 0((M/ R 'E 5= #! 7 (A 2 B //(K 0 '8 > C2 \$ ' 1 C1.2
 * (K ((2 7 (5 2\$(T\$ %' 7) (=2 #! ' #4 #(7 2= #! K B1 (9 0H9 = - 4 0@"(9 (&2 - B (" (@"(. % E 7 (@"(- B (6 # 2(= ='(J L - B4 0@"(9 \$2 E &2 -

B1BBB D 3? H (H!> H \$ - (= \$ = (\$ -
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 B ((&' ! ' &2 -
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#! K * (4(8+9 0#(5C 8 3 (
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المراجع البيئي خرافية

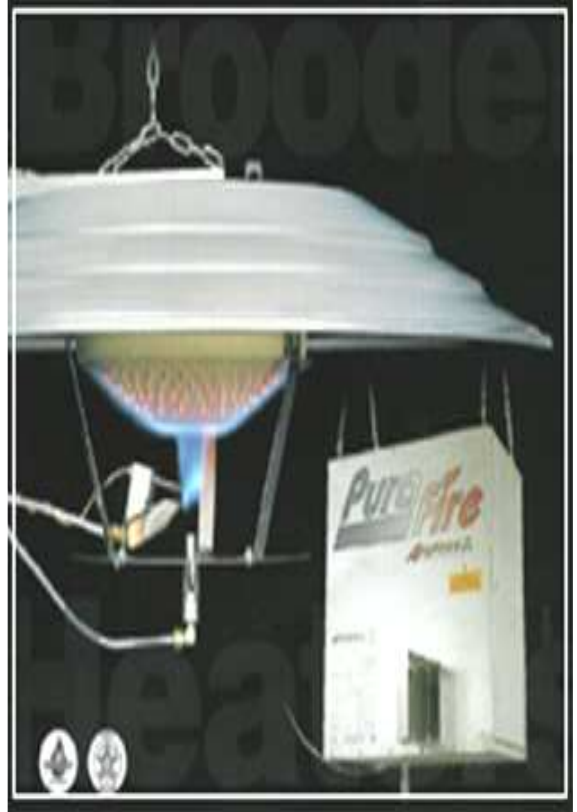
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 B& 625 H1 - J \$ H7)11982- B L 7 L \$0 -
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 B& 213 H (7 () 11977-B % # % -
 B&11 H5 J E * ()11973-B 0 -
 H #! = ()11970- B* ! 7 -
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 (' (7 K 0)11982- B # -
 B345 & H N H
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 B72 & H #! \$;)11968- H_ 9 ! \$ -
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 965 B# 5 B2004B1 B B*-M (\$ -
 B2005 14
 B2005-2004 H B12004- B \$" -

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الغلا حق



مساقي



مدفئه



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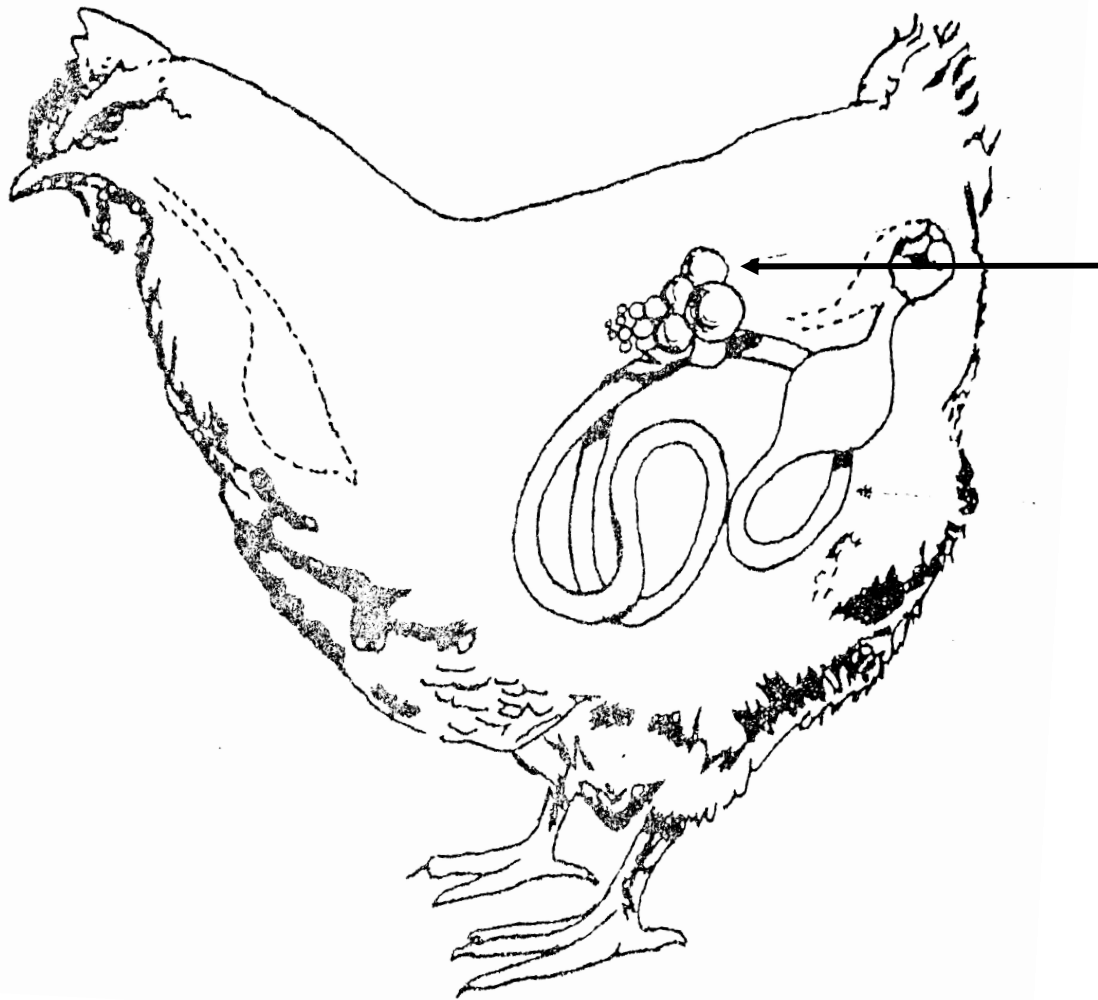
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