

(1)

2008-1994

:

.

% 98

% 87

% 4.5

.

% 13

% 0.7

:

30621 .

(1)

Standard Study of the Effect of Horizontal and Vertical Expansion Factors of the number of cows on the Evolution of Milk Production in Syria

Marwan Albarouki⁽¹⁾

ABSTRACT

The evolution of milk production was studied in the country for the period 1994-2008 by measuring the role of horizontal and vertical expansion factors. Results showed that:- Horizontal expansion factors played the main role in determining the development trends of milk production in the country during the studied period, and that not in accordance with global trends in this area, so that 98% of the changes in production were interpreted by the changes in the numbers of cattle and 87% of the increase in production achieved Due to a rise in the numbers of cattle, which increased by 4.5% annually, while the intensification of production factors contribute only about 13% of the increase in production. - The policy for changing the structural composition of the herd of cattle by type and which was based on the reduction of the proportion of cows low-productivity local cattle and focus on raising the proportion of cows improved in the herd had positive results, however, that these results came very modest, and did not lead to a substantial increase in annual production for cows during the period studied only by 0.7% only.

Keywords: Milk, Horizontal expansion, Cows, Vertical expansion.

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.(2003)

- 1

- 2

.(2008 -1994)

-

.(2008-1994)

-

: (2008-1994)

-

-1

(2008-2006) (1996-1994)

Tukey HSD Scheffe ANOVA -

-2

.SPSS

:

.2010

FAO Statistics Division 2011

% 9.5 (2008-2006)

15.5 2000

% 41

1621

2008

54.48

%

%10.6 (2001-1999)

%0.4

3.2

1059

2008-2006

127.43

45031

(2001-1999)

(NAPC-2009)-(2008-2006)

39

41.5

%26

:

%11

%12

%16

85675 - (2008-2006)
 (1996-1994) % 47
 F=24.38 (0.05 > P-Value)

scheffe
 F = 1.98 F = 4.02 0.05 > P-Value

(1)

				()			
%		%		%			
100	2294	100	8099	100	3530	1994-1996	
96	2200	32	2559	33	1163	2006-2008	
100	734	100	62852	100	85675	1994-1996	
157	1149	67	42114	43	36655	2006-2008	
100	2603	100	442546	100	169969	1994-1996	
102	2652	313	1383115	307	521640	2006-2008	
100	3592	100	348943	100	89258	1994-1996	
106	4175	62	215847	58	51695	2006-2008	
100	2477	100	862440	100	348000	1994-1996	
109	2689	191	1643600	176	611154	2006-2008	

NAPC-2009

3555

(2 1 2) 1520

(R=0.85)

%32

(R Square=0.32)

. %5

%29

. 33

(3)

(2)

		R ²	F	Sig.
Y6 = 7.176E6 - 3555.289 X (-3555.289) (623.737)	()	.714	32.49	.000
Y7 = 3.093E6 - 1519.982 X (1.223E6) (611.442)	()	.322	6.180	.027
Y8 = -65615.985 + 33.232 X (28703.89) (14.345)	()	.292	5.367	.037

2500

. 2200

2603

2650

169969

(2006-2008) (1994-1996)

(1) %207

521640

.% 213

F = 256.005 0.05 >P-Value)

(

F = 291.25

.(F = 0.176 0.05 < P-Value)

scheffe

(5 4

3)

% 9.8 %9.5

(R= 0.99)

%98

% 96 (6)

%4

(3)

		R ²	F	Sig.
.090X Y9 = 148804.30 . e (8018.96) (.006)	4 () Y9 - x	.947	232.2	.000
.094 X Y10 = 375765.14 . e (19428.30) (.006)	5 () :Y10 - x	.954	271.2	.000
Y11 = -31892.472 + 2.705 X (37579.76) (.106)	6 :() - y11 : () - x	.980	649.6	.000

3500

-

4200

1965

6000

1982

52 (1994-1996)

(89)

.% 42

(2008-2006)

%38

F = 121.29

F = 171.28 0.05 >P-Value)

(

scheffe

(F = 3.113 0.05 < P-Value)

%5.5

(8 7 4) % 4.8

%0.7

(9) %0.8
(R= 0.99)

%98

(R= -0.68)

% 45

.(11 10 5)

(4)

		R ²	F	Sig.
-.056 X Y12 = 110930.17 . e (9244.22) (.009)	(7)	.745	537.9	.000
-.049X Y 13 = 419355.13 . e (629524.0) (.008)	(8)	.756	40.30	.000
.007 X Y14 = 3780.15 . e (94.17) (.003)	(9)	.354	7.11	.019

(2008 - 1994)

-

-1994)

1644 (1996-1994)

862

(2008

781 % 91

(2008-2006)

.(1)

348 %76

-

652

611

%83

2689 2477

-

%17

%.8.6

(ANOVA)

:

-1

(F = 171.4 F = 116.6) P-Value<0.05

.(F =5.46) p-valu > 0.05

F

08-94

: (6)

(12) -1
%90 %4.5

(13) -2
% 91 0.91 % 5.2

.%1 %5
(14) -3
0.49 % 0.7

% 49

-4

.(2007) .(2- 2)

(6)

		R ²	F	Sig.
.044 X Y1 = 324361.1 . e (812325.3) (.004)	(12) () - y1 - x	.895	110.82	.000
.050 X Y2 = 790715.9 . e (31198.24) (.004)	(13) () - y2 - x	.912	135.30	.000
.006 X Y3 = 2437.74 . e (40.74) (.002)	(14) (/) - y3 - x	.489	12.44	.004

(2008-1994)

()

2003)
 2007)
 2008)
 2007)
 (Chiang, 1974 2007)
 ()
 - x2 - X1 -Y :
 (16 15 7)

R) -1
 %98 (= 0.99
 .% 1.14 % 1
 -2
 %58 (r = 0.76)
 .% 4.4 % 1

(7)

		R ²	F	Sig.
0.000002426 X1 Y4 = 378133.093 . e (18665.95) (.000) 1.146 =	(15) - y4 () - x 1	0.98	555.65	.000
Y 5 = 14.734 + 0.0000052 LNx2 (9.792E6) (1.247E6)	(16) - Y5 () () - x	0.58	17.650	.001

% 87

(1) % 13

-1994)

(8)

% 21.4 (2008-2006) (1996
 % 2.7
 % 24 % 26
 % 20.4
 % 0.8

P- 0.05

Value<

scheffe

.P-Value> 0.05

(8)

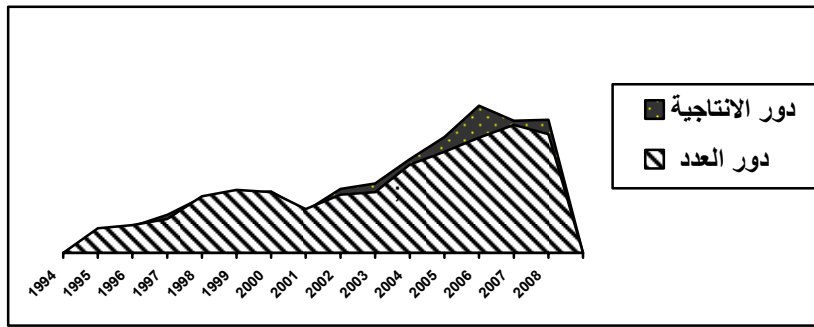
				()			
%	/	%		%			
100	7411	100	69989	100	9444	1994-1996	
1.24	9173	1.20	84270.58	78.6	9186.3	2006-2008	
100	4831	100	149946.11	100	31040	1994 -1996	
1.26	6077	.99	148631.41	78.8	24459.7	2006-2008	
100	6567	100	4604.47	100	701.2	1994-1996	
1.29	8464	1.01	4665.67	78.6	551.2	2006-2008	
100	6567	100	11099.67	100	1690.1	1994 -1996	
1.16	7616	0.98	10914	84.8	1433	2006-2008	
100	6263	100	8476	100	1353.3	1994-1996	
1.17	7314	0.95	8042.48	81.3	1099.7	2006-2008	

FAO Statistics Division 2011 :

" "

:

(1990)



NAPC-2009

:

(1)

.(%)

.(2008 - 1994)

:

%27.6

- 1

%0.2 %8.4

(1996-1994)

%1.2

.(1996-1994)

-2006) (1996-1994)

- 2

%.8.2 %23.4 (2008

% 51.4

- 3

.(2) .%84.1

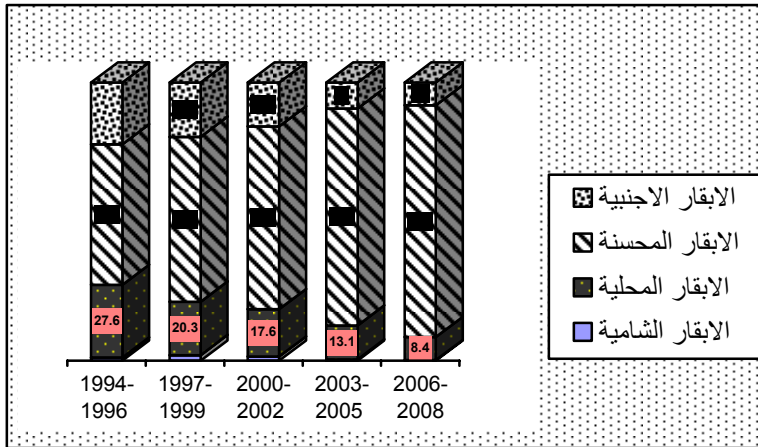
:(3)

% 40.5

-1

.(2008) -(2006)

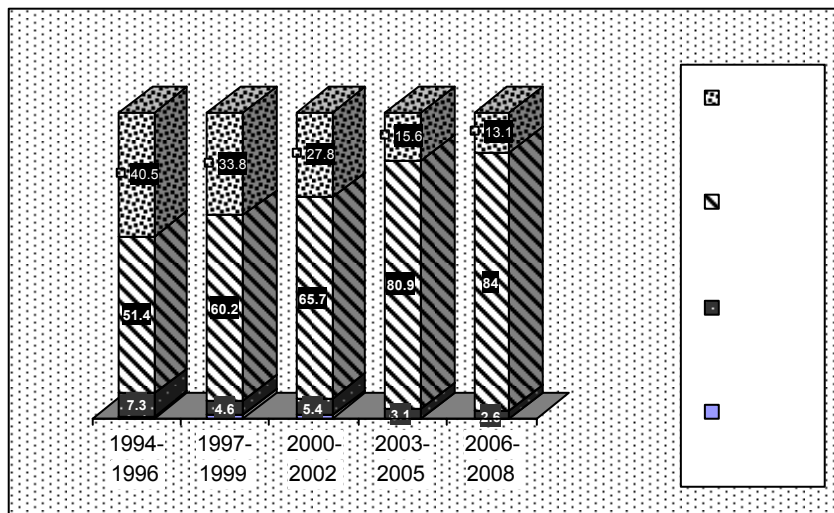
%13.1 (1996-1994)



NAPC-2009

.(%)

(2)



NAPC-2009

.(%)

(3)

-2
%0.2 %2.4 %0.9 %7.3
-3

.%84 % 51.4

:

: .(9)

. 0.05 0.01 -1
-2

.(2- 2) - 3

(r = -0.66):
(19 18 17 9) (r = - 0.77) (r = - 0.59)

(20) (r = 0.76)

- 4

%1
%0.03 %0.07 %0.06
%1

.%0.14

(9)

		R ²	F	Sig.
-.004 X Y = 2720.92 . e (55.28) (.001) 0.06 =	17 : / - : y (%) : x	.431	9.83	.008
.002 X Y = 2221.53 . e (89.01) (.001) 0.14 =	18 : y : (/) x : (%)	.511	13.56	.003
-.004 X Y = 2748.97 . e (56.49) (.001) 0.07 =	19 : /) y: : (%) : X	.499	12.94	.003
-.036 X Y = 2657.79 . e (42.25) (.014) 0.03 =	20 : y : (/) x : (%)	.35	6.93	.021

-1994)

%87
(2008-2006) (1996 -1994)
% 13

-1
(2008

-2

()

%.84.1

%. 0.7

-1

-2

(1)

		t		
Constant	B	Constan	B	
7.176E6	-3555.29	5.750	-5.700	1
3.093000*	*-1519.982	2.528	-2.486	2
*-65615.99	*33.232	-2.286	2.317	3
148804.3**	** .090	18.56	15.24	4
**4375765.1	.094	19.341	16.47	5
** -31892.47	** 2.705	-.849	25.49	6
110930.17**	** -.056	12.00	-6.35	7
**3419355.1	** -.049	14.20	-6.348	8
** 53780.1	** .007	40.14	2.67	9
** 40846.31	**3.412	4.196	26.67	10
** 7.594E6	** -8.803E5	3.465	-3.332	11
** 1324361.1	.044**	26.317	10.53	12
** 790715.99	** 0.05	25.345	11.63	13
.006	** .006	.272	3.527	14
378133.09**	2.426E-6**	20.258	23.57	15
** -3.992E7	**5.240E6	-4.077	4.201	16
** 390346.189	** .016	11.090	12.55	17
** 2221.53	** .002	624.9	3.682	18
** 2748.97	** -.004	48.665	-3.597	19
** 92657.7	* -.036	-2.63	.021	20

%1

- ** %5

- *

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