

-

-

2005

-

- /

. :

/

/

2005

/
/

-

20011648 :
: . :

:

:

..... :
..... :
..... :

.
. .
.

-

2005

0̃ 0̃ 0̃ 0̃
0̃

⋮

.....⋮

.....⋮

... ..
.. ..
... ..
... ..
... ..
... ..
... ..
... ..
... ..
...

Ö

Ö

Ö

Ö

()
()

. 2004

300

.(SPSS)

õ õ
õ

õ

õ õ õ

Summary

The aim of the study is to enhance the socio-economic importance of the water harvesting technology, also to empower the significant role of the woman for increasing the efficiency of water harvest technology, and its reflection on other sides of life like social cooperation, social justice, and the living level of the family. This study covers the northern area of west bank (Jenin, Tulkarim, Qalqila) in the year 2004.

The triangle of the sample was three villages (Atara, Saida, Farata) that have no water pipes network and depend mainly on water harvest to provide water. This sample represents the socio-economic circumstances for the majority of North West bank villages which have no water pipes network.

The methodology of the study was of qualitative and quantities techniques. It contains questionnaires, personal interviews, field notes, review literature, and internet. Three hundred questionnaires were collected from families and farmers in the three villages. The results of this questioners were analyzed by the statically program for social science (SPSS).

Water harvest technology helped to reserve traditional habits, values, and it was the main factor in passing water crises. It also clarifies the woman's role in administrating the water source, and shows the positive results of using this technology on time and effort.

Water harvest gave all farmers and residences the same opportunity and equality with those have water pipes network as others, in order to help them in cultivating their lands and investing it. Moreover it helps in promoting their competition abilities in the local market and provide to storage for water to use when need.

Water harvest participates in limiting poverty in the area of study by providing additional work opportunities. It also supports the family by providing the basic needs by using the home garden in addition to that reserve the food for the family and increase income.

These technologies expanded the cultivated area, promote the competition abilities for farmers, making the production better in quantity and quality, and also gave farmers the ability of using modern technologies in the farms.

I
II
III
IV
V
VI
IX
X
XI

:

1	1.1
3	2.1
4	3.1
5	4.1
5	5.1
6	6.1
7	7.1
7	8.1

:

13	1.2
15	2.2
15	1.2.2
15	2.2.2
16	3.2
16	1.3.2
18	2.3.2
18	3.3.2

20		4.3.2
20		4.2
23		5.2
23		1.5.2
25		2.5.2
26		6.2
26		
	:	
27		1.3
27		1.1.3
28		2.1.3
29		3.1.3
29		2.3
30		3.3
31		4.3
31		5.3
31		1.5.3
33		2.5.3
33		1.2.5.3
35		2.2.5.3
38		3.2.5.3
39		3.5.3
39		4.5.3
	:	
41		1.4
43		2.4
43		1.2.4
44		2.2.4
45		3.2.4
47		3.4

48	1.3.4
49	2.3.4
50	3.3.4
51	4.3.4
54	4.4
55	5.4
56	
59	

14		(1.2)
17		(2.2)
19		(3.2)
21		(4.2)
22		(5.2)
24	2002-	(6.2)
		. 1995
25		(7.2)
32	()	(8.3)
34		(9.3)
35		(10.3)
36		(11.3)
37		(12.3)
38		(13.3)

6		(1.1)
	. 2002	
15		(2.2)
	.1997	
16		(3.2)
18		(4.2)
20		(5.2)
	.1997/1998	
21		(6.2)
	. 2000/1999	
23	.2004	(7.2)
23		(8.2)
	. 2002-1995	
24		(9.2)
	. 2002-1995	
26		(10.2)
	2000-1995	
28	.()	(11.3)
39	.	(12.3)
51)	(13.3)
	(2001)	
52	.()	(14.3)
59		(1)

60	.	(2)
61	.	(3)
62	.	(4)
63	.	(5)
64	.	(6)
65	.	(7)
66	.	(8)
67	.	(9)
68	.	(10)

̃ ̃ ̃ :
 ̃ ̃
 ̃ ̃ ̃
 ̃
 .(Manssi 2001)
 ̃ :
 ̃
 ̃
 .(Patrick 2001)
 ̃ :
 ̃ ̃
 .(Morris 2002)
) :
 ̃ / (7000-2000) ̃ / (10000-2000
 .(www.moa.gov.jo/2003) / (10000-7000)
 ̃ :
 ̃ :
 ̃ ̃ ̃
 ̃ ̃ :
 ̃ ̃) ̃ . 2.5
 .(2001 ̃

(2001)
 :contour ridges
 20-5
 2-1
 %50

:Semi-circular and Trapezoidal bounds

50-30 8-1
 15-5 2-0.3
:Small pits

:Small runoff basins

(negarim)
 10-5
 25-10

:Runoff strips

:Inter-row system

100-40
 10-2

Õ

:Meskat Ô

Õ Õ Õ

.(manka)

()

:Contour-bench terrace

Õ

:Rooftop Systems

Õ

Õ

:

Õ

Õ

:

Õ

. 3 500,000 1000

Õ

Õ

Õ

Õ

:

Õ

Õ

Õ

Õ

Õ

Õ

:Jessour

○

:

:

:Water spreading

○

○

○

○

○

○

:Large bunds

○

○

○

○

○

. 2-1

100-10

○

:

○

○

○

○

○

○

○

○

○

○

○

:Cisterns

○

○

500-10

○

:Hillside-runoff systems

○

○

○

○

○

○

• • : **.1**

1.1

Õ Õ ()

1967

Õ Õ Õ

Õ Õ

.(1997,) .(1993)

Õ Õ

Õ Õ Õ

Õ Õ Õ

Õ

Õ Õ

Õ Õ

Õ Õ Õ Õ Õ

Õ Õ

Õ Õ Õ

2004

0 0 0 . 0.6

0

0

0 0

0 0 0

0 600

0 0) 21

(2002

0 0

0

0 0

0

0 0

0 0 0 0 0 0

0 0

:

(3 / 1) ()

0 0 0 :
0 %94

0 0 0

0 0
0 0

3.1

⊖ ⊖ ⊖ :
⊖ ⊖ ⊖ ⊖
⊖ ⊖
⊖ ⊖ ⊖ ⊖
⊖ ⊖ ⊖
⊖ ⊖ ⊖ ⊖
⊖
⊖ ⊖ ⊖ ⊖
⊖ ⊖
⊖ ⊖ ⊖ ⊖
⊖



4.1

⊖ ⊖
⊖ ⊖ (30) ()
⊖ ⊖ ⊖
⊖ ⊖
⊖
⊖





0 0



5.1

0



(0 0 0)



0

0

39357

(1)

.%9.55

3564

:(1.1)

(1999

) . 2002

6.7	51:49	%2.5	800	
6.0	50:50	%2.4	2297	
6.4	50:50	%2.7	467	

Õ Õ

(1.1)

Õ Õ

Õ Õ Õ Õ Õ

6.1

Õ Õ Õ

Õ

Õ

Õ

29 Õ Õ

.12-11 00

0 1990

0 0 %10 0

360,000

.(Nasr, 1999)

0 0

0 0 0

:

(1999)

0 0

0

0

0 0 0 0

0 0 0 0

0 0

0

0 0 0

0 0) 1998

0 .(/

1948

0 0

0 0 0 0

0 0

%37

%49

0

0 0 0 0

0 0

0

0

0 0

%54

0 0

(Gopalan, 2003)

2003

%85

6.5

.2003

1950

40

%55

(Prinz, Nalik, 2002)

2002

(1000-2)

300

5

) ()

(2001

(Tamimi, Hosari, 1999)

%2

1999-1900

%70

2025

5

%90

2200-200

150

5

%50

7-6

د

د

.

.

.

د



د

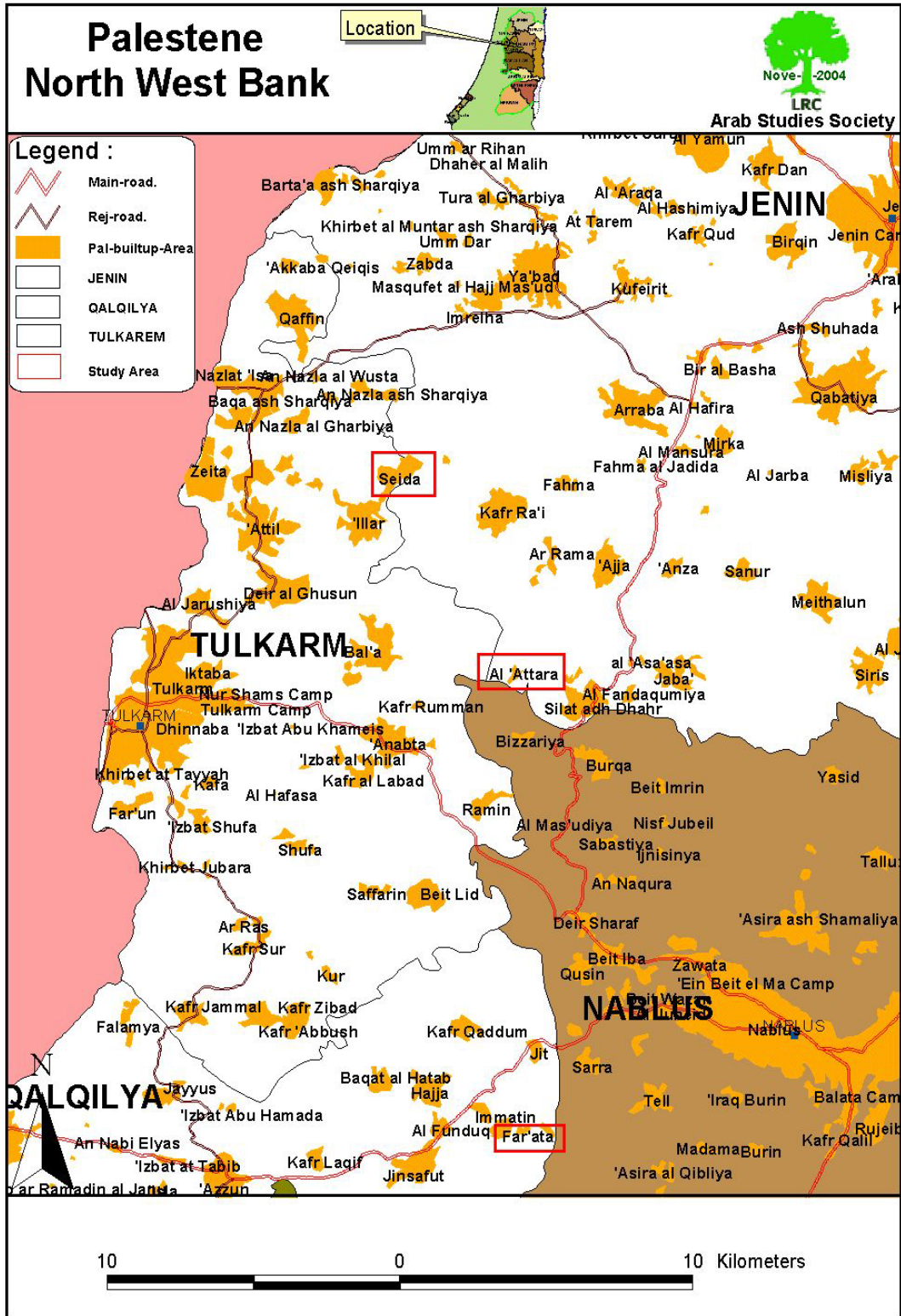


: .2

Õ Õ Õ
Õ

1.2

Õ Õ
Õ Õ Õ Õ Õ . 69
(1.2) .



)

:(1.2)

.(2004

2.2

1.2.2

500 27000
 2 5950 60
)
 .(1998) .2 1016.7 (

2.2.2

3549524 2004
 399097 2002 ,(1999)
 . (2.2)

1997) .(2.2)

.(1999)

2			
333.7	200802	577.6	
521.0	129030	244.4	
415.1	69265	164.7	

3.2

1.3.2

315

(3.2)

500

5

450

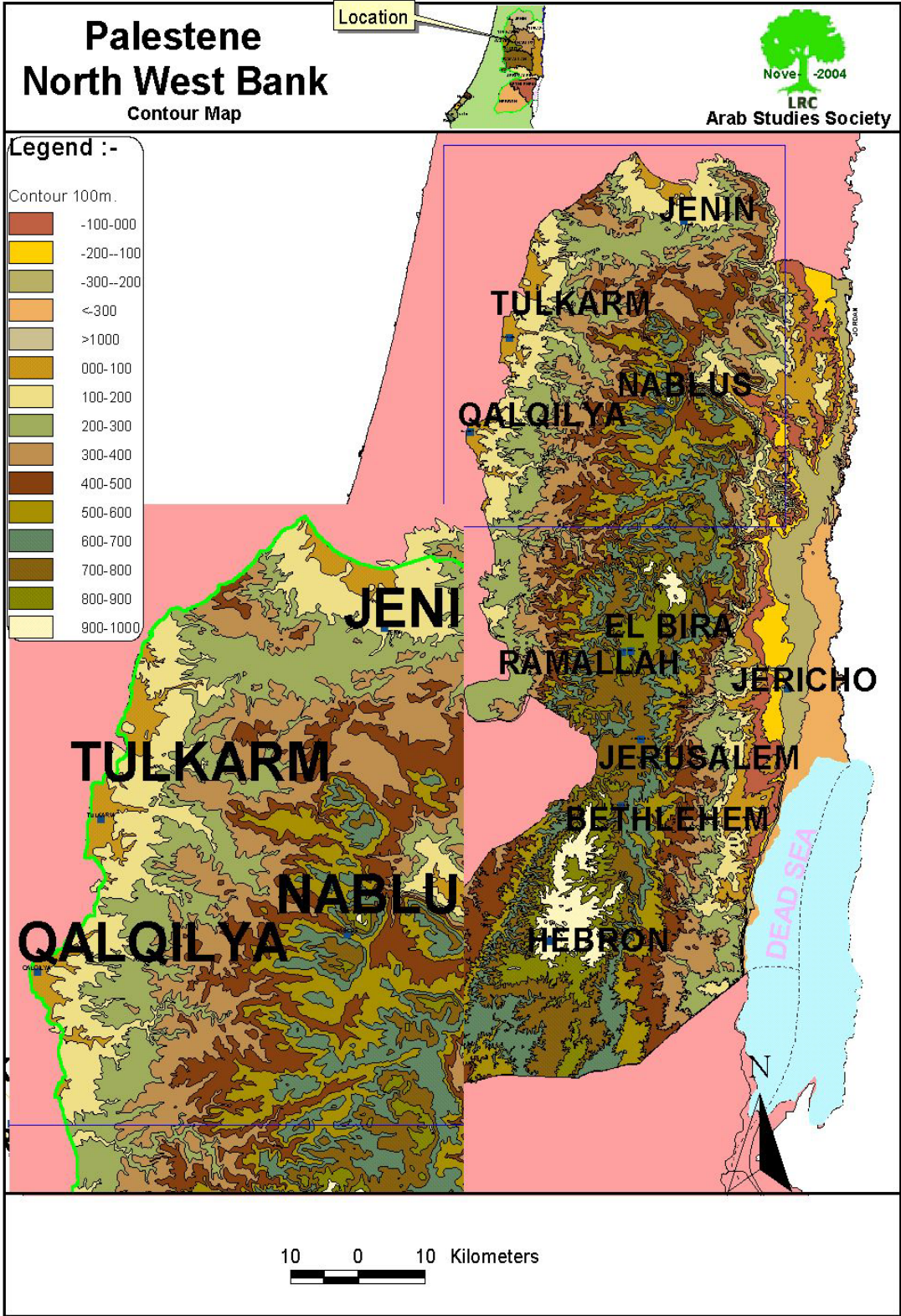
180

(1969)

(3.2)

250-200	
240-220	
200-150	

(2.2)



)

(2.2)

.(2004 ,

2.3.2

2011-2012
 28 14
 32-22
 (-3) 9
 (1969) (41)

3.3.2

2004

(4.2)

(1999)

:(4.2)

/	
528	
651.5	
641.7	* /

*

2004 2004

(3.2)

2004 2004 %70 2004

2004) . %67 2004

(2004)

Palestine North West Bank

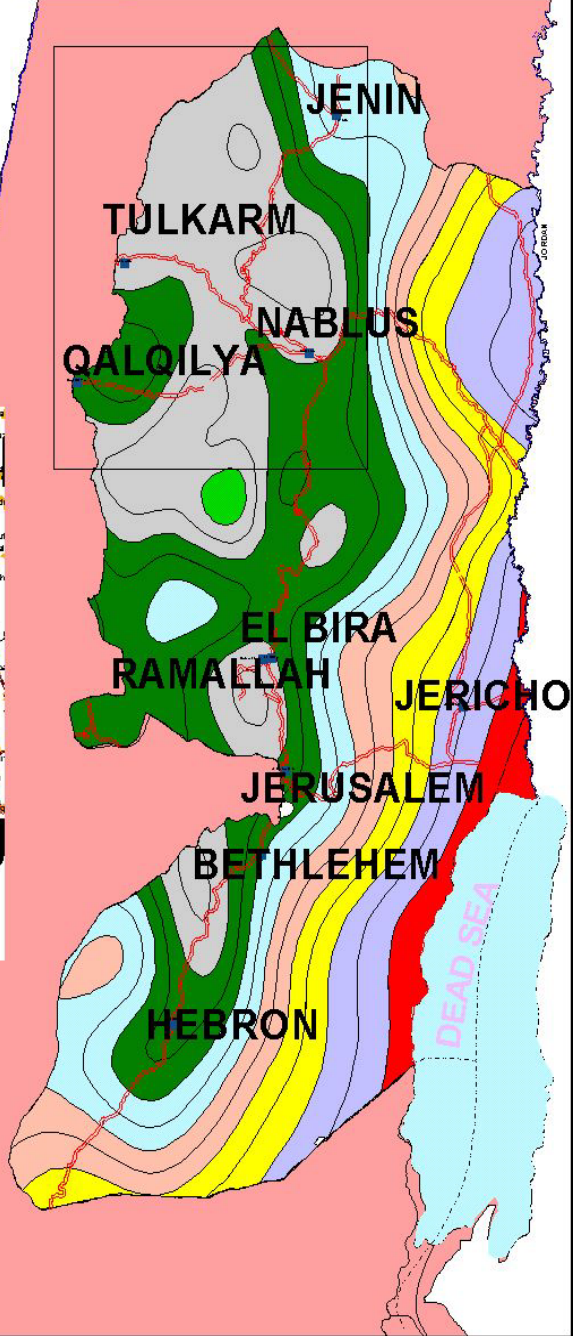
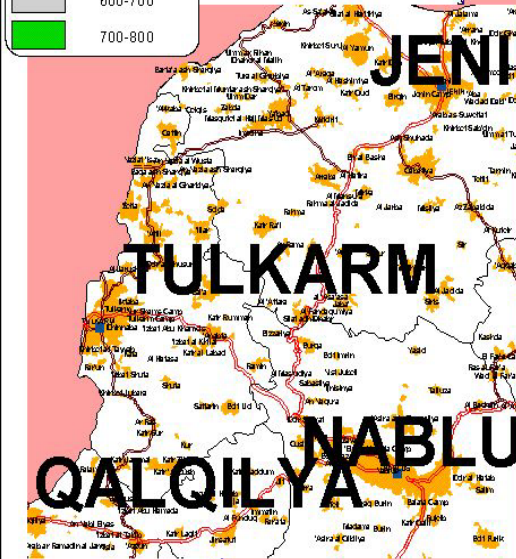


Legend :-

- Main-road.
- Ref-road.
- Pal-builtup-Area

Rainfall-m.

- 0-100
- 100-200
- 200-300
- 300-400
- 400-500
- 500-600
- 600-700
- 700-800



10 0 10 Kilometers

0

(3.2)

.(2004 ,)

4.3.2

̄ ̄ ̄ %70-63
 ̄ %74-68 ̄
 %50
 ̄ ̄) %75-70 %75-62
 .(1999

4.2

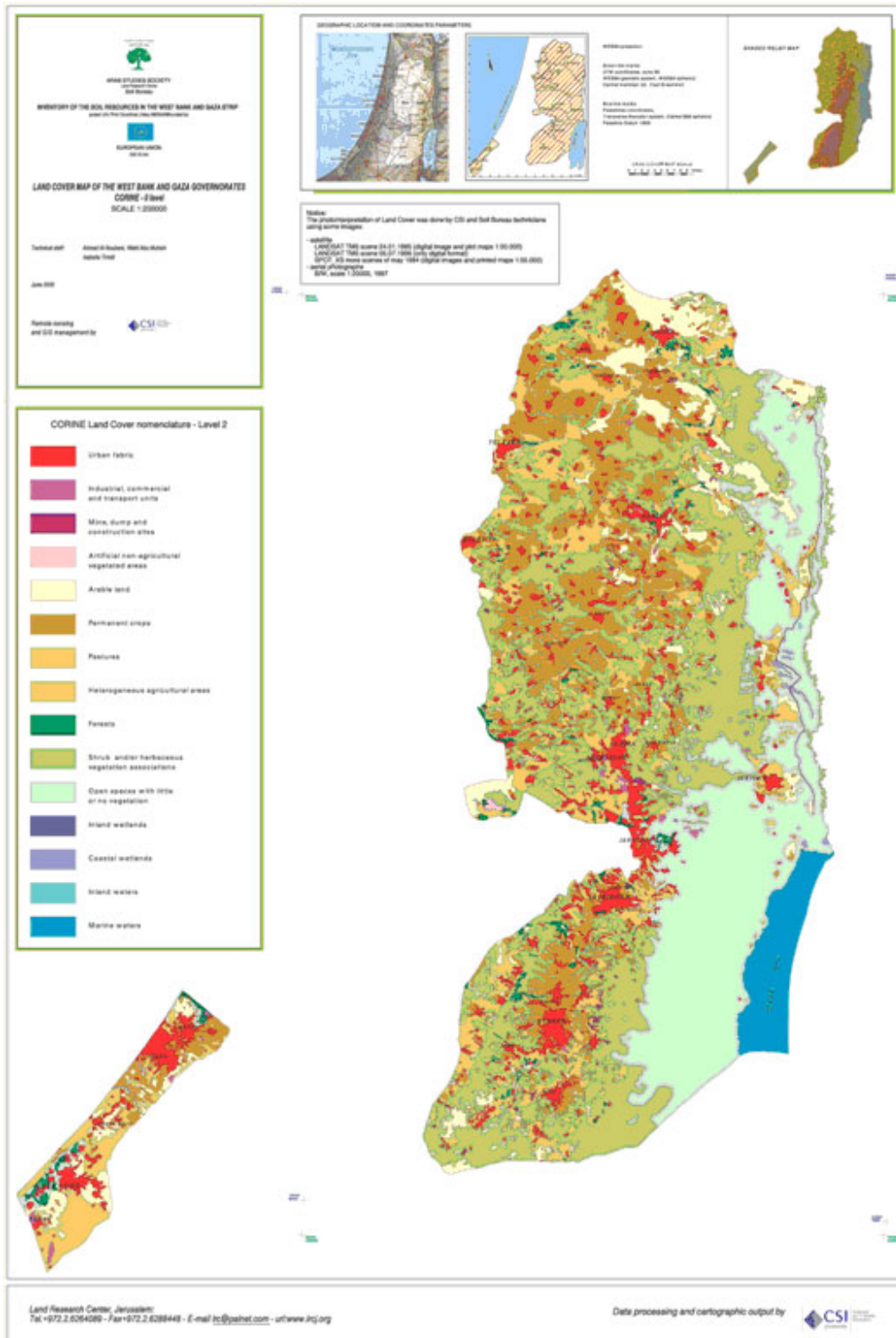
̄ ̄
 ̄ ̄ ̄
 ̄
 ̄ ̄ ̄
 ̄ ̄ (2000) 750867
 .(5.2)

:(5.2)

.(Issac, sabbah, 1999)

.1997/1998

̄̄̄̄	̄		̄̄		
6.042	4.04	34734	215140	117532	
5.573	16.62	11152	129416	13028	
---	---	8992	210588	65163	
---	---	54878	555144	195723	



(5.2)

.(2004

2004 2003 2002 2001 2000 1999 1998 1997 1996 1995
 14.1 12.00 12.5 11.5 13.8 15.1 16.2 13.3

2004 2003 2002 2001 2000 1999 1998 1997 1996 1995 : (7.2)
 (http://www.pnic.gov.ps, 2004)

	%54	%46	300
	%49	%51	700
	%56	%44	100

1987 2000 - 1995 1965 %24 %19
 2000

2000 2001 2002 2003 2004
 (http://www.pnic.gov.ps, 2004) (8.2)

2002 2001 2000 1999 1998 1997 1996 1995 : (8.2)

(http://www.pnic.gov.ps, 2004) 2002-1995

2002	2001	2000	1999	1998	1997	1996	1995
14.1	12.00	12.5	11.5	13.8	15.1	16.2	13.3



\bar{O} \bar{O}
 \bar{O} \bar{O} (9.2)

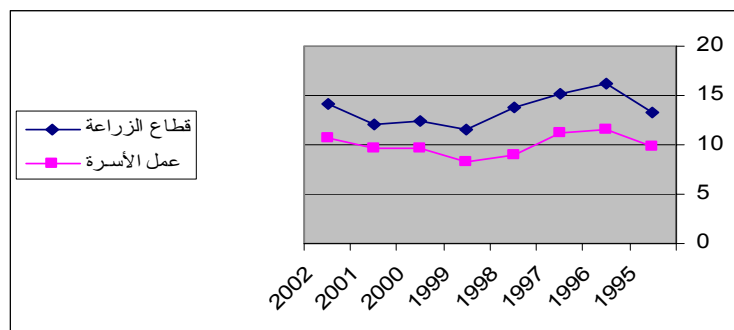
:(9.2)

\bar{O} \bar{O}) \bar{O} 2002-1995
 2002

2002	2001	2000	1999	1998	1997	1996	1995	
14.1	12.0	12.5	11.5	13.8	15.1	16.2	13.3	
10.7	9.6	9.6	8.3	9.0	11.2	11.5	9.9	

\bar{O} \bar{O} (9.2)
 \bar{O} \bar{O}
 \bar{O} \bar{O} \bar{O}

.(6.2)



. 2002-1995

:(6.2)



:(7.2)

2.5.2

1500 2000 3000
 ̄ ̄ %34.1 2004
 ̄
 (<http://www.pnic.gov.ps>, 2004) %12.8 %12.8

̄ %15
 1650 %68
 ̄ ̄ %45
 ̄
 ̄ ̄
 .(<http://www.pnic.gov.ps>, 2004)

6.2

1.6.2

\bar{O} :
 $\bar{O} \quad \bar{O} \quad \bar{O} :$
 $\bar{O} \quad \bar{O} \quad \bar{O}$
 :(10.2)

$\bar{O} \quad \bar{O} \quad \bar{O} :$ (10.2)
 2000-1995 $\bar{O} \quad \bar{O} \quad \bar{O}$

.(2000)

2000	1999	1998	1997	1996	1995	
9.8	9.3	9.5	10.3	11.6	10.3	
34.6	31.8	29.1	29.8	29.2	26.9	

$\bar{O} \quad \bar{O}$ (10.2)

\bar{O}
 $\bar{O} \quad \bar{O} \quad \bar{O} \quad \bar{O}$

$\bar{O} \quad \bar{O} :$

\bar{O} .()
 \bar{O}

.3

1.3

1.1.3

Õ

Õ : Õ

Õ

225

2

18577

%25

/

1600-800

Õ

950

:()

420

1006

320-

/

1200

257

700-670

.(1999)

2.1.3

774 1967
 328
 2002
 10
 52
 %29
 (1999) .

(1999) .() :(11.3)

2		
1800-1600	100	
590-500	140	
2200-2000	360	

(11.3)

29 2003

29 2003
 / 10

3.1.3

291 297
56
(1999)
32 300
250 2
25-14
34
75 120 15
(1999)

2.3

Upper Torunian
%27.2 (50)
50 .%23 %27
) .%85
%14
(http://www.aljazeera.net, 2001

300 80 130
 2.5% 300
 46 2010 187
 %200
 .(http://www.aljazeera.net,2001)

the apartheid wall) 3.88
 (campaign, 2002

3.3

270
 (http://www.iwmi.cgiar.org,2004) 2000

128
 65 56

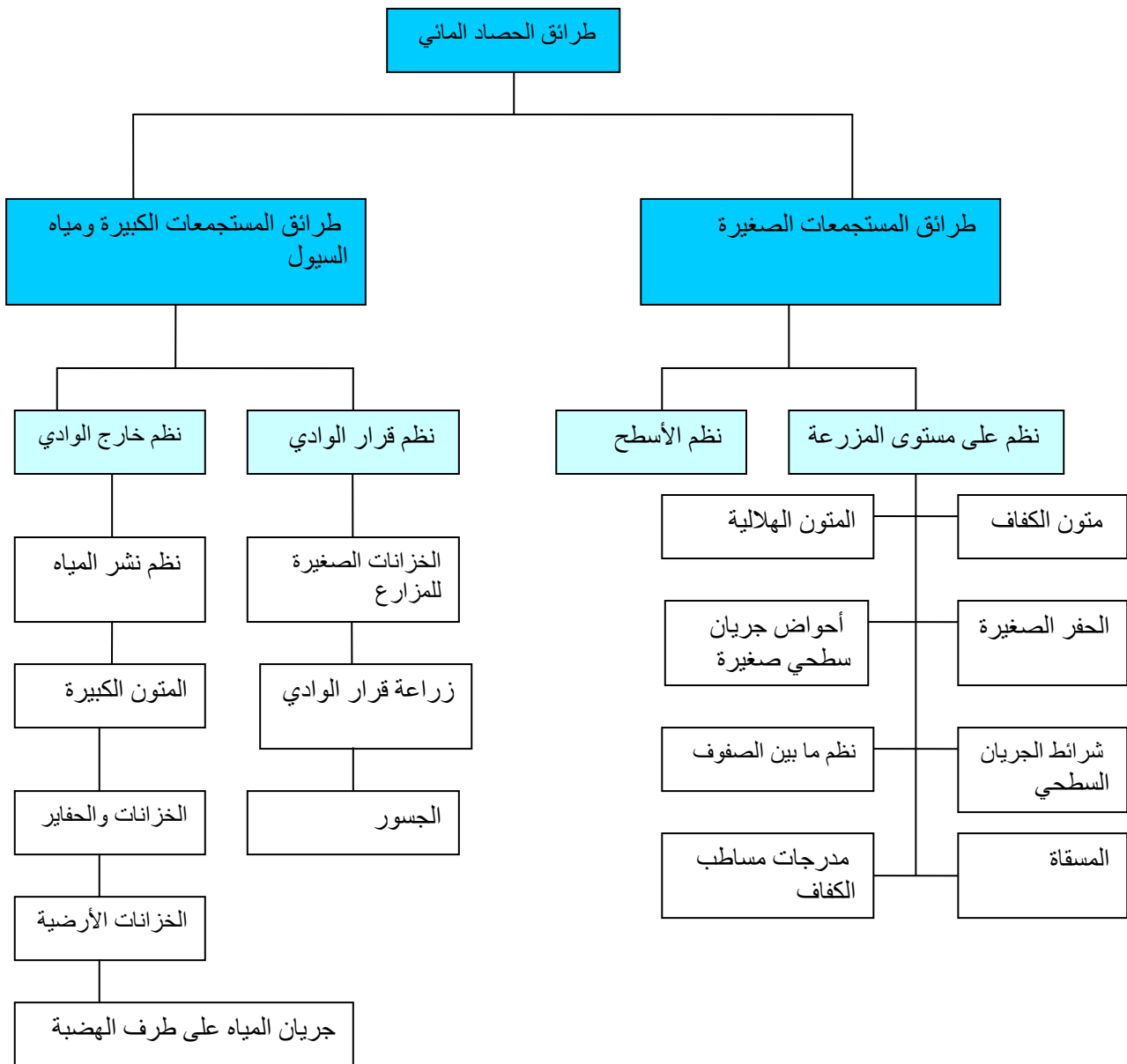
45 1.8 87
 29

80
 50 104
 .(http://www.aljazeera.net, 2001)

د د
د د د)

(8.3)

.(2001



د د د) .()

:(8.3)

.(2001

\tilde{O} \tilde{O} \tilde{O} \tilde{O}
 \tilde{O} \tilde{O}
 \tilde{O} \tilde{O}

2.5.3

\tilde{O} \tilde{O} \tilde{O} \tilde{O}
:

1.2.5.3

- \tilde{O} \tilde{O} \tilde{O} :

\tilde{O} \tilde{O} -
100-60 -

\tilde{O} \tilde{O} \tilde{O}
 \tilde{O} \tilde{O} ()
 \tilde{O} \tilde{O} 150
 \tilde{O} \tilde{O}

80

\tilde{O} \tilde{O} \tilde{O} \tilde{O}
(1992)

\tilde{O}
 \tilde{O} \tilde{O} \tilde{O} :()

Õ Õ Õ

Õ

Õ

10-5

.(9.3)



:(9.3)

2.2.5.3

:



250-240

()

(10.3)



(10.3):



، pannels

ō ō 240 ، 3.5 ، 11
ō
ō

()

ō ō ō ō
ō ō ō
، 20-15
.(11.3)



:(11.3)



8

4

250

0

30

0

0

0

.(12.3)



:(12.3)

: 3.2.5.3

ō
ō ō ō

ō ō

ō

.(13.3)



ō ō

:(13.3)

:

3.5.3

Ö
Ö Ö

(12.3)

:(12.3)

3		-		/\$/	3 /			
\$/								
2.5	+	60		20	70	1992	/	
0.3	+	12		22.5	200	1999	/	
0.3	+	50		35	300	2000	/	
0.0		5		3		1997	/	

4.5.3



Ö Ö



.4

Õ Õ Õ
 Õ Õ

Õ

1.4

Õ Õ Õ
Õ Õ

.(10)

Õ
 Õ Õ Õ Õ
Õ Õ
Õ Õ Õ

Õ Õ Õ Õ Õ

Õ Õ Õ Õ

:

د

د

.

د

د

:

.

د

Õ

:

Õ Õ Õ Õ

د

.

د

:

.

د

د

Õ

:

Õ Õ

د

د

.

• Õ

: .

1.2.4

Õ Õ Õ

Õ
Õ Õ Õ

Õ Õ Õ
Õ Õ Õ Õ
Õ Õ Õ

Õ Õ

Õ

Õ Õ Õ Õ
•(3) Õ Õ Õ

% 70.7

Õ

• ()

%74

2.2.4

Õ
Õ Õ Õ

Õ Õ
Õ Õ Õ Õ
Õ Õ
Õ
Õ Õ

Õ
Õ
Õ Õ Õ Õ

Õ Õ
Õ

Õ Õ Õ Õ

.(0.66=)

Õ Õ

%85.3

Õ Õ Õ Õ Õ

Õ Õ

%70.7

.(4)

29

Õ

: **3.2.4**

Õ Õ Õ

Õ

. Õ Õ ()

Õ Õ Õ

Õ

Õ

Õ

. Õ Õ

-

-

Õ Õ

Õ

Õ

Õ

Õ Õ

Õ Õ

Õ

Õ Õ

Õ Õ Õ

Õ Õ

Õ Õ %77.7 Õ

Õ

.(5)

Õ Õ %22.7

Õ Õ Õ Õ Õ Õ

Õ Õ Õ

(0.634=)

Õ

%56

Õ Õ Õ

Õ Õ Õ Õ
Õ

Õ
Õ Õ Õ
Õ

Õ Õ
Õ
Õ Õ Õ

Õ
Õ
Õ

:

1.3.4

Õ Õ

2003 UNDP Õ

%67 / / 2 Õ

. 2000/9/28

,2003

0 0
0 0
0 0 0
0

(<http://www.pnic.gov.ps>, 2004)

0 0 %66.7
0
0 0
0 .0.484

0 0.787
%70.7

%6

%18.7

0 .(6) %70
4200 / 6000
0 12600 0 3 /

2.3.4

0 0
35
0 0 55
0 48 0

3.3.4

250
10
%32
384 / / 1200
%13.7
%65.3
%21
%21.3
%8
(9)

4.3.4

(13.3)

)

:(13.3)

:(2001

	3 /	US\$ 3				3 /US\$/	
			3.5	B250			
36.5	4.5	2	3.5	---	1.5	12.5	
8-19*	12.5	0.5	3.5	21.5	5	7.5	
50	12.5	0.5	3.5	21.5	5	7.5	

3 /

*

3 / %54

:(

:(14.3)

US\$/	US\$/	3

185.6
 29 (2000
) .6.4 (http://www.aljazeera.net/in-depth,2001)

(1999

%54 7-5
 / /US\$ 180 %54
 .(1.8)

16306 104357
 /US\$ 2935080

18
 / 210
 %64

.(9)
 (0.683=)

%60
 .%2ss4
 (10) (0.720=)

Õ Õ Õ



Õ Õ Õ Õ
Õ Õ



Õ Õ



Õ Õ



Õ Õ



Õ



Õ



Õ Õ Õ Õ



Õ Õ Õ Õ



Õ



Õ



Õ Õ



Õ Õ



Õ Õ Õ

Õ Õ



. 〇	:(2002) .	.1
.1999 〇	:(2000) 〇	.2
2025- 〇 〇	:(1999) 〇	.3
. 〇	:(2000) 〇	.4
. 〇	:(1999) 〇	.5
.1999 〇	:(2000) 〇	.6
2025- 〇 〇	:(1999) 〇	.7
〇 .2002 〇 〇 〇	:(2003) . 〇	.8
〇 .1999 〇 〇 〇	:(2000) . 〇	.9
. 〇	:(1992) . 〇 〇	.10
〇 〇	:(1998) 〇	.11
〇 〇	:(1999) . 〇	.12

.551,49564 .348-310

13. (1999):
- .551,9564 .393-353 .
14. (2001):
- 40 . \bar{O} \bar{O} 92-9127-127-6 .
15. \bar{O} \bar{O} - \bar{O} : (2001) .
- /
16. (2000):
- ()
17. (1997):
- 59-50 .
18. الموسوعة الفلسطينية. (1990): القسم الثاني، المجلد الأول. الدراسات الجغرافية.
19. (2004):
20. 1/2/2004 .
21. 5/4/2004 .

1. the apartheid wall campaign, stop Israel's stranglehold of Palestine, report #1, nov. 2002. the apartheid wall. Network (PENGON), Jerusalem.
2. Gopalan,s. appropriate technologies for water supply system, International conference on women in agriculture empowering women farmers for sustainable development,19th-21th November 2003, manil-philippines. P 87-90
3. Manssi,A, (July,2001): dry land agrobio, conservation and sustainable use dryland agro biodiversity, international center for agriculture research in the dry land areas. P 13.
4. Morris, j. (2002): sustainable development promoting progress or perpetuating poverty?. Profile books, London. Second edition. P 35.
5. Nasr, m. (1999): assessing desertification and water harvest in the middle east and north Africa, chapter 4 ZEF center for development research, bonn. First edition. P 28.
6. Issac, j, Al-junaidi, f, Sabbah, w, Abu Amriyeh,m. (1999): efficiency of irrigated agriculture in the west bank, Applied research institute, Jerusalem, alquds university – Palestine. P 8-12.
7. Patrick, F, malin, F. (2001): water harvesting for upgrading of rainfed agriculture. Stockholm international water institute, Sweden. 91-974183-0-7/ p 8.
8. Prinz, D, nalik, a,h. 2002 runoff farming, Article prepared for WCA info. NET
9. Tamimi, A, Hosari, S. (1999): conflict socio-economic water harvest, the ninth international rain water catchments systems, 9-july-1999 Petrlina, Brazil. P 128- 131.
10. Sabbah,b. water quality, irrigation, 5/4/2002. 20/11/2004.
<http://www.aljazeera.net/in-depth/water-6-3.htm>.
11. Tommy, h. water productivity and consumption, 5/1/2004. 20/4/2004.
http://www.iwmi.cgiar.org/pubs/Book/CA_CABI_Series/WaterProductivity/
12. palestenian central of staitics, agricultuare staitics, 17/6/2002. 25/7/2004.
http://www.pnic.gov.ps/arabic/agriculture/agri_del_3.html. 21/3/2004.
13. palestenian central of staitics, laboure and poverty, 17/6/2002. 25/7/2004
http://www.pnic.gov.ps/arabic/labor/demographic_42.html. 21/3/2004
14. Taamari, R, water quality, irrigation, 5/4/2003. 20/11/2004.
<http://www.moa.gov.jo/moa/2003html/>

0) . 0 0 0

:(1)

.(2000

		0			
	0 0				
			000		
					0 0

. 00 00 00 00 00 00 : (2) 00
 (http://www.aljazeera.net/in-depth, 2001)

1:1.96	2.9	5.7	()
1:6.3	91	571	(/)
1:3.36	30	101) (/
1:7.3	171	1252	(/)
1:9.47	211	2	()
1:5.15	68	350	()
1:27	5	136	(/)
1:3.7	93	344	(/)

:(3)

212	14	56	18	
70.7	4.7	18.7	6.0	
00	42	36	222	
00	14.0	12.0	74.0	
233	47	2	18	
0.7	15.7	77.7	6.0	
68	12	36	184	
22.7	4.0	4.7	61.3	

:(4)

92	106	14	88	
30.7	35.3	4.7	29.3	
%50-35	%35-20	%20-5	00	
18	76	204	2	
6.0	25.3	68.0	0.7	
16	18	10	256	
5.3	6.0	3.3	85.3	

:(5)

2	47	233	18	
0.7	15.7	77.7	6.0	
36	12	68	184	
12.0	4.0	22.7	61.3	
25	25-17	16-11	10-0	3 / /
6	106	128	60	
2.0	35.3	42.7	20.0	
-----	-----			
		168	132	
		65	44	

:(6)

3000	3000-1700	1600-900	800-0	
30	70	80	120	
10.0	23.3	26.7	40.0	
300	300-200	200-100	100-0	
10	98	122	70	
3.3	32.7	40.7	23.3	
16	18	10	256	
5.3	6.0	3.3	85.6	
212	14	56	18	
70.7	4.7	18.7	6.0	
50-35	35-20	20-5	00	
18	76	204	2	
6.0	25.3	68.0	0.7	

:(7)

125	34	77	64	
41.7	11.3	25.7	21.3	
60	60-46	45-31	30-15	
18	88	182	12	
6.0	29.3	60.7	4.0	
92	106	14	88	
30.7	35.3	4.7	29.3	

:(8)

74	19	106	101	
24.7	6.3	35.3	33.7	
-----	-----			
		236	64	
		78.7	21.3	
45-25	25-15	15-10	0	
91	77	108	24	
30.3	25.7	36.0	8.00	
-----	-----			
		252	48	
		84.0	16.0	

:(9)

25	25-17	16-11	10-0	3 / /
6	106	128	60	
2.0	35.3	42.7	20.0	
300	300-200	200-100	100-0	
10	98	122	70	
3.3	32.7	40.7	23.3	
100-75	75-50	50-25	25-0	
84	67	95	54	
27.8	22.2	31.5	18.5	
50-35	35-20	20-5	00	
18	76	204	2	
6.0	25.3	68.0	0.7	

			.					.13
<input type="checkbox"/>	-4		-3		-2		-1
			:					.14
<input type="checkbox"/>		-4		-3		-2		-1
								.15
<input type="checkbox"/>	60	-4	60-46	-3	45-31	-2	30-15	-1
			.					.16
<input type="checkbox"/>					.	-2	.	-1
	\hat{O}		.					.17
							1	
<input type="checkbox"/>	-4		-3		-2		-1
					.			.18
<input type="checkbox"/>				-3		-2		-1
					.			.19
							1	
<input type="checkbox"/>		-4		-3		-2		-1
								.20
					1			
<input type="checkbox"/>						-2		-1
								.21
<input type="checkbox"/>						-2	.	-1
								.22
<input type="checkbox"/>						-2	.	-1
								.23
<input type="checkbox"/>	%45-25	-4	%25-15	-3	%15-10	-2	%0-1	

:

:

.24

-1

-2

-3

-4

.25

%80-60 -4

%60-40 -3

%40-20 -2

%20-0-1

%100-80-5

:

.26

-1

-2

-3

-4

:

.27

%50-35

%35-20

%20-5

%0

Ô

Ô

Ô

.28

-2

-1

:

.29

-1

-2

-3

-4