“Organic agriculture and olive oil production in the Southern Mediterranean Countries”

OLIBIO Research Project

A very heterogeneous group of countries

Turkey, Syria, Jordan, Lebanon, Israel, Palestine, Egypt, Lybia, Tunisia, Algeria and Morocco

Four sources of information

- A research on the situation and prospects for organic olive oil in Italy;
- A study on the organic olive oil in the Med;
- A study on the European market for selected Syrian products;
- A study about competitiveness of Italian organic products.

A very fast growing population

Country	1980		2003		Var. 80-03	Life expectancy		2015		Var. 03-15
	(000n)	%	(000n)	%	%	years	index	(000n)	%	%
Turkey	46.132	29,7	71.325	28,0	54,6	70,4	100	81.300	27,4	14,0
Syria	8.959	5,8	17.800	7,0	98,7	71,7	101	22.000	7,4	23,6
Lebanon	2.669	1,7	3.653	1,4	36,9	73,5	104	5.200	1,8	42,3
Jordan	2.225	1,4	5.473	2,2	146,0	70,9	100	6.800	2,3	24,2
Israel	3.764	2,4	6.433	2,5	70,9	79,1	112	7.900	2,7	22,8
Egypt	43.915	28,3	71.931	28,3	63,8	68,6	97	80.900	27,3	12,5
Lybia	3.043	2,0	5.551	2,2	82,4	72,6	103	6.900	2,3	24,3
Tunisia	6.469	4,2	9.832	3,9	52,0	72,7	103	11.500	3,9	17,0
Algeria	18.740	12,1	31.800	12,5	69,7	72,7	103	38.300	12,9	20,4
Morocco	19.382	12,5	30.566	12,0	57,7	68,5	97	35.400	12,0	15,8
Total	155.298	100,0	254.364	100,0	63,8	70,7 *	100	296.200	100,0	16,4

..Urbanization

Country	%
Turkey	66,11
Syria	50,12
Lebanon	87,90
Jordan	79,19
Israel	91,98
Egypt	42,03
Lybia	86,33
Tunisia	63,53
Algeria	58,73
Morocco	57,41

Income and agriculture

Country	GDP per person		Ag share	Ag labour force	
	US$	index	%	(000n)	%
Turkey	6.390	117,1	13	14.779	44,4
Syria	3.620	66,3	23	1.599	4,8
Lebanon	4.360	79,9	12	42	0,1
Jordan	4.220	77,3	2	194	0,6
Israel	19.530	357,9		67	0,2
Egypt	3.810	69,8	17	8.535	25,6
Lybia	7.570	138,7	9	97	0,3
Tunisia	6.760	123,9	10	966	2,9
Algeria	5.760	105,6	10	2.729	8,2
Morocco	3.810	69,8	16	4.285	12,9
Total	5.457	100,0		33.293	100,0

Water and agriculture

Country	Agricultural area (000ha)	%	Irrigated area (000ha)	%	%
Turkey	41.690	26,6	5.215	39,9	12,5
Syria	13.759	8,8	1.333	10,2	9,7
Lebanon	329	0,2	104	0,8	31,6
Jordan	1.142	0,7	75	0,6	6,6
Israel	566	0,4	194	1,5	34,3
Egypt	3.400	2,2	3.400	26,0	100,0
Lybia	15.450	9,9	470	3,6	3,0
Tunisia	9.763	6,2	381	2,9	3,9
Algeria	40.065	25,6	560	4,3	1,4
Morocco	30.283	19,4	1.345	10,3	4,4
Total	156.447	100,0	13.077	100,0	8,4

Summarizing

- Growing population, increasingly in town
- Improving incomes, changing food patterns
- Limited or scarce natural resources
- Decreasing prices for many conventional commodities
- Increasing food trade deficit
- Emerging environmental problems
- Agriculture still source of income and jobs in some countries
- Need to create jobs and income in rural areas

Organic agriculture, December 2005

Country	Farms *		Area	
	n.	%	ha	%
Turkey	14.401	34,9	93.133	30,7
Syria	5.000	12,1	20.500	6,8
Lebanon	331	0,8	2.465	0,8
Jordan	1	10,0	na	na
Israel	420	1,0	6.685	2,2
Egypt	500	1,2	24.548	8,1
Lybia	0	0,0	0	0,0
Tunisia	515	1,2	143.099	47,2
Algeria	39	0,1	887	0,3
Morocco	20.040	48,6	12.051	4,0
Total	41.247	100,0	303.368	100,0

** = includes collectors of wild fruits and herbs*

Status of organic agriculture: institutions

Country	Legislation	Education and research	CSOs	Local Certification
Turkey	Like EU	Advanced	1 Association	7 CBs
Syria	Under elaboration	Scarce	Nothing	Nothing
Lebanon	Advanced elaboration	Good	Developed	1 CB
Jordan	Not existant	Scarce	Nothing	Nothing
Israel	Like EU	Advanced	1 Association	1 CB
Egypt	Not existant	Scarce	Developed	2 CB
Lybia	Not existant	na	na	Nothing
Tunisia	Like EU	Advanced	Developed	Nothing
Algeria	Not existant	Scarce	Nothing	Nothing
Morocco	Advanced elaboration	Good	Developed	Nothing

International cooperation

- IFOAM Mediterranean
- Mediterranean Organic Ag. Network
- FAO projects
- EU funded MEDA projects
- Bilateral public projects
- Private initiatives

Status of organic trade

Country	Export	Domestic market	On going projects
Turkey	Very strong	Growing	Several
Syria	Growing	Nothing	Some
Lebanon	Modest	Small	Several
Jordan	Nothing	Nothing	Some
Israel	Very strong	Growing	na
Egypt	Very strong	Small	Some
Lybia	Nothing	Nothing	na
Tunisia	Very strong	Small	Some
Algeria	Nothing	Nothing	na
Morocco	Very strong	Small	na

Prospects to 2010

Trade	Mean
Export to EU	3,0
Domestic market	2,4
Export to US and Canada	1,9
Export to Italy	1,8
Export to Gulf countries	1,4
Export to Japan	1,2
Imports	1,2
Export to former USSR countries	0,9
Export to Maghreb countries	0,1

4 = strongly increase; -4 = strongly decrease

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Israel	Very strong	Growing	na
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Tunisia	Very strong	Small	Some
Algeria	Nothing	Nothing	na
Morocco	Very strong	Small	na

Three groups of countries

- **Advanced: G1 Turkey, Tunisia, Israel and Egypt;**
- **Medium: G2 Lebanon and Morocco**
- **Laggards: G3 Algeria, Syria (and Libya).**

Structure of exports

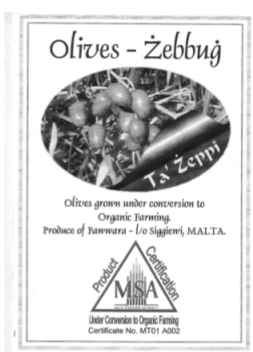
- **Bulk products: olive oil from Tunisia, tomatoes from Egypt, cotton from Turkey and Syria, pulses from Turkey.**

- **Processed products: *argan* oil from Morocco, dates from Tunisia, wines from Israel, olive oil from Palestine and Syria, honey from Turkey, t-shirts and herbal teas from Egypt,**

Organic olive oil

Country	A) Total organic area	B) Area with organic olive trees	C) Area with olive trees	B/A %	B/C %
Turkey	93.133	7.732	649.350	8,3	1,19
Syria	20.500	5.000	500.000	24,4	1,00
Lebanon	2.465	475	58.000	19,3	0,82
Israel	6.685	340	22.000	5,1	1,55
Palestine	1.000	500	nd	50,0	
Jordan	10	10	64.520	100,0	0,02
Egypt	24.548	23	49.000	0,1	0,05
Lybia	na	na	200.000	na	na
Tunisia	143.099	80.016	1.500.000	55,9	5,33
Algeria	887	416	239.350	46,9	0,17
Morocco	20.040	100	504.700	0,5	0,02
Total	312.367	94.612	3.786.920	30,3	2,50
All Med	3.299.154	362.210	7.379.090	11,0	4,91

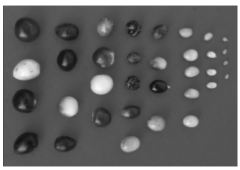
6 Rules for organic olive oil



- **Respect the conversion period;**
- **Know your soil and respect traditions;**
- **Manage the natural fertility of the soil;**
- **Defend with the help of nature;**
- **Harvest with care and respect;**
- **Process carefully.**

Comparative LCA gives mixed results

Organic olive oil chain



- Respects the environment
- In some cases, it improves the natural habitats
- Uses local varieties
- Ensures employment at farm level
- Local processing and bottling provide jobs and income
- Gives pride to producers

Biodiversity

- Local and traditional olive tree varieties
- Higher number of varieties
- Introduction of shrubs and trees hosting parasitoids
- Cultivation of leguminous crops as green manure
- Sheep, goats, horses, (cattle ?) left grazing → manure as fertilizer
- Higher number of small mammals, birds, snakes?

Further biological research is needed

Water conservation

- Olive trees are naturally drought resistant..
- Olive trees were normally planted on the most difficult slopes, on marginal hills, on rocky areas;

BUT

- Increased use of irrigation (trickle) since the ’70s has made them more productive, but the root system is less deep → more susceptible to reduced water availability
- No specific organic guidelines

Further research is needed (not only on olive trees)

Links with fair trade: an example from UK

Category	Supplier	Content (liter)	Per box no.	Price (£) Total	Price (£) Unit	Price (€) Unit	Price (€) liter
In conversion	CFT, UAWC, PARC	0,5	12	50,4	4,2	6,2	12,3
		0,75	12	70,8	5,9	8,7	11,6
		5,0	4	128,0	32,0	47,0	9,4
Organic Galilee	Sindyanna	0,5	12	60,6	5,05	7,4	14,8
		0,75	12	82,8	6,9	10,1	13,5

FAIRTRADE

Organic extra – virgin olive oil from Palestine

Scenario to 2010

- ***Development of the organic agri-food chain:*** **G1 > G2 > G3**
- ***Impact FAO, IFOAM, MOAN*: G3**
- ***Annual average growth of output:*** **7,7% (crops and fruits)**
- ***Domestic market*: G1 and G2; average value < 400.000 €**
- ***Export*: EU; average value < 700.000 €**

Limiting factors

Obstacles	Mean
Low education, lack of extension and training	2,5
Lack of structures (production, processing, distribution)	2,4
Poor marketing	2,3
Lack of consumers'awareness	2,1
High production and certfication costs	1,9
Lack of subsidies and of financial support	1,6
Small size of farms and firms	1,5
Lack of inputs and tools	1,3
Low and/or fluctuating yields	1,2
Competition of other foreign products (on foreign and local markets)	1,0
Lack of harmonization with other legislations	0,5
Lack of traceability	0,1
Distance from foreign markets	0,0
Missing legislations / regulations	-0,2
Lack of certification bodies	-0,7

4 = strongly agree; -4 = strongly disagree

Favoring factors

Suggestions	Mean
More collaboration between international organizations and Donors	3,1
More cooperatives and associations	3,1
Private foreign investments and joint ventures	3,0
Expansion of eco-tourism and of agri-tourism	3,0
More trade agreements, more access to EU markets, recognition of the national certification systems	2,7
Common Mediterranean logo	1,8

4 = strongly agree; -4 = strongly disagree

Organic agriculture meets the MDGs

1. **Halving poverty and hunger**

   - Higher resilience, more stable and better income, more jobs in rural areas (on farm and off farm diversification) → Rural Development

7. **Ensuring environmental sustainability**

   - Re-naturalization of countryside, lower water use, no chemicals, recuperation of native varieties, etc. → More research is needed.

8. **Establishing a global partnership for development**

   - Public support to OA through bilateral and multilateral cooperation;

   - Private and CSO's partnerships based on respect and fair trade.

Thanks for your attention

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