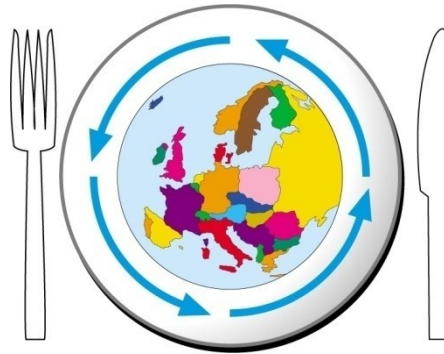


THE EATING CITY PLATFORM: Experiences in public foodservices

A necessary change of paradigm?



Amsterdam December 6th & 7th 2012

Isabelle Lacourt

Who is Risteco

A **Consortium** of companies working in support for foodservices: **consultancy, foodstuffs and catering related waste management;**

No profit organization

Risteco acts as an **international multi-dimension and multi-function platform,** to create links among different actors such as :

Universities, research centres, public bodies, businesses, NGOs ...

Aim: to **promote sustainable development in the foodservices,** through research, international collaboration, information and communication and technological transfer (knowledge based economy).

2 main offices: Turin (Italy) and Novalaise (France)

Innovative Approach

Life Cycle Thinking and Systemic vision

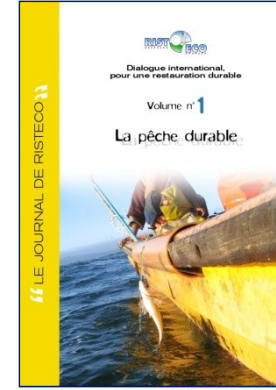
Life Cycle Assessment : a scientifically based methodology that takes in consideration all the life cycle phases of a product or service: from raw materials extraction, to the various phases of transformation, transport and use, up to the End of Life, to quantify environmental impacts and energy consumption

Life Cycle Costing : to evaluate the sum of initial and future costs associated with the production and use of a product over a period of time.

Systemic vision: an overall vision of all agro-food supply-chain phases, with their related social, environmental and economic impacts.

Risteco Handbooks 2005- 2010

To introduce the “Sustainable development” into the decision making process



The Alliance Network



Fondation Charles Léopold Mayer
pour le Progrès de l'Homme



CHINA-EUROPA FORUM



Why “Eating City” ?

Cities “eat” food that is produced elsewhere.
In 2030 the 70% of the world’s population will live in an urban context.

Facing a Dilemma in Europe ?

More than 700 Kg of food bought per person/year and 500 Kg of waste per person/year mostly related to food and beverage.

43% of the Ecological footprint related to what we eat.

More than 30% of children overweight + around 18% already obese

Worrying quantities of food leftovers in the canteens!

6% of the total health budget used to cure food related pathologies.
In Italy in the past 15 years public health expenses are doubled from 50 Billion Euro to 105 Billion Euro

What is Eating City ?

Eating City aims to give life to ideas, to stimulate intellectual dialogue and to foster long term vision of public & and private decision makers on the future of sustainable urban food supply chains worldwide.

Action-oriented, Eating city also evidences good practices and constructive propositions to shift the paradigm; the ideal place where food, health, environment and social values meet the economy.

Thinking Tables, Workshop, Conferences to gather, share and spread experiences and finally elaborate concrete proposals for decision makers.



Key words:

City Food Policy

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Sustainability Wellness Food taste Territory Research
Governance Energy Culture Social Values
Innovation Networking Economy
Food supply chain

Why should we start from social foodservices ?

Every year, a Italian city of 1 million inhabitants spends an average of 45 million € for social and school public foodservices and around 20 million € for hospital foodservices.

Nowadays no institution have a systemic vision of the global food chain within a single city/territory.

In the last decade, food supply chain externalities have become more and more relevant, but still are not adequately evaluated.

The European Market of Social Foodservices

WEST EUROPE	Million Meals				% penetration of the Market				Turnover (million €)		
	2006	2007	2008	2010	2006	2007	2008	2010	2006	2007	2008
Austria	52	55	56	59	20,0	21,3	22,0	23,6	239	257	265
Belgium	129	134	139	150	26,2	27,2	28,1	30,6	580	609	645
Denmark	59	61	63	68	14,9	15,4	15,9	17,4	282	296	310
Finland	100	102	103	107	20,5	20,9	21,1	22,3	452	468	480
France	1 190	1 238	1 289	1 365	33,6	34,8	36,0	37,9	5 240	5 530	5 900
Germany	528	540	555	600	15,7	16,1	16,5	17,8	2 635	2 727	2 850
Greece	30	34	37	42	14,4	16,3	17,6	19,9	64	74	85
Ireland	96	109	115	125	50,5	57,1	60,2	65,8	315	369	400
Italy	798	821	860	920	44,7	46,3	48,9	53,2	3 590	3 790	4 090
Luxembourg	9,5	9,8	10,5	11,5	45,2	46,7	52,5	57,5	74	78	85
Netherlands	310	305	310	320	36,3	36,1	36,9	37,9	1 056	1 064	1 095
Portugal	130	135	141	148	37,2	38,0	39,2	41,0	435	455	485
Spain	376	395	420	460	39,9	41,6	44,2	51,1	1 300	1 405	1 540
Sweden	104	106	108	111	12,3	12,6	12,8	13,2	454	468	485
U.K	1 284	1 345	1 430	1 566	36,4	38,2	40,9	45,4	5 091	5 417	5 250
TOTAL WEST EUROPE	5 196	5 390	5 637	6 053	30,1	31,2	32,7	35,3	21 807	23 007	23 965

The European Market of Social Foodservices

73.6 billion Euro /Year
21.0 billion/Year Meals served

EAST EUROPE	Million Meals				% penetration of the Market				Turnover (million €)		
	2006	2007	2008	2010	2006	2007	2008	2010	2006	2007	2008
Cyprus	0,4	0,5	0,7	1,0	0,7	0,8	1,2	1,7	1,8	2,6	3,8
Czech Republic	118	125	131	140	16,3	17,2	18,2	19,7	194	209	225
Estonia	9,5	10,5	11,0	13,0	14,3	16,2	16,9	20,0	11	12,5	13,5
Hungary	139	143	145	152	19,0	19,7	20,1	21,3	155	162	170
Latvia	2,2	2,5	3,0	3,5	2,2	2,6	3,1	3,7	3	3,5	4,5
Lithuania	4,0	4,5	5,0	6,0	2,5	2,9	3,3	4,1	4	4,7	5,5
Malta	3,8	4,1	4,4	5,0	28,1	29,5	30,6	33,3	11	12	13
Poland	44	52	60	75	2,5	3,0	3,4	4,3	85,7	103,7	122,7
Slovakia	19	21	24	30	7,9	8,9	10,4	13,0	30,5	35	41
Slovenia	15	17	19	22	14,3	16,2	19,6	22,4	44	51	59
TOTAL EAST EUROPE	355	380	404	448	9,0	9,6	10,3	11,6	540	596	658
TOTAL Contracted	5 550	5 770	6 040	6 500	26,2	27,2	28,5	31,0	22 347	23 603	24 623
TOTAL Self-Operated	15 650	15 430	15 120	14 500	73,8	72,8	71,5	69,0	49 053	49 597	48 977
TOTAL Social Foodservice	21 200	21 200	21 160	21 000	100	100	100	100	71 400	73 200	73 600

Source: GIRA FOODSERVICE


Eating City Study & Research:

Starting from the experiences of Risteco and its partners, Eating City includes a working team dedicated to study sustainable catering new models.

Starting from 2003, main research activities on meal life cycle analysis allowed to point out the **logistics** (food supply chain) and the **waste management**, as two main levers to reduce the environmental impact, independently of food menu template and nutrition value.

Meal GHG emissions

"Scenario A" = 4,63 Kg CO₂ Equiv.

Scenario-----> A 

Cycle de vie "Repas"	Kg CO ₂ Eq.	10	20	30	40	50	60	70	80	90	100	%
Prod. matières premières:	4,085											88,07%
<i>Entrée</i>	0,095											2,06%
<i>Plat protidique</i>	3,263											70,34%
<i>Accompagnement</i>	0,000											0,00%
<i>Fruit, Fromage, Dessert</i>	0,279											6,01%
<i>Pain</i>	0,037											0,79%
<i>Emballages</i>	0,411											8,86%
Logistique (primaire)	0,043											0,93%
Production de Repas:	0,355											7,65%
<i>Consommation d'énergie</i>	0,323											6,96%
<i>Déchets</i>	0,032											0,69%
Logistique (secondaire)	0,027											0,59%
Consommation:	0,128											2,76%
<i>Déchets</i>	0,128											2,76%
Total	4,638											100%

Scenario A:
Menu including beef meat.

Greenhouse gas calculated for foodstuffs transported on road, according to their geographical origin :

- 25% = 100 Km
- 25% = 500 Km
- 25% = 1000 Km
- 25% = 1500 Km

Source:
Study by Risteco

Waste in Social Foodservices per capita

Production et consommation du repas Rest. Scolaire		
Type de déchets	Gr	%
Organique	185	71,15%
Emballages	40	15,38%
Couverts en plastique	0	0,00%
Indifférencié	35	13,46%
Total par repas servi	260	100,00%

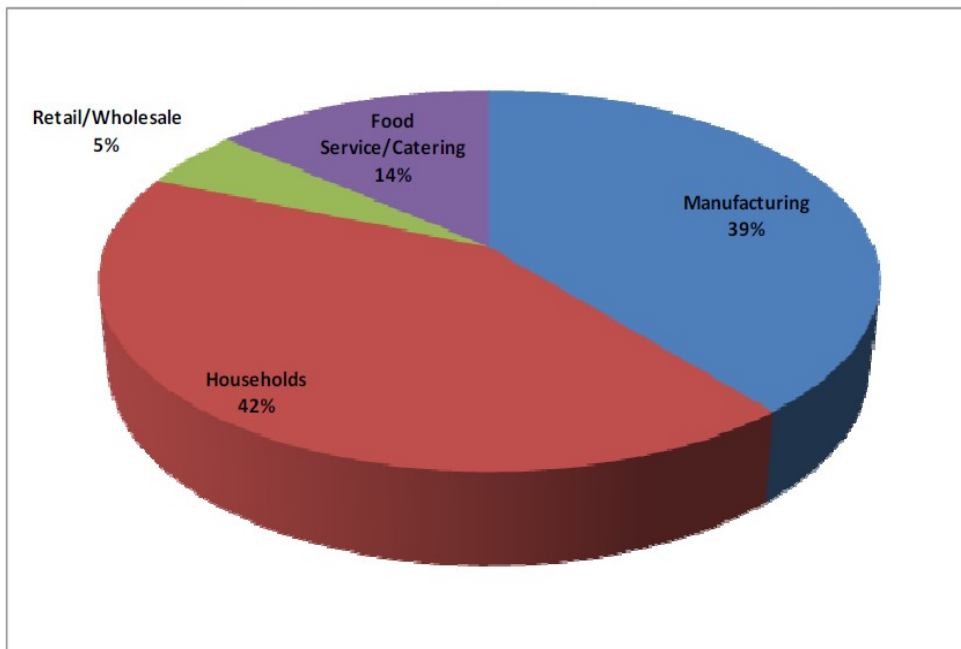
Production et consommation du repas Rest. Scolaire		
Type de déchets	Gr	%
Organique	211	74,82%
Emballages	69	24,42%
Couverts en plastique	0	0,00%
Indifférencié	2	0,76%
Total par repas servi	282	100,00%

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Each meal consumed out of home = 250 g of waste

Food waste in Europe (EU 27)

Percentage breakdown of EU27 food waste arisings by Manufacturing, Households, Wholesale/Retail, and Food Service/Catering sectors (best estimate)



Source: 2006 EUROSTAT data (EWC_09_NOT_093), Various national sources

Source Eurostat/DG Envi	Tons. of Food Waste		Kg Per Capita ¹
Totale Food waste in EU27	89.277.472,00	95%	178,65
Manufacturing	34.755.711,00	39%	69,55
Households	37.701.761,00	42%	75,45
A Foodservices	12.498.846,08	14%	25,01
Retails/Wholesales	4.463.873,60	5%	8,93

Assumption by Risteco:

Food waste in PFS

Meals served per year	22.314.430.798,00	
Kg Of waste per Meal	0,25	Kg Per Capita ²
A1 Total Tonns of Food waste	5.578.607,70	62,50

Food waste Foodservices

Other Consumption Out Home	€ 386.700.000.000,00	
Average Ticket	€ 11,00	
Meals/Contact year	35.154.545.454,55	
Kg of waste per contact	0,21	Kg Per Capita ³
A2 Total Tonns of Food waste	7.382.454,55	76,65

A1+A2 Total Tonns of Food waste **12.961.062,24** **25,94**

Total Tonns CO₂ eq Emission **25.144.460,76**

Per capita 1= UE Total Population

Per capita 2= / (meals served/250 days)

Per capita 3= / (Meals/365)

Meals ingredients, talking about Fish!



BENEFITS	FISHERY	
	LARGE SCALE	SMALL SCALE
Subsidies	\$\$\$\$\$ 25-27 billion	\$ 5-7 billion
Number of fishers employed	 about 1/2 million	 over 12 million
Annual catch for human consumption	 about 30 million t	 same: about 30 million t
Annual catch reduced to fishmeal and oils	 35 million t	 Almost none
Annual fuel oil consumption	 about 37 million t	 about 5 million t
Catch per tonne of fuel consumed	= 1-2 t	= 4-8 t
Fish and other sealife discarded at sea	 8-20 million tonnes	 Very little

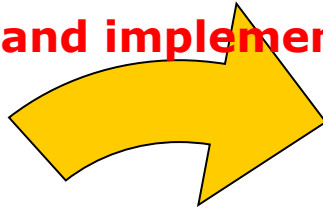
Source : Pauly and Jacquet, Conservation Biology, 2008

WIN WIN MENTALITY

A trustworthy win win mentality: public buyers and food providers must feel as partners and not antagonists, with a unique objective:

to innovate and implement more sustainable food services.

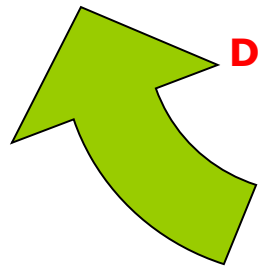
Social
Respons.



Economy **Why sustainable food is worthwhile:**

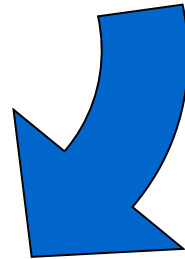
Sustainable

Development



Environment

- +Local food = less Miles, less pollution
- +More taste = less waste
- +Nutrient food = less health expanses
- +Soil preservation = save biodiversity



= Green Public Procurement

Life Cycle Thinking approach is a key of this change of paradigm

Financial Key n° of the italian public foodservesices:

financial statement analysis years 1996 2010

representative sample of 43% of the whole contract market (data in /000 euros)

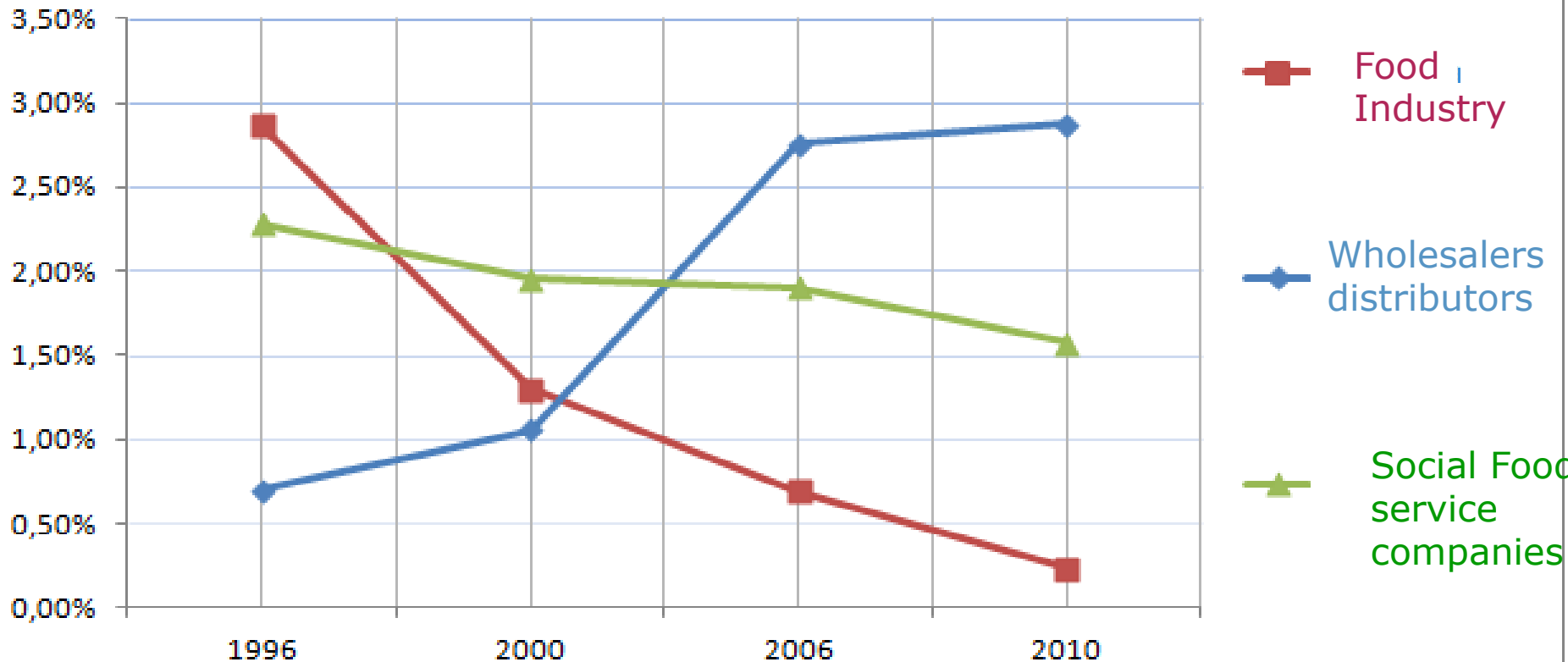
SOCIAL FOODSERVICES (IT)	1996 %		2000 %		2006 %		2010 %	
Turnover	585.940		1.108.708		1.728.296		1.678.029	
Food Consumption	224.253	38,27%	392.709	35,42%	575.237	33,28%	525.531	31,32%
Labour Cost	264.746	45,18%	460.128	41,50%	746.802	43,21%	715.873	42,66%
Depreciation /Amm	24.337	4,15%	33.486	3,02%	54.481	3,15%	53.943	3,21%
Added value	358.621	61,20%	545.923	49,24%	848.614	49,10%	826.657	49,26%
EBITDA	31.874	5,44%	88.791	8,01%	100.792	5,83%	111.999	6,67%
EBIT	24.410	4,17%	68.216	6,15%	82.998	4,80%	76.203	4,54%
Net Profit	13.391	2,29%	21.688	1,96%	32.883	1,90%	26.397	1,57%
Dipendenti n°	16.088		28.212		39.659		36.660	
Costo Medio Dipendente	16		16		19		20	
Fatturato/Dipendente	36		39		44		46	

In 15 Years the price of schools meals in Italy have not been increased : in parallel, food cost dropped from 38,7% to 31,32 % in ; Labour Cost from 45,18% to 42,66%

Economical aspects of the Food supply chain in Italy

Trend of Net Profit

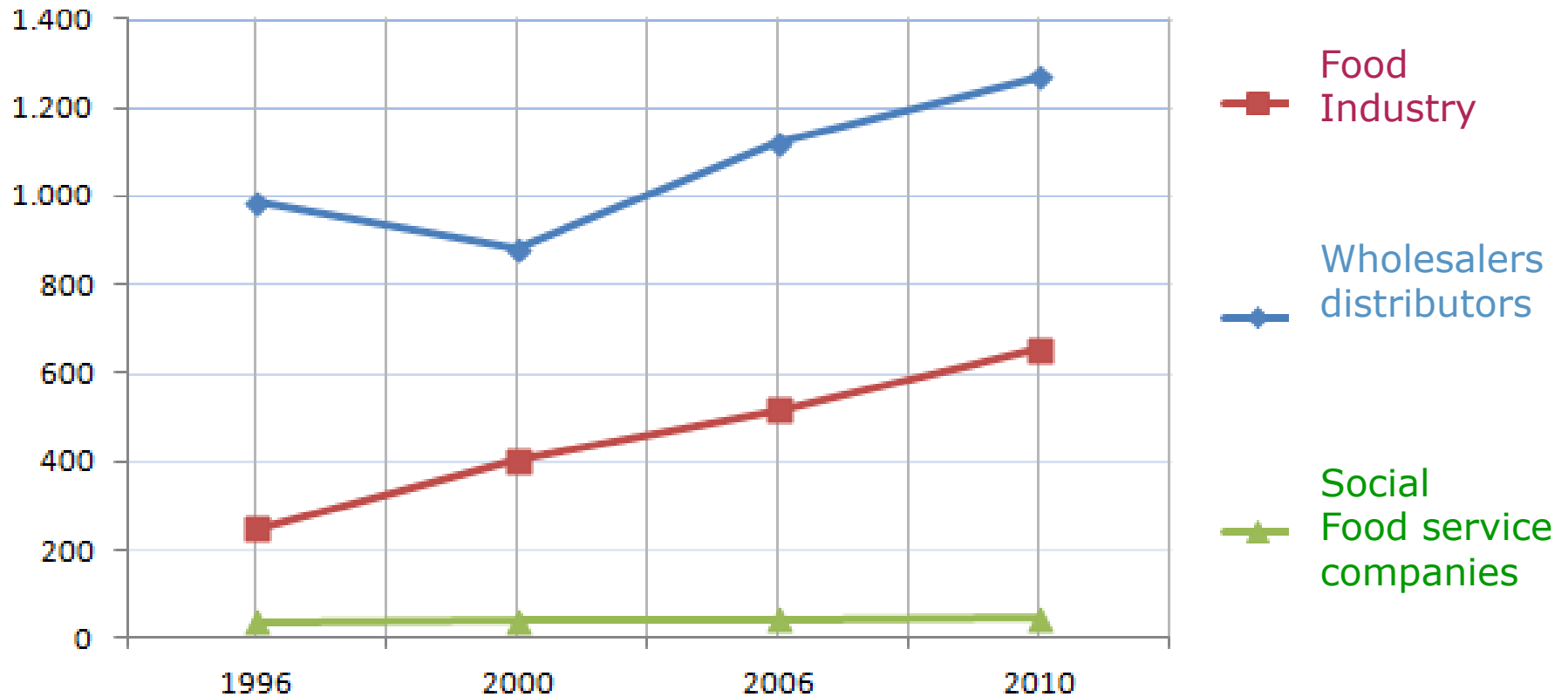
3 main segments of the agro-food supply chain data in % (sample in evolution)



Economical aspects of the supply chain in Italy

Annual Turnover/Workers

3 main segments of the agrifood supply chain data in /000 Euro (sample in evolution)



The European F&B Market (Eu 27)

Sector: in EU 27	Annual Turnover	Workers	Turnover/Workers
Food & Beverage Industry (F&B)	€ 954.000.000.000,00	4.200.000,00	€ 227.142,86
<i>Large Company</i>	€ 494.172.000.000,00	1.562.400,00	€ 316.290,32
<i>SMEs</i>	€ 459.828.000.000,00	2.637.600,00	€ 174.335,76
Total Foodservices (Out of Home Cons.)	€ 468.000.000.000,00	7.316.000,00	€ 63.969,38
Total Social Foodservices (SFS)	€ 77.000.000.000,00	2.200.000,00	€ 35.000,00
<i>SFS Contracted</i>	€ 24.623.000.000,00	600.000,00	€ 41.038,33
<i>SFS Self Operated**</i>	€ 52.377.000.000,00	1.600.000,00	€ 32.735,63
Onboard Travel Foodservices	€ 4.300.000.000,00	50.000,00	€ 86.000,00
Other Food Consumption out of home	€ 386.700.000.000,00	5.066.000,00	€ 76.332,41
Home F&B Consumption	€ 882.000.000.000,00		
Total food consumption in Eu	€ 1.350.000.000.000,00		
Organic "BIO" market value	€ 18.400.000.000,00	1,36%	

The shift of paradigm

SUSTAINABLE FOOD SYSTEM

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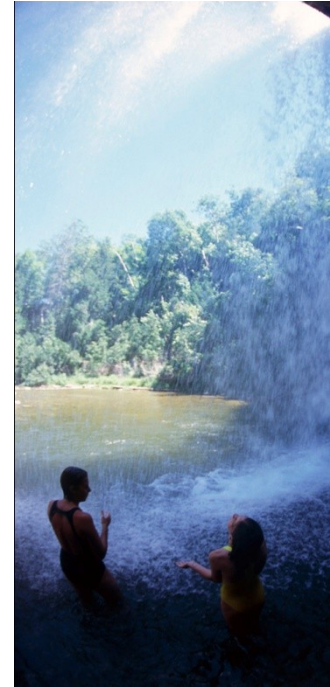
+ HEALTHY FOOD

+ LABOUR

- HEALTH COSTS

- WASTE

+ LIFE QUALITY



The shift of paradigm

In the past:

Business activity traditionally has been taking into account 3 different resources such as:

Financial, Technical and Human resources

In the future:

Human labour must be put again at the center of economy

Environment must also be taken into account as the 4th limited resource...
such as the first three ones

For a new agri-food supply-chain in symbiosis with the hosting territory.

The main steps:

workshops and conferences,

March 2010 Main conference in Rome (Softagri)

March 2011, Main conference: Food in Mediterranean countries

March 2012, workshop in Paris (food waste)

April 2012 Main conference in Canton

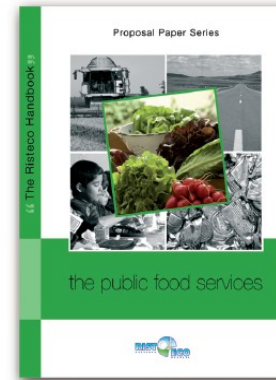
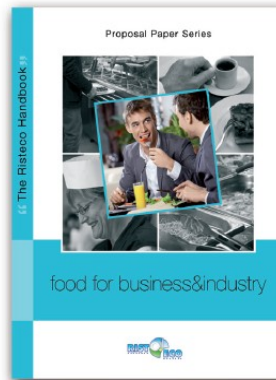
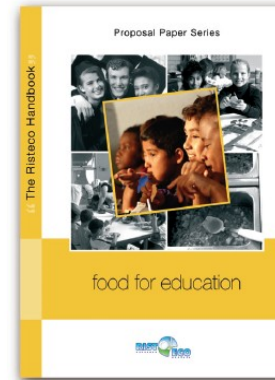
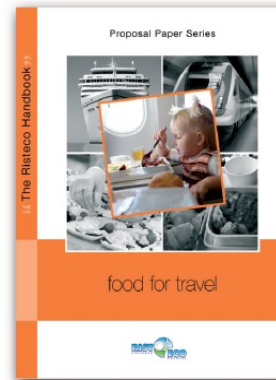
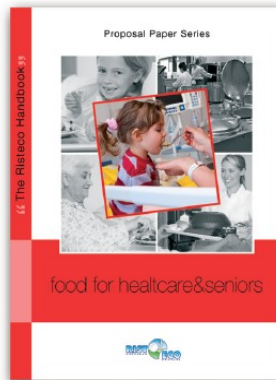
November 2012 workshop in Brussels (logistics and local food)

December 2012 workshop in Amsterdam.

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Les publications d'Eating City



**Thanks
for your attention**