



The “out of home” food consumption A lever to mitigate climate change Workshop presentation

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In the frame of
Food Wave - Empowering Urban Youth for Climate Action”

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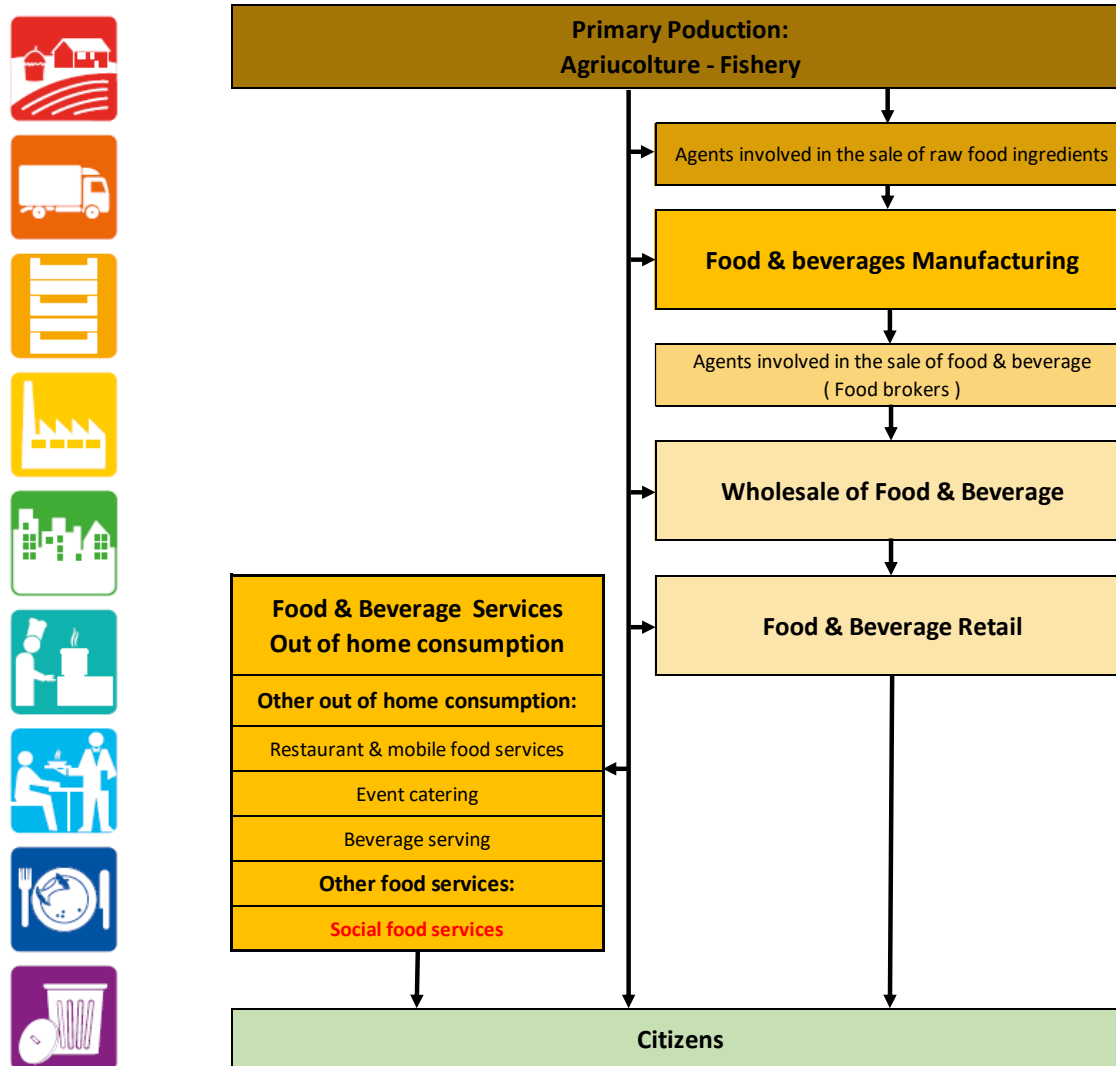


1 – The Food Business in EU

The main actors



The whole food chain in EU



2 – the Food services market

KEY Numbers



Food Industry and Food Services in EU

Table 2.1 : Food & beverages - Food service - Key Fact & N°, EU-28 Market - 2016

F&B Sector: in E.U. Year 2016	%	Annual Turnover (000)	%	N° Workers	Turnover/ Workers (000)
Food & Beverage Industry (F&B) ^{*1}	100,00%	€ 1.118.622.400,00	100,00%	4.501.927	€ 248,48
Large Company >250 Workers	51,88%	€ 580.351.800,00	37,72%	1.698.204	€ 341,74
SMEs	48,12%	€ 538.270.600,00	62,28%	2.803.723	€ 191,98
insight SMEs per size:					
0-19 Workers	10,72%	€ 119.885.600,00	23,75%	1.069.089	€ 112,14
20-49 Workers	9,64%	€ 107.865.300,00	11,74%	528.396	€ 204,14
50-249 Workers	27,76%	€ 310.519.700,00	26,79%	1.206.238	€ 257,43
Total Foodservices (Out of Home Cons.)	100,00%	€ 409.019.700,00	100,00%	8.841.473	€ 46,26
Total Social Foodservices (SFS - EU28) ^{*2}		€ 81.119.601,83		2.081.858	€ 38,97
<i>SFS Contracted (Source: Gira Foodservice)</i>	6,49%	€ 26.562.254,22	7,71%	681.695	€ 38,97
<i>SFS Potential Self Operated (No F&B Market)</i>		€ 54.557.347,61		1.400.163	€ 38,97
Other Food Consumption out of home ^{*3}	93,51%	€ 382.457.445,78	92,29%	8.159.778	€ 46,87

A huge market - with great potential to create jobs and mitigate **climate change** if we rethink the whole Public Foodservices market

24 Billion euro is the value of food procurement only in social food service



3 – The Social Food services in EU

Key Numbers



The EU Market (Fonte Risteco)

Table 2.2 : The Social Food Service Market - Key Fact & N°, EU-28 - 2016

Country		Contracted Market					Self Operated	Total Social Foodservices Market				
EU Country	Population 2017	Meals in Contract year 2016	Estimation Meals per Day	Contracted Market Value	Workers (HDC)	Contracted Market Penetr. %	Tot Meals SFS Self Oper.	Tot Meals SFS	Potential Market Value	Tot Meals per day	Daily Meals /pop.tot	Workers (HDC)
 AT	8.772.865	68.500.000	269.818	€ 244.000.000,00	6.262	27,00%	185.203.704	253.703.704	€ 903.703.703,70	999.325	11,39%	23.193
 BE	11.365.834	149.000.000	586.903	€ 672.000.000,00	17.246	31,40%	325.522.293	474.522.293	€ 2.140.127.388,54	1.869.118	16,45%	54.924
 DK	5.748.769	70.000.000	275.726	€ 389.000.000,00	9.983	18,30%	312.513.661	382.513.661	€ 2.125.683.060,11	1.506.701	26,21%	54.554
 FI	5.503.297	108.000.000	425.406	€ 565.000.000,00	14.500	22,10%	380.687.783	488.687.783	€ 2.556.561.085,97	1.924.915	34,98%	65.612
 FR	67.024.459	1.371.000.000	5.400.295	€ 6.110.000.000,00	95.000	38,00%	2.236.894.737	3.607.894.737	€ 16.078.947.368,42	14.211.304	21,20%	250.000
 DE	82.800.000	612.000.000	2.410.635	€ 3.029.000.000,00	77.736	17,80%	2.826.202.247	3.438.202.247	€ 17.016.853.932,58	13.542.894	16,36%	436.722
 IE	4.774.833	100.000.000	393.895	€ 344.000.000,00	8.828	62,10%	61.030.596	161.030.596	€ 553.945.249,60	634.291	13,28%	14.216
 IT	60.589.445	885.000.000	3.485.968	€ 3.960.000.000,00	84.368	54,00%	753.888.889	1.638.888.889	€ 7.333.333.333,33	6.455.495	10,65%	156.237
 NL	17.081.507	321.000.000	1.264.402	€ 1.236.000.000,00	31.721	38,40%	514.937.500	835.937.500	€ 3.218.750.000,00	3.292.713	19,28%	82.606
 PT	10.309.573	165.000.000	649.926	€ 451.000.000,00	11.574	58,70%	116.090.290	281.090.290	€ 768.313.458,26	1.107.200	10,74%	19.718
 ES	46.528.966	426.000.000	1.677.991	€ 1.730.000.000,00	44.399	42,10%	585.876.485	1.011.876.485	€ 4.109.263.657,96	3.985.727	8,57%	105.460
 SE	9.995.153	114.000.000	449.040	€ 519.000.000,00	13.320	14,50%	672.206.897	786.206.897	€ 3.579.310.344,83	3.096.827	30,98%	91.860
 UK	65.808.573	1.244.000.000	4.900.049	€ 4.130.000.000,00	105.993	37,50%	2.073.333.333	3.317.333.333	€ 11.013.333.333,33	13.066.798	19,86%	282.647
Sub Total	396.303.274	5.633.500.000	22.190.054	€ 23.379.000.000,00	600.000	32,74%	11.044.388.413	16.677.888.413	€ 71.398.125.916,64	65.693.307	16,58%	1.832.366
Other Eu (28)	115.501.814	1.591.627.108	6.269.334	€ 3.183.254.215,17	81.695	32,74%	3.269.110.847	4.860.737.955	€ 9.721.475.909,12	19.146.186	16,58%	249.493
Total	511.805.088	7.225.127.108	28.459.388	€ 26.562.254.215,17	681.695	37,50%	14.313.499.260	21.538.626.368	€ 81.119.601.825,76	84.839.493	16,58%	2.081.858

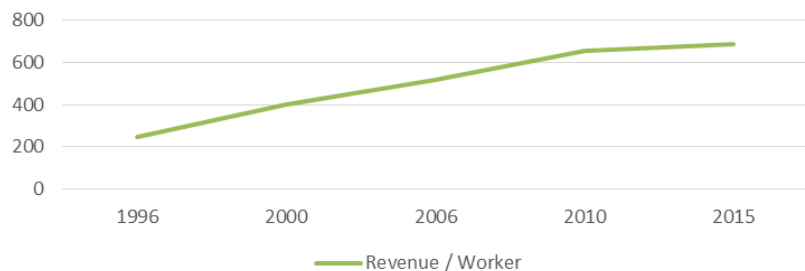


Evolution of italian social foodservices market 1996 to 2016 segment :Food processor

Table 4.1 : Food & beverages Manufacturing - a small sample of manufacturers working with SFS companies, Italian Market -1996 2016

Analysis of the income statement (P&L)										
F&B Manufacturers										
data in Euros/1000	1996 %		2000 %		2006 %		2010 %		2015 %	
Revenue	459.876		1.381.124		1.769.808		2.512.852		2.993.167	
Products costs	284.220	61,80%	969.946	70,23%	1.198.487	67,72%	1.716.202	68,30%	2.129.024	71,13%
Labour Costs	55.332	12,03%	109.328	7,92%	136.990	7,74%	182.698	7,27%	192.966	6,45%
Amm & Depreciation	13.978	3,04%	31.589	2,29%	48.989	2,77%	54.826	2,18%	52.652	1,76%
EBITDA	31.682	6,89%	47.133	3,41%	56.294	3,18%	75.477	3,00%	106.744	3,57%
EBIT (Food Manufacturers)	30.224	6,57%	43.242	3,13%	29.437	1,66%	47.083	1,87%	54.092	1,81%
Net Profit	13.173	2,86%	17.957	1,30%	12.274	0,69%	5.841	0,23%	14.837	0,50%
Indicators:										
N° of workers (Hdc)	1.864		3.433		3.430		3.847		4.363	
Average Worker Cost	30		32		40		47		44	
Revenue / Worker	247		402		516		653		686	

Fig. 1 -F&B Manufacturing - Keuro
Revenue/Workers



Reading this data we can easily understand the industrialization process. The contribution on sales for each worker has shifted from 247 Keuro to 686 K euro; despite this industrialization process the profit has shifted (EBIT = from 6,57% to 1,81%). The major issue is related to raw materials costs. (from 61,8 % to 71,13%) not due to increased cost but to reducing sales price to be competitive.



Evolution of italian social foodservices market 1996 to 2016 segment : Food Distributor (wholesales and logistic platform)

Table 4.2 : F&B Wholesales - a small sample of suppliers working with SFS companies, Italian Market -1996 2016

Analysis of the income statement (P&L)										
F&B Wholesale Distributors										
data in Euros/1000	1996 %		2000 %		2006 %		2010 %		2015 %	
Revenue	128.960		691.660		1.221.148		1.424.547		1.766.597	
Products costs	110.961	86,04%	551.031	79,67%	962.635	78,83%	1.120.679	78,67%	1.400.616	79,28%
Labour Costs	5.394	4,18%	31.191	4,51%	41.328	3,38%	48.202	3,38%	48.001	2,72%
Amm & Depreciation	1.434	1,11%	10.264	1,48%	10.140	0,83%	19.823	1,39%	21.812	1,23%
EBITDA	4.645	3,60%	35.260	5,10%	61.692	5,05%	67.601	4,75%	126.721	7,17%
EBIT (Wholesale)	3.145	2,44%	30.662	4,43%	68.331	5,60%	73.902	5,19%	104.909	5,94%
Net Profit	897	0,70%	7.293	1,05%	33.662	2,76%	40.892	2,87%	70.350	3,98%
Indicators:										
N° of workers (Hdc)	131		786		1.089		1.123		1.118	
Average Worker Cost	41		40		38		43		43	
Revenue / Worker	984		880		1.121		1.269		1.581	

Fig 2 -F&B Wholesale - Keuro
Revenue/Workers



That's the so called «Middle man» winner of this «game» of industrialization....

Food cost % has been reduced from 86% to 79%

And profit (EBIT from 2,44% to 5,94%)

This Business it is quite recent (last decade) and it is growing till today since social foodservices (public one mainly) is reducing value of meal cost despite quality and labor cost



Evolution of italian social foodservices market 1996 to 2016 segment :Foodservices operator

Table 4.4 : Social Food Service providers - a medium sample of companies working at 100% into SFS in the Italian Market -1996 2016

Analysis of the income statement (P&L) SAMPLE 2										
Social Food Service (SFS) Private Contractors (With 100% of turnover on SFS market) - Sample of 20% of the total italian market										
data in Euros/1000	1996 %		2000 %		2006 %		2010 %		2015 %	
Revenue on FS	230.209		384.328		653.006		749.180		880.259	
Products costs for FS	85.638	37,44%	141.113	36,20%	237.720	35,55%	261.456	34,36%	300.080	33,33%
Labour Costs	99.282	43,41%	157.166	40,32%	269.363	40,28%	316.608	41,61%	383.716	42,62%
Amm & Depreciation	8.510	3,72%	18.758	4,81%	24.328	3,64%	29.344	3,86%	27.292	3,03%
Added Value	140.528	61,44%	192.374	49,35%	319.913	47,84%	366.906	48,22%	431.853	47,97%
EBITDA	17.445	7,63%	33.931	8,70%	48.588	7,27%	55.734	7,32%	48.137	5,35%
EBIT Social FS	13.964	6,11%	20.141	5,17%	51.931	7,77%	36.378	4,78%	20.845	2,32%
Net Profit	4.240	1,85%	8.536	2,19%	29.241	4,37%	14.950	1,96%	13.231	1,47%
Indicators:										
N° of workers actual	5.489		9.410		14.033		15.846		19.181	
Average Worker Cost	18		17		19		20		20	
Revenue / Worker	42		41		48		48		47	
Workers Equiv -Base 1996	5.489		9.356		16.048		18.261		21.607	
Job Lost (on this sample)	0		-54		2.015		2.415		2.426	

Results: Food cost from 37,44 % to 33,33% - lost of workers -2426 only in this sample and more then 10.000 in social foodservices - EBIT from 6,11 % to 2,32%



Evolution of italian social foodservices market 1996 to 2016 segment :Foodservices operator – trend of indicators

Fig 3 - SFS (sample 2) - % Food cost/Revenue

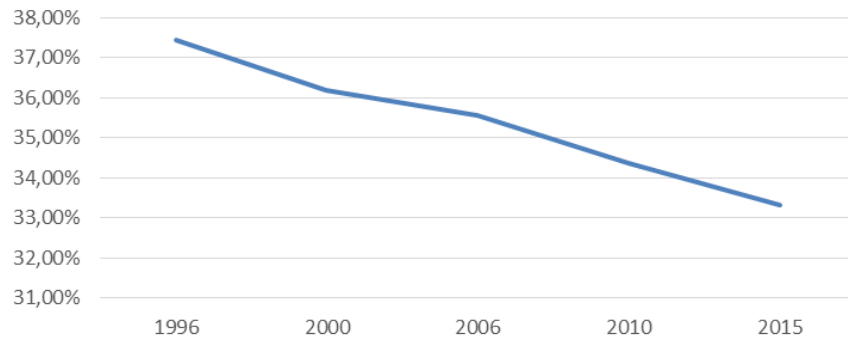


Fig 4 - SFS (sample 2) - Keuro Revenue/Worker

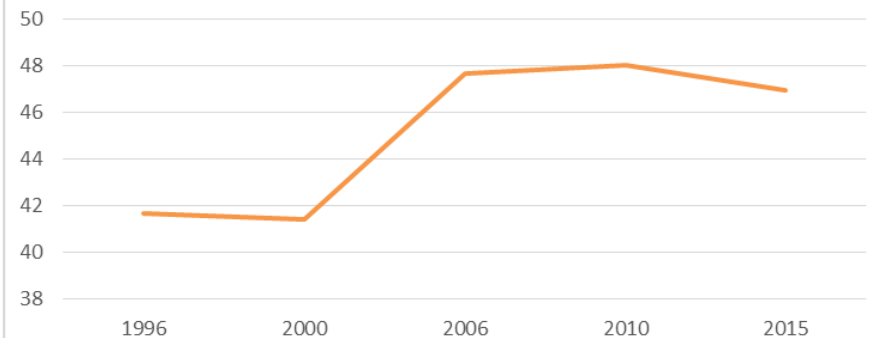


Fig 6 - SFS (sample 2) - N° of Workers - Job Lost

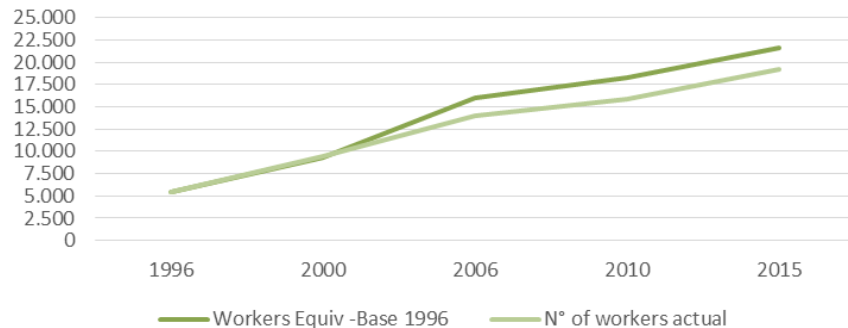
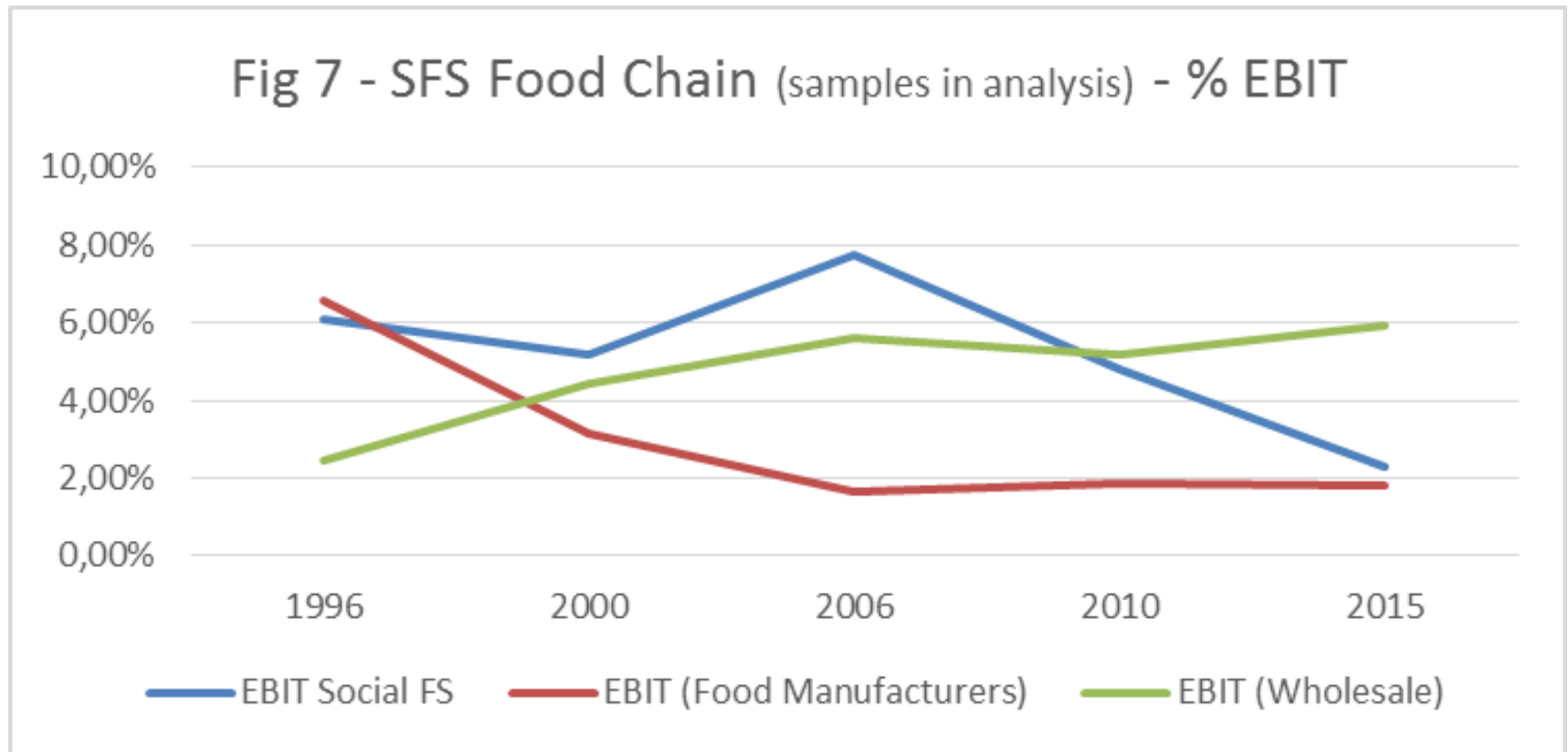


Fig 5 - SFS (sample 2) - % EBIT



Evolution of italian social foodservices market 1996 to 2016 segment :Foodservices operator – conclusion



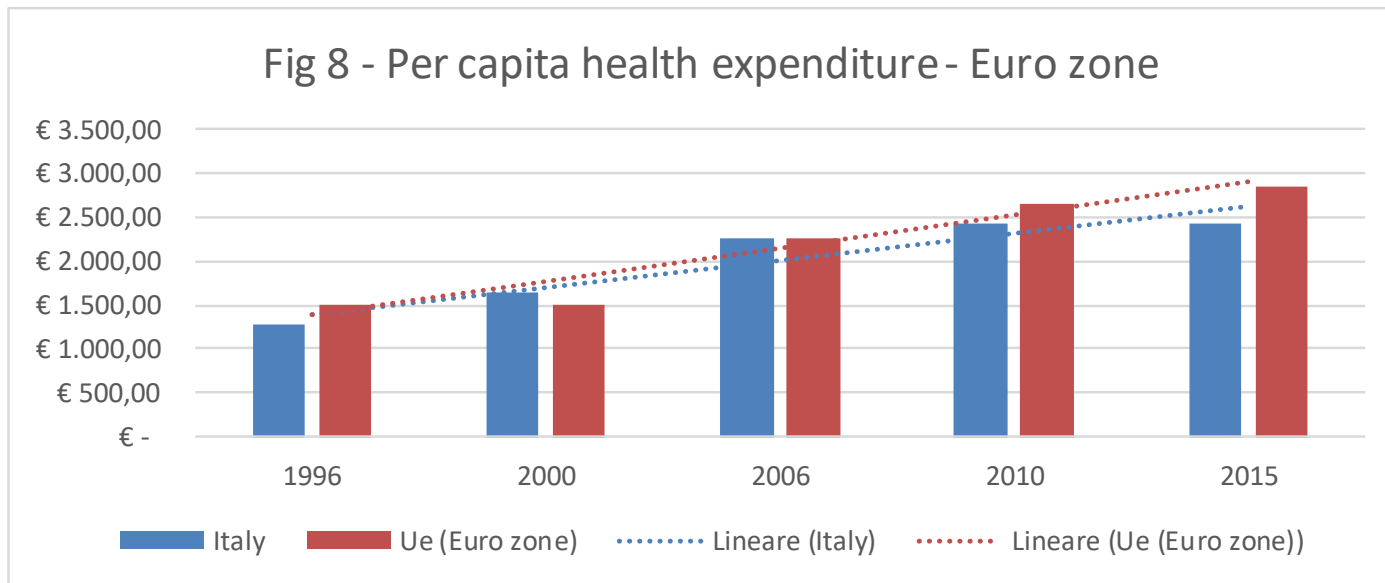
4 – health expenditure in same period



Expenditure on health – per capita 1996 -2015

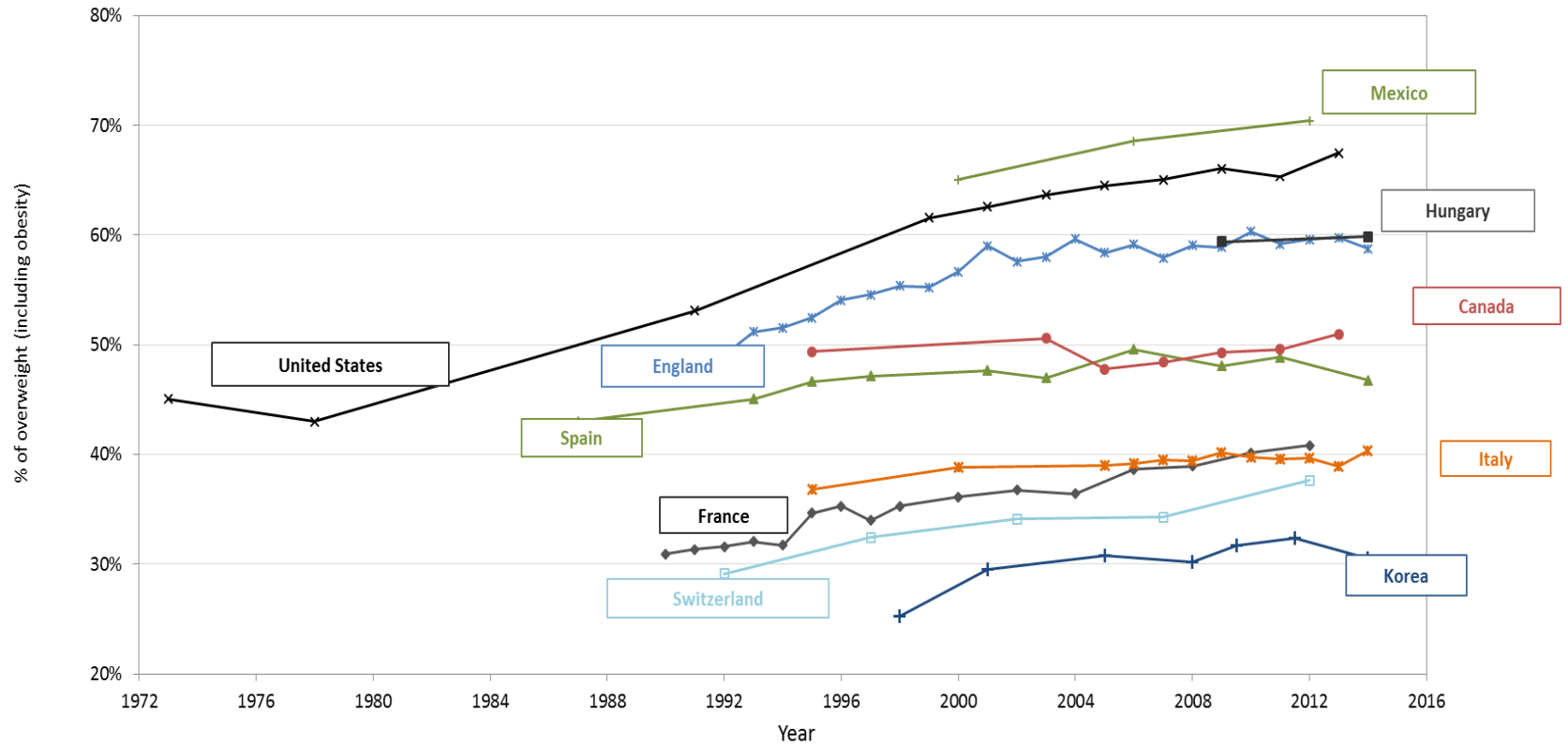
Table 5.1 : Current "per capita" all expenditure on health - Euro zone -source OECD

Country/Year	1996	2000	2006	2010	2015
Italy	€ 1.277,47	€ 1.649,76	€ 2.252,96	€ 2.423,55	€ 2.437,47
Ue (Euro zone)	€ 1.502,21	€ 1.514,52	€ 2.251,33	€ 2.649,79	€ 2.847,59



Trend of obesity (including overweight)

Dati OECD



In certain country represent 8/9% of gdp



5 – The social foodservice in EU

Social & Environmental Impact



Food Waste in public food services

Production et consommation du repas Rest. Hospitalière		
Type de déchets	Gr	%
Organique	350	55,56%
Emballages	164	26,03%
Couverts en plastique	98	15,56%
Indifférencié	18	2,86%
Total par journée d'hôpital/patient	630	100,00%

Production et consommation du repas Secteur Hospitalier		
Type de déchets	Gr	%
Organique	212	56,53%
Emballages	116	31,01%
Couverts en plastique	46	12,27%
Indifférencié	1	0,19%
Total par repas servis au personnel	375	100,00%

Production et consommation du repas Rest. d'Entreprise		
Type de déchets	Gr	%
Organique	185	56,54%
Emballages	121	37,09%
Couverts en plastique	0	0,00%
Indifférencié	21	6,37%
Total par repas distribué	327	100,00%

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%

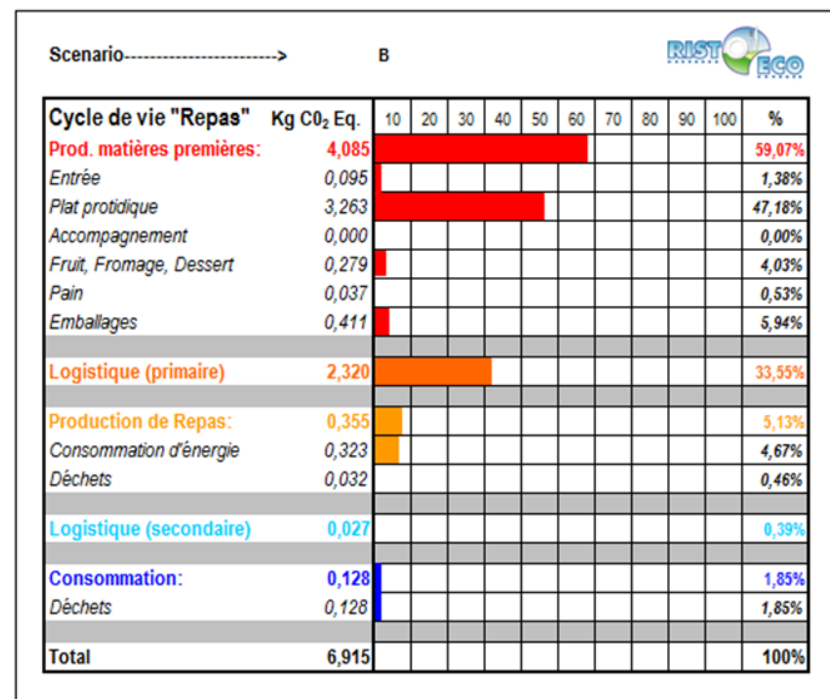
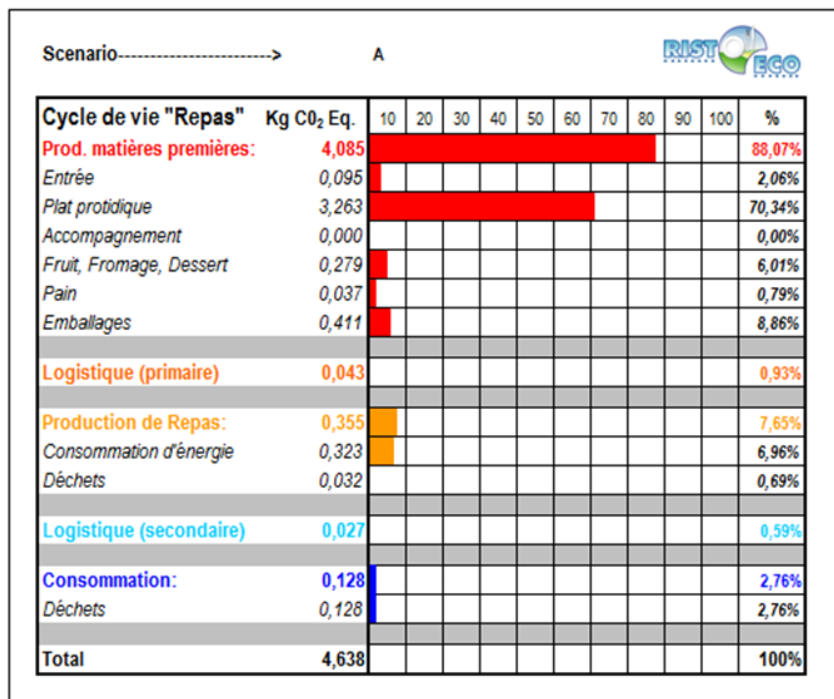
School canteen between **150/185 gr** of food waste for each meal served.

We can assume that in EU for each meal served « out of home » we produce 250 gr of waste.

A bulimic food system... with an increasing ratio of obesity in pupils and an increasing ratio of per capita health expenditure and an **huge climate change impact, due to waste management, logistics and industrial production (processed food)**



GHG emission for each meal served



Scenario A = 4,63 Kg CO₂ Equiv

Origin of products: Eu Market

Food Miles 0,043 Kg CO₂ Equiv.

Scenario B = 6,91 kg CO₂ Equiv.

With 50% of products coming from extra Eu.

Food Miles 2,320 Kg CO₂ Equiv



GHG emission for each meal served

Classic French meal 2 (with red meat)

Types de repas	Qte (g)	Kcal	Protéines (g)	Lipides (g)	gCO _{2e} /kg	gCO _{2e}
Entrée : tzatziki						
yaourt	125	75	5	4,4	2880	360
concombre	75		1		1720	129
huile d'olive (1/2 c.s.)	7	63	0	9	2600	18,2
Plat principal : bifteck - frites						
bifteck	150	222	37,5	6	35800	5370
frites	200	228	4,6	7,3	1300	260
Dessert : tarte aux poires						
farine	40	136	4,8	0,8	1170	46,8
poires	100	60	0,4	0	709,5	71
huile (1 c.s.)	15	135	0	15	2153	32,3
Total		919	53,3	42,5		6290

Vegetarian meal 1

Types de repas	Qte (g)	Kcal	Protéines (g)	Lipides (g)	gCO _{2e} /kg	gCO _{2e}
Entrée : soupe de légumes						
200g légumes de saison	200	60	3	0	267	53,4
huile (1/2 c.s.)	7	63	0	7	2153	15,1
Plat principal : omelette aux pommes de terre et aux oignons						
2 œufs	106	195	16	11	2610	276,7
potatoes	200	170	3	0,2	77	15,5
huile (1/2 c.s.)	7	63	0	7	2153	17,1
Dessert : salade de fruits						
fruits de saison	200	100	2	0	267	53,4
Pain	50	125	4	0,6	1520	76
Total		776	28	25,8		510

Source : [701] Étude individuelle nationale des consommations alimentaires 3 (INCA 3) - Avis de l'Anses - Rapport d'expertise collective - Juin 2017 Édition scientifique

Base Carbone : facteurs d'émission alimentaire (ingrédients ingérés)

[702] WWF – ECO2 Initiative – Vers une alimentation Bas Carbone, saine et abordable. Etude comparative multidimensionnelle de paniers alimentaires durables : impacts carbone, qualité nutritionnelle et coût. – 47p –2017.



Labor: artisanal > industrial fishing



FISHERY BENEFITS	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



PFS Meal impact on climate change in France

3 milliards of meals served every year in France

The difference between a classic animal protein based meal and a plant based ones is **5,79 kg of CO₂ équivalent**.

We can easily reduce of **2 kg de CO₂ équivalent** the GHG emission for each meal served in public food services
= **6 millions tons of CO₂ équivalent**.

Here the total CO₂ emission in France:

Émissions de CO₂ par activité en 2018

en millions de tonnes

Secteur d'activité	2000	2005	2014	2015	2016	2017	2018 (p)
Transformation énergie	64	67	38	40	43	48	39
Industrie manufacturière	106	101	76	74	72	72	70
Traitement centralisé des déchets	1	1	2	1	1	1	1
Résidentiel/tertiaire	88	99	70	75	76	75	69
Agriculture/sylviculture (1)	13	12	12	12	12	11	10
Transport routier	128	130	121	122	123	123	121
Autres transports	8	7	6	6	6	6	6
Total (1)	408	418	325	331	332	336	317

p : données provisoires.

(1) : hors utilisation des terres, leur changement d'affectation et la forêt (UTCATF)

Note : données révisées avant 2018 ; selon les définitions de la Convention-cadre des Nations unies sur les changements climatiques (CCNUCC), les émissions répertoriées hors total ne sont pas incluses, à savoir les émissions fluviales, maritimes et aériennes internationales, ainsi que les émissions des sources non-anthropiques.

Champ : France métropolitaine.

Source : Citepa, rapport Secten mai 2019.



The workshop

PLENARY SESSION

The EU Market of "Out of Home"
food consumption Key Fact &
numbers

The Impact of our Food system on
Climate Change

How Gastronomy should help to
rethink recipes and tackle climate
change

WORKING GROUPS:

PRODUCTION

DISTRIBUTION

CONSUMPTION

STATEMENT FROM EACH WG

COMMON DECLARATION

AN ONGOING PROCESS TOWARDS COP 26

WORKING GROUPS:

PRODUCTION

DISTRIBUTION

CONSUMPTION

FINE TUNE THE COMMON DECLARATION



Thanks

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