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## SOME PRELIMINARY RESEARCH ON AWARENESS CONCERNING SUSTAINABLE DEVELOPMENT AND HEALTHY FOOD<sup>1</sup>

### 1. Introduction

At the beginning of March 2005 a short questionnaire was carried out among 721 Polish students. The main aim was to obtain a rough picture of students' awareness on some issues of sustainable development and healthy food, in order to create a basis for broader research among a larger group (*e.g.* farmers, housewives, civil servants, politicians, pensioners, etc.). Awareness on issues of sustainable development and healthy food is important for developing ecological policy [see Słodczyk and Sobuś, 1999], agricultural policy [see Rahman, 2005] and policies for sustainable development [see Byelyakov, this volume]. Furthermore, it may be helpful to stimulate sustainable consumption patterns [see Wong et al., 1996] and to increase the demand for ecological food products [see Słodka, 2004]. Students were chosen as the research group, as it was assumed that due to their education they should be quite well informed on the issues of interest.

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The questions concerned whether sustainable development is an important issue, opinions about the free market, preferences for healthy or cheap food, reading information on food labels, whether Polish or foreign food is healthier and the influence of EU accession on the quality of food.

## 2. Results

The questionnaires (total 721) were carried out at the Faculty of Economics of Opole University (345, UO, a public university), the International School for Logistics and Transport in Wrocław (218, MWSLiT, a private university), Wrocław University of Technology (97, Pwr, a public university) and the School for Management and Administration in Opole (57, WSZiA, a private university), while a few students from Wrocław University (4) also filled out the questionnaire. Almost 53% of the sample consisted of females, while 90% were of age between 18 and 24. The majority of the students were in their first, second or third year of studies.

### Sustainable Development

About 61% of the students consider sustainable development to be an important issue, 4.3% think it is complete nonsense, while almost 35% report to have never heard of it. Slightly more women than men know the term. Almost 70% of the students in Opole, while only 50% of the students in Wrocław, think sustainable development is important. Almost 45% of the students in Wrocław do not know the term, while the percentage for Opole is 27.1. The large amount of students not knowing the term sustainable development may be a sign that the topic does not have priority in the educational program. Furthermore, it is likely that knowledge on this topic is less developed among many other groups in society. However, another question to be researched is, even when the term sustainable development is known, what is understood by this.

The second and third question concerned the acceptance of the market economy as an economic system that solves the allocation problem. Acceptance of an economic system strengthens this system, since less friction is expected to take place. In other words, it stimulates an "institutional equilibrium" [see Furubotn and Richter, 1997, 9–10], which makes the system more sustainable. In answer to the question "what do you think about the free market?" (see Table 1), 13.1% replied "a disgusting system where capitalists exploit workers" (12.1% of the women, 14.4% of the men). Only 7.1% responded "a superb system" (3.2% of the women, 11.3% of the men), while a large majority of 79.8% considered it to be

"maybe not the best system, but I do not know a better one" (84.7% of the women, 74.3% of the men). It seems that women are more socially conscious than men. This can also be observed from the answer to the question "with which of the following answers do you agree the most?": 59.3% of the women think that "unemployment benefits are good for society, as the poor have something to live of", against 49.1% of the men (average 54.5%). 40.7% of the women think that "unemployment benefits result in the unemployed not wanting to work", against 50.9% of the men (average 45.5%). An interesting difference can be observed between students from public and private educational institutions. At the private schools (MWSLiT, WSZiA) the answers concerning what they think about the free market are more extreme (see Table 1). More students think that either the market is a disgusting or a superb system.

**Table 1.** Assessment of the market as an economic system

Answer	Total	Women	Men	MWSLiT	WSZiA	PWr	UO
Disgusting system	93 (13.1%)	46 (12.1%)	47 (14.4%)	33 (15.9%)	16 (28.6%)	11 (11.5%)	33 (9.6%)
Superb system	50 (7.1%)	12 (3.2%)	37 (11.3%)	21 (10.1%)	8 (14.3%)	5 (5.2%)	16 (4.6%)
Don't know a better one	565 (79.8%)	321 (84.7%)	243 (74.3%)	153 (73.9%)	32 (57.1%)	80 (83.3%)	296 (85.8%)
Total	708 (100%)	379 (100%)	327 (100%)	207 (100%)	56 (100%)	96 (100%)	345 (100%)
No answer	13	3	6	11	1	1	0

Source: authors' own elaboration.

## Healthy Food

Healthy food should be distinguished from the concept of ecological food. Ecological food should fulfill certain very strict standards, whereas healthy food is rather a colloquial word expressing a perception about food.

As can be read from Table 2, about 83% of the sample considers healthy food either to be important or very important. This percentage is almost 87% for women and slightly over 79% for men. Almost 89% of the people considering sustainable development to be very important think that healthy food is important or very important, while this percentage is almost 67% for people thinking that sustainable development is complete nonsense and 75% for the people not knowing the term sustainable development. The results indicate an interesting issue for further re-

search. The data may suggest that healthy food is more important to women than for men. Furthermore, there may be a dependency between knowledge on and seeing the importance of sustainable development and the perception of the importance of healthy food. This may imply that education on sustainable development is of crucial importance, and should be researched among a wider group of people.

In Table 3 the results of the question "what kind of food would you choose" is presented. A choice could be made between "cheap food, quality doesn't matter", "healthy food, price doesn't matter", "if I had more money, I would buy more healthy food" and "all the same". Nothing was asked about price level or price differentials. About 87% reported that either they would choose healthy food, no matter what price (22.1%), or buy more healthy food if they had more money (65.2%). The percentage was 90% for women and 84.3% for men, which may again be a sign that healthy food is more important to women than for men. The percentages were 90.6% for people thinking sustainable development is very important, 82% for people not knowing the concept of sustainable development and a little less than 77% for people considering sustainable development to be complete nonsense. Again, this may be a sign of the importance of environmental education and perception of sustainable development.

Only 40% of the sample read about ingredients always or often (Table 4). The percentages are 43% for women and 36% for men. Thus, although more than 80% thinks healthy food to be very important, many of these people do not tend to read labels, while again women may be more conscious of what they eat.

It seems that less students from towns with less than 10,000 inhabitants read about ingredients on food labels than students from larger towns (Table 5). It may be that these students are less conscious, or have greater trust in what they buy. However, it is also likely that students from smaller towns have less money for buying better food products. The moment that people have more money, they may start to look for something special, and read more about the ingredients. Furthermore, it is possible that students from small towns do not buy food so often. The questionnaire was carried out in Wrocław (about 650,000 inhabitants) and Opole (about 130,000 inhabitants). Students from outside these cities may take food from their parents' home, often home made. As a result there is no label to read.

A large majority (61.6%) consider Polish food to be healthier than foreign food (Table 6). Only a few people consider foreign food to be healthier (2.9%). More men (64.8%) than women (58.8%) think Polish food is healthier. It is interesting, when comparing people who think sustain-

**Table 2.** Importance of healthy food for students

Answer	Total	Women	Men	Sustainable Development very important	Sustainable Development complete nonsense	Don't know concept of Sustainable Development
Very important	143 (19.9%)	81 (21.2%)	62 (18.8%)	97 (22.6%)	4 (13.3%)	39 (15.9%)
Important	453 (63.2%)	250 (65.6%)	201 (60.4%)	283 (66%)	16 (53.3%)	145 (59.2%)
Indifferent	108 (15.1%)	47 (12.3%)	61 (18.3%)	45 (10.5%)	8 (27.7%)	54 (22%)
Unimportant	7 (1%)	2 (0.5%)	4 (1.2%)	2 (0.5%)	0 (0.0%)	5 (2%)
Absolutely unimportant	6 (0.8%)	1 (0.3%)	5 (1.5%)	2 (0.5%)	2 (7.7%)	2 (0.8%)
Total	717 (100%)	381 (100%)	333 (100%)	427 (100%)	30 (100%)	245 (100%)
No answer	4	1	0	0	0	0

Source: authors' own elaboration.

**Table 3.** Choice of food – price versus healthy food

Answer	Total	Women	Men	Sustainable Development very important	Sustainable Development complete nonsense	Don't know concept of Sustainable Development
Cheap food, quality doesn't matter	12 (1.7%)	5 (1.3%)	7 (2.1%)	8 (1.9%)	1 (3.3%)	3 (1.2%)
Healthy food, price doesn't matter	158 (22.1%)	80 (21%)	78 (23.5%)	107 (24.9%)	7 (23.3%)	41 (16.7%)
If I had more money, I would buy more healthy food	467 (65.2%)	263 (69%)	202 (60.8%)	282 (65.7%)	16 (53.3%)	160 (65.3%)
All the same	79 (11%)	33 (8.7%)	45 (13.6%)	32 (7.5%)	6 (20%)	41 (16.7%)
Total	716 (100%)	381 (100%)	332 (100%)	429 (100%)	30 (100%)	245 (100%)
No answer	5	1	1	0	0	0

Source: authors' own elaboration.

**Table 4.** Reading about ingredients of food products on label – analysis by gender

Answer	Total	Women	Men
Always	71 (9.9%)	37 (9.7%)	34 (10.3%)
Often	214 (29.9%)	128 (33.6%)	85 (25.7%)
Sometimes	274 (38.3%)	152 (39.9%)	122 (36.9%)
Seldom	120 (16.8%)	53 (13.9%)	65 (19.6%)
Never	36 (5%)	11 (2.9%)	25 (7.6%)
Total	715 (100%)	381 (100%)	331 (100%)
No answer	6	1	2

Source: authors' own elaboration.

able development is important with those who report not to know the term, the first group is more inclined to report that Polish food is healthier, while in the second group the percentage reporting "no difference" is larger.

More than 41% of the student population thinks that EU accession will positively influence food quality in Poland, while about 26% thinks the opposite. Students who think Polish food is healthier are more pessimistic than students seeing no difference and students thinking foreign food is healthier (although this group is small). However, almost 35% of the students reporting that Polish food is healthier, think that EU accession will improve food quality in Poland. This is an interesting phenomenon that may be relevant for further research on perceptions, as theoretically, assuming that Polish food is healthier, an inflow of EU products would lead to a decrease in quality. However, more than 37% of this group expects a negative influence, while the percentage for the other groups is below 10.

### 3. Concluding remarks

From the preliminary research on awareness among students concerning sustainable development and healthy food some interesting observations can be made and questions for further research appear. A majority of the students know the term sustainable development and think it is important. However, more than one-third have never heard about it. Thus, there is a role for education on sustainable development, as it can be expected that in less educated groups the knowledge is less developed. Research on the perceptions of the importance of other terms, such

**Table 5.** Reading about ingredients of food products on labels – analysis by home town according to the number of inhabitants

Answer	Total	500.000	100.000– 500.000	50.000– 100.000	20.000– 50.000	10.000– 20.000	5.000– 10.000	5.000
Always	71 (9.9%)	10 (8.9%)	21 (16.2%)	8 (11.4%)	9 (8%)	8 (11.6%)	4 (7.3%)	11 (6.8%)
Often	214 (29.9%)	42 (37.5%)	42 (32.3%)	25 (35.7%)	32 (28.3%)	22 (31.9%)	10 (18.2%)	38 (23.6%)
Sometimes	274 (38.3%)	41 (36.6%)	41 (31.5%)	20 (28.6%)	52 (46%)	25 (36.2%)	24 (43.6%)	71 (44.1%)
Seldom	120 (16.8%)	17 (15.2%)	18 (13.8%)	14 (20%)	17 (15%)	8 (11.6%)	13 (27.3%)	31 (19.3%)
Never	36 (5%)	2 (1.8%)	8 (6.2%)	3 (4.3%)	3 (2.7%)	6 (8.9%)	4 (7.3%)	10 (6.2%)
Total	715 (100%)	112 (100%)	130 (100%)	70 (100%)	113 (100%)	69 (100%)	55 (100%)	161 (100%)
No answer	6	1	0	0	0	2	0	0

Source: authors' own elaboration.

**Table 6.** Healthiness of Polish and foreign food

Answer	Total	Women	Men	Sustainable Development very important	Sustainable De- velopment com- plete nonsense	Don't know con- cept of Sustain- able Development
Polish food healthier	439 (61.6%)	223 (58.8%)	215 (64.8%)	275 (64.4%)	20 (69%)	134 (54.9%)
Foreign food healthier	21 (2.9%)	13 (3.4%)	7 (2.1%)	14 (3.3%)	2 (6.9%)	4 (1.6%)
No difference	253 (35.5%)	143 (37.7%)	110 (33.1%)	138 (32.3%)	7 (24.1%)	106 (43.4%)
Total	713 (100%)	379 (100%)	332 (100%)	427 (100%)	29 (100%)	244 (100%)
No answer	8	3	1	2	1	1

Source: authors' own elaboration.

**Table 7.** Influence of EU accession on the quality of Polish food

Answer	Total	Women	Men	Students thinking Polish food is healthier	Students thinking foreign food is healthier	Students seeing no difference between the healthiness of Polish and foreign food
Positive influence	293 (41.3%)	146 (38.6%)	146 (44.1%)	151 (34.7%)	14 (66.6%)	128 (50.6%)
No influence	232 (32.7%)	135 (35.7%)	97 (29.3%)	121 (27.8%)	6 (28.6%)	104 (41.1%)
Negative influence	185 (26.1%)	97 (25.7%)	88 (26.6%)	163 (37.5%)	1 (4.8%)	21 (8.3%)
Total	710 (100%)	378 (100%)	331 (100%)	435 (100%)	21 (100%)	253 (100%)
No answer	11	4	2	4	0	0

Source: authors' own elaboration.



as quality of life, which sometimes can be used as a synonym for sustainable development, should accompany discussion on educational issues.

A large majority consider that the free market may not be the best system, but do not see a better system. In this context, it may be that women are more socially conscious than men. Healthy food is very important to more than 80% of the student population. Questions for further research, which appear from analysing the results, are whether women are also more convinced of the importance of healthy food and whether there is a positive relationship between knowledge and education on the subject of sustainable development and the perceived importance of healthy food.

It is significant for further research on eco-labeling that although there is such a large number of students thinking healthy food is very important, they do not tend to read labels. A positive result for the Polish agro-food sector is that a large majority consider Polish food to be healthier than foreign produced food.

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