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GENDER AND ENVIRONMENT STATISTICS

Note by Central Statistics Office of Ireland[1]

Invited paper

1. Many of the most important statistical indicators in the economic and social domains such as employment and unemployment rates, pay gaps, educational attainment and health indicators are disaggregated by sex, although 30-40 years ago statistics on man hours worked would not have been uncommon! However, today it would still be an exception to see an environment indicator disaggregated by sex, age, household type, etc.

2. Environmental damage and sustainable development actions are connected with the behaviour patterns of people. The causes and effects of environmental damage are not necessarily gender neutral. If the roles of men and women in the consumption of natural resources and in the pollution of the environment, and the consequences for people and communities of those activities were disaggregated by socio-economic factors, then policy-makers could more clearly target their policies at the population segments most responsible and most affected.

3. Currently environment statistics are essentially sexless and genderless and policy-makers have almost no statistical data on whether there are differences in how men and women are responding to climate change and environmental concerns.

4. This paper proposes that international organisations, policy-makers, and national statistical institutes should look more closely at gender issues in environment statistics and determine whether a gender dimension should be built into relevant environment indicators. This process would involve the addition of some new more person-focused indicators into existing indicator sets. At policy level, a decision needs to be made as to whether mainstreaming gender into

[1] Prepared by Gerry Brady, External Trade and Environment Division, and presented by Helen Cahill

environment statistics is becoming a necessary element of greening our behaviours in relation to domestic water usage, recycling, energy conservation, transportation and purchasing influences.

5. Major decision-makers in areas affecting the environment (e.g. heavy industry, Ministries of Environment, farming, transport, energy production) are often predominantly male. Conversely, teaching at first and second levels is often female dominated and with it there are opportunities to embed good practices in care for the environment and usage of basic resources. The impact of gender on the creation and take-up of green policies needs to be examined. For example, women are probably the main purchasers of food products in many countries. This has implications for the delivery of policies directed at encouraging consumers to give preference to purchasing products with greener content.

6. Products consumed by men and women may have quite different impacts on the environment. While personal consumption data would be of most relevance, existing data on purchases from household budget and other surveys could be used to undertake exploratory studies on the impact of differences in the consumption patterns of men and women on the environment. Gender information on who actually does the purchasing of food products etc. would also assist in targeting the delivery of policies aimed at greening product packaging etc.

7. The website www.myfootprint.org enables people to roughly calculate their carbon footprint but unfortunately the website does not collect data on the sex of the respondent. Travel and other surveys could be used to calculate more detailed carbon footprints. Data on purpose and mode of travel, whether public transport alternatives were available, whether there were accompanying passengers etc. may reveal significant differences in the attitudes of men and women to travel, as well as significant differences in their awareness of the impact on the environment. It may also be possible to supplement time-use surveys to gather some useful statistics on environment-related behaviours.

8. There is currently a quite limited amount of sex-disaggregated environment statistics available. While the potential gender indicators would vary substantially by region and climate zone, areas where a gender dimension may be of interest include:

- general attitudes to climate change and behaviour responses,
- consumer purchasing and personal consumption,
- transport,
- recycling,
- energy use,
- decision-making in raw material usage,
- decision-making in policy development areas and,
- impact on people of climate change and environment degradation.

9. A few examples of statistical data have been given here to illustrate that it is possible to collect some data and to assist in the discussion as to whether a focused effort needs to be undertaken to compile gender related environmental statistics. However these data have generally not been collected with a gender focus and should be considered as illustrative rather than as hard statistics.

10. The European Commission published a Eurobarometer[2] survey on Europeans' attitudes towards climate change in 2009. Climate change was ranked as the second most serious problem faced by the World today after "poverty, the lack of food and drinking water". Broadly similar proportions of men (48%) and women (45%) cited climate change to be one of our most serious problems.

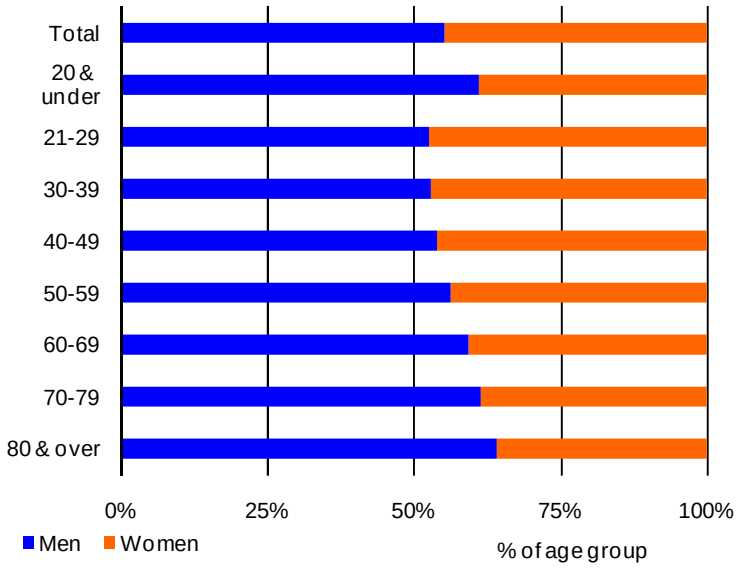
11. Respondents were asked whether they had personally taken specified actions aimed at fighting climate change. A higher proportion of women than men took most of the actions. For example, 81% of women, who took personal action aimed at fighting climate change, separated most of their waste for recycling compared with 76% of men who took personal action.

Action	**% of men who were taking personal action**	**% of women who were taking personal action**
Separating waste for recycling	76%	81%
Reducing consumption of energy at home	61%	66%
Reducing consumption of water at home	51%	58%
Reducing consumption of disposable items	38%	43%
Buying seasonal and local products	26%	32%
Environmentally friendly transport mode	27%	29%
Reducing use of their car	25%	23%
Purchasing a more environmentally friendly car	24%	17%
Avoiding taking short-haul flights	10%	11%
Switching to energy supplier using renewable sources	9%	9%
Installing machine in home for renewable energy	6%	6%

12. An analysis of car ownership in the 2006 Census of Population in Ireland showed that 85% of male reference person households had a car compared with 72% of female reference person households. When this analysis was limited to persons living alone, the corresponding figures were 63% of males living alone had a car compared with 53% of females living alone. While neither measure may be ideal, both suggest that there may be a gender difference in rates of car ownership.

13. In Ireland in 2008, 55% of full driving licences were held by men. There were more men than women with a full driving licence in all age groups. Combining these data with information on vehicle ownership, engine size, fuel type, and annual kilometres travelled could further our knowledge on gender differences in the area of car usage.

[2] http://ec.europa.eu/public_opinion/archives/ebs/ebs_322_en.pdf



14. An analysis of means of travel to work using data from the Census of Population in Ireland showed that in 1996, 48% of men and 44% of women in employment drove a car to work. By 2006, this proportion had risen to 54% of men and 62% of women. The proportion of women travelling to work as a passenger in a car decreased from 13% in 1996 to 6% in 2006. Such data could be supplemented with analyses of how children travel to school.

15. An analysis of items recycled in a 2005 survey module[3] on Recycling and Energy Conservation in Ireland showed that male reference person households (87%) and female reference person households (90%) had similar levels of participation in recycling. When the analysis was restricted to persons living alone, the picture changed considerably with 69% of male one person households compared with 82% of female one person households recycling at least some products suggesting that there may be a gender difference. The table shows the data for single person households with higher proportions of women living alone recycling each item.

Item recycled	% of men living alone	% of women living alone
Overall	**69%**	**82%**
Paper	60%	75%
Aluminium cans	60%	72%
Tin cans	59%	73%
Glass	57%	69%
Cardboard	56%	70%
Plastic	45%	57%
Clothing	30%	56%

[3] http://www.cso.ie/releasespublications/documents/labour_market/current/qnhsrecyclingenergy.pdf

16. An analysis of energy conservation methods used by households was undertaken in a 2005 survey module on Recycling and Energy Conservation in Ireland. While the published data contained no gender dimension, a special analysis of single person households showed that women were more likely than men to be taking energy conservation actions.

Energy conservation method	% of men living alone	% of women living alone
Double glazing	62%	70%
Lagging jacket	63%	73%
Attic/roof insulation	56%	63%
Draught stripping	42%	45%
CFL light bulbs	22%	30%

17. The European Environment Agency set of core indicators[4] is summarised in Table 1. They comprise ten domains and 35 indicators. There is no gender dimension presented in the EEA web overview of each core indicator. It should be possible through enhanced data collections to disaggregate aspects of some of these indicators by sex, e.g. area under organic farming, land take, passenger transport demand, use of cleaner and alternative fuels, recycling of packaging waste, municipal waste generation. However an adapted survey methodology may be needed to collect data at the individual rather than household level, and new person-focused indicators would also be needed.

18. In summary, the gender dimension of environment statistics is as yet inadequately developed. Gender mainstreaming of some important environmental indicators is possible. This data would measure the actual practices of men and women in relation to issues of climate change and environment that a change in their behaviours could influence. The data would enable policy-makers to focus more clearly on influencing the behaviours of a particular population segment.

19. While adjusting surveys and administrative data systems to collect or analyse such data may be onerous, the alternative is a set of environment statistics unable to distinguish socio-demographic differences in behaviour and responsiveness to environmentally friendly practices.

[4] http://themes.eea.europa.eu/IMS/CSI

Table 1: European Environment Agency Core Set of Indicators

Domain	Indicator
Agriculture	Area under organic farming
Air pollution	Emissions of acidifying substances
	Emissions of ozone precursors
	Emissions of primary particles and secondary particulate matter precursors
	Exceedance of air quality limit values in urban areas
	Exposure of ecosystems to acidification, eutrophication and ozone
Biodiversity	Designated areas
	Species diversity
	Threatened and protected species
Climate change	Atmospheric greenhouse gas concentrations
	Global and European temperature
	Greenhouse gas emission projections
	Greenhouse gas emission trends
	Production and consumption of ozone depleting substances
Energy	Final energy consumption by sector
	Primary energy consumption by fuel
	Renewable electricity consumption
	Renewable primary energy consumption
	Total primary energy intensity
Fisheries	Aquaculture production
	Fishing fleet capacity
	Status of marine fish stocks
Terrestrial	Land take
	Progress in management of contaminated sites
Transport	Freight transport demand
	Passenger transport demand
	Use of cleaner and alternative fuels
Waste	Generation and recycling of packaging waste
	Municipal waste generation
Water	Bathing water quality
	Chlorophyll in transitional, coastal and marine waters
	Nutrients in freshwater - Nutrients in transitional, coastal and marine waters
	Oxygen consuming substances in rivers
	Urban waste water treatment
	Use of freshwater resources