Notes from Discussion Session on Food

Chairs: Christian Reynolds, Michalis Hadjikakou

Christian Reynolds presentation – main points

- Food consumption in Australia places stress on scarce resources (water and electricity) and generates environmental impacts (waste and CO_2).
- From a consumption perspective, households are the main end consumer of food, either through eating out or at home.
- Digression: Notable fall in apparent consumption of beef and veal and lamb and mutton in the 1990s, couple with an upward trend in pig and poultry meat ever since. People report eating less red meat these days but there is always a gulf between what people say and what they are actually doing! People are certain eating more fruit and vegetables.
- There is also increasingly a tendency to eat out more as seen in statistics.
- Empirical exercise to test whether each state in Australia is food secure
    - 3000 calories per day = food secure but NOT nutritionally secure
    - Datasets: Calories from Wolfram Alpha, Prices from DAFF and FAO, 72-sector food classification (using 'Hadjikakou nutrition classification concordance' – available on the IElab cloud), 8-region model, no imports.
    - Methodology: Economic output for each main food commodity in each state converted to physical units (tons) and then average caloric values used to estimate the total available calories in final and intermediate demand in each state – these are then divided by population to obtain calories per capita.
    - The results show very high overall food security for all states when all calories in final and intermediate demand are considered. However, NSW and ACT are not food secure when only final demand is taken into account. This is likely to reflect the fact that consumers in these states buy a lot of food which comes from other states (imported final demand).

Michalis Hadjikakou presentation – main points

- Food sustainability is a very complex and multifaceted issue. Many groups around the world increasingly interested in different aspects of the food system: agricultural processes and efficiency, consumer choice and dietary composition, footprints of production and consumption. There has also been an explosion of interest in defining and promoting food choices which are both healthy and sustainable.
- The talk presents preliminary findings from a 2-year project funded by the Australian Academy of Science (AAS) which aims to explore spatial and socioeconomic gradients in food consumption impacts using a multidimensional approach combining economic, environmental and nutrition indicators.
- Methods and data: The IElab is seen as a hub for food-related research and a series of concordances has been put in place allowing interested users to integrate nutrition data from the ABS or other sources with input-output and environmental extension data in the IElab. Further data from Eora environmental extensions have been brought in to complement existing datasets. This research uses the same 8-region, 72-sector classification

(see 'Hadjikakou nutrition classification concordance' – available on the IElab cloud) along with final demand vectors from the 2009/10 ABS Household Expenditure Survey (HES) for different states, metropolitan regions and income quintiles of the Australian population.

- Results and implications: There is considerable spatial heterogeneity – average carbon, water and ecological footprints vary tremendously from state to state with the average household in some states performing better than the country average in one indicator but worse on other indicators. The next step is to add dietary quality indicators and economic impact indicators to the data and consider options and barriers in suggesting simple and affordable dietary modifications that could help move us closer to a healthy and sustainable diet for all Australians.

Discussion points

- Amount of food purchased appears to flatline as income increases. This stresses the importance in also having an idea of the physical quantities of the food consumed as opposed to relying solely on consumer expenditure which biases consumers who tend to purchase more expensive, higher quality products.
- Barney Foran raised the issue of tourism as a reason for increased food consumption in certain parts of the country in certain parts of the year. He warned that this consumption can be fairly significant and is not captured in the HES data.
- People's behaviour is notoriously difficult to change and there is also bias in the data as people do not necessarily report the truth in terms of their expenditure and food consumption.