

WHAT'S IN THE FRIDGE? URBANISATION, CONSUMPTION AND DEMAND IN BANGKOK AND HANOI

Key points

- In one or two generations, fridge-freezers have become normal appliances in virtually all households in urban Bangkok and Hanoi. This is one of the reasons for increasing household energy demand
- The 'need' for a fridge-freezer and the energy consumption that follows is related to the dynamics of urbanisation and diversification in food provisioning, but this is not a simple or predictable relationship
- Households define quality, fresh and safe food in very different ways: some use supermarkets and favour a 'Western' diet; others avoid mass-produced food and rely upon local suppliers. In both situations fridge-freezers are essential appliances, but for very different reasons

Introduction

Electric appliances make up an increasing share of domestic energy demand, particularly in emerging economies in Asia. Fridge-freezers have become nearly ubiquitous in Thailand and Vietnam. In 2012, 49% of Vietnamese households owned a fridge as did 91% of Thai households in 2014. Our study focused on the practices of consumption and provision that lie behind recent increases in the ownership and use of fridge-freezers in urban Bangkok and Hanoi. The study consisted of 52 interviews with 'middle class' households living in these two cities. We asked about present and past routines and practices of shopping, keeping food and drinks cool, and cooking. Most interviewees also showed us around their home and allowed us to photograph the contents of their fridge-freezers.

Questions

- How has the ownership and use of fridges and fridge-freezers in Bangkok and Hanoi developed over the last twenty years?
- How are fridge-freezers used: what do people keep in them today?



- What strategies do people adopt to ensure sufficient, fresh, and convenient food?
- How are changing diets, urban systems of food provisioning and energy demand related to the widespread ownership of fridge-freezers?

Findings

The people with whom we spoke in Bangkok and Hanoi keep a similar, albeit expanding, range of foods – e.g. vegetables, fruits, drinks, eggs, condiments, milk, meat, ice and cooked food – in their fridge-freezers. However, there were some important differences. For example, Mai's fridge, in Bangkok has packs of eggs bought from the nearby supermarket and laid by imported chickens. Duc's fridge, in Hanoi, also contains eggs, but in his case, there is an entire crate of unpackaged eggs 'imported' to the city from his home village by bus. In Hanoi specifically, many respondents were anxious about the safety of food bought in supermarkets or from 'unknown' suppliers. This story of the eggs illustrates the diversification of food sources and different methods of responding to urban food chains.

While some people, like Mai, opt for a more 'Western' diet, based on what they find in supermarkets that are now popping up everywhere, others, like Duc, maintain or return

to a more 'traditional' diet with food sourced from the countryside. Ms Lien combines both strategies:

Every weekend I go to the countryside to buy food and vegetables to store in the fridge. I only buy fruits and small things [cookies, candies, yoghurt and snacks, milk] in the minimarket nearby here but main things like meat, fish, I buy from the countryside. (Hanoi, woman aged 30-40)

A key insight from our research is that the fridge-freezer is central to *all* of these strategies.

Fridge-freezers enable urban forms of food provisioning often involving long-supply chains, and they are important for storing 'Western' foods such as dairy products or manufactured ready-meals. But in Hanoi particularly, complex and extensive systems of provision were often associated with food scares. Some of our interviewees were really anxious about the risk of contamination:

[B]efore we just bought fresh food from the local market but recently there have been so many news items on food security – they talk about unsafe food – and that is why we should protect ourselves. ... Of course sometimes we also have to buy from the local market but now we prefer buying from local people and we also [get food] from our garden.

(Hanoi, woman aged 40-50)

For these households, a fridge-freezer is essential in that it allows them to bypass the supermarkets and keep stocks of food from what they took to be 'safe' providers.

The domestic fridge-freezer proves to be as important in providing access to standardised, 'Westernised' urban food chains as it is in enabling people to resist these trends by sourcing and then storing 'traditional' foods from 'local' suppliers.

Significance

Whilst fridge-freezers are increasingly common household appliances, our research shows that this does not, in itself, result in converging patterns of shopping, cooking or eating. The specific histories, geographical contexts and trajectories of urban development play a critical role in the development of 'need' for a fridge-freezer.

DEMAND research insight #11 WHAT'S IN THE FRIDGE?

Further reading: www.demand.ac.uk

Contact the researchers: Mattijs Smits (mattijs.smits@wur.nl) and Jenny Rinkinen (jenny.rinkinen@lancaster.ac.uk)

The demand for fridge-freezers and other energy-using appliances should never be seen in isolation. How appliances figure in daily life varies and changes through, and as a result of, 'wider' practices, including where and how people shop, store and cook food, and what they eat. Fridge-freezers are critical nodes in networks of provision that stretch far beyond the home.

As we have shown, the 'need' for fridge freezers is an outcome of changing systems of provision and of how households respond. Policy measures, such as increasing the energy efficiency of individual appliances do not engage with more basic questions about how fridge-freezers are used, how this changes and whether urban systems of food provisioning can be reconfigured in much less fridge-freezer dependent and hence less energy intensive ways.

Methodologically, our analysis demonstrates the relevance of analysing 'small-scale' social practices – shopping, storing and cooking food – as a means of revealing 'large' social phenomena, including forms of urbanisation, supermarketisation and energy demand.

Implications

- The increasing demand for more and bigger fridge-freezers is not simply an outcome of economic growth, affordability or consumer choice. It is strongly related to changing systems of food provisioning and to the role of supermarkets, governments, and other organisations involved across the cold chain, including companies selling fridges or frozen meals.
- The policy focus on energy efficiency overlooks the pivotal role of the fridge-freezer in mediating more and less energy intensive systems of urban food production and consumption.
- The diversity of household strategies that we observed provides an important reminder of how flexible these systems and practices can be. People adapt their diets, keep food fresh in different ways, and modify shopping habits as goods, appliances and infrastructures change. There is no single template either of diet or of urban food provisioning.
- The histories and trajectories of fridge-dependence in Bangkok and Hanoi have parallels with those observed in other parts of the world. However, because they are embedded within these more extensive systems of provision and practice, there are local, historically specific differences in how fridges become normal, and in how their role continues to evolve.



DEMAND is one of six Centres funded by the Research Councils UK to address 'End Use Energy Demand Reduction'. DEMAND also has funding from ECLER (EDF R&D), Transport for London and the International Energy Agency.

www.demand.ac.uk