Nudges as a tool for promoting sustainable consumer behavior in Asia-Pacific

Why does consumer behavior need to change in Asia-Pacific?

Making consumption more sustainable is particularly important in Asia-Pacific given the dramatic trends being witnessed in the region. The region is expected to be at the forefront of worldwide consumption by 2030, with consumer spending projected to reach $32 trillion and constitute about 42 per cent of global consumption,\(^1\) carrying with it implications for the environment. Globally, about 65 per cent of greenhouse gas emissions (GHG) emissions are induced by household consumption.\(^2\) While such data is limited for the region, due to its growing share of global consumption, Asia-Pacific consumption-emission trends are increasingly representative of patterns globally. The most important sectors of household consumption-related effects on GHG emissions, both globally and in Asia-Pacific, are housing, food, transport, clothing, and tourism, with differences in degree depending on subregions (see figure below).\(^3\)

Clearly there is a need to alter consumption patterns in the region towards sustainability. However how to persuade consumers to do so is not clear. While mainstream economic models may assume that consumers are making rational decisions, this is not the case for a number of reasons. One is lack of information regarding the impact of their choices on the environment. Consumers also perceive products that are more sustainable to be weaker in other dimensions such as strength, effectiveness or attractiveness, which might lead them to opt for less sustainable options and behaviors or to use higher quantities of the product than necessary. Moreover, most sustainable behaviors involve some immediate cost, such as increased effort, financial cost or inconvenience, requiring a trade-off between these drawbacks for the individual and a more sustainable good whose benefits appear to lie in the future or in an abstract sense. Even if these concerns were to be addressed, research indicates that there are deeper constraints to changing consumer behavior. Particularly, the insights of the field of behavioral economics highlight that many of the decisions consumers make may not be conscious. That is why nudging has emerged as a novel policy option for governments.

What is nudging?

Nudging can be part of the toolkit to support consumers in making sustainable purchasing decisions. It is particularly attractive because of its ability to predictably change behavior without forbidding any options or without the need to provide economic incentives. Nudges are positive reinforcements, small suggestions, or changes in choice architecture intended to influence the behavior of consumers. Choice architecture refers to the different ways a decision can be presented to consumers.

There are a number of factors to consider for effective nudging. Researchers suggest that nudges seem to be most appropriate in what may be called “low-involvement” decisions (i.e., ones that involve little conscious deliberation), and in “high-involvement” decisions that are complex or unfamiliar. It has also been suggested that nudges seem to be more effective if they are perceived of as legitimate (i.e., helping people to do what they ideally would like to do) or when they are so unobtrusive as to be virtually invisible.\(^4\) Policymakers can apply nudging in two ways, first to counteract the negative impact of other actors’ (e.g., business, media) attempts to subconsciously influence human behavior and thus reduce behaviour deemed undesirable, and second to actively promote behaviour deemed

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desirable. Nudging can be used to engender cognitive impact (the use of ecolabels or visibility enhancements), affective responses (sensorial and social influence cues) and behavioural effects (adjustments in convenience and product size). Some principles for effective nudging are providing feedback that compares your behavior with others; making the desired option the default option as people subconsciously choose what is considered normal; and tweaking the environment to make sustainable choices easier.

What are the particular strengths of nudging as compared to more traditional methods of influencing consumer behavior? First, the most obvious strength of nudging is its compatibility with the idea of free choice. In an era when ideological preference lies in some income markets and the increasing impact of globalization on national states limits governments' ability to regulate and tax in order to influence individuals' behavior, nudging is a practical approach for policymakers to try to solve pressing social and individual problems. Second, insights from psychology and behavioral economics, on which nudging builds, help policymakers to connect complex policymaking processes and goals to individuals' daily decision-making. Unlike in classical economic theory, the understanding of human behavior which lies at the core of nudging is derived from empirical evidence rather than abstract theoretical models. For the citizen, nudging offers two advantages—guidance in difficult decision-making processes, and the possibility to reject choices where they are contrary to the individual's preference or advantage. The fact that individuals can opt out of the nudge also provides a safety valve for occasions where the policymaker makes decisions based on other interests than the individual's.

Certainly, nudging as a behavior influence tool also has a number of weaknesses. One of the main weaknesses is the difficulty to design a policy intervention correctly and make sure that what works in an intervention environment also has the desired effect at a population level. The problem is that there is a lack of evidence at a population level since few applied research studies have had resources to work with an entire population as a sample. Another weakness with nudging is that humans adjust and change their behavior based on changes in their environment. It is therefore difficult to be sure how different individuals react to the same nudge. An additional problem for policymakers is that a nudge's full potential might only become apparent after a certain adaptation period. Furthermore, the degree of efficacy of nudging is necessarily difficult to judge because of the counteracting force of marketing by the companies negatively affected.

Which are some consumption sectors that benefit from nudging?

**Transport**

Nudging can and has been usefully employed internationally in various sectors of consumption. One example is personal transport. The main challenge of private transportation is the heavy reliance on private car use. Therefore, the focus of shaping more sustainable mobility patterns is intimately tied with the nature of infrastructure provided and through shaping the transport environment to compete with the convenience of car use. Types of nudges which have been used globally include: framing of information, since behavior depends to some degree on how the situation is presented or with what words the issue is formulated, such as by expressing car fuel consumption as litres per km instead of kgs per litre; feedback on transport use and mobility patterns, such as through mobile apps; feedback on driving patterns, such as through car alert messages; changing the physical environment, for example through road planning that alters driving speed and patterns; and mobile apps that encourage walking as well as utilize the power of social norms by encouraging sharing of amount walked with other online users.

**Housing**

Another example of nudging is in energy consumption for residential housing. This is important since buildings account for a large proportion of energy use in most countries. Residential energy efficiency is influenced by two types of behavior. Much of energy usage in households is routine behavior, which is not done consciously. Energy efficiency investments are more conscious and made more rarely; thus, people look for and process more information in order to make the decision. Some of the typical nudge interventions used include feedback on energy consumption, i.e., informative billing, metering and displays; social comparison feedback, such as by providing factual comparison of usage with comparable households; prompts for low-cost changes to the physical environment that aim to influence error-prone repetitive behavior, such as stickers reminding the building user to turn the lights off; and changes to the default option, such as when the environmentally friendly contract is offered as the default.

**Food**

For food consumption, nudging has been applied to promote environmental goals such as to reduce meat consumption (and thereby climate change), and to reduce food waste. Food consumption is to a large degree a habitual process, which makes it prone to nudging. The main areas of nudges include: providing simplified information for supermarket products, which is ensured through government legislation; changing accessibility and visibility, given the empirical findings that the visibility, presentation and experience of food has significant impact on the type and amount of food consumed; influence size, given the finding that portion, plate and spoon size has a significant impact on the amount of food consumed and food waste; positioning of product choice, such as at eye height or at the front of a supermarket, with the empirical evidence that this has a great impact on consumer choice; and providing information about others' behavior and ideal-type behaviors, given that humans seem to be greatly influenced by their social environment when it comes to the type of food and the amount of food they consume, such as by asking people to visit a buffet many times rather than take a large helping in the first visit. Research shows promising results from such food environment nudges. Simple and cost-effective adaptations like making a menu's default option plant-based can significantly decrease meat consumption, while social cues and smaller plate size can reduce food waste at hotel buffets by up to 20 percent.

How can nudging be institutionalized in governments in Asia-Pacific?

There are a number of ways to institutionalize the fairly new concept of nudging in government policy. One is to create a unit within the state administration or supporting institutions. Globally, more than 200 institutionalized behavioural insight-related bodies exist in the public sector, although their use in Asia-Pacific developing economies remains at a nascent stage. The most established example in the Asia-Pacific region of the use of nudging across government policies provided by that of Singapore, which has used such behavioural science to influence household behaviour since the 1960s. This includes using nudging to reduce water consumption and encourage the use of public transport. Amongst developing countries in the region, the Government of India has recently utilized behavioural insights in the implementation of large-scale schemes, such as Swacch Bharat Abhiyan for the cleaning of public spaces.
Indeed, in 2019 the Indian Government in its annual economic survey made a strong case for institutionalising nudging in the administration by setting up a nudge unit in the Government planning agency, NITI Aayog.\(^\text{11}\)

There might also be a need to create demand and capacity for this kind of expertise within the public administration. This may include training events, capacity building and networking across various sectoral government departments dealing with consumer issues. A broader deployment of nudges within the public administration might also require political discussion, which may include receiving parliamentary approval. Going ahead, it might also be relevant to engage municipal administrations, as the municipalities provide a wide range of services in general and particularly in areas relevant to sustainable consumption.

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### Endnotes


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The MPFD Policy Briefs aim at generating a forward-looking discussion among policymakers, researchers and other stakeholders to help forge political will and build a regional consensus on needed policy actions and pressing reforms. Policy Briefs are issued without formal editing. This issue was prepared by Shuvojit Banerjee (Macroeconomic Policy and Financing for Development Division). For further information on this issue, please contact Hamza Ali Malik, Director, Macroeconomic Policy and Financing for Development Division, ESCAP (escap-mpdd@un.org).

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