

Green Nudges:

A New Way Of Looking At Environment Policy

Nithya Srinivasan

Effectiveness of environment policies widely depends on the underlying model of individual behaviour. Traditional environment policy has largely focussed on neoclassical economic models that emphasize the rational, self-interested behaviour of human beings and their stable preferences. In recent years however, behavioural economics has generated considerable evidence that individuals work in a 'bounded rationality' framework .i.e. deviate from full rationality and pure self-interest. It is important to include alternative models that take into account bounded rationality and cognitive biases of individuals while designing policy instruments.

This line of thinking emphasizes the fact that human beings may not always be the rational, profit maximising individuals we assume them to be. Issues such as perception of fairness, social status, and conditional cooperation, imperfect information etc. greatly affect their decision making process and having such a complex set of motivations can have many implications for environment policy making. Green nudges are fast gaining popularity amongst policy makers and more and more of these behavioural traits are getting incorporated into environment policymaking. For e.g., in the United Kingdom, the Behavioural Insights Team has been active across a variety of policy fields. In the European Commission, the Directorate-General for Health and Consumers has launched a framework programme to support behavioural economics work in the Commission as a

Management and Budget has drawn inspiration from behavioural economics in the areas of health-care provision and financial regulation. It's time that such interventions are taken actively in the context of India, especially with the advent of schemes such as the Swachh Bharat Abhiyan etc.

Behavioural economics brings to light important characteristic of distributive preferences such as accountability, efficiency, need and equality. For e.g., Fairness concerns appear to be particularly relevant as distributional implications differ dramatically between different instruments ranging from environmental taxes, fuel economy standards and tradable emission permits. Though conventional theory establishes that people free ride for higher material payoffs, considerable evidence has been found to support that people care about perceived fairness and conditional cooperation i.e. are willing to choose the cooperative alternative if others do too. This has been noted with regard to siting nuclear waste on Switzerland, climate change negotiations between countries as well as contributions for establishing natural parks etc. People care about social norms such as norms to conserve and recycle energy as well. The way information is conveyed has significant effects too. For e.g., information about the negative effects of water consumption on the environment and information about self-water consumption in relation to that of others has powerful effects on water conservation. Environment labelling or

willingness to behave (voluntarily or in the presence of peer pressure) in an eco-friendly manner.

Consumption is socially conditioned. Certain types of consumption is conspicuous and sensitive to social status. A survey in Norway revealed that 73% of the population would like to recycle waste as they would like to be seen as responsible citizens (Brekke et al. 2003). Besides self-image, peer image seems to be an important consideration in social responsibility. List et al. (2004) indicate that respondents are much more likely to choose a costly environmental practise if others are informed about their choices.

Social failure is as serious a matter as market failure. Application of behavioural science can be used to make smarter policies and nowhere is this as true as in the domain of environment and resource economics. Subtle inexpensive changes can be brought about by simple changes in the way information is conveyed and/or social environment is designed. For e.g., open defecation is a huge problem in India which programmes such as Swachh Bharat Abhiyan aim to tackle. In spite of building toilets, less than 50% are in use. World Bank has proposed communicating the negative effects of this behaviour as opposed to the benefits received. This suggests the usage of a significant finding of behavioural science, the principle of 'loss aversion' which states people value potential losses twice as much as potential gains. Sense of ownership also brings about significant improvements, as now someone is held accountable for the situations.

Governments and policy makers in many ways are architects as they design the 'choices' that condition the social environments we live in. Choice architecture that leverages the fundamental

truth that all actors and agents in the economy are less than perfectly rational can be extremely successful in nudging us to take choices that are environmental friendly. This idea of Nudging was presented by Cass Sustein and Richard Thaler in their 2008 book called 'Nudge'. It is a concept in behavioural economics which proposes that positive reinforcements and indirect suggestion are ways to influence behaviour of individuals to derive socially optimal outcomes.

In their book, Sunstein and Thaler promulgate the philosophy of "libertarian paternalism". They establish that people are subject to cognitive biases and prone to predictable irrationality. Thus, if the social environment can be appropriately designed, people can be nudged into making more optimal choices. This affects everything from designing the voter ballot to designing employee healthcare forms. Nudges are favoured for their simplicity and cost effectiveness, though they have potential drawbacks as well.

Green Nudges in action

The strategy to offer the most environment friendly option as the default choice has proven to be quite effective in a number of contexts. This method relies on the individual's inertia to change and the relative laziness of people with approaches that do not naturally come to them. For e.g., in the US, energy suppliers and telephone operators now send bills in electronic formats as the default option. If the candidate wishes to receive the bill in hard copy, they must specifically ask and would be charged for this service. This strategy has helped in saving a lot of paper in the country. This is in contrast to the practice

adopted in France by majority of the service providers which requires clients to themselves take actions to make sure they no longer require bills in paper form.

Another well-known example is the fact that not providing customers with plastic bags at checkouts obliges them to ask for or even pay for them, as has been the case in China since 2008 and in Italy since January 1st, 2011. This dual obligation constitutes a powerful restriction on overconsumption and encourages people to favour alternative options, such as reusable bags. This policy has recently been adopted in a large number of super markets and shops in India and the success of this policy indicates more large scale implementation of this nudge.

Interventions based on spontaneous adherence to social norms have been launched for various environmental purposes. This uses principles of informational feedback and comparison with peers to generate desirable eco-friendly behaviour.

In an experiment on waste recycling in California, every day for four weeks, a note was placed on the door of 120 homes informing the occupants of their neighbours' achievements and contributions to recycling. The volume of recycled material rose by 19% and besides, this effect was durable, as it continued for four weeks after the campaign was discontinued. The strength of this strategy lay in providing informational feedback on the behaviour of the neighbourhood, and thus of the social norm applicable in the district.

The area of energy consumption can also benefit from this type of strategy.

An experiment carried out in California compared the effectiveness of various forms of informational feedback. In comparison to methods that relied on explaining the harm caused on wasting energy and those which propagated ideal behaviour, the ones that were the most successful was the one that displayed neighbours' preferences. Similar practices have also been adopted by hotels for the process of water saving. These make use of an important component of human behaviour i.e. humans tend to compare themselves with their peers and would choose the 'right' option if it would result in greater social acceptance.

Being conscious of social norms can be based on a simple perception of surroundings and doesn't necessarily have to be based on comparative statistics. A person living in an urban environment with a large amount of rubbish is likely to litter too, while one who lives in a cleaner environment will undertake more responsible behaviour. In addition, campaigns that promote positive behaviour rather than condemn negative behaviour have also been proved to be more successful.

Limitations

Though Nudge theory and behavioural economics is very interesting, it is criticised for a variety of reasons as well.

Firstly, serious questions are raised in relation to ethical concerns. Often, the idea of architecting choices is scorned upon as it can lead to a paternalistic state. Further, there is potential for misuse of data of the people. It is important to note that governments themselves are not immune to these kind of behavioural shortcomings.

Secondly, there are limitations to the usage of nudge theory. Behavioural scientists can use these to develop more effective social programmes but as such, it has limited uses in solving the chaotic challenges of economic growth and stability. Further, some behavioural changes happen faster than others and it is advisable for policy makers to target the low hanging fruits first. Thirdly, what may work in one district/state may not work in another. Hence, testing practices specific to contexts is crucial. Further, many nudges may not be sustainable solutions as long term responses of individuals may differ from short term responses.

Conclusion

In spite of the temporary nature of nudges, it can have a significant impact on policy outcomes in India. As a developing nation, India faces a number of social issues and government must develop innovative policy solutions for the country. Thus, behavioural economics can be a great start but it must be accompanied with consistent well defined environment policy measures.

Bibliography

Dalmia V., 2014, Mann Ki Baat: Innovation in Indian Policy Making, Observer Research Foundation

Gsauttbauer E., 2013 Behavioural Economics and Environment Policy: Theory and Experiments, Universitat Autònoma de Barcelona

Centre d'analyse stratigique, 2011, Green nudges: New incentives for ecological behaviour

Brown D. et al., 2010, Behavioural Economics and the Environment, Springer accessed at www.springer.com