# NO PLASTIC BAGS? THE POLICY CHALLENGE OF CHANGING CONSUMER (AND CORPORATE) BEHAVIOUR FOR FUTURE SUSTAINABILITY

Cameron Richards<sup>1</sup> and Irina Safitri Zen<sup>2</sup>

<sup>1</sup> Perdana School of Science, Technology and Innovation Policy, Universiti Teknologi Malaysia (UTM) <u>cameronkrichards@utm.my</u>

> <sup>2</sup> Sustainability Unit, Universiti Teknologi Malaysia (UTM) *irinasafitri* @utm.my

#### **ABSTRACT**

In order to implement policies of sustainability to change consumer behavior, governments must also gain sufficient support from various stakeholders across the wider community as well as the private sector. In Malaysia as elsewhere government campaigns to encourage shoppers to stop using plastic bags illustrates not only the challenges of getting the community to 'go green' but also to sustainably change consumer behavior. The 'no plastic bags' campaign began in several Malaysian states before being adopted as a national policy direction. This paper will discuss this process in terms of the wider challenge of public education or awareness campaigns as government policy-building for future sustainability. It will also consider the role that corporate social responsibility policies play in the support provided for such campaigns by participating shops, supermarkets and shopping centres.

**Keywords:** corporate social responsibility, no plastic bags, public awareness campaigns, policy-building, sustainability

#### INTRODUCTION

'They call it the garden city, though more lately its trash town... Bangalore's residents in August and early September dealt with stench and garbage as rotten food, flowers, papers and plastic bags leaking noisome muck spilled into the roads and streets' [our emphasis]

— Jain, S. 'Why is Bangalore such a dump (these days)?', Reuters, September 12, 2012.

In late 2012 one of India's most 'up and coming' if largest cities Bangalore reached a point of collapse of its antiquated and inadequate waste disposal system and infrastructure. As the local as well as national economy grew substantially in the previous decade the associated growth of rampant consumerism played its part. Above all else the particular image of 'plastic bags leaking noisome muck' summarized not only the horror of a city literally awash in waste but also the pivotal challenge of getting people to change their habits when it come comes to separating, recycling, and treating or disposing of garbage. Various analyses of the Bangalore predicament in local newspapers focused at the time on the need for better policy implementation which — in addition to the need for improving the local infrastructure - might require penalties as well as encouragement to get the community to take responsibility for changing its bad habits. Although there is extensive talk of 'going

green' around the world at the heart of the human sustainability challenge is the policy challenge of changing consumer behavior.

Following San Francisco's efforts from around 2005 to ban plastic bags, many cities. countries and also non-governmental organisations around the world have embraced 'no plastic bags day' or similar public education campaigns as an emblematic 'going green' focus for promoting environmental awareness in consumers (e.g. Hoskins, 2008; Avallone, Giraldi & de Oliveira, 2012). This is likewise the case in Malaysia where cities such Penang have lead the way - followed by other states such as Selangor and Sarawak - in making shoppers pay 20 Malaysian cents (USD 0.06) per plastic bag as part of a strategy of 'reeducation' (Baker, 2010). Such campaigns inevitably involve a collaboration between government and not only supermarket chains (and the private sector more widely) but also the wider community. More recently the campaign was even adopted in Malaysia by government hospitals (Borneo Post, 23rd February, 2012). Critics – which include Malaysian plastic manufacturers - argue that the 'no plastic bags' campaigns are largely a gimmick for each of these 'macro-stakeholders' (e.g. Lim. 2012). Indeed after the initial impetus for such campaigns a special edition of The Malaysian Insider (12th November, 2010) reported a negative response by not only consumers but also scientists and environmentalists. Even if the direct and immediate effect of this campaign on the environment is mainly 'tokenistic' the campaign is still significant as a focus for whether constructive 'going green' outcomes of sustained behavioral change can be achieved as a strategic policy.

In Malaysia as well as in other countries where such campaigns have been conducted (England, the US, Singapore, etc.), it is not always immediately clear how much sustainable impact is actually being achieved. This paper will explore two related issues in relation to the Malaysian examples of the no plastic bags campaign. The first issue is to evaluate whether this campaign is really just a gimmick only – even if initially so – or whether consumer behavior is being significantly changed in the process. A second issue is whether government promoters and participating shopping centres in the campaign are really interesting in sustainable outcomes rather than merely a public relations exercise. The paper will be outlined in three sections. The first section will consider the general efficacy and importance of public educational or awareness campaigns to have an enduring or sustainable influence on consumers – not only in terms of their shopping habits but also their levels of environmental and social awareness. The second section will look more closely at the Malaysian campaigns as a case study in identifying the key factors in play which determine whether the campaign is mainly a gimmick and public relations exercise or rather a focus of more enduring purposes and outcomes. The third section will especially focus on how the crucial factor of supermarket and shopping centre participation inevitably reflects either surface or deep levels of corporate social responsibility.

## PUTTING GOOD INTENTIONS INTO PRACTICE: THE GREENING OF SOCIAL BAD HABITS

'What we need most now are the integrated government polices - laws and standards, taxes and credits, incentives and mandates, minimums and maximums – to guide and stimulate the marketplace to drive the innovation further, to commercialize these new ideas faster and to bring the revolution to life sooner' – T. Friedman, *Hot, Flat and Crowded*, p. 263.

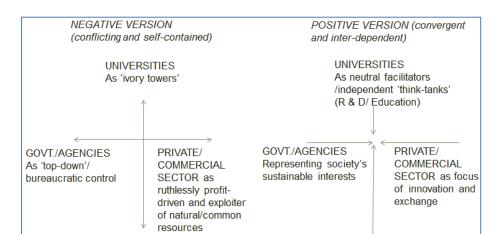
'No plastic bags' campaigns may be initiated by either government or non-government organizations (including community groups). The versions that we are focusing on in the Malaysian context here involve government initiatives in collaboration with supermarket chains, shopping centres and the private sector more generally. Both versions provide an interesting focus on the links to related notions of community awareness and

public education campaigns - which have a long history in different societies (e.g. Rifkin, 1989, Rist, 2008, Gilding, 2011). But in recent decades globally, public awareness or education campaigns have primarily focused on health awareness (e.g. Fogle, 2008; Draxen, Guenther & Hansen, 2009). There have also been many examples of 'going green' campaigns (e.g. Earth Day). These have been typically lead by globally focused community groups – with corporate and private sector advertising following suit to harness the growing currency of this push.

In this section we propose to outline a sustainable policy-building framework for evaluating as well as promoting how the key macro (especially public, private and civil society) stakeholders either individually or collaboratively participated in 'going green' or sustainability related public awareness or education campaigns in particular. In this way we can start with the role that community or society leadership (i.e. whether government or non-government based) takes in initiating some particular campaign to create awareness, to educate the public, and to ultimately try and change people's behavior. A starting point for any campaign, then, is the specific engagement of the community or public at large. As typified by anti-smoking campaigns, health-related campaigns typically try to shock the public into awareness. The 'going green' push perhaps tend to be more subtle focusing in particular on either latent feelings of guilt (i.e. guilt that we need to do more to safeguard or improve our environment) or desire (e.g. desire for a better, safer, and more sustainable world to live in). As the Earth Day network (www.earthday.org/) exemplifies, various public awareness or education campaigns typically and increasingly deploy not just conventional media but the internet in general and social media in particular.

As we discuss below in relation to the Malaysian 'no plastic bags' campaign', repeated follow-up are generally recognized as a crucial key to increasing awareness to the point of 'educating' consumers and changing their behavior. From a government policybuilding perspective in particular, this process gets augmented in terms of the interplay of macro directions and micro interventions. Micro interventions of government policy replicate a behavioral view of the basic educational process in terms of consisting of both 'carrots and sticks' - or social as well as economic engineering in terms of rewards and punishments. Micro intervention 'sticks' (taxes, standards, regulations, etc.) typically serve to provide extrinsic structure whereas 'carrots' may also include more intrinsic motivations ('going green' as the 'right thing to do') as well as extrinsic encouragements typically linked to financial concessions. Interventions in the process of a campaign or project typically aim to influence attitudinal or behavior change. In community awareness as well as formal education a sustainable learning process tends to presume the challenge of getting the right balance between carrots and sticks in the interplay between macro directions and micro interventions. Engaging intrinsic motivations are thus a prerequisite to really changing engrained habits or practices. Thus whilst any campaign should be an interplay of intrinsic and extrinsic motivations for some particular changed practice or outcome to be achieved with long-lasting sustainability.

Any community awareness or public education campaign inevitably involve or presume progressive layers of awareness, learning, and mindset or cultural change reflected in changed collective (and not just individual) behavior (e.g. Queensland Government, 2012). The achievement of initial awareness can either be a surface perspective or a first stage in developing or learning a more deep-level understanding influence practice. As noted below, the 'no plastic bags' campaign may simply mean to some that they now have to pay for their plastic bags – without any real understanding or interest in the need to 'save the environment'. Therefore the distinction between *superficial* and *informed* community (including consumer) 'awareness' corresponds to that also between a *surface learning* and *deep learning* model of organizational or society behavior change (e.g. Biggs, 2001).



COMMUNITY/CIVIL SOCIETY

consumer-driven and careless

as exclusive (us vs. them),

FIGURE 1. Conflicting vs. sustainable models of industry-government-community-university interactions

The initial origin or push for any kind of awareness or education campaigns is also typically initiated as a leadership intervention of some kind in the same way that a classroom teacher uses carrots and sticks to promote a potentially optimal learning environment as a committed strategy or policy. Leadership in the Malaysian and similar versions of the 'no plastic bags' campaign typically alternates between the initial and overseeing government intervention but also the private sector support and organization of the process in relation to the wider community – who thus may alternately be represented as merely consumers or valued members of society. These links describe the dominant three macro policy stakeholders (government, business, and the wider community). As Figure 1 depicts, the role of a the fourth macro policy stakeholder (academic critics or researchers) thus lies in the role of hopefully being a neutral focus for not just evaluating such campaigns but also assisting with strategies, methods and/or frameworks for supporting or even optimizing the process.

Profit/progress/competition vs. sustainability, quality, reciprocation (growth vs. equilibrium)

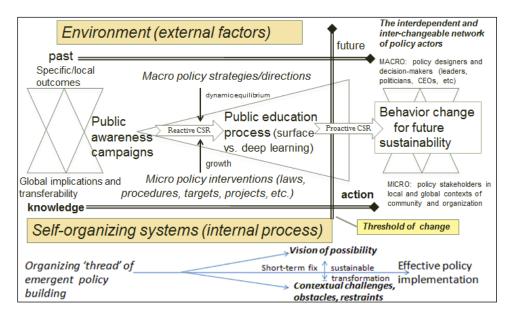
COMMUNITY/CIVIL SOCIETY as

sharing of natural/cultural resources

inclusive, caring, and equitable

Figure 1 further sketches out a general typology for considering an integrated model of how the four macro stakeholders might convergently work together for sustainably successful outcomes – or rather divergently interact in terms of superficial or surface aspects of mere rhetorical gestures or advertising gimmicks. Clearly a public awareness or education campaign with sustainability should have a systemic integrity as an interplay of internal and external factors. As suggested earlier, a policy view of the micro and macro factors of emergent sustainability corresponds to a related distinction or interplay between the intrinsic and extrinsic motivations framed by the behavioral psychology models of Pavlov and others. To the extent that such campaigns begin with individual as well as public as the precondition of any sustainable change in behavior or practice, perhaps the most useful theoretical framework to distinguish superficial and informed awareness lies in Alfred Schutz's (1973) Theory of Relevance. This theory points out how a changing collective and also individual awareness or consciousness can either be anchored in fleeting media (e.g. advertising) images or more sustainably be connected to 'life-worlds' made up of the interplay between individual agents and social structures and conventions.

FIGURE 2. An integrated framework of how public awareness and education campaigns can and should aim for appropriate, constructive and sustainable behavior change



As will be discussed further, a distinction can be made between 'corporate social responsibility' (CSR) as mere rhetorical affectation for publicity purposes and something more fundamental and enduring. We think that one of the most useful models to appreciate this involves the distinction made in some versions of constructivist learning theory between surface and deep learning (e.g. Biggs, 2001). This distinction generally corresponds to the related influential delineation in organizational learning between single loop learning and double loop learning (Agyris and Schon, 1984) - with the latter focused on a sustained transformation of underlying mindsets. Surface modes of learning tend to remain focused on the external and superficial motivations, awareness and information sharing. Deep level modes of learning rather tend reflect the convergent and common links between individual and collective levels of action on one hand, and on the other knowledge and understanding. Such a model also is consistent with Bandura's (1977) notion of Social Learning which can be reciprocally reinforced within communities or organizations as a modeling process involving the four stages of attention, retention, reproduction and motivation. In this way - as Figure 2 suggests - the most successful and sustainable public awareness and education campaigns for behavior change are those that achieve a deep convergence or collaboration between all the stakeholders. The questions that always remains or is asked when applying this framework to the evaluation of any particular campaign, then, is whether the initial efforts of awareness building are leading to something more enduring and substantial.

#### THE CASE OF THE MALAYSIAN 'NO PLASTIC BAGS' CAMPAIGNS

Every plastic carrier bag that has ever been produced is still on the planet, in landfill, hedgerows, or floating in the sea... killing over 100,000 seabirds, dolphins, seals, whales and turtles every year

- R. Hoskins, Ban the Plastic Bag.

In this section we propose to explore further some of the key issues to do with the Malaysian 'no plastic bag' campaigns. This will be linked to feedback and provisional

findings provided by a particular study we conducted together with associates in Johor eight months after the national plastic bag ban was activated in January 2011. The study involved answers to a standardized questionnaire by 262 households. Johor state did not have the same entry period as several other states which trialed the campaign earlier. Because of this, these other states (in particular, Penang, Sarawak and Terengganu) typically had a longer 'phasing out' period from not only the rest of the Malaysian states but also similar transitions in Western countries. Western versions of the campaign tend to be somewhat accelerated. The Malaysian way often entails a more gradual transition. This is especially so in rural parts of the country where a significant number of people might well baulk at the extra cost as well as initial inconvenience of paying for plastic bags.

The related campaign transitions from *awareness* to *learning* and on to eventual *behavior change* hopefully are crucially dependent then on dominant and changing consumer perceptions about the campaigns across diverse local contexts. In this way the Johor study nevertheless remains provisionally useful in providing a window on to the initial transition period in terms of emerging perceptions in relation to a number of key questions. There are three general issues that we propose to discuss in this section as a foundation for exploring initial progress in the trajectory from general awareness of the campaign towards possible behavior change in the long-term. First, what changes in support or resistance to the campaign do we see happening in this period? Second, are consumers really starting to make a connection between plastic bags and 'going green' in terms of actual environmental awareness and appreciation? Third, do consumers generally accept or not that participating shopping centres do so from an authentic sense of corporate social responsibility?

After eight months there was almost universal awareness of the campaign. 94% of respondents indicated that they were very much aware not just that they were paying for plastic bags but that this was part of an awareness campaign. At this stage also the survey indicated generally positive perceptions. Just on 75% of respondents indicated that they supported the campaign. In turn basically half of these particular respondents provided strong support for the concept. However a slight majority did indicate they did not want to see the campaign extended to include the traditional night, morning and wet markets which provide an alternative to the big supermarket and shopping centre chains. In sum then – in response to the first key issue – there was solid and emerging support expressed for the key idea of the campaign that people should become more environmentally aware and be prepared to change old habits of behavior.

Although the actual commitment in action rather than words is often not clear from surveyed responses, there was at least promising recognition from respondents that they were confident in the success of the campaign (66%). The degree of acceptance of the principle of doing away with plastic bags or using reusable alternatives is also not so clear. As expected there were initially significant rates of people (23%) forgetting to bring their own reusable bags at least once but these quickly reduced in percentage. Only 11% regularly purchased the more expensive fashionable alternatives sold by supermarkets or stores. 38% of those who do regularly use reusable shopping bags say they pay for plastic bags when they forget to bring a reusable alternative. There was a much greater use of shopping trolleys as a substitute for bags altogether. All of this could well be more a comment about the cost of plastic bags than actual commitment to going green.

Participating supermarkets and other shopping centre stores are invested with the responsibility to promote campaign awareness through media advertisements as well as flyers and posters. In this way participating businesses and corporations are able to also harness the increasingly positive association that it is 'doing its bit' by 'going green'. Only a minority of respondents supported the view of some critics that these campaigns were primarily a public relations gimmick. Yet there was not strong support for the contrary view that the campaign was primarily motivated by intrinsic motivations of altruism and

environmental or social responsibility per se. This was also despite how campaign advertisements made it clear that the cost of having to pay for plastic bags would not be used for profit but to fund other corporate social responsibility activities by the participating supermarket or shopping centre chains. In other words, there was a sense that many were yet to be really convinced about this.

During the early days at least of the national campaign there were several newspaper reports of perceived consumer suspicions that the no plastic bags campaign was an initiative by stores to make extra profit (e.g. *The Star*, January 11<sup>th</sup> 2010). Our interpretation of the overall feedback from survey responses is that is whilst there is not strong support for the campaign there is nonetheless general acceptance of the rationale and process informing this. Also whilst there is a deal of healthy skepticism about the motivations of participating politicians and businesses this has generally been balanced by the initial good faith of consumers (and the public at large) to give the campaign stakeholders the provisional benefit of the doubt about their long-term commitments to this. However governments and corporations alike should certainly not take this provisional support for granted.

### FROM SURFACE TO DEEP CORPORATE SOCIAL RESPONSIBILITY: A KEY TO THE FUTURE SUSTAINABILITY OF MALAYSIAN 'NO PLASTIC BAGS' CAMPAIGNS

'Researchers (have) found that longer term [corporate responsibility] commitments were more likely to be seen as driven by a genuine concern for increasing society/community welfare, while shorter term campaigns were more likely to be viewed as a way to exploit the cause for the sake of profit' —Bhattacharya, Sen & Korschun, Leveraging Corporate Responsibility. p. 193

We have elsewhere discussed how increasingly sustainable policy-building in the world is a function of macro stakeholders revolving around the industry-focused interplay between government and the corporations or rather public and private sectors (Richards and Padfield, in press). As Thomas Friedman amongst other has pointed out, in a 'hot, flat and crowded' world the private sector businesses and corporations especially have not only the possibility but also the responsibility for coming up with innovative solutions and providing the leadership directions which many governments around the world fail to provide (Cf. also Rist, 2008; Gilding, 2011). To the extent that 'going green' is increasingly becoming a global grassroots movement, this development has also put immense pressure on corporate organisations to show that they are not just ruthlessly profits-driven only but also practice social and environmental responsibility and accountability. In this way the concept of corporate responsibility has become the focus also of a growing awareness of the importance of sustainability as a convergent rather than 'either/or' view of the link between future economic and environmental sustainability. As Bhattacharya, Sen and Korschun (2011, p.8) put it, there is increasingly a sense in the marketplace that 'a company's longterm success, and sometimes its existence, is inextricably tied to its stewardship of not just its own well-being but also that of the natural and social environments in which it operates' (Cf. also Farroknia & Richards, in press).

A key platform of the 'no plastic bags' campaign in Malaysia from the outset was that on designated days initially (and eventually for good) shopping centres would make consumers pay for their plastic bags. In Penang and eventually nationwide, this campaign focus then became enacted as a *No More Free Bags Everyday* ban (Basiron & Misni, 2011). The nominal excuse for this is to discourage consumers from using plastic bags and to train them to use reusable bags as part of the process of a growing awareness. But, if the end result is that people just get used to paying for the bags and do not dramatically change their

behavior, then it could be argued that the corporate social responsibility demonstrated by private sector support for the campaign has not and will not move from a superficial or surface to deep level commitment and motivation.

Whilst local State governments in Penang initially and then others first had the initiative to promote no plastic bag campaigns, it was supermarket chains like Jusco, Tesco and Mydin, and shopping centre corporations like AEON Bhd which made this growing campaign into a national policy reality. Whether these campaigns can be judged in the future to have been ultimately successful will very much depend not only the policy commitment and strategizing of these private sector corporations and business, but also on whether their levels of corporate strategizing is surface or deep learning. Just as governments may be tempted to see the idea of 'going green' as a kind of temporary gimmick rather than a long-term commitment, so too conversely participating shopping centres and supporting businesses or corporations may likewise be tempted to see them as source of profit and focus of advertising promotion. In this way we can make a basic distinction between reactive and proactive corporate social responsibility policies or strategies practiced by particular businesses or corporations.

Although as indicated above the primary importance of the no plastic bags campaign lies in fostering environmental or 'going green' awareness, learning, and behavior change, the actual focus on trying to significantly reduce the number and impact of plastic bags remains a significant one in its own right. We think that a central aspect of the corporate commitment to 'going green' as a matter of CSR lies in the range of support which can be given to promoting reusable bags and related alternative solutions. As reported above, some plastic manufacturers of Malaysia were quick to label local 'no plastic bags' campaigns as an advertising gimmick by both the government and shopping centres. Their line of criticism included partly valid points that at least some of the claims about damage to the environment directly caused by plastic bags had been exaggerated. Another claim was that proposed remedies may cause more damage to the environment than plastic bags per se (Lim, 2012). The 'no plastic bags' campaign has potential yet to be harnessed in Malaysia of shopping centre chains working with plastic bag manufacturers as well as other on possible alternatives - by 'working with' we also mean sponsoring science and technology innovations for viable solutions. In any case an integrated solution should and will include a range of types of reusable bags or alternative bag options extending from hession, canvas, and synthetic fabrics through to possible version of biodegradable plastic bags.

Another important focus which needs to further developed is the link between the 'no plastic bags' campaign and the related challenge of getting Malaysians to better *sort* as well as *recycle* their waste. This is a similar challenge to that being currently forced upon the Bangalore local government in the reports indicated at the outset of this paper. This would also need to involve separating organic waste from the categories of inorganic waste which can be recycled (i.e. paper, metal and glass). As the survey confirmed, many Malaysians have also got in the habit of using their plastic shopping bags to dispose of home organic as well as other waste products. In this way the 'no plastic bag' campaign will likely also evolve or at link to a large community waste management challenge of dealing with vast and growing realms of rubbish also in overflowing landfills.

The strength of the commitment of participating Malaysian shopping centres to the no plastic bags campaign is still to be firmly established for the long term. Likewise there is some way to go also to achieve an intrinsic commitment from private sector businesses and corporations to the associated 'going green' campaign. Just as public awareness is a crucial first step, so too that the private sector is at least committed to a reactive version of corporate social responsibility. The challenge then is the follow-up stage where reactive CSR needs to become more proactive and sustained – with active support for new innovations which can promote sustainability. Thus the real test is the next step from superficial to deep

and intrinsic commitment by all the macro stakeholders in unison. As Bhattacharya, Sen and Korschun (2011) further suggest, just as the rise of the stakeholder (actually 'a specific but large and diverse set of stakeholder segments' ranging from investors to community groups) produced the concept of CSR so too this also needs to be truly valued by these same stakeholder segments for it to be a sustainable idea in particular contexts or campaigns such as that discussed here,

#### CONCLUSION

This paper has focused on how the 'no plastic bags' campaign in Malaysia and elsewhere provides an example of 'going green'. It has done so in terms of a trajectory along which initial awareness starts a social learning process which hopefully results in sustainable as well as constructive and appropriate behavior change. Such an exemplary campaign – for various reasons, people's wasteful habits with plastic bags epitomize the global challenge of sustainable change – also provides the focus for exploring the wider challenge of getting the macro-stakeholders of shopping consumption (government, business, the wider community and researchers) to work together for sustainability in practice as a long-term commitment and not just as a convenient public relations gimmick or advertising ploy. Instead of the conventional approach of taking either a naively uncritical or cynically resistant perspective, this paper has recognized that public awareness and education campaigns represent emergent processes of behavior change at work which require a long-term not just shortterm framework for evaluating ultimate success or failure. In this way the paper has further discussed a study of consumer responses in terms of how people appear to be making the transition to not only new shopping habits - but also a 'going green' perspective with an increasingly deeper commitment to environmental and social concerns. Similarly it has focused on how the corporate social responsibility aspects are critical to future success and sustainability of local 'going green' campaigns. Whilst a good start has been made businesses and corporations need to move from merely reactive reasons for embracing the 'going green' concept to beginning to take a more proactive leadership role in collaborating with all macro and micro stakeholders alike within and outside a particular organization or community.

#### **REFERENCES**

- Avallone, I., Giraldi, J.& de Oliveira, S. J., (2012). Conscious Consumption: A Study on Plastic Bags' Consumers in Brazil, *International Journal of Psychological Studies*, 4, 1, 122-134.
- Argyris, C., Schön, D.A. 1978. *Organizational Learning: a Theory of Action Perspective*, Addison-Wesley.
  - Baker, A. (2010). Fees on plastic bags: Altering consumer behavior by taxing environmentally damaging choices, *Expresso*, Available at http://works.bepress.com/alice\_baker/1
- Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.
- Basiron, H. & Misni, S. (2011), Kudos For Malaysia's No Plastic Bag Day Campaign, Bernama 7<sup>th</sup> February, Available at http://envdevmalaysia.wordpress.com/2011/02/07/kudos-for-malaysias-no-plastic-bag-day-campaign/
- Biggs, J. & Tang, C. (2011). *Teaching for Quality Learning at University*, 3<sup>rd</sup> edn., McGraw Hill.
- Bhattacharya, C. Sen, S. & Korschun, D. (2011). Leveraging Corporate Responsibility: The stakeholder route to maximizing business and social value, University of Cambridge Press.
- Drazen, Y. Guenther L. & Hansen, J. (2009) Public Awareness campaigns, In K. Slack, K. Jack & L. Gjertson (eds), *Maltreatment Prevention; Toward an evidence-based approach*, Wisconsin Institute for Research on Poverty
- Fogle, C. et al (2008). Public Education Strategies to Increase Awareness of Stroke Warning Signs and the Need to Call 911 *Journal of Public Health Management & Practice*, 14, 3, 17-22.
- Gilding, P. (2011). The Great Disruption: Why the Climate Crisis Will Bring On the End of Shopping and the Birth of a New World, Bloomsbury Press.
- Hodges, C. (2012) Homeland Security partners with Simon owned shopping malls If You See Something, Say Something" public awareness campaign, Available at http://www.examiner.com/article/homeland-security-partners-with-simon-owned-shopping-malls
- Hoskins, R. (2008). Ban the Plastic Bag: A Community Action Plan for a Carrier Bag Free World, Alistair Sawday.
- Lim K. (2012) The real issue is litterbugs, not the use of plastic bags, *The Star*, 21<sup>st</sup> February, Available at http://thestar.com.my/news/story.asp?file=/2012/2/21/focus/10772048&sec=focus

- Richards, C. (2012). Sustainable Policy Making and Implementation: Towards a new paradigm for a changing world, *Development Review*, Vol. 21, Bangladesh National Academy for Planning and Development.
- Richards, C. & Padifield, R. (in press). Water as an exemplary focus of sustainable policy development: A Malaysian case study, *International Journal of Environmental Policy and Planning*,
- Farroknia, F. & Richards, C. (in press). The accountability challenge to global e-commerce: The need to overcome the developed-developing country divide in WTO e-commerce policies, in *International Business, Sustainability and Corporate Social Responsibility: Principles and Strategies to Balance Ethical, Social and Environmental Concerns with Corporate Requirements*, eds. L.Leonard & M.Gonzalez-Perez, Emerald.
- Rist, G. (2008). *The history of development: From western origins to global faith*, 3<sup>rd</sup> edn., Zed Books.
- Singh, J. (2012). Time to widen the 'No Plastic Bags' ruling, *The Star*, 3<sup>rd</sup> February, http://thestar.com.my/news/story.asp?file=/2012/2/3/focus/10665928&sec=focus
- Queensland Government (2012). Waste management community awareness campaigns http://www.health.qld.gov.au/ehworm/waste management/awareness.asp
- The Groundwater Foundation (2012). Good water. Good health. Good Choices. *Public Awareness Campaign Kit.* Available at http://www.groundwater.org/pe/pack.html
- Zhao, Q. & Stasko, J. (2002). What's happening?: Promoting community awareness through opportunistic, peripheral interfaces, *Proceedings of Working Conference on Advanced Visual Interfaces*, New York, 69-74.