Evaluating the Effectiveness of Policies and Programmes on Education for Sustainable Consumption: A discussion of the methodological challenges in investigating policy impacts towards sustainable consumption

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Abstract:
This paper provides a discussion of the methodological challenges that are faced in trying to evaluate the effectiveness of Education for Sustainable Consumption (ESC) policies and programmes. Two aspects of behaviour change are investigated: the driving factors and conditions for behaviour change towards SC and the ways in which governments can influence consumption practices. In regards to how research can investigate ESC policy, consideration is given to how the effectiveness of ESC initiatives can be properly investigated, and also to how research can identify policy opportunities in regards to strengthening ESC implementation.

None of these individual discussions provide an absolute solution to evaluation of the effectiveness of ESC policy, but they do provide substantial insight into how ESC policies can be more effectively developed. The individual discussion on policy research also provide some direct recommendations for improving the government's role in ESC implementation.

1. Introduction

The task of judging the effectiveness of policies and programmes on Education for Sustainable Consumption (ESC) and the promotion of responsible behaviour and sustainable lifestyles is a very difficult methodological challenge. As with all real-world social research, it is full of a multiplicity of significant factors and limits to demonstrating correlation between actions and impacts. A second challenge though that is more specific to ESC is that as a social process its ideal is to go beyond just mere knowledge transfer and to actually address the socio-cultural values that underpin current consumption behaviours while also instilling in individuals the reflexive learning skills that allow them to be critical problem solvers that can draw direct connections between their own personal actions and behaviours and the wider social and environmental challenges that are global in nature. These desired learning objectives are monumental, which means: one, it is very difficult to evaluate the progress being made towards achieving them; and two, even where progressive changes are identifiable it is almost impossible to demonstrate correlation with specific driving factors.

Before jumping to far ahead though and discussing the challenges faced in judging the effectiveness of policies and programmes for ESC, it is important to start at the beginning and address what is the hope (or objectives) in implementing ESC. Here, we actually have a much clearer task ahead of us, and ESC is an important concept from a policy perspective because it brings with it a much more practical and action oriented approach than several of the other difficult subjects in the sustainability rhetoric. ESC's focus is narrow and specific in comparison to the broad encompassing topics of both Sustainable Consumption and Production (SCP) and Education for Sustainable Development (ESD). ESC also has the key purpose of directly engaging individuals to participate in activities that will support the wider objectives of sustainable development (SD).

SD can be a difficult concept to fully conceptualise in educational curriculums due to its idealistic and theoretical nature that does not always readily lend itself to practical actions. While SCP often addresses very complex and technical issues that are void of a substantial human element. ESC provides a uniquely different learning opportunity based on simple and practical actions individuals can take

in their daily lives, and through this experiential learning process the wider principles of SD and sustainable consumption (SC) can be illuminated. Thus, this provides a valuable entry point into to the wider discussions about sustainable lifestyles as individuals' consumption patterns is one of the most pertinent lifestyle issues.

UNESCO explains the importance of ESC in the mid-term report for DESD as:

> *Education for Sustainable Consumption, a core theme of Education for Sustainable Development, is essential to train responsible citizens and consumers in this context: individuals need to be aware of their fundamental rights and freedoms, appropriately informed to participate actively in the public debate, oriented towards a conscientious participation in the markets. Hence, ESC has become a core component of ESD and global citizenship and generates awareness of the interrelatedness of central ESD issue* (UNESCO, 2009: 50).

In *Here and Now: Education for Sustainable Consumption – Recommendation and Guidelines* (UNEP, 2010), it is further explained that a part of ESC is about transferring the skills and knowledge for people to meaningfully participate in public discourse on SD/SC issues and to take an active role in economic and development activities in an ethical manner. The idea of sustainable consumption refers to a new social and cultural paradigm that challenges individuals with, "participating in the ongoing values debate about quality of life; developing critical analysis of information; controlling the human impact on nature; preventing life-style related illnesses; exercising social responsibility; and maintaining public discourse in order to guarantee accountability" (UNEP, 2010: 8).

ESC is addressed in this paper as a primary means for advancing the proactive participation of individual consumers in SC. In this manner, ESC is as an approach to raise consumers' self-awareness, advance their sense of social responsibility, and stimulate their autonomous choice to actively participate in SC. ESC also entails more functional knowledge in regards to the analytical skills to decipher what are sustainable and unsustainable consumption choices. The fact that ESC includes an array of functional knowledge to support individual practice and application is a main reason for it being an important learning theme of ESD. Thus, ESC can be understood as having a two-fold objective: the first objective is to advance participation in sustainable consumption practices, and the second objec-

tive is to provide a tangible entry into the wider 'philosophy' of sustainable development.

The two objectives of ESC provide a quantitative task and a qualitative task respectively. Achieving the first objective, more participation in SC, has a clear goal for which we are striving to reach. Though there may be some debates on what should be included in SC, it would be fully possible to set up quantifiable indicators of SC (i.e. less household energy consumption, less waste reaching landfills, more support for local food networks, etc.) and then to judge a group's (country, society, city, etc.) progress towards achieving those goals. For the second ESC objective, influencing individuals' awareness, values and behaviours so that they become proactive actors in supporting the transition to a sustainable society, we are left with a qualitative issue regarding value and behaviour change that is much more difficult to evaluate. Furthermore, considering that the actual task being addressed in this paper is not solely measuring the amount of value and behaviour change that has occurred but to also find a means to evaluate how effective a given ESC policy or programme is in driving that value change, it is doubly complicated.

2. Behaviour Change: Considering the driving factors towards sustainable consumption

When considering what governments can do to promote and enact a social transition to SCP, a wide range of policy opportunities arise. Governments can work across many sectors including production, industry, agriculture, energy, etc. sectors to influence change, and they can also build infrastructure that will provide for better efficiency. However, these efforts mainly deal with sustainable production, and when we specifically consider sustainable consumption there is no substantial alternative of focus besides affecting consumer choice and behaviour. Thus, if governments hold the achievement of SC as an important foundation for establishing a low-carbon, sustainable society then the consumption choices made by the end-user should in many ways be the starting point for their policy work. In the U.K. government's sustainable development strategy document *Securing the Future* (2005), a new approach is presented on how the government can better influence consumer behaviour towards sustainable consumption. This is a five point strategy:

1) **Enable** – remove barriers that discourage sustainable consumption, provide facilities and infrastructure that encourage sustainable consumption, educate and give information about how to consume sustainably;
2) **Encourage** – establish measures to encourage and reward good behaviour, discourage and penalise bad behaviour, and enforce action when necessary;
3) **Engage** – involve the public, communicate and campaign, utilise media resources, stimulate community action;
4) **Exemplify** – lead by example and achieve a policy consistency
5) **Catalyse** – building from the other four points, make major shifts in social and cultural habits to break old habits and kick start change
(adapted from HM Government. *Securing the Future.* March 2005: Ch. 2, pp. 24-41).

To understand the government's role in influencing consumer behaviour towards SC and what actions they can take, it is necessary to investigate how and why consumer behaviour is affected. Let us first consider what is happening when an individual buys an environmentally-friendly or an eco-labelled product. First, the consumer is motivated by some driving value or ethic, and in this case a desire to protect the environment. Second, the consumer holds a corresponding belief that buying environmentally-friendly products is an active means to help protect the environment. Finally, there must be trust placed in the information conveyed by the specific product and its label for the consumer to assume that the purchase of that product helps to achieve the previous two objectives. This general scenario of the motivations behind SC is one often assumed as the ideal standard, the reality can be much messier and driving factors and motivations much more diverse and untidy, however the main point of this general scenario is to demonstrate that the most common drivers are value-motivations.

When consumer behaviour and choice are directed by this type of value-motivation, it is a complicated issue to clearly understand, explain and predict. Many available models of consumer behaviour have been developed, but all have significant limitations in explaining variance of behaviour among differing consumers. A full review of these numerous models is not possible in the limited space of this paper, nor would it provide substantial benefit. Rather, consumer behaviour models are briefly presented to provide a theoretical insight in to how and why consumers alter their consumption patterns. The Value-Belief-Norm theory of pro-environmental behaviour

(Stern, et.al., 1999) provides one of the strongest basis for analysing shifts in consumer behaviour towards sustainable consumption. This work builds off of Schwartz's Norm Activation model (1977), and links it to environmental value theory. The Value-Belief-Norm theory postulates that pro-environmental values, an awareness of the consequences of one's actions, and an ascription of personal responsibility can lead to the acceptance of a new environmental paradigm. Through this process, an individual moves towards developing a personal norm for pro-environmental behaviour (Stern, et.al.,1999: 84-6). Even though this model is considered one of the strongest for explaining pro-environmental behaviour, it still can only account for 35% of the variances between personal norms and indicators of pro-environmental behaviour (Jackson, Jan. 2005: 58).

These models provide benefit in explaining how and why significant behavioural changes occur while also demonstrating the importance that values often play in this process. It is also useful then to further understand what types of values can specifically support a pro-environmental behavioural change. From his work on the effects of values on human behaviour, Schwartz proposed ten motivational value types:

- **Universalism** – understanding, appreciation, tolerance, and protection for the welfare of all people and for nature,
- **Benevolence** – preservation and enhancement of the welfare of people with whom one is in frequent personal contact,
- **Tradition** – respect, commitment, and acceptance of the customs and ideas that one's culture or religion impose on the individual,
- **Power** – attainment of social status and prestige, and control of dominance over people and resources,
- **Security** – safety, harmony, and stability of society, of relationships, and of self,
- **Conformity** – restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms,
- **Achievement** – personal success through demonstrating competence according to social standards,
- **Hedonism** – pleasure and sensuous gratification for oneself,
- **Stimulation** – excitement, novelty, and challenge in life,
- **Self-direction** – independent thought and action-choosing, creating, exploring

(Schwartz, 1992: 5-12).

Cialdini's Focus Theory of Normative Conduct (1990, 1991) provides recognition of the importance social norms can play in shaping our behaviour. The focus theory distinguishes two types of norms: *descriptive* – informing our own behaviour based on what we experience others doing, and *injunctive* – behavioural constraints based the conceived moral rules and guidelines of a social group (Jackson, 2005: 59-60). This is significant in that it demonstrates how although individual behavioural change is often addressed on the basis of individuals achieving value learning one by one, if a critical mass of people demonstrate pro-environmental behaviours this can have a much larger effect as a conditioning social norm.

A major difficulty in the real world to assess how values actually affect consumer behaviour is the fact that in the market place only purchases count (as a register of one's desires). It is highly feasible that there are people who hold pro-environmental values but are blocked from expressing these in their consumer actions due to multiple barriers that are present in regards to sustainable consumption, including affordability, availability, knowledge of product choices, convenience of product, feeling of powerlessness in effecting change. It is also important to note that predominant social and institutional structures can effectively lock consumers into specific consumption patterns. "Hence while ecological citizens struggle to use their limited influence to transform the market through mainstream channels, the constraining institutional factors which delimit the choices available are being reproduced societally, and the major consumption decisions are being made out of the public eye, away from market pressures" (Seyfang, April 2005: 297).

The various behaviour models provide some insight on the types of factors that may influence a behaviour shift towards sustainable consumption. What is clear is that value-motivations and pro-environmental orientations must be a key area of focus in policy activities. Governmental activities should first aim to alleviate barriers to practicing SC, and second to provide better opportunities for SC (both in quantity and quality). The issue that remains less obvious from the review of behaviour theory, and which suggests an area needing further research, is how people actually learn and incorporate new values into their daily practices.

3. Behaviour Change: Addressing how policy and programmes can influence practice

If we are placing the main burden on governments to drive the social transformation towards more sustainable societies, than we must consider what are the roles they can play in shaping this transformation and what are the major actions they can actually take to drive behaviour changes as they relate to consumption practices. Traditionally, the process of consumption has been explained from a perspective of rational utilitarianism which views the consumer as the only influential actor. Unfortunately, this position has ignored the role social factors, marketing and governance can play in directing consumption practices. Furthermore, governments and politicians have avoided interfering with individual consumer sovereignty since this theory argues that utilitarianism within the marketplace is the key factor to achieving the best for all of society. The free-market approach of modern economics also influenced policies by arguing that being a 'good citizen' is inextricably linked to a mandate for regular consumption (Hobson, 2002) and that the "high-consumption society" is the ideal model for advanced societies. The troubling social Darwinian sentiments in this thinking aside, it has become increasingly clear that unrestricted utilitarian individualism is actually at fault of marginalising political discussions on issues of "collective good" or "civic duty".

The historical pretext must be understood if proper attempts are to be made for a social transformation towards SC because it has long been endorsed by both public and private sectors that the type of growth linked to increased consumption is synonymous with achieving social development. Sanne suggests that in many cases consumers are locked-in to a work-and-spend lifestyle by the conditions that are deliberately promoted by businesses and producers (2002: 286). Governments will need to recognise both how social infrastructures define specific consumption possibilities and also the ability they have to influence the values that guide individual behaviour if significant inroads are to be made in promoting SC practices.

"The overarching challenge regards the role of communication and education in supporting and promoting and normalizing visions of sustainable lifestyle" (UN-DESA, internet: 2009). This is a strate-

gy that must be based on rewarding and encouraging good behaviour rather than punishing bad behaviour. This type of positive, transformative action is much more difficult for governments to enact with the same level of success that they have in establishing policies for punitive, ameliorative actions. The achievement of SCP will require the partnership of all of the various actors involved in the processes of consumption and production: producers, retailers, public institutions/government, mass media, NGOs, academia, and of course the consumers. It is critical that any analysis of the key leverage points for embedding SC in social practices specifically address the sociocultural factors and market infrastructures that play a significant role in preconditioning consumer behaviour.

It is thus an important task to detail the means available for influencing consumption practices and consumer behaviour. Two distinct aspects must be considered in regards to this issue. First, examination of the various drivers that structure the possibilities of consumption practices is needed. Second, identification of the tools and mechanisms available to governments for encouraging changes in consumer behaviour is also needed. Patterns of consumption and production have been significant forces in shaping the structure of modern civilization. The UN-DESA report *Sustainable Lifestyles and Education for Sustainable Consumption* identifies six drivers of current consumption practices: economic development, technological progress, political settings and policy actions, cultural and historical contexts, social factors and conditioning, and psychological motives (internet: 2009). An examination of these drivers provides insight into the various factors that may shape a consumer's decisions and lead to a scenario where an individual cannot express his preferred behaviour. In any given society, these six drivers can be analysed based of the types of consumption practices they support/encourage and also in regards to the limits/barriers they create for practicing SC. An important part of achieving SC will be to increase the number of clear and easy opportunities for practicing consumption in a sustainable manner.

In order to properly consider the various ways in which governments can influence society and encourage sustainable consumption, it is important to understand the various policy tools and mechanisms governments have at their disposal which can be used to influ-

ence consumption practices. A report by the German Technical Co-operation (GTZ) and partners (2006) details a set of five policy instruments to support sustainable consumption and production. First, governments often rely on *regulatory instruments*. These are successful in enforcing minimum standards and controlling against negative practices, however there is a clear difficulty in encouraging good practice through regulation. Second, another tool governments often use is *economic instruments*. These can include negative taxing, but are more successful in promoting good practice through such things as positive subsidies and green procurement strategies. Third, governments can use *educational instruments*. Though these are recognised as a standard part of the formal education sector, they are seldom applied outside of this sector as a tool of informal education. Educational instruments can focus on the production side through research, development and production training. They can also be applied to the consumption side through consumer education and the promotion of participatory learning/critical analysis techniques. The fourth instrument, *cooperative instruments*, are becoming more common and are used to create voluntary agreements (most often with industry) to improve production techniques and provide technology transfer. Finally, governments can use *informational instruments* to increase consumer awareness of sustainable consumption options such as eco-labeling, auditing and reporting, consumer advice, and environmental quality targets (adapted from Tyson, ed. 2006).

FIGURE 1: DRIVERS OF CONSUMPTION AND LIFESTYLES
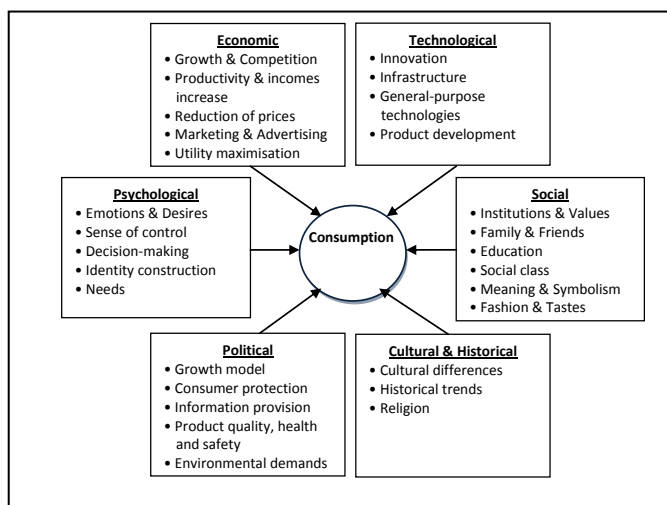
Source: UN-DESA, internet: 2009

4. Policy Research: Judging the effectiveness of ESC initiatives

Understanding the goal of ESC to influence consumer behaviour towards SC practice, it is possible to better visualise what types of achievements ESC initiatives should be achieving. These are two-fold: first, increased practice of SC while also decreasing practices of unsustainable consumption; and second, increased prevalence of socio-cultural values-behaviours that support SC. As already mentioned, the first achievement can be quantifiably measured, while the second achievement is much more difficult to assess (as the reviews of behaviour change demonstrated). Since the second achievement often drives the first achievement, it is thus very difficult to demonstrate progress towards SC when it is at a mid-term level and the socio-cultural shifts that are occurring have yet to be actualised in practice.

At this level of behaviour change and socio-cultural shifts towards SC, ESC provides the appropriate focus and tools for governments to affect this type of change. Here, we must return to the original methodological challenge to judge and assess the effectiveness of policies/programmes on ESC (along with the promotion of responsible behaviour and sustainable lifestyles). There are three different aspects that must be considered for this assessment. First, taking specific ESC policies and initiatives in to account, we want to be able to identify the impact they are having and to consider if they are achieving the desired goals. Second, addressing the overall policy/institutional structure for ESC and SC promotion, we want to be able to demonstrate clear opportunities for improving and strengthening the systemic approach to these issues. Third, considering the prevailing socio-cultural norms on consumption and lifestyles, we want to better track the trends and changes that are occurring as they relate to achieving the societal visions of the low-carbon, sustainable society.

The methodological challenge is on how to properly assess these three aspects correctly. When trying to assess the behaviour and value changes that are occurring, a major part of the challenge is actually based around the issue of assuming correlation. That is, to properly assess behaviour and value change usually requires survey and questionnaire research akin to market research, but the reality is that this is seldom what occurs when trying to address the link be-

tween a given policy and its influence of SC behaviour and practice. For individual ESC projects or initiatives, it is feasible to conduct before and after surveying of target audiences, and in this manner it is possible to establish a methodologically sound research base for expression of correlation between the ESC projects (inputs) and the resulting changes in behaviour (outputs). Besides this very direct before and after surveying tied to individual projects, it is extremely difficult to establish methodologies that allow for finding correlations between ESC inputs and behaviour change outputs from wider-oriented policy systems. The influencing social factors are numerous, and it is impossible to truly isolate the impacts of specific policies from these other driving factors.

Instead, attempts are more often made to establish rather abstract frameworks for investigating ESC policy and practice on a basis that assumes "good inputs" will lead to "effective outputs". Thus, from a theoretical perspective, researchers conceptualise what are the conditioning factors for participation in SC and what are the factors that drive value-behaviour change towards more responsible lifestyles. From these idealised factors, researchers then work to develop frameworks that can try to assess how well ESC policies and programmes are addressing these various factors. In this process however, there is a rather substantial theoretical leap being made that assumes if a given policy appropriately tackles all of the outlined factors then the impact of the ESC should be absolute. In a real-world situation with complex drivers and factors of influence, this is not an inappropriate approach for loosely considering how to strengthen policies, but it is also not a completely reliable approach for ensuring the effectiveness of policies.

Lacking reasonable opportunities to conduct the type of survey/questionnaire work needed to really find out if a policy or project is resulting in behaviour change, the next best option is to see if quantifiable improvements are happening regarding the target consumption areas. Depending on the scope of the initiative, this can either be very reliable (or less reliable in cases where the driving factors are more diverse than accounted for in the initiative). For example, when the Chinese government initiated the project "Tack-

ling White Pollution"[1] in 2008 to reduce the usage of disposable plastic shopping bags, they did not create an outright ban on plastic bags but rather attempted to dissuade consumers from using plastic bags by making consumer pay for them and by campaigning about the reasons to move away from plastic bag usage. A year into this initiative, the government was able to demonstrate that the usage of plastic bags in supermarkets had declined by two-thirds which equates to a reduction of 40 billion plastic bags not being consumed per year.[2]

A second way in which governments try to assess effectiveness is by trying to assess the number of participants in a given initiative and there is eagerness to claim success when an initiative is positively received and replicated. The problem with this approach though is that popularity does not always correlate with a positive outcome in regards to behaviour change. In many cases, there may be a certain level of correlation between number of people engaged in an initiative and the level of social impact that initiative has, but this fact is not absolute nor does it tell us any quantifiable information about the type of behaviour change that it supports. For example, the promotion of energy saving light bulbs has received a high-level of uptake in many countries and in this manner it is possible to claim success in terms of a high-participation ratio. However, as is often discussed with this specific example, there has actually been very little correlation between people changing to energy saving light bulbs and any on-going (or even secondary) changes in their overall values and behaviours for SC. In fact, in many cases these light bulbs were given away for free and consumer usage was encouraged based on a financial-savings argument, so the consumer may have never created any clear link between this action and SC practice. This is not to discredit the policies that promoted such a rapid and sizeable uptake of energy saving light bulbs, but rather to draw point to a SC policy where greater participation does not specifically correlate with increased value-behaviour change.

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[1] Presented in Choi and Didham (2009), chapter 12.

[2] See URL source for further details and achievements (In Chinese):
http://news.sohu.com/20090525/n264141006.shtml

There is also a third way for investigating effectives, as mentioned above, which is based on assuming what factors a project needs to address on order to support effective SC practice and then assessing the project to determine if it does address these issues. For example, in Choi and Didham (2009) a total of eleven ESC good-practice cases from China, Japan and Republic of Korea were assessed to determine how effective they were in promoting sustainable consumption, however most of the criteria for this assessment were based on reviewing inputs (or characteristics) of the project implementation rather than actual achievements/impacts the projects had made. One way in which the eleven cases were examined was based on how well they promoted certain values that are viewed as building blocks for participating in SC and encouraging environmental citizenship. These include:

- **Pro-environmental values** – a personal belief that protecting the environment is important,
- **Individual Empowerment** – that each person can be a powerful agent of change,
- **Responsibility** – a sense of environmental citizenship and duty,
- **Simple actions** – recognition that little steps can lead to big impacts,
- **Future Vision** – an inspired view of achieving a sustainable society (Choi and Didham, 2009: 149-51).

The practice cases were qualitatively evaluated to see if their approach and activities especially addressed each of these values, and each was qualified as either supporting the value as "strongly positive", "positive", "unidentified", or "not clear" (see table 1 below). From this type of assessment, it was possible to draw lessons about how projects (and even policies) can effectively promote each of these individual values and to also provide some consideration of a holistic approach to address all five values consecutively. But, in reality, it was very difficult to provide any reasonable valuation of which projects had been most effective in their ESC efforts.

TABLE 1: EFFECTIVE VALUE PROMOTIONS

Stage	Chinese Case					Japanese Case			Korean Case		
	C1	C2	C3	C4	C5	J1	J2	J3	K1	K2	K3
Pro-environmental Values	+	+	+	+	+	+	+	+	+	+	+
Individual Empowerment	+	+	+	+	+	+	+	+	+	+	+
Responsibility	-	+	-	-	-	+	+	+	-	-	++
Simple actions	-	++	++	-	++	NC	NC	NC	++	NC	+
Future vision	NC	-	-	-	-	+	+	+	NC	NC	+

N.B.: ++ = Strongly positive; + = positive; - = Unidentified; NC: Not Clear

Source: Choi and Didham, 2009: 150

5. Policy Research: Identifying opportunities for institutional strengthening of ESC

The efforts needed to identify appropriate opportunities for strengthening the policies and institutional frameworks for ESC can be even more challenging than the attempts to assess the impacts of specific ESC initiatives. At one level though, it is possible to make general findings about the current policy structure for ESC promotion – specifically considering the institutional strengths and weaknesses, and from this to provide broad suggestions for improving performance. It is even very probable that the integration of these suggestions would support enhanced effectiveness, but the reality is also that this type of input-oriented analysis has little ability to demonstrate correlation to improved outputs.

This type of analytical approach is often applied in policy research and is commonly excepted as an appropriate methodology. A regular focus of this approach is to look at system capacities or leverage points. Recommendations can be made from a capacity analysis by either identifying system strengths that can be the foundations for building from or by identify system weaknesses that can be the key areas for interventions. For example, in Didham (2011) a capacity assessment was conducted of the current institutional frameworks for ESC promotion held by the governments of China, Japan, and Republic of Korea. The components of this assessment framework were based on the United Nations Development Programme's (UNDP) strategy for capacity development to strengthen the foundations for effective and continued development efforts. It specifically utilised the levers of change identified by UNDP as 1) institutional

arrangements, 2) leadership, 3) knowledge, and 4) accountability (UNDP, 2010: 7-13).

FIGURE 2: COMPONENTS OF CAPACITY ASSESSMENT FRAMEWORK: LEVERS OF CHANGE IN CAPACITY DEVELOPMENT

Institutional Arrangements	Leadership	Knowledge	Accountability
• Streamlined processes • Clear definition of roles and responsibilities • Merit-based appraisal mechanism • Coordination mechanism	• Clearly formulated vision • Communication standards • Management tools • Outreach mechanism	• Research supply and demand linkage mechanism • Brain gain and retention strategies • Knowledge sharing tools and mechanism	• Audit systems and practice standards • Participatory planning mechanism • Stakeholder feedback mechanism

(Source: UNDP. 2010)

Individual country cases were prepared for each of the three countries in regards to the capacities of the national governments to lead, promote and implement effective ESC policy and programmes. These cases were prepared based on interviews with relevant government officers and civil society members along with review of policy documents. Each case was individually investigated in terms of the four UNDP leverage points and their criteria. The assessment of the cases was done qualitatively per country for each leverage point, but was also given a ranking based on the scale: 0 = no identified examples; 1 = existing examples, but not mainstreamed across system; 2 = existing examples and identifiable achievements/impacts, and; 3 = mainstreamed across system and high achievements/impacts. The establishment of this assessment framework and scoring was based on a very ideal model of potential ESC implementation, and in this manner it was not expected that any country would actually achieve 100% score for the entire assessment. Rather, the goal in applying this framework was to be able to identify those areas that are ripe for capacity building and can lead to substantial improvements across the entire system.

TABLE 2: TOTAL SCORES FOR CAPACITY ASSESSMENT OF THE LEVERS OF CHANGE

	Institutional Arrangement	Leadership	Knowledge	Accountability	Total Score	Total Capacity Rating[1]
China	5	6	4	1	16	38.1%
Japan	5	7	5	2	19	45.24%
Korea	4	5	3	2	14	33.33%
Total Potential Score	12	12	9	9	42	100%

N.B. 1 - Calculated as a percentage of the achieved score divided by the total possible score of 42.

Source: Didham, 2011: 95

This type of assessment allowed for the identification of both several common weaknesses across all three countries' ESC systems and also several specific strengths from each individual country from which they could work to build on. Under the lever for institutional arrangement, it was found that all three countries lack capacity in clearly defining roles and responsibilities for ESC, and to a lesser extent they are also weak in providing a coordination mechanism for ESC especially in regards to inter-ministerial cooperation on these issues. Capacity in the leadership lever is generally strongest across all three countries, though each country has differing criteria in which they are individually strongest and weakest. Under the knowledge lever, it was found that strengthening of knowledge sharing tools is clearly needed. It is important though to distinguish two separate aspects of knowledge sharing. First is ensuring that information/research is influencing policy making, and in this case all three countries are relatively strong. Second is the provision of information to the public on SC, and this does occur at a very simple level highlighting individual SC opportunities but no country really addresses this at a more complex level by providing knowledge and tools for people to understand how lifestyle patterns can be adapted to accommodate new changes to support more sustainable societies. Finally, all three countries were extremely weak in terms of capacities for accountability. It was further found that accountability could be increased in three ways: 1) by addressing input level and project planning through greater multi-stakeholder participation in defining the vision and objectives for SC; 2) by addressing throughput level

and project implementation with a clear set of target achievements and practice standards; and, 3) by addressing output level and performance assessment through a clear monitoring and evaluation system that supports reflexive learning within the project cycle.

This assessment also drew out several other general recommendations for strengthening the institutional frameworks for ESC. The first recommendation is on expanding the roles and responsibilities for ESC beyond national governments as they are currently considerably over-burdened with the responsibility for driving social transformation towards a sustainable society and success would be much more likely with the engagement of a greater number of partners. A second recommendation addresses the use of multiple policy mechanisms to create a holistic approach for promoting SC and addressing the different social and political drivers of consumption practices; this recommendation further discusses the need for inter-ministerial cooperation in regards to the implementation of these differing policy mechanisms. The third recommendation refers to clearer defining of the policy priorities and target areas for SC as the topic is still one that challenges many government officers, especially in terms of what movement to "more-sustainable" consumption may require.

Another important area for strengthening ESC implementation is through better integration with the current governmental approaches for both SCP and ESD as these topics are usually better developed and rooted in existing policy. Furthermore, it is also suggested that ESC can actually provide a thematic approach and that its practical orientation can help learners become better oriented with the broader concepts of SCP and ESD.

> The key activity here is to clearly highlight and support opportunities for individuals to actively practice sustainable consumption and to structure these experiences as unique forms of action learning for understanding the wider principles of sustainable development and SCP. ESC aims at providing a process of active and communicative learning that challenges traditional patterns of behaviour through a process of integrating science and values into a socially responsible worldview that places the student or consumer at the center of a dynamic system rather than as an outside observer of a stable system (Didham, 2011: 110-1).

In this manner, it is believed that by building from the idea of a self-aware learning and an action-learning process, it is possible to engender critical reflection that allows learners to better draw direct connections between their own actions and the quality of the world around them.

A second policy evaluation method that can support this issue of better thematic integration between the various sustainable development concepts is a systems mapping of the institutional frameworks for SD (SCP, ESD, ESC, etc) from the level of national policy. For a topic such as ESC, it is necessary to distinguish multiple policy sectors for specific investigation; these may include development policies, production and consumption policies, formal education, non-formal education, and teacher training. For each sector, the procedure starts by identifying 1) relevant policies and strategies, 2) primary actors, and 3) resource capacities. The next effort is to consider what are the specific goals and impacts strategies for these differing policy streams, and this could be followed by looking at specific projects and how they are being implemented. Finally, as the analyst begins to consider how effective the implementation has been in achieving the various identified goals, consideration should also be given to identify system overlaps or places where efficiency could be improved by greater collaboration between various activities. Especially due to the fact that many of the SD concepts have only recently developed and different ministries have often picked up the one or two concepts that most closely relates to their own priorities, it is common to find that there are often significant overlaps in the efforts being made without anyone previously realising them.

6. Conclusion

This paper has set out to investigate the challenges faced in evaluating the effectiveness of ESC policies and programmes and their promotion of SC. Four main themes have been considered. First, the conditions for behaviour change towards SC were considered. Second, the ways in which governments can influence consumption practices were examined. Third, consideration was given to how the effectiveness of ESC initiatives can be properly investigated. Fourth, it was discussed how research can identify policy opportunities in

regards to strengthening ESC implementation. What we find from the discussions in each of these themes is that the available methodologies are incomplete and often only provide insights that are either very general or anecdotal in nature. However, with this said, it must be acknowledged that this is more or less the reality of all social research that tries to investigate how we drive social transformation towards a more positive and progressive status.

If the four themes are taken in unison though, substantial understanding can be gained about what are the main ways to improve the effectiveness of policies and institutional frameworks for ESC and SC promotion. This does not give us a clear evaluation of the effectiveness of a given policy, but it does help to guide the development of more effective policy. The continued desire of course is for clearer correlation between policy inputs and behaviour change outputs, and it would be possible for future research to more clearly take up this challenge while still maintaining a systems level evaluation. This approach would require both the type of input-oriented evaluation described above and also the before and after surveying that can be done for specific projects. If projects that demonstrate a high-quality in regards to the input-oriented frameworks also lead to effective promotion of SC in regards to the output-behaviour change evaluation, then this would provide the type of correlation needed to positively justify the continued usage of the input-oriented frameworks.

References

Choi, Mee Young and Robert J. Didham (2009) *Education for Sustainable Consumption in Northeast Asia: Strategies to promote and advance sustainable consumption.* Hayama, Japan: IGES.

Didham, Robert J., ed. (2011) *The Role of Governments in Education for Sustainable Consumption: Strengthening capacity for effective implementation in China, Japan, and Republic of Korea.* Hayama, Japan: IGES.

HM Government (2005) *Securing the Future: Delivering UK sustainable development strategy.* DEFRA - lead department, London: Crown copyright.

Hobson, Kersty (2002) Competing Discourses of Sustainable Consumption: does the rationalisation of lifestyles' make sense?. *Environmental Politics*, 11(2), pp95-120.

Jackson, Tim (2005) *Motivating Sustainable Consumption: A review of evidence on consumer behaviour and behavioural change.* Report to Sustainable Development Research Network, Surrey: Centre for Environmental Strategy, University of Surrey.

Schwartz, S. H. (1992) Universals in the Content and Structure of Values: Theory and empirical tests in 20 countries. In Zanna, M. (Ed.), *Advances in Experimental Social Psychology,* 25, pp1-65, New York: Academic Press.

Seyfang, Gill (2005) Shopping for Sustainability: Can sustainable consumption promote ecological citizenship?'. *Environmental Politics*, 14(2), pp290-306.

Stern, Paul C, Thomas Dietz, Troy Abel, Gregory A. Guagnano and Linda Kalof (1999) A Value-Belief-Norm Theory of Support for Social Movements: The case of environmentalism. *Human Ecology Review*, 6(2), pp81-97.

Tyson, Greg (2006) *Policy Instruments for Resource Efficiency: Towards Sustainable Consumption and Production.* Report by UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP), Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

United Nations Department of Economic and Social Affairs (2009) *Sustainable Lifestyles and Education for Sustainable Consumption.* Online paper.
[http://esa.un.org/marrakechprocess/issuessuslifestyles.shtml].

UNDP (2010) *Supporting Capacity Development: The UNDP Approach.* New York: UNDP.

UNEP (2010) *Here and Now! Education for Sustainable Consumption: Recommendations and guidelines.* Victoria Thoresen, main author. Paris: UNEP.

UNESCO (2009) *Proceedings: UNESCO World Conference on Education for Sustainable Development.* Held in Bonn, Germany, 31 March-2 April 2009, Paris: UNESCO.