

Public engagement with voluntary and community sector organisations working in sustainable waste management: case studies from three towns in England, UK

Abstract

Within the context of shifts towards the concepts of resource efficiency and circular economy, voluntary and community sector organisations are increasingly being viewed as agents of change in this process. Using questionnaire surveys across three towns in England, namely Northampton, Milton Keynes and Luton, this study aimed to understand public engagement with these organisations. The findings suggest that there were generally high levels of awareness of the organisations and strong engagement with them. Clothes were the items most donated. Key reasons for engagement included the financial value offered and the perception that it helped the environment. However, potential limitations in future public engagement were also determined and recommendations for addressing these suggested.

1. Introduction

Recent European Union (EU) and UK Government policy and legislation have sought to encourage a more sustainable approach to the management of resources (EC, 2008; Defra, 2011; Williams *et al.*, 2012). The revised EU Waste Framework Directive (rWFD), (EC, 2008), transposed via the Waste (England and Wales) Regulations 2011, identifies waste as a resource giving greater priority to waste prevention and “preparation for re-use”. Indeed, for some time, Government has sought to implement policies and to encourage enhanced efficiency and recovery measures (Defra, 2005;2007;2011).

In Government’s review of waste policy in England (Defra, 2011), it pledges to work in partnership with local authorities and businesses to facilitate the uptake of best practice in waste prevention and resource management, amongst other ways through:

- Reducing barriers to innovation and wherever possible the burden of regulation on compliant businesses,
- Supporting capacity building in local communities and giving them freedom to take initiatives in service design and provision.

The Review also includes reference to using the Localism Act 2011 (DCLG, 2011) and Big Society concepts to “empower local communities”. It promotes a partnership between local communities and allows community stakeholders to participate in the decision making processes with regard to how the community deals with environmental issues, including waste management (Defra, 2011). This approach builds on the recommendations of the Sustainable Development Commission (SDC) that concluded that Government policy should prepare the ground for communities to deliver sustainable actions, coordinate support and provide access to funding (SDC, 2010).

Within the context outlined above the role of voluntary and community sector (VCS) organisations have been viewed as the agents of change at the local level, to deliver and facilitate more sustainable strategies (Defra, 2011). However, while there has been much research on community level initiatives to promote sustainability, there is limited practical evidence to guide policy, or indeed to inform successful public engagement with such initiatives (Forest and Weik, 2014). According to Weerawardena *et al.* (2010), the issue of building long-term sustainability within the third sector is fragmented and relatively under developed.

Using three towns in the East Midlands of England as case studies, this study aimed to examine and understand the levels of public engagement with VCS organisations and the factors that influenced this engagement.

1.1 VCS organisations and the sustainability agenda

VCS organisations (or third sector or community-based organisations) are “groups within which individual members associate of their own volition with others in the pursuit of common objectives” (Kim, 2011, p. 643). The term ‘Voluntary and Community sector’ (VCS) is generally applied to entities that are value driven and which principally reinvest their surpluses to further social, environmental or cultural objectives (London Borough of Hounslow, 2011).

The sector ranges in scale from small, local charities to nationally important bodies. Due to its range and diversity, segmenting it by type of organisation can be helpful, particularly for sharing best practice and maximising the impact of sector activities. Voluntary organisations working internationally are sometimes referred to as non-governmental organisations (NGOs). Community groups (defined as purely voluntary, without paid staff) may be differentiated from voluntary organisations (defined as having paid staff). These entities are collectively referred to as voluntary and community organisations (VCO) or the voluntary and community sector (VCS), (Defra, 2009).

Various VCS organisations form a cornerstone of civic society and an institutional basis of society's ‘third sector’. In many countries they have grown considerably in scope and scale within recent decades, and play a key role in engaging with and empowering society in a manner in which top down approaches are unable to (Fahmi and Sutton, 2006; Wilson *et al.*, 2006; Colon and Fawcett, 2006; Parrot *et al.*, 2009; Bailey 2012; Middlemiss, 2011; Seyfang and Haxeltine, 2012; King and Gutberlet, 2013; Forrest and Wiek, 2014). For example it is at the community level that notions of climate change adaptation and mitigation, and wider sustainability should best be developed and implemented at the local levels (Tudor *et al.*, 2011; Shaw *et al.*, 2014; Forrest and Weik, 2014). In this way, opportunities to embed these concepts into existing

mandates, budgets and governance structures at the local and regional levels can best be realised (Bizikova *et al.*, 2008; Burch, 2011). There are also emerging narratives around the significance of community structures as means of maintaining the fabric of the community by embedding and facilitating notions of urban resilience (Adger, 2006; Lüthie *et al.*, 2009; Lee and Maheswaran, 2010; Ernstson, 2010; Collier *et al.*, 2013). Thus community governance structures such as third sector bodies and engagement with these structures play a vital role not only in promoting sustainability, but also in enabling the capacity for change within communities and the society at large (Tudor *et al.*, 2011; Collier *et al.*, 2013; Shaw *et al.*, 2014).

2.Methods

Two main approaches were employed in the project, namely a: (1) meta-analysis and (2) questionnaire surveys.

The meta-analysis utilised both academic and grey literature (non-academic, but reputable sources) to examine the nature and key operations of VCS organisations, in the UK and beyond. The selected papers were obtained mainly from the Science Direct database, as well as key UK Government agencies such as the Waste and Resources Action Programme (WRAP), Department of the Environment, Food and Rural Affairs (Defra), the Audit Commission, the Office of the Third Sector, and publically available environmental consultancy reports.

The questionnaire surveys were undertaken in three adjacent towns, in the East Midlands region of England, namely: Luton, Milton Keynes and Northampton. The aim wasn't to be undertake a statistically significant sample from each town, but rather to capture a snap shot in terms of the socio-economic profile of the population, as well as the main activities of the organisations operating in the three towns. The surveys were conducted during the first three weeks of April 2013, with Milton Keynes being first, followed by Northampton and lastly Luton. Each of the three surveys employed 50 questionnaires, with respondents randomly selected from people walking in the streets, usually the high street. Respondents were handed the questionnaire and it was collected back on completion. A total of 149 questionnaires were completed and returned.

The main purpose of the questionnaire was to determine public perceptions, attitudes to and use of the organisations in the case study areas. The questionnaire, a four page document with an introduction and contact information for reference and feedback purposes, was divided into four sections, namely: (1) Generic questions on recycling and shopping from charity shops; (2) Evaluation of shopping practices at furniture reuse shops; (3) Examination of general environmental attitudes and beliefs; and (4) Socio-demographic information.

The majority of the responses utilised tick boxes and Likert scales ranging from 1 – 5, with 5 indicating agreement and 1, non-agreement. There were also spaces for open questions provided. To facilitate the analysis, all questions were coded. Likert scales

ranging from 1-5 were used to code the questionnaires. The coded information was initially entered into MS Excel and these data were then transferred into SPSS (version 20) for analysis. The normality of the data was first ascertained using the Shapiro-Wilk Test. As $p > 0.05$, the data were assumed to be parametric. Descriptive analyses were first performed to determine frequencies. Bivariate analyses, using Pearson's Correlation were then undertaken to examine and evaluate the nature of the key antecedents to the perceptions and attitudes of the participants towards the organisations, and their use of the shops.

3. Results

3.1 Meta-analysis

Reported numbers of the organisations in the UK vary. For example, according to Curran and Williams (2010), there have been approximately 400 such agencies set up in the UK since 1970. However, Defra (2009) note that there are about 1000 such entities in England alone. While LR Solutions and London CRN (2008) state that there were 693 third sector reuse organisations and initiatives in London, divided into six main categories, namely:

- Domestic furniture and appliance reuse organisations (16)
- Computer and other IT reuse organisations (7)
- Charity shops (614)
- Other reuse organisations (4)
- Internet-based exchange forums (38)
- Locally organised swap forums – give or take days (14)

Despite the discrepancy in numbers, it is generally agreed that most are small and localised, with income of less than £250,000/annum (Dururu, 2014). However, there are around 7% which have an income of over £1m and 20% operate regionally and nationally. For example, half of the principal reuse organisations in London serve one to three boroughs, with only 11% serving seven to ten boroughs (LR Solutions and London CRN, 2008).

They have diverse scales of operation, activities and objectives. For example, they deliver public services (HM Treasury, 2005), including waste management and in particular re-use (e.g. Williams *et al.*, 2006; Defra, 2008; Cox *et al.*, 2010), bulky waste services (Alexander and Smaje, 2008; Curran and Williams, 2010), community composting (Slater *et al.*, 2010) and waste minimisation activities (e.g. collecting used furniture and electrical appliances) (Defra, 2009). In 2009, nationally, the sector was diverting around on average 500,000 tonnes of waste from landfill per annum (Defra, 2009). For example, Featherstone (2013) states that reuse operations in London collect around 12,000 tonnes. The types of materials managed by the sector varies,

with only 4% of items donated to charity shops ending up in landfill. According to Defra (2005), textiles recycled through charity shops added up to 20% of the tonnages of material handled by other community organisations. By 2013, some 96% of materials (an equivalent of 347,000 tonnes of textiles donated to their shops) were recycled or sold on for reuse (CF and CRAQM, 2013). Approximately 20% of furniture collected at the kerbside is reusable and around 40% of the materials at household waste recycling centres (HWRVs) are reusable (Featherstone, 2013).

They also undertake a significant social role. For example, they redistribute the furniture and electrical appliances to vulnerable households, thus alleviating poverty, and combating social exclusion (Curran and Williams, 2010). Indeed, as illustrated in Fig. 1, poverty alleviation is key factor in their objectives. Featherstone (2013) argues that reuse organisations play a vital role in social housing, by facilitating the sustainable management of housing stock (e.g. by reducing waste costs from voids clearances and supporting residents to recycle and reuse more). In the UK, there is an increasing demand for reuse furniture, with child poverty a pressing problem, with two in five households having no working adult. Thus their benefits to society include (Lloyd, 2012):

- The ability to deliver services in response to local demand, particularly with respect to niche materials and/or particular social needs
- Making goods and materials available that would otherwise be unaffordable for those on a low income
- An emphasis on, and ability to meet, the specific needs of service users and the local community

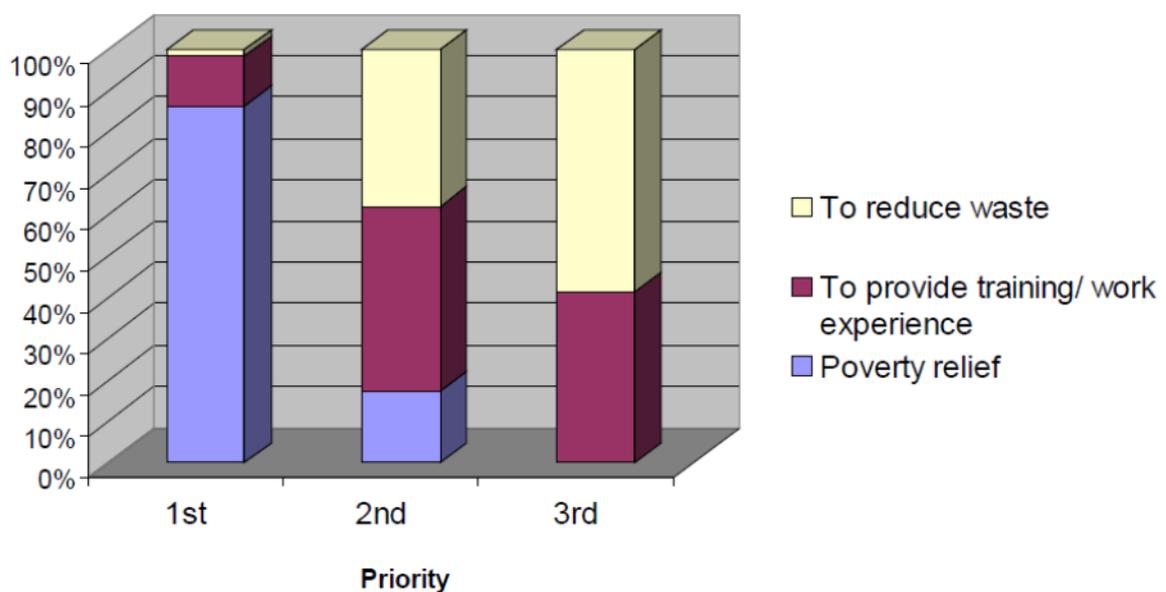


Fig.1: Key objectives of reuse organisations in London

Source: LRS Solutions and London CRN, 2008

3.2 Questionnaire survey

Over half (55%) of the sample was female (Table 1). There were more females, 64% interviewed in Luton than any other town. However, according to the ONS (2013), the 2011 population census shows that the number of males and females in Luton is almost similar (101,954 and 101,247 respectively). The high percentage of female respondents could be attributed to reluctance to participate by men.

The majority of the respondents for the three towns were in the 16-30 years age group followed by the 31-45 years age group. Some 50.3% of the population was in some form of employment, with Northampton having the highest part time (P/T) employed (44%) and Milton Keynes the lowest (32%). However, the figures show that there are far less people in full time (F/T) employment than part time (P/T) across the three towns. Luton had the highest number of students (30%).

Some 57.7% of the sample had an annual income of less than £20,000. All three towns showed similar levels of income, except in the £30-50,000 range where Northampton had a significantly higher figure than Luton. Over 50% of the individuals in all three towns resided in rented houses, with Luton having the highest rentals at 65%. The most common houses were semi-detached and flats. House ownership was highest in Northampton at 58%.

Table 1 Demographic characteristics of the sample population

Characteristic	Luton	Milton Keynes	Northampton	Combined
Gender				
Male	18 (36%)	23 (47%)	25 (52%)	67 (45%)
Female	32 (64%)	27 (53%)	24 (48%)	82 (55%)
Age				
16-30	21 (42%)	17 (34%)	19 (38%)	57 (38%)

31-45	18 (36%)	13 (28%)	13 (28%)	44 (28%)
46-60	8 (16%)	9 (18%)	10 (20%)	27 (18%)
61-75	3 (6%)	9 (18%)	4 (8%)	16 (12%)
>75		2 (4%)	3 (6%)	5 (4%)
Occupation				
Student	15 (30%)	9 (18%)	6 (12%)	30 (20%)
P/T	20 (40%)	16 (32%)	22 (44%)	58 (38.9%)
F/T	6 (10%)	8 (16%)	2 (5%)	16 (11%)
Retired	4 (8%)	10 (14%)	10 (20%)	24 (16%)
Unemployed	5 (10%)	4 (6%)	9 (18%)	18 (12%)
Income				
<10K	9 (18%)	9 (18%)	14 (28%)	32 (21.5%)
10-20K	22 (44%)	16 (32%)	15 (32%)	54 (36.2%)
21-30K	13 (26%)	15 (30%)	8 (16%)	26 (17.4%)
31-50K	3 (6%)	8 (16%)	10 (22%)	22 (14.8%)
>50K		2 (4%)	2 (2%)	4 (2.7%)
Accommodation /Residence				
Terrace	12 (24%)	11 (22%)	8 (16%)	31 (20 %)
Detached	8 (16%)	8 (16%)	9 (18%)	25 (16 %)
Semi-detached	18 (36%)	22 (44%)	16 (32%)	56 (37.6%)

Flat	12 (24%)	9 (18%)	15 (30%)	36 (24.8%)
Ownership				
Rented	32 (65%)	23 (46%)	21 (42%)	76 (51%)
Owned	18 (35%)	27 (54%)	28 (58%)	73 (49%)

Source: Dururu, 2014

3.2.1 Recycling and use of charity shops

Eighty-one percent of all the respondents said that they recycled. Table 2 indicates that residents of Northampton were the most likely to use charity shops (80%), followed by Milton Keynes (78%) and Luton (66%). However, on buying or taking items to furniture reuse shops, Luton had the least respondents (48%), Milton Keynes had 62% and Northampton was highest at 80% (Table 2).

Table 2 Comparison of individuals' use of furniture reuse shops across the three towns

Factor	Luton	MK	North	Combined
Have you shopped at a charity?	33 (66%)	39 (78%)	39 (80%)	112 (75%)
Have you used a furniture reuse shop?	24 (48%)	31 (62%)	40 (80%)	86 (57.7%)
How often?	Monthly: 16 (32%) Annually: 14 (28%)	Monthly: 20 (40%) Annually: 10 (20%)	Monthly: 15 (30%) Annually: 16 (34%)	Monthly: 52 (34.7%) Annually: 41 (27.9%)

How would you dispose of a sofa?	Charity: 25 (50%) Tip/throw away: 20 (40%)	Charity: 26 (51%) Tip/throw away: 19 (38%)	Charity: 23 (48%) Tip/throw away: 20 (42%)	Charity: 74 (49.7%) Tip/throw away: 60 (40.2%)
How did you find out about the shop?	Drove/walked by: 17 (34%)	Drove/walked by: 15 (30%)	Drove/walked by: 18 (38%)	Drove/walked by: 51 (34.2%)

As shown in Fig. 2, clothes were the most donated item at a combined percentage of 31% for all the three towns, while furniture donation was 6.7%. Other items included books and toys. Over 34% of the respondents said they made monthly donations and 28% donated on an annual basis.

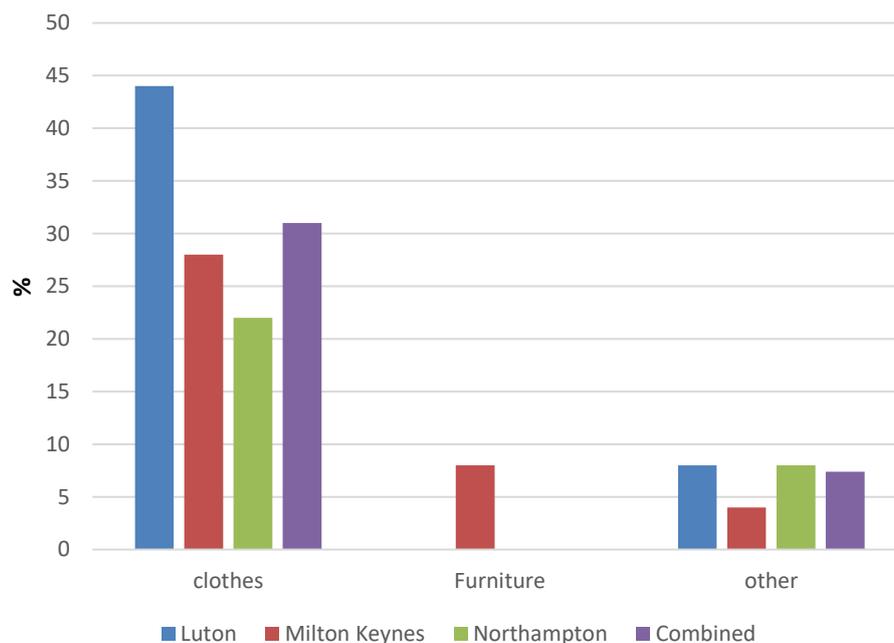


Fig. 2: Items donated and bought across the three towns

3.2.2 Awareness of the existence of furniture reuse shops

An overwhelming majority of respondents (84.4%), were aware of the existence of furniture reuse shops in their area and had shopped in them. Residents in Luton had the highest lack of awareness about them (20%). Overall, 34% only came to know of the existence of the shops either by walking or driving by. As demonstrated in Table

2, about 50% of the individuals stated that they would take their unwanted sofa to a charity, while 40% said they would take it to the tip or throw it away.

3.2.3 Environmental attitudes and beliefs

The main reasons why individuals used the shops were because of the value offered and quality, as demonstrated by these correlation factors being highest (Table 3). There was also some correlation with gender, with women expressing a greater engagement, compared to men. However, this may relate to the larger percentage of women surveyed. Perceptions about helping the environment (41.6%) and also living in close proximity to furniture reuse shops (30%) were also key deciding factors.

Table 3: Factors impacting on engagement with shops

Factor	Luton	MK	North	Combined
Gender	-0.0186	-0.375**	-0.320*	0.361**
Age range	0.441**	0.354*	-0.375**	-0.301**
Prefer to buy new items	0.227	0.453**	0.418**	0.365**
Good quality is important	0.307*	0.340*	0.377*	0.332
Value is important	-0.330*	-0.368**	-0.444	-0.386**

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Alternatively, of those that said they did not buy from the shops, 30% preferred to buy new items. However, they could not unequivocally say whether items from the shops were of good quality or not. Most reported strong beliefs on the positive role of recycling on the environment. An overwhelming 78% thought that their consumption patterns had an impact on the environment and 88% agreed that it was their personal responsibility to look after the environment.

Asked what would encourage them to use furniture reuse shops, 81% suggested quality of items, while 63% thought awareness of the existence of a shop within their local area might have an effect on their shopping habits (Table 4).

Table 4: Factors determining why charity shops were used

Factor	Luton	MK	North	Combined
Why use charity shop?				
Good value	26 (42%)	21 (42.9%)	25 (50%)	67 (45%)
Helps the environment	26 (42%)	19 (38%)	22 (44%)	62 (41.6%)
Why don't use charity shops?				
Prefer to buy new items	17 (35%)	12 (24.5%)	15 (30%)	45 (30.2%)
Like good quality items	7 (14%)	2 (4%)	4 (8%)	13 (8.7%)
Not aware of shops in the area	10 (20%)	7 (14.3%)	7 (14.3%)	23 (15.6%)
What would encourage you to use charity shops?				
Good quality items	43 (84%)	35 (71%)	43 (88%)	121 (81.2%)
Awareness of shops in the area	33 (66%)	25 (51%)	35 (72%)	94 (63%)
Environmental attitudes and beliefs				
What I buy and consume impacts upon the environment	39 (78%)	30 (61%)	29 (60%)	99 (66.4%)
I buy based on costs	39 (78%)	39 (79.6%)	38 (78%)	117 (78.5%)

I buy based on quality	43 (86%)	43 (85.7%)	43 (88%)	129 (86.6%)
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4. Discussion

While accurate numbers of VCS organisations working in waste management across the UK, vary, they evidently play a significant role in society. This is evidenced both in terms of their environmental role of collecting, reusing, minimising waste, but significantly also, their social role helping vulnerable households (Defra, 2011; Lloyd, 2012; Seyfang and Haxeltine, 2012; Forrest and Wiek, 2014).

Across each of the three towns there was high awareness of furniture reuse shops, and most used them to either buy or sell items. Clothes were found to be the most donated item for all three towns, with just over a third of residents stating that they donated items at least once a month. This confirms the importance of textiles as found in other studies and suggests the key role played by textiles in achieving reuse targets (Defra, 2005; 2009; CF and CRAQM, 2013).

The socio-economic composition of the population appeared to have had some impact on engagement with the shops. Indeed, most residents across the three towns were in P/T employment, earning less than £20,000/annum, and within the age range of 16 – 30 years old. These factors would have had a bearing on disposable income thus affecting lifestyles, as well as behaviour and attitudes towards resource consumption (Dururu, 2014). It's important to note though that use of charity shops was highest in Northampton, where incomes were highest. This perhaps could be related to the higher quality of items in the shops. It would be interesting therefore to extend the study into areas where disposable incomes are higher.

An overwhelming majority of the respondents were aware of charity shops in their towns, primarily via either walking or driving by. This would suggest the importance of location to such shops to ensure good public engagement. The perceived value offered in shopping at these stores would also suggest that price is a significant contributing factor in public engagement. Interesting, perceived benefits to the environment were also reported as a key reason why residents used the shops (Dururu, 2014). Presumably this relates to perceived minimisation of waste through reuse and recycling of items, which if they had not been donated/sought/bought from the shops, would have been disposed to landfill. At the same time, it may simply be respondents telling the researchers what they believed they wanted to hear. Nevertheless, the findings suggest that notions of value, quality and environmentalism should form key components in the marketing strategies of these entities. At the same time, the results showed that costs and good quality were key influencing factors, with 30% of the respondents preferring to buy new items. This raises two key issues with

regard to continued and future public engagement. First, there exists a dichotomy between price and quality. If the quality of items donated to these entities continues to fall, then regardless of the 'low' price, residents may decide not to engage with them and not use the shops. Second, these organisations need cash flow to sustain operating costs and if there is no one to buy and no items to sell, they will struggle to fund their operating costs and remain viable (Dururu, 2014). Thus while the study suggests that there was generally good awareness of the organisations in the three towns and they were fulfilling a need for individuals seeking value, there are a number of issues that need to be addressed to further improve public engagement.

Conclusions

VCS organisations working in the waste management sector have a key role to play in maintaining the environmental and social fabric of communities and the society. While, there was strong public awareness and engagement with the furniture reuse shops across the three towns, there were also a number of challenges identified that impacted upon public engagement. Key amongst these included overcoming perceptions of the quality of items, value and the location/visibility of shops. It is vital that they not only offer value, but also good quality items. A good location to ensure visibility is evidently also crucial. Greater awareness building and perhaps even a 'rebranding' exercise to move away from public perceptions of the organisations offering primarily 'poor' quality items, may very well be required. Faced with competition from entities such as eBay and low cost retailers, these are issues that need to be urgently addressed if the public is to be better engaged and ultimately the long-term viability of these organisations assured. Crucially, outside of their role in waste management, these organisations evidently also play a key role in addressing the social needs of society. Indeed, the meta-analysis illustrated that poverty alleviation was a more important issue than waste management. Indeed, glimpses of this are also seen from the survey in that value was a key contributing factor for why individuals engaged with the organisations. In addition, income levels in the three towns were low, thus the shops were a manifestation of the lifestyle choices of residents. It is possible that the timing of the study, during the economic down turn in the UK may have impacted upon perceptions and public engagement. An understanding of whether this is indeed the case would require a follow up study. Given their environmental and social roles, it is vitally important that the sector remains relevant, in tune with the needs of the public and ultimately therefore, resilient.

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References

- Adger, N., 2006. Vulnerability. *Global Environmental Change*. 16(3), 268 – 281.
- Alexander, C., Smaje, C. 2008. Evaluating third sector reuse organisations in the UK: case studies and analysis of furniture reuse schemes. *Resources Conservation and Recycling*. 52, 719-730
- Bailey, N. 2012. The role, organisation and contribution of community enterprise to urban regeneration policy in the UK. *Progress in Planning*. 77, 1–35
- Bizikova, L., Neale, T., Burton, I., 2008. Canadian communities' guidebook for adaptation to climate change: including an Approach to generate mitigation co-benefits in the context of sustainable development. First edition. Environment Canada and University of British Columbia, Vancouver. Available at: http://www.fcm.ca/Documents/tools/PCP/canadian_communities_-_guidebook_for_adaptation_to_climate_change_EN.pdf. Accessed on 10/4/2014
- Burch, S., 2011. Development paths: investigating the roots of responses to climate change. *Sustainable Development* 19, 176–188.
- CF and CRAQM (Charity Finance and Charity Retail Association Quarterly Magazine) 2013. Charity shops 2013 survey.
- Collier, M.J., Nedović-Budić, Z., Aerts, J., Connop, S., Foley, D., Foley, K, Newport, D., McQuaid, S., Slaev, A., Verburg, D., 2013. Transitioning to resilience and sustainability in rural communities. *Cities*. 32. S21 – S28
- Colon, M., Fawcett, B., 2006. Community-based household waste management: lessons learnt from EXNORA's 'zero waste management' scheme in two South Indian cities. *Habitat International*. 30, 916 – 931.
- Cox, J., Giorgi, S., Sharp, V., Strange, K. Blakey, N. 2010. Household waste prevention – a review of evidence. *Waste Management and Research*. 28, 193-219.
- Curran, A., Williams, I. D. 2010. The role of furniture and appliance re-use organisations in England and Wales. *Resources, Conservation and Recycling*. 54, 692-703.
- DCLG (Department for Communities and Local Government) 2011. *The Localism Act*. HMSO. London: England.
- Defra (Department for Environment, Food and Rural Affairs) 2009. *Benefits of third sector involvement in waste management*. HMSO. London: England

Defra (Department for Environment, Food and Rural Affairs) 2005. Bulky waste collections: maximising reuse and recycling. HMSO. Bristol: England.

Defra (Department for Environment, Food and Rural Affairs) 2007. Waste and Resources Evidence Strategy 2007-2011. HMSO. London: England.

Defra (Department for Environment, Food and Rural Affairs) 2011. Government Review of Waste Policy in England. HMSO. London: England.

Defra (Department for Environment, Food and Rural Affairs) 2008. Benefits of third sector involvement in waste management. Waste and Resources R&D Project, WR0506. HMSO. London: England.

Dururu, J., 2014. Voluntary and community sector organisations (furniture reuse) and the sustainable consumption and production agenda in the UK. MSc thesis. The University of Northampton: England

EC (European Commission) 2008. Waste framework directive 2008/98/EC. Brussels.

EU (European Union) 2011. Europe 2020 Strategy: roadmap to a resource efficient Europe. Brussels.

Ernstson, H., van der Leeuw, S.E., Redman, C.L., Meffert, D.J., Davis, G., Alfsen, C., Elmqvist, T., 2010. Urban transitions: on urban resilience and human-dominated ecosystems. *AMBIO: a Journal of the Human Environment*. 39(8), 531 – 545.

Fahmi, W.S., Sutton, K., 2006. Cairo's Zabaleen garbage recyclers: multi-nationals' takeover and state relocation plans. *Habitat International*. 30, 809 – 837.

Featherstone, F., 2013. Bulk up. *CIWM Magazine*. October. 34 – 36.

Forrest, N., Wiek, A., 2014. Learning from success – toward evidence-informed sustainability transitions in communities. *Environmental Innovation and Societal Transitions*. In Press.

HM Treasury (2005). Exploring the role of the third sector in public service delivery and reform: a discussion document. HMSO. London: England

Kim, S.H., 2011. On the historical determinants of third sector strength: a qualitative comparative analysis. *The Social Science Journal*. 48(4), 641-650.

King, M.F., Gutberlet, J., 2013. Contribution of cooperative sector recycling to greenhouse gas emissions reduction: a case study of Ribeirão, Brazil. *Waste Management*. 33(12), 2771 – 2780,

Lee, A.C.K., Maheswaran, R., 2010. The public benefits of urban green spaces: a review of the evidence. *Journal of Public Health*. 33(2), 212 – 222.

- Lloyd C., 2012. Opening up a can of paint. Msc Thesis. University of Surrey: England.
- London Borough of Hounslow (2011). Voluntary and Community Sector Strategy 2011-2015. London: England.
- LR Solutions and London CRN. 2008. Third sector reuse capacity in London. Available at:
http://www.london.gov.uk/sites/default/files/Third%20Sector%20Reuse%20Capacity%20in%20London_0.pdf Accessed on 22/4/2014
- Lüthie, C., McConville, J., Kvarnström, E., 2009. Community-based approaches for addressing the urban sanitation challenges. *International Journal of Urban Sustainable Development*. 1(1), 49 – 63.
- Middlemiss, L., 2011. The effect of community-based action for sustainability on participants' lifestyles. *Local Environment*. 16(3), 265- 280.
- ONS (Office of National Statistics) 2013. Neighbourhood statistics. <http://neighbourhood.statistics.gov.uk/dissemination/LeadKeyFigure>. (Accessed on 24/09/13)
- Parrot, L., Sontamenou, J., Dia, B., K., 2009. Municipal solid waste management in Africa: strategies and livelihoods in Yaoundé, Cameroon. *Waste Management*. 29, 956 - 995
- SDC (Sustainable Development Commission) 2010. *The future is Local: empowering communities to improve their neighbourhoods*. London: England.
- Seyfang, G., Haxeltine, A., 2012. Growing grass roots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions. *Environment and Planning C*. 30(3), 381 400
- Shaw, A., Burch, S., Kristensen, F., Robinson, J., Dale, A., 2014. Accelerating the sustainability transition: exploring synergies between adaptation and mitigation in British Columbian communities. *Global Environmental Change*. 25, 41 - 51.
- Slater, R., Frederickson, J., Yoxon, M. 2010. *Unlocking the potential of community composting*. Report to the Department for Environment, Food and Rural Affairs (Defra). HMSO. London: England
- Tudor, T.L., Robinson, G.M., Riley, M., Guilbert, S., Barr, S.W., 2011. Household consumption and waste patterns in the United Kingdom: a critical overview of lessons learnt. *Local Environment*. 16 (1), 51 - 66
- Weerawardena, J., McDonald, R.E., Mort, G.S., 2010. Sustainability of nonprofit organizations: an empirical investigation. *Journal of World Business*. 45(4), 346-356.

Williams, I.D., Curran, T., Schneider, F., 2012. The role and contribution of the third sector in terms of waste management and resource recovery. *Waste Management*. 32(10), 1739 – 1741.

Williams, N., Croker, M., Barrett, D. 2006. Review of the voluntary and community waste sector in England—final report. Available from www.defra.gov.uk/environment/waste/strategy/review/index.htm. Accessed 13/01/13.

Wilson, D.C., Velis, C., Cheeseman, C., 2006. Role of informal sector recycling in waste management in developing countries. *Habitat International*. 30(4), 797 – 808.