

COOPERATIVES AND ENVIRONMENTAL DEVELOPMENT: SUCCESSES AND CHALLENGES

INTRODUCTION

The environment of our planet is degrading at an alarming rate because of non-sustainable urbanization, industrialization and agriculture. Unsustainable trends in relation to climate change and energy use, threats to public health, poverty and social exclusion, demographic pressure and ageing, management of natural resources, biodiversity loss, land use and transport still persist and new challenges are arising. Since these negative trends bring about a sense of urgency, short term action is required, whilst maintaining a longer term perspective. The main challenge is to gradually change our current unsustainable consumption and production patterns and the nonintegrated approach to policy-making (Malik, 2012)

Environmental sustainability this is the ability to maintain the qualities that are valued in the physical environment. For example, most people want to sustain human life, the capabilities that the natural environment has to maintain the living conditions for people and other species for instance clean water and air, a suitable climate (CGIAR, 1989).

- The aspects of the environment that produce renewable resources such as water, timber, fish, solar energy
- The functioning of society, despite non-renewable resource depletion
- The quality of life for all people, the livability and beauty of the environment

Threats to these aspects of the environment mean that there is a risk that these things will not be maintained. For example, the large-scale extraction of non-renewable resources, such as minerals, coal and oil or damage done to the natural environment can create threats of serious decline in quality or destruction or extinction. Traditionally, when environmental problems arise

environmental managers work out on how to reduce the damage or wastage. But it is not always easy to work out exactly when and where threats will have their effects and often the impacts are hard to reverse. So increasingly environmental managers adopt strategies aimed to prevent damage being done in the first place. Birchall (2012), a full sustainability program needs to include actions to prevent threats and impacts from arising, actions to protect the environment from threats and damage, and restoration to reverse damage already done. Sustainability issues arise wherever there is a risk of difficult or irreversible loss of the things or qualities of the environment that people value. And whenever there are such risks there is a degree of urgency to take action.

Environmental sustainability programs include:

- * Actions to reduce the use of physical resources,
- The adoption of a 'recycle everything/buy recycled' approach,
- ❖ The use of renewable rather than delegable resources,
- The redesign of production processes and products to eliminate the production of toxic materials.
- The protection and restoration of natural habitats and environments valued for their livability or beauty.

These sustainability programs need to operate on an adequate scale and need to continue operating reliably for as long as the threats continue (Birchall, 2012).

Some of the issues that pose major environmental sustainability problems include:

- Destruction of the living environments (habitats) of native species
- Discharge of polluting chemicals and other materials into the environment
- Emission of greenhouses gases into the atmosphere than can cause climate change

• Depletion of low cost oil and other fossil fuels

Some environmental issues are largely of local significance while others have regional or even global impact.

Why sustain the environment?

We might want to sustain something in the physical environment because it is useful to us: e.g. the quality of local urban environments. Or we might want to do it because we care about the wellbeing of other people or other species - for their sake, not ours. That is we can be motivated by utilitarian concerns and/or altruism.

Sometimes we maintain something in the environmental domain in order to make it possible to achieve another goal in another domain. For example, we might sustain marine habitats in order to support the livelihood of coastal townships. Or we might sustain renewable resources so that we can support economic development or genuine progress.

Co-operatives and sustainable development

Co-operatives as has been known set the ground and voice for the unheard members of the society. Co-operatives are enterprises of the future which can complement conventional markets and government action. They respond to the triple bottom line of sustainable development: economic development, social justice, and environmental protection.

Cooperatives contribute to the protection of the environment for future generations. They are dedicated to helping individuals adopt more responsible patterns of consumption, thereby consuming fewer resources. Renewable energy cooperatives, for instance, offer consumers a local option to have clean energy while investing socially and economically in sustainable development. Others are supporting practices that return value to our environmental resources. As member-owned enterprises embedded in their communities, cooperatives are better placed to

help community members respond to environmental degradation and to protect and responsibly manage available resources.

As a core role they heighten awareness around the world on the crucial contributions they make to poverty reduction and sustainable development. As member-owned, member-run and member-serving businesses, cooperatives can put social justice and equity at the heart of economic progress while helping to ensure that the production and provision of goods and services matches the needs and aspirations of communities.

Best practices

Tackling informality in e-waste management: The potential of cooperative enterprises

Electrical and electronic waste (e-waste) is currently the fastest growing waste stream, and it is hazardous, complex and costly to treat. Adequate e-waste recycling can contribute to an environmentally sustainable economy, but that requires immediate improvements in job quality and incomes. Most of the world's e-waste ends up in developing countries to be treated by informal workers. These workers are vulnerable to the health and environmental risks of e-waste, have little power to negotiate their working conditions and end up recovering a fraction of the recyclable material while contaminating themselves and the poor communities where informal e-waste recycling takes place. Therefore, improving occupational safety and health, upgrading skills, increasing workers' incomes to fair and decent levels, and promoting the formalization of informal workers in this sector – along with other decent work strategies – is needed to promote sustainable development and better jobs in this growing sector. Retrieved from, *China Labour Bulletin*. 2005. "The plight of China's e-waste workers 2014

Co-operative carbon offset project in Fair-trade supply chain (Kenya)

Co-operative carbon offset project in Fair-trade supply chain In 2013 we established a revolutionary new carbon offset project, which is co-operatively governed and operates in the communities that supply The Co-operative Food with Fair-trade certified tea in southern Kenya. The project builds on the quaClara project which distributes biosand water filters to households in northern Kenya to replace the traditional method of water purification – burning wood to boil water. Following investigations with offset provider Climate Care, and consultation with the local communities, the project expansion was agreed and began operating in 2013. The project realizes a range of benefits beyond the carbon saved from avoiding wood-burning, including: Retrieved from, http://climatecare.org/our-projects/aquaclara/

- Reducing illness and healthcare costs, due to filters being more effective at purifying water than boiling, and reduced indoor air pollution from less wood burning;
- Saving households money, as they need less fuel wood; and
- Reducing the demand for unsustainably harvested fuel wood.
- The use of 9,500 water filters will save emissions of 22,560 tones of CO2 over three years -6,460 tones of which are from the
- Expansion into our Fair-trade tea supply chain, and will directly benefit around 65,000 people

Waste and packaging in UK

Waste is one of UK's key environmental areas of focus, they follow the well-established waste hierarchy of reduce, reuse and recycle. We are optimizing packaging to ensure maximum protection of products with minimum waste, while continuing to reduce packaging weight where possible and ensuring high recyclability. We are a signatory to the Courtauld Commitment, a voluntary agreement to improve resource efficiency and reduce the carbon and wider environmental impact of packaging and the grocery sector (Balkan, 2010).

Reducing our own-brand packaging, while also ensuring this does not increase other environmental impacts such as product wastage, is a priority for us. We also aim to reduce raw material use by maximizing the recyclability and recycled content of packaging. In 2013 we achieved a 5% reduction in the weight of own-brand packaging compared to 2012 (Balkan, 2010).

We also became a signatory to the industry-wide Courtauld Commitment 3 initiative and will continue to work to optimize packaging, increase recycled content, improve recyclability and reduce food waste.

Challenges

However, in spite of their importance, co-operatives have not yet received the attention they deserve Borzago et al (2008). The basic reason for this neglect has been a widespread conformism in interpreting the functioning of the economy, despite the increasingly inability of convention consequences. New paradigms and institutional arrangements are essential. Given their ability to effectively combine economic, social, and ecological goals, cooperatives have the potential to address and alleviate the crisis, which suggests that possible paths to exit the crisis are available, but they have not yet been fully exploited. Kristic et al (2013) clarifies that there is a dramatic need not only for improved models for explaining cooperative enterprises and their functioning, but also for innovative interpretations of the working of economic systems and the institutions that govern them.

For cooperatives to live up to their full potential, they need political and financial autonomy, and an enabling environment that would allow such autonomy, such as transparent and sound regulatory frameworks, a conducive investment climate and creation of policy dialogue spaces between government and various stakeholders.

Reference

- Aqua Clara Project Safe water and community support (2013) retrieved from http://climatecare.org/our-projects/aquaclara/
- Malik A.& Grohmann, E. (2012), Environmental Protection and Strategies for Sustainable Development: Strategies for Sustainability
- Balkan e-Waste Management Advocacy Network (BEWMAN). n.d. *E-waste management in Serbia*, 2010.
- Chaturvedi, B.; Bhardwak, S. 2013. Learning to re-e-cycle: What working with e-waste has taught
 - us (New Delhi, Chintan Environmental Research and Action Group).
- Chi, X.; Streicher-Porte, M.; Wang, M.Y.L.; Reuter, M.A. 2011. "Informal electronic waste recycling: A sector review with special focus on China", in *Waste Management*, Vol. 31, pp. 731–742.
- China Labour Bulletin. 2005. "The plight of China's e-waste workers", 15 Aug. [3 June 2014]. Chintan Environmental Research and Action Group. n.d. Wastepickers, Fact Sheet (New Delhi). Available at: www.CHINTAN-india.org/documents/fact_sheets/CHINTAN_wastepickers_fact_sheet.pdf [18 June 2013].
- Delfin, M.; Guzman, D.; Garay, E.; Yanez, P.; Delfin, M. 2009. *Diagnostico de residuos electronicos en Bolivia* [Survey of electronic waste in Bolivia] (La Paz, Swisscontact, Caintec and Delfin Consultora).
- Jain, A.; Sareen, R. 2006. "E-waste assessment methodology and validation in India", in *Journal of Material Cycles and Waste Management*, No. 8, pp. 40–45.
- Jovanic, P., Tosic, K., Rochat, D. 2011. National e-waste assessment in Serbia (Belgrade, UNDP,
 - PACE Workgroup 3.1 and University of Belgrade, Institute of Multidisciplinary Research).
- Krstić, G. et al. 2013. *The shadow economy in Serbia: New findings and recommendations for reform* (Belgrade, USAID Serbia, Business Enabling Project).

 Kuehr, R.; Magalini, F. 2013. *UNU & WHO survey on e-waste and its health*
- Weaver, P., Jansen, L., van Grootveld, G., van Spiegel, E. & Vergragt, P. (2000). Sustainable technology development. Greenleaf Publishing: Sheffield, UK.
- Borzaga, carlo, galera, giulia and nogales, rocío (eds.) (2008) Social Enterprise: A New Model for Poverty Reduction and Employment Generation
- ,Bratislava, slovakia: united nations development Programme regional Bureau for europe and the commonwealth of independent states
- Birchall, J. (2012) 'the Potential of co-operatives during the current recession: theorizing comparative advantage', paper presented at the uricse conference in venice