

## Bartering for a Better Future? Community Currencies and Sustainable Consumption\*

Gill Seyfang\*\*

### Abstract

*Sustainable consumption is gaining currency as a new policy objective, requiring consumers to enact preferences for sustainability through the marketplace. But there is a limit to the changes in consumption behaviour which individuals can make within social institutions, and current policies do not question the materialism inherent in current development policies. New social institutions, or structures of provision, are needed to enable the lifestyle changes required for sustainability. This paper critically assesses the potential of one such alternative system of provision: namely money and exchange. 'Community currencies' is the generic term for a wealth of alternative types of money which are springing up in communities throughout the world to address social, economic and environmental needs. This paper presents new research findings and reviews experience of three distinct types of community currency with goals of sustainable consumption, each with a different purpose and design, and assess their potential as new institutions for environmental governance. The currencies examined are: Local Exchange Trading Schemes (LETS) which aims to rebuild local economies through cashless exchange; Time Banks promote volunteering, civic engagement and mutual self-help by rewarding unpaid work in the community; the previously unresearched NU-card, a mainstream 'green loyalty point' currency piloted in the Netherlands which incentivises sustainable consumption. This paper discusses the scope and potential of each of these models, the values they represent and the barriers they face, and will suggest possible ways forward for creating new social infrastructure for sustainable consumption.*

*Keywords: community currencies, LETS, time banks, institutions, governance, sustainability*

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\*\* Centre for Social and Economic Research on the Global Environment (CSERGE) University of East Anglia, Norwich, NR4 7TJ, UK

## **Introduction**

Sustainable consumption is gaining currency as a new sustainable development policy objective, requiring widespread changes in behaviour at all levels of society to reduce the environmental impacts of consumption. While new international environmental governance institutions are growing upwards from state to global scale to tackle system-wide environmental issues, there is an increasing focus upon smaller-scale governance and citizen action at various sub-national levels, from local government to grassroots community groups and individuals. There is a growing policy emphasis on the role of socially- and environmentally-motivated individuals to exercise consumer sovereignty and transform markets through the minutiae of daily purchasing decisions. However a sociological analysis of consumption suggests that the scope of individuals and groups to change their behaviour is limited by existing social infrastructure and institutions – systems of provision – which ‘lock in’ consumers into particular patterns of consumption.

This paper examines one particular system of provision – namely money and exchange. A ‘new economics’ approach to analysing economic activity highlights the socially, environmentally and ethically unsustainable implications of the behaviour and consumption patterns promoted by the characteristics of modern mainstream money. For instance, these include the externalisation of environmental and social costs and benefits from economic decisions, resulting in ‘rational’ decision-making which promotes economic growth at the expense of ecological and social resilience. The new economics approach considers economic activity to be fundamentally embedded within social contexts, and so rather than proposing incentives for individuals, it articulates alternative social infrastructure and systems of exchange to rectify these problems. This paper critically assesses the role and potential of such an alternative infrastructure – regional and local socio-economic systems – to overcome the barriers to sustainability identified in conventional money systems. ‘Community currencies’ is the generic term for a wealth of alternative types of money which are springing up in communities throughout the world. There is a growing range of community currencies developing in the US and UK, among other countries, which address social, economic and environmental needs. They enable – and incentivise – particular types of exchange relationships and consumption patterns. While they are still small in circulation and impact, they deserve attention as potential models of alternative ways forward for sustainable economies and societies.

Previous research has examined the role of community currencies as providers of informal employment for the socially excluded (Seyfang, 2001c, 2004d; Williams et al, 2001) or as community-building tools (Williams, 1996; Seyfang, 2004c), the sustainability implications of community currencies have rarely been investigated (Seyfang, 2001a is one example). This paper makes a timely contribution to the debate on governance for sustainability by discussing the role and potential of community currencies to create new systems of provision and exchange which promote sustainable consumption by enabling individuals and groups to change their behaviour patterns. Empirical evidence of 'exemplars' of sustainable consumption initiatives is needed to inform policy, and here new research findings are presented to assess experience of three distinct types of community currency with goals of sustainable consumption. These are: Local Exchange Trading Schemes (LETS), time banks, and the previously unresearched Nu Spaarpas green savings scheme. This paper will discuss the scope and potential of each of these models, the values they represent and the barriers they face, and will reflect on the implications of these initiatives for theories of environmental governance and sustainable consumption in the context of building new systems of provision. Finally, it will suggest possible ways forward for community-level sustainable consumption with appropriate policy recommendations.

### **Sustainable Consumption: A Mainstream Strategy**

Responsibility for environmental decision-making in its widest sense is shifting from central government to new sets of actors and institutions, at a range of scales (Adger et al, 2003). At the same time as new international governance institutions are growing upwards from state to global scale to tackle system-wide environmental issues (such as the Intergovernmental Panel on Climate Change), there is an increasing focus upon smaller-scale governance and action at various sub-national levels, from local government to grassroots community groups (by 'community' we mean both communities of place and communities of interest) and to individuals in everyday consumption decisions (Jasanoff and Martello, 2004; Seyfang, 2003a).

Over the last 15 years, 'sustainable consumption' has become a core issue on the international environmental agenda, and the growth in what is variably termed 'green' or 'sustainable' consumption has occurred alongside an increase in the range of individual environmental actions that the government wishes to encourage (DEFRA, 2003). From its auspicious entry onto the international stage at the Rio Earth Summit in 1992, the term 'sustainable consumption' evolved through a range of

international policy arenas, and its definition narrowed as it became more widely accepted as a policy goal. The more challenging ideas put forward in Agenda 21, the roadmap to sustainability adopted at that summit (UNCED, 1992) which concerned re-orienting development away from materialistic consumption, became marginalised as governments instead focused on politically and socially acceptable, and economically rational tools for changing consumption patterns such as cleaning up production processes and marketing green products. In the late 1990s, the OECD began researching what sustainable consumption might mean to member states, and concluded that market failure was the prime cause of unsustainability. In this strongly libertarian perspective, governments are therefore expected to correct prices and provide regulatory frameworks to influence producers to be more eco-efficient and offer consumer choices of 'green' products (OECD, 2002). This perspective on of sustainable consumption has become widely adopted by governments, hence its description here as the 'mainstream' model.

The UK government's approach to sustainable development is founded upon a belief that stable and continued economic growth is necessary, and is compatible with effective environmental protection and responsible use of natural resources ('cleaner growth') (DETR, 1999). In 2003, the UK Government announced its strategy for sustainable consumption and production which also follows this approach. It defines sustainable consumption and production as: "Continuous economic and social progress that respects the limits of the Earth's ecosystems, and meets the needs and aspirations of everyone for a better quality of life, now and for future generations to come" (DEFRA, 2003:10). In practice, this emphasises decoupling economic growth from environmental degradation, to be achieved through a range of market-based measures: making the polluter pay, eco-taxes, government purchasing initiatives, consumer education campaigns and instituting voluntary eco-labelling schemes. So the agenda has narrowed from initial possibilities of redefining prosperity and wealth and radically transforming lifestyles, to a focus on improving resource productivity and marketing 'green' or 'ethical' products such as fairly traded coffee, low-energy light bulbs, more fuel-efficient vehicles, biodegradable washing powder, etc.

The UK government, following the mainstream model, places individual consumers at the heart of its sustainable consumption strategy, calling on informed and motivated citizens to use their consumer sovereignty to transform markets by improving environmental and social aspects of production and product design (DEFRA, 2003). It cites the growth of fair trade, green and ethical consumerism as evidence that producers are responding to the signals sent by individuals, and

relies upon economic instruments and markets to facilitate these changes. As such, it is a highly individualistic strategy, which assesses consumption behaviour in terms of consumer incentives and market signals.

Critics of this mainstream strategy for sustainable consumption point to a number of failings in this approach related to its individualistic and overall-consumerist foundations, which they claim limit the effectiveness and scope of these measures. These are: that the mainstream strategy for sustainable consumption relies upon market signalling, which in turn is based upon pricing regimes which systematically externalise social and environmental costs and benefits; that it fails to consolidate improvements made over time, leaving them vulnerable to changes in consumer attention and concern; that it makes only consumer markets available to transformation, while significant consumption from producer industries, and institutional consumption through the public sector are immune to sustainable consumerism by individuals (which raises the issue of sustainable public procurement); that it neglects the social meanings and context of consumption which compete for influence with environmental motivation; that it is largely premised on assumptions that greater material consumption equate with well-being; that it affords the right to influence the market solely on those able to participate in that market; that it pits individuals against globally powerful corporations in an inequitable struggle; and most significantly, that it fails to see the social infrastructure and institutions which constrain choice to that available within current systems of provision (Maniates, 2002; Sanne, 2002; Seyfang, 2004a,b; Southerton et al, 2004).

#### **An Alternative, New Economics Approach**

Given that current systems of provision prevent significant changes in consumption patterns, what can be done to overcome this limitation? Efforts to create alternative systems of provision, with associated social and economic institutions and infrastructure, require a foundation in alternative values, development goals, motivations, and definitions of wealth. They draw out the richer sociological meanings attached to consumption and point to collective institutions as the source of potential change. Such an alternative theoretical approach to governance for sustainability and sustainable consumption is proposed by a broad body of thought known collectively as the 'new economics' (Douthwaite, 1996; Robertson, 1999). This movement crystallised from a number of alternative thinkers in the mid-1980s who came together to organise The Other Economic Summit in 1985, a progressive meeting of green economists which shadowed the G7 summit of heads of state of major

economic powers (Ekins, 1986). Following this meeting, the New Economics Foundation was formed, and has developed to become a leading self-styled 'think and do tank' which promotes 'real economic well-being' (Shah and Marks, 2004).

This is an environmental philosophical and political movement which is founded on a belief that economics cannot be divorced from its foundations in environmental and social contexts, and that sustainability requires a realigning of development priorities. It is a theory that environmental wealth, and the value of labour to sustain communities and families, must be recognised, accounted for, and protected in order to support the market economy which rests upon this bedrock. This theory stresses the benefits of decentralised social and economic organisation and local self-reliance in order to protect local environments and economies from the negative impacts of globalisation, and reducing the scale of material consumption. The scale of economic activity and the level at which decision-making and social organisation occurs is a core aspect of these writings, as witnessed by their titles, for example Fritz Schumacher's 'Small Is Beautiful' (1993 [1973]) and Kirkpatrick Sale's 'Human Scale' (1980). The costs of globalisation these analysts identify include: capital flight out of the margins; local economic conditions being determined by global forces, as witnessed by industrial relocation resulting in areas of economic decline, despite a wealth of local skills and labour, and work that needs to be done; environmental degradation resulting from externalities such as global transport of goods, and lack of visible feedback mechanisms; erosion of local knowledge about environmental management; and an exclusive focus on the monetary economy at the expense of the environment and the unpaid social economy, the bedrocks upon which the conventional economy relies. In such cases, the argument for localisation is that more local control and decision-making power over economic, social and environmental conditions would improve quality of life. Simultaneously, the case is made that the material consumption which this economic growth provides does not significantly increase society's well-being or life satisfaction. The conclusion drawn from both these observations is that development should be reoriented towards promoting well-being rather than growth, and (Jacobs, 1984; Galtung, 1986; Douthwaite, 1996; Robertson, 1999; Henderson, 1995).

However, these theorists do not call for isolated self-sufficient communities; rather they employ the principle of subsidiarity in asserting that decisions should be made at lowest effective level, whether those decisions are economic, environmental or social (Ziman, 2003). It is certain that for many issues, such as railways, hospitals and education,

regional, national and international coordination is required, but in the case of the environment, the most appropriate level for decision-making is not necessarily global – actions require very local decisions, especially in the case of individual consumers and producers, albeit in a context of global environmental awareness. This strategy also embraces many positive aspects of globalisation – for instance popular international worker solidarity movements and consumer organisations have created global networks of activists, linking producers with consumers across the world to lessen the psychological ‘distance’ between them and foster supportive links (Brecher et al, 2000). At the same time, international environmental agreements and global sustainability conferences bring nations together to address issues outside the scope of national borders or laws. James Robertson describes this process as ‘evolution from today’s international economy to an ecologically sustainable, decentralizing, multi-level one-world economic system’ (Robertson, 1999:6). It calls for a new kind of citizenship of humanity as a whole, one which expands across borders (as does environmental change) and which recognises the political implications of private decisions and so defines everyday activities of consumption as potentially citizenly work. Dobson calls this ‘ecological citizenship’ (Dobson, 2003).

This is an equity-based understanding of environmental governance, drawing on ‘ecological footprinting’ methodology to define, visualise and address injustice. This technique calculates the area of ‘ecological space’ (of resources and pollution-absorbing capacity) taken up by individuals, cities and countries, and finds that the ecological footprint of the developed world is far larger than its geographical area – ie it uses a far greater proportion of the world’s resources than an equitable distribution (an equal per capita share of a fixed amount of environmental space) would suggest (Wackernagel and Rees, 1996). Sustainable consumption, for new economists, requires citizens and governments to take action to reduce the size of our ecological footprints to take up only a fair share of resources. This means cutting material consumption to levels which are globally equitable, and adjusting lifestyles to match – backing up calls from the new economists to re-orient economic policy to promote well-being rather than its current proxy, GDP (Shah and Marks, 2004).

In this model, key priorities are localisation, self-reliance, civic participation, embedded economic relations, building social capital and cohesion, and reducing ecological footprints through cutting material consumption. These in turn reduce environmental impacts, promote subsidiarity in environment decision-making and empower individuals – within a collective context – to build alternative systems of provision

which are based upon different conceptions of wealth, progress, etc, and through these allow people to behave as ecological citizens. This paper considers one such alternative provisioning system, namely systems of exchange. Community currencies are one tool put forward by proponents of the new economics to achieve these aims. Before exploring community currencies in more detail, it is worthwhile examining precisely what it is about conventional systems of exchange that the new economists seek to replace.

### **Conventional and Alternative Exchange Systems**

#### *What's wrong with mainstream money?*

The system of provision this paper is concerned with is that of exchange and money. What are the characteristics of the current mainstream money system? According to mainstream economic theory, money is a politically and socially neutral technology, with four core functions: as a medium of exchange, a unit of account, a store of value, and a standard of deferred payment (Begg et al, 2002). According to this theory, the more mobile, efficient and widely accepted a currency is, the better it will perform its functions. Sociological and political, not to mention environmental critiques of this notion lead the new economists to challenge this assumption on a number of grounds (Hutchinson et al, 2002; Dodd, 1994).

First, they argue that the functions of money – particularly medium of exchange and store of value – contradict each other. The fact that money is both a symbol (used for exchange) and a commodity itself (an item to be stored) encourages people to hoard money, removing it from circulation and thus reducing the amount available for transactions. It is a characteristic of modern economies that a shortage of money – supposedly the measuring stick of the economy – results in the paradox of having people with skills and labour to offer, plus work that needs to be done, but without the money to bring them together, the result is unmet needs and unemployed workers. This tendency has been observed by economists back to Gessel (1958) and Keynes (1973 [1936]), who promoted policies to ensure greater monetary circulation. A preferable solution, the new economists claim, would be to split the functions and have separate currencies for each purpose, so ensuring a ready supply of money for trade regardless of stores of value (Greco, 1994; Douthwaite, 1996).

Second, the mobility of money is not necessarily a good thing for local economies, according to these analysts. It results in 'capital flight' away from peripheral economic areas and towards centres, so draining

regions and communities of the means of exchange. This centralising tendency, whereby money is concentrated in a few areas at the expense of other areas, is one of the economic costs of globalisation which the localisation movement seeks to address. National currencies are best suited to national-level and international transactions, and in performing this role, do not serve the needs of local communities well, according to the new economics analysis, which criticises the 'dissociated' nature of modern money (Douthwaite, 1996; Robertson, 1999). Local economies are strengthened when money circulates many times within an area before leaving – known as the multiplier effect. New economics favours money that remains in a local area rather than migrating, and which is 'embedded' or founded within *local* social relations and environments, imbuing it with local significance and placing economic transactions and consumption itself within a profoundly *social* context (Greco, 1994; Lietaer, 2001).

Third, the current pricing regime upon which mainstream money is founded values some kinds of wealth and overlooks others, with profound implications for the signals sent by markets and hence development goals in general. Environmental and social costs and benefits are externalised from economic prices, and so are not accounted for in economic decision-making. This results in economic behaviour which degrades social quality of life and the environment, but which is entirely rational within the market framework (Jackson, 2004). Economic rationality is a tightly-bounded world, divorced from ethical, social and environmental contexts, and arguably never intended to be considered away from these overarching – and fundamentally important – frameworks. New economists – and increasingly they are joined by environmental economists working within the mainstream – argue that the dominance of markets at the expense of non-marketed aspects of life has gone too far, and argue for pricing to account for the full costs and benefits of activities, to enable genuinely rational decisions to be made which values all types of wealth, not merely that which is marketed (Robertson, 1999; Douthwaite, 1996; Daly and Cobb, 1990). This has implications for quality of life, justice, work and welfare.

Fourth, mainstream money and its system of exchange actively promotes particular types of behaviour and discourages others, and the implications of these effects are detrimental to sustainable consumption. For example, employment within the formal economy is rewarded while unpaid community labour is not; furthermore, the political structures surrounding the system of exchange reinforce this through the state benefits system by actively undermining people's capacity to undertake unpaid work and insisting that they enter formal employment. By

redefining what is considered 'useful work' and 'wealth', new economics aims to build a system of exchange provision which does not make these judgements, and which is more enabling of community participation and engagement through valuing all kinds of productive activity regardless of whether it takes place in formal employment or not. It suggests that the societal system of income distribution (currently based upon formal employment) should be altered, to remove the privileged position which formal employment currently has over other types of socially-useful work (Boyle, 2004; Robertson, 1999).

#### *Proposing Community Currencies*

This section has outlined how the current system of provision of money and exchange mitigates against actions and activities for sustainable consumption, and limits the scope of lifestyle changes which are possible within this system. The solution which a new economic analysis suggests is to create new, alternative exchange systems which rectify these negative aspects. 'Community currencies' is the generic term for a wealth of contemporary alternative exchange systems which exist alongside mainstream money, and which have been springing up in developed and developing countries since the 1990s to address the problems listed above.

The key to understanding the role and function of community currencies is to view all money systems as social infrastructure: the design of exchange mechanisms builds in particular purposes and characteristics to each type of money, which in turn promotes particular types of behaviour. Lietaer states "Money matters. The way money is created and administered in a given society makes a deep impression on values and relationships within that society. More specifically, the *type* of currency used in a society encourages - or discourages - specific emotions or behaviour patterns" (Lietaer, 2001: 4). Mainstream money is a system which prioritises a narrowly defined range of economic activities, in isolation from social and environmental contexts, and so inhibits sustainable consumption. Therefore new systems of exchange need to be invented, specifically designed to serve different ends by taking a 'whole systems' approach to the economy-society-environment context of economic activity. While these may be less efficient from a purely economic viewpoint, they are actually *more* rational when one incorporates environmental and social factors into the equations (Greco, 1994; Boyle, 2002; Seyfang, 2000; Lietaer, 2001).

Alternative money systems are not new; efforts to reform, replace and redesign money have a long and rich history around the world as a tool to support local economies in times of recession (when conventional

money is worthless or in short supply), and it is only in recent decades that the notion of having an exclusive national currency became the norm (Seyfang, 2000; Tibbett, 1997; Douthwaite, 1996; Boyle, 2002). In recent times they have emerged in both developed and developing countries as community responses to the economic, social and environmental pressures of globalisation and economic restructuring, and the social embeddedness of economic relations has become a more significant objective (Seyfang, 2001b). For example, community currencies have arisen in Mexico, Uruguay, Senegal, Thailand, Japan (DeMeulenaere, 2004), and in Argentina, alternative money systems traded in barter markets and conceived as a 'solidarity economy' by local environmentalists became real lifelines for much of the population during the national economic crisis in 2001-2 (Pearson, 2003). Viewing consumption as a profoundly social activity, the community currencies explored here all combine economic with social objectives, in order to adjust the trajectory of consumption patterns (see Dodd (1994) for a good introduction to the sociology of money). In addition to these 'social' currencies, a range of virtual currencies is now in use across the globe which are rarely thought of as alternative exchange systems, but which nevertheless function as mediums of exchange, units of account and stores of value: air miles and supermarket loyalty points are two common examples which demonstrate the plurality of money in everyday use (Boyle, 2003; Lietaer, 2001).

Having described the problems associated with mainstream money and the conventional system of exchange, an alternative has been described: complementary exchange systems designed to address these problems and enable more sustainable consumption patterns. How effective are these community currencies at overcoming the drawbacks of mainstream money institutions, and facilitating sustainable consumption? The next section will review experience with three distinct types of community currency, each designed for a different purpose: Local Exchange Trading Schemes (LETS) which aims to rebuild local economies; Time Banks which promote civic engagement and mutual self-help; and NU-card, a 'green savings' currency which incentivises environmental lifestyle changes and sustainable consumption.

### **Examining Community Currencies: Three Examples**

#### *A Green Local Economy: Local Exchange Trading Schemes (LETS)*

The most common types of community currency in the UK is LETS, Local Exchange Trading Schemes, which was developed in Canada, and pioneered in the UK in 1986. A LETS operates a virtual currency to enable

members to exchange goods and services without using cash, using local credits instead. LETS emerged in Canada as a response to the negative impacts of globalisation and economic restructuring, bringing unemployment and social fragmentation. This type of local money system was specifically designed to address the first two failings in mainstream money outlined above: namely that an abundant medium of exchange is required for a community to trade amongst itself, which circulates locally and cannot leave the area. LETS also seek to build community and create 'convivial' economies, embedded in local social relations. They aim to enable people to help themselves through work and exchange, without suffering externally-imposed limitations such as that of the systematic withdrawal of money (Lang, 1994).

Members of a LETS list their 'wants' and 'offers' in a local directory then contact each other and arrange their trades, recording credits and debits with the system accountant. The currencies often have locally-relevant, idiosyncratic names such as 'shells' in Kings Lynn, or 'bricks' in Brixton, and aim to instil a sense of local identity. No interest is charged or paid, so there is no incentive to hoard credits, and exchange becomes the primary objective. Most LETS are small, voluntary organisations run by local activists, but they have increasingly been championed by local authorities under the aegis of LA21 as a tool for local economic renewal, community building and environmental sustainability. LETS has grown to about 300 schemes in operation at present, with an estimated 22,000 people involved and an annual turnover equivalent of £1.4million (Williams et al, 2001).

Research has shown that LETS deliver small, but significant, economic benefits to members, providing new opportunities for informal employment and gaining skills, and enabling economic activity to take place that would not otherwise have occurred. But their social impact is much greater, as they build social networks, generate friendships and build personal confidence. LETS also encourage 'green' consumption activities in a number of ways: they promote local suppliers of food and other goods, reducing 'food miles' and the hidden costs of international transport associated with the conventional economy; they promote shared resources among members of a community, and so cut individual consumption, for example lift-sharing, hiring equipment and facilities; and they encourage recycling of goods, as members find a market for their unwanted items (Seyfang, 2001a). Some LETS have evolved to issue local currency notes, so removing the burden of reporting transactions to a central accountant, and enabling the currency to spread further in the area - even through local businesses in some areas. These notes often affirm 'in each other we trust', 'in community we trust' (rather than 'in

god we trust' as seen on US dollar notes). In these ways, LETS can be seen as a tool for building more self-reliant, socially-embedded local economies, a strategy proposed widely by environmentalists as a protective measure against external economic shocks from the global economy. For these reasons, LETS has been championed as a tool for building green economies (Douthwaite, 1996).

However, despite this potential, LETS have remained small and marginal in economic terms, due to a number of internal and external factors limiting their growth. These are that LETS need to develop and grow to fill the large 'skills gaps' which presently exist, meaning that it is difficult to find staple goods and services on the schemes; they need financial support to scale up and attract new members to fill these gaps; they tend to operate in a 'green niche', attracting people who agree with the principle but have little time to participate, and indirectly excluding others.

Finally, government regulations are a significant obstacle. Current social security rules deter benefit-recipients from participating in local exchange systems like LETS, by counting LETS earnings as equivalent to cash income, and so potentially threatening means-tested benefits when levels exceed a given limit (currently £5 a week). Although most LETS members rarely trade above this level, the message is nevertheless sent out from government, loud and clear, that it disapproves of benefit-recipients undertaking such activities, and this message is sufficient to inhibit participation by the most excluded groups in society. By placing mutual support initiatives like LETS in the same category as informal employment (and decreeing it to be incompatible with receiving state benefits), the government is effectively stopping people from finding creative self-help solutions to the problems of unemployment – not simply in terms of actual work and income, but also through increased self-esteem, widened social networks, and the growth of trust and mutual support in deprived neighbourhoods. A turnaround in state thinking is needed to actively promote LETS through policy initiatives which frame LETS-type schemes as positive endeavours for the poor and unemployed for the full range of social and economic reasons (Seyfang, 2001a, c; Williams et al, 2001).

#### *Spending Time Building Sustainable Communities: Time Banks*

The second wave of community currencies in the UK is 'time banks', which are based on the US time dollar model developed by Edgar Cahn, and aim to rebuild supportive community networks of reciprocal self-help, particularly in deprived neighbourhoods. Referring back to the list of problems associated with mainstream money, time banks address the

fourth cited failing, which is that certain types of labour are valued and others neglected, producing perverse incentives which undermine social cohesion. Time banks explicitly value and incentivise the work which goes on in the 'core social economy', the bedrock of society upon which the formal economy rests – raising children, caring for elders, community volunteering, helping neighbours – in order to strengthen communities' capacities to support and care for themselves through the development of social capital (ties of reciprocity and trust). This has immediate impacts on educational achievement, health, crime levels and personal development.

A time bank operates like a reciprocal volunteering scheme, with a central broker to coordinate members activities. The principal characteristic of time banking is that everyone's time is worth the same amount – one time credit per hour – regardless of the nature of the work provided. Participants earn credits by helping others, and spend them receiving help themselves (Cahn, 2000). The first UK time bank was set up in 1998, and the 2002 national evaluation found that there were 36 active time banks, with an average of 61 participants each, who had exchanged (given or received) a mean of 29 hours each. This equates to 2196 participants in total, and nearly 64,000 hours exchanged (Seyfang and Smith, 2002). By 2004, there were 68 time banks up and running, according to Time Banks UK ([www.timebanks.co.uk](http://www.timebanks.co.uk)). Time banks aim to overcome the limitations of LETS by being based in mainstream institutions (health centres, schools, libraries), paying coordinators for development and support work, and most importantly, for brokering transactions between participants (Seyfang, 2002). They attract members of the most socially-excluded groups in society – the unemployed, ethnic minorities, people with disabilities (those who normally volunteer least), and are often introduced into marginalised areas where building trust and neighbourliness is a challenge which the conventional economy cannot meet – but which time banks can address, and which is essential for sustainable development. While some might argue that time banking is simply institutionalising existing informal exchange networks, research shows that this is not the case, and that a large proportion of the time exchanged would not have happened without the time bank. In other words, time banks are an institution which aims to recreate the informal support networks that some take for granted, but which are so obviously missing in fragmented, deprived neighbourhoods and for isolated individuals such as the elderly, the housebound and the unemployed (Seyfang and Smith, 2002).

In addition to this 'community time bank' model, time banks can also be used as a 'coproduction' tool to encourage people to become

involved in the delivery of public services which require the active participation of service users in order to be successful, for example health, education, waste management, local democracy, etc (Cahn, 2000). By rewarding and encouraging civic engagement, time banks - a community currency designed for a specific social purpose - could invigorate active citizenship. Preliminary findings from the 2004 national survey of UK time bank coordinators reveal that time banking is being used to promote more sustainable consumption and environmental governance through 'ecological citizenly' action in a variety of ways. Mount Libanus time bank in Wales has organised a 'planning for real' community visioning event, and plans to use the time bank to encourage greater community involvement and sense of ownership of local environmental projects. This time bank and others reward participation in local community forums and housing associations with credits, promoting engagement in local decision-making. The Hexagon Housing Association in London covers 5000 properties in five boroughs (mainly the low-income areas of Southwark and Lewisham), and is incorporating time banking into its business model, as a tool to promote sustainable, cohesive communities. It is starting out by providing DIY and first aid training courses in exchange for time credits, and hopes this will empower residents to share skills, provide mutual support and develop a sense of community pride (and reduce maintenance costs for the association). Already, the time bank coordinator reports that those taking part are primarily the more traditionally excluded groups, and that neighbourliness and interactions have increased. Other projects here and in other time banks include linking with local recycling efforts to reward waste minimisation and separation efforts, rewarding members with low-energy lightbulbs, and community gardening. In Glasgow, time bank participants can spend their credits on fresh fruit and vegetables delivered direct from the market to the community, improving local diets and nutrition. In these cases and dozens of others, the interdependence and social contacts which these small exchange create are the most important aspect of the transaction, fostering community spirit, self-worth and engagement (see [www.timebanks.co.uk](http://www.timebanks.co.uk) and [www.londontimebank.org.uk](http://www.londontimebank.org.uk) for more information on individual projects).

Furthermore, "co-production is a framework with the potential for institutions ... to achieve the elusive goal of fundamental and systemic change" (Burns, 2004) by re-conceptualising the role and purpose of those institutions from the bottom up, and reframing them in terms of empowered participation and civic action. For instance, education provision could evolve to become a system of enabling people to teach

each other; health services can be revolutionised by capturing the expertise, time and energy of patients to help each other, and local government could harness the energy of communities to not only receive, but also design and deliver local services in a genuine spirit of reciprocity. Time banks are indeed a new infrastructure of income distribution for society, where income is not dependent upon one's value to, and activity in the formal economy. In this way it echoes calls for a non means-tested 'citizen's income' where basic provision is made for all individuals on an unconditional basis - thereby ensuring that vital socially reproductive work is valued and carried out, and the infrastructure of income distribution is changed so that income is no longer dependent upon formal employment (Citizen's Income Trust, 2004; Boyle, 2004).

The radical of valuing all labour (or time) equally seeks to explicitly recognise and value the unpaid time that people spend maintaining their neighbourhoods and caring for others. Thus voluntary work is rewarded in credits, and so incentivised, rather than squeezed out by the conventional economic system which accords it no value. For socially excluded individuals and communities, whose skills are accorded no value in the mainstream economy, the opportunity to be valued and rewarded for one's input into community activity and for helping neighbours, is enormously empowering. It also sends a powerful message to top-down service providers about the wealth of abilities in deprived neighbourhoods, rather than repeatedly emphasising needs and deficiencies. In fact, the most significant benefit of time banking, for many participants, was the opportunity to redefine what is considered 'valuable' (Seyfang, 2004d), in other words: *creating and putting into practice new institutions of wealth, value and work* which are necessary for sustainable consumption and development (Shah and Marks, 2004; Robertson, 1999; Ekins, 1986).

Time banks in the UK still face limitations in achieving their potential and have yet to be fully mainstreamed into public service provision. These are: large 'skills gaps' in projects which again presents a limited range of services available in exchange for credits; difficulty becoming established, as projects take a long time to develop yet they are reliant upon short-term funding; and reciprocity is slow to materialise due to a cultural shift needed to alter the reluctance of participants to ask for help. Government regulations are again a stumbling block for the implementation and uptake of this system of exchange. In the case of time banking, (which is presented as mutual volunteering rather than an alternative monetary system), the unemployed are officially encouraged to participate, for social and community reasons, but may only exchange

their credits for services, not goods. As time banks have developed in the US, material incentives for earning credits (donated refurbished computers, meals, household goods and so on) have been a major factor in encouraging participation from youth groups and the poor. This strategy is threatened in the UK by present government regulations which count their value as monetary income which is counted against social security benefits.

Another state obstacle is that those in receipt of incapacity benefits are deemed to be capable of working if they take part in time banks, and so risk losing their benefit payments. This is a short-sighted and misguided policy, as much time banking work is carefully targeted towards the abilities of participants, so for example a housebound person might earn credits for making telephone calls to others, but still be incapable of conventional employment. Furthermore, the social and personal gains from taking part ameliorate the social exclusion associated with disability, and so participation from these groups should be particularly encouraged (Seyfang, 2003b, 2004c,d; Seyfang and Smith, 2002).

*Rewarding Sustainable Consumption: NU Spaarpas*

A third example of a local currency designed for a specific purpose is the NU-card, a 'green loyalty point' currency which has recently been piloted in the Netherlands. This currency is designed to promote environmentally-friendly consumer behaviour, and acts like a reward card. It is an incentive scheme which specifically seeks to overcome the market disincentives to consume sustainable or ethical products, which are produced by the systematic externalisation of social and environmental costs and benefits from market prices. In other words, if mainstream money effectively incentivises unsustainable consumption, then NU is a prototype system which reverses those hidden subsidies by rewarding more sustainable behaviour. This is based on a marketing assumption that "it is better to approach people in a positive and stimulating way than in a negative and restrictive manner" (van Sambeek and Kampers, 2004: 13) - in other words, promoting sustainable consumption using carrots rather than sticks (Holdsworth and Boyle, 2004).

Points are earned when residents separate their waste for recycling, use public transport, or shop locally. Extra points can be earned by purchasing 'green' or 'ethical' produce (such as organic food, fairly traded goods, recycled products, rental, repairs etc) at a range of participating local stores. The points can then be redeemed for more sustainable consumer goods, public transport passes, or cinema tickets

(in other words, spare capacity in existing provision which incurs no additional costs), or donated to charity. In this way, there are incentives to change behaviour both when earning and spending the points, and private businesses benefit at the same time as public goals are met. The points circulate in a closed-loop system, and card scanners in participating shops feed data into a central set of accounts.

The initiative was founded by the Rotterdam Municipal Authority, and was a partnership between local government, local businesses, and non-governmental organisations – specifically Barataria, a sustainability consultancy organisation; it also received funding from the European Union. The idea was developed during the 1990s, and officially born at a meeting of the Rotterdam Local Agenda 21 in 1998. It was prompted by several government objectives: reducing waste entering landfill, promoting public transport use, and generally raising environmental awareness and sustainable consumption. This currency was introduced in the city of Rotterdam in the Netherlands in May 2002, and by the pilot's end in October 2003, 10,000 households had the card, over 100 shops were participating, and 1.5 million points had been issued. It adopted a high-profile, professional marketing approach to raising public awareness of the scheme, and cost two million euros to establish and run for the period. Due to a slow build-up of members, changing strategies for issuing points, and the time taken to acclimatise to the project, the organisers felt that making pronouncements about changes in consumer behaviour during the short pilot were premature. Nevertheless, they do point to a growth in the number of points issued from shops as time progressed, and a telephone interview with a sample of cardholders revealed that five percent of participants reported changing their behaviour (of buying organics, separating waste, and buying second-hand goods) as a result of the NU card – reporting that being 'rewarded' for making certain choices was the influencing factor. The NU scheme also made shop owners more aware of the different types of products they sold, but within the short lifetime of the pilot, no actual changes in provision can be attributed to the project.

The NU concept is currently seeking funding to be rolled out to Amsterdam and the rest of the Netherlands, and future implementations would benefit from lessons learned in Rotterdam –for example there are plans to make the card scheme self-sustaining financially, through charging clients (eg. government) for meeting their objectives using the scheme. The ideas are also spreading abroad as a specific-purpose monetary tool for incentivising sustainable consumer behaviour (Bibbings, 2004). Like time banking, it rewards actions which are seen as positive, building on psychological responses and self-esteem to grow

sustainability, rather than guilt, exhortations to action, and punitive measures. Of the three alternative money systems examined here, NU is the most 'mainstream', as it exists comfortably alongside mainstream money in regular everyday transactions, simply altering the incentives offered by market prices, and is easily understood by a public accustomed to savings points. Nevertheless it represents a profound shift in the infrastructure of exchange, as it uses a value system different to market prices which is based upon sustainability principles, yet "the NU card scheme can present itself as a reliable channel for sustainability, and also offers low-threshold information that the consumer needs at time of purchase" (van Sambeek and Kampers, 2004: 77).

### **Conclusions and Policy Implications**

Community currencies have been put forward as a response to the failings of mainstream money – the conventional system of exchange – to promote sustainable consumption. They emerge from a new economics analysis which identifies socially-embedded local economies as potentially more sustainable forms of development. The preceding section of the paper described three distinct examples of community currency and assessed their effectiveness and potential to constitute alternative systems of exchange to favour sustainable consumption. The findings of this study are that community currencies are indeed fledgling attempts to build new social and economic institutions founded upon different values to mainstream systems of provision, with implications for environmental governance, sustainable consumption. The community currencies examined here are successful at overcoming each of the drawbacks of mainstream money discussed above, and building alternative exchange systems which answer the need for sustainable consumption. Specifically, they provide a medium of exchange which circulates alongside scarce national currency to provide new opportunities for economic activity; they are place-specific, retaining roots in local communities, and they are not mobile, which means they circulate within a given area and do not drain away, boosting local self-reliance; they can correct the misleading market signals offered by the conventional economy, allowing people to incorporate social and environmental factors into their valuations and purchasing decisions; and finally, they recapture 'work' from the formal economy and place it at the centre of a 'whole systems' approach to the economy, valuing and rewarding the development of social capital and active citizenship.

Community currencies are found to be prized channels for the expression of values which are squeezed out of the conventional economy, and demonstrate a deep-rooted desire for systems of provision

and exchange based upon assumptions and priorities quite different to that of mainstream money. Furthermore, they answer the need for sustainable consumption at a fundamental level, by adjusting the incentives, structures and institutions within which society transacts and so re-orienting it towards new sustainability goals. They have emerged as grassroots responses to problems with mainstream money, and operate in a variety of contexts in developed countries, from neighbourhood friendship networks to city-wide savings cards. Community currencies are not a blanket cure-all for sustainability. Their individual success is dependent upon being locally-specific, adapted to particular local situations, social contexts and objectives of the initiatives, and while generalised models are available, they should be fine-tuned to the location and objective they are targeted at.

While the scale of these examples is presently small, they have demonstrated that they do achieve their objectives and have the potential to achieve much more if scaled up and mainstreamed. Each of these case studies might be considered experimental prototypes for future multi-currency developments. They demonstrate that the existence of plural monetary infrastructures is possible, and is effective at enabling more sustainable consumption patterns, within the limits of scale as currently operationalised. In so doing, they point to possible future developments which might take these principles and evolve them into something embedded within daily life for millions of people, transforming society's behaviour towards sustainable consumption and production principles.

These examples are suitable for local applications. Other types of currency could similarly be designed for other scales of circulation and function, resulting a multi-tiered variety of currencies, each designed for their role. For example, Bernard Lietaer, senior Central Bank executive in Belgium and designer of the European Currency Unit, projects from historical and current developments in money, to envisage a four-tiered monetary system in the future, where corporations and individuals deal with multiple currencies routinely – much as we do today with payment of air tickets in cash and air miles, for instance. The top level would be a 'global reference currency', one which is not tied to any nation state, and whose objective is to provide a stable and reliable reference currency for international trade. It is based upon a basket of standard internationally traded commodities such as gold, copper, wheat. Lietaer suggests that such a system might evolve from the range of competing international corporate scrips, presently used for moneyless trade between firms: in the US, 400,000 businesses belong to nearly 700 barter exchanges, totalling \$8.5 billion in cashless trade. This trade is growing at 15 percent a year, three times faster than dollar commercial exchange (Lietaer,

2001:291). The second layer of monetary systems would, in this model, comprise three multinational currencies, each used by a number of geographically-close countries – the NAFTA dollar, the Euro, and an ASEAN currency. The third layer is some remaining national currencies outside or alongside the multinational currency regions, with the difference from today that they no longer hold a monopoly over issuing money. The fourth layer of this model is local community currencies – local economic and social currencies such as the ones outlined in this paper to meet local needs and build social capital. Lietaer suggests these could expand their scale and influence as communities self-organise in response to the structural changes accompanying globalisation, and once a critical mass is reached, they would be widely adopted and exchanged through community internet clearing houses (Lietaer, 2001). Together these could provide complementary tools which add up to a system of provision designed for sustainable consumption and development by rewriting the rules of exchange (Seyfang, 2000; Boyle, 2003; Robertson, 1999).

In order for this evolution to occur, a number of policy changes are required, the most fundamental of which is a shift in thinking and organisation, away from top-down command and control of the economy, and towards a more open, flexible, adaptable structure which allows experimentation and the spontaneous emergence of new exchange systems (Lietaer, 2001). First, governments need to recognise the benefits delivered by participation in community currencies as being valuable for local economies, communities, and environments. This in itself would necessitate a rethinking of social policy and a redefinition of ‘work’ in order to cease the privileging of formal employment over all other types of work, and would also require policy to consider a whole systems approach to economic activity, and realigning economic policy to meet broader sets of objectives. Community currencies offer new infrastructure for income distribution, new pricing regimes and new economic rationalities which work in favour of sustainable consumption, for example by encouraging recycling and sharing, and enabling more local needs to be met with local resources. Second, other than where businesses are involved, this official recognition should not lead to treating community currency transactions as equivalent to conventional economic activity, with associated taxes, benefit restrictions, etc. Community currencies benefit those on the margins of society – those on low incomes and outside the labour market for whatever reason; it is perverse to penalise those very groups from participating through social security benefit regulations, as we have already seen. Third, funding is needed to allow these projects to develop and grow over sustained

periods, attracting broad cross-sections of members and becoming more familiar to the public at large. And finally, government should embrace the possibilities offered by community currencies to deliver public services more effectively and achieve policy objectives across a range of areas, using alternative exchange systems as a tool to get to places and motivations where mainstream money cannot reach.

For example, taking part in LETS can be valuable 'occupational therapy' for the unemployed, enabling them to learn new skills and develop confidence. Time banking and co-production are tools which could change the way we think about public service provision, resulting in participative and empowering genuine partnerships for health, education, and development. And the NU card could be used to boost recycling rates, cut congestion by promoting public transport, and support local businesses.

A key characteristic of resilience and adaptability is diversity. The challenges facing us across the globe demand action both to mitigate, and adapt to environmental, social and economic change. Arguably, a diverse range of systems of provision, extending beyond the confines of current mainstream institutions and into increasingly self-reliant and empowered communities, will prove the best defence against external shocks. The policy challenge now is to support those fledgling initiatives seeking to build new systems of provision, and enable them to grow, thrive and propagate alternative development goals and values alongside the familiar market infrastructure. Adopting time banks throughout the health service, or developing partnerships to introduce NU cards in cities throughout the country, would start a process of diversifying the systems of provision of money used, in favour of sustainable consumption.

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