Development in Practice, Volume 19, Number 6, August 2009

Routledge
Taylor & Francis Group

Solidarity economy and recycling co-ops in São Paulo: micro-credit to alleviate poverty

Jutta Gutberlet

Lack of working capital hinders collective commercialisation of recyclables. Social exclusion and bureaucratic constraints prevent recyclers from obtaining official bank loans. As they continue to depend on intermediaries, the cycle of poverty, dependency, and exclusion is perpetuated. The article discusses collective commercialisation and the micro-credit fund created among 30 recycling groups in the Brazilian city of São Paulo. A committee of eight women recyclers manages this fund. The article contextualises reflections on empowerment and community-based development, applying the theoretical framework of social and solidarity economy. The author finally suggests that inclusive governance structures have the potential to generate greater justice and sustainability.

KEY WORDS: Gender and Diversity; Governance and Public Policy; Labour and Livelihoods; Social Sector; Latin America and the Caribbean

Introduction

The scope and the degree of urban poverty and social exclusion in the 'Global South' has become a concern of unprecedented magnitude which needs to be addressed with innovative and fair strategies. Exclusion is one of the results of inequitable social and economic development, often as a result of restructuring and the consequent unemployment and spatial and social segregation. In many cities throughout the world, informal recycling has become the main activity of the impoverished and excluded population. Organised resource-recovery and recycling is a unique opportunity to generate income and to empower those involved. In addition, this activity produces environmental and resource-conservation benefits. This article discusses co-operative recycling as a form of social economy which helps to build human, social, financial, political, and natural assets. The availability of micro-credit is essential to facilitate and enhance this activity.

The article is situated within a social and solidarity economy which emerges as a response to inequality and provides insights on policy-making and livelihoods issues pertinent to the informal sector in the Latin American context. It is not an exhaustive account of social economy but

ISSN 0961-4524 Print/ISSN 1364-9213 Online 060737-15 © *2009 Oxfam GB*
Routledge Publishing DOI: 10.1080/09614520903026892

describes the experience of a recycling network with micro-credit as working capital. The case study presented in the article underlines the revolutionary potential of social and solidarity economy in provoking social change, with women being in the forefront of this process. Attention is also given to the barriers and difficulties that the recyclers currently face in their attempts at collective commercialisation.

Micro-credit is a tool for use within social and solidarity economy. It is best known through the Grameen Bank, founded by the Nobel Prize winner Professor Muhammad Yunus, and it is defined as loan distribution and recovery based on mutual trust, accountability, participation, and creativity. Micro-finance includes different forms of financial services besides micro-credit. 'Micro-finance is defined as a development approach that provides financial as well as social intermediation, [which] involves organising citizens' groups to voice their aspirations and raise concerns for consideration by policy makers and develop their self-confidence' (Qudrat and Rahman 2006: 477–8). Essential to this new development approach is the 'micro' scale, involving small credit amounts, and the focus on women as recipients of these loans. Experience, particularly that of the Grameen Bank (which by mid-2006 had handed out close to US $6 bn to more than 50 million borrowers), widely confirms that women are more reliable in the matter of loan repayment and more active in improving the quality of life of their community beyond that of their family (Counts 2008).

The present story is about the experience of a network of 30 recycling co-operative organisations in the south-east of Brazil, where micro-credit was sought in 2006 to overcome the lack of working capital for collective commercialisation. Besides bridging a financial gap and thus enabling the participants to earn more, the experience shows that micro-credit can act as a tool for participatory human development. Most informal and organised recyclers sell their material to intermediaries. In order to engage directly with the recycling industry, they need large quantities of material and better qualities. Collective commercialisation is a means of increasing the recyclers' earnings and empowering them through praxis. Micro-credit has become the key to helping the groups to overcome bottlenecks in the commercialisation process. This article concentrates on some of the lessons drawn from this experience and discusses the process of using this participatory exercise to introduce sustainable improvements to livelihoods and strengthen group solidarity.

Generating innovative forms of economy

In Brazil as elsewhere, new forms of production, distribution, finance, and consumption are emerging from a scenario of poverty, unemployment, and informal enterprise; these forms can be summarised as *social* or *solidarity economy*. Economic practices based on solidarity, co-operation, and reciprocity are gaining momentum as a means to overcome poverty and exclusion. They differ from the widespread praxis of market-oriented capitalism, where the logic of capital accumulation is the prime objective in defining work relations and product outcomes. Women play a primary role as agents within this development approach, which is initiated from below.

Moulaert and Ailenei (2005, p. 2039) define social economy and synthesise the methods and concepts within this field. They discuss social economy from a historical and geographical perspective and identify early experiences where '"associations" were created in order to organize and protect communities'. The common denominator is the recognition and underpinning of the values related to co-operation and sharing. Terms such as social economy, third sector, solidarity economy, alternative economy, non-lucrative sector, non-profit sector, not-for-profit sector, voluntary sector, and idealist sector are used synonymously in the literature and have a long history.

Solidarity economy (économie solidaire, *economía solidaria)* is widely perceived as a new generation of social economy with a plurality of forms of economic activity. The term is also used to underline the (re)-emergence of the 'old' social economy principles, as highlighted in Moulaert and Ailenei (2005). Solidarity economy is a bottom–up initiative which encompasses the voluntary sector as much as new institutionalised economic experiences. '"Solidarity economy" thus creates synergies between actors (local authorities, private enterprises, state, citizens) and generates workplaces by offering new services' (*ibid*.: 2042). Both terms are used interchangeably in the academic literature. Like Singer (2003), I value the term 'solidarity economy' simply for underlining the utmost important aspect of this type of economic praxis as *solidarity*. The proposal comes from the drive to change unjust and exploitative economic relations and to improve livelihoods. It gives hope that a different world is possible, with innovative ways of production, commercialisation, and consumption. Community-based enterprises are recognised as useful strategies for local economic development, particularly in poor communities. Profit making is still at the centre of attention in social enterprises, but the profits are applied in the social sphere.

'Social economy' may also be read as fulfilling a certain function within capitalism: one of filling the gap and performing a function subordinated to the dynamics of market-oriented capitalism, without treating the root causes of unemployment, and thus contributing to the maintenance of the *status quo*. Social economy does not yet sufficiently address the pressing social concerns about unemployment and underemployment, although its extent is increasing. Its effects are often beneficial in terms of human development, because it helps people to empower themselves.

Key attributes of social economy

Autonomy or self-determination, rather than paternalistic dependency, is key in social economy. Social relations based on autonomy have the potential for social innovation, from both an institutional (governance) perspective and an economic (satisfaction of needs) perspective. Co-operation and reciprocity are building-blocks for social cohesion, which in turn is necessary for such collaborative work schemes to function. Effective integration requires a certain degree of decentralisation, with the transfer of power and responsibility to its members, and it involves deliberation. Debate and discussion aimed at transparency, producing well-informed opinions and consolidating the values of solidarity and co-operation are equally fundamental in this process. In networking, co-ops and associations have the ability to build the social assets that are necessary for deliberation.

Deliberative spaces, 'defined as virtual and real sites where meaningful public dialogue and debate can occur [. . .] play a crucial role in generating ideas and information that can improve knowledge, improve understanding, and enhance the quality of decisions', according to Parkins and Mitchell (2005: 529). These authors argue that such deliberative spaces may also 'become systematically distorted through manipulation, coercion, and misinformation' (*ibid.*: 530). Transparency and participation throughout all processes (particularly during regular evaluations) are crucial to avoid these kinds of distortion. Participation means sharing responsibilities and decisions. In praxis it implies that stakeholder representatives are actively involved in the negotiation with government or business about issues that pertain to them, such as policy design and implementation of actions that support social-economy initiatives.

Zimmerman (1990) calls the process 'learned hopefulness', whereby individuals learn and use skills that enable them to develop a sense of psychological empowerment, a multidimensional concept linked to community involvement. It is 'the process whereby individuals learn and utilize skills that enable them to develop a sense of psychological empowerment' (*ibid.*:73). He theorises that psychological empowerment functions through intrapersonal, interactional,

and behavioural components. Empowerment means that people have increased control over their lives, increased critical awareness of their socio-political environment, and the stimulus to participate democratically in their communities. The concept is defined as 'an intentional ongoing process centered in the local community, involving mutual respect, critical reflection, caring, and group participation, through which people lacking an equal share of valued resources gain greater access to and control over those resources' (Speer *et al.* 2001: 716).

Speer *et al.* (2001) discuss participation as an integral component of social cohesion, together with notions of trust, connectedness, and civic engagement. These authors reinforce previous findings that social cohesion is related to intrapersonal empowerment. 'As an intrapersonal component, empowerment addresses the manner in which individuals think about themselves and includes concepts of perceived control, self-efficacy, motivations to control, and perceived competence' (*ibid*.: 2). Previous research suggests that intrapersonal empowerment is linked to the quality and extent of participation.

The government plays an important role in facilitating what Jürgen Habermas has described as the 'public sphere of communicative action and deliberation in which, according to a more or less supportive institutional framework, the process of political opinion and will formation take place' (Gerometta *et al.* 2005: 2017). Habermas's concept outlines the possibility of consensual political will through on-going deliberation between all social groups. The challenge is how to include in the deliberation the ones who are socially and economically excluded, and who form the majority in the Global South. How to build the necessary social assets so that their concerns and proposals are taken into account by policy makers? There are new ways of governance which more effectively tackle social, economic, and political exclusion. Public deliberation and social-economy initiatives are fundamental in this process.

Solidarity economy in Brazil

Brazil provides interesting experiences of social economy. Here the term 'solidarity economy' is more widespread and has entered the discourse of public institutions from the local to the federal level. A national secretary and council for solidarity economy (*Secretaria Nacional de Economia Solidária*, *Conselho Nacional de Economia Solidária*) were created in June 2003 to foster these initiatives. On the non-government side, a national solidarity forum and many regional solidarity forums (*Fórum Nacional de Economia Solidária*, *Fórum Regional de Economia Solidária*) were set up to promote sharing and co-operation on different scales. In 2004 the first nationwide meeting on Solidarity Economy was held in Brasília (*Encontro Nacional dos Empreendimentos da Economia Solidária*), with 2500 representatives from all states in Brazil. During these events, regional forums and state commissions were formed. In theory these networks stimulate co-operation in production and commercialisation, so that the local production reaches the local consumer quickly (Singer 2003). This is not yet the reality for the informal recycling sector. The World Social Forum, Local Agenda 21, and other benchmarking actions focusing on social justice, can contribute to this form of economy.

Social relations and the cultivation of collective goods are fundamental in defining a strong social economy. According to a study conducted by the *Instituto Brasileiro de Análises Sociais e Econômicas (*IBASE) and the *Associação Nacional dos Trabalhadores em Empresas de Autogestão e Participação Acionária* (ANTEAG), recognising and valuing different perspectives and opinions indicate strong co-operation (2009). Instead of expecting others to follow one's own ideas, conflict generated by differing opinions is accepted as part of the process in developing a common proposal, while avoiding differences in opinion indicates 'weak' co-operation. Active participation, taking positions, and exposing one's ideas indicates a 'strong' characteristic, different from passive participation in the sense of only being present in meetings (*ibid.*).

Variations from weak to strong indicate changes in values and culture. Social-economy businesses contribute to changing culture regarding individual autonomy and self-reliance. In a context of strong co-operativism and strong participation, individuals seem to lose self-centredness, being guided towards private profits and material gains. The study suggests that cultural change influences social businesses, with the emergence of a culture of autonomy (*autonomia)* and self-management (*autogestão)* (IBASE and ANTEAG 2004). Popular economy becomes viable only when sustained by the principles of co-operation and reciprocity, as previously outlined within the characteristics of solidarity economy; otherwise it reproduces the conventional capitalist economy. Defining solidarity economy as an 'area of change of the co-operative and solidarity character of work and of the market in favor of the reproduction of life from a broader perspective' brings this aspect to the forefront (IBASE and ANTEAG 2004: 4, author's translation).

There are two mechanisms that stimulate the expansion of social and solidarity economy. The first refers to claiming spaces which enable dialogue and collective decision making among organised stakeholders. The second underlines capacity development to build self-reliance and to enable self-management.

Recycling co-ops in the social-economy context

Worldwide the most impoverished and excluded urban population employs a survival strategy consisting of the informal selective collection and commercialisation of recyclables from the waste stream. In Brazil these workers are called *catadores* (literally 'collectors'), in Argentina *cartoneros* ('cardboarders') or *recicladores* ('recyclers'), in Colombia *callejeros* ('street people'), in Cuba *recuperadores* ('resource recoverers'), in Egypt *Zabaleen* ('garbage people', from *Zbel*, meaning garbage), and in Morocco *Mikhala* (in a dialect meaning 'those who sift through garbage'). There are also other terms in use for this category with strong negative connotations, such as *cirujas* in Argentina, meaning scavenging birds, such as vultures. The recyclers' stories of exclusion and poverty are similar everywhere. The most dignified term is *recuperador*, or resource recoverer, which describes exactly what they do.

Informal recyclers work outside any organised structure, regularly collecting the material within their *trap lines* – the geographic area that they regularly service. The material is collected daily and, after separation into various categories: paper (white, coloured, cardboard), plastic (generally up to 10 different types), glass (by colour), metal (various sub-categories), and other less abundant materials, it is sold to intermediate businesses. A growing number of recyclers join organised groups such as associations or co-ops, which sometimes receive support from NGOs or government. The level of autonomy and government support varies, and the co-ops also face administrative and financial hurdles. In most cases the existing infrastructure is precarious and unsafe, with inadequate ergonometric settings, lack of space, inadequate protection from wind, rain, and sun, and often the absence of toilets, showers, and running water. In the streets, recyclers are frequently harassed and stigmatised.

Since 2005, a number of recycling groups in the metropolitan region of São Paulo have collaborated in the Participatory Sustainable Waste Management project (PSWM), which provides a space for learning and an opportunity to share and discuss their work experiences. The objective of the PSWM is to build and strengthen the capacity of the recyclers and the local governments in the interests of inclusive waste management, by structuring, organising, and strengthening the recycling groups in the region. The long-term aim is to increase responsible consumption and reduce the generation of waste.

The current federal government is supportive of organised recycling and has invested in capacity building. On 1 October 2007, the President of Brazil announced the release of 14.6

million Reais (approximately US$ 7.5 million) as a new credit line of the National Economic and Social Development Bank (*Banco Nacional de Desenvolvimento Econômico e Social* – BNDES), targeted at recycling co-operatives. On 10 October 2007, the municipal government of São Paulo signed a decree which guarantees recycling co-ops priority in the city's tender for the collection of recyclables (*Decreto 48.799)*. However, despite these developments, organised resource recovery urgently needs to be recognised as making a legitimate contribution to urban sustainability; if not, these groups have almost no chance of significantly improving their livelihoods.

Participatory and action–research tools

The results presented here derive from collective work conducted since April 2005 within the PSWM project. I participated as one of the members in all eight meetings of the project management committee (composed of 24 participants with voting power, drawn from the local government, recyclers' movement, NGOs, and the university) conducted since then; in eight meetings on collective commercialisation; and four on micro-finance. All events were videoed and photographed, and individual notes were taken. The Ethics Committee at the University of Victoria (Approval # 05-129) approved this research. My involvement with Brazilian Portuguese and culture since childhood enabled me to become immersed in this different world without difficulties.

A humanistic approach helps in the search for meaning and shared values and goals, by means of listening to unheard voices, building new understandings, and disseminating them. Individual experiences and perceptions are recognised as key to the understanding of governance issues within inclusive waste management and to contributing towards possible strategies and solutions. Action–research focuses on efforts to improve the quality of these groups and their performance through collaborative enquiry. It is a methodology that pursues action and change as well as understanding. It is a 'collaborative process between researchers and people in the situation [and it is] a process of critical inquiry, a focus on social practice, and a deliberate process of reflective learning' (Checkland and Holwell 1998: 12). Action–research is a process that leads to a better understanding of the circumstances and the finding of solutions. Effective change can be achieved only when those affected are involved.

Kidd and Kral (2005) argue that the researchers' attitudes – their approach and mindset – are fundamental in developing a successful and genuine participatory process. The authors draw on Paulo Freire's liberationist ideology for the disempowered. Here Freire used *conscientisation* to describe the process of developing awareness through self-enquiry. 'It is the implicitly empowering process in which a group of people become aware of the nature of their disenfranchisement, the mechanics through which inequity is perpetuated, and their ability to change their circumstances' (Kidd and Kral 2005: 188). In terms of the necessary attitude for participatory research, Chataway recommends a 'commitment to full democratisation of both content and method' (2001: 240).

Action–research is *situational*, because it focuses on a specific question in a well-defined context. It involves *planned intervention* and action through continuous deliberate steps. It is also *collaborative*, because it involves all those with a stake or interest in addressing these questions. Finally, it is *participatory* and is undertaken by the research subjects. Through their empowerment, participants – and the poor in particular – have a chance to influence policies that affect their living conditions. Action-oriented research requires critical consciousness on the part of the researcher; it encompasses political as well as practical actions, which, through inclusive processes, empower the underprivileged and excluded. The pace of community-led work is driven by the process rather than the product and provides opportunities for empowerment.

Building collective commercialisation and micro-finance

In most cases, informal and organised *catadores* sell their material directly to intermediaries, thus exposing themselves to exploitation. With increased levels of organisation and empowerment, recycling groups can expand their scope and scale, allowing for commercialisation directly with the industry. Particularly when they are able to form networks and evolve into secondary recycling co-operatives (*co-operativa de 2o grau*), new opportunities arise. These higher levels of organisation are forms of cutting the ties of existing dependencies between recyclers and intermediaries. Selling directly to the industry requires large volumes, persistent quality, access to transport, and being able to issue invoices.

In 2005, PSWM participants (the management committee and a wider circle of recycling leaders who have been involved in workshops) have learned about co-management and participatory methodologies for project implementation, evaluation, and monitoring (Table 1). This active process of capacity building was geared towards real-life necessities and focused on the participants' definition of priorities, bringing together group leaders, university and government representatives, and facilitators. Between 2005 and 2008, 16 leadership meetings and four regional meetings, as well as field visits, were conducted to guide the process, discuss emerging challenges, and address obstacles. In 2007 the *Rede Gerando Renda* project (funded by Petrobrás), an offspring of the PSWM, was initiated to promote collective commercialisation among the municipalities of Santo André, São Bernardo, São Caetano, Diadema, and Mauá. Table 1 shows women's dominance in organised recycling and highlights the differences in the average incomes of recycling groups, depending on whether or not they engage in collective commercialisation.

First results are available for collective commercialisation in the municipality of Diadema, where five groups are currently operating. Three of them now earn on average between 125 per cent and 137 per cent more than before, and two groups earned less than before. There were specific reasons for the lower income earned in 2007 by these two groups. The group *Chico Mendes* earned 21 per cent less in 2007 because a partnership with Albert Einstein Hospital was terminated, the hospital having decided to sell its waste material directly to the industry. *Chico Mendes* has recently initiated the door-to-door collection of recyclables in its neighbourhood – a less lucrative but more highly principled activity. The lower income of *Vila Popular* (10 per cent less than in 2006) is explained by the extremely precarious working conditions – with absolutely no space – and by the fluctuating number of group members.

Table 1: The network of PSWM recycling co-operatives

Municipality	Regional extension	Number of groups	Female	Male	Total	Tonnes/ month	Average income/ person/ month(R$) Sept. 2006
ABCD	Diadema, Mauá, Ribeirao Pares, Santo André, São Bernardo	1	136	152	288	396.5	358.8
SP	Zona Sul	10	54	40	94	101.5	158
SP	Zona Leste	6	48	27	75	95.8	103
SP	Zona Oeste	3	23	12	36	54	250
Total		30	261	231	493	647.8	217.45

Figure 1 identifies the existing collective commercialisation networks in the region. Until 2006 two recycling depots (*Centrais*) were the only ones that could issue invoices and hence network with other groups in São Paulo. Both depots have used micro-credit to facilitate commercialisation since then. In 2007, with support from PSWM and *Rede Gerando Renda*, a strong network has emerged in the ABC region, with *Centco-op ABC*, a co-op of co-ops and associations (secondary recycling co-operative). Lately, the process in São Paulo has become weakened with an on-going reform of *Central Granja Julieta* and *Central Miguel Yunes*.

Table 2 shows the difference between selling to intermediaries and directly to the industry, underlining the advantage of networking. Our first experience with collective commercialisation began in October 2006, when groups in Diadema and São Bernardo sold white paper and cardboard directly to the industry *Suzano*, via the recycling depot in *Granja Julieta* in southern São Paulo, which provided the invoice for the transaction. Now the groups have organised separate localities in Diadema (*Co-operlimpa*) and in SBC (*Refazendo*), to which they can bring their material and from where the industry regularly collects it. A major bottleneck in the region is that organisations lack the legal status to issue invoices. For that reason *Granja Julieta* continues to perform this function. On average, groups earned 55 per cent more through the network. Initially only two groups collaborated; one month later, two more groups joined, and then *Co-operma* from Mauá and *Co-operPires* from Ribeirão Pires also entered the network. In SBC the process began with the co-op *Refazendo* collaborating with *Associação Raio de Luz.*

In the municipality of Santo André, some co-ops already collect sufficient quantities to sell some materials directly to the industry or to large-scale intermediaries. However, these groups did not demonstrate any interest in collaborating with smaller groups. Networking does not always work for everybody, and the degree and availability of human and social assets determine the successes or failures of collaborative transactions. One of the initiatives to co-operate between Ribeirão Pires and Santo André failed due to lack of transparency in the financial administration in Santo André. Trustful relationships are key to networking; once trust is broken, groundwork and time are needed in order to re-establish good relations.

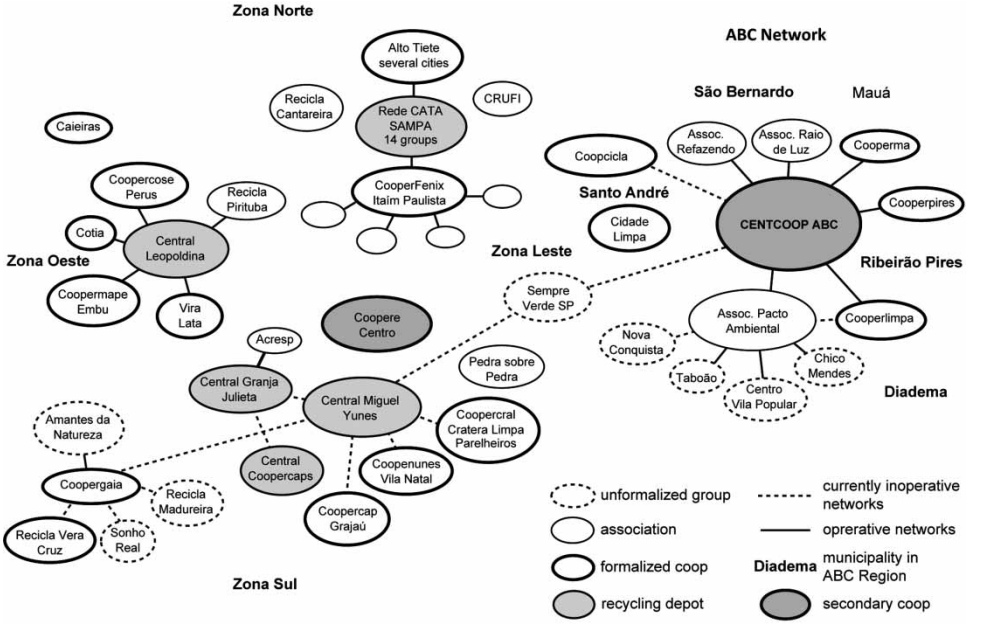

Figure 1: Collective commercialisation networks in the metropolitan region of São Paulo

Table 2: Price differences between individual and collective commercialisation

Material	Middlemen price (in R$)	Industry price (in R$)	Increase in %	Data collected
Cardboard	0.15 to 0.18	0.29	61 to 93%	December 2006
White Paper	0.35	0.52	49%	December 2006
Tetrapask	0.16	0.30	87%	October 2007
Plastic (PP)	1.00	1.55	55%	October 2007
Plastic (PEAD)	0.80	1.10	37%	October 2007
Plastic (PET)	1.05	1.20	14%	October 2007

Administrative or staffing changes also affect networking. With the change of the director at *Granja Julieta*, trust had to be rebuilt between the depot and the bank, which had blocked the account and thus caused a chain reaction affecting several groups. It took some meetings for the network to identify the underlying cause of the problem. The funds were released only after negotiations between the network, the bank, and a facilitator from PSWM. In the mean time, the co-op *Co-opercose* in the north of São Paulo had resolved this problem by providing the invoice for commercialisation. As a positive spin-off, this additional group now also participates in the network.

New networks have been set up to commercialise other materials. Diadema, for example, initiated the network for PET plastic recyclables, sending their material to *Co-opcicla* in Santo André. Today they co-operate with *Refazendo* in SBC, selling directly to the industry *Recipet* in Mauá. In São Paulo the groups *Sempre Verde*, *Co-opervida*, and *Inter 21* initiated commercialisation with the recycling depot *Miguel Yunes*.

It took time for the co-operative *Co-operfênix* in the east of São Paulo to network. They did not have the necessary infrastructure or transport facilities to send out their material. They have now been awarded a plot of land by the sub-municipality and have received a press from the packaging industry (*TetraPak*), which facilitates the stocking and transportation of the material. *Co-operfênix* now commercialises materials together with the depot *São Mateus* and until 2008 collaborated with the regional recycling programme *Cata Sampa*, co-ordinated by the National Recyclers' Movement (*Movimento Nacional dos Catadores).*

In August 2006, the PSWM project launched a first workshop on micro-finance. Twenty-five group leaders from within six cities that are part of the collective commercialisation network in the metropolitan area of São Paulo participated in this event. The objective was to create a micro-credit fund to assist in collective commercialisation. Donations from project participants and supporters started the fund. A committee of eight women leaders, representing the municipalities involved, was formed to manage the fund. Although approximately half of the recycling leaders who participate in the management committee are men, women were more interested in serving on this specific committee. A bank account was set up, and the committee created the principles and rules for the use of the fund. A monthly membership fee of 1 Real (approximately US$ 0.46) was unanimously approved. In December 2006, PSWM conducted a collective exercise with participants from the network to evaluate the experience. The participants highlighted the factors that most contributed to or most hindered the network (Table 3).

For the participants, earning a higher income was definitely the main benefit from this experience. Although they also valued the collective aspect, it clearly remains a challenge to be overcome, as the data listing the negative factors show. Personal skills need to be developed in order to practise transparency, trust, reciprocity, and co-operation. Here is where

Table 3: Results of a PSWM monitoring and evaluation workshop (2006)

Positive factors
• High income (no middlemen required)
• Adds value to the material
• Avoids the cartel of middlemen
• Redirects the recyclable materials into the right direction
• Group members are more stimulated and satisfied in collective work
• Strengthened cooperation among network participants.
• Learned experiences in administration and financial control
Negative factors
• Lack of transparency
• Lack of control over the process
• Lack of trust
• Delayed payments (middlemen pay right away)
• Lack of funds to pay for the work already done
• Lack of adequate equipment, space and transportation
• Insufficient recyclable material
• Lack of understanding about co-operatives
• Lack of capacity-building opportunities
• Lack of coordination
• Ineffective timing in CC
• Lack of standardisation in material separation
• Difficulties in finding buyers for the material
Challenges
• Depots unable to pay the groups
• Groups unable to issue invoices
• Excessive bureaucracy in formalising the groups
• Irregular material intake by industry (e.g. holiday)
• Lack of transparency
• Extra costs with delivery to the depot
Opportunities
• PSWM project
• Project ABC Gerando Renda
• New project of Cooperma
• Micro-credit fund
• The proposal of a large secondary Co-op (CENT COOP)

participation as a strategy to build empowerment comes into play. The main challenges identified by the participants are insufficient infrastructure and the lack of human skills necessary for collective commercialisation.

Collective commercialisation through recycling depots involves a high level of uncertainty in the conduct of the financial transactions (for example, in the money transfer and with the cheque requisitions between depots and individual co-ops, as well as between industries and depots). This triangulation causes delays which translate into frustration and insecurity for the groups involved. Lack of transparency in the accounting process is also a challenge. Groups had little or no participation in price negotiations, which were done solely by the depot.

Two key structural problems for some groups are the lack of capital and/or transport facilities. Micro-credit was identified as a pivotal solution to the time delay in collective commercialisation. Another constraint is the fact that unless groups are formally established, they may not set up a bank account. Furthermore, without transport facilities some groups remain dependent on local intermediaries to pick up the material. Among the organisational problems, the main difficulty mentioned was the lack of clear rules for the use of common storage space and equipment. This has already caused unnecessary conflicts and divisions among the groups. There also seems to be a lack of information about the recycling industry. Finally, this sector is also affected by macro-economic price fluctuations: '*We can't sell our material for such a low price; it does not pay our work*' (PSWM meeting, 13 July 2006). Prices for recyclable material fluctuate significantly as a consequence of global market trends.

Overcoming hurdles in collective commercialisation

The research findings reported here concentrate on the specific assets and barriers to collective commercialisation that affect organised recycling groups in metropolitan São Paulo. Our experience with educational action–research focuses on the continuous process of planned action and intervention, addressing the challenges identified in collective commercialisation and micro-finance. Through a spiral of deliberate steps we observe, reflect, plan, and act to improve the practice as an on-going process. Collective critical evaluation has been part of this learning process, crucially conducted in an atmosphere of mutual understanding and consensus, democratic decision making, and common action. Those directly involved are equal partners in the research and outreach process, and ultimately they retain ownership of the study. The following key aspects were identified through the research.

Building social cohesion

Collective commercialisation is a complex process, requiring specific human and social assets. Social exclusion, disempowerment, and recurrent disappointment of group members can erode trust and create prejudice that challenges social cohesion. Sometimes individuals have never had a voice, due to their lifelong exclusion from mainstream society. The process depends on trustful human relations and hence needs to be built from below. Participation and capacity development are ways of empowering groups and forming trust. Regular meetings of the PSWM management committee and specific meetings between the recycling groups have provided a forum in which participants are empowered in a process of social innovation and where social cohesion is built; both are fundamental characteristics of the social economy.

Access to financial assets

Lack of financial assets is a major impediment to collective commercialisation. Starting capital is necessary to enable a recycling group to participate in a commercialisation network. In most cases, individual recyclers and recycling groups sell the material for immediate payment. In collective commercialisation, the groups need to accumulate significantly larger quantities, which means longer periods without pay.

The micro-credit fund was created to address this bottleneck. During the first two rounds the payback rate was timely and total. However, in the following two rounds groups experienced difficulties. One group were unable to sell their material because of the long Christmas and New Year break. Later they made two payments which included the interest rates for the respective two months' delay. The other group had to use the credit to cover subsistence expenses and were

not yet able to pay back the loan. Micro-credit projects are active citizenship-building projects, where participants learn how to modify the ways in which individuals act as economic agents and the ways in which they perceive themselves. The human-development aspect of micro-credit is as important as the financial. Being able to receive a loan provides a sense of dignity and reassurance. Maintaining transparency is another fundamental characteristic for the success of micro-loans. Every meeting of the PSWM receives quick updates on the fund, outlining current and future borrowers, and notifying the reasons for delays. Peer pressure helps to maintain high rates of payback and high levels of motivation for participation. The funds were raised from donations.

A comprehensive plan to provide micro-credit, through government or non-government initiatives, is pivotal for the strengthening and growth of these groups towards more autonomy. Outreach activities and action–research are fundamental in empowering the participants and building a participatory management scheme within the co-ops. Skills development and practising the values of solidarity economy are equally important milestones towards the success of this model.

Access to transportation

Access to transportation proved crucial to enable the groups to participate in collective commercialisation. Without accessible transportation the recyclers will continue to depend on the intermediaries' trucks picking up the material. In early 2007 two used trucks and several portable two-way radio transceivers were bought through the new project (*Rede Gerando Renda)* to assist in the collective commercialisation. The organisation of practices and rules for an equitable use of these resources was fundamental in achieving success. This experience has also contributed to the capacity development of collective ownership and decision making among the recyclers. Again, micro-credit could make a difference in overcoming this hurdle.

Increased transparency

Some of the depots have already started to implement a transparent accounting process. Groups have developed strategies to increase transparency and accountability. PSWM, being participatory and transparent, has helped to set a precedent in this regard. The discussion has led to the definition of priorities and responsibilities within collective commercialisation, as outlined in Table 4.

Table 4: Actions to improve the network of collective commercialisation

Responsibilities of the groups that centralise the material (Depot)	Standardisation and efficiency for sorted, crushed and bailed material
	Preparation of invoices in advance to be ready at the day of commercialisation
	Agreement with participating groups over operational fees
	Efficient money transfer
Responsibilities of groups participating in CC	Arrange for transportation and pay the transportation costs to the depot
	Stadardise the separation, crushing and bailing of materials
	Set the fees and contributions for collective commercialisation
	Co-ordinate financial transactions between depot and groups and ensure that all outstanding payments are made

Our experience reinforces the argument that participation (collective action) and solidarity (co-operation) are fundamental to empowerment and therefore to the building of social assets. The praxis of being included, of having a voice, of being reflected in the brainstorming, discussion, and decision making has clearly differentiated this development process.

Conclusion: are collective commercialisation and micro-finance a solution to poverty?

Recovering recyclable waste materials is a viable and necessary employment-generating activity. It also directly improves environmental quality by recovering and re-directing these materials and saving virgin resources. The social and environmental contributions are obvious but as yet not widely recognised and valued. The recyclers continue to be stigmatised and harassed, both by the public and by the police. These attitudes towards recyclers need to change, and the value of their work needs to be recognised. It is also necessary to educate citizens to take responsibility for their consumption and to collaborate with recycling initiatives. The work environment at the co-ops or recycling depots needs to be safe and risk-free, as well as ergonomically designed.

A higher level of organisation of the recycling groups facilitates the implementation of inclusive waste-management programmes. Cities can benefit from these networks, which provide more efficient resource recovery while also helping to eradicate poverty. By promoting the capacity of the recyclers, their reach can be extended and their tasks diversified to enhance their environmental stewardship. The government of Brazil could well assist in tackling macro-economic price fluctuations within the recycling market by establishing a proper combination of taxes, fees, and other incentives to stimulate resource recovery via recycling co-ops.

Our experience differs from the widely known micro-credit schemes (Anthony 2005; Mahmud 2003; Qudrat and Rahman 2006; Rahman 1999), since the money is not lent to individuals but rather to an organised group as a way to overcome a crucial short-term obstacle. Here micro-credit is a tool to facilitate collective commercialisation. Micro-finance is a development strategy to achieve collective outcomes. It involves the organisation of recycling groups to voice their goals. Micro-credit empowers these citizens, as described by Qudrat and Rahman (2006), through inclusive decision-making processes. Our experience has shown that a participatory approach can successfully build responsible, autonomous, micro-credit initiatives. According to the participants, the process of managing the fund in itself has empowered them and strengthened their self-confidence. By exercising their agency, participants – particularly women – are empowered, which 'can eventually be effective in transforming structures that restrict women's access to resources' (Mahmud 2003: 604). In this particular case, eight women successfully administer the fund. Participating in the meetings and debates about how best to run the micro-credit fund has proved to be a vital praxis to develop the capacity of its participants. This process, together with taking up new responsibilities, has moreover helped the women to gain self-confidence. One of them has become a representative for the national recyclers' movement, and another woman has taken on more responsibilities within the co-operative. Participatory development, particularly through women, has enormous potential for social change. Our micro-credit experience confirms the widely recognised prominent role of women in social development. A persistent problem is the limited access to financial resources, which are currently too small to address the real needs of the 30 participating groups. The fund needs to be expanded.

Collective commercialisation and micro-finance are essential tools within social and solidarity economy. Major questions remain, however: how to strengthen the organisation of

networks that reach beyond the economic benefits expected from collective commercialisation? How to stimulate the generation of *solidarity* relations that transcend the economic sphere? How to construct a long-term class identity of the *catadores*, guided by social and environmental justice? Participatory management and micro-credit are solutions that help to address the severe working conditions of the recyclers and transform them into recognised resource recoverers.

Acknowledgements

Many people were involved in this work, to whom I extend my thanks. First of all the participants of the management committee of the PSWM project, in particular the recyclers. My colleagues and friends Maria Ruth Takahashi, Fábio Luiz Cardozo, Angela Baeder, Nidia Pontuschka, Ana Maria Marins, Lúcia Martins Campos, and Solange Dias have been central in creating this process. Other practitioners, scholars, and collaborators in Brazil have also been involved in the PSWM project and have contributed to the thought process. Research funds were provided through the Canadian International Development Agency (CIDA), via the University Partnerships in Co-operation and Development Program (UPCD).

References

Anthony, Denise (2005) 'Co-operation in microcredit borrowing groups: identity, sanctions, and reciprocity in the production of collective goods', *American Sociological Review* (70): 496–515.

Chataway, Cynthia J. (2001) 'Negotiating the observer–observed relationship: participatory action research', in Deborah L. Tolman, and Mary Brydon-Miller (eds.) *From Subjects to Subjectivities: A Handbook of Interpretive and Participatory Methods*, New York: New York University Press, pp. 239–55.

Checkland, Peter and Sue Holwell (1998) 'Action research: its nature and validity', *Systemic Practice and Action Research* 11 (1): 9–21.

Counts, Alex (2008) *Small Loans, Big Dreams: How Nobel Prize Winner Muhammad Yunus and Microfinance are Changing the World,* Toronto: John Wiley & Sons Canada

Gerometta, Julia, Hartmut Haussermann, and Giulia Longo (2005) 'Social innovation and civil society in urban governance: strategies for an inclusive city', *Urban Studies* 42 (11): 2007–21.

IBASE and ANTEAG (2004) *'Autogestão em avaliação'*, São Paulo: ANTEAG.

Kidd, Sean A. and Michael J. Kral (2005) 'Practicing participatory action research', *Journal of Counseling Psychology* 52 (2): 187–95.

Mahmud, Simeen (2003) 'Actually how empowering is micro-credit?', *Development and Change* 34 (4): 577–605.

Moulaert, Frank and Oana Ailenei (2005) 'Social economy, third sector and solidarity relations: a conceptual synthesis from history to present', *Urban Studies* 42 (11): 2037–53.

Parkins, John R. and Ross E. Mitchell (2005) 'Public participation as public debate: a deliberative turn in natural resource management', *Society and Natural Resources* (18): 529–40.

Qudrat-I Elahi, Khandakar and M. Lutfor Rahman (2006) 'Micro-credit and micro-finance: functional and conceptual differences', *Development in Practice* 16 (5): 476–83.

Rahman, Aminur (1999) 'Micro-credit initiatives for equitable and sustainable development: who pays?', *World Development* 27 (1): 67–82.

Singer, Paul (2003) 'As grandes questões do trabalho no Brasil e a economia solidária', *Proposta* 30 (97): 12–16.

Speer, Paul W., Courtney B. Jackson, and N. Andrew Peterson (2001) 'The relationship between social cohesion and empowerment: support and new implications for theory', *Health Education and Behavior* 28 (6): 716–32.

Zimmerman, Marc A. (1990) 'Taking aim on empowerment research: on the distinction between individual and psychological conceptions', *American Journal of Community Psychology* (18): 169–77.

The author

Raised in São Paulo, **Jutta Gutberlet** earned a PhD in Geography from the University of Tübingen, which focused on the socio-economic and environmental impacts of development in Brazil. Her work on informal recycling is the subject of her book *Recycling Citizenship, Recovering Resources: Urban Poverty Reduction in Latin America* (Ashgate, 2008). She is an Associate Professor in the Department of Geography and Director of the Community-Based Research Laboratory (CBRL) at the University of Victoria, British Columbia. Contact details: Department of Geography, University of Victoria, PO Box 3050 STN CSC, Victoria, British Columbia V8W 3P5, Canada. <juttag@uvic.ca>