Community Currency Systems:
A Co-operative Option for the Developing World ?

Peter Moers, 1998

Table of contents

Summary

The aim of this paper is to demonstrate the potential of Community Currency Systems (CCS) in strengthening the local economy in developing countries. A CCS is a agreement among members of a community (individuals and/or enterprises) to accept a certain exchange medium, which is not the national currency. The community currency is only valid within the community, thus stimulating local demand and eliminating the leakage effect commonly caused by imports. Moreover, the quantity of money in circulation is determined by the community itself, which reduces the problem of money scarcity.

Chapter 1 will explain the malfunctioning of the current monetary system, indicating the need for an alternative complementary exchange system that can compensate partially the shortcomings of the current system. In chapter 2 will start with a summary of the general principles and history of community currencies, demonstrating the capability of ordinary people to issue money. Furthermore, an analysis will be made of the different types of CCS that can be distinguished.

In chapter 3, several common arguments against community currencies will be studied more closely. Also the relevance of these arguments for developing countries will be discussed. CCS experiences in developing countries are still very rare. In order to give an impression of the functioning of CCS in developing countries, chapter 4 describes experiences in Argentina, Mexico, Senegal and Ecuador. In chapter 5 the conditions for a successful introduction of local currencies will be determined on the basis of the few existing scientific studies on community currency experiences. These conditions will be compared with the situation prevailing in developing countries, thus giving an insight into the potential of CCS as a poverty alleviation strategy.

In chapter 6 some practical issues concerning the management of CCS will be raised and attention will be given to the question how these issues can be solved in a Third World context. Chapter 7 will take a look into the question if CCS are in fact co-operatives and to which extent co-operatives can play a role in introducing and promoting CCS. Chapter 8 gives an overview of the possibility of CCS to contribute to the sustainability and acceptability of existing programmes and projects, such as micro credit, training and environmental programmes. Finally, chapter 9 will elaborate on the potential role of the ILO in the further development and the promotion of the CCS concept.

0. Introduction

A study by the United Nations Development Programme that examined the relationship between globalization and poverty, observes that a rising tide of wealth is supposed to lift all boats. But some are more seaworthy that others. The yachts and ocean liners are indeed rising in response to the new

opportunities, but the rafts and rowboats are taking on water and some are sinking fast1. As a result of the continuing globalization process, wealth, income and employment becomes concentrated in fewer and fewer hands, while poverty and unemployment are more widespread than ever.

The GDP of planet Earth is today 5 times higher than 40 years ago; nevertheless, the number of people living in poverty doubled2. The world s 400 top billionaires enjoy a combined income equivalent to that of 2.5 billion of world's poorest. 200 multinational enterprises combined represent a quarter of the world's total economic output, yet they employ less than 20 million people, i.e. less than 1% of the potential global workforce3. Moreover, as a result of the increasing dependence on exports, economies at all levels (macro, meso and micro) have become increasingly dependent on events that are completely out of their control. The impact of the Asian and Russian crisis on the world economy is the most recent example. Building a global economy without giving attention to local economies is like the mighty Titanic sailing out without life-vessels. Or even worse, it is like burning all boats on earth even before the Titanic has completed its first trip.

Developing countries, whose income is often dependent on one or two primary (agricultural or mineral) exports, are particularly vulnerable to the changing tides on the global market ocean. The virtual absence of locally produced industrial products, in combination with a consumer preference for imported goods, makes that export earnings leave almost immediately the country. Heavily indebted countries, or countries with high corruption levels benefit even less from the export earnings, which are often transferred to foreign bank accounts even before they reach the country.

More and more it is recognized that a dynamic local economy, that is able to recycle income from exports as well as locally generated income, is essential for a balanced and sustainable economic development. Although exports can form an important source of income for a region, it is the degree to which the income is recycled internally that determines the general standard of living of a region. A good example are the years of good coffee prices in many Third World countries. Entire regions and even countries receive an enormous financial injection when frost destroys Brazilian coffee production and world market prices boom. Since the local economy is not able to absorb this new wealth, its effects are very temporary; the main beneficiaries are importers of cars, electronic equipment and other luxury items. When the boom is over, many coffee farmers are obliged to sell these items, often at a fraction of the purchase price.

In order to reinforce the local economy, many strategies have been developed: the introduction of appropriate technologies, strengthening of local financial institutions (such as credit unions), training for import substituting economic activities, buy local campaigns etc. In recent years, an additional tool

has seen the light: the community currency. This currency is only valid within a community, thus stimulating local demand and eliminating the leakage effect commonly caused by imports. Moreover, the quantity of money in circulation is determined by the community itself, which reduces the problem of money scarcity.

The CCS concept is extremely relevant to the ILO s objective to alleviate poverty through the creation of self-employment and the promotion of small and micro enterprises and co-operatives. The study of innovative practices in this area forms an essential element of this strategy. This study is a first introduction to CCS and intends to prove that the concept has a potential which deserves to be investigated by the ILO.

1. The basics of money

1.1 A brief history of money

The most ancient form of economic exchange is barter: John gives Mary a bag of corn, and Mary gives John a goat in return. The problem with simple barter is of course that chances are slim that both trading partners have something to barter which interests the other party. Money has been invented to overcome this limitation of barter.

Money has come in many shapes and forms. The first forms of money were commonly used traded products, like salt, cattle, grain and tobacco, that have a user value in itself. These commodities could be either used, or exchanged for other products, thus facilitating indirect barter. Thanks to money, as medium of exchange, specialization becomes possible. The arts, trade and other forms of social interchange could flourish. Economic activity developed fast as a result of the ease to exchange. However, the limited durability and transport inconveniences of these commonly used products, paved the road for the use of precious metals (especially gold and silver) as a generally accepted exchange medium.

In order to reduce the risk of theft, goldsmiths built vaults to secure their gold. Other people with an excess of gold were attracted by security of the vault and deposited it with the goldsmith. To avoid the frequent transport of large amounts of gold, the custom developed that depositors would write notes which could be redeemed by the goldsmith to pay their bills. More and more people started to accept these notes as a means of payment, because they corresponded with the delivery of a certain amount of gold.

The common use of notes provided the goldsmith with the opportunity to write notes for making loans. In fact, it enabled him to write notes for more gold than there was gold in his vault: he created money. Eventually, it was found that as much as ten times the value of gold in the vault could be circulated as notes.

He only needed enough gold in reserves to redeem the few notes that were presented for redemption gold4. This doubtful practice, called fractional reserve banking , led frequently to bank runs and panics, when the fraction of backed money became to small and certain clients were denied to redeem their paper notes for metal.

Governments decided to regulate the creation of money and the first Central Banks appeared. Governments, however, continued (and continue) the same abuses as they supposedly were to halt by centralizing the money creation. Nowadays governments create money either directly by simply printing money, or indirectly by selling its bonds to commercial banks who use it as a legal reserve to issue more loans.

In 1944, before the end of World War II, the major Western powers considered monetary stability as a absolute condition for the reconstruction of their economies. The USA held two-thirds of the world s gold stock (worth 20 billion US$), which made them more than ever the bankers of the world. The price of the US dollar was fixed in terms of gold (initially at $35 per ounce) and that all other currencies were pegged to the US dollar.

The destabilizing effects of speculation and the persistent US balance-of-payments deficit were seen as the immediate causes of the system's demise in 1973. Because the US dollar was the key reserve currency, the United States was reluctant to devalue despite persistent deficits. As US deficits persisted, the stock of US dollars held abroad ballooned relative to the need for a reserve currency. Some countries viewed the United States as abusing its privilege to issue reserve currency and as forcing other countries to finance persistent US deficits. In 1971 President Nixon suspended convertibility of the Dollar in gold and introduced a system of floating exchange rates two years later5.

Today, only a minor part of the money in circulation has the form coins and banknotes. For example, in France coins and banknotes represent 5% of the total money mass. In developing countries this proportion is higher (e.g. 30% in the West African Monetary Union6). The rest of the monetary mass takes the form of bank accounts. Central Banks still have a monopoly in issuing notes and coins, but commercial banks can buy notes at their cost of production depending on the demand of their clients (i.e. the preference of the public to use paper money). Thus, by issuing bank credits, commercial banks determine indirectly also the amount of the notes in circulation. Only a small part of the money in circulation is backed by gold. A shift from the use of gold reserves (which do not generate interests) to foreign exchange reserves (which do generate interests) has contributed to the fact that the value of money today depends more than ever on the confidence the public has in it.

The doubtful practice of fractional reserve banking that Central Banks tried to regulate, has become more than ever modern banking custom. The

persistence of such system falls and stands with the confidence of the public in the currency. In modern times, a loss of confidence leads to fleeing into so-called hard currencies, as could be observed during the latest financial crises in Asia and Russia, having severe effects on the liquidity of these economies. In case these confidence crises would spread over to one of these hard currencies, one can only guess how deep the resulting world wide economic depression would be.

An important development in recent monetary history is growing importance of speculation. In 1995, an average daily currency volume of 1.3 trillion US$ was exchanged globally. This corresponds to 30 times the daily gross domestic product (GDP) of all of the developed countries (OECD) together. The annual GDP of the United States is turned in the market every three days. Only 2 or 3 percent of that volume has to do with real trade or investment; the remainder is speculation (on stock markets, valuta markets etc.). Twenty years ago, the proportion of speculation in total trade volume was only a few percent7. The implication of this development is that monetary stability depends more and more on speculative markets; the interventions of governments or central banks in central markets can give signals at the best, but their funds they have available for interventions are only a fraction of the total trading volume. Overreactions of financial markets will therefore have more than ever an effect on the real economy. The following section will explain that the speculative function of money interferes with its basic function as a standard of value.

1.2 The functions of money

The functions of money have expanded over time. The most essential functions of any kind of money are:

(1) medium of exchange: money facilitates multi-party barter;

(2) a standard of value: in order to compare the value of goods and services, we express them in Dollars, Pounds, Marks, etc.

In later stages of history, money has played other, less essential roles:

(3) A store of value: this has historically been a minor function, since the facilities for secure storage were rare and no (interest) incentive existed to postpone spending of the money. Savings were invested in the form of cattle, land (improvements), housing etc. The store function became more important with the development of the modern banking system during the past two centuries.

(4) A tool for speculative profit: today more than 95% of all currency transactions are motivated by speculation; less than 5% are for trades of goods and services8.

The secondary functions are often in conflict with the two essential ones, as speculation leads to unstable and unpredictable exchange rates, which undermines the currencies role as a standard of value in international

transactions9; and hoarding the currency (i.e. using it as a store of value, function 3) means that others cannot use it as a medium of exchange (function 1).

It is important to realize that only the first two functions are essential in order to be an efficient currency. Any functions that interfere with the essential ones have to be avoided, if the monetary system is to be sustainable.

1.3 How money is created10

Money flows in a circular fashion: it has a beginning and an ending, it is created and it is extinguished. Money is first created by somebody who needs it. This creator issues a promise that he will redeem the money he created once he can. If the creator enjoys a high degree of confidence, his promise will be generally accepted as a medium of exchange. Eventually, however, the promise must be complied with. The creator distinguishes the money by accepting the promise as a payment in exchange for something of value he produced.

In the current banking system, the money creator needs an authorization from a commercial bank before he can put money into circulation. The bank evaluates the loan applicant s credit-worthiness and the value of his collateral. In fact the bank has not created anything; it has just used its legal authority to convert the value of the applicant s collateral in a negotiable form: generally accepted currency. Therefore, in stead of saying that a bank creates money, it would be more appropriate to say that the bank approves the creation of money; the real origin of the new money is the proposal formulated by the borrower.

1.4 Why money is always scarce

Unlike savings banks and credit unions, when a commercial bank makes a loan, it does not use the savings of some clients to give credit to others. In fact the bank creates new money, as credit, by the process of fractional reserve banking: only a small fraction of the loan (usually between 10 and 20 percent) really exists in the bank's reserve account at the central bank. The rest is created, simply by crediting the account of the borrowing client11.

It is one thing for those who have earned money to charge interest for its use; it is quite another for banks to charge interest on money created out of nothing. The extra money required to pay the interest over these commercial bank loans is not available within the circuit: the principal amount is created at the time the loan is made, but the money to pay the interest is not created. In other words: at any given moment in time, the total amount of debt in a conventional money system always exceeds the total amount of money available in the system.

The money needed to pay the interest over these loans can only come from some other similar circuits, i.e. money issued by some other borrower. If

that happens the second borrower will not be able to earn back enough money to pay his debt. In order to prevent an economic stagnation, the money supply must be continuously expanded: there is need of a perpetual borrower that can never go bankrupt despite the fact that he never pays his debt. In the prevailing monetary environment, the governments have assumed this role.

In order to reduce this debt, economic growth should exceed the growth of debt. However, in practice, real economy cannot catch up with the exponential growth of interest bearing debt. Statistical information confirms this: worldwide debt has been growing by 2% per year faster than the world economy as a whole since 1950, and the total debt in the world is now equal to the value put on almost three years of all economic activity, compared to one year in the 1950's12. Margrit illustrates the practical impossibility of exponentially growing interest: one penny invested at the time of the birth of Christ at 5% interest would buy today more than 5,000 balls of gold the weight of the earth...13

1.5 How money is misallocated

As described in the previous paragraph, a person can create money if the commercial bank where he applied for a loan, considers him credit-worthy. Since banks are commercial enterprises, allocation decisions for loans are not made in democratic way, but rather on the basis of profit and growth prospects. Therefore, especially in developing countries, the commercial banks rations the scarcely available loanable funds to credit-worthy medium- and large-scale enterprises in the modern commerce and manufacturing sector14.

In developing countries, where typically more than 80% of the population depends on small businesses for their income (mostly informal sector and farming), the term dual economy is often used to indicate the relative independence between the formal and the informal sector of the economy. It is clear that under these circumstances very little of the money created through bank loans to the formal sector will trickle down to the informal sector, which struggles consequently with a chronic short of cash.

1.6 Conclusion

The origin of the maldistribution of money and the persistence of dual economies at all levels (nationally as well as internationally), is the undemocratic way in which it is created. Moreover, one can question the long term stability of a monetary system that is based on fractional reserve banking. Several writers have attempted to describe alternative monetary systems based on a system of negative interest15. Renowned economists such as Maynard Keynes16 and Irving Fisher17 have acknowledged the validity of the negative interest theory. A description of these theories falls outside the scope of this paper, which aims to study alternative monetary systems that can function under the prevailing monetary system, rather than to give alternatives for the current monetary

system. It is important, however, to keep in mind that the successful development of CCS can play an important role in convincing policy makers of the need for monetary reform.

2. An introduction to Community Currency Systems

2.1 What is a Community Currency System (CCS)?

Like any other currency, a community currency is a general accepted exchange medium. Only, the use of currency is limited to a community. The concept community has to be defined in the most broad sense of the word: a group of people having an ongoing collection of interactions and continuing relationships 18. Some Community Currency Systems (e.g. for the exchange of lodging and information) cover areas that even exceed international borders. Modern developments in telecommunication (internet, e-mail) have made the development of these virtual communities possible. The focus of this paper will be on currency systems targeted at communities (including individuals, enterprises and institutions) that cover a geographical limited area (generally a city or a quarter).

Community currencies go in many forms: paper notes, accounts on a computer, registers on a black board etc. Other systems are actually barter or work exchange networks with no written administration at all (e.g. rotating field work). The rules for these currencies also vary, depending on the needs and desires of community members. What they have in common is a commitment to community building, to supporting what is local, and to gaining a greater understanding of the role of economics and money in our daily lives. Community currencies are generally backed by the goods and services offered by the members.

2.2 Community currencies in history

Local, rural and city-regional currencies were the rule until last century, when government decided to limit the right to create money to itself and to the banking sector. During the European renaissance era, a time of strong wealth growth, local and city currencies were used for local trade, while a variety of international currencies were used for the purposes of import and export, thus strengthening internal economic security and cohesion as well as allowing for mercantile trade19. Some local currencies have survived the monopolization of money creation and exist since more than a century (Tokyo, Singapore, Guernsey). The Guernsey notes, for example, were first issued in 1819 as interest-free local government bonds, which helped to finance the island's entire infrastructure.

Stamp scrip currencies are based on a concept developed by Silvio Gesell, a German businessman living in Argentina. In stead of gaining interest if

stored, Gesell's currency gradually looses value. The method is comparable to the children s game in which a ball is thrown from one player to another while a blindfolded person counts to 10. The player who holds the ball at the count of 10 is out of the game. The participants in the game will play the ball immediately after having caught it. In the case of the stamp scrip, the person who holds the scrip at the end of the period (e.g. week) has to buy a stamp and stick it on the scrip in order to keep it valid. This concept is called "demurrage".

Stamp scrips were especially successful during the Great Depression of the 1930s, when they introduced by local governments in Europe and North America. The concept spread rapidly and resulted in a radical reduction of unemployment. The most famous example of local stamp scrip is the case of the Austrian Town of Wîrgl20. In 1932 the mayor of the town - confronted with a 35% unemployment rate - convinced the townhall to issue 5.000 Austrian Shillings worth of stamp scrip, which were covered by exactly the same amount of national currency deposited in a local bank. Within a year, the 5.000 local Shillings had circulated 463 times, which was 14 times than the national currency. In other words, on average, the same amount of money created 14 times more jobs. Local employment had fallen by 25% after one year and after two years Wîrgl became the first Austrian town to achieve full employment and major improvements to the town were implemented. When more than 200 other Austrian communities decided to follow the example set by Wîrgl, the Austrian State Bank stepped in and blocked the experiment. A legal appeal was made at the way to the Supreme Court, where it was lost.

Community barter networks flourished during the Great Depression. By 1933 there were 159 barter organisation involving 1 million people in 127 USA cities. A common feature of these barter organisations was the central issuing of local currency. The risk of this system was that more currency was issued that the value of the goods they represented. This, in turn, would result in a loss of confidence in the local currency among the participating public. In spite of this danger, in Germany their success was so impressive, that, following the Austrian precedent, the movement was called to a halt by central government. Local currencies in the 1930 have clearly been victim of their own success. It has to be emphasized, however, that it is external intervention, not internal disfunction, that has blocked the expansion of the local currency concept.

2.3 An overview of alternative currency systems

Before describing the particularities of the different types of community currencies, it is useful to see the entire family to which these systems belong. A first distinction that can be made is between systems in which all users are also issuers of the currency (mutual credit systems) and systems in which not all users can issue currencies. The confidence in these latter systems depends either on a commodity that fully backs the money supply (100% commodity backed), or on the credibility of the issuing authority (fiat currency21). In the

following sections, examples will be given of these three types of currencies, while their benefits and disadvantages will be analyzed. Special attention will be given to the currencies targeted at communities (i.e. individuals as well as businesses), which are most relevant for the context in developing countries: the HOURS and the LETS experiences. The geographical area in which these currencies are valid, is normally restricted to a city or a quarter, for this reason these community currencies are also often referred to as local currencies.

2.4 100% commodity backed currencies

Currencies fully backed by commodities were the rule until the practice of fractional reserve banking became an accepted practice a few decades ago. If the currency represents a value in itself (like tobacco, sugar, gold etc.), one can speak of a commodity currency. Because of their disadvantages of being perishable and often difficult to transport, commodity currencies are hardly used anymore (although in times of hyperinflation their popularity tends to grow fast). If the currency is in fact a claim to a given quantity of a commodity (which is typically stored), one can speak of a commodity standard. The most known examples of these commodity standards is the gold standard upheld by many countries during the 19th century.

Modern-day examples of commodity standards concern above all the so-called corporate scrip. These are usually paper notes (or, in the information era: positive accounts in a computer) that are issued by an enterprise. The corporate scrip can be used as a bonus for customers in order to increase sales. A recent example are the frequent flyer miles issued by airlines: initially only airfares could be acquired with the scrip. In recent years, however, also hotels, ware-houses, restaurants credit-card, taxi, telephone and car-rental companies etc. buy miles to pass them on to their customers as a bonus or accept them as a means of payment.

Corporate scrip can also be used to raise funds for investments, thus escaping the commercial banks monopoly to authorize the creation of money. Examples of local corporate scrip issued for this reason, are the so-called Berkshire experiments. Advised by an NGO called SHARE, at least 5 enterprises participated in the experiments. The process is vividly described in the following excerpt from a 1995 article in Z-Magazine22:

In 1989, a local deli, well loved by many people in Great Barrington, had to relocate because its lease was running out and a new lease would double the rent. Frank, the owner of the deli, went to several banks to borrow money to move to another location and was turned down. Finally he approached SHARE (Self-Help Association for a Regional Economy), the Schumacher Society s loan-collaterialization program. Susan Witt, SHARE's administrator, suggested that he issue his own currency -- Deli Dollars -- and sell them to his customers to raise

the money he needed. Each note sold for $9 and could be redeemed for $10 worth of food, and was dated so that redemption was staggered over time.

"I put 500 notes on sale and they went in a flash. It was astonishing," Frank said. Before long, Deli Dollars were turning up all over town as people exchanged them instead of U.S. dollars for goods, services, or debts. In effect these paper notes, which were essentially nothing more than small, short-term loans from customers, became a form of community currency. They so excited the people of Great Barrington that they were followed by Farm Preserve Notes issued cooperatively by Taft Farms and the Corn Crib. Each farm raised about $3,500 the first year and issued new notes in succeeding years. Five other businesses also issued scrip, including the Monterey General Store and Kintaro (a Japanese restaurant and sushi bar). Together, these businesses raised thousands of dollars to finance their operations that they couldn't have obtained through conventional sources. These success stories drew the attention of the New York Times, Washington Post, ABC, NBC, CNN, and Tokyo television and have inspired projects around the country.

In this example, the creation and extinction of money can be clearly observed: a shop owner issues money in the form of a note giving the holder the right to buy in his shop. At one point, the shop owner has to comply with his promise and accept the notes in exchange for goods, thus extinguishing the money he once created. The temporary existence of the scrip has prevented them from becoming a generally accepted exchange medium. The main aim of such notes is to provide the issuers with working capital.

Scrip has also been used by local governments as a creative solution for structural budget problems. In the beginning of the 1970s, the mayor of the Brazilian city of Curitiba (500.000 inhabitants) became concerned with the serious waste problem in the city s slum areas: garbage cars were unable to enter the narrow streets and the garbage was left in the streets. This attracted rats, flies and other vermin that spread diseases. The health situation was clearly deteriorating.

Lacking the funds to clean the slum areas, the city s mayor elaborated a low-cost plan to alleviate the problem in a sustainable way. Residents could exchange one bag of selected waste for one public transport token. Soon the tokens became an accepted exchange medium also for transactions between residents themselves and economic activity increased. In a similar program, the city government bought organic waste from the slum dwellers in exchange for tickets. These tickets could be used to buy food that the city government had bought from farms around the state. The organic waste was composted and sold to farms. Also these tickets have begun to live their own life and have become a generally accepted exchange medium23.

Nowadays the same tickets can be used for food, public transport, toys and even tickets for the opera. Some 95% of the slum population participates in the project and over 70% of Curitiba s garbage (annually 750 tons) is recycled or composted. The city's recycled paper alone is estimated to save 1,200 trees a day24. Most of the selected garbage is sold to local industries which have created new employment for thousands of persons, many of which live in the slum areas. Moreover, residents of the slum areas have cheap and easy access to public transport, increasing their mobility and thus their ability to increase their incomes. The extra costs resulting from the increased use of the public transport system (more buses, more drivers, more petrol etc.) were more than offset by the extra income from sales of selected waste to the local recycling industry.

2.5 Fiat currencies

Fiat currencies are issued by a central authority, who also regulates its supply. In this section examples will be given of fiat currencies issued by Central Banks, local governments and communities. All examples described below concern paper notes or coins, generally accepted by the public.

2.5.1 Fiat currency issued by Central Banks

As described in chapter 1, virtually all national currencies are issued and managed by Central Bank fiat. These currencies are backed for a small part by the gold and foreign exchange reserves of the country, but more and more by the confidence of the users in the money. Central Banks are responsible for the internal stability (i.e. low inflation) and external stability (i.e. little fluctuation of the exchange rate between the national currency and currencies of the mayor trading partners countries). A variety of tools are at the disposal of Central Banks to achieve this stability, including intervention (buying or selling the national currency in the market in exchange for other national currencies), interest-rate fixing and fixing reserve requirements for the private banks25. Central Banks are selling gradually large amounts of gold for foreign exchange, which has the advantage of earning interest. This means, at least theoretically, that the confidence in our own currency has become more dependent on the confidence in other currencies.

In some exceptional cases, the currency is backed by an agreement with a third country. The franc CFA, used in the West African Monetary Union and the Central African Monetary Union, are two examples: they are backed by an agreement with the French government to fully convert the franc CFA in French francs. The French government also participates in the Central Banks of these monetary unions.

2.5.2 Fiat currency issued by a local government

The most prominent case a local government issuing its own exchange media, are the provincial bonds issued by the Salta province in Argentina. The case is very relevant to the often cash-starved local governments in developing countries and can serve as an inspiration for creative governors. Moreover, it touches the question to which extent large-scale local currencies can contribute to national inflation (see also 3.2).

As many Argentine local governments during the economical crisis in the 1980s, the government of the remote northern Argentine province of Salta was confronted with a chronic shortage of cash, because federal government failed to transfer in time funds to the provinces. In September 1984, the province came up with an unconventional solution: it started printing its own money (provincial bonds), which it used to pay its employees26.

Bonds of 10, 100, and 1,000 australes (the national currency at the time) were printed, the same value as ordinary Argentine bank notes had. The bonds could be exchanged for australes or spent on goods and services, but only within the province that issued them. They maintained their value for about four years from the date of issuance. Since no interest was paid on the bonds and the national currency suffered from high inflation (ranging generally from a 95% to a 1000% annual rate), the bonds were almost worthless at the end of the four years. This discouraged the use of the bonds as a storing unit: everybody tried to spend the bonds as quickly as possible, just as the official currency.

The Argentine central government, as well as International Monetary Fund (IMF) were worried that the example set by Salta would be followed by many more provinces. This was considered a serious danger for the central governments efforts to curb inflation. Thanks to an austerity program and restrictive monetary policy, the central government had been able to bring inflation down to 3% a month, a record low in that period. The IMF brought up the issue in talks with the Argentine government, but no measures were taken to stop issue of provincial bonds.

In 1986, three neighboring provinces, La Rioja, Jujuy, and Tucuman, took over the idea and started printing its their own bonds. The amount of bonds issued grew gradually and by the end of 1991, the bonds represented an estimated 60% of all currency in circulation in Salta. In the neighboring province of Tucaman, this proportion was estimated at 43%. It is not entirely clear why the central government has not taken action against the bond issues. One reason could be that the central government recognized the positive effects that these bonds had on the region s economy. Moreover, although important at provincial level, the proportion of the provincial bonds in the national money supply remained very modest, thus mitigating their threat of stimulating inflation of the national currency.

Several factors contributed to the credibility and acceptability of the provincial bonds:

1. People's time preference for money: public employees could choose between receiving their salary in time paid in provincial bonds, or receiving their salary a few days late in australes. Since the bonds became quickly widely accepted, many employees choose the first option.
2. The bonds could be exchanged at the local banks for official currency at any time and at a 1:1 rate.
3. Until 1987, the provincial government organized a lottery in which the bonds served also as lottery tickets.
4. The provincial government accepted its bonds in payment for provincial taxes and services.
5. The Chamber of Commerce agreed to accept the Salta bonds 27.

Clear signs of over-issuance of Salta bonds appeared in 1987 (when the Salta bonds were traded with a 20% discount) and in early 1992 (15% discount). Provincial governments pay a high price for this abuse: since there is no forced circulation of the bonds, people exchange en masse their bonds into australes. This causes an important loss of revenue for the provincial government. After a temporary suspension or slowing down the rate of issuance of the bonds the rate turned back to normal (1:1).

In March 1992, the provincial government of Salta was planning to redeem its bonds for official currency, using a loan obtained from the central government. It is not known whether the other provinces were planning to follow the Salta plans28.

2.5.3 Fiat currency issued by Communities: HOURS

As in the previous examples, the main beneficiary of money creation is creator himself: the creator is the only one who does not have to earn the money before spending it. In the case of national currencies, commercial banks benefit by creating money out of nothing and lend it to the public at an interest rate. In the case of the provincial bonds, the province can spend money without being dependent (in the short run) on transfers of funds from central government. In the case of Curbita, the issuing municipality avoids being paralyzed by a shortage of funds and has gained great popular support. Communities can also issue their own fiat money: the beneficiaries are individual citizens, local businesses and - often - non-profit community organisations. The geographical area is normally limited to a city or a quarter.

The most famous and successful experience can be found in Ithaca, in the state of New York. The project was initiated by Paul Glover in 1991. The systems uses the hour as unit of account, which corresponds to the prevailing hourly wage is. This has the advantage of being able to revalue the unit of account in case of prolonged inflation (which is inherent to any national currency,

as indicated in chapter 1). The Ithaca HOURS are valued at 10 US$, but in other HOURS systems a 12.50 (Kingston) or 12 US$-value (Brooklyn) is used. Ithaca HOUR notes have been issued in denominations of 1/4, 1/2, 1, and 2 hours. HOURS are negotiable, which means that some people (like dentists) can charge more for an hour s work than others (like farm labour). In the first 6 years of its existence, some $57,000 worth of HOURS have been issued, and an estimated $540,000 trade volume was generated within the community between 1,500-2,000 people29. Monthly trade volume is estimated at 6,000 HOURS (60.000 US$)30.

The issuing institution is normally an association that holds regular (generally monthly or bi monthly) member meetings, which are called community reserve meetings (Brooklyn) or pot-luck meetings (Ithaca), to decide how much currency to issue, which community projects receive grants and which investors receive a loan in local currency. A board of directors, which is elected by the members, oversees printing and issuing the currency.

The currency is issued in various ways. Most HOURS are brought in circulation through new members: every new member receives 2 HOURS. Every eight months members may apply to be paid an additional two HOURS, as reward for continuing participation31. A second source of HOURS are the grants given to community projects. The grants are allocated by the members during the community potluck meetings , where the main decisions are made. About 10% of all HOURS issued go into circulation as grants to local organizations. By the summer of 1995, over $4,000 of local currency had been donated to 22 community organizations by the governing body. A third source of new currency are the interest-free loans. Loans are generally issued for periods up to six months. Other HOURS communities, such as the Brooklyn Greenbacks also reward persons who recruit local businesses, members who attend community reserve meetings, and directors who attend board meetings32.

It is not necessary to be member of the community, to be able to accept or earn HOURS: also non members can participate. The advantage of being member is receiving 2 HOURS every 8 months and publicize your offers and requests for free.

As a result of these new issuances of currency, the per capita supply of money increases continuously. This no problem as long as the supply of goods and services in the community increases accordingly. However, like in any fiat currency system, a careful management of the money supply is extremely important in order to maintain the confidence of its participants.

The income to finance all operations come mainly from a newspaper called Ithaca Money, which Paul Glover publishes and distributes free of charge. The newspaper contains articles on the local economy, community self-help initiatives, and the benefits of local currencies, but its primary purpose is to

publicize the goods and services offered and requested by members (individuals and businesses). Each issue of the newspaper contains classified-type listings of both offers and requests for goods and services, as well as display ads. The display ads are paid for either in dollars or in HOURS.

One of the secrets behind the success of the Ithaca HOURS is probably the strong participation of local businesses. The HOURS are accepted at hundred of small businesses in the town: stores, landlords, restaurants, movie theaters, a bowling alley, two large locally-owned grocery stores, 30 farmers' market vendors as well as a local credit union. Private citizens see the value of the HOURS and accept them as a payment. For businesses, the HOURS offer a way of making use of their idle production capacity. E.g. restaurants and movie theaters tend to accept more HOURS when occupancy rate is low. In some instances, businesses pay their employees in part with Ithaca HOURS.

Other explaining factors are the dedication and energy of its founder, the simplicity of the system (transactions are not registered, so no complicated computer programmes are necessary), Ithaca s relatively small size, its remoteness from any large city, and its highly educated and progressive population33. Moreover the Chamber of Commerce has begun to accept HOURS. Finally, the fact that people do not have to be member to be able to participate in the system, reduces considerably the entrance barrier.

Currently about 40 HOURS-like systems operate in the USA, 1 in Mexico, 6 in Canada and 1 in the United Kingdom. As far as known, the system has not spread to the European continent.

2.6 Mutual credit systems

In mutual credit systems the currency needed for a transaction is created at the moment of the transaction as a credit and debit in the balances of the two parties in a centralized accounting system. Unlike fiat currencies, no centralized authority is required to manage the money supply. The credibility of the currency is based on the trust of all participants of the system in each other (mutual trust). Each person in the system is responsible for the backing of a part of the money in circulation, by promising to accept the currency in exchange for his goods or services. The mutual credit system is used to facilitate trade among enterprises (as in commercial barter exchanges) or among members of a community (individuals as well as enterprises) in a geographically defined area (Local Employment Trading Systems: LETS).

2.6.1 Mutual credit systems for enterprises

2.6.1.1 Commercial barter exchanges

Barter is actually an incorrect term for describing the activity of these organizations, since barter involves the swap of goods or services between two parties. As we have seen in chapter 1, the disadvantage of barter is that both parties have to be interested in each others goods and at the same time. Money was developed in order to take away this disadvantage.

In commercial barter exchanges, enterprises (only enterprises can become member) are able to trade with each other as if they were using conventional money through the creation of their own credit. The trade exchange company gives to each member a particular line of credit in trade credits, the unit of account of the system. The maximum negative (debit) balance which that member is allowed to carry depends on the expected demand for the goods and services that the enterprise is willing to trade within the system. Generally, a business can trade 10% of their gross sales per year (10% additional above their regular business)1. The credits circulating are backed by the promise of each member to accept the credit in return for its goods or services (mutual credit).

When a trade takes place between to enterprises the value of the transaction is credited to the seller and debited (reduced) from the buyer s account. Moreover, a commission (generally in trading dollars) is debited from the account of both trading partners, and credited to the account of the barter exchange company. Transactions often take place partially in national currency and partially in trade credits. The barter company only registers the trade credits part of the transaction. As in most mutual credit systems, the trade credits only exist in the form of accounts in a central computer; no paper notes are brought into circulation, because this would undermine the barter exchange company s ability to keep track of the transactions of its members (and thereby its possibility to charge a commission on each transaction).

Businesses participating in barter exchanges can obtain several economic benefits:

* new business relations resulting in new sales (both additional cash and barter business), thus reducing unit costs;
* conserving cash for essential expenditures, resulting in better liquidity and a saving equal to the opportunity cost of money (trade dollar credits are interest free);
* exchange of unproductive assets (excess inventory and unused capacity) for valuable products or services;

To take advantage of barter, a firm must have slow-moving or non-performing assets to exchange, or excess capacity to take on additional sales. Barter sales are an increment over and above cash sales, usually not amounting to more than 10-15 percent of total business. There are no tax advantages or disadvantages to barter. In the USA tax law treats barter identically to cash.

A barter companies can make money in three different ways:

1. By acting as a clearinghouse, keeping accounts of members transactions and trade balances. Barter exchanges generally charge a commission on each barter transaction between two members (usually around 10%). Often these commissions are payable in trade credits; periodical membership fees are generally payable in official currency.
2. By acting as a broker, actively intermediating between buyers and sellers. The computer and now the internet make pairing of buyers and sellers easier and more efficient than ever before. The advantage is that members no longer need to trade direct.
3. By acting as a trader, buying merchandise for their own account for later sale. Some companies (corporate trade companies) are specialized in this latter function, buying goods and services for trade credits, and selling at partly trade credits, partly national currency.

Commercial barter is a relatively young industry, roughly 20 years old, that has developed into a multi billion dollar business in North America, and that is beginning to break through in Europe and other parts of the world. The International Reciprocal Trade Association (IRTA) is an organisation that represents some 180 commercial barter companies in 13 countries (including Argentina, Colombia, Turkey and South Africa) and that aims to foster the common interests of the commercial barter industry in the United States and worldwide . It estimates the trade volume of the commercial barter industry in North America alone at more than 7.5 billion dollars. Currently the industry is growing at an annual average rate of 8%, significantly faster than the growth of GNP. An estimated 300,000 US business - most of them small and medium-sized businesses, but including a large and growing number of well-known larger firms - will use the services of commercial barter companies in 19982.

The single most important explaining factor of this impressive growth is probably modern computer technology which has enormously simplified the administration of these organisations. Secondly, as the number of participants grows, it becomes more interesting to participate in the network since chances of successful trades increase. Thirdly, the development of broker and trading services reduced considerably the time companies had to invest in finding interesting trading partners and making effectively use of the system.

Trade exchange operators generally have the power to borrow trade credits to themselves. In some trade exchanges, where operators spent trade credits well beyond their capacity to earn them through fees, this has led to a serious loss of the members credibility in the system: members were less willing to sell goods and services for trade credits. The trade credits lost their value and the barter exchanges failed. On of the tasks of the IRTA is to try to avoid such abuses and protect the industry3.

By putting into use excess production capacity of their member enterprises, commercial barter exchanges make an important contribution to the

creation of employment and income. Research into commercial barter exchanges in the USA has confirmed the positive effect that these organisations have on economic stability: in times of recession more production capacity becomes idle and trade within the barter system increases4. Members clearly see the system as complementary, adding an average 10-15% to their sales in national currency. Given the advantage of the cheap barter credit over credits in national currency, it is not unthinkable that a certain substitution effect will take place from earnings in national currency to earnings in trade credits, if enterprises see sufficient outlet for the extra trade credits. As commercial barter systems grow, the possibilities for trading will increase and trade credits will become more accepted.

With the help of a European Union subsidy experiments with barter exchanges for enterprises and non-for-profit organisations are currently undertaken in four countries: UK (Scotland), Ireland, Spain and The Netherlands. All experiences take place under different circumstances, in rural as well as urban areas. Purpose of the project is to determine the employment generating effects of these initiatives5.

Although barter exchange companies exist in developing countries (such as South Africa and Brazil), their membership is restricted to formal sector businesses. As far as known, no comparable experience exists in the informal sector. Small and medium business associations could develop these kind of barter exchanges for their members, thus improving the capacity use of their members, without much investment.

2.6.1.2 The WIR co-operative

The WIR economic circle cooperative is one of the oldest still existing alternative currency systems. Motivated mainly by the bad economic situation of the time, 17 cooperators founded the WIR cooperative founded in October 1934 in Zurich, Switzerland. The system was modeled after an exchange organization, existing at the time in the Scandinavian and Baltic states, and inspired by the interest free money theory of Silvio Gesell (see 2.2). WIR stand for the first three letters of Wirtschaftsring (business circle), but also for the German word for 'we'.

In the beginning, the WIR economic circle was open to every person or company authorized to act . Not only businesses, but also farmers, civil servants and white-collar workers participated in the WIR. Participants paid cash into an account and received a bonus of 5%. The credit could be used to go shopping within the WIR. However, most new members were attracted by the interest free WIR-credit for extra buying power, which was meant to stimulate sales of the participating businesses. Sales also increased because no interest could be gained on WIR credits, thus discouraging hoarding. The growth of the cooperative was impressive during its first years.

By the end of the 1930s, it became clear that too many credits had been issued at too weak collateral. The amount of bad debts seriously affected the confidence in the system and WIR credits were beginning to trade at a discount. Severe measures were taken to reverse the situation. As the economic situation improved in the 1950s and the conditions for obtaining credits had become more strict, many wage earners lost interest in the WIR. On the other hand, the commercial middle class (mainly stores and trade businesses) suffered from an increasing competition of mass distributors; the WIR offered them effective competitive advantages that were important for surviving in this new environment. In 1955 the General Assembly of the cooperative took the decision to restrict membership to the commercial middle class (Mittelstand): only middle class businesses (of small and medium size) were admitted as member; large companies endangering the interests of the middle class were excluded.

Currently, the WIR cooperative disposes of a cooperative bank and six regional offices. The steady growth of the system during the past decades is demonstrated by the following table6. In 1993 the turnover of the WIR amounted to more than 2.5 billion Swiss Francs or about 2 billion US$.

Growth WIR 1973-1977

1973	1993	1997
Number of participants		
20 402	76 618	82 793
Turnover (Swiss Francs)		
196 million	2.521 billion	2.085 billion
Balance		
83 million	1.028 billion	1.063 billion

The WIR operates in a similar way as the commercial trade exchanges describes in the previous section, with the difference that it is organised as a co-operative, which increases the benefits for enterprises that participate in the system. Companies that join the WIR pay an entrance fee a yearly fee and a fee per transaction (all in Swiss Francs). The fees are used mainly to pay the salary of the professional staff employed by the so-called WIR-bank, a for-profit bank that manages the WIR accounts and issues WIR loans. The unit of account is the WIR valued officially at par with the Swiss Franc. The WIR-money only exists as a computer account; no paper notes circulate. Members can apply for low interest WIR-loans. A collateral is required (typically a second mortgage on a house or business) to comply with Swiss banking laws. In order to maintain the WIR s value, the total value of outstanding loans is kept below one-third of the system s annual turnover8.

The WIR does not function entirely according to the mutual credit principles, because loans are financed 100% by creating new WIR-money, without taking into account the destiny of the loan. As will be argued in section

3.4, this can lead to an unstable relation between the amount of money in circulation on the one hand, and the amount of goods and services available in the system on the other. This might have contributed to the sentiment that many participating businesses have, namely that WIRs are more easily earned than spent. This, in return, has resulted in a black market where WIRs are traded at discounts as high as 30%9.

2.6.2 Mutual credit systems for communities

2.6.2.1 LETS

LETS is an acronym which stands for Local Exchange Trading System. The first LETS was established in the 1983 in Comox Valley in British Colombia, Canada by Michael Linton as a response the high unemployment in his home-town. Since then, LETS systems have proliferated around the world. More than 1500 systems are currently operating worldwide. The countries which host most LETS are the United Kingdom (more than 400), France (300) and Australia (250)10.

The unit of account in the original LETS system in Canada is the green dollar; other systems have called their currencies new berries , Noppes , talents , wallets etc. LETS administration consist list of accounts, usually kept on a personal computer (although hand-kept LETS still exist). A new member receives an account, which begins with a balance of zero. The account is credited if he receives green dollars and debited if he spends them. Often a maximum negative balance is fixed to avoid members of abusing their power to create credit. Generally, no interest is charged on negative or positive balances. No paper currency notes circulate as in the HOURS case. Transactions are reported to the central LETS registrar or record keeper either by telephone or mail. Every member receives periodically an update of his account balance. Each member has in principle the right to know the balance of each other member, although not all LETS apply this rule. Since no transaction can be made without having an account, the system can only be used by members. This disadvantage is partly alleviated by re-endorsable cheques, a system used in Mexico-city (see section 4). Besides an update of their accounts, members also receive regularly a listing of goods and services being offered and requested within the system.

A LETS system operates very much like a commercial barter exchange but it has several notable differences in philosophy, intent, and practice:

1. LETS is a not-for-profit cooperative arrangement, usually unincorporated and operated by volunteers, whereas commercial "barter" exchanges are for-profit businesses.
2. LETS caters to individual traders, although business members are also welcome and desired, while commercial exchanges favor large volume business clients.

3. In LETS, the initiation and membership fees are nominal, sufficient only to cover the modest operating expenses of the system. Commercial exchanges charge large cash fees for membership and take a substantial percentage, usually in cash, on each transaction.
4. In LETS, there is generally no interest charged on either debit or credit balances.
5. While commercial exchanges actively broker trades among their members, LETS functions only as a clearinghouse and information service; there is generally no brokering of goods or services by LETS itself11.

As in all community currency systems, the currency is backed by the expectation that each member will - in the long run - take not more out of the system than he puts into it. Having a temporary negative balance in a LETS system is not a problem: positive balances can only exist if there are negative balances. The total of all balances in a LETS system always equal zero. However, members with debit balances are expected to offer actively offer their services to prevent their accounts being permanently in debit.

2.6.2.2 Service Credit System: Time Dollars

The service credit system differs from the two previous systems in that the persons who benefit from the services are not necessarily the persons who have to return a service in order to balance their account. Inventor of the plan is Edgar Cahn, a prominent lawyer, who conceived the plan because he was not satisfied with the way government programs dealt with social problems.

The basic idea of the system is to value voluntary social work. The unit of account is the Time Dollar, worth one hour of social service. People can earn a Time Dollar by lending a social service to a needy person in the community. Each members has an account and Time Dollars are registered in the computer of the local Time Bank . The credits can be spend on other services, saved for later, given to another person in need of social services, or returned to the Time Dollar Bank, who redistributes the credits to people in need. Programs that get started often donate Time Dollars to the elderly and needy in order to prime the pump 12. At the moment, more than a hundred systems are operating in 38 states of the USA. No systems of this type are known of outside the USA.

The idea is to exchange services on the basis of an hour for an hour. The first generation of programs often focused on senior citizens because many of them have an important natural resource of free time and many others have great unmet needs. At the moment, the average age of the people earning Time Dollars is 63, and the average age of recipients is 83. New programs, however, are building networks serving other groups, such as teenage mothers, people suffering from the AIDS virus, public housing residents, children in urban schools, and parents needing day care for their children. The systems have integrated into health care systems, colleges, churches, state and federal social agencies,

neighborhood security patrols, etc. In some cases, Time Dollar programs involve high school students who are required to do some community service before graduating.

Time Dollars are backed by the expectation that future generations will continue providing the same services within the system as the present members. This might be an optimistic expectation in societies where an increasing number of senior citizens will need to be supported by a decreasing number of relatively young people. However, most participants take this risk without complaining: they can only win in comparison with the initial situation in which their voluntary work was not given any value at all. In order to prevent a situation in which demand exceeds supply of services, some systems limit the number of Time Dollars a person can carry over in his account from one year to the next. One state established a formal guarantee to back the system in decreeing that Time Dollar participants would be first in line for scarce state services if their programs went under. The relatively high percentage of the members have never done volunteer work before, indicates that the reward in Time Dollars certainly appears to be significant. The Missouri state government has been so enthusiastic about the plan, that it has guaranteed the value of service credits. It will go into the market to buy services for those who have earned credits, if there is no one willing to provide services for Time Dollars when needed. In Miami, participants are earning more than 10,000 Time Dollars a month by helping others13.

It will be clear that the Service Credit System is of little relevance for the context of developing countries, where state intervention in social services has been minimal and the extended family takes care of most of these functions. Moreover, the number of people that would be willing or able to serve within these systems without receiving an immediate financial reward, would be very limited, given the economic pressure to earn cash income.

2.6.2.3 Knowledge Exchange Systems

In Europe, North America and Australia, various Knowledge Exchange Systems have developed14. These systems exchange exclusively educational services, such as music lessons, extra classes for children, physical training classes etc. The service hours are registered in a system comparable to that of a LETS. The growth of these systems is impressive. The ease of communication facilitated through the development of the internet, has given a further incentive to the growth of this movement: today s communities are not necessarily geographical entities.

The European Commission co-financed recently a the project AFREROLE (Autoformation et Formation Reciproque En Reseaux Ouverts pour Lutter contre l'Exclusion) which works in Belgium, Austria, Germany, Spain and France. The objectives of the project are the training of animators in order to increase the number of Knowledge Exchange Networks, consolidate the existing

networks through inter-network cooperation, and study the effects of these networks15.

At the moment more than 500 Knowledge Exchange groups exist in France, Belgium, Spain, Switzerland, Brazil, Burundi, Austria and Germany. The fact that this movement has spread into Brazil and Burundi, indicates that the concept is viable in the context of developing countries. The Knowledge Exchange Systems will not be dealt with in detail, because educational services can be integrated into more comprehensive community currency system, such as a LETS and HOURS.

2.7 The evolution of Community Currency Systems

The previous sections have described the two different types of Community Currency Systems that can be identified: those that operate as a fiat system (see the Ithaca- HOURS example) and those that operate as a mutual credit system (see the LETS). The growth of these systems during the past decade has been impressive, as is illustrated by the following graph: more than 1400 communities in a dozen different countries have already started their own local currency system. Number of Community Currency Systems Operational in Twelve Countries 1984-199616

3. Common arguments against CCS

In this chapter several common arguments against the use of CCS will be analyzed, using the scarce scientific studies that are available. The arguments against CCS are used mostly by business or government representatives to demonstrate either that CCS are a danger for the general interest, or to prove the ineffectiveness of the systems.

3.1 CCS reduce the economic efficiency

Since the validity of a community currency is restricted to a relatively small area, it can be argued that little competition exists between producers of the same goods and services. Moreover, since CCS producers depend often on a much smaller market, they will not be able to achieve the same scale advantages as a large producers. This may give rise to higher prices for consumers in the CCS.

In the first place one has to take into account that CCS are complementary systems. Consumers do not have a 100% CCS income: they always have the choice of buying in local currency within the community, or with national currency outside the community. Therefore, producers in the CCS are certainly not insulated from outside competition. At the other side, producers certainly do not depend 100% on income from the CCS; it is often only the

excess capacity that is sold via the CCS. By making use of this idle capacity, producers actually see their unit price decrease, thus increasing their efficiency.

Secondly, even if a CCS grows in economic importance and consumers and producers become dependent on the system for a large proportion of their needs and income, one can enter the discussion of trade-off between economic efficiency and economic stability: at which point economic efficiency (through specialization) starts to endanger economic dependence. Adversaries of CCS emphasize the economic efficiency effect of specialization and consider CCS as a disguised form of protection; proponents of CCS emphasize the reduced economic dependence and higher self-reliance as result of the CCS, and see economic dependency as a potential source of not only economical instability, but also political and social unrest.

One of the fundamental principles of neo-classical economics is division of labour through specialization. Persons, communities, regions and even countries have become increasingly specialized and therefore dependent on external trade. In a dynamic world market, a comparative advantage today is not a guarantee for the same advantage tomorrow. Although it is undeniable that globalization has lead to more products available at lower prices, it has also lead to increased inequality of wealth distribution (see introduction), more income instability and enormous transitions costs for communities that have lost their competitive advantage. These transition costs include not only a loss of income and employment, but also social costs such as rising crime rates, drug abuse, prostitution etc. The main form of specialization in developing countries is in agricultural exports. Local economies are left to the mercy of international markets that are completely out of their control17.

A certain degree of specialization is beneficial and CCS certainly do not pretend to bring communities back to autarky: products with demand a high degree of specialization and in which scale advantages play an important role, are simply not traded within CCS. New computers, cars, and Windows 98 consist of so many specialized elements, that they can impossibly be developed at the level of a community. As said earlier, CCS are intended as complementary currencies; they do not pretend nor strive for a complete substitution of the national currency. On the other hand, as a result of specialization, communities have lost a great deal of their skills diversity which makes them more vulnerable to outside shocks. If skills in essential areas such as agriculture, housing and clothing are lost because many people specialize in tasks that are only of value in the world market, the community degrades from an economically productive unity into a subsidized collection of individual households, that has no viability on its own. An new balance has to be found between the dependence on outside markets and self-reliance at community level. It is easy to loose a skill; it is much more difficult to acquire one. CCS can help to employ and retain skills within the community, thus contributing to their very right of existence.

3.2 CCS are a source of inflation

This fear is closely related to the question if CCS are a substitution or a complement of national currencies: do local currencies create new trade or are they rather a substitute for trade formerly handled in normal currency. If there is a large trade substitution effect, this would theoretically mean that less goods and services are available in the economy (they are absorbed by the community currency), while the amount of national currency remains the same. This could lead to inflationary pressures if no extra goods and services become available to absorb the liberated national currency. The answer to the question is that both effects (trade substitution and creation) occur at the same moment. Which of the two effects is dominant, depends on the way community currencies are spent.

In the following the two trade effects will closely examined:

1. trade creation: a transaction that would not have taken place without the local currency.The economic benefits of CCS (in terms of extra revenues and employment) are expected to derive from this effect. Excess production capacity that is left idle within the present monetary system is employed within a CCS: restaurants accept local currency during low activity hours, unemployed people are hired for gardening services etc. These are clear cases of local demand creation: transactions that would not have taken place without the local currency. Research has clearly shown that people tend to spend local currencies easier than national currency, because they are easier to earn.

2. trade substitution: a transaction that substitutes a transaction formerly made in national currency.A transaction in local currency that substitutes a transaction in national currency has no direct net economic effects in terms of income and employment generation. However, since the local currency is created (and not earned at the expense of a hard currency earning activity) , national currency has been saved. These savings can be spend on other products and services, which leads thus indirectly to a net higher volume of trade. It has to be noted, however, that this indirect effect has a lesser impact on the local economy, since only a part of the saved national currency will be spend local. The increased purchasing power will give an initial impulse to the economy, but the impact is temporary as the extra purchasing power will gradually leak away in the form of imports.

The following figures are a graphical representation of the income generating effects of the introduction of a local currency. Four persons are supposed to participate in the CCS: A, B, C and D. In figure 1 the initial situation is represented: no local currency is introduced: the aggregate income is 4 units of national currency (4$).

In the second case, A has introduced a local currency which is accepted by B, C, and D. None of the transactions in local currency are substitutions of transactions formerly made in national currency. A completely new parallel

economy in local currency is created besides the existing economy in national currency. The new aggregate income of this virtual economy is 8 units: 4 in national currency and 4 in local currency. Note that the income gain would have been much larger if all 4 participants had been able to spend a newly created local currency unit.

Figure 3 represents, just as figure 2, the situation in which A introduces a local currency, accepted by B, C and D. However, in this case all transactions are substitutions of transactions in local currencies. It is supposed that national dollars are spent half locally and half outside the community. The extra purchasing power generated by the fact that A can save 1 unit of national currency, will leak gradually away, and at the end of the period the aggregate income will be 4.93$: 4$ in local currency and 0.93$ in national currency.

Very little scientific research has been into the trade creation and trade substitution effects of the introduction of local currencies. Studies on these effects in developing countries are even nonexistent, although ongoing research in Mexico will possibly reveal some first indications18.

The scarce studies available on experiences in developed countries, indicate that the trade creating effect is very small. This can be explained from the fact that most members of the investigated CCS are high- and middle-income full employed persons, who have little time and little need to raise their income by satisfying unmet community needs. The amount of local currency introduced is very small relative to the national currency income of the community. Idealism rather than economic necessity are often the overriding motives to participate in the CCS in developed countries. However, there are no indication that the small trade creation effect is the result of large substitution effects. The local currency is mainly spent on transactions that would not have taken place without the local currency. Or, as one member of a CCS in Great-Britain describes it: there are certain things we wouldn't spend money on, and think it was something we should do ourselves, and yet there is a sense in which getting it on LETS seems like getting it for free... it's extras, it has enriched our lives, rather than provided necessities. 19 As will be argued in chapter 5, the conditions for trade creation are better in developing countries.

Fears for inflation resulting from the introduction of CCS seem to be at out of proportion regarding the size these community systems can reach in the short run. The example of the provincial bonds issued in Argentina (see chapter 2) indicates that even if a high proportion of the money supply consists of local currency (60% in the Salta province), the inflationary effect is still not noticeable. It is the confidence of the public in the currency, rather than the amount in circulation that determines its stability: as in all sectors of the economy susceptible to speculation, the expectations of the public are self fulfilling prophecies. If the public is convinced that the local currency forms no threat to monetary stability, it will remain stable. If rumours are spread that the local

currency endangers the stability of the national currency, the national currency will weaken, just like any other rumour would do.

3.3 CCS encourage tax evasion

Legislation is clear about it: in most countries no taxes are payable over income (in local or any other currency) unless the income is earned in connection with a business20: the transaction should not be repetitive, nor should it be aimed at making a profit. This means, for example, that no taxes are payable over baby sitting or gardening, unless it is your profession. The number of transactions that lead to taxable income are scarce because the number of businesses participating in the systems is still small. The businesses that do participate pay taxes over their income in local currency. Since the turnover and profits of local businesses may be expected to rise after joining the CCS, an increase of tax revenues may even be expected. Moreover, if transactions are registered (as is common in most mutual credit systems), tax evasion of local currency income is even more risky than tax evasion of national currency income. In this case the CCS seems to work in favour of the tax collector. In general, tax evasion does not seem to be higher in CCS than in the tax paying society as a whole.

More problems arise on the issue of benefits (social security system) over income earned in local currency. The main reason is that the social security system was never designed for the modern reality of marginal occasional and temporary employment opportunities. Even on part-time and seasonal work it is often difficult to apply the current rules. Here again, benefit evasion does not seem more chronic than in the society as a whole. More and more governments understand that benefit legislation is difficult to apply on most of the activities undertake in CCS. The tendency is therefore towards exemption of CCS participants from benefit payments21.

Government might experience a drop in tax revenues if sales of certain enterprises fall because people prefer to buy services and products from individual members (who are tax-exempted) using the local currency. More research would be necessary to examine the importance of this substitution effect and to which degree this tax loss is compensated by overall higher sales elsewhere and decreased expenses on welfare.

In developing countries, the tax evasion argument (and even less the benefit evasion problem) is hardly valid since the incomes earned in the informal sector (the main target group for CCS) are so minimal that it is improbable that they would be taxable. Benefit systems (and thus regulations) are non-existent or not applicable to the informal sector in most developing countries.

Instead of regarding CCS as a tax evasion phenomenon, many local and national governments now acknowledge the useful role that CCS can play as

a costless social security system, providing income opportunities for people at the lower end of the socio-economic spectrum. In Australia CCS income is exempted from social security benefits; in England government has employed civil servants who install CCS; in New Zealand people who register as unemployed are encouraged to join a CCS; in the USA income from Time Dollars (see 2.6.2.2) are exempted from tax22.

In developing countries, where formal social security systems are underdeveloped or even nonexistent, government support for CCS is even more desired. In Argentina, for example, government has implemented a special program that supports the CCS movement23. Furthermore, it permits tax exemptions on income earned in local currency. Some local governments even accept people paying taxes in nature (potatoes, milk)24, which some might consider even more extreme than accepting local currency. Governments that give preferential treatment to CCS, generally consider the systems as an instrument that reduces the need for government expenditures on income transfers or subsidies, thus liberating public funds for other, truly productive investments (education, infrastructure, etc.).In short: governments arguments against CCS as a tax evading instrument are difficult to defend, especially in developing countries. However, the CCS might form the motive for a discussion on the way taxes and benefits should be levied. In general, the current tax system is often in conflict with labour market policies aiming at full employment. Levying taxes at level of enterprises on the use of scarce resources (energy, natural resources, space, environment, waste storage and/or transformation, etc.). This would make labour cheaper and environmentally destructive products more expensive. Discussions on the introduction of this so-called eco-tax in the European Union are in a final stadium.

3.4 CCS are unable to finance investments

One important criticism of CCS is the fact that the zero-interest policy, makes it unattractive for the participants to save money, which makes that participants will always be dependent on the national currency systems for their investments. First of all, CCS do not pretend to substitute the conventional currency systems. As explained in 1.2, the main function of money is to facilitate transactions, not to accumulate wealth. One of the strong characteristics of CCS is that accumulation of money is discouraged, thus preventing any interference with the function of money as an exchange medium.

Secondly, one has to distinguish between investments that increase immediately the amount of goods and services available within the community (e.g. the purchase of merchandise), and investments which will lead to a long term increase in production capacity (e.g. establishing an orchard fruit), or no increase at all (consumption credit).

The first type of investments can be financed by simply creating the necessary amount, either through permitting the investor to debit his account (in mutual credit systems such as LETS) or by providing the investor with newly issued paper notes (in HOURS systems). There is no danger of inflation because the amount of money in circulation follows the amount of goods and services available within the system. As soon as the goods are sold, the loan will be canceled and the money is taken out of circulation. These loans can be issued free of interest; a small service fee will have to be charged to cover the cost of the labor involved in issuing and keeping track of credit, plus other overhead. A collateral can be required in order to protect other users of the system. No savings are necessary to finance these kind of investments.

In the ideal case, the second type of investment (long term or consumption) will have to be financed out of savings in order to maintain relation between monetary mass at the one side, and goods and services available at the other. It is not expected that the zero-interest policy will eliminate completely the savings behaviour: saving is useful, even without interest, because some large purchases cannot be afforded immediately, because one prepares for a less productive period in the future (retirement) or to be prepared for unforeseen expenses (illness, funeral, etc.). If the unit of the community currency is coupled to the national currency, a compensation for inflation will have to be given to the savers and charged from the borrowers. In any case, in order to finance long term investments CCS will have to develop capital market functions, like in the conventional economy25. The supply (of savings) and demand (of loans) will determine the price (interest rate) of the money.

Most CCS - even the ones in North America and Europe - are too young and have insufficient turnover to support this kind of use. In some LETS individuals have taken on large debits to build their own houses, and then repaid these debits more quickly than would be possible using an interest-burdened currency26. In this case the ideal path of matching the monetary mass with the goods and services available has been left. However, no signs of internal inflation (i.e. a lower acceptance of the community currency) have been reported in these scarce cases, proving again that the confidence of the members in the system appears to be the main determining factor for internal inflation.

3.5 Local currencies are easy to counterfeit

It can be argued that local currencies are easy to falsify, because the high-tech anti-counterfeiting measures taken in the case of national currencies are too expensive for local currencies. This point is especially interesting for the setting of developing countries, where the use a computer administrated ledger system (with no paper money in circulation) has severe practical as well as psychological disadvantages. The use of paper money reduces administration costs (not every transaction is recorded, as in the ledger system) and little effort is needed to explain the functioning of the system to its participants.

First of all, no exchange medium, whether local or national, is completely safeguarded against counterfeiting. From the golden coins with underweight to fake credit cards: the fact that accepting money is and remains a question of confidence will always attract people who see an advantage in abusing this confidence. Nevertheless, the number of cases of counterfeiting of local currencies is very small (although not nonexistent27) for several reasons.

Counterfeiting of local currencies is normally not very interesting for criminals looking for an easy profit while keeping a low profile. Firstly, the circle of people that accepts the local currency is limited and people tend to know each other. Thus, the chance of being caught is considerably higher than in the case of national currency. Moreover, people within the system are not likely to undermine the system, since they benefit from it. Destroying it would mean the end of an income generating opportunity. Finally, it is rare that people spend large amounts of money in a short while within the system: systems that admit unlimited credits to be spend in the system are more and more scarce. People who spend large amounts into the system without having earned them first, are easily detected.

Several (low-tech) measures can be take to reduce the risk of counterfeiting (see also Hometown Money , Paul Glover):* periodical recall and new design of the paper money;
* use of special colours of paper, difficult to find or specially made for the purpose;
* using special types of paper, difficult to find or specially made for the purpose
* use of off-set rather than photocopying techniques for reproduction;
* numbering the notes;
* stamping and signing the notes;
* making an impression on the note (for example of the CCS logo) using a special plier.

Other, more high-tech measures can be thought of, but depend on the financial means available for this purpose and on the technical possibilities locally available. The investment made in anti-counterfeiting equipment has to be seen not only in the light of reducing the risk of counterfeiting, but also as a confidence building measure, which is especially important during the early stages of the introduction of the currency.

3.6 CCS lead to an Informalization of the economy

This argument also touches the tax-evasion problem dealt with in 3.3. If a substitution takes place from activities formerly done by formal enterprises (who pay taxes) to individuals (who do not pay taxes), one can speak of a Informalization of the economy. This would probably mean that one (taxable) full

time job would be lost and replaced by many (untaxed) part-time jobs. Enterprises can regard this as unfair competition because the individual part-time producers do not carry business overheads such as insurance and rents, nor do they comply with requirements for health, safety and fire regulations, food hygiene laws, public liability insurance etc.28.

First of all, it is questionable that this Informalization effect exceeds the new employment and income created as a result of better utilization of the excess production capacity of formal enterprises: while some enterprises might have to cut certain jobs, many enterprises will be able to employ more people as a result of increased sales. The overall effect on employment (and thus income tax revenues) might be positive and the job-loss could be considered a readjustment of the local economy.

Secondly, the term Informalization only means that the income is not considered for tax purposes and that it does not figure in the GDP of the country. It says, however, nothing about the value of that income for the socio-economic well-being of the community. Paying taxes or contributing to the GDP are no objectives in themselves. Taxes are paid in order to correct a skewed income distribution and to pay for goods and services that are not produced by the private sector. The GDP is considered a measure for the general well-being of a country s population. If CCS can redistribute one full time job over many part-time, it contributes to a better income distribution just as taxes do, but in a natural way. Jobs are not lost; they are redistributed, which reduces the need for corrective measures taken by government, such as welfare.

4. CCS Experiences in developing countries

4.1 Introduction

In contrast to the exponential growth of CCS in North America, Europe, Australia and New Zealand, the experiences in developing countries are still rare and often undocumented. In this section, 4 experiences will be described.

4.2 Argentina

Although the status of Argentina as a developing country can be disputed1, the experiences the Clubes de Trueque (literally barterclubs , not to be confused with the commercial barter clubs in theUSA which only admit enterprises; see section 2.6.1.1) are aninteresting case for CCS developers in developing countries,because its beneficiaries belong mainly to the lower socio-economicsegments of society, this in contrast to many CCS in developedcountries.

The Clubes de Trueque in Argentina are based on the Alvin Toffler's concept of the prosumer 2. Prosumers are defined as individuals who are, at the

same time, producer and consumer of goods and services. The basis of the Clubs is, much like the LETS, a mutual credit system backed by the promise of the members to earn as much credits as they spend.

The first Club de Trueque was founded in Bernal (in the Buenos Aires province) in April 1995 as a popular response to the economic crisis and its accompanying high unemployment rate (17.3%). The movement grew explosively and at the end of 1997, Argentina counted more than 400 Clubs, with the participation of some 100.000 active members3, representing approximately 40.000 families. The Clubs in a certain geographic area are member of a so-called nodo (knot), which are in their turn interconnected through a nation-wide network (Red Global de Clubes de Trueque Multireciproco 4). More than 90% of all trade takes place within the Buenos Aires urban area and its immediate surroundings.

Members trade goods and services among each other using credits , which have different names in the various Clubs. The credits circulate in the form of paper notes. The value of one credit is fixed at 1 Argentine Peso. Because the Argentine Peso is fixed to the US-dollar, one credit equals one US-dollar. Every Club has in principle its own Credits. In order to facilitate transactions between the different Clubs, new notes have been brought into circulation recently which are valid in the whole country. A total amount of two million credits were in circulation in December 1997, generating an estimated trade value of 20 million pesos per month5. It is not clear which part of this value represents new trade and which part is a substitution of transactions formerly made in pesos. After a case of counterfeiting, the notes in circulation have been professionally redesigned: they contain a watermark and an invisible sign only visible under UV-light.

In order to stimulate the community sense and give everybody the chance to know each other in his/her Club, the number of participants per Club is limited - as a guideline - to 200 persons6. Thanks to the strong growth of the movement, the variety of products and services that can be bought with the local currencies is impressive. Special markets for agricultural products are organised. Every Club has its own market day and issues a special barter bulletin in which supply and demand are advertised.

Most participants belong to the lower middle-class, many of whom have problems finding an employment in the formal economy. A promotion campaign in churches, community centres etc. has been held recently in order to attract also the poorer segments of society. Workshops have been organised in which the participants were asked to resume their marketable skills or products. Training is organised to develop the skills and to assure that demand is met adequately. The Clubs are recommended to form a so-called Circle of Quality and Self-Help . These Circles control the quality of the products and services

offered by the participants. They also help members who have problems in spending or earning the local currency.

As the trueque movement expanded and large numbers of prosumers participated, some larger enterprises as well as government reacted shocked in a first instance. Questions arose for example on the issue of tax-liability and unfair competition with enterprises who do pay taxes. However, government now acknowledges the important function that the trueque movement plays as an important employment generating instrument in the hands of the people, and a costless social security system. Therefore government strives for a peaceful coexistence of the movement side by side to the regular economy. In some cases government even supports the movement actively, for example by making available facilities for meetings of the Clubes de Trueque.

The challenges of the movement in the near future are to create and develop its relations with co-operative enterprises, with municipalities and with NGOs. The success of the trueque movement has spread to Chile, Brazil and Uruguay and will probably penetrate further into Latin America.

4.3 Mexico City (Tlaloc)

The number of participants in the Tlaloc experience is small (150) in comparison with the Trueque movement, but the socio-economic status of the participants make it an interesting case for those interested in targeting the poorer segments of society.

The project is promoted by the NGO Promocion del Desarrollo Popular (PdP), under the guidance of Luis Lopezllera. Inspired by the experiences in North America and Europe, PdP initiated in 1994 an experience in a poor desert valley (Valle del Mezquital) with indigenous people, a movement of 100 communities, with 20 years of relatively successful grassroots organization. The Boja money was created (Boja means money in the local language), and the system grew progressively. Unfortunately, the experiment was halted because the grassroots organisations were harassed by the government thinking they were linked to the Zapatista rebels in Chiapas7.

The Tlaloc currency was first introduced in early 1996 in Mexico City. The target population is not a heterogeneous local community but a complex network (la OTRA Bolsa de Valores), based in a giant, polluted and alienated metropolis, and linking rural with urban people, institutional people with individualities, and middle class with poor people. All activities were implemented with the existing human and physical resources; no additional funds had been received for this new project. The starting conditions of the project were therefore far from ideal.

The unit of account is the Tlaloc, called after one of the highest divinities in the Aztec cosmology, related to water, rain, thunder and life. The "Tlaloc" is worth one hour of social work or 25 pesos (US $3 dollars). Bills are denominated in half, 1, 2, 3, 4 and 5 Tlaloc's. The system is administered by the so-called ECOBANK. A catalogue of offers and requests is printed for the members, and published every 4 months. Members must accept at least 10% of every transaction in Tlaloc.

The system consists of a checking system (comparable to the LETS) and a paper currency, (comparable to the HOURS). When a person joins the system, he receives 15 hours in Tlaloc notes, and a 40 hour credit to his account. Any member person who has sufficient credit on his account, can bring in circulation a paper note. The ECOBANK registers the emission and the value of the currency is debited on the account of the person making payment. The paper money has ten spaces for signatures. The first space is signed by the person making payment. The second is signed by the person who accepts the currency in exchange for a good or service. The currency passes from hand to hand and after every transaction the paper is signed by the receiver. When all 10 places for signatures are filled up, the last receiver can return the paper currency to the ECOBANK where it is credited to the account of the person turning it in. This person does not necessarily have to be member of the system. No interest is paid on positive balances, thus discouraging accumulation of Tlalocs8.

Since 1997, people can also transfer Tlalocs directly to each others account using a triplicate chequing system which must be signed by both parties three times, with one piece going to each of the parties and third piece going to the administration. The checks are not very popular as a payment method: the lack of bank accounts experience, as well as the time taking procedure (signing 3 times and then go to the ECOBANK) are probably the main factors preventing use of the cheques.

The Tlaloc experience can be considered a hybrid system, combining both the advantages of the LETS and the HOURS. The LETS advantage of participants determining themselves the amount of money in circulation through a system of accounts, is combined with the HOURS advantage of using paper money which allows transactions to take place between people who may not be members, makes transactions more natural and reduces the administrative load (not every separate transaction has to be registered at a central point). These last two advantages are especially important in a low-tech context. In fact the system is closer to the LETS system than to the HOURS system because the mutual credit principle is maintained. Each transaction can be registered (as in a LETS), although with some delay.

Some critical notes can be placed with the question if people indeed always sign the paper currency. In order to avoid the hassle of going to the ECOBANK to exchange the full paper currency for a new one, the last (tenth)

receiver can decide not to sign. The same accounts for the 11th, 12th and maybe 13th receiver. These unsigned transactions will not be registered. This is in principle no problem, except in case the central administration wants measure the exact trading volume. A solution could be to reward participants with a high turnover within the system, for example by permitting them to have higher negative balances (as is happening in the Noppes system in Amsterdam, Holland). Another question is if the continuos renewal of currency notes does not lead to unnecessary expenses9.

By the beginning of 1998, the Tlaloc community counted some 150 members. Members are not only individuals, but also groups, (socio-ecological responsible) enterprises, institutions and even microregions. Due to distance and transportation problems, few people maintain daily social contacts within the Tlaloc community: transactions often depend on printed information and spontaneous phone calls. Consequently, trading volume is still relatively small. Social gatherings are organised every once in a while, in which participants exchange ideas, expose their products and services. Increased motivation and confidence are important by-products of these gatherings. The number of people participating in the Tlaloc community increases much slower than had been hoped for. The initial target of 1000 members after one year of operation had to be readjusted for being too ambitious.

Making individuals, institutions and enterprises think about the matter is probably the project s main achievement for the moment, not only within the Tlaloc community, but also beyond. The Tlaloc experience has received ample publicity on national as well as international level. Inspired by the Tlaloc experience, many organisations and microregions, in Mexico as well as abroad, are interested in starting their own experiences. A community currency research project called Cambio local en el mundo en desarrollo is currently (1998) studying the effects of the Tlaloc community currency in Mexico City, and designing methods for simplifying the introduction of these currencies in other localities and countries10.

4.4 Senegal

The project promotion of community-based exchange systems in Dakar, Senegal, is an initiative of the NGO ENDA Tiers-monde. The activities started in January 1998 under the coordination of Mr. Hasan Aslafy in the district Grand-Yoff in Senegal s capital Dakar. An experimental phase of half a year (until June 1998) had been foreseen. In order to facilitate the promotion, the project uses an existing network of credit unions which already work with ENDA. The large majority of the members and leaders of these credit unions are women.

After several sessions of promoting and explaining the concept, the first community exchange group formed itself in march 1998. The group choose the

name Doole, which means force in Wolof, the main local language in Senegal. A coordinating group of (initially) 6 persons was formed and a list of offers and requests was composed in the same month. The Doole group decided to organise monthly markets, the first of which took place in may. The number of people attending the market grew fast: 52 in may, some 150 in June and about the same number in July.

With funds of the NGO ENDA the first notes were printed in April and the first community currency in West African is born. The currency notes called bons de travail are denominated in hours. Notes of 1 hour, ´ hour and ¨ hour are printed. One hour is equivalent to 1000 francs CFA (1.50 US$). In order to become member of the community, a person pays a 500 f CFA inscription fee (0.75 US$). The new member receives bons with a value of 5 hours (7.50 US$).

One heure equals in principle one hour of work. In practice the exchange of work (services) is not yet very common. The hour has above all significance in the payment of training services. One of the plans of the Doole group is to create a Popular University11. After having composed the bulletin of offers and requests, there appeared to be an unexpected high demand for training services. During the June market, 5 priority areas were identified: computer literacy, languages, commercial skills, local cereals and local products. At first the availability of a trainer within the CCS will be examined. If the desired expertise is not found within the CCS, experts from outside will be approached and asked to participate in the CCS. The plan is to organise training sessions with a trainer - pupil ratio of approximately 1:10. Every student pays one heure (equivalent to 1000 f CFA) for each hour of training received. A proportion of the amount will be used to compensate the trainer. The rest will be used to finance partially the general costs of the CCS (administration, promotion) and to finance activities of communal interest (e.g.. planting trees, construction of a communal building, training for unemployed youth etc.).

The Coordination Group, a group of about 10 enthusiastic members of the CCS, plays an important role in the administration as well as promotion of the system. The Coordination Group takes important strategic decisions, such as how, where and if organizing markets, how much money should be emitted, to which zones should be expanded etc. Given the short time of existence of the community, the members of the Coordination Group are self-elected volunteers; they are not democratically chosen represents of the members. In fact anybody who thinks he (or, in practice rather she) has the time and capacity to contribute to the decision taking process, can participate in the Coordination Group. As the community grows, internal regulations will be formulated in order to assure democratic representation. The beating heart of the Coordination Committee is an Administration Committee (Comite de Gestion) of three persons, which is advised by an economist of ENDA. A number of sub-committees takes care of specialized tasks, such as the edition of a bulletin of offers and requests (4 persons), the organisation of training session (two persons) and communication

(3 persons). The same Coordination Group plays an important role in the promotion of the concept in other districts of Dakar, as well as outside Dakar. The members of the Committee receive in principle a compensation in heures for their promotion efforts. However, since the central administration does not yet receive revenues in heures, the volunteers compensation is registered and will be paid once the resources are available (mainly through the organisation of training sessions).

The Doole experience is a clearly an HOURS case: every interested person who pays the 500 f CFA inscription fee, receives five hours worth of bons. The entrance barrier is low: people who have their doubts about the system, can also participate without being member. The acceptability of the system is high, because paper money is used and transactions take place without any administrative hassle.

A disadvantage of the HOURS approach in a pilot project setting, is difficulty to obtain information about the volume of transactions. This information is an important element in determining the income and employment generating effect, obviously the main reason to introduce the system in a Third World context. Within an HOURS system, the only way to obtain information on the trading volume is holding random inquiries. This consumes extra resources and is not as accurate as information provided by register in a LETS system. The Doole Coordination Group has held inquiries during the July market, using volunteers. The results ...

A particular feature of the experience in Senegal is the geographical validity of the currency. Although the color of the bons is different in the various districts where the system in introduced, the geographic area in which bons are accepted is in principle unlimited. The rural areas around Dakar will accept Dakar s bons and vice versa, and once the CCS in neighboring Mauritania have become operational (promotion activities are foreseen in October 1998), the bons can even be used for international transactions. Although the range of products and services available within the CCS is expanded by opening up the frontiers of the community, the danger of geographical currency imbalances between communities will rise as well. If the products of Dakar are more popular than the products of a rural community participating in the system, the rural community will be drained from its community currency, thus returning to the initial situation of financial scarcity. On the other hand, the amount of community money circulating in Dakar might soon become too large with respect to the goods and services offered within the community, thus leading to an inflation (or reduced acceptability) of the community currency. As in any CCS, the advantages and disadvantages of expanding geographically will have to be studied thoroughly before deciding on the optimal community size.

Plans exist for a bank where unused bons can be kept and possibly loans in heures will be issued. The idea is currently discussed within Doole community and no details are yet known about its functioning.

The project has received requests for technical support from several institution in Senegal, as well as in other countries in the West African sub-region (Guinea, Mali, Mauritania, Cote d Ivoire). In Senegal, the project is currently working in 4 districts in Dakar and thinks to expand its working area to a total 30 districts, before extending into other urban centers in Senegal. The first promotional efforts in rural areas (via existing credit unions) have already lead to a observation visit of a rural group to the July market in Dakar. Future plans of the project entail: setting up a information/documentation center, facilitating training, and strengthening initiatives and strategies of poor urban populations, as well as lobbying at regional and international level to promote and render alternative currency systems more credible.

4.5 Ecuador12

Ecuador hosts two community currency experiences. Both are virtual copies of the LETS13 frequently found in developed countries, with very few adaptations.

4.5.1 Rumihuaico

Rumihuaico is a community in the valley of Tumbaco, near Quito, the capital of the country. The LETS was initiated in 1995 by the Pestalozzi Educational Foundation (FEP in Spanish) for its members. Most participants of the Rumihuaico-LETS belong to the middle-class.

The currency of the Rumihuaico-LETS is called recurso (resource) and its exchange rate with the national currency (sucre) is 1 to 1. Every member starts with a zero account. No interests are paid on negative nor positive balances. Any member can verify the balance of any other member at any moment. The administration is kept on a computerized accounts system, as commonly used in LETS. In order to pay for administrative costs, members pay a small percentage of the value of each transaction into a central account. If necessary, members can be asked to make extra contributions in recursos or in national currency. A regularly updated directory of offers and requests is maintained. Transaction can take place only in recursos or in combination with the national currency. Only the recursos transactions are registered by the system.

4.5.2 Toctiuco

In contrast to the Rumihuaico case, the participants of the Toctiuco-LETS belong to the lower socio-economic segments of society, which makes this

case even more interesting. Toctiuco is a popular quarter, created in the 1950s when landless immigrants occupied unused land in the mountainous outskirts of Quito-city. Nowadays the sector puts up some 30.000 people. Although the infrastructure of the quarter has been improved considerably during the last decade, the population continues to live in extreme poverty. Educational levels are low. Typical slum problems such as lack of space, unemployment, criminality, drug abuse, sexual abuse and alcoholism are part of the daily reality of Toctiuco. A large majority of the population makes its daily descent to Quito-city, where they work as street vendors or household personnel.

At the end of 1995, the NGO Hombres de Tierra initiated the project under the coordination of Mr. Alfonso Gandarillas and with technical support from the Rumihuaico-LETS. The Toctiuco-LETS uses the compromiso as a unit of account and transaction. Its value is equal to that of the national currency (sucre). The 84 members gather for trading generally every Sunday morning in one of the 30 locations that the NGO installed in the quarter. Every member has his check-book with which payments can be made. At the end of the market, the checks are deposited at a central point. All transactions are introduced in a computer, which produces the state of account of every member. Given the small number of participants at the moment, the need for a bulletin with offers and requests is not yet felt. However, members asked to fill in their offers and requests in the inscription form. In the future, when the number of participants will be larger, a printed bulletin might become useful.

The Toctiuco-LETS also experiences some problems. First of all,some members seem to take advantage of the system by buyingmore than they offer, resulting in high and permanent negativebalances. Other people have problems in spending theircompromisos, resulting in high positive balances. Given the highinflation in Ecuador, these people see decreasing their purchasingpower very rapidly. Helping members with excessive structuralpositive or negative balances to find ways to earn or spend morelocal currency balances would be a first measure to attack thisproblem. Fixing maximum negative (and possibly positive) can alsocontribute to a more equal distribution of community currency.Finally, one can think of introducing a rule which obligesparticipants with a negative balance to balance their accountsregularly (e.g. every 3 or 6 months) paying the difference withnational currency.

A very interesting problem follows from the trade between the Toctiuco and the Rumihuaico-LETS. Since Rumihuaico is a semi-rural community, it produces basic food items that are very wanted in the Toctiuco-community. In absence of local production of goods, the Toctiuco-community can only offer its services (household services, brick laying, painting, gardening etc.). As a consequence, existing dependency patterns in the conventional economy (e.g. Toctiuco-girls working in the households of well-off families in Quito paid in sucres) are copied in the alternative economy (e.g. Toctiuco-girls working in well-off Rumihuaico households paid in recursos). Although these newly created jobs

are better than no job at all, it is clear that LETS have their limit in creating a new economic reality. In the case of structural imbalances, complementary measures are necessary in order to really change economic relations. In the Toctiuco-case, the NGO Hombres de Tierra is planning to organise entrepreneurial and skill training, especially for members with permanent negative balances, aimed at diversifying the range of products offered within the community. Another measures that could contribute to the equality of trade positions, is to introduce the system in other quarters of the city, with similar standards of living, but with different specialization, such as bricks, textiles, ceramics, metalwork etc.

Another way of diversifying the range of goods that can be purchased with local currency and at the same time satisfying the demand for basic cereals in urban areas, is collective buying in major quantities from producers and selling them partially in national currency and partially in community currency to the members of the CCS. The proportion in national currency has to cover the expenses made in purchasing, transporting and storing the cereals. The margin normally taken by intermediaries in national currency, is now taken in community currency. The transactions can be made by the central coordinating committee of the CCS or by an individual member. By offering the possibility of buying basic food stuffs in exchange for local currency, the credibility and thus acceptability of the currency will be greatly enhanced. More people will be tempted to join the scheme, thus obtaining economies of scale and diversifying further.

In order to reduce printing costs, the CCS could introduce endorsable cheques, as used in the Tlaloc case. A cheque could then be used several times (10 times in the Tlaloc case) before having to emit a new one.

4.5.3 Conclusion

Although the members of the Rumihuaico-LETS appear at first glance not a typical target group for CCS-developers in the Third World, it is important to appreciate the role that this pioneer-LETS has played in introducing the concept in Ecuador. The Toctiuco-LETS, would probably never have taken off if the Rumihuaico-LETS would not have been a success. When introducing a CCS it can be interesting to start first building some expertise with a easy (or less difficult) target group. This experience can inspire other institutions to copy the experience with more difficult target groups. A successful pioneer experience can be the beginning of a wave of CCS initiatives; a pioneer failure will discourage potential developers to work with even more difficult target groups.

5. The conditions for success

In spite of their impressive growth during the past years, Community Currency Systems have received very little attention from mainstream economists. The first scientific magazine focused entirely on community currencies has issued its first edition in 1997 in Australia (International Journal of

Community Currency Research)14. Since most research is done on CCS in developed countries, the identified factors for success will have to be re-examined and compared with the conditions in developing countries. For reasons of convenience, the industrialized countries will be referred to as the North and the developing world as the South.

5.1 Community sense

As stated in section 2, a community can be defined as an ongoing collection of interactions and continuing relationships 15. In a well integrated community, people tend to feel less barriers to trade (they already know each other) and mechanisms of social control function better (avoiding free-rider behaviour). Not every geographic unity (neighbourhood, village, city etc.) is automatically a community. Although it is impossible to generalize in this respect, two important factors seem to be positively correlated with the degree of community sense:

stability of the population composition: a highly mobile population, as a result of seasonal or permanent migration, is less likely to engage in continuous interactions;

dispersion of the population: in communities with a geographically dispersed population, contacts are less regular.

Research in Australia confirms that the economic impact of CCS depends on their geographical location. LETS operating in smaller neighbourhood areas of towns and cities have higher trading levels than urban-wide (such as Tlaloc in Mexico-city) or more rural systems. In larger cities one can observe the concentration of trading in a number of smaller clusters with little outside trade16. The reason is that much of the CCS trade is in consumer services (eg. hair-dressing, food, baby-sitting), which are generally purchased close to the client s home: participants are unwilling to travel large distances across the urban area or within rural localities to purchase such services17.

It would be wrong to conclude that CCS are useless in communities that suffer from a low degree of community sense. To the contrary: the introduction of a CCS can make an important contribution towards more and better communication within the community, which is a benefit in itself (see for e.g. section 8.4 on the use of CCS in post-conflict situations). However, it would be unrealistic to expect any significant economic benefits (in terms of employment and income) in the short run as a result of the introduction of a CCS in these situations.

The most adequate type of CCS to introduce in a community depends mainly on this degree of community sense. In an impersonal environment, in which one knows little or nothing about his/her trading partners, a soft currency based on the promise of each member to deliver as much goods and services as

he/she consumes, may have difficulties to gain wide acceptance. In this case a hard (or funded) local currency can be an interesting alternative. A funded local currency is backed by assets that can be liquidated easily, for example the inventories of an enterprise.18

The lack of community sense is probably an important brake on the development of CCS in the North. Even if all conditions for a successful trade are present (the demand, the offer and the money), people are often too timid to contact each other. In the South - where communal bonds have remained strong (ethnic, religious networks etc.) - this problem probably is of minor importance19, although in urban areas with a relatively unstable population composition these bonds might have lost much of their strength.

5.2 Participants availability of time

The trade volume of a member depends highly on his availability of time. Research in New Zealand, Australia, Norway and the UK has shown that a relatively large proportion of LETS members has joined primarily for environmental and ideological reasons. Moreover members tend to be highly educated (often education), have a full-time employment, and have relatively high incomes. Since many members have a full-time employment, little time (and energy) is left to invest in the CCS. As one member stated: If you're working full-time, LETS can't possibly work because your time's too valuable 20. The less spare time you have, the more value it has in economic terms.

In the South the value of time of the participants is generally much lower than in the North, because many people tend to be un(der)employed. Even if initial economic benefits are small, people will be interested to join, because alternative ways to increase income are extremely rare. In this respect, the perspectives for CCS growth in developing countries tends to be better than in the North.

5.3 Participants need to trade

CCS have a tendency to grow fast during economic recessions and stagnate when the economy is booming. One example is the Great Depression of the 1930s, which coincided with a period in which CCS flourished (see section 2.2). Australia offers another example. When Britain joined the European Union, Australia lost its main export market. Food stocks destined for Britain had to be destroyed, and unemployment and bankruptcy became common. In 1992, the Australian government stimulated the setting up of LETS throughout the country, providing funds for education, publicity, computer equipment, and other expenses. As illustrated by the graph in section 2.7, the movement grew at an astonishing rate and some of the largest CCS nowadays operate in Australia21. The CCS provides not only an informal sector safety net, but one that tends to expand when most needed. The rare scientific research into multilateral barter

systems confirm this counter-cyclical tendency, for commercial as well as community exchange systems22.

The main reason is that a CCS is in essence a complementary system. If the conventional economy already provides full employment and a general level of economic well-being, the need for a complementary system is not felt. More people have work which means less time is available to invest in complementary economic systems (see previous section). Moreover, more income is available which reduces the need for extra purchasing power provided by a CCS. One can therefore conclude that bad (economic) times are good times to start a CCS. Whenever the good times return (or finally come) the CCS is hoped to have proved its raison-d etre and will survive.

Many of the economies of the South would probably be described as a never-ending Great Depression if Northern standards would be applied. The scarcity of money and credit are felt much stronger in the South than in the North. Therefore again, the prevailing situation in the South seems to be more fertile for CCS development than in the North.

5.4 Diversity of goods and services available

If many people offer the same services and/or goods, the possibilities for trade are significantly reduced. The diversity of the supply depends on several factors, such as:

the general level of education: a higher general level of education often indicates more skills diversity and thus a higher trading potential;

the professional vocation of the region: when a region is dominated by one or two professions (e.g. farmer in rural areas), the possibilities for exchange are extremely limited. This is especially true for rural areas with an (export) monoculture.

Human resources in the North tend to be better educated and more diverse than in the South. In this respect, the trade potential seems to be higher in the North, at least as far as the service sector is concerned. This is not to say that CCS are of little use in a context of monoculture or low levels of education. However, complementary measures are possibly necessary (especially training) in order to increase skills diversity. This issue stresses the importance for CCS-developers to conduct a survey of the target group and area before initiating CCS-promotion. The availability of essential goods and services, such as agricultural produce, is important in order to reach the critical mass (i.e. the point at which the diversity of goods and services available for trade is able to attract members without requiring further promotional efforts23). In the South it is generally easier to involve local producers of cereals, vegetables and fruits (especially in provincial towns) because many people - wage employed or not - have strong links with the surrounding rural areas from which they often originate. Since labour is an important cost component in almost all agricultural

produce, a relatively high proportion of the price could be accepted in local currency. CCS can thus contribute to the integration of rural and urban economies.

5.5 Integration of local formal businesses

The lack of business participation is felt as one of the most important shortcomings of CCS in the North. HOURS-systems seem to have less problems in attracting local business than LETS, probably because the concept of paper money is easier to grasp and involves less administrative hassle. The use of a unit of account that is valued at par with the national currency also seems an important factor in attracting local business. Most potential new enterprise members have no idea about the possibilities to spend the local currency they would receive, and fear to get stuck with useless local currency. As an illustration of this rather reluctant attitude of local enterprises, one can mention Guelph LETS in Canada, which requires an average of six visits before a small business agrees to join24.

Indeed the creation of wells (i.e. members having a large positive account (LETS) or a high amount of paper notes (HOURS)) is a problem many enterprises experience once they decide over-enthusiastically to accept the local currency. This is not only a problem for the participating business (how do I spend all this local money ? and how do I pay my next energy bill without national currency ?), but also a threat for the system as a whole: trading stagnates because of an unequal distribution of the monetary mass. Several measures can be taken to prevent or solve wells : restricting the proportion of local currency accepted per transaction (e.g. 10% in stead of 100%), provide personal shopping lists for people with high local currency earnings or even direct intermediation between people with wells and potential trading partners.

The advantages of local business participation are obvious:

a wider range of products becomes available;

systems loose part of their often alternative image (which refrains many people from joining);

many people who find it easier to go to a shop than to contact individual members, will be more prone to accept the new currency (although some writers feel that in this case conventional consumer roles are copied and the community building aspect of CCS is lost)25.

The initial reluctant attitude of local businesses is probably universal and will be a source of concern also for CCS-developers in the South. Preventing the creation of wells (a bad image is difficult to change) and involving local business associations (such as the Chamber of Commerce) from the very start, will facilitate business participation in the CCS.

5.6 Fiscal constraints

One of the mayor brakes on CCS development in the North is a fiscal legal framework aimed at protecting a social security system rather than reducing the dependence on it. Many people refrain from offering their labour freely on a transparent market such as a CCS, because they are afraid of being cut on welfare or receiving additional taxes claims. In the South, income taxation generally is a minor source of income: income legislation is generally less complicated and few people actually reach the level of taxable income. Also in this respect the South seems to provide better conditions for CCS development than the North.

5.7 Conclusion: perspectives for CCS in developing countries

Although it is difficult to weigh the importance of the different factors of success, the context in the South seems to be at least as appropriate for the development of CCS as in the North. More research on CCS experiences in the South is needed in order to analyze the specific problems encountered by in these contexts.

6. CCS practical issues: building an appropriate CCS

6.1 Issues determining the system choice

Two major categories of CCS have been identified in chapter 2: the HOURS-type (section 2.5.3) and the LETS-type (2.6.2.1). The advantages and disadvantages of the different systems will be dealt with in this section, with particular attention for the context in developing countries. The analysis will focus on 5 characteristics:

the physical appearance of the currency;
the complexity of (and thus resources needed for) the administration of the system;
the complexity of the management of the money mass;
the ability to monitor the system;
the ability to finance the system.

6.1.1 The physical appearance of local money

The acceptance of any new money by the general public, depends highly on the physical appearance of the money. In the North - where the use of bank accounts, cheque-books and credit cards has become a daily routine for many people - a CCS in the form of a centrally administered computerized account system (with participants having a positive or negative balances) is generally easily accepted.

The CSS experiences in the South that have been dealt with in chapter 4 show mixed results regarding the success of introducing new kinds of money. In Senegal the HOURS-system has been adopted. As expected, the paper notes used have gained acceptance relatively easily. In Mexico, the cheque-book system is hardly used by members, while the (endorsable) paper notes used with much more frequency. In Ecuador and Argentina, the cheque-book system seems to have been accepted. However, no information was available in order to determine whether this introduction was smooth or had to be accompanied by a large promotional campaign.

Especially the Mexico case shows that - whenever users have the choice - they have a preference for paper notes. Paper notes have the advantage of being psychologically very close to the monetary tools people already know; possibly the physical proof of using a bank note gives people the illusion to hold actually something of physical value in their hands. Moreover, the use of paper notes is more anonymous than a cheque system: some participants might not like the idea of every transaction being registered. Finally, as a result of this anonymity, people who are not member of the system are not excluded from trading. This can accelerate the growth of the CCS, since people who want to try out the system before joining, can do so without any impediment.

Some LETSystems (e.g. Tlaloc in Mexico) have acknowledged this weakness and have introduced paper notes. These notes are issued by the person who debits his account in exchange for the paper note and redeemed by the person who deposits them at the Bank (crediting his account). Thus the mutual credit principle is maintained. In Mexico the paper note has to be signed by both parties every time a transaction takes place, up to a maximum of 10 times. Others propose that the notes should only be signed if the receiver/spender is not members of the system, thus extending the lifetime of a paper-note. Signing the notes adds up to the inconvenience for the user; not signing the paper notes means that import information might be lost.

6.1.2 The administrative complexity of the system

HOURS-systems are without a doubt easier and less time-consuming to administer than LETSystems, mainly because transactions are not registered. The advent of the personal computer and accompanying computer programmes have considerably reduced the complexity of administrating LETS and has strongly contributed to the growth of these systems during the past 15 years. In LETSystems all transactions are registered centrally. This means not only that administration takes more time, but also that the system is less user-friendly (people have to fill in data rather than just handing over a paper note). In the future one can think of fully automated LETSystems in which people pay in local currency using a chip-card, making LETS at least as user-friendly as the HOURS-system. For the South, however, these scenarios are still far off.

This does not mean, however, that mutual credit systems are inappropriate for the South. In urban areas in the South, computer density as well as computer literacy is increasing rapidly, making computer administrated LETS less utopian than often thought. The two experiences in Ecuador can serve as an example. Moreover, bookkeeping without computers is certainly not impossible and is still practised by many LETS worldwide1. In 1993 nearly one third of the LETS in the UK did not use computers. It can be kept very simply in a standard cash book. A double page is used for each member. The headers of this page are date of cheque, cheque from or to , LETS-units spent , LETS-units received and balance. Sending out accounts is simply a question of photocopying these pages2. Finally, even if communities lack the financial, human and technical resources for sophisticated administration as in the North, systems can be adapted in such a way that the need of a computer is eliminated, and the role of central registry reduced to a minimum.

One example could be scoreboard placed in the centre of a village. Transactions are reported orally by both parties involved and could be registered immediately by a person that enjoys the trust of the community or even by the participants themselves. Information on the balances of all members are available at all times and to everybody by consulting the scoreboard. Another example would be the use of score sheets 3. Every participant receives at the beginning of a period a blank sheet with a grid of 100 squares printed at each side of the sheet. One side measures the units spent; the other side the units earned. Every square represents one unit of local currency. When a transaction takes place, the according value is recorded on the spent-side of the buyer and the earned-side of the seller (e.g. by placing a cross in squares representing the units earned respectively spent). If the last square of each transaction is used to place the signature and ID of the other party, transactions can be recorded later on in a central administration, if desired. People cannot earn or spend more units than there are spaces on the sheet. This would prevent people from overspending or saving the units. Fees could be levied e.g. by making the first five squares of units spent black. These five squares would be registered as units earned at the administration. As far as known, no CCS has yet implemented this or a similar method.

6.1.3 The complexity of managing the money mass

The amount of money in circulation should not grow faster than the value of the good and services available in an economy. This rule applies for a conventional currency system run by a Central Bank as well as for a CCS, run by its members. If the money supply grows faster than the real economy, the currency looses value and prices will rise (inflation). The first indication of an inflationary tendency are a growing number of wells , i.e. members with a high amount of local currency (in HOURS) or a high positive balance (in LETS) who have problems spending their purchasing power.

In an HOURS-system, the money supply is managed by a central committee (which responds to the General Assembly). This committee has to monitor the economy and react to signals of inflation. In informal meetings administrators ask participants with large trading volumes if they have more HOURS than they can spend. If only one of these participants says yes , then the first action to take is help the participant to spend their HOURS (e.g. through a personal shopping-list). If several participants have this same problem, than the money supply is tightened. This can be done by reducing the number of HOURS paid to new members, by eliminating the bonuses that existing members receive periodically, or by reducing the percentage of HOURS which are issued as loans/grants. In small, systems with carefully monitoring and a slow increase of money supply, money supply problems should be manageable. However, as the system expands, more informal meetings with key participants have to be organised, turning the monitoring into a time consuming and increasingly intuitive task4.

LETSystems claim that no intervention is needed in order to control the money supply. Since money is created each time a transaction is made, it follows that the LETS units in existence exactly match the amount of real wealth being exchanged 5. Proof of the strong confidence in the self-regulating force of the system, is the fact that members of LETSystems often face no spending limits. In fact, it is seen as the responsibility of every individual member (and not of a central authority as in a fiat-system) to estimate its capacity to earn units in the future. In some LETS, this gave rise to problems when members spent (deliberately or not) more than they were willing or able to earn in the (near) future. A high negative balance may be interpreted as (but not necessarily is) taking advantage of the system. Members with a high positive balance are also a danger for the system, because they slow down the circulation of the currency, thus depriving other members from using the currency.

Participants with high positive or negative balances, obvious have a problem and should be helped rather than punished. A high positive balance indicates that a member has problems spending local currency. A high negative balance indicates that a member has problems finding people interested in his/her services and goods. Some CCS have a special commission (see Argentina case) that deals with these problems. In spite of these committees, some systems have collapsed as a result of members who left with high negative balances. To protect members for such practices, many LETS have defined maximum values for both positive and negative account balances. Often this limit is a fixed amount valid for all members. One can also think of a flexible method where the maximum balance of each individual member is based on his turnover during the previous year. Maximum balances can be important in order to maintain the confidence of the participants in the system. However, they can also form an obstacle for large transactions. Therefore, it is generally possible to obtain an exemption from this internal rule.

Money supply management in an HOURS context consists of two essential tasks: (1) estimate the amount of money that can be absorbed by the system and (2) help people who have problems in spending or earning the local currency. In LETSystems only the second task remains. The money supply is therefore easier to manage in LETSystems than in HOURS-systems.

6.1.4 The ability to monitor the system

As shown in 6.1.1, the two objectives user-friendliness of the exchange medium and information available for monitoring are conflicting. Both objectives are extremely important: one the one hand, the user-friendliness determines how fast a new concept becomes accepted; on the other hand, monitoring the system and measuring its effects is of extreme importance especially if the concept is developed in a new context and many people and institutions still have to be convinced of its value. A certain trade off between the two objectives seems inevitable.

Adapted mutual credit systems (such as implemented in Mexico-city) seem to be the best option for pilot projects in developing countries, which contain a high degree of research. When the system has proven its value, concessions can be made towards the user-friendliness objective.

6.1.5 The ability to finance the system

One of the most attractive features of CCS for its promoters, is their ability to become financially independent soon after the first promotion. In fact, most CCS in the North have surged without any subsidised outside intervention. Since CCS are voluntary organisations, many CCS keep overhead costs low by voluntary contributions of members (in labour or in kind), thus reducing the need for cash (in local or national currency). In spite of the extremely light administrative structure of most CCS, some expenses are inevitable in order to run the system in a orderly way and maintain the confidence of the members.

Two types of expenses have to be distinguished: expenses in local currency and expenses in national currency. A substitution of the latter for the first contributes further to the independence of the system, reduces the need for unpopular levies in national currency and provides extra income opportunities for certain members. The remaining expenses in national currency have to be covered by contributions of the members, or - as has happened in some cases - by subsidies (from government or non-governmental organisations).

A case can be made for subsidies in the starting phase: the initial high investments in (amongst others) promotion can be prohibitive for many communities, although the need for and the viability of a CCS is beyond doubt. Subsidies for research purposes can also be justified: the results of a research investment will e beneficial to the community as a whole; not only to the CCS-

community. CCS can use the results of research in their promotion campaigns, not only towards the public, but also towards government and business representatives. On the other hand, subsidies for running costs have to be avoided, since they make the CCS more vulnerable and can give the system an image of a parastatal institution, while its philosophy is based on independence and self-reliance.

Unless subsidies are used for starting up the system, entrance fees are justified by the fact that the initial promoters of the CCS have invested time and national currency in launching the system. This burden should be carried equally. Late-comers participate in this burden through an entrance fee. The entrance fee that has to be fair and not too high: potential members that expect to make few transactions within the system should not be deterred to enter. If the system grows continuously, the entrance fees form a steady source of income that makes it unnecessary to ask for contribution from the existing members. However, since the growth of the system is generally erratic, this is a highly unreliable source, that has to be complemented by periodical service charges from the users of the system.

In HOURS-systems, transactions between members are not registered. Therefore members cannot be charged fees according to their use of system. Theoretically members can be asked to pay a periodical (e.g. monthly) user fee, but in practice this would mean that members eventually would become disadvantaged with regard to the non-registered users of the currency. This leaves only two potential internal sources of finance: print extra money to pay for expenses or charge fees from enterprises and individuals who advertise in a journal issued on regular basis by the system. Ithaca HOURS limits itself to the second source in order to avoid inflationary tendencies.Given their relatively easy access to member accounts, LETSystems have a strong incentive to substitute cash expenses for local currency expenses. However, a certain amount, for such things as copying, postage, telephone service, etc. will inevitably be payable in cash. Cash expenses are usually covered by charging an annual membership fee, and/or entrance fee in national currency.

Other costs, such as record-keeping, publication, management, and other services provided by LETS members are typically paid in LETS-currency. In LETSystems, members contribute in various ways to the running costs of the system. Some LETS charge members for each service rendered: recording transactions, printing account statements, noticeboard advertising etc. Other LETS levy fees according to the value of transactions made within the system (such as a percentage of each transaction). Again in other cases fees are flat (fixed amount per transaction) or not at all related to trade volume (e.g. interest payable on positive and negative balances at month-end). Each way of charging has its advantages and disadvantages, as will be analyzed in the next chapter.

The 4 basic forms of service charges are:

(a) a fixed periodical fee;
(b) a percentage of the balance;
(c) a percentage of the turnover;
(d) a fixed amount per transaction.

(a) fixed periodical fee

This is mathematically the most simple option to cover expenses, but is also arbitrary and can form an obstacle for people who do little transactions within the system from becoming member.

(b) percentage of the balance

If applied only on positive balances, this option can be considered a modern form of Silvio Gesell s concept of demurrage (see 2.2). The advantage of using this method, is that people are encouraged to spend their currency as fast as possible: hoarding leads to a loss of purchasing power. Some systems levy charge fees on both positive and negative balances. The possible danger is that members are discouraged to trade, because they always want to stay close to a zero-balance. The Noppes-system in Amsterdam, the Netherlands, has tried to mitigate this disadvantage by defining for each member an interest free balance maximum. If the balance goes beyond that ceiling, demurrage is levied. The interest free balance maximum is based on the participant s trade volume during the past 12 months6.

(c) percentage of the turnover

This is the main source of income for commercial barter exchanges. Few CCS developers recommend this option because it discourages participants to make transactions within the system: good behaviour is punished. By according preferential rates to members who have traded a large volume (e.g. if the accumulated volume of transactions exceeds 1000 units, the members is charged 5% in stead of 10% for every next transactions), good behaviour is encourages again, but administration becomes more complicated.

(d) fixed amount per transaction

Although this option probably reflects best the real cost made per participant, it decreases people s propensity to use the system and is not recommended. Again, preferential rates for good customers might take away this disadvantage.

6.1.6 Conclusion

In the following table gives a summary of the conclusions of the previous paragraphs. Three systems are examined: the HOUR-system, the LETS and the LETS+. The latter is an adapted form of LETS, comparable to the system used in Mexico, which seems to be more appropriate for the context in developing countries. The strong (+) and weak (-) points of the three systems are compared on the basis of the five characteristics examined in the previous paragraphs.

Characteristics of the system		
HOURS	LETS	LETS+
acceptance of the currency		
+	-	+
administrative load and complexity		
+	-	-
complexity of management money mass		
-	+	+
Ability to monitor		
-	+	+
Openness to non-members		
+	-	+
Ability to tax		
-	+	+

+ = strong point; - = weak point

LETS and HOURS systems have three benefits and three weakness each. The advanced LETS has five benefits and only one weakness.

6.2 Issues independent of the system choice

This section will describe briefly the practical issues that any CCS will be confronted with in the same way, whether LETS or HOURS.

6.2.1 The information system for offers and requests

A information system that disseminates the offers and request of goods and services of the members of the system, is an essential element of any CCS. A good information system contributes in itself (even without the introduction of a local currency) to many additional transactions, thus strengthening the local economy. The most common form of spreading the information is a printed bulletin (notice-board or directory) which lists all requests and offers. The bulletin is generally issued every 2 to 6 months7. Often a newsletter is elaborated, in which the advertisements are accompanied with articles about the state of advancement of the CCS, important decisions taken, and general backgrounds on CCS-development. The bulletin is often distributed not only among members, but also to potential new members, related institutions etc.

In the South, several problems can occur that prevent the printed bulletin system from being effective or feasible. First of all, many members of the CCS might be illiterate, excluding any form of written information dissemination systems. A possible solution is the installation of a central store in which people can leave samples of the goods they sell. The shop keeper might also function as a intermediator between people requesting and offering services. This service would have to be financed out of intermediation commissions charged over sold products.

Secondly, the financial resources needed to produce such a bulletin might be scarce. If local businesses can be found to pay for adds in the directory, this would be the ideal solution. If not, posting the directory in a central location, is one way to reduce costs. Keeping descriptions brief will of course reduce printing or photocopying costs. Requiring a deposit (possibly in local currency) for each bulletin distributed, can stimulate the circulation of a few bulletins among many members. The mouth-to-mouth -circuit will certainly contribute to further dissemination of information, but some form of a written directory seems to be indispensable.

Thirdly, in contrast to the North, the telephone cannot be expected to play an important role in bringing buyers and sellers together. Contacting people directly at their homes is more time-consuming and is often extremely difficult if streets have no names and houses no numbers. Regular meetings/markets and a permanent meeting point are extremely important (more than in the North) in order to stimulate trade.

6.2.2 The unit of account

The function of a unit of account is to compare prices, not only between different products at a given time, but also for the same product at different times. The ideal unit of account is therefore one that is generally known and whose value never changes. Unfortunately, these units do not exist. National currencies are generally known, but their value is undermined by inflation. The HOUR - defined as an hour of unskilled work - could be a stable unit, but is not generally known.

The local unit of account can be tied to different standards. One is the time standard, as is used in the Ithaca HOUR: the value of the local unit equals the going rate for one hour of work. Another possibility is tying the value to a commonly traded item, e.g. a bag of rice. Care has to be taken that the item chosen is not subject to speculation, as is often the case with basic cereals in developing countries. The third possibility, tying the local currency to the national currency, is the most commonly practised. Although both possibilities might be preferable from the point of view of stability, the latter can not be beaten for its quality of needing no conversion.

Tying to the national currency is has various advantages. First of all it will be accepted easier by the general public, who will initially have more confidence in a new currency whose value is comparable to the national currency than in any new-born local currency with an unknown name and value. For that matter, the same holds true for the design of paper notes: too fancy designs might reinforce people s feeling that they are dealing with funny money . Secondly, if strong business participation is a goal of the system, a valuation based on the national currency is strongly recommended: shops cannot be

expected to label everything in two currencies. Moreover, many businesses will have to declare their local currency revenues for tax purposes; using two different units of account would certainly not facilitate their administration. A third argument for the use of national currencies is the possible fusion between two neighbouring LETS, or the creation of a third system that permits trade in the whole area (MultiLETS). The administrative complexity of this operation will be considerably reduced if the two systems use the same unit of account. The clear disadvantage of tying to the national currency is of course that the local currency looses purchasing power along with the national currency8.

In the South high rates of inflation are more common than in the North. Any currency that reaches the level of hyper inflation, will be avoid by the public. If this hyper inflation strikes a national currency, people will avoid using it and simple barter will become the only alternative. A local currency is valued at par with the national currency will be allotted the same fate. Both LETS and HOURS-systems can follow theoretically an escape route: changing the unit of account of the currency into a slightly less generally accepted, but much more stable currency. For example, a CCS in Mexico could decide to use the peso as its unit of account as long as annual inflation is below 10%. In case inflation rises above this figure, the standard would be changed to the US-dollar. The feasibility of this operation is slightly higher in the case of a LETSystem.

The HOUR-system would have to recall all its peso paper notes and replace them with new dollar-notes. This is costly and inconvenient for the participants. In a pure LETSystem (without any paper notes circulating), it would basically be an arithmetical exercise for the central administration, without any consequences for the members. The same cheques can be uses for transactions, just mentioning the new unit of account.

6.2.3 Legal status

Much discussion exists still on the question whether CCS should take a juridical form or remain an informal community organisation, as has been the case most of their existence. Some writers argue that it is unnecessary for CCS to register legally, because their purpose is self-administration. All transactions take place between members within the system and everybody is personally responsible for his/her actions; the system only registers the transactions. Since the system as such has no relations with the outside world, no outside person or organisation can lay claims on the systems assets, nor can the system lay claims on assets outside the system. In the UK most LETS are unincorporated societies , without a legal status. They have the status of a non-profit making private membership club9.

Although small CCS can function perfectly well without having any legal personality, there are cases in which legal registration can be useful:

A legal status gives more confidence to formal businesses who consider to participate, even if no legal actions can be undertaken in case of non-compliance. Therefore, legalization can be a important element in a strategy that aims at involving formal businesses in the CCS;

If a CCS grows and disposes of equipment that represents a considerable value (computers, offices, etc.), members might consider legalization in order to arrange the distribution of the assets in case of dissolution of the CCS. In case the CCS is sufficiently large to contract personnel, a legal status is obligatory in order to sign a labour contract between the employee and his employer;

If a CCS wants to apply for grants from public institutions they may be required to adopt a more formal status.

In France, CCS of a sufficiently large size tend to register as an association (type loi 1901). One CCS in France has tried to register as an association of the type mutuality (mutualite), but the request has been turned down by authorities10.

In any case, local currency is not a legal tender. They have no legal value, nor legal consequences (except for taxes payable). This means that if a member promises (even if he signs a contract) to earn back the CCS credits he receives, no legal action can be undertaken to force the member to comply with his promise, since the member does not have any debt in legal tender (national currency) with the organisation11. The only sanction that a CCS can undertake towards a person who willingly refuses to earn back his credits, is social pressure. Therefore, it makes no sense to legalese a CCS in order to make members better comply with there promises.

6.2.4 The start-up strategy

Every beginning is difficult. This is especially true for starting CCS that introduce a new unknown local currency. Much effort has to be made to convince the community members of the potential benefits of earning and accepting the new currency. Experience suggests that a community-wide event that is paid for by local currency is a good way for the system prove its potential and gain popularity. This event could be the cleaning up of the community, the construction or renovation of a community centre or day-care centre, the digging of a sewerage etc. The event should be preferably labour-intensive (costs should be mainly labour-costs) and have a long-lasting, visible result. The main demonstration effect is that the community becomes aware that no external funds are necessary for improving its well-being. In this way the first community currency is distributed.

More difficult than the distribution of the currency is creating a steady demand for it. Several strategies have been developed to encourage the demand for local currency, but very few have been tested. One of the best options for developing

countries may be the bonus concept, developed by the Swiss Bruno based on experiences in India12 and mainly applicable to CCS that are based on a fiat-currency (see 2.5.3). The concept is dependent on a donor who is willing to invest in a labour-intensive community project (e.g. the digging of a drainage canal). In stead of paying the labourers with the donor money, they receive local currency (called bonuses), that have the form of paper-notes. The donor fund is divided into two parts. The first half is placed on a bank-account and serves as a reserve backing the local currency in circulation. Bags of corn, rice or other commonly traded and highly valued goods can also function as a reserve. People can convert local currency into national currency (or corn) at any moment. This measure is purely meant to increase confidence in the new currency: the actual conversion is discouraged by charging a high commission.

The other half of the donor fund is transferred to a community-based credit committee This committee, in turn, issues loans to existing or starting local small enterprises. Modern micro-credit methods, such as a peer group pressure, might be used to assure loan repayment. One of the criteria of awarding loans should be that the enterprise sells to the local market. The credit is issued in national currency, but can be paid off (partially) in local currency. A discount is given if the enterprise pays in local currency. This creates demand for Bonuses in the local economy.

The idea is that, as confidence in the system grows, more people will offer their goods and services in exchange for local currency. With a greater diversity of products available, fewer people will want to exchange the Bonuses for national currency paying a high commission. This means that more bonuses can be brought in circulation backed by the same reserve. This can be done in the form of financing new community projects, direct bonus transfers to needy members of the community who are not able to do productive work (e.g. the elderly), and through new loans which will contain a larger proportion of (interest-free) local currency. A separate committee would be responsible for managing the total amount of bonuses in circulation. After several rounds the donor money will have been absorbed by the community. At this point the confidence in the local currency should have increased to the level that a small reserve fund is sufficient to satisfy the small number of people that prefer to convert their bonuses into national currency at an unfavourable rate. New loans would be issued as 100% free-interest bonuses.

The success of the bonus system depends for a large part of the Bonus committee s ability to effectively manage the demand and supply of the local currency units. The amount of bonuses in circulation should not exceed the total value of loans which may be repaid in bonuses. Proper management requires considerable understanding of local economic conditions. Not only the amount brought into circulation, but also its timing is of extreme importance: the demand for bonuses (from enterprises with loans) should coincide with the moment of first distribution (wages paid to the labourers). Once the trade volume has increased,

management should become easier. Inpilot projects a period of 4 years has to be reckoned with. A project using the bonus-concept is currently executed in India13. Apart from the bonus system, the demand for local currency can also be increased if the promoting entity (local government, project, community organization etc.) engages directly in productive activities. An example is the Curitiba case described in 2.5.3, where waste is turned into marketable products. Any other activity that is based on local resources and local demand can serve this purpose. E.g. people can earn local currency for every quantity of organic waste deposited at a recollection point. The organic waste is transformed into compost and used in the production of vegetables, which are sold (partially) for local currency. Another example could be the establishment of a business incubator , where starting businesses can rent space, equipment and services in exchange for community currency. Also in this case an initial donor injection is necessary.

7. CCSystems and co-operatives in developing countries

7.1 CCS and co-operative principles

The International Co-operative Alliance (ICA), the worldwide confederation federation of the co-operative movement, has formulated 7 cooperative principles during its 1995 congress in Manchester14. The principles will be examined and will be compared with the common practices in CCS.

(i) voluntary association and open for all

Membership of a co-operative is voluntary and open to all persons able to use its services and determined to comply with their responsibilities as a member. No discrimination on the basis of sex, social background, race, political affinity or religion can be made. All CCS normally comply with this principle.

(ii) democratic power exercised by the members

Co-operatives are democratic organisations led by their members, who participate actively in the decision taking process. The persons elected as representatives of the members are responsible to them. In primary co-operatives, members have equal voting rights, according to the rule: one person, one vote . Co-operatives on higher levels are also organised in a democratic way.

Although the level of actual participation of the members varies in the different forms of CCS, the rule one person, one vote is generally respected. The election and functioning of a Board of Representatives is often very similar to the practices commonly used in co-operatives15.

(iii) economic participation of the members

The members contribute equally to the social capital of the co-operative. The interest on this social capital is limited. Surpluses are used for one of the following three purposes:

the development of the cooperative (transfer of surplus to the co-operative s reserves);

the distribution among the members according to their volume of transactions with the co-operative;

the support of other activities (often within the community) as approved by the members.

Here three separate issues have to be dealt with:

(a) contribution to the social capital

The social capital needed by a CCS is relatively small. Registration is often done at a member s home (rather than a office) and on a voluntary basis (rather than contracting personnel). Any expensive equipment is leased rather than acquired. Initial costs are generally covered by entrance fees, which are - in contrast to a co-operative s social capital - not remunerated nor reimbursed in case the member leaves the organisation. In short: most CCS do not have a social capital in the cooperative sense.

(b) participation of operating costs

As described in 6.1.5, HOURS-systems finance most of their running costs mainly by selling advertisements in their newspaper. Another possibility is monetary finance: the central administration prints and spends money into the system, although this latter method is regarded with a healthy degree of suspect. Members generally pay entrance fees in national currency. Since, transactions are not registered, members cannot be charged fees according to their use of system.

Some LETSystems, charge their members according to the volume of transactions (a percentage of each transaction); others ask a fixed amount per transaction. Again others make charges which are not at all related to trade volume. Fees are levied in local currency as well as national currency, depending on the system s need.

In short: very few of the current CCS finances its operating costs according to the cooperative principle a prorata transactions . However, the LETSystem offers more possibilities to apply the cooperative principles than the HOURS-systems.

(c) distribution of surpluses

A clear distinction has to be made between the benefits for the individual members of the system and the surplus generated by the system itself. The benefits of each member derive from the internal transactions among the members. This means that it is not necessary for the organisation to generate a surplus in order to be economically interesting for its members. As in a consumer cooperative or a credit union, members gain even if the organisation does not distribute any results at the end of the year.

Surpluses in CCS can appear if the charges made on the accounts of the users exceed the expenses made for maintaining the system. In an HOURS environment, advertisement revenues could exceed operating expenses and leave a surplus. In a CCS a surplus would manifest in a positive system account at the end of the exercise. However, in practice very few CCS generate an operating surplus and even less systems decide to distribute that surplus over their members.

In short: very few CCS distribute surpluses for the simple reason that they are nonexistent, very small, and/or not structural. This is comparable to a Credit Union that has correctly estimated its operating costs and corresponding fees levied from its members. Structural surpluses are simply solved by reducing the members charges payable for the next period; not by redistributing them.

Concluding, it can be said that LETS as well as HOURS-systems largely comply with the cooperative principles as formulated by the ICA. Since CCS are closed systems, the economical motive for people to become member is not to benefit from the distribution of surpluses, but to obtain cheap credits and gain access to a highly transparent market (limiting costs of intermediation). In the HOURS system, the real economic activity is the edition of a journal with advertisements. This undertaking can be organised in a cooperative way or not, just like any other editor. The currency system in itself does not generate income and can therefore not be considered an enterprise or - for that same reason - a cooperative. A LETS can be considered a cooperative if decisions on surpluses are taken according to the cooperative principles. It can be considered a special form of Credit Union in which members are clients (if they have a negative balance) as well as suppliers (if they have a positive balance).

If a LETS can register as a co-operative or as an association depends on if and how it distributes eventual surpluses. In case of an association, the surplus is automatically transferred to the reserves of the organisation. In case of a cooperative, surpluses should be distributed according to the contribution of every participant to the system. In principle, a CCS can choose any legal structure that supports non-for-profit trading16. If CCS are to be promoted by a Credit Union, as will be proposed later on, the system will automatically operate under a cooperative status. Unless the system grows and starts to build its own structure (see 7.9), it is not necessary to register the CCS separately.

7.2 CCS and Credit Unions

Credit Unions already play an important role in the promotion and the administration of CCS. In Australia, for example, in a dozen of communities a Credit Union was opened in conjunction with a LETSystem1. The marriage between Credit Unions and CCS seems natural, because:

the Credit Unions and the CCS often cover the same geographical area;

the members of a Credit Union are at the same time the ideal target group of CCS (low-income and un(der)employed population);

the co-operative principles and the principles applies by most CCS are very close (see previous paragraph): open and voluntary affiliation, democratic administration, autonomy and independence, promotion of education among the members, involvement with the community.

the members of a Credit Union are generally active in different professions, thus increasing the chance of transactions;

the Credit Unions have experience and a proven capacity to administrate a financial system: this credibility will improve the acceptance of any newly issued local currency.

7.3 CCS and non-financial cooperatives

All above mentioned arguments, except for the last two, are also valid for non-financial co-operatives. CCS can be an interesting way to improve the economic situation of co-operative members. Promoting CCS through cooperatives has various advantages. Firstly, it facilitates the task of gathering a sufficiently large number of people interested in the system and reaching the critical mass (see 5.4). Moreover, cooperative members often already know and trust each other which means that a certain sense of community already exists. Thirdly, most members cooperative members in developing countries belong to the poorer segments of the population, which gives them an extra incentive to take advantage of new trading possibilities if these present themselves (see 5.3). Finally, agricultural cooperatives that are close to urban areas can gain new market openings and can reduce their dependence on (sometimes overly greedy) intermediates by joining a CCS, either as organisation, or through their individual members. The cooperative could set up a consumers cooperative that uses the earnings in local currency to buy urban products.

A possible constraint that CCS developers will encounter when promoting CCS through cooperatives in developing countries, is that most cooperatives are agricultural, and a most of these agricultural cooperatives are specialized in the marketing of 1 or 2 export-oriented products (coffee, cacao, tea, cotton etc.). In these cases, the possibilities for exchange are limited since all members are producers of the same product. On the other hand, the introduction of a CCS can facilitate the development and marketing of other marketable skills and products, thus contributing to a diversification and stabilization of local economies and reducing their dependence on export earnings. This process of diversification might have to be accompanied by complementary measures, such as training and credit programmes.

The professional diversity of members of non-agricultural cooperatives - such as consumers cooperatives, housing cooperatives and of course the earlier mentioned Credit Unions - is often greater that those of agricultural cooperatives. From this point of view, the perspectives for immediate results of CCS-promotion

seem to be better for these kinds of cooperatives. A consumers cooperative has the additional advantage that it already disposes of a showroom for its products. This room can equally be used for the sale of local products sold for local currency.

Commercial barter exchanges, as described in 2.6.1 (mutual credit systems for enterprises), can be organised in a cooperative way, as is proved by the WIR co-operative in Switzerland which is in operation since more than 60 years (see 2.6.1.2). These exchanges are still unknown in developing countries. If organised in a cooperative form, enterprises will probably be more eager to join because they can control the system themselves (which increases transparency and confidence) and excessive commissions would be avoided.

8. CCS as a complementary strategy in existing projects

CCS can be used as a complementary strategy to improve the financial sustainability of many existing programmes and increase its impact.

8.1 CCS and Microcredit

It has become increasingly clear that the commercial bank sector in developing countries is rarely willing and/or able to make the necessary adjustments and innovations to extend financial services to small-scale operators2. Governments, NGOs and international organisations have widely acknowledged this problem and a number of strategies has been designed to overcome this problem. The rapid growth and spread of the micro-credit concept during the past decade, is the most recent example and probably the most successful.

Since the micro-credit approach is largely based on resources generated within the informal sector itself, it has helped businesses, households and communities to discover that they can become financially independent without external intervention from money lenders, commercial banks etc. In order to be maintain this independence and become sustainable, a microcredit system must achieve a repayment rate of near 100%. The introduction of CCS can improve the repayment rate in two ways.

(i) Suppose Ms. X needs a credit of 100 units in national currency (100 N$) to buy a sewing machine (75 N$) plus working capital (25 N$). If the introduction of a CCS enables Ms. X to buy her working capital requirements locally with local currency (25 L$), her credit need are reduced to 75N$. The 25 L$ are interest free and normally easier to earn than the 75 N$. Thus the chances of Ms. X repaying her debt in N$ are higher, while at the same time more scarce N$ are available for other lenders in the microcredit system.

(ii) As is generally known, household and business budgets are barely separated in the daily practice of informal business: high medical costs or a funeral almost inevitably affect the repayment of a loan issued for productive purposes. Therefore, even if a credit in local currency cannot be used for an investment, it can increase the purchasing power of the households by spending the interest free local currency on the daily household needs. The saved hard currency can than be used to pay off the microcredit loan more easy3.

8.2 CCS and labour-intensive (infrastructural) works The Bonus-concept described in 6.2.4 can increases the acceptability of the new local currency while at the same time realizing a community work. This can be the digging of a canal, the construction of a community centre, or any other labour-intensive work for that matter. In stead of paying the labourers in national currency, they are paid in local currency. The national currency is used for loans to small enterprises. The loans are repayable in local currency, thus encouraging the enterprises to accept local currency in exchange for their goods. In this way, donors who finance labour-intensive infrastructural works can achieve two objectives with the same amount of money: helping the starting-up of a CCS and realizing a labour-intensive work. Donors interested in improving the efficiency of their investments might consider CCS therefore as an extremely interesting partner. The ILO, who is an important player in the promotion of labour-intensive infrastructural works in developing countries, could play an critical role in introducing this new finance tool with donors.

8.3 CCS and training

CCS have a strong potential in identifying training needs as well as meeting these needs. Two types of training needs can be identified:
(a) skills that can be marketed within the CCS;
(b) skills that cannot be marketed within the CCS.

The first training need (a) will be identified by the information system that usually forms an integral part of the CCS. If a strong and steady demand exists for certain skills that are not locally available, this will normally automatically result in a demand for training. Since this need can obviously not be met within the CCS, the training service has to be imported, or an outsider has to be convinced to join the group and share his skills with others (paid in local currency). In the first case national currency is needed to pay for the training; in the second case the system would satisfy the need internally. If the demand for a certain training is high, the CCS could negotiate collectively with potential external providers in order to keep the cost down. Skills (b) that cannot be marketed within the CCS (or that have no market value at all) will also be identified by the system and will often partially be met by other participants within the system itself.

The experiences in Senegal (see 4.4) suggest that the demand for training, as well as the willingness to pay for it in local currency is considerable in developing countries. The main reason is that often the general public cannot afford the training services offered by private institutions. Public education services are often inaccessible because of the limited number of students that can be place, while the content of school programmes does not respond sufficiently to the demands of the labour market. The initiative developed in Senegal to setup a Popular University, financed through a CCS, will be of extreme interest in this respect.

8.4 CCS and environmental programmes

The environmental impact of any project proposal is nowadays subject to thorough examination before a project can be implemented. CCS can become an important integral part of community development projects that have economical as well as environmental goals. CCS can contribute in three ways to the preservation and improvement of the environment: through its effect of shifting demand from imported to local products, through its effect of improving the efficiency of the local economy and through its effect on investment decisions of local entrepreneurs.

Since community currencies only have a value within the community and local currencies gain no interest, participants will tend to look for possibilities to substitute purchases in national currencies for purchases in local currency, thus saving national currency. This shift in demand towards local produce reduces the need for transport, thereby reducing environmentally harmful emissions and the dependence on (often imported) fossil fuels. Especially in the North, the continuing process of globalization has blown transport cost - measured in energy consumption - way out of proportion. In industrialized countries, more calories are used to transport most of the food consumed, than the food itself contains4. In many urban centres in the South, this consumption pattern tends to be copied.

The very existence of a CCS will stimulate people to offer their services, including repair services. As a result of this preference to spend local currency, people with imported equipment tend to make use of local repair services in stead of buying (importing) new equipment. The life-time of equipment will increase, which reduces not the consumption of scarce natural resources (outside the community), but also the amount of waste disposal.

Because of the increased local demand, local entrepreneurs will invest more (in local as well as national currency). Local businesses that use local resources to satisfy a local demand are generally more sensitive for social pressure on investment decisions than multinationals whose production and consumption markets are sometime literally worlds apart (Third and First World). Any negative environmental effects would be taken into account by local

businesses, because it might create tension with customers, who live in the same community. Moreover, the zero interest policy of most CCS makes long term investments again interesting. Because positive accounts do not generate interest, the value of the local money tends to diminish over time. This forms an incentive for people who have excess funds to seek for investments that will maintain their value, or even increase in time. A typical example is planting trees. In a positive interest economy, planting trees that can be cut in 20 years is not economically not interesting, because the same amount on a bank account would probably generate much higher revenues. However, in a zero-interest economy this might be a rational investment decision.

A more concrete example of how local currency systems can contribute to the sustainability of environmental programmes is the case of Curitiba (see 2.5.3), in which garbage collection and transformation go hand in hand with a strengthening of the local economy. Environmental objectives that have productive consequences (such as the transformation of selected garbage or organic waste into marketable products) can be promoted and sustained via the introduction of a local currency. In its turn, the CCS does also benefit: the acceptability of the local currency will increase if a wider variety of products are available in the local market.

8.5 CCS in post conflict situations

Although no practical experiences exist yet in this area, CCS seem to have a high potential in contributing to the sustainability of many services commonly found in post-conflict strategies.

In absence of alternative sources of finance in post-conflict situations, the micro credit services provided by governments, NGOs and international organisations play a mayor role in the reconstruction of the economy. As argued in 7.1, CCS can improve repayment rates and at the same time stimulate demand and supply in a still fragile local economy.

Training programs are important in semi-permanent refugee camps, where people are not sure how long they can stay, but where survival is no longer an issue. Training prepares the refugees for a successful return to their homelands. A CCS systems with a complete range of products and services will be difficult to initiate given the temporary situation in which people find themselves: few people will be able or willing to invest in productive businesses. A Knowledge Exchange System is a type of CCS that requires very little investment (basically only time) and that makes optimal use of skills and knowledge available within the refugee camp. One Knowledge Exchange System is known to be functioning in Burundi, although no information is available on the context of the situation in which the system works.

In programs aimed at reintegration of returned refugees, training can be part of the wider range of services and goods traded within a CCS. The provision of education services by government is often highly insufficient or nonexistent in post-conflict situation, thus making it even more necessary to make optimal use of local knowledge resources available.

Community Currency Systems also have their limits in post-conflict situations. CCS are financial systems. Just as in the macro economy, where monetary policy is used as in instrument to pursue real goals (in terms of employment and purchasing power), the CCS can solve some problems of correspondence between demand and supply. However, in case that the resources to satisfy this demand don t exist or are not sufficiently developed, complementary measures (such as training) remain necessary. CCS cannot create real resources where they don t exist; CCS can only employ existing resources that remain under- or un-utilized. If the obstacles for development are structural and real (lack of training, adverse climate, inadequate infrastructure etc.), an external intervention remains necessary. A combination of such an external intervention with a CCS will improve the durability of the effects of the intervention.

CCS seem to be an adequate strategy in resettling programs for returning refugees. In these cases CCS can help people to make use of the skills and knowledge available in the community. CCS are less useful in refugee camps installed as an temporary emergency solution. In these situations people s main concern is survival and not rebuilding their communities. Since trust is an important condition for the success of the CCS, a certain degree of stability is an absolute pre-condition. Before people will invest in community building, they first need the assurance that they can stay where they are. Land titles can play an important role in fulfilling this pre-condition.

8.6 CCS and appropriate technology

The attention for AT in development policies has grown after the failure of the l960s and early 1970s, when aid policies were based on the unadapted transfer of large-scale, capital- and energy- intensive industrial technology from the North to the South. Already in the mid-1960, the wisdom of this approach began to be challenged, not in the last place thanks to the work of E.F. Schumacher5.

Schumacher argued that industrial technologies are inappropriate for the Third World, because:

the investment per workplace created is high: developing countries need large numbers of relatively inexpensive workplaces. In this way the technology contributes to the formation of social elites;

the investments are concentrated in the urban areas, where the scarce skilled labour, and infrastructure can be found. Employment is most needed in rural areas, where the majority of people live;

the new technologies often compete out traditional non-farm activities in rural areas. Left without alternative, these unemployed rural workers migrate to urban centres, breaking down rural social structures;

the new technologies make the developing country dependent upon developed countries for spare parts, skills and often markets6.

By the mid-1970s, the evidence for the failure of development models based on large-scale industry, was accumulating. Many of the large industries went bankrupt, or could only continue thanks to protection and subsidies. Moreover, they had not improved the living standards of the masses: the rural and urban poor. At the same time, there was a growing recognition that small-scale, localized industry and agriculture can reduce transport costs, decelerate city growth, produce goods and services very efficiently, and are an effective way of distributing income. These industries need an appropriate technology, that preferably:

is operated, maintained and manufactured locally;
is operated by its owners;
uses local and renewable raw materials and energy; and
can easily be reproduced and spread through local markets.

The past two decades, many small-scale, low-cost technologies have been developed for agricultural equipment and food-processing, water supply, building materials, textiles, small-scale manufacturing, energy and transport. Today, at least twenty organizations undertake research and development work in the area of appropriate technology. In the industrialized countries, there are the pioneer organizations ITDG, VITA and the Brace Research Institute, more recently joined by AT International, TOOL in Holland, GATE in Germany, GRET in France, IDRC in Canada and APACE in Australia. Among international organizations, UNICEF and ILO are major supporters of AT work in developing countries. There are now hundreds of AT organizations in developing countries, ranging from technical research and development groups at one end of the spectrum, to information-networking teams at the other.

AT-developing and promoting organisations have a common vision in the sense that both see the strengthening of the local economy as the key to improving peoples living standards. Collaboration between AT- and CCS-developers would be highly synergetic:

AT can diversify the range of products available within the CCS. This improves considerably the attraction of these systems, especially in rural areas: the greater the diversity of products available, the higher the chance of

transactions, and the greater the potential benefit of joining the system. This will attract new members, thus increasing the economic impact of the CCS;

CCS can provide financing for local entrepreneurs who want to invest in AT. If the technology can be (re)produced by local craftsmen, using local resources, these investments can be financed out of interest free loans provided by a CCS. Given the fact that the investment will immediately increase the production capacity of the investor, there is no danger for inflation. Because of the low costs of the loan, the technology will be accepted more easily.

Since AT-investors generally use local resources and produce for a local market, the potential turnover of the CCS will increase considerably: in order to pay off his loan in local currency, the investor will have to accept (partially) local currency for his products. After the loan has been canceled, the clients probably will want to continue to pay in local currency. This means that the entrepreneur will have to look for additional ways to spend the local currency. All these dynamics contribute to a larger grip of the CCS on the local economy.

CCS can help to adapt AT to the local needs. Experience has shown that rigid technologies have great difficulties to become widely accepted. The acceptance of the technology depends on the specific needs and resources of a community, which can be very diverse. In order to get a technology introduced under widely differing operating conditions, its design is has to be highly flexible. Since a CCS has a large potential of identifying local needs (see 6.2.1 and 8.2), this will facilitate the task of AT-promoting agencies.

8.7 CCS and fair-trade

Fair-trade organisations aim at establishing stable and fair trade relations between developing countries and developed countries. The organisations accord hall-marks to enterprises that work according to the principles set out by the fair trade organisation, such as: fair wages, environmentally sustainable practices, involve workers in the decision-making process, direct purchase, a guaranteed minimum price, credit allowances for producers, mutual security in supply and purchase (long term trade relations), etc. The enterprises whose working methods have been approved by the fair trade organisation, are allowed to place a special hall-marks on the packaging of the product, which makes it often possible to sell the product at a higher price. The products are bought by a small but growing public that is prepared to pay a surcharge on products that are produced and traded in a socially responsible way. The fair trade organisations themselves are normally not active in the purchase, transport, transformation and retail selling. They rather control the enterprises using their hall mark. Fair-trade organisations are especially active in North-west Europe, but the concept is gradually spreading all over the European continent. Coffee and handicrafts are the main products traded in the fair trade circuit. However, the range of products that are traded under a fair trade hall

mark is expanding steadily: e.g. bananas, honey, textiles, cacao and orange concentrates7.

Fair trade organisations and CCS have similar objectives, namely increasing and stabilizing the incomes of people in developing countries. However, they work at different sides of the community border: CCS try to achieve its objective by reducing the dependence on exports by increasing the circulation of local wealth; fair trade organisations try to achieve the objective by stabilizing the export revenues of the target population. Both approaches have their limits: a CCS will inevitably reach the point in which no more import substitution is possible and income can only increase if exports revenues rise; fair trade organisations can improve the income position of the target group up to a certain point, but the long term stability of the local economy will depend on how this new wealth is circulated in the economy. In fact, fair trade organisations stop where CCS start and vice versa. CCS and fair trade organisations are therefore highly complementary.

Fair trade organisations can support CCS actively by promoting the concept via their partner organisations (especially co-operatives) in the South. In this way fair-trade organisation can contribute to a multiplication of the income and employment generating effect they have brought about in many communities in the South. Fair-trade organisations can also promote the sale of their products through existing CCS in the North, accepting partially local currency. If consumers in the North buy local products and fair-trade imports, they can be assured that they build communities and stabilize economies in two worlds. This would mean, however, that a proportion of the margin of the fair-trade organization would be received in the form of local currency. This proportion could be used for promotional activities in the community to buy fair-trade products and to compensate for (voluntary) work done by the fair-trade organizations.

Footnotes

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