Secure Livelihoods

Errol D'Souza♣

Abstract: The vast literature on social security for unorganized workers in India is casual about providing a justification for this type of public assistance, treating it as rather an obvious obligation of any civilized society. Moreover, by viewing social security as a state its focus is restricted to the outcomes of deprivation and vulnerability that characterize it. This essay by contrast argues for shifting the focus of attention to processes whereby stochastic shocks and institutions empower or hinder households from attaining satisfactory incomes and well being. A justification is provided in terms of the principle of equality of opportunity and it is argued that the concept of secure livelihoods is the appropriate vehicle for mobilizing the full import of this principle. The policies that are suggested by this reading are social assistance when the fundamental capacity to transform assets into well being is impaired, credit-cum-insurance services when contingencies do not allow the smoothing of consumption, and the provision of complementary social and economic infrastructure of adequate quality and priced so as not to exclude the needy.

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♣ Professor, Indian Institute of Management, Ahmedabad 380 015. ✆:(079) 2632-4866 (O). Email: errol@iimahd.ernet.in

Introduction

As the traditional economic and social order undergoes transformation as societies develop there emerges a perceived need for social security to provide for those who lack an income (due to disability, old age, death of a breadwinner, maternity, work-related injury, unemployment, etc.) or who have medical needs. Programmes of this type in developing countries that are publicly administered are not usually extensive and they cover mainly a small part of the population - the organized sector, where the structure of enterprises facilitates the collection of taxes and contributions, as well as the administering of schemes. As a result the extension of these schemes such as those governed under enactments like the Employees' Provident Fund (& MP) Act, the Workmen's Compensation Act, the Employees' State Insurance Act, the Maternity Benefit Act, and the Payment of Gratuity Act, to outside the ambit of the formal sector is not viewed as operationally feasible[1]. To the vast majority of the population who belong to the informal or unorganized sector especially designed social insurance schemes like welfare funds financed by taxes or a cess it is argued are required (Subrahmanya, 2000), as well as social assistance programmes financed by government revenue and targeted to the poor (Guhan, 1994).

Social security for the unorganized sector is increasingly receiving the attention of academics, policy makers, multilateral organizations, and NGOs, and the writing on the subject is fast approaching the status of a growth industry (van Ginneken, 1997, 1998; Jhabvala and Subrahmanya, 2000; Seeta Prabhu, 2001; Mahendra Dev, 1999; and Unni and Rani, 2001). The consensus in the literature is that the definition of social security needs to be broadened from the focus on addressing only contingencies to encompassing programmes that enable individuals to attain a reasonable standard of living. Those programmes providing employment, income and assets required to reach a basic standard of living have been termed as economic security programmes whereas those associated with needs such as health care, child care, old age, pensions, and food have been termed as basic needs programmes and the two types of programmes are viewed as being mutually reinforcing. For instance, it is argued that child care facilities can increase the hours worked as well as the productivity of women workers and the increased income earned provides economic security that in turn becomes the means by which people can satisfy basic needs. Social security in an economy with a large unorganized sector is thus seen to be a part of a comprehensive poverty reduction programme which has a promotional component of improving endowments and exchange entitlements as well as a protective component that protects individuals from contingencies such as illness, disability, etc.

Social security programmes for the unorganized sector are thus meant to provide adequately to beneficiaries - with the adequacy of provision being a replacement (mainly partial) of previous earnings due to the occurrence of a contingency, or, the provision of a minimum or standard level of benefit to all. In this light, they involve redistribution from those better off to those worse off - social equity, and the provision of benefits to people equal in expected discounted value to their contributions or taxes - individual equity. The standard level of benefit advocated can be viewed as a general income support policy into which the contingency related social insurance policy dovetails once regular benefits from it have been exhausted because coverage and benefits will have limits imposed by the availability of finance. The explicit objective of the aspect of social security policy in promoting social equity is poverty reduction and not so much the correction of large income or wealth inequalities. The case for this needs to be spelt out as the literature cited above does not make out a case but treats it rather as an obvious objective. The equity foundations for social security for unorganized workers are largely skipped over though some justifications are done by making an appeal to rights, needs, or desert based arguments. A desert-based argument for instance is made by Bhatt (2000) who argues for income security and social protection because workers and producers are the main contributors to the wealth of nations and provision of such security to them will add to social product. Rights and needs based arguments justify social security on the grounds that they allow a decent or minimum standard of living.

Equality of Opportunity

If the reduction of absolute poverty is the valid concern then it is the task of public policy to assure that most of the population is above the poverty line and that no vulnerable groups (the elderly, children, disabled, etc.) suffer income deprivation. However, if observed income and wealth inequality reflect to a large extent individual differences in effort, ambition, and risk taking, then, in as much as these are due to individual responsibility it is not required of social policy to alter the resultant income inequality[2]. The crucial distinction is that social policy is concerned with the equality of opportunities and not the equality of outcomes (income, wealth) as individuals are not deemed to be responsible for the opportunities they face which are largely due to circumstances beyond their control (Roemer, 1996). It is the individual's responsibility, however, to transform favourable opportunities into positive outcomes. The role of social policy is to compensate individuals for the disadvantage inherent in their circumstances. In this perspective equality of opportunities reduces to *equality in access to wealth-creating factors*, or, the capacity to earn incomes is the target of social policy. If workers in the unorganized sector constitute individuals who share the same set of circumstances (irregular income and low quality employment) and workers in the organized sector are another type who share a different set of circumstances, then, equalizing opportunities across these two types of individuals in society implies that the distribution of the income earning capacity is the same for both these types. The stress is not on the capacity to earn incomes being the same for both types (which is an equal outcome scenario) but on the equal distribution of that capacity so that individuals irrespective of their type do not face differential circumstances that are beyond their abilities to influence. Once the circumstances have been delineated, differential effort and risk taking will result in different achievements of income and wealth which is acceptable as it does not violate the notion of social equity as equality of opportunity.

A significant source of inequality is social exclusion[3] which refers to the multi-dimensional character of deprivation due to the disadvantages relating to the precariousness of work, income, gender, ethnicity and participation - it thus refers to exclusion in the economic, social and political sphere due to power relations, culture, and social identity. It is recognized that the dimensions of social exclusion are different in each society (deHaan and Maxwell, 1998) and that vulnerability of some groups of people in a society results from barriers to upward mobility that can take many forms such as discriminatory treatment by institutions of justice, religious and cultural marginalization, and lack of political representation. Well being then is not merely economic but can also result from social and political marginalization which is due to the low voice and socio-political power that certain groups have in society. Social exclusion makes it very difficult for certain social groups to access resources such as education, information, credit, employment opportunities and legal protection, that enable upward mobility. In India one of the dominant forms of social exclusion is caste which is fixed at birth. This social institution often denies access to common property resources as happens when lower castes are prevented from entry into temples or forbidden to use village wells because these castes are deemed to be polluted. Till until recently children of lower castes were even denied entry into schools - a social restriction on human capital acquisition, and on social occasions lower castes are sometimes made to eat separately.

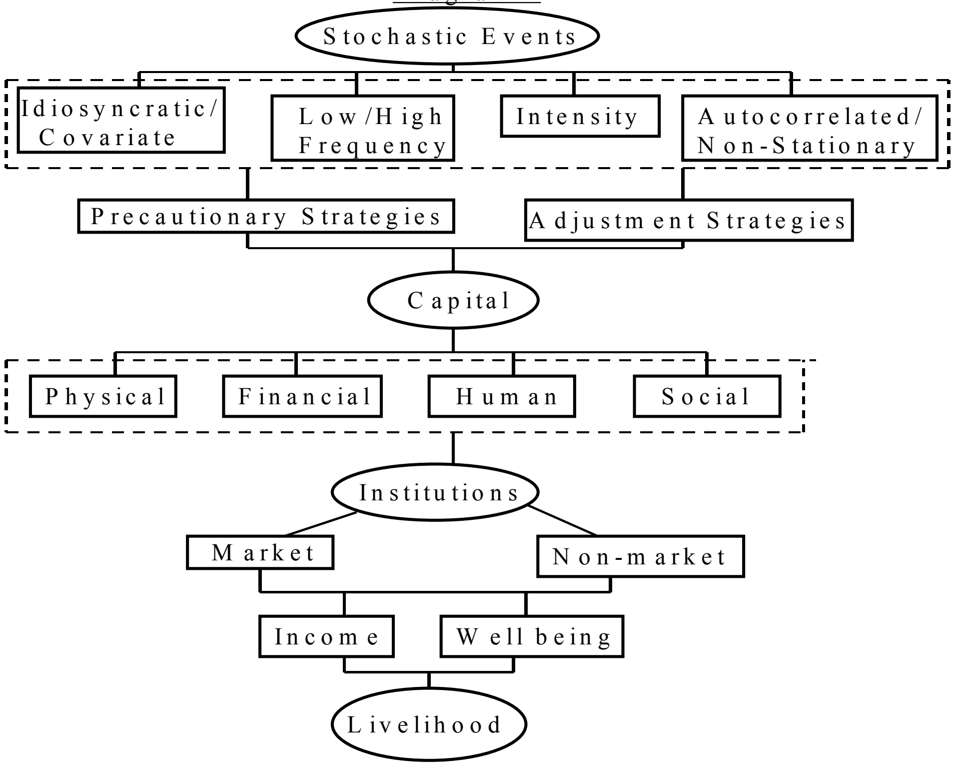
In the labour process literature, workers in the unorganized sector have also been characterized as suffering from social exclusion - the exclusion being from the process of economic development. This is because the people working in this sector have been viewed as surplus labour - limited industrialization and labour demand along with the increasing demographic pressure and landlessness that resulted in increasing labour supply is the reason advanced for the rise of the unorganized sector. Unorganized sector workers are thus those who are excluded from modern economic development. This perspective of course has been questioned by Marxist scholars (Breman, 1996) who do not see the unorganized sector as part of a dual economy, but rather as a product of capitalist development - unorganized workers are thus not excluded from development, but subsumed under its logic. However, as pointed out by Breman, lack of mobility and segmentation characterize urban labour markets in India where certain economic functions are associated more with particular social groups than others. Such a non-market phenomenon impedes equality of opportunity as it implies that some groups are 'included' and others 'excluded' and thus calls for policy to mitigate such inequality. The provision of social and economic infrastructure must accordingly be tied to a delivery mechanism that entails equal access to goods and services such as basic health and education.

In economic terminology we can think of wealth creating assets and the enviornment in which they are generated as the conditions circumscribing households who act given these conditions to produce income and other aspects of well being which are constitutive of livelihoods. The goal of social policy as we conceive it is to promote equality of opportunity so as to enable households to achieve secure livelihoods. The wealth creating assets that households are endowed with unequally are various forms of capital - physical capital, financial capital, human capital, and social capital. Physical capital encompasses land, housing, livestock, jewelry, farm implements and other production durables that constitute tangible assets which allow production and that have the potential of begetting income. Financial assets constitute assets with higher liquidity and lower carrying costs that allow households to make intertemporal adjustments of income that can be used for consumption, production, and investment. There are three types of financial capital services that it is useful to distinguish. Savings services allow the depositing and accumulation of small amounts of capital over time which in many cases earn a positive rate of return. Credit services allow a borrower to obtain a lump sum now but repayments of the principal and interest have to be made at some future point of time. Insurance services allow clients to pay a premium in return for a future payout that is contingent on the occurrence of a risk whose timing is unknown. Human capital includes health, education, and nutrition that are embodied in individuals and which translate into skills and abilities that are potential sources of labour, managerial and entrepreneurial incomes. Social capital refers to the features of social organization such as informal reciprocal networks, norms and trust that are found within communities and extended families and which facilitate coordination for mutual benefit or enable redistributive transfers to occur.

The focus of equality of opportunity on wealth creating factors that has been adopted here is a recognition that it is assets - broadly defined to include physical, financial, human and social assets on which more shortly - which are commandeered by individuals and households with the objective of achieving certain levels of income and well being. Second, there is an emphasis on multiple dimensions to the achievement of income and well being so that an over emphasis on economic aspects without reference to the social and political dimensions of well being will not promote an understanding of what we are seeking to comprehend. Third, the treatment of social security in the established literature describes a favourable social security system mainly in terms of outcomes achieved in various aspects of well being such as in education, nutrition, health, etc. The strategy in the literature has been to identify what constitutes well being and the vector of attributes that constitute well being is selected on a notion of what is an essential component of basic needs or a decent standard of living. The literature then measures whether the achieved elements of the vector of well being in society is sufficient to meet the basic needs of the individuals or households that comprise it - insufficiency being a measure of insecurity. In contrast to this emphasis on outcomes the approach we take here is different in that social security or insecurity is not a *state* where income and well being is insufficient for basic needs, but rather, is a *process* where due to certain mechanisms and institutions, individuals and households are able or unable to attain satisfactory incomes and well being.

In trying to transform wealth creating assets into incomes and well being (see Diagram I) agents in the economy face a stochastic environment which makes them subjects of various types of risky situations such as drought, illness, or disability and the institutions through which the conversion of assets into earnings is transacted can enable or hinder the efficiency with which such actions by agents are performed. The end result of these actions by agents in the face of various risky conditions and institutions that facilitate or constrain their ability to generate returns from various activities is what at first blush can be thought of as is done in the literature as the achievement of economic and social needs, but which on reflection would be more appropriate to think of as promoting the attainment of increased power over their own lives now and in the future. For these reasons, this essay's point of departure is that the issue of social security is best intellectually tackled through the lens of secure livelihoods. Secure

Diagram I



livelihood as defined here refers to the extent of empowerment of households as determined by the opportunities available to them to make a living mediated through various market and non-market institutions in the face of stochastic conditions when they act by deploying various forms of capital - physical, financial, human, and social - at their command so as to earn a return in the form of income or well being. We now proceed to elaborate on this definition.

Stochasticity and Institutions

Households have endowments of the various forms of capital identified at their disposal - their opportunities - which can be transformed into different forms of income that can be thought of as returns to these types of capital. Transfers and remittances for instance are returns to social capital and credit as a form of financial capital is a current return on the potential value of assets. These incomes deriving from various types of capital allow households to attain other aspects of well being such as low levels of infant and maternal mortality. Income and well being is mediated through institutions such as markets and non-market ones such as norms within households regarding the allocation of resources. The livelihood of households is then insecure if various types of capital assets they have are subject to erosion or the institutions that enable the transformation of these assets into aspects of income and well being function poorly and ineffectively. Secure livelihoods which is our preferred way of viewing social security then is not only about the availability of the various types of capital assets at the command of households but also about the erosion of these assets through various random shocks and the inability to earn the full potential return on these assets due to institutions that support and help generate incomes from these assets not providing an enabling environment.

The capital assets of households are subject to erosion due to stochasticity - various types of eventualities that are probabilistic in nature and beyond the direct control of households. These stochastic events are of four different types, each of which yields variable and unpredictable returns from capital and so affect the security of livelihoods (Morduch, 1998). One type of stochastic fluctuation can be characterized by frequency of occurrence. Certain types of shocks to human capital such as minor illnesses for instance can occur very frequently whereas other shocks are relatively more rare. High frequency downside shocks have the potential to erode capital and can be quite damaging. Second, there is the intensity of occurrence of a shock, more intense shocks being more serious or damaging to the asset base of households. For instance, a shock of high frequency but minor incidence to health such as insect bites will have a smaller impact than one with a low frequency but serious impact such as a coronary attack. Third, shocks need not be independently distributed over time - they could be autocorrelated. For instance a monsoon failure may result in drought and malnutrition which in turn raises the probability of occurrence of further erosion of human capital as children are pulled out of schools and made to work to supplement the reduced income. Droughts also affect the maintenance of the land and the consequent poor soil conditioning and run-offs can have adverse impacts much after the climate returns to normal. Some shocks may be non-stationary. For instance, if somebody becomes permanently disabled or loses productive assets, then, these can have permanent effects on their capacity to generate incomes. The fourth type of random shock does not vary over time but across individuals. These are either idiosyncratic, i.e., they are due to factors that are specific to individuals in isolation such as accidents, injuries, and illnesses, or they are covariate and affect a group who are linked geographically or by some shared risk characteristic such as a drought, floods, or an epidemic.

Households are in the know that these shocks occur but have no idea as to the timing of their occurrence due to the probabilistic nature of these shocks and so have no control over the likelihood of occurrence. These shocks affect the variability of income and well being and households undertake precautionary strategies to smooth the returns to forms of capital. In short, households make attempts in advance to minimize the impact of adverse income shocks (Morduch, 1995). This can be thought of as a precautionary motive of savings. The aim of such a motive is the desire to be able to procure a minimum level of consumption in the unknown future when an unknown amount of reduction in income or increase in expenditures (such as for medical needs or social obligations) could occur[4]. Traditionally savings is defined to include changes in assets - monetary and physical - such as food, jewelry, inclusive of other consumption and production durables, and adjustments are made for changes in debt. This focuses on savings and investment by households on financial and physical capital only. It does not include the other important component of savings and investment in human capital such as education and in social capital such as investments in networks of family and friends that provide a safety net as well as other services. As the aim of precautionary savings in various forms of capital is to minimize downside risk and to reduce the variance of income the strategy also entails a lowering of the expected income as lower risk is generally associated with lower returns[5].

Precautionary savings is a type of buffer stock that can be liquidated in the event of a transitory income shock. Physical assets that are used for precautionary savings are usually jewelry, livestock and food. These types of savings are subject to risks like inflation, disease, and rotting and status, cultural norms and prestige play an important role as well in the accretion of such assets. Financial savings are mainly in the form of cash due to the demand for liquidity and accessibility in times of sudden need. These savings earn a negative real interest but are demanded due to the desire for quick liquidity and low transactions costs dominating the desire for a positive return when the consideration is to make timely expenditures when a random shock occurs. A form of precautionary saving in human capital is to have more children who form a reserve army of labour that can be used whenever there is an unexpected shortage of family labour due to illness or failure of exchange entitlements. Another extreme form of income smoothing via labour market activity is tied labour involving a long term contract between employers and employees at low but steady wages and greatly reducing the risk to workers of facing low consumption in slack seasons (Bardhan, 1984). Incomes are also diversified through off-farm activity with some household members in wage employment. Precautionary savings can also be in the form of social capital through investing in personal relationships with extended family and friends that give private transfers as gifts or loans in times of need. Social capital is also built up via household members migrating and remitting incomes.

Once adverse shocks occur, households deploy various strategies to insulate consumption from the reduction in the return to various forms of capital. Households respond to declining income by adopting expenditure-minimizing strategies of changing dietary habits, cutting down purchases of non-essential goods, and income-enhancing strategies including sending children and women to work. Adjustment strategies are typically adopted in a hierarchical manner with priority given to those which have low long run costs and entail easily reversible actions. For instance, reduced incomes by those who have a large proportion of their consumption expenditure absorbed by food expenditures is often adjusted to by a modification of food consumption. Consumption rationing in this case is achieved by diversifying food consumption - forgoing income elastic components of food expenditures such as on meat or fish, and compensating by consuming coarse cereals or in some cases even wild foods. Apart from the composition of food, absolute food consumption may also be reduced when the shock is large through having fewer meals per day as well as smaller servings of food. After the exhaustion of this type of strategy households adjust through strategies that have greater long run implications for their asset base. This involves drawing down savings in various forms of capital and even selling assets.

It should be mentioned that housing is an important physical asset and it is often overlooked that it can cushion households in times of adversity. Housing is often used as a base for home-based enterprises such as front-room shops involved in retailing and preparing meals, to tailoring and dressmaking. Housing is also used for extending personal relationships and generating social capital. Young households without their own assets often reside in parental households giving them access to cheap housing, freeing additional time for potential productive work as elders help with child rearing activities. Of course, congestion and the side effects this can create on health, etc. as a result of for instance latrine sharing are costs of such activities. Another common practice of adjusting to shocks is to withdraw children from school - drawing down human capital - so as to release resources for the priority of purchasing food. Social capital is also called on through borrowing from friends and relatives as well as moneylenders and requests made for remittances from the extended family.

As the circumstances become extreme assets such as jewelry, livestock[6] and farm implements can be sold, children can be sent to work and to beg, and female members of the household join the labour force through work in petty trade and services in the informal sector as domestic servants, street sellers, and as scavengers. Girl children are usually called to take on childcare and other household responsibilities so as to release their mother for work. The intrahousehold distribution of the burdens of adverse shocks are known to be very unequal. As shown by Behrman (1988), seasonal variation in nutrition is more marked for girls than for boys in India, and Rose (1999) demonstrates how during adverse rainfall shocks in India girls' survival probabilities fall relative to boys', with girls being 40% more likely to die than boys in a year of bad rainfall. Various adjustment strategies adopted by households in the face of seasonality and calamity in terms of diversifying sources of income and drawing upon communal and social relationships and physical assets have been excellently and exhaustively documented in the work of Agarwal (1991).

The opportunities available to households to attain various levels of income and well being are affected apart from stochastic factors, also, by institutions - market and non-market - that facilitate or hinder their ability to transform their various stocks of capital into aspects of livelihood. This transformation of assets into the returns that constitute the income and well being aspects of livelihood are mediated through markets where goods and services are transacted and non market institutions such as the government supplied public services of health, education, etc. The availability of information about and imperfections in markets and the nature of government intervention that promotes or hinders participation in markets through ensuring property rights and enforcement of contracts is a crucial aspect of the promotion of secure livelihoods. Often the transformation of assets into incomes for instance does not allow the full potential returns to assets to be earned due to the constraints in factor markets. A well-known example of this is in the credit market where despite a good prospect of future revenues from an activity credit may not be forthcoming due to a collateral constraint. Much the same constraint on the options available to households operates when for instance the timely availability and quality of inputs is not assured. Thus an important precondition to promoting secure livelihoods is investments by government in technology development and transfer, road infrastructure, and improving the performance of commodity markets.

Assets are not profitably invested in many cases due to the lack of complementary services such as agricultural extension and access to services that prevent disease, and due to inadequate access to input and output markets and infrastructure. The generation of income and well being can be negligible if the necessary complementary infrastructure and markets as well as health and other social services are not in place. Social and economic infrastructure are crucial inputs to enhancing the household returns to types of capital. Social services such as education ensure that people gain skills and knowledge, whereas economic infrastructure such as health care, water, transport and electricity ensure that households use their skills and knowledge productively. When there is a decline in public investment in infrastructure such as occurs during structural adjustment programmes not only does the quality of services that households can obtain suffer, but also they are forced to allocate a greater proportion of their incomes to needs such as water, transport and energy. This has negative impacts on well being.

The consequences of poor social and economic infrastructure are visible in many instances as when for instance it requires more time for women to carry out such tasks as fetching water which reduces the time available for income generating activities. Declining quality (stock-outs in drugs, and teaching materials, declines in staffing in health centres and schools) and increasing expensiveness of services results in less health care and poor sanitation which affects the productivity of human capital. The retreat of the state from the provision of social and economic infrastructure affects the capacity of households to earn incomes not only in the present but also over the longer term as children are pulled out of schools because fees become prohibitive and pushed into augmenting incomes so as to maintain consumption. Schooling not only directly improves labour productivity and so reduces poverty but also has beneficial impacts on household productivity through its positive effects on hygiene and health, nutrient intakes, as well as on the number of children and their schooling, all of which enhance well being (Behrman, 1990). In addition supportive economic policy environments that do not result in inflation or currency crises, and sustainable fiscal policies are important to converting assets into secure incomes and livelihoods.

Credit Cum Insurance Services

It is often argued that the perfect vehicle for the management of adverse shocks is the family and hence transfers mediated through other institutions such as the state may actually just substitute for such mechanisms and not add to income generation (Cox and Jimenez, 1995).

Rosenzweig (1988), however, finds from a survey of villages in rural South India that transfers respond to less than 10% of the size of typical income shortfalls. This should be expected as reciprocal transfers would be more possible in more well to do households (which need such transfers the least) and in situations of covariant risk such as during a monsoon failure both parties to a reciprocal transfer would be pushed to subsistence making it difficult to share the adversity. Also, as pointed out by Morduch (1998) when incomes of participants grow at different rates, richer households would have incentives to opt out of informal insurance mechanisms to shield themselves from repetitive redistribution to others. In fact, recognizing such effects, communities may put restrictions on the accumulation and saving strategies of households so as to foreclose the possibility of households isolating themselves from communities and their social demands as and when they find their obligations due to their relative resource abundance are decidedly higher than their receipts from the community. Banerjee and Newman (1998) also argue that cities have greater earning opportunities but weaker informal reciprocal insurance mechanisms whereas villages have group based informal insurance mechanisms but low earning opportunities. Thus the bulk of the population can stay put in villages, and informal insurance can be a drag on economic development.

Given the constraints of social capital in coping with shocks and its inability to assure households of secure livelihoods a key concern for policy is to develop programmes aiming at expanding household access to human and financial capital. Households have a high potential for savings, credit, and insurance services that allow them to face adversity as well as to generate better returns on assets. The savings rate in the unorganized sector of 18% is by no means low and comparable to the savings rate of 25% in the organized sector (Pradhan, Roy, and Saluja, 1999). It is noteworthy that the pattern of savings in the unorganized sector is different than that in the organized sector. Households in the unorganized sector save more in the form of physical assets[7], constituting 75% of gross savings whereas in the organized sector savings in physical assets comprises just 34.5% of that sector's gross savings. The pattern of financial savings is also instructive. In the unorganized sector 66% of financial investment was in deposits and small savings in commercial banks and post offices whereas in the organized sector such deposits accounted for 48% of total financial investment with provident fund/PPF accounting for the second major form of financial savings with a share of 34%. Interestingly, for the year 1994-95 when the study was conducted by the NCAER, it was estimated that approximately 37% of the population lived below the poverty line[8]. About 97% of these poor people belonged to the unorganized sector and only 3% to the formal sector. Of those poor in the unorganized sector, 81% lived in rural areas and 19% in urban areas. Significantly, the poor in the unorganized sector dissaved in the aggregate with a savings rate of -4.5%. This is stark given that the overall savings rate of the poor was 13.8%. Negative savings is therefore a distinguishing feature of the poor in the unorganized sector.

Given the lack of access to the services of financial intermediaries unorganized sector savings is in the form of physical capital, cash, and by investing in social capital through the provision of gifts and loans to those from whom they may be prospective future borrowers. Active financial markets for savings, credit, and insurance services can help households overcome adverse circumstances more easily and protect their consumption whilst at the same time not eroding their prospective future earnings unlike strategies such as drawing down the stock of human capital via withdrawing children from schools, or distress sales of physical assets. In what follows we stress on this fact that strategies for intertemporal income and consumption smoothing that are not effected through financial markets for credit and insurance but through adjustments in the stock of physical, human and social assets are second best arrangements. Credit cum insurance provision it will be argued is a more effective first best mechanism for managing risk and the smoothing of incomes. Financial markets, however, must not have high transactions costs and strict collateral requirements or involve considerable waiting time and must provide liquid, flexible savings services that can be dipped into to cushion shortfalls in incomes. Households that do not face credit constraints will reduce their precautionary savings in other forms of capital that diminished their future earnings potential as these other savings were in low-risk, liquid assets, that could easily be converted into incomes. Households investing in liquid assets tend to invest less in production durables like farm implements and tend to make smaller illiquid investments in human capital such as sending a child to school. When earnings are irregular as in the unorganized sector, and lumpy, savings are highly demanded as an income smoothing mechanism.

Credit facilitates the stabilization of consumption over time and thus enables households to absorb more risk than is possible in the absence of credit. In the absence of credit households adopt risk-reducing behaviour such as diversifying income generation or tending to favour established technologies over adopting newer technologies and do not exploit the potential for productivity increases. Differential access to credit institutions results in differential risk behaviour and hinders the adoption of capital accumulation strategies by households in the unorganized sector that maximize their income earning potential[9]. An advantage of good credit services is that if appropriately managed, it can substitute for insurance services. All households in the unorganized sector insure against risk (Zeller, 1995) by for example undertaking mixed cropping (deployment of physical capital) and paying a premium in the form of additional work, or entering into implicit coinsurance with friends and relatives (social capital) with the premium being the reciprocal help given in difficult times. These indirect insurance systems may be effective as we argued earlier in covering for idiosyncratic risks such as illness, accidents, or old age, but are also grossly ineffective against covariant risk such as weather risks which affects everybody simultaneously. Formal insurance on the other hand is not an easy financial service because of the presence of incentive problems - agents can behave opportunistically. Credit contracts are free from a major problem in insurance contracts - unlike an insurance contract it does not dilute the incentives of the insuree, and the lender does not require to know the effort level or the output of the borrower. Also, when random factors resulting in uncertainty are correlated across households, then, insurance is not viable, but as long as these random factors are not autocorrelated - correlated across time - a credit service can serve as a good alternative as it enables risk pooling across time.

Credit contracts need to be tailored, however, to the specifics of the conditions faced by households in the unorganized sector. A weakness of credit contracts from the point of view of the unorganized sector is that they economize on information - the nature of a contingency is irrelevant to a lender who mainly bothers about expected yield and maturity so as not to have an asset-liability mismatch amongst other motives. In the unorganized sector, credit contracts should have the flexibility of tending towards insurance contracts by relenting on a part of the repayment due whenever there is an unforeseen negative shock to a borrower. The credit contract, in other words, should be contingency based and allow rescheduling of repayments - a credit-cum-insurance contract. Such systems are more successful as has been the case with SEWA which allows pregnant borrowers to reschedule loans or the Association for Social Advancement in Bangladesh that requires borrowers to buy life insurance so as to safeguard the repayment of loans in case of the death of the borrower. The Grameen Bank requires borrowers to contribute to an emergency fund in the amount of 0.5% of borrowings. This fund provides insurance in case of default, death and disability.

An important institution that can provide credit linked insurance services is the microfinance institution[10] (Morduch, 1999, 2000) as it uses local, member-based knowledge and monitoring (peer monitoring) to determine loan amounts, interest rates, and rescheduling possibilities. Small communities or social groups reduce the cost of information collection and contract enforcement as in such situations information is common knowledge. Moreover as local communities have very low exit rates due to other communities being tightly knit and having high entry barriers, contracts are more or less self-enforcing. It needs to be kept in mind, however, that the tradeoff between incentives (opportunistic behaviour) and risk-pooling is never easy. Credit substitutes for the lack of insurance when there is an inability to diversify risk across households in space by pooling risks across time. Such an arrangement faces viability problems, however, when contingencies are correlated across the population as the covariance of income risk will then result in a covariance of default risk. A well run cooperative credit type scheme would in such a situation not be successful and tend towards bankruptcy unless it kept high reserve ratios, had easy access to donor grants, or, it pooled risks over a range of economic activities that are complementary from a risk point of view.

Microfinance institutions are also subject to capture with collusion being often reported between credit officers and clients. Todd (1996) describes how a loan officer at Grameen Bank in collusion with borrowers delayed the recording of interest payments. The loan officer used a complicated system of double accounting and used the on-time payments of some borrowers to cover up the repayment defaults by others. The loan officer was able to increase the collective credit rating of borrowers as well as earn a promotion. This is a problem of delegation that any financial institution faces when lenders and borrowers collude against the interests of the financier. Many microfinance institutions have not been successful despite the wide publicity given to such institutions[11]. As is usual, institutional design is crucial and there have been success stories from which much can be learned (Desai and Namboodiri, 2000).

When high intensity large covariate risks occur the ability of households and community finance organizations to deal with them is seriously in doubt as when happens during massive drought and famines. In such cases of disaster the state provides implicit insurance through social assistance programmes via transfers that replenish the asset base of households (mainly health and nutrition related services, and occasionally actual asset transfers such as housing after a flood or earthquake). Microfinance type institutions can take over once the ability to economically engage in productive activities is restored as the incomes generated re-enable households to save and repay loans and accumulate sources of capital and make intertemporal decisions. A convenient way to think about this is to consider the following two types of situations. Let y denote household permanent income, c current consumption, and w the value of the vector of attributes that enables minimum effective well being of households (basic needs). Then, in the situation where $c < w < y$, households' potential livelihood is affected by contingencies and they are unable to borrow against future income. A credit cum insurance service will be an effective tool in this situation. In another type of situation, the fundamental capacity to transform assets into well being is impaired so that $c < y$ as well as $w < y$. Here, it will not be possible to borrow against future income and tax or cess financed social assistance by the state is warranted.

State programmes of social assistance face problems of targeting, have high delivery costs due to administrative and staffing problems, and often are slow in implementation which reduces the effectiveness of response to events. Microfinance institutions can offer credit cum insurance services largely financed by clients and enable households to undertake first best precautionary strategies to avoid the effect of shocks and adjustment strategies to cope with shocks once they occur. Some of the ways in which this has occurred in India has been documented in Jhabvala and Subrahmanya (2000) and van Ginneken (1998). Of course, as stressed earlier, if the complementary economic and social infrastructure such as the availability of water, roads, electricity, health services and schools are not available or their quality is low and functioning is ineffective, then, easing the access to financial services by unorganized sector households may not be of much use. The challenge of development policy in securing livelihoods is in creating and providing the necessary social and economic infrastructure so as to enable community level institutions to function and so promote the empowerment of households.

References

Agarwal, B. (1991) - "Social Security and the Family: Coping with Seasonality and Calamity in Rural India", in E. Ahmad and J. Drèze, J. Hills, and A. Sen (eds.) - "Social Security in Developing Countries", Clarendon Press, Oxford.

Banerjee, A. and A. Newman (1998) - "Information, the Dual Economy and Development", Review of Economic Studies, 65(4), October, 631-54.

Bardhan, P. (1984) - "Land, Labour and Rural Poverty: Essays in Development Economics", Oxford University Press, New Delhi.

Behrman, J. (1988) - "Intrahousehold allocation of nutrients in rural India: Are Boys Favoured? Do Parents Exhibit Inequality Aversion?, Oxford Economic Papers, 40(1), 32-54.

Behrman, J. (1990) - "The Action of Human Resources and Poverty on one Another - What we have yet to Learn", Living Standards Measurement Study Working Paper No. 74, The World Bank.

Bhatt, E.R. (2000) - "Foreword", in R. Jhabvala and R.K.A. Subrahmanya (eds.) - "The Unorganized Sector - Work Security and Social Protection", Sage Publications, New Delhi.

Binswanger, H. and D. Sillers (1983) - "Risk-aversion and credit constraints in farmers' decision making: A reinterpretation", Journal of Development Studies, 20, 5-21.

Breman, J. (1985) - "Of Peasants, Migrants and Paupers", Oxford University Press, New Delhi.

Breman, J. (1996) - "Footloose labour: working in India's informal economy", Cambridge University Press.

Cox, D. and E. Jimenez (1995) - "Private Transfers and the Effectiveness of Public Income Redistribution in the Philippines", in D. van de Walle and K. Nead (eds.) - "Public Spending and the Poor: Theory and Evidence", Baltimore, Johns Hopkins/World Bank, Chapter 12.

Dasgupta, P. (1993) - "An Enquiry into Well Being and Destitution", Oxford University Press, Oxford.

DeHaan, A. and S. Maxwell (1998) - "Poverty and Social Exclusion in North and South", IDS Bulletin, 29(1), January 1-9.

Desai, B.M. and N.V. Namboodiri (2000) - "Organisation and Management of Rural Financial Sector", Oxford & IBH Publishing Pvt. Ltd., New Delhi.

D'Souza, E. (1996) - "Some Effects of a Social Security Tax", Indian Journal of Labour Economics, 39(4).

Dutta, R.C. (1999) - "Public Action, Social Security and Unorganised Sector", Paper presented at the Conference on Social Security in India, Institute for Human Development, April 15-17, New Delhi.

Guhan, S. (1994) - "Social Security Options for Developing Countries", International Labour Review, Vol. 133 no. 1, Geneva.

Holzmann, R. and S. Jørgensen (2000) - "Social Risk Management: A new conceptual framework for Social Protection and beyond", The World Bank, Social Protection Discussion Paper No. 6.

Jhabvala, R. and R.K.A. Subrahmanya (2000)(eds.) - "The Unorganized Sector - Work Security and Social Protection", Sage Publications, New Delhi.

Jodha, N.S. (1975) - "Famine and Famine Policies: Some Empirical Evidence", Economic and Political Weekly, 10/41.

Mahendra Dev, S. (1999) - "Social Security in India: An Overview of Performance and Issues", Paper presented at the Conference on Social Security in India, Institute for Human Development, April 15-17, New Delhi.

Morduch, J. (1995) - "Income Smoothing and Consumption Smoothing", Journal of Economic Perspectives, 9(3), Summer, 103-14.

Morduch, J. (1999) - "Between the Market and State: Can Informal Insurance Patch the Safety Net?", World Bank Research Observer, 14(2), August, 187-208.

Morduch, J. (1999) - "The Microfinance Promise", Journal of Economic Literature, Dec., 1569-1614.

Morduch, J. (2000) - The Microfinance Schism", World Development, 28(4), April, 617-30.

Pradhan, B.K., Roy, P.K. and Saluja, M.R. (1999) - "Informal Sector in India: A Study of Household Saving Behaviour", National Council of Applied Economic Research, New Delhi, August.

Rodgers, G.B., Gore, C. and Figueiredo J.B. (1995) - "Social Exclusion: Rhetoric, Reality, Responses", Contributions to the World Summit for Social Development, International Institute for Labour Studies, Geneva.

Roemer, J.E. (1996) - "Theories of Distributive Justice", Harvard University Press.

Rose, E. (1999) - "Consumption Smoothing and Excess Female Mortality in Rural India", Review of Economics and Statistics, 81(1), Feb., 41-49.

Rosenzweig, M. (1988) - "Risk, Implicit Contracts and the Family in Rural Areas of Low Income Countries", Economic Journal, 98(393), 1148-1170.

Rosenzweig, M. and K.I. Wolpin (1993) - "Credit market constraints, consumption smoothing, and the accumulation of durable production assets in low-income countries: Investments in bullocks in India", Journal of Political Economy, 101 (2), 213-24.

Seeta Prabhu, K. (2001) - "Socio-Economic Security in the Context of Pervasive Poverty: A Case Study of India", ILO, InFocus Programme on Socio-Economic Security", May, mimeo.

Subrahmanya, R.K.A. (2000) - "Welfare Funds: An Indian Model for Workers in the Unorganized Sector", in R. Jhabvala and R.K.A. Subrahmanya(2000)

Todd, H. (1996) - "Women at the Center: Grameen Bank Borrowers after one Decade", Westview Press, Colorado.

Unni, J. and U. Rani (2001) - "Social Protection for Informal Workers: Insecurities, Instruments and Institutional Mechanisms", Gujarat Institute of Development Research, mimeo.

Van Ginneken, W. (1997) - "Social security for the informal sector: Investigating the feasibility of pilot projects in Benin, India, El Salvador, and Tanzania", ILO, Issues in Social Protection, Discussion Paper No. 5.

Van Ginneken, W. (1998) - "Social Security for all Indians", Oxford University Press, New Delhi.

Zeller, M. (1995) - "The demand for financial services for rural households: Conceptual framework and empirical findings", Quarterly Journal of International Agriculture, 34(2), 149-70.

Notes:

[1] Judicial pronouncements have upheld the applicability of the EPF and ESI Acts to home-based workers in beedi rolling, carpet manufacturing, and other cottage industries. Yet it is difficult in these situations to firmly establish an employer-employee linkage and employers have large incentives to evade. Unorganized sector work by nature does not result in steady and regular employment.

[2] There is of course the issue of the circularity between resources and preferences - richer individuals may be more willing to take risks which are thought of as belonging to the realm of personal responsibility - which complicates the argument. We sidestep this here but see the endnote 9 below where a difference is made between risk preferences and risk behaviour.

[3] Rodgers pioneered the work on social exclusion at the International Institute of Labour Studies at the ILO. See Rodgers, Gore and Figueiredo (1995).

[4] This motive for saving is different from the accumulation motive where the aim is to accumulate assets for a planned and foreseeable expenditure such as financing the acquisition of real estate or a dowry.

[5] Income smoothing also occurs via using variability reducing inputs and production techniques. Inputs such as fertilizer may be used less intensively to reduce the level of investment tied up in risky activities and land may be devoted more to safe, traditional seed varieties than riskier high-yielding varieties.

[6] Rosenzweig and Wolpin (1993) find that sales of bullock in India are motivated by the need to smooth consumption.

[7] Physical assets include gold, jewelry, house property, and consumer durables.

[8] The per capita monthly income (and not consumption expenditure) poverty lines for rural and urban areas were estimated as Rs. 228 and Rs. 305 respectively. The rural poverty line was found by inflating the 1987-88 figure given by the Expert Group and the urban line by inflating the poverty line for 1973-74.

[9] Binswanger and Sillers (1983) found risk preferences to be fairly homogeneous across income groups in LDCs but there were differences in risk behaviour as observed in the adoption of new technologies. They attribute this to differential access to production credit.

[10] Under this rubric are included group lending programmes (such as Grameen Bank), credit cooperatives, and rotating savings and credit associations.

[11] Morduch (1999) reports that currently less than 1% of microfinance institutions worldwide are financially sustainable, and most of them, including Grameen Bank, receive high subsidies.