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Livelihood Options? The Political Economy of Access, Opportunity and Diversification

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Acronyms

AP	Andhra Pradesh
CGIAR	Consultative Group for International Agricultural Research
CPR	Common Property Resources
DFID	Department for International Development (UK)
HYV	High Yielding Variety
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDS	Institute for Development Studies, Sussex
IRDP	Integrated Rural Development Programme
JRY	Jawahar Rozgar Yojana (a wage employment scheme)
MP	Madhya Pradesh
NGO	Non Governmental Organisation
NIE	New Institutional Economics
NSS	National Sample Survey
PIP	Policies Institutions and Processes
RNFE	Rural Non-farm Economy
SC	Scheduled Caste
ST	Scheduled Tribe
TNC	Transnational Corporation
TSP	Transforming Structures and Processes
UP	Uttar Pradesh

Abstract

The livelihoods prospects facing the poor – whether for coping or thriving – are located in economic, political and social structures and processes, at both macro and micro levels. What lessons can we draw from existing theories and concepts that might help to interpret these complexities? This paper examines a wide range of thinking on rural development in an effort to address that question.

Much recent work has brought the subject of 'livelihood diversification' to prominence. This reveals the importance of rural non-agricultural activities, multiple and diverse livelihoods and of migration.

Clearly a rural economic change is taking place, yet we find that our traditional theories of structural transformation raise as many questions as they answer, particularly with respect to the impact on rural society, the role of the state, the determinants of non-traditional, non-agricultural and often multiple livelihood activities, and the implications for processes of poverty alleviation, well-being and differentiation. This paper raises three sets of questions.

First, how do processes of diversification, migration and multiplicity at the household link with theories of structural transformation and development, and where do the forces of such change originate? Are they in industry or agriculture or in non-sectoral transformations, spurred by globalisation and the changing structure of international markets?

Second, do such 'new' economic activities provide better or worse opportunities than those that existed before? Is diversification a strategic approach to an expanded opportunity (i.e. 'thriving') set, or a constrained response to a diminished set of opportunities (i.e. coping)? Has diversification offered the freedom and choice to move out of entrenched and dependent caste, class or gender-based activities?

These questions of the balance between compulsion and choice, structure and agency are closely related to a **third** question on the social relations of production and exchange. What determines access to new and productive options and opportunities? Do markets work, or do social factors dominate access, production and exchange? Have traditional rules of access and structures of inequality simply been reproduced and propagated in new areas of work? How can more equitable access be encouraged?

This paper addresses these multiple but related questions on diversification, access and opportunity as follows. First, it reviews theories of national and regional economic diversification and transformation. Second, it asks how different theories of agrarian change attempt to explain the impacts of such changes on rural livelihoods. Third, it examines societal processes that act to constrain or enhance access to opportunity.

1 Definitions and Dimensions of Livelihood Diversification

1.1 Definitions of diversification: multiplicity and/or change?

Diversification can either refer to an increasing multiplicity of activities (regardless of the sector), or it can refer to a shift away from traditional rural sectors such as agriculture to non-traditional activities in either rural or urban space – i.e. sectoral change. When it also involves moving the location of livelihood, or some other intrinsic economic quality, we could call it adaptation.

1.1.1 Diversification as multiplicity

The key variable here is diversity, which in turn implies multiple elements (see also Box 1). Several recent studies have emphasised 'multiple livelihoods' (e.g. Bryceson, 2000; Francis, 2000) or 'occupational multiplicity' (Breman, 1996). An individual has a diversified livelihood where s/he has multiple jobs or incomes, but a household can have multiple livelihoods, even though each member is in fact specialising in one activity (Ellis, 2000b).

In addition, we need to be clear on the temporal unit of analysis, i.e. whether we refer to different activities that take place in one day, or perhaps one week, one season, or even one lifetime. Such distinctions will make critical difference to our measurements.[1]

1.1.2 Diversification as sectoral change

'Sectoral' or, more generally, 'adaptive' diversification takes place at different levels of the economy. Thus diversification of a rural economy (and thus the expansion of the rural non-farm economy, RNFE) is separate from the diversification of a household or individual economy (and thus the expansion of rural non-farm share of income). The increasingly urban nature of a national economy may be at odds with the increasingly rural nature of a particularly enterprise or family strategy. And while the local economy may become increasingly formalised, an individual's own work be become increasingly non-formal. There are links between these various levels, but they are not always direct.

Livelihood units – whether individuals, families or businesses – may change the make-up of their livelihood 'portfolios' to reflect changing opportunities, hazards, risks and constraints. Such behaviour falls under the broad term of livelihood diversification. In recent years, a large literature has evolved which tries to study and understand the causes and consequences of such behaviour (Ellis, 2000b; Scoones, 1998, Carney (ed), 1998). However, there has not always been agreement on the scope or definition of the term. So what exactly is livelihood diversification (and why has it become a topic of such interest?).

1.2 Livelihoods in the economy: basic dimensions of livelihood activities

Before we can begin to think in detail about the diversity of livelihood activities, we need to clarify the main dimensions by which we define and measure differences between and within livelihood categories.[2]

1 Multiplicity is best measured by counting both the number of items and the proportional contribution of each. To capture this, Ellis (2000a) uses the inverse of the Herfindahl-Hirschman market concentration index originally suggested as a measure of diversity by Chang (1997).

1.2.1 Economic sector

Definitions by economic sector include 'nonfarm' or 'agricultural' livelihoods. The National Accounting concepts of primary, secondary and tertiary enterprises are a useful benchmark to follow.[3] These can be sub-divided down into two, three or even four point classifications with well-defined categories consistent across countries. But production units within the same sub-sector may demonstrate very different levels of scale, process and sophistication.

There are other sectoral-type dimensions that may also be useful. For instance, we may wish to separate those activities that depend on direct production from natural resources from those that depend on exchange through market or non-market institutions, or depend on direct provision of entitlement from state welfare schemes (Sen, 1981). In such cases, economic 'sectors' have been grouped by the dominant institutions governing access to the resource either through natural resources management institutions, the market and moral economy or the state.

1.2.2 Space

Activities or enterprises in rural areas are generally distinguished from those in urban areas.[4] Increasingly multi-spatial livelihood strategies cut across both domains: some members of the family unit remain in rural areas where costs of reproduction are lower, while others reside (often temporarily) in urban areas where better returns can be found in labour markets. In between rural and urban are several other spaces, including rural farms and the peri-urban. Often these intermediary points are critical as sites of accumulation for the rural rich and a stepping stone to the urban middle 'class' (Harriss-White, 1999).

Both sector and space are critical dimensions in understanding processes of economic structural transformation (Chenery et al, 1986; Kuznets, 1966).

1.2.3 Scale

Scale of economic unit ranges from individual petty traders or gatherers through household enterprises depending on own family or hired labour, to businesses, factories or farms employing hundreds of people. Size is often closely related to the amount of capital invested and levels of technology. These in turn tell us much about the state of capitalist transformation in the country or countryside and, in addition, the size of the 'informal' sector and the degree to which the state is able to govern economic activity.[5]

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2 The literature on the rural economy and diverse livelihoods is clouded by conceptual ambiguities, many of which relate to imprecise terminology. See Barrett *et al.* (2001) for a useful review.

3 Primary sectors refer to agriculture, mining and other extractive activities. Agriculture or farm activities are a subset of primary activities; the broadest definitions include any activity in the production or gathering of unprocessed crops, livestock, forest or fish products from natural resources. Non-agricultural then covers all other forms of activity and income including processing, transport or trading of unprocessed products. Sometimes a distinction is made between on-farm and off-farm, the former referring to livestock and crop enterprises on private land, the latter referring to gathering enterprises on common lands. It is not always clear if these off-farm activities fall within the non-farm sector. For this paper we will assume not.

4 The population density per square kilometre usually determines the distinction between urban and rural. In some literature rural non-farm income is used to mean *any* non-farm income earned by a rurally located household, including income from urban jobs and remittances. We assume rural income to mean any income earned in rural areas, whether local or not.

5 The distinction between formal and informal enterprises usually depends on numbers of employees. A sector's number of employees is usually the defining variable.

1.2.4 Relations of production

How any individual participates in an economic livelihood activity requires further explanation: s/he may be involved in an economic activity acting as the owner and controller of the means of production and bearing all risk, or at the other extreme, be an employee. But there are many different categories of 'employee', including, for instance, those 'bonded' in some patron-client relationship. In between the extremes of entrepreneur and employee may be a myriad of more fuzzy contractual arrangements in which control of means of production and risk born by the enterprise are shared in some manner (such as out-grower schemes or share-cropping).

2 Structural Transformation and the Non-farm Economy

Urbanisation, sectoral diversification and industrialisation of national economies are defining features of the economic development process. Yet despite large amounts of sectoral diversification in national and rural economies, we do not see simple occupational shifts from, e.g. 'peasant farmer' to 'factory worker', but moves to increasingly diversified and multiple livelihood sources. These new livelihoods are seemingly stuck 'betwixt and between' a traditional agricultural peasant society and more commercialised, sometimes non-farm, labour markets (Bryceson 1996, 2000). To assess whether and why this condition may be 'pervasive and enduring' (Ellis, 2000a), four views are of particular relevance. The first and second point to the failure of industrialisation and the rural non-farm economy, respectively, to provide full employment for rural masses. The third and fourth point to changes in the structure of international competition, affecting not only the viability of smallholder agriculture, but also the nature of labour markets more generally.

2.1 Industrialisation and urbanisation

Historical analysis of growth processes in developed countries identify economic and social structural transformation as characteristic manifestations in the growth of almost every developed nation (Kuznets, 1966, 1971). Economic transformations included sectoral shifts away from agriculture to non-agricultural activity (but with employment shifting more slowly than production), and more recently away from industry to services; scalar shifts in size of productive unit, away from small family enterprises to national and multi-national corporations; and spatial shifts, away from rural occupations and locations to urban. Such historical evidence was supported by the cross-sectional analysis of 'patterns of growth' scholars (Chenery et al., 1986; Syrquin and Chenery, 1989) and by convincing theory such as Lewis' (1954) 'two-sector' growth model which predicted that cheap, surplus labour[6] from traditional, rural subsistence sectors would speed the accumulation of capital and development of high-productivity urban sectors. Thus, sectoral diversification of the economy coupled with urbanisation came to be regarded as broadly synonymous with growth. However, in many countries, including India, industrialisation failed to stimulate national growth rates adequately to achieve the expected volumes of employment.[7]

Such beliefs underpinned much development thinking during the 1960s and 1970s and spurred industrialisation strategies in many countries with surplus agrarian labour.

This failure of urban employment creation divided observers as to how best to get agrarian change to contribute to development. On the one hand were those who still proposed rapid industrialisation and diversification of the national economy as the fastest way to achieve development (e.g. Byres, 1991; 1998, with some concessions to the 'appropriateness' of the technology). On the one hand were those who argued for keeping poor rural people in rural areas but improving their lot there, by improving farming (e.g. Lipton, 1983; Lipton and Longhurst, 1989). Related to the latter view, were those who felt diversification could still take place, but that the structural transformation would be at a rural level, perhaps based on more intermediate technology and capitalisation, fuelled by rising productivity in the small-scale farming sector (e.g. Mellor, 1976).

6 This means that the marginal productivity of labour is assumed to near zero.

7 See, amongst many others, Harriss (1991) on bimodal paths, and Lipton (1977) on urban bias.

2.2 Regional growth theory and the rise and fall of the rural non-farm economy

Regional[8] growth linkage models of the kind reviewed below suggest that inter-sectoral resource flows at the local level are important and allow increases in trade and economic output to be captured and distributed more locally. The main arguments are summarised in Table 1.

Table 1 Agricultural growth-linked RNFE activities, by sector

Linkage to agriculture	Secondary sector (Construction and manufacturing)	Tertiary sector (Trading and services)
Production: Forward	Processing and packaging industries. Construction of storage & marketing facilities.	Transportation and trade.
Production: Backward	Agricultural tools and equipment.	Agricultural and veterinary services. Input supply.
Consumption	Household items. Home improvements.	Domestic services. Transportation. Sale of consumer goods.

However, scholars of regional growth linkages also argue (e.g. Haggblade et al., 1989; Hazell and Ramasamy, 1991), that rural-urban markets are imperfect and much sectoral output is at best only partly transferable: bulky staples, fresh perishables and rural services in particular. An agriculturally-driven non-farm sector can develop in relatively isolated rural areas, because of the protection that such imperfections provide, coupled with the inability of poor people to afford urban imports. Such linkages between agriculture and the rural non-farm economy (RNFE) take many forms. Typical consumption and production linkages are outlined in Table 1. Consumption linkages are thought to be particularly significant, because of the propensity of poor, small-scale producers to spend on rurally-produced goods. In addition, there is a range of less direct linkages between sectors, mediated via investments, infrastructure, skills and networks, as outlined in Box 1.

Box 1 Cross-sectoral linkages other than direct production and consumption linkages

Beyond production and consumption linkages, there may be other less direct but equally important inter-sectoral linkages in the rural economy:

- Financial capital linkages, or investment linkages: allow locally accumulated capital to be reinvested locally and so act to capitalise rural areas (e.g. Reardon et al., 1994).
- Human capital linkages: allow skills learnt in non-farm sectors to improve agricultural productivity (e.g. Timmer, 1995). Likewise, improved nutrition from more advanced agriculture will have knock-on effects on labour productivity in other sectors.
- Labour linkages: Hart (1994) suggests that the persistence of part-time subsistence farming can lower the cost of living and therefore lower the cost of rural labour, contributing to multi-sectoral growth.
- Infrastructure and service linkages: investments in the power, water, communications and transport infrastructure necessary for agriculture will contribute to growth across sectors.
- Social capital linkages: likewise, development in market and business networks in one sector will help economic development across other sectors too (e.g. Timmer, 1995).

2.2.1 The fall of the RNFE through leakages and urban competition

Much depends on the containment of economic activity within the locality if agricultural and non-farm expansion are to go hand-in-hand. As development reduces transport and transaction costs, the costs of urban 'imports' drop. As rural purchasing power grows, rural preferences shift towards modern, urban products and services. The protective barriers of market failure are eroded and leakages begin to appear (Saith, 2001). There are two effects.

8 i.e. regions within countries, not internationally.

First, rural people begin to straddle both rural and urban economic domains, and increasingly depend on urban labour markets, urban remittances, urban trade and urban social networks (Bryceson, 2000).

Second, only sectors with real competitive advantage survive. As Wiggins and Proctor (1999) argue, rural non-farm enterprises have an economic advantage in specific sectors only. These include the natural resource-based extractive industries, traditional rural skills (e.g. crafts), and tourism, and in addition, any industry that requires temporal or spatial proximity to the point of extraction or production, or that places a premium on cheap labour. These sectors fulfil urban rather than rural demand, and create rural 'exports' – the lifeblood of rural growth. If they are nurtured, they can act as the main engines of rural non-farm growth.

2.2.2 Revival through modern linkages to the urban economy

As urbanisation proceeds, the same factors that led to economies of scale, proximity and agglomeration quickly lead to urban congestion, limited resources and soaring costs. Peripheral suburban locations quickly fill, and soon industry is locating outside urban areas, e.g. along main transport corridors between cities. Slowly, it reaches back out into the countryside, providing growth points of RNFE development that take advantage of low land, water, power and labour costs. However, its reach across rural areas is very uneven.[9]

At the same time, global competition and pressures for restructuring industry also have implications for the RNFE. Economies of scale are replaced by economies of scope (Harvey, 1989; Harriss, 2000a), which in turn depend on outsourcing production to cheap, flexible production units. Often this means small, sub-contracted, decentralised enterprises, or casualised, migratory labour forces. In theory, both open up new opportunities for rural workers and producers to link remotely to industry. Rural-urban linkages prosper, but this time rural enterprise is complementing urban centres, not competing with them. Drawing on this literature, the stages of RNFE development proposed here are summarised, in a highly stylised manner, in Table 2.

The growth, demise and recovery model may suggest a sequential process and homogeneous pattern of development across region and nation. In reality, different parts of the economy will develop at different rates and many rural locations will display varying degrees of all stages simultaneously, including migration to urban points of production (typified in Stage Three). The actual position and mix will depend on levels of agricultural development, rural income, rural infrastructure and urbanisation.

Critics of regional growth theory linkages argue that capital flows are not governed entirely by economics, but also by the power of ethnic and class ties (Harriss, 1987), i.e. what Hart (1994) refers to as the social logic of investment. These social structures and networks further modulate economic factors to create a highly diverse pattern of RNFE development that is temporally, spatially and socially specific.

9. Thus in India in the 1980s the RNFE grew in both output and productivity and employment. Yet in the ten years since structural adjustment, the RNFE has shrunk (Bhalla, 2000). Capital has relocated to urban areas and small-scale units have been competed away. New 'rural' industries have grown up only on major inter-state highways, or where important resources such as water, land and labour are available cheaply.

Table 2 Stylised stages of development in the RNFE

Stage of RNFE	Stage of agricultural development	Level of rural remote-ness	Level of urban-isation	Main locus of non-farm production	Level of non-farm technology, capitalisation and returns
1: Traditional	Pre-modern and subsistence	High	Low	Rural (RNFE limited by low purchasing power)	Low: Traditional subsistence products
2: Locally linked	Initial technology-led agricultural growth	High	Low	Rural (RNFE expands through agricultural-led growth)	Low–Medium: Some technology and capital improvements
3: Leakages to urban areas	Improved urban marketing	Low (new roads open urban markets)	Low	Urban (RNFE competed away by urban goods and services)	Medium–High: As urban location allows investment and economies of scale, RNFE must modernise to survive
4: New urban linkages	Increasing urban demand	Low	High (congestion and costs rise)	Shift to rural: flexible specialisation able to exploit to rural advantage	Low–High: From cottage industry out-workers to modern 'clustered' and sub-contracted units

2.3 Global structural transformations in agriculture and industry

In an increasingly inter-dependent system of world trade, global forces of economic transformation may impinge dramatically on rural livelihoods.

2.3.1 Restructuring of global food systems

The collapse of fixed exchange rates under the Bretton Woods system in the early 1970s, and the ensuing emphasis on fiscal austerity and export-oriented development, are believed by some to have encouraged a re-structuring of the global food system. Underlying this transformation are a number of salient features, including a new 'international division of labour', the perceived 'globalisation' of international capital and the rise of 'non-traditional food exports' in Third World agriculture. How these transformations have affected poor people in the developing world is the subject of intense debate, as evidenced below.

The international division of labour
As the rules of international trade seek to constrain governments' ability to subsidise industrial agriculture in the West, the shifting of staple food surpluses into food aid is gradually giving way to pressure from farm lobbies in Europe and North America against the dismantling of protectionist measures and subsidies. Second, it has been argued, western governments are now using non-tariff barriers, such as environmental and health restrictions, to protect domestic producers.

Non-traditional exports
World market saturation in basic foods together with the rise of exotic preferences in industrialised nations is believed to have stimulated the rise of a non-traditional market for Third World food. Included here are small yet relatively profitable niche commodities, such as shellfish (primarily prawn), ornamental plants, and horticulture.

However, the sustainability of these new opportunities may be limited: niches may disappear as others enter the market. Second, profitability and access in international markets are influenced by transnational corporations, and the prospects of any Third World producer are severely constrained by their peripheral position within the world economy.

The 'rise' of global capital
A final and related aspect of global food re-structuring is the increasing presence of northern transnational corporations (TNCs) in Third World agriculture (Burch et al., 1996; McMichael, 1994; Goodman and Watts, 1997). Distinguishing characteristics of this transformation include a growing emphasis on agricultural processing and wage labour, contract farming (in which TNCs establish reliable yet flexible arrangements with food producers) and the internationalisation of trade.

Three issues are of particular concern. One reflects a growing concern that TNCs are establishing an 'unhealthy' level of power within the world food economy, including: increased control over the supply of seed technology; the prospect of synthetic substitutes for major Third World commodities, such as cocoa; and attempts by TNCs and western governments to obtain proprietary control over seeds that are either indigenous (e.g. basmati rice) or produced as global public goods through, e.g. the CGIAR (the Consultative Group for International Agricultural Research).

A second and related concern touches upon how and how far TNCs have been able to control the supply of agricultural inputs. Beyond conventional agrochemicals is the perceived threat of biotechnology and international intellectual property rights (which would enforce TNC proprietary rights over seed technology).

A final concern relates to the impact that transnational corporations are having on market access and international trade. A major fear here is that TNCs are able to use their comparative advantage (information, market power, global trade institutions) to play developing nations off against one another and so ensure that the price of (traditional and non-traditional) agricultural commodities remains low (McMichael and Raynolds, 1994).

2.3.2 Restructuring global product and labour markets: post-Fordism?

Some observers argue that atomised labour markets are not a feature of a failed capitalist structural transformation, but of a new transformation altogether. They do not bring 'modernity' as proposed by Marx, Weber and Polanyi, but a post-modern society distinguished by flexible modes of production and neo-liberalism. Some argue that this new transformation is merely a symptom of the 'reworking of the dynamics of capitalism' away from the 'rigidity' of hierarchically organised firms and mass-scale production (labelled as Fordism) to more 'flexible' modes or working and organising labour associated with the rise of neo-liberalism. Others see these and associated social changes – weakening of traditional class formations, multiplication of ethnic identities and the rise of 'post-modernism' – as much more fundamental.[10] This flexibility implies an ability to adapt to rapidly changing markets and requires new forms of industrial organisation and a more mobile and flexible workforce (Harriss, 2000a). Such change is associated with the casualisation of labour markets leading to the rise of part-time work and subsequent occupational diversification (Breman 1996). These trends are part of broader social transformations equated with the rise of 'post-modernism', and for Harriss (2000a) have increased the insecurity of labour and accentuated inequality both between and within nations.

10 See Harriss (2000a) for an overview of this debate.

2.4 The impacts of change and transformations

Breman and Mundle (1991) summarise well the diverse transformations at work in the rural economy. For India he proposes three interconnected processes related to the decline of agriculture, the rise in rural non-farm and urban employment and the increased flexibility and insecurity of labour markets.

Taken together these form a 'package' of sectoral, spatial and labour market trends that could be broadly labelled 'rural diversification'. But within such changes of context, what do rural livelihoods look like and what features do we expect to see?

2.4.1 Snap-shots of diversified livelihoods

A brief round-up on diversification theory provides some insight into the potential of a diversified rural economy to provide pro-poor growth. However, we are still left unsure as to its impact on welfare and well-being. 'Snapshots' of recent evidence help to throw further light on these issues.

First, the RNFE is highly diverse; returns or wages are likewise highly variable. They may be very high, especially in the case of formal sector employment;[11] skilled or capitalised activities to which entry is restricted, or any other sub-sector which is protected from competition. They may also be very low, for instance, traditional cottage activities or micro-enterprise (e.g. firewood collecting, petty-trading, handicrafts). However, it is important to note that these types of self-employed activities may provide other benefits such as flexibility, home-working and cultural acceptability (especially by women) that are otherwise lacking in labour market participation.

Often the highest returns from the RNFE are higher than the highest returns from agriculture and the lowest returns are lower than the lowest returns from agriculture. In these cases non-farm income shares generally form a U-shaped distribution against wealth group. However, while this would lead to the poorest having higher shares of non-farm income than the middle groups, the middle groups may still earn considerably more absolute non-farm income than the poorest.

Second, labour market opportunities are restricted by gender, class and broader social inequalities.[12] A profoundly negative tendency is for existing institutions that determine preferential access to resources to reproduce themselves as new opportunities make themselves available (e.g. Boyce, 1993; Berry, 1989).

Third, the casualisation of labour markets has further influenced livelihoods. In stark contrast to bygone days of tied patron-client labour, many jobs now are so temporary that the cycle of work and work-search has become a permanent condition leading to a lifestyle of 'hunting and gathering' for subsistence work (Breman, 1996) with a daily 'scramble' for day wage (Bryceson 2000). This trend has been encouraged by the relaxation of labour controls and standards in the wake of liberalisation; the neoliberal agenda argues that such freedom and flexibility in labour market institutions is essential to the efficiency and flexibility of enterprise in a global economy (World Development Report, 1995). Yet the result has left many livelihoods increasingly divided, multiple and diverse, not to mention precarious and pauperised. With the increasing spatial and temporal dislocation of labour forces, and associated loss of collective voice and bargaining power, this trend seems set to continue. As the informal social protection once granted by patrons has declined, this

11 Entry to which is intensely competed with social contacts and bribes playing an important role.

12 In South Asia, for example, the agricultural labour market has become increasingly dominated by women as men move out of farm work to take the generally more lucrative non-farm work to which women are mainly barred. In Latin America, where such gender inequalities are less prevalent, rural labour market access and returns are more egalitarian.

raises urgent questions of whether and how more formal 'modern' social protection might be introduced (Farrington et al, 2004).

Fourth, much diversification is through labour markets, many of which are in the sites of highest economic growth: near towns, cities and industry. Depending on the distance of these employment sites, participation in labour markets may involve a daily, weekly or seasonal pattern of circular migration. It may involve all members of the household searching in an ad hoc manner most days, or one member employed full-time sending remittances from afar. Most agree that migration is a normal part of rural livelihoods[13] and is an essential coping mechanism as well as means of accumulation. However the negative aspects of migration (family disruption, the squalor of temporary accommodation, and impossibility of registering voting rights) have tended to dominate policy discourse (de Haan, 1999). This is despite the role that a cheap, flexible labour force can have in fuelling the economy and easing the slow process of structural transformation.

Clearly, livelihood diversification can be both a coping and a thriving mechanism – thriving where it is driven by a growing and more flexible economy. But the 'coping' dimension dominates where diversification is an enforced response to failing agriculture, recession and retrenchment (e.g. Davies, 1996; Scoones, 1998; Francis, 2000).

Drawing on this literature, the differing impacts of diversification on well-being are illustrated in Table 3. However, not all the dimensions can be captured in such a simple comparison. First, presenting a residual activity (such as gathering forest products) as a safety net may disguise the fact that employment is often exploitative, with incomes too low to meet basic needs and a work environment too poor to meet basic human rights. Second, as mentioned, low-return activities and segmented sectors contribute to structural inequality; opportunities for social upliftment through sectoral or spatial economic mobility are rare. Third, livelihoods are often highly insecure, due to mass under-employment and highly casualised labour markets and inadequate availability of work to ensure sufficient income. Fourth, the sectoral and spatial dispersal of the rural labour force erodes possibilities for collective action and thus political 'voice'.

Without a clearer understanding of the reasons people enter into new or diversified activities, and the social structures and processes that determine their opportunity sets – or lack of them – we are still far from understanding the mechanisms by which rural change, transformation and diversification affect the poor. We are even further from understanding the ways in which they respond.

13 de Haan (1999) argues that migration may have been just as common place in the past as well.

Table 3 Variable impacts of diversification on well-being

Feature of the RNFE	Dimension of well-being	Negative impacts	Positive impacts
Many parts of the economy are low-return ‘residual’ sectors. Many are informal with no regulation; many are located away from home.	Income and working conditions	Low returns, limited possibility to graduate from poverty. Poor work standards. Stress of travelling and living away from home.	Acts to check falling wages rates in agriculture. Acts as coping strategy and safety net.
The RNFE is diverse; with some very lucrative sectors.	Inequality	Excludes those without access to resources.	Provides possibilities for regional growth, possibly reaching the poor through ‘trickle-down’.
Labour markets are highly casualised.	Security	Insecure work – looming possibility of unemployment. Difficulty of collective action.	Allows a degree of livelihood flexibility, though few may desire this.
Labour market opportunities are non-local. Livelihoods are multi-spatial.	Social and political empowerment	Migratory labour forces are dispersed and foreign, reducing bargaining base and civil rights respectively.	For the young, provides opportunities for experience outside an agrarian economy. May bring new experience, skills, contacts, and thus break down traditional institutional structures.

2.5 Three approaches to understanding rural change and transformation

Here, we draw on Harriss (1987), who distinguishes three approaches to understanding rural change: decision-making models, systems approaches and structural/historical views, acknowledging that not all views fit neatly into one or other box. Each has a contribution to make to the examination of diversification, opportunity and access.

2.5.1 Decision-maker models

Decision-maker models focus on individuals and employ techniques of micro-economic analysis and the theoretical perspectives of methodological individualism. They include studies of farm economics – in neo-classical mould – which are concerned with the allocation of resources on the farm and farmers’ responses to markets and innovations. A seminal text in this area is Schultz (1964) who argues that peasants are ‘rational but poor’, while the basics of such an approach are outlined in texts such as Collinson (1972).

Decision-maker models are easily adapted to incorporate non-agricultural activities. Thus non-agricultural enterprises are seen as analogous to the farm enterprise, but drawing on different natural resources and participating in different output markets. Non-agricultural rural labour is treated in the same way as rural labour in general: returns are calculated on the basis on wage rates and compared to the net returns per capita per day. Low’s model of farming and migration in Swaziland (Low, 1986) incorporates the male migration component well, explaining that households divide rationally because of the higher wages for males in industry and mining, and cheaper costs of reproduction and living for females in the original community.

In section 3 we examine the ways in which such micro-economic, usually household models have been re-packaged in 'sustainable livelihoods frameworks', and how the conventional micro-economic components of resources (assets), activities (micro-transformations) and preferences (for well-being) have been developed or re-presented. Two areas are of interest.

First, we seek to understand differential returns across diverse activities – those beyond agriculture and even beyond rural labour. This provides us with a micro-economic basis for explaining differential access, opportunity and hence differentiation.

Second, we explore these household models further, particularly with relation to decision-making 'strategies' and the light they shed on diverse portfolios and multiple livelihood activities. We also explore the role of choice and utility optimisation to explain such 'strategic' behaviour. Indeed, as Harriss (1987) points out, a number of studies by anthropologists and sociologists also fall into this 'decision-maker' category when individuals make choices about their values and their actions. The associated entrepreneurship of the peasant farmer is a strong theme, particularly in sociology and social anthropology.

Rational actor models of decision-making and 'game theory' have also been applied to explain behaviour in imperfect markets, with imperfect information and with non-private property, including the literature on collective action (e.g. Ostrom, 1990) and new institutional economics. However, these approaches do little to explain the system itself, for which distinct systems and/or structural approaches are needed.

2.5.2 Systems approaches

Systems approaches include those concentrating on socio-technical systems, or on the social systems of agrarian communities. These go beyond narrowly farming system approaches (e.g. Ruthenberg 1980). Boserup (1965) is a powerful example of the interplay between limited environmental resources, changing population densities and new, evolved technology. In her case, increasing population density explains the development of increasingly intensive production systems of cultivation. These in turn involve induced changes in technologies and social institutions. But some of the drivers of change can be outside the system, such as urban demand and improved infrastructure (Tiffen et al, 1994). Likewise, the general combination of geography and economy are well placed to explain regional growth linkages and the constraints on rural-urban interaction. Systems approaches have also been found in many studies by social anthropologists and sociologists, particularly among 'functionalist' studies.

The relations between environment, demography and technology has long interested geographers who have made attempts to model how rural societies manage the farming calendar in ways that are robust in the face of risk. It is this study of 'livelihood systems', underpinned by the assumptions of a rational, rather apolitical peasant that we develop in Section 4. These allow us to understand livelihood diversification and adaptation as the response to external hazards and trends, particularly environmental, demographic and technological factors. Building on micro-economic asset-based approaches, they allow us to develop concepts of vulnerability, resilience and sensitivity.

Using environment and demography as key external forces of change this literature has been very successful in explaining induced technical change (e.g. Hayami and Ruttan, 1970) or induced institutional change (Hayami and Kikuchi, 1981). It generally argues that contexts which are under pressure are among the first to introduce institutional change. Thus in South India, Epstein's (1973) famous study records the tale of two villages: one that enjoyed irrigation, agricultural success and stability retained its hierarchical structures of patronage and tied agricultural labour. In the other, with no irrigation, people were forced to diversify and migrate. Many of the traditional, regressive institutions broke down, thus suggesting that economic diversification contributed to social mobility.

But because systems approaches emphasise the systemic quality of the local community, regulated by values, they tend to attribute change to ‘external’ forces acting upon the local society. Such approaches ignore the relationship of between locality and state (whereas structural/historical views do not), and neglect processes that may be internal to peasant society – such as life cycle events (e.g. Chayanov, 1925).

2.5.3 Structural/historical views

Structural/historical approaches share some of the features of systems approaches but have an historical and political emphasis, incorporating the importance of power relations and, sometimes, Marxian methodology of class formation and analysis. They are centrally interested in the process of productions, access and exchange and place ownership and control of resources at the centre of the analysis. The social classes, which represent the structures of access and ownership also represent sources of conflict which may be seen as an engine of change within the ‘system’ of social relations. However, the historical process of capitalist development, including commoditisation, commercialisation and the incorporation of smallholders into capitalist market systems, is seen as the major change or transformation in rural societies.

Though some Marxist schools would argue that capitalist development subsumes all other forms or modes of production, other speak of ‘articulation’ in which different modes can exist, and interact, side-by-side, most particularly pre-capitalist or semi-feudal modes with capitalist. Such perspectives shed light on processes of uneven or restricted development that may explain the persistent under-employment and occupational multiplicity of some rural areas.

Within this tradition, there are also those who argue that the distinctive nature of peasant production survives. Peasants are able to supply goods more cheaply than capitalist producers, due to more efficient use of capital, cheaper labour and resources and some degree of auto-exploitation.

Initial endowments, budget constraints and the stage of accumulation in the life cycle (e.g. Chayanov, 1925) have an important impact on the returns from different livelihood activities. However, the means by which social relations affect both the quantitative and qualitative terms of production and exchange, and hence access to opportunity arising from diversification, is also centrally important. The means by which these relations are played out through imperfect factor markets (including land, labour, capital and outputs) and through differential access to natural resources, innovations, the moral economy and the state are of crucial concern in the Indian context and are explored in the last section in this paper.

3 Livelihood Strategies: Assets, Activities and Well-being

The decision-maker model referred to above is the basic micro-economic framework that underpins many methodological and theoretical perspectives on individualism. The three elementary features of this framework are resources, the technological possibilities of transforming these into commodities, and the preference of individuals.

Thus the model is central to demand- and supply-based equilibrium theory, whether this be at household[14] or macro-economic levels.

3.1 Micro-economic models of livelihood

These same three basic components feature in almost all theories and frameworks explaining the livelihood activities and returns of rural people. However, interpretations and emphases vary from one framework to another, as the four principle examples discussed below illustrate.

3.1.1 The peasant household

Rural livelihoods analysis was probably born with the birth of peasant studies[15] in the 1960s, given the dominance of peasant modes of production in many newly-independent African countries.

Though 'peasant studies' has fallen out of fashion, the concepts and theories are still central to an understanding of rural livelihoods. The area is multi-disciplinary, having branches rooted in household economy, but also in more Marxian ideas of surplus extraction, differentiation and class formation.

There are nine key variables for the empirical analysis of the peasant household (Deere and de Janvry, 1979:603):

1. the stocks of means of production at time t;
2. the division of labour by sex and age in the household process;[16]
3. choice of activities (products and technologies) and allocation of resources in the home production process;
4. choice of activities and job search in the wage labour production process;
5. disposition of the product between sale (marketing) and retention for home use;
6. the formation of the net income (sources of income);
7. effective demand – disposition of net income;
8. reproduction of the consumption unit and of the means of work, acquisition of raw materials;
9. the levels of stocks of means of production at time t + 1.

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14 The micro-economic models discussed here use the household as the unit of analysis, but we recognise that intra-household analysis would be needed in order, for instance, to examine gender roles and negotiation within the household.

15 'Peasants are households which derive their livelihood mainly from agriculture, utilise mainly labour in farm production and are characterised by partial engagement in input and output markets which are often imperfect or incomplete' (Ellis, 1992:13).

16 Chayanov (1925) in the 1920s had sought to understand patterns of surplus and deficit between agrarian households in terms of life-cycle effects in stark contrast to Lenin's view that they were caused by a process of capitalist accumulation and transformation. This work, not translated into English until 1966, was to help broaden the disciplinary breadth of peasant studies, and the levels of analysis.

These now help to provide a framework for understanding the differences in income, accumulation and differentiation among households.

3.1.2 New household economics and agricultural household models

Becker (1965), in work labelled the 'new household economics', suggested that household behaviour was motivated to acquire a set of so-called home or 'Z-goods', including leisure, which would tend to maximise the household's 'utility', a subjective variable that defined the household's motives and aspirations. These Z-goods, and thus utility, were produced within the household making use of purchased X goods and labour. While peasant models of household aimed to explain differentiation with respect to the given resources, technologies and behaviours of the peasant, these neo-classical models aimed to explain peasant behaviour itself. If preferences, resources and technological possibilities were known, so too would behaviour, as the peasant was expected to optimise utility in quite predictable ways.

In parallel to work on utility and demand, others were focusing on production and supply in the peasant household. Schultz's discovery that peasants were 'efficient but poor' (1964) opened the way for micro-economists to apply the theory of the firm to peasant farm units. These econometric models were refined through the 1970s, culminating in the model developed by Barnum and Squire (1979) for farmers in Malaysia, which even sought to explain 'perverse' farmer responses in which increased farmgate prices, which were also consumer commodities, could actually lead to reduced output.

3.1.3 The entitlement approach

The entitlement approach developed by Sen (1981) had as its focus the analysis of poverty and famine that was central to development studies during the late 1970s and 1980s. The approach was still micro-economic in frame – attempting to understand how limited endowments were transformed into commodities. Central to the analysis was not the production of use values or income but 'entitlements': the effective command and control an individual had over a commodity or 'the set of different alternative commodity bundles that the person can acquire' (Sen, 1981). In a private ownership economy the entitlement set of a person is defined by his/her endowment – his original bundle of ownership. Under community ownership these endowments would include the rights of access and extraction open to him or her.

The entitlement literature has been developed in relation to the rules and norms that determine the rights of access to certain resources, which are of prime importance in rural India. What interests us here is how the concept of entitlement differs from other micro-economic models of livelihood.

First, entitlement is similar to the measure of *real* income in that the net profit or product of a livelihood activity is adjusted by the value of essential goods that can be exchanged for that product, which, in turn, permits consideration of the terms of trade between economic sectors. Second, the theory allows the transformation of endowments to entitlement – by production *or* by exchange – to be conceptualised and quantified generically for household process, whether they be production, wage labour or reproduction oriented. This is called is called 'entitlement mapping' or 'E-mapping' and the gradient of the endowment-entitlement vector measures the entitlement achieved. This makes clear that very different sets of entitlements can be returned from similar initial endowments, the explanation lying in processes of access, production, transformation and exchange.

Overall, the entitlement approach allows room for a more socially and politically nuanced view of the world than many other economistic frames. While the conceptual frame does not explain or predict these social structures, it does allow space for an analysis of differential institutional terms and, with respect to famine and disaster, the differential impact of events on different social actors. The entitlements approach is able to link easily with economic frames of the type reviewed above, but also institutional and structural approaches to understanding distribution and thus has the potential to form the cornerstone of an inter-disciplinary approach.

3.1.4 Food security, sustainable livelihood and asset-based models

During the 1980s, the study of famine and food security continued as a major area of empirical research and conceptual debate. Several frameworks evolved to better incorporate issues of food security, coping and vulnerability, environmental sustainability and adaptation, and livelihood diversification.

Chambers (1987) developed the concept of 'sustainable livelihood securities' which built on the existing interest in food *security* and the new interest in (albeit environmental) *sustainability.*[17] Thus stocks and capabilities – both tangible and intangible - were converted into flows through livelihood activities, and thence to well-being. As Chambers and Conway (1992) had argued,

> 'A livelihood comprises the capabilities, assets (including both material and social resources) and activities required to make a living…and to cope with and recover from shocks and stresses'.

At about the same time a similar model developed by Swift (1993) emphasised the need to balance production and exchange with consumption. Central to this balancing act were 'assets', which replaced 'stocks and capabilities', and consisted of investment, stores and claims. The model developed the asset category in some detail. First, material assets were split into investments and stores, an important initial step into understanding coping strategies and longer term sustainability and vulnerability. Second, a non-material category of assets – 'claims' – was added, which opened a new area of conceptualisation and paralleled emerging concepts of social capital, to which we return later below.

Davies' (1996) livelihood entitlements framework concentrated on these two features as well, but expressed them in 'entitlements' language. Thus, households are seen as balancing sources of entitlement (from drawing down on assets, production and exchange) with calls on entitlements (for consumption, claims, securing future security through investment and savings). Both Swift and Davies' frames were practical enough to support the monitoring food security by implementing agencies and were developed by some as operational frameworks.

Some years later, livelihood frameworks received new inputs and redesign, partly from government-funded efforts to develop a sustainable livelihoods approach to poverty alleviation[18] and from the rise of new concepts of human, natural and social capital.[19] Assets were still central but the term was now used almost interchangeably with capital. In addition, the main focus was on identifying broad categories of capital, with natural and physical joining the fashionable human and social (Scoones, 1998; Carney (ed), 1998; Moser, 1998 and Bebbington, 1999).[20] The three stage

17 Implicit in the birth of sustainable livelihoods, perhaps, was the assumed poverty and environment link between livelihood sustainability and natural resources sustainability

18 See in particular DFID (1997)

19 Which the World Bank particularly encouraged (Bebbington, 1999).

20 Bebbington's frame also included cultural capital and Carney's included financial capital, which is seen by others as part of physical capital.

micro-economic model was still central. Thus Scoones saw assets transformed by institutions into outcome (1998), Carney presented capital assets as being ‘transformed by structures and processes’ and livelihood strategies to livelihood outcomes, and Bebbington spoke of ‘the abilities of people to transform … assets into income, dignity, power and sustainability’ (1999:2029).

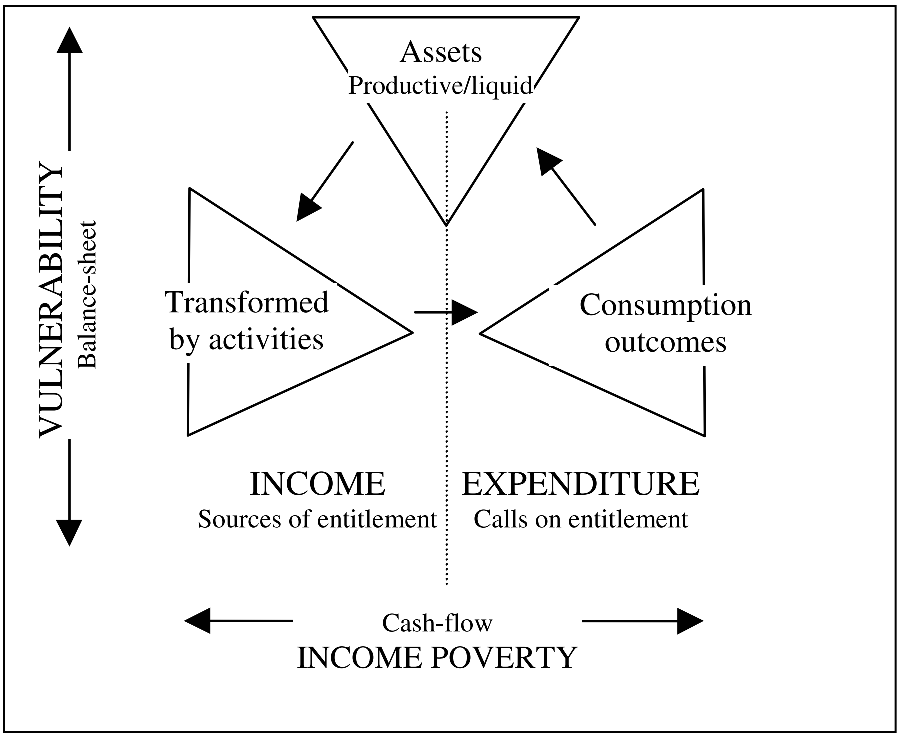
3.2 Towards a basic framework

The entitlement approach describes how endowments are ‘mapped’ into entitlements or commodity bundles which aim to fulfil the demands of the individual. The livelihood securities approach describes how stocks and capabilities create flows that lead to well-being. Asset-based livelihood approaches consider how assets are transformed by structures and processes and livelihood strategies into livelihood outcomes. These are a new permutation of the age old neo-classical general equilibrium model with its three givens: resources, technologies for transformation and preferences (See Table 4 and Figure 1).

Table 4 Summary of comparable terms in micro livelihood frameworks

Micro-economic trinity			Framework or model
Resources: Factors of production • land • capital • labour	**Transformations** through activities technological possibilities	**Preferences** of individual	Neo-classical supply-and-demand general equilibrium economics (Breman and Mundle, 1991)
X-goods and labour, factors of production	Activities, production, sales	Z-goods, determined by utility, including consumption	New household economics and agricultural household models (Becker, 1965; Barnum and Squire, 1979)
• Raw materials • Means of work • Family labour power	Home production, wage labour production and reproduction processes	Means of reproduction and production, differentiation through greater reproduction	Peasant Household Organisation (Deere and de Janvry, 1979)
Endowments	Entitlement mapping through production and exchange	Entitlements	Entitlements (Sen, 1981)
Stocks, capabilities	Activities, flows	Well-being	Sustainable livelihoods (securities) (Chambers 1987, Chambers and Conway, 1992)
Assets: • Investment • Stores • Claims	Production, exchange, processing	Consumption	Food security (Swift, 1993)
Capitals: • Social, • Physical • Natural • Human • (Cultural: Bebbington, 1999)	Transforming structures and processes, institutions, activities	Well-being, (meaning and capabilities – Bebbington, 1999)	Scoones (1998), Carney (ed, 1998), Bebbington (1999), Ellis (2000a)

Figure 1 Micro-economic livelihood framework



However, each new permutation offers new insights. Four issues stand out, and are incorporated into a summary framework for thinking about the micro-economics of livelihoods. First, entitlement analysis, household economics and food security literature suggest a need to look at the balance of entitlements produced by the household or livelihood unit against the preferences and needs. This provides a calculation of the overall entitlement balance – deficit, surplus or breakeven – in a household over a given period of time. This in turn determines the ability of the household to accumulate and, thus, its social-economic status.

Second, this status helps to explain the differential terms of transformation (or entitlement mapping) and thus the entitlement balance. Terms of transformation are influenced by institutions that determine the terms of access to opportunity, production and exchange.

Third, work on food security and asset-based approaches reveal the central role that assets have in determining the ability of a livelihood to insure against risks and mitigate future shocks, to cope with them when they do occur and to adapt existing livelihoods portfolios to gradual or sudden shifts in the terms. Assets are central to new thinking about livelihoods, in particular livelihood security and sustainability.

Fourth, the combination of assets balance, entitlement balance and activities provide an overall picture of well-being, capability and cultural meaning (Bebbington, 1999). This in turn defines the opportunity set available to an individual (Sen, 1981). The distinction between entitlement balance and asset balance is a little similar to the difference between a cash-flow sheet and a balance-sheet in theory of the firm. Thus, a cash flow assesses inputs and outputs in a limited time period. It is important for giving a static picture of production, income and profit or loss. The balance sheet, on the other hand, assesses the underlying health of the enterprise. It gives a more dynamic view of the amount of working capital available, the potential to draw down resources if crisis strikes or to invest if a change in direction is needed. On a more human level, the financial health combined with capability, a reflection of self-confidence and esteem, provide a measure of the ability to cope and adapt in a changing world of threats and opportunities (Figure 1).

3.3 Taking assets further

Contemporary asset-based approaches take the concept of assets, capitals and resources beyond traditional economic boundaries. In the process, they bring some useful insights to the relationship between diversification, access and opportunity.

First, implicit in much of the thinking about livelihoods and development is the notion that resources can be conceptualised as capital assets and that these capital assets are convertible, and are therefore subject to the logic of investment.[21] Financial capital, for instance, can be used to acquire other forms of capital, including human capital (labour and knowledge), social capital (loyalty, networks) and natural capital (water, land). Likewise, one can use human capital to acquire economic, social and natural capital, and so on. Thus one form of capital can be used to acquire other forms of capital, and the 'topography' of asset exchangeability is determined by moral, legal and cultural factors.

Second, for an asset to be of value as an insurance against livelihood stress, and to be effective in coping, it must have certain *qualities*, regardless of its market value. It should be liquid: easy to sell, like a radio or jewellery, but not like land. It must also be divisible (especially if small amounts are needed at a time). Finally its value should be secure against fluctuations, given that terms of trade can shift dramatically during shock and crisis (e.g. livestock and labour markets).[22]

Third, qualitative factors also help in explaining productivity. In this way factors of production, which are pure quantitative variables, such as land, labour and capital, are different from natural, human and physical capital which may have incorporated variable degrees of productivity-enhancing qualities. Thus, land plus soil quality may become natural capital, and labour plus skill level becomes human capital. This approach puts less emphasis on factors of production and strategies for their efficient allocation and production and instead focuses on how changes in assets effect the long term ability to increase productivity, asset wealth and security.

Fourth, while all households have at least some assets, and most can be converted to cash to meet livelihood needs, a simple assessment of an asset' s worth does not capture fully the stream of lost financial returns, social utility and other benefits generated (Devereux, 1993:55), nor highlight the negative affects of asset depletion. Clearly, liquidation of productive assets, such as seeds and ploughs, will severely undermine future productivity and livelihood sustainability, while sale of a stores, investment, savings or non-productive assets, such as radio or jewellery, while compromising future enjoyment, security and social status, will not. Such concerns are central to sustainable livelihood security approaches (Chambers, 1987 and Chambers and Conway 1992).

3.3.1 Intangible assets

Bourdieu (1977) makes the distinction between 'material capital', the tangible means by which people meet their material needs, and 'symbolic capital', i.e. the creation and maintenance of various social relationships among kin and the wider community. As Kabeer (2000:44) notes, symbolic capital 'is not easily intelligible in terms of neo-classical notions of rationality because it appears to involve the diversion of scarce time, effort and resources from the acquisition of concrete material goods', however it is recognised that 'the fund of duties, debts, claims and obligations built up in the investments in social relationships can be converted into material resources in times of need'.

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21 Defined in this way, 'capital' is different from traditional Marxian definitions and social capital and similar conceptualisations have been criticised for an apolitical and ahistorical interpretation of economic life (Fine, 1999).
22 For more on this subject, see Devereux (1993).

Some now feel that the commoditisation and repackaging of so many non-economic concepts represents a colonisation of social sciences by the economics (Fine, 1999). Certainly, huge swathes of scholarship are often ignored with the introduction of such new frameworks. However, there is no doubt that a large area of non-economic social science has become much more widely discussed and considered than previously. Further, scrutinising one discipline within the theoretical frame of reference of the other, is one way to forge complementarities and understandings between them. In broad terms we can distinguish three areas of intangible asset: capability, the moral economy and power.

Capabilities

Capability describes the personal and often non-economic and non-social attributes of an individual. As described by Sen (1985) in his original description of the capability approach, commodities (bread, medicine) are transformed into characteristics (nutrition, treatment) which are in turn transformed into functionings (moderately nourished, health). It is these functionings that lead to a 'capability set' that provide the resources and opportunities for the individual's chosen state of being. This set defines the advantage of that person relative to someone else and hence influences the opportunities open to them. The person can use that advantage as they choose and the more advantage they have, the more freedom they have to choose a course of action that leads to well-being.

Mainstream definitions and measures of human capability often focus on health, nutrition and education and include the more obvious productive attributes, such as skills, strength, information and knowledge. As Sen (1997) points out, however, such definitions may limit the conceptualisation of capability to a purely economic realm, in which capability is considered for its impact on productivity. Human capital contributes to quality of life in many other ways, a range of ways that he sums up as human capability. This includes the ability to debate, negotiate, to add voice to political processes and, ultimately, to be an agent of social change.

Claims, moral economy, reciprocity and trust

Moral economists (such as Moore, 1966 and Scott, 1976) argue that social groupings, such as the household, extended families, shallow kinship grouping, major lineages or other 'communities', share a sense of reciprocity. Membership of these economies involves an implicit mutual agreement or obligation to share resources and claim resources. Often gifts and obligations are built up through good times to be 'claimed' during bad as a form of social insurance (Swift, 1993; Davies, 1996). In this way, risk is pooled and vulnerabilities shared. Further, those of higher status may be obliged to provide guarantees in times of hardship, in return for services or political support.

Such relations of 'reciprocity' also exist, in theory, between the citizen and state. Thus the citizen may pay taxes, or rent, and be able to 'claim' certain benefits which may include public goods and services as well as individually-targeted transfers.

The relations of trust and co-operation that underpin the moral economy may be used to facilitate other collective functions, such as the management and protection of common assets, such as forest or water bodies among resource users, the sharing of land, livestock, contacts or information among kin or in the collective marketing and purchasing of commodities. The functioning of such rural organisations and institutions generally increase efficiency and productivity and are well documented and conceptualised in the new institutional economics literature drawing on concepts of game theory, trust, transaction costs, imperfect information and moral hazard. Conceptually, however, it is important to distinguish between the benefits conferred through membership of such institutions and the individual credit or debit status of those within such groups.

Such benefits are often included under the broad banner of social capital that has risen to great popularity, particularly with the support of the World Bank and asset-based frameworks. Most social assets, however, tend to be limited by membership.[23] Further, they tend to be designed to confer certain exclusive benefits on that membership, to the exclusion of others in society. One man's social capital, is another's social disadvantage. Such patterns of exclusion may also be the foundations on which hierarchies of power and influence are built.

Power and influence

The degree of power and influence an economic actor or class of actors may hold is also part of Coleman's (1990) original broad definition of social capital. Neo-classical economics give the concept of power or influence a wide berth, particularly with respect to their ability to distort allocatively efficient markets and institutions that in turn determine access and accumulation.[24] These variables are central to structural approaches to the study of society, and most closely relate to Bourdieu's 'symbolic capital'. The commoditisation of power is foreign to these literatures. They argue that economic power, most often analysed through a class framework, is an outcome of social relations and determines the terms of access and control to key commodities and thus the terms of the assets' transformation. The ways in which these transformation are influenced, to yield either high or lower returns, is central to our understanding of access and poverty. We return to the political economy aspects in Section 5, but for now we consider the second of three main components in our micro-economic frame: the issue of asset transformation and economic activity.

3.4 Terms of transformation

In economic terms, we can consider an economic livelihood activity to be any activity that creates entitlement, i.e. a set of 'use values' or a form of income, either at the present time or to be drawn down at some time in the future. In asset-based approaches, assets, in their broadest conceptualisation, form the basis of all livelihood entitlement. Thus Moser (1998) categorises livelihood coping activities around asset types in her asset-vulnerability framework. Other frames focus on key institutions as the sources of entitlement, such as the market, state, community (see for instance Kabeer, 2000). In general, an asset may be transformed through a number of different institutions. How can we understand the terms of that transformation (rate of return or gradient of the E-mapping vector) in order to understand the inflows, values and entitlements a household has available?

3.4.1 Unpacking the terms of transformation

In economic production theory, output is a function of the factors allocated to production and the total factor productivity that can be achieved within the limits of technological possibilities.

Commodity output = Factors x Total factor productivity

In an exchange situation the price received will be the market clearing price for that good, determined by the general equilibrium conditions of supply and demand. Thus:

Income received = Commodity x Market price

23 Membership may not be clear-cut, however. While much of the NIE literature is based on models of co-operative and community groupings with equal or 'horizontal' social relations, such homogeneity is relatively rare. This may lead to graduations in levels of membership, or inclusion, as defined by the influence they can bring to bear and the benefits, if any, they receive. At some point the benefits may become so low that participation may no longer be worthwhile. Though in some cases visible resignation from social groups may lead to a further loss of status in society accompanied by sanctions.

24 Except through theories of monopsony and monopoly.

This gives the marginal value productivity, or the rate of return.

In more generic terms, Sen's (1985) frame combines one equation for both production and exchange. Thus:

Entitlement = Endowment x Gradient of the entitlement mapping vector

And in more recent livelihood language, the equivalent model is:

Entitlement sources = Assets x Terms of transformation

Drawing together the literature reviewed here, several livelihood activity types are summarised in Table 5. All involve gaining **access** to an initial asset, resource or endowment, the terms of which could depend on property rights, institutions of local resources management, moral economy, public welfare provision or the inherent 'public good' qualities of the asset in mind. Second, some involve a degree of the actual physical process of transformation or **production**, the efficiency and productivity of which will depend on skills, information, technology and equipment, all of which could be classified as assets, or assets that add value to basic factors of production.[25] However, the terms will also depend on the economies or dis-economies of scale, and the availability of external inputs such as rainfall, pests and key social institutions that determine efficiency, such as the quality of labour supervision. Thirdly, most will involve some degree of **exchange**, either through competitive commodity, labour, credit, land or other markets, through non-competitive, semi-feudal markets or more informal systems of barter or reciprocity. We can therefore propose that entitlement is a qualitative and quantitative function of asset (factors and capitals) with:

- terms of access
- terms of production
- terms of exchange

3.4.2 Neo-classical perspectives

Of the terms of access, production and exchange, our neo-classical micro-economic models tend to ignore the first, subsume the second into technology and total factor productivity and the third into price. The agricultural economic models of the late 1970s (Barnum and Squire, 1979) emphasised the role of prices above all else in understanding changes in peasant production patterns and ushered in a new policy era of structural adjustments in the developing world.

The market is the institution of exchange and the creator of prices, and distribution of factors, simultaneously. Except in extensions of market analysis to include conceptualisation of imperfectly performing market (such as transaction costs, externalities, imperfect information etc), price is the pervasive determinant of exchange value and hence returns.

Technology is central to the transformation of resources to meet preferences. Beyond this, it can also create or improve access to resources, (e.g. through land reclamation, irrigation, dams, etc), and the means by which preferences are met (e.g. saving time through domestic appliances or wastage in processed foods, etc). In the wider economic sphere, technology affects the nature of labour markets in general, in particular the degree to which capital displaces labour, the subsequent demand for skilled and unskilled labour, and the prevailing wage rates.

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25 Inevitably there is cross-over between assets and terms, in particular between assets that add value (such as market information, or pieces of production kit) and the terms themselves. This is partly due the problems of over commoditising economic values as 'assets' and 'capitals'.

Table 5 Terms of transformation for different categories of livelihood (as defined by their asset base)

Asset base of livelihood	Example	Terms of access	Terms of production	Terms of exchange
	In general…	*Social structures and institutions: market, community, state, kin, household, wealth and class, technological constraints, capability, entry costs*	*Technology (hardware and software, scale economies, environment, combined inputs*	*Price and market demand, market, infrastructure, class, entry costs, T-costs*
Production-based	Agriculture, artisanal	Land and water rights	Rainfall, pests, mechanisation, seed variety, skills, market information	Terms of trade on input and output markets,
Common property-based	Hunt and gather	Management rules and norms, competition for products	Harvesting equipment, knowledge of natural environment	Value for barter or on commodity markets,
Asset-based	Sale of animals, land	Ownership or transfer rights/ usufruct	(Knowledge of market)	Market demand and price, lost value as collateral or status
Labour-based	Local and migrant labour markets	Labour market segmentation, intra-HH norms for use of labour	(Knowledge of market)	Wage rates, terms of contract, consumer price index, contacts
Trade-based	Small scale retailing, hawking	Rights to commodity within HH, (knowledge of market), permits	Transport	Market rates, commitments to certain traders
Moral economy-based	Reciprocity and patronage in community	Class, gender, ethnicity, kin networks, patronage relations	Knowledge and relations with patrons	Market value of claim
State-based	Transfers, schemes and investments	Rights based on ethnicity, class, etc, excludability or resources	Knowledge of government schemes/ programmes	Available amounts, amounts lost in bribes and commissions

Technology is central to the transformation of resources to meet preferences. Beyond this, it can also create or improve access to resources, (e.g. through land reclamation, irrigation, dams, etc), and the means by which preferences are met (e.g. saving time through domestic appliances or wastage in processed foods, etc). In the wider economic sphere, technology affects the nature of labour markets in general, in particular the degree to which capital displaces labour, the subsequent demand for skilled and unskilled labour, and the prevailing wage rates.

Technology can be embodied in hardware, such as machines or seeds, or it can be in the form of software, knowledge, information and skills. These differences in turn affect the manner in which it is controlled and distributed as either a public or private good. In addition, complementary skills or assets may be needed to use the technology or gain access to it. Recent asset-based livelihood frameworks (e.g. Carney (ed), 1998) are noticeable in not explicitly including technology and this in part reflect the dilemmas in categorising it as an asset, or as part of the broader facets of the economic system and environment.

3.4.3 Systems and combined approaches

Many authors have attempted to develop more holistic frameworks for understanding the terms of transformation, some of which are summarised in Table 6.

Table 6 External factors that affect the returns from livelihood activities

Framework, model	**External mediating factors**
Decision-maker paradigms	
Production economics	Technology, price
Sen (1981)	E-mapping shifts, e.g. unemployment, terms of trade, prices, social security
Swift (1993)	Production failures, exchange failures, seasonality, disasters.
Davies (1996)	Natural, individual/household, livelihood system, moral economy, market and state
Scoones (1998)	Institutions
Carney (ed, 1998)	Transforming Structures and Processes (TSPs) (including levels of government, private sector, laws, policies, incentives, institutions); Policies Institutions and Processes (PIPs); vulnerability context.
Boserup (1965)	Land pressure, markets
Hayami and Ruttan (1970), Hayami and Kikuchi (1981)	Changing resource constraints and commodity demand lead to new production technologies and resource management institutions
Kabeer (1990)	Distribution of usufruct ownership; natural environment; customs, conventions, ideologies; market and non-market forms of exchange
Kabeer (2000)	State, market, community, household

At this point it is important to make a distinction between structural determinants of differentiated terms of transformation – based on relatively fixed physical or social markers (class, location) and more proximate, variable factors. The former are explored in Section 5 when we consider how social processes of access, production and exchange are mediated by class and political factors. The latter are explored in Section 4 in which we consider how livelihoods units and their systems respond to shock and stresses.

For now, however, we consider how multiple asset sets and means of transformation are determined by the needs and desires of individual decision-makers, or otherwise. This brings us to the third and final element of our micro-economic model: preference.

3.5 Preference, choice and well-being strategies

As we have briefly discussed above, neo-classical economics visualises the economy as an aggregate of atomistic individuals who may be both producers and consumers and who make their optimising choices in pursuit of their respective returns. Each producer, given the technological possibilities, chooses the profit maximising activities and outputs at the going prices and so does each consumer given the budget constraint and scale of preferences.

3.5.1 Utility and livelihood strategies

This scale of preferences is conceptualised through the model of utility, encapsulated for instance in Becker's (1965) 'Z-goods', i.e. the values released from consumption which provide the individual with utility. These models assume that if the exact utility function – or set of utility preferences – of that individual can be defined, so too can the allocative behaviour, or 'livelihood strategy'. The model also assumes perfect rationality in livelihood behaviour and the allocation of resources in order to maximise utility, though admits the possibility of a more 'bounded' notion of rationality to explain non-economic preferences.

In peasant farm household economics the utility functions tend to be generalised with respect to common, known preferences of peasant households and the meta-preferences are assumed to be those of 'rational economic man'. Profit-maximisation, risk mitigation and drudgery aversion are three key objectives (Ellis, 1992) which are often used in agricultural models. However, the utility function is ultimately mediated by the individual perceptions, aspirations and beliefs and are thus governed by the diversity of human personality and culture. This area of study lies in the realm between anthropology and psychology and provides a useful analytical tool for examining specific livelihood strategies and the objectives and logic that drive them.

The concept of a single, unchanging motivating function in life is a major limit to the utility model. Instead, a decision criteria matrix helps to provide a framework for thinking about the multiple and competing objectives that may occur consecutively in decision-making. Such a framework was developed by Davies (1996:269) in order to understand the specific livelihood coping strategies adopted in rural Mali following drought. Factors that proved important to consider included the levels of: returns; risk, reliability and sustainability; and drudgery, health, legality. Each of these corresponds to a preference in our utility model or decision criteria matrix. But more structural factors also determined the boundaries of 'feasible choice'. These included the time and location, the gender and age composition of the household and institutional and cultural rules and norms in force.

3.5.2 Multiple livelihood strategies

We can use such a model to consider the common occurrence of multiple livelihood strategies in many rural areas, as discussed in Section 4. Thus three broad factors help to explain how economic decision-making leads to such multiplicity in livelihood portfolios based on maximising returns and minimising risk:

1. **Predicting risk and uncertainty**. Allocation of resources across several, non-co-varying sectors helps to spread risk and manage uncertainty (e.g. Alderman and Paxson, 1992; Dercon and Krishnam, 1996).
2. **Responding to variability and discontinuity**. In contrast to *ex-ante* insurance strategies to manage risk, multiplicity is often an *ex-post* coping response to variable production factors (e.g. drought, pests) or institutions of exchange (e.g. casual labour markets and uncertain product markets). These may be in the form of shocks, trends or cycles (Maxwell, 1984). It is important to emphasise that secure, full-time occupations simply do not exist for most people in the developing world, however much people desire them, and that even if they do, the returns or work available are often not enough to satisfy basic needs, thus forcing diversification into other activities to make ends meet.
3. **Building on complementarity**. For instance, home-based, part-time work may complement home-based, part-time domestic chores; own production may complement processing or trade; capital raised in labour markets may complement agricultural investment; urban contacts made during urban work may facilitate trade.

Multiple preferences and well-being

Multiple livelihood strategies have generally been examined against people's preferences for income and risk. The final outcome, however, depends on the 'trade-offs' between one value preference and another, and the perceived levels of risk and return. Individuals make trade-offs and, particularly at the level of the household, outcomes may be negotiated through conflict or bargaining. Trade-offs may vary by age, gender, religion and class, being both culturally and individually determined.

Chambers (1995) argues that notions of *well-being* allow people themselves to define the criteria of a good life that are important to them. This may result in a range of outcomes including self-esteem, meaning, security, happiness, power, as well as more conventionally measured material concerns.

Stated like this, well-being appears to have many similarities to utility. However, utility presupposes that people have the full power of agency to make logical choices and construct economic strategies. Well-being is a purely descriptive term with no underlying assumptions about the feasibility of achieving the desired outcomes, nor the constraints that may act to limit choice.

Cultural dopes, rational fools and constrained choice

While preferences are an important part of understanding livelihood strategies and behaviour, constraints also limit the set of *feasible* decisions, choice or options (and may generate 'push' factors). These include economic constraints, such as the feasible returns and risks that different enterprises offer, the very severe factor market failures in rural areas and the scarcity of full-time secure employment. However, they also include institutional factors such as the gendered nature of domestic, home-based work. These culturally determined meta-preferences affect what Kabeer (2000) calls *admissible* choice, as distinct from *feasible* choice, which relates only to imposed economic constraints.

This last issue lies at the heart of different approaches to understanding the behaviour of people in rural societies. On the one hand, rational choice theorists (including neo-classical economists, public choice political scientists and pyschologists) see a world of individual, rational decision-makers, selecting from available choices and options around them. On the other, structuralists (including some sociologists and classical political economists) see the world as classes of people whose behaviour is explained by much larger cultural and sociological forces that swamp individual agency.[26]

The term 'strategy'– whether push or pull – is controversial, highlighting as it does the rational choice theoretical perspective of much recent writings about livelihoods. There is a strong feeling that 'strategies' overstate people's ability to act as agents, rather than having to react as victims of circumstances (Rakodi, 1991). Analysis of livelihoods need to distinguish between explicit strategies on the one hand and reactions to systems of power and situations of crisis on the other (Beall and Kanji, 1998).

One way of achieving a balance between the extremes of 'rational fool' and overdeterministic 'cultural dope' (Kabeer, 2000) is to begin with the theoretical frame of rational choice, but work to define more clearly its limits. Three limits are immediately evident.

26Class analysis, political economy or dependency theories have declined in recent decades in favour of what Fine (1999) calls the colonising tendency of neo-classical economics creating 'new household economics', 'new rural economics', 'new institutional economics' and 'new political economy'.

First, while peasants may be ‘poor but rational’ (Schultz 1964), as Kabeer (2000:22) argues, that rationality may well be ‘bounded’, for instance, by meta preferences that create an ‘ought’ factor in social choice. Thus preferences, choices and trade-offs are much influenced by race, age, gender, marital status, individual preference, parenting, etc. All of these impose subconscious patterns of behaviour that may not make economic sense if compared to more limited utility functions. While individuals retain choice, it is mediated by cultural meta preference and individual, personality-based preferences.

Second, a distinction needs to be made between proximate and structural economic constraints (and opportunities). The rational choice model recognises budgetary constraints and, to a limited degree, problems of inequitable initial endowment. While the neo-classical model can incorporate, a limited way, some inequalities in resource endowments into its model, and some forms of market imperfection (monopoly, transaction costs, etc), ‘it cannot give space to systematic discrimination which occurs in the exchange system originating from social distinctions, such as class, caste or sex’ (Bharadwaj, 1994, 360), which provide permanent limits to opportunity for demarcated swathes of society.

Third, if choice is limited too far – whether this be by bounded rationality, proximate or structural constraints – then the envelope of viable choice may shrink until there is only one feasible option remaining. While in theory there is always a choice, in extreme situations – facing either destitution or prostitution; sale of land or starvation – the choice is forced and limited by extreme lack of options and may become ‘compulsive’.

It is to these three issues that we turn in Section 5. Before this, however, we consider how the dynamics and variability of the wider physical and social system impacts upon livelihoods decisions and outcomes.

4 Adaptable Systems: Vulnerability, Coping and Diversification

Several important themes in rural livelihoods have their roots in systems approaches to the analysis of rural change and transformations. Such approaches view the 'livelihood system' as an essentially stable inter-dependent system of natural, physical and demographic factors that respond to external forces of change. The approach has its limitations, particularly in its assumptions of no internal dynamics or endogenous forces of change, such as class relations or other social conflict. However, despite its limitations, it is relevant to our central enquiry: namely the changing patterns of rural opportunity and vulnerability and the social and physical processes underpinning access and therefore well-being. In particular we will examine ways of conceptualising such change, particularly in relation to the decision-maker priorities of risk-mitigation and profit or opportunity maximisation. First, we begin by considering the nature of exogenous forces that apply stresses to livelihood systems. Then, building on the micro-economic framework developed above we consider how these forces might be transmitted to multiple or individual units in the system. Thirdly we ask how people are likely to respond and what this means for well-being, poverty and economic mobility.

4.1 Exogenous forces and mediating factors

4.1.1 Human versus natural forces

Central to studies of rural systems has been the distinction between natural and human-induced environmental change. Examples of the former include cyclones, floods, drought and other 'acts of God' in which the role of human agency is relatively minor. Examples of the latter include changes in technology, government, public policy and major market forces. Of course, the distinction between natural and human-induced environmental change is often blurred by contradictions between knowledge (what is true) and perception (what one believes is true).

4.1.2 Shocks, trends and cycles

Both human and natural forces can have variables time-frames, and degrees of predictability. And exhibit shocks, trends and cycles. A **shock** is a relatively short acting stress, such as drought, epidemic, or fall in output prices. However, the effects may be long-lived, or a series of individually minor impacts may 'ratchet up' into a major one over time.

If shocks are more gradual, then they become a **trend**, such as urbanisation, structural transformation, population growth, resource degradation, the distribution of new technologies or the development of new markets and demand. Trends may be less devastating in the short-term as they provide livelihood systems with time to assess, prepare and adapt, but the impacts are likely to be just as permanent.

Cycles, particularly those associated with seasonality, are more predictable, though they are often modulated by trends and shocks (e.g. particularly bad or good rains).

4.1.3 Zones of impact

An external stress, or hazard, will not affect every system, or every social actor or economic unit in that system. Agricultural decline, whether through drought or declining terms of trade, is likely to affect most rural people; agriculture is the lynch-pin of many rural economic activities. Other changes are mostly targeted to particular livelihood groups and socio-economic classes.

4.2 Risk, diversification and insurance

The study of how rural people perceive and respond to risk goes back several decades. The economic perspective focuses on the subjective probability attached by individuals to a particular outcome occurring, and the subsequent ‘management’ action that usually involves modifying allocation of critical factors of production in order to minimise losses (cf Ellis, 1998). The social and institutional perspective focuses on the manner by which traditional rural societies mitigate risk through societal groupings and relations. Concepts of risk are implicit in more recent writings on vulnerability that have developed in parallel to the coping literature (e.g. Moser, 1998). There are important questions of whether risk is increasing with structural change, as for instance, traditional patron-client employment relations decline, and employment is increasingly casualised (Ruthven and Kumar, 2002).

4.2.1 Risk-management and diversification

Risk management is often cited in the literature as the primary motivation for diversification. (Alderman and Paxson, 1992; Bryceson, 1996; Reardon, 1997; Scoones, 1998; Hussein and Nelson, 1998; Francis, 2000). It is worth recalling the distinction between ex-ante and ex-post strategies (see also Ellis, 1998).

Diversification works to reduce risk by spreading it across several enterprises. In agriculture diversification has long been known. Common forms include enterprise diversification (planting different crops or inter-cropping), spatial diversification (planting across different fields), temporal diversification (staggered planting) and varietal diversification (using lower risk, drought resistant varieties). Other forms of diversification include input diversification (using low risk or lower price inputs), market diversification (alternative sources for purchasing inputs and selling outputs) and vertical integration (diversifying into own production of inputs and own-processing of outputs).

However, such strategies are only effective if the risk does not co-vary across the enterprises in question , which in fact often happens in a rural environment. Many branches of the economy are likely to depend indirectly on agriculture and when shocks come, in the form of drought or falling terms of trade, they are likely to affect all farms. A common solution is to diversify into non-local (urban) labour or product markets.

While diversification may work to reduce risk, it is not without cost. All else equal, diversification across several enterprises is less productive than specialisation in one if the enterprise enjoys economies of scale (increasing marginal returns to factors allocated). Diversification may involve the mobilisation of labour – often kin – over sectors and space and this can incur significant costs of supervision and acquisition of information (e.g. Francis, 2000).

4.2.2 Risk, insurance strategies and the moral economy

Insurance strategies are another form of ex-ante risk management. Formal insurance is rarely available due to the co-variant nature of risk in rural areas, high transaction costs and moral hazard. Credit schemes often substitute for insurance and aid consumption smoothing, and are more widely available, though micro-credit schemes can have severe restriction in the use, quantity and timing of funds available.

More common – and traditional – strategies involve investing in assets, stocks and savings such as stocks of livestock and food, jewellery, cash or household durables (Devereux, 1993; Carter and May, 1999). However, they can be inefficient forms of self-insurance when set against the opportunity cost of lost investment. In addition co-variate risk can lead to falling asset prices during distress sale periods. Further, the much stronger position of rich producers during a production shock allows them to buy up assets at rock-bottom prices, with serious implications for post-crisis equity.

Other informal mechanisms involve 'investing' in social capital by building up goodwill in times of plenty in the hope that this will be repaid if bad times come. These may involve building vertical social ties, between a richer patron and a poorer client or 'horizontal' ties between individuals of kin groups of similar socio-economic status. New capitalist orientations may be causing patrons to ignore this moral obligation.

4.3 Coping strategies

Should a shock or stress challenge the basis of a livelihood, then it moves into 'coping' strategies, which are short-term ex-post efforts to support the basis of the livelihood while the stress is present (Davies, 1993).

The concept of 'coping strategies' evolved during efforts to explain how households and individuals adapted to crises (see for example Davies, 1993, 1996; Swift, 1993). The initial suggestion was that livelihoods changed in discrete stages in the run up to crisis and as the impacts deepened. This was welcomed as a means of modelling and thus predicting events such as famine. Despite practical difficulties and some criticism of the theory (cf. Davies, 1993), the term has been mainstreamed into donor thinking such that the 'ability to cope with and recover from shocks and stresses' is a critical component of a 'sustainable livelihood' (DFID, 1998).

4.3.1 Three types of coping

Typically there are three potential components to a coping strategy based around assets, activities and needs or preferences, equivalent to the three main elements of the micro-economic model. Coping at preference, need or consumption level typically involves (Devereux, 1993) consumption diversification by changing diet or inputs to cheaper or more plentiful item, consumption reduction by rationing, or consumption reduction by reducing the number of consumers (e.g. by loaning livestock or sending family members away; see Table 7 for examples)

Coping at asset level typically involves liquidating stores, eroding productive assets (in extremis), calling down informal claims (e.g. through kin networks and moral economy) or calling down formal claims (e.g. though the state or financial services) (Swift, 1993). Coping at activity level can involve working harder or longer hours at existing activities or diversifying into new economic activities protected from the original shock or trend.

Table 7 Consumption-based coping strategies

Consumption modification coping strategies	Examples
Consumption reduction (rationing)	Smaller portions Fewer meals Fewer snacks, street foods
Consumption diversification (change diet)	Less preferred varieties Wild foods Less nutritious diet
Reduce consumers (change household size)	Wife returns to father Children sent to relatives Male migrates temporarily Daughter betrothed Triage

Source: Devereux (1993)

Detailed economic analysis of the household coping behaviour can be found in the recent literature on consumption smoothing (Alderman and Paxson, 1992; Morduch, 1995). A central question in this literature relates to the efficiency and equity of consumption smoothing in relation to needs for *income*-smoothing insurance.[27] From an efficiency perspective, studies find that households are able to smooth consumption at a lower cost than the actuarial cost of income-insurance (e.g. Binswanger and Rosenzweig 1984). Yet from an equity perspective the costs of such consumption smoothing are higher for the poorest and, related to this, the poorest are more limited in their ability to smooth consumption. Thus vulnerability is differentially distributed within communities according to asset and income levels.

4.3.2 Impacts of coping

Coping 'strategies' that are not part of a pre-planned insurance or mitigation plan are often taken up out of want for any alternative and tend to be high cost. Often they involve running down productive assets, often in unsustainable ways, and leave people poorer and more vulnerable than they were before, especially if they have to be used over long periods (Davies, 1993).

Consumption moderation, rationing or austerity measures have an affect not only on short-term financial and personal well-being, but also on longer term productivity and security, as when, for instance, food intake, medical care, or school attendance are reduced.

4.4 Vulnerability and capability

The degree to which a livelihood is able to insure against or mitigate risk, or to cope or adapt after a hazard, is central to our understandings of poverty and opportunity. Recognition of the dependence of internal livelihood components (e.g. assets, activities and consumption) on external, often variable factors paved the way for the development of the concept of vulnerability. There is some debate as to whether vulnerability should be seen as purely an internal property ('structural'; 'differential') or both internal and external ('proximate' cf Davies, 1996). Here we find clarity in the proposition that the risk a livelihood faces is a function of external hazard and the (varying) internal vulnerability among households to a given hazard.

27 Note that here income is assumed to be allocated to either savings/investment or consumption. In reality, the distinction between the two can blur. Good food, education and health can be an investment in human capital. Household durables may be considered consumption goods but have a role as assets to be liquidated in times of need.

The structural or internal side of vulnerability has dimensions of sensitivity – the intensity with which the external stress is felt – and resilience – the ability to bounce back or to adapt to change (Blaikie and Brookfield 1987:10).

4.4.1 Resilience, capability and accumulation

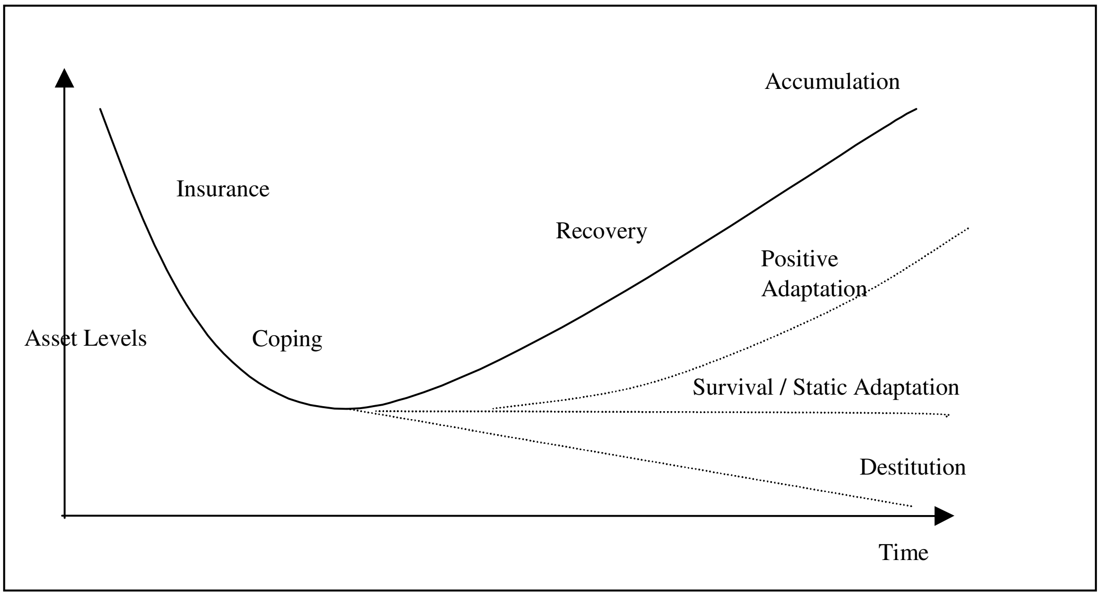
As Holzmann and Jørgensen (2000) note, the focus on vulnerability and coping often distracts us from the ability of households to rebound after a shock and to build new, stronger livelihoods. Thus, the behaviour displayed in coping strategies may be reversed so that as new, more lucrative activities are found or existing activities intensified the higher returns lead to new investments, new assets and improved consumption. The positive and negative adaptation strategies distinguished by Davies (1996: 4) are in the same vein.

Davies (1996: 4–6) also distinguishes between livelihood and subsistence strategies, both of which individuals pursue during times of relative security. **Livelihood strategies**, she argues, ‘imply relative success’, in the sense that they ‘make people more secure and can lead to positive adaptation’, (i.e. reversible strategies which are pursued by choice). **Subsistence strategies** ‘imply relative failure’, in the sense that they ‘result in greater vulnerability, necessitate the pursuit of negative adaptation, and are followed by the poor alone’ (1996: 5).

Framed in this way, livelihood strategies suggest that individuals are able to increase security and well-being by accumulating and investing in various forms of capital. Subsistence strategies are more likely to deplete capital, however, perpetuating a situation in which scarce resources are always being used up, leaving little margin for accumulation.

The balance of inflows to outflows – or sources of entitlement to calls on entitlement – create different classes of surplus or deficit livelihood. These classes determine the level of consumption, the degree of security and the capability to take up new opportunities. However, they also reflect the deeper divisions in society between asset holding classes and, linked to these, qualitatively different terms of access production and exchange. It is these social structures, and the segmentation of opportunity that they create, that we turn to in the next section.

Figure 2 Trajectories of coping, accumulation and adaptation



Source: Adapted from Davies (1993)

5 Segmented Opportunity: Social Structures and Processes of Access, Production and Exchange

5.1 Theories of distribution, production and exchange

A central concern in social science is the mechanisms by which economic goods and resources are distributed. In this section we are interested to understand the structures, relations and processes that determine access to assets and the terms of production and exchange, and thus patterns of diversification and opportunity. Three main bodies of thought exist to answer these questions: neo-classical theory of the market, new institutional economics and political economy.

5.1.1 Perfect, competitive markets

In neo-classical economics, returns to production are determined by the technological possibilities available, the relative factor and output commodity prices as determined by the market in general equilibrium and the budgetary constraint, itself determined by initial endowment. Near-equal initial endowment is a key assumption for perfect markets. When a market reaches competitive equilibrium, it also obtains 'Pareto Optimality', in which limited resources are distributed most effectively between a mass of atomistic profit-maximising producers and utility-maximising consumers and 'the best possible state of affairs' for society is reached. (Just, Huerth and Schmitz, 1982).[28]

5.1.2 Institutional economics and rural contracts

This notion of perfect competition, and thus perfect adjustment, rules out any production- or consumption-related externalities, and excludes all social relations other than those that express themselves through the demand and supply.

But in reality, there are not always large numbers of buyers and sellers, information is not freely available, exchange transactions have costs, there is moral hazard, etc. While monopoly and monopsony are, to a degree, considered as a special case of market failure in traditional neo-classical analysis, these other failures are not. However, these cannot be ignored, not least because a diversity of different production and exchange processes have evolved to ameliorate (or cope with) them.

A fundamental starting point for most institutional theories is that institutions differ from organisations:

> . . . they are the rules of the game of a society, i.e. the humanly devised constraints that structure human interaction. They are composed of formal rules (laws and regulations), informal constraints (conventions, norms of behaviour and self-imposed modes of conduct), and the enforcement characteristics of both. By contrast, organisations are the players: groups of individuals bound by a common purpose to achieve objectives. They include political, economic, social and educational bodies (parentheses in original; North, 1995, p. 23).

Social institutions, then, are the ties that bind individuals to organisations, regulating intra- and inter-organisational behaviour.

28 As was first argued by Adam Smith in the Wealth of Nations in 1776.

Ideas about state intervention highlight the difference between **formal and informal institutions**. As North (1990: 46) has argued, a fundamental distinction here 'is one of degree'. Formal institutions are the explicit rules that govern social behaviour. As such, they have come to depend increasingly upon recognition and enforcement from the modern state.

An important distinction between rules and norms is that rules have explicit sanctions that encourage individuals to act in a particular way. Norms imply a particular form of behaviour, and preferences about whether and how individuals should conform to this. Rules, on the other hand, are stipulations (with positive and negative sanctions), designed to shape social behaviour.

Any study of institutions must of course be specific about the particular types of institutions that affect well-being, in particular those of kinship, community, market and state. Each of these has distinct institutions governing production, exchange and other forms of social obligation and affects access to land, labour, capital, commodities and safety nets.

Rural institutions and contract theory

Market failures, and accompanying institutions, are particularly acute in rural areas. Share-cropping is a good example of an economic institution in which the market failures for land purchase, small-scale credit availability, insurance and timely produce disposal for the tenant are fulfilled by landlords seeking, in turn, to overcome failures in labour availability and costs of labour market supervision.

In more recent years, economists have begun to explore the diversity of exchange systems. Formal modelling has been employed to explore the optimality and the relative efficiency of different contracts and the relative outcome of the bargaining parties (e.g. Binswanger and Rosenzweig, 1984)

Such 'contract theory' explorations have unravelled the diverse objectives, constraints, strategies conditions and consequences for individual parties in such contracts. However, in the pursuit of individual detail they have tended to lose sight of social relations, subsuming these into 'market relations' based on rational objectives and (albeit imperfect) market rules and assumptions of free choice and equal terms. The intrinsic class – and thus power – relations are not used as a conceptual tool, and this has tended to create abstract, pseudo 'classes' against each other as if in class-conflict. Thus the relations are between landlord-tenant, employer-employee, lender-borrower and while the inherent social status and power are implicit, they are not built into the theory or explanation.

Further, such new institutional approaches take an overly static, a historical view of contract formation. In part this is due to the micro, individual nature of analysis. Attempts to understand the complexity have been fuelled further by reductionism, and with this a strong return to methodological individualism. This deprives us of a broader view that can explain the co-existence of various contractual forms in the same space, the relative trajectories of such systems over time, the changing conditions and relations of production which determine these contracts, and the systemic influences that operate upon them.

5.2 Surplus, access and class

Market exchange takes many forms. Social, political and economic institutions are the ways by which it emerges and has meaning. 'There are no impersonal abstract mechanisms at work, neutral among competing claims' (Harris-White, 1996:39). Distribution is socially and politically motivated as individual agents fight for limited profit and resources.

5.2.1 *Surplus and appropriation*

One of the central notions of classical political economy is that of 'surplus', i.e. the difference between gross output and costs of production. For a household the surplus value is the value of labour time and produce achieved over and above all production and reproduction needs. In supply-and-demand general equilibrium analysis, the distribution of this surplus is determined by the commodity pricing process which distributes the spoils of the economy in a Pareto optimal manner among all participants. In political economy, the distribution of surplus is determined by the social relations and patterns of economic power in operation in society at the time. Access to this surplus in turn determines patterns of accumulation and of class formation (see Box 2 for possible routes for appropriating and gaining access to such surplus).

Box 2 Routes of surplus extraction in agrarian economies

Based on a framework for Latin America, Deere and de Janvry (1979) identify seven generic mechanisms for surplus extraction: three based on the land market, one on each of the labour, output and credit markets, and one based on the formal and informal taxation powers of the state:

1. Rent in labour services, in exchange for usufruct right to land for subsistence farming; characterising semi-feudal relations of production.
2. Rent in kind, as a fixed amount or proportion, in return for access to land.
3. Rents in cash.
4. Extraction through wage labour markets, the surplus 'extracted' being the difference between the value of the produce and the combined cost of materials and wage labour. Exploitation increases further if the wage falls beneath the level required for subsistence (of peasant reproduction). This is the dominant form of exploitation of peasantries under capitalism.
5. Extraction via terms of trade which place the value of commodities produced to those purchased. This is the dominant form of extraction from independent peasant producers and may result from cheap food policy, competition with capitalist agriculture, monopolistic merchants capturing high profit margins, transmission of international prices.
6. Extraction through usury, charging interest rates that are above the cost of capital, with indebtedness augmented by the instability of peasant agriculture.
7. Extraction through taxation, through head, land, market, export and income taxes, usually involving a transfer form the peasantry to the state.

Such an approach suggests that social relations moderate patterns of distribution and determine economic behaviour and possibilities, in particular the ability to accumulate and move beyond simple reproduction or survival (as discussed in the previous section). The exact way in which surplus is appropriated and distributed will depend on historical conditions but several different mechanisms might be prominent at the same time, depending on the means of livelihood or economic class. Further, with changes in the nature of the structure of the economy, (e.g. land reform or increased commercialisation of commodity markets), the exact mechanisms of surplus extraction may change from those based on more traditional semi-feudal institutions to those based on provision of marketing and money-lending services, wage labour markets and terms of trade.

5.2.2 *Value and access*

A not unrelated approach considers 'values' or 'benefits' and inquires as to the structures and processes determining access to them and thus their distribution. The access approach 'takes value to be implicit in any act of appropriation or use…since without value, or some benefit, the object would not be of concern. Values can be embodied in things, currencies, other persons, concepts, symbols, utterances and so forth' (Ribot, 1998: 313). In Ribot's study of the charcoal commodity chain,[29] value was measured in profit and accrued in the form of rent. Rents are charged by those

29 For more commodity chain analysis see Harriss-White (1996).

with control over access to material items, as well as on access to labour, opportunities, authorities, markets (e.g. Bates, 1981). Rents emerge somewhere between the ability to control through social sanction and the sheer forces of the market to distribute competitively.

Thus, a fundamental starting point for understanding 'access maps', as pursued in commodity chain analysis, is the notion that markets and market relations are 'embedded' in a wider context of social rules, values and systems of power and authority (Granovetter, 1992; Harriss-White, 1996; Platteau, 1994a; Polanyi, 1957).

Conceptually and empirically, studies of national and global commodity chains involve:

1. the **costs and margins of profit and income** at each stage of production and exchange (Harriss-White, 1996; Ribot, 1998);
2. the **spatial flows of commodities**, investigating both volumes and direction (Harriss-White, 1996);
3. the **social relations of trade**, involving key points of economic power (Harriss-White, 1996; Ribot, 1998);
4. the **resultant distribution of income and profit** (Ribot, 1998); and
5. the means by which social actors maintain **control** over key points of economic power, thereby maintaining **access** to the key points within the commodity chain.

5.2.3 Class and determinants of access and control

An important entry point for understanding access is to consider property. Formal or informal, a property right simply implies a claim on property that others (either with or without the enforcement of a third party) will agree to uphold (Bromley, 1992: 4).

However, one's command over property may vary with one's capabilities (human, economic and social capital) and the 'excludability' of the resource (Ribot, 1998), and one's capability or willingness to follow a particular social rule. Ownership implies a right to use and benefit from a resource, a right to rent and sell the resource to others, and a right to exclude others from enjoying its benefits or reducing its value.

A critical distinction here relates to the ways in which different types of regime affect access (Bromley, 1992: 4–11). Formal permission may be required, for instance, to gather forest materials from state-owned land, compared with private arrangements with landholding families elsewhere, or CPR membership rules.

Berry (1989:13, quoted in Ribot 1998), argues that individuals secure access to valuable resources by "investing" in important institutions, such as marriage, clientage and kinship.

This is not to underplay the importance of economic status, whether in assets, or net entitlement flows, in influencing the qualitatively different patterns of access that arise in rural areas. Power over markets is determined by relative 'bargaining position'. This, in turn, is determined by the initial resource position and reinforced by forces of tradition, custom and social mores. An analytical framework outlined by Bharadwaj (1985:11) is based on four distinct 'classes' of resource holder:

1. Landless and marginal: chronically deficit. Involved in exchange, generally on disadvantageous terms, and enter labour or credit market to secure advances for circulating capital.

2. Small cultivator: on average, a subsistence level of production evening out over good and bad years. Generally involved in exchange on disadvantageous terms.
3. Medium cultivator: produce a year-on-year surplus and participate in markets competitively, responding to relative price changes.
4. Large, dominant cultivators: a substantial surplus, dominate markets by setting terms and conditions for exchange.

We now use this class framework to consider how such patterns of differentiated market access are created and reproduced and how they affect the relations of production and exchange in rural livelihoods.

5.3 Social processes of production and exchange: interlinked markets in rural India

In rural India certain conditions exist which lead to a failure of 'free' market economics and create differentiated access to production and exchange opportunities (Bharadwaj, 1985). First, the peasantry have been sufficiently differentiated, and for long enough, that they cannot be treated as homogeneous. In addition, semi-feudal relations in production and exchange raise questions regarding the neo-classical premise of competitive decision-making. Exchanges not only do not conform to competitive conditions but different exchange systems prevail side by side and the involvement of different classes of peasants in exchange is qualitatively different, both in the nature of market inter-linking and forced or compulsive commerce. Critical to this, there is a direct and systemic link between their class position and the kind of exchange system they are involved in. These exchange systems determine how the surplus generated in the system is distributed among surplus producers and appropriators, and among appropriators themselves. The consequence is that these differentiated systems lead to the co-existence of opposite trajectories, some leading to stability and betterment, others to relative immiserisation and marginalisation. This in turn effects the production relations, the patterns of investment of dominant surplus appropriators and thus the patterns of growth and rural development.

Four key factors then allow surplus extraction to take place (Bhaduri, 1973). First, most farmers are share-croppers, dependent on the landowner for their farming subsistence. Second, perpetual indebtedness reduces the retained share of crop at harvest to well below legal levels (once repayment and interest are combined), and certainly to a level that makes subsistence for the following years impossible. The share-cropper runs the year in deficit and can only survive on consumption loans. Third, the landowner is generally the provider of those consumption loans so he, or his children, are unable to leave the landowner until the debts have been settled. Fourth, the share-cropper has no collateral and can only borrow against his future produce, so he has no access to alternative credit markets. In addition, because he runs the year at a deficit, he is forced to sell the crop immediately after harvest when prices are lowest, yet forced to buy back pre-harvest when prices are highest. His enforced participation in the market effectively excludes him from their advantages.

The ability to interlink the terms of contract of more than one market, in Bhaduri's case the land and credit market, are central in explaining the ability of dominant economic agents to impose exploitative conditions despite the (albeit highly imperfect) competitive market forces in operation. Such interlinkages often include:

- Land-labour: tenancy contracts include underpaid labour services. Terms differ depending on relative tenurial status of landlord and tenant.
- Land-credit: landlords act as creditors and stipulate types of crops to be grown
- Moneylender-trader: output bought by trader or manufacturer at lower rates.

The power of the dominant party to exploit in an inter-linked market is much more than in markets taken separately. First, in any *one* market, there may be limits to exploitation, due to traditions, conventions or economic factors. Thus there may be traditional limits on the size of the share a tenant must give to the landlord in sharecropping. Second, the weaker party loses any option to exercise choice in other markets due to commitment in one.

Finally, the weaker party's economic advantages in the system may diminish. Commercialisation may increase the exploitative element of earlier relations but weaken the patronage element (e.g. Breman, 1974; Ruthven and Kumar, 2002). For instance, money contracts and cash rents lead to shortening of leaseholds and tenant switching.

All these factors mean that the type and degree of choice in one market influence the feasible choices available in another, and generates 'pauperising' participation in a commercialised output market through dependent relations in undeveloped, non-competitive, semifeudal land, labour and credit markets. This 'forced commercialisation' in turn leads to 'encumbered freedom' and restricts the patterns of market participation, production and income, and hence livelihood options (Bharadwaj, 1985:14). Although a market participant might appear to be making free choices in line with the neoclassical economics paradigm of equal, independent, market actors, in reality, the more markets are interlinked, the more constrained is the set of choices s/he faces.

5.3.1 Markets and stages of development

In the conditions described above, output market are often more (and more quickly) commercialised than land, labour or credit markets (Bhaduri, 1973). In general, the effect of inter-linkages on the pace and process of development depends on the degree of initial inequality and differentiation. Where technical or commercial improvements are introduced by the state into semi-feudal exchange networks, this almost invariably reinforces patterns of accumulation and extraction, despite the rational poverty-reducing affect of the technology, opportunity or innovation (Bharadwaj, 1985:20).

5.3.2 Agrarian structure, technology and access to opportunity

In agriculture, new technology transforms the relationship between the costs and benefits of production, producing a more efficient means of accumulating wealth. Starting from a comparative advantage in productive capacity, 'early innovators' acquire new technology and enjoy its benefits before their competitors.

Arguments from a political economy standpoint are rather different from this 'rational choice' perspective: individuals with wealth and status tend to be well-placed when it comes to adopting new technologies: they have better connections with sources of information and capital, and are less risk averse than their poorer neighbours (Boyce, 1993).

In India, high yielding varieties (HYVs) of grain were allocated in favour of farmers with good 'initial conditions', such as productive soils, large-scale irrigation networks (provided largely by the British) and secure land title (Harriss, 2000b).

Struggles continue between 'forces promoting productive accumulation and those stabilising, perpetuating and reinforcing unproductive investment' (Bharadwaj, 1985:21). The extent to which forces support the former determines the impacts on access and opportunity of any process of transformation or diversification.

6 Rural Transformation, Occupational Diversification and Social Change

6.1 Introduction

This section applies to the Indian context some of the concepts examined above. Its main focus is contextual: it asks what results have been obtained when these concepts have been applied in earlier studies of rural livelihoods.

It locates this discussion within the changing nature of the rural economy over the last few decades, examining how livelihoods have adapted and responded to such changes. In a preliminary way, it also explores the role of the state in influencing patterns of social and economic mobility.

6.2 Broad patterns of employment diversification across India

Drawing on NSS data, Table 8 presents the sector-wise breakdown of the 388 million employed rural workers in 1999–2000 (Radhakrishna, 2002).

Table 8 Breakdown of rural employment, 1999–2000

Sector	Total workers (millions)	% of total
Agriculture, animal husbandry, fisheries and forestry	238	60
Unorganised non-agricultural sector	133	33
Organised sector	28	7

Source: Radhakrishna (2002)

Radhakrishna (2002) demonstrates that employment in the organised sector increased slowly from 24 million in 1983 to 28 million (of whom some 22 million are in government) in 1999–2000, the major employers being the unorganised agriculture and non-agriculture sectors.

The composition of employment (self-employment, regular salaried employment and casual employment) has been changing. While self-employment is on the decline, casual employment is on the rise. The share of self-employed in the rural workforce declined from 62% in 1977–8 to 56% in 1999–2000, while the proportion of casual labour increased from 30% to 37%. Regular employment marginally declined from 7.8% to 6.7% during the same period (Radhakrishna, 2002).

The decline in self-employment is largely attributable to a declining share of the (mainly self-employed) agricultural sector in the rural workforce, from 83% in 1977–8 to 76% in 1999–2000, with an increase in the rural non-agricultural sector from 17% to 24% over the same period. The annual growth rate of the workforce in agriculture was 1% during 1977–99, while in the non-agricultural sector it was 4.3% during 1977–88 and 2% during 1988–2000. Also, the proportion of rural households receiving incomes from cultivation fell from 62.4% in 1987–8 to 57.1% in 1999–2000. The aggregate data suggest factors which are 'pulling' people (mainly better-off households, mainly in the better-developed States) into the non-farm economy (whether rural or urban) and those which are 'pushing' people out of agriculture (mainly poorer households, mainly in economically weaker areas). The long-term decline in public investment in agriculture (requiring more private investment in, e.g. pumped irrigation) is likely to make agriculture more expensive and risky outside the canal-irrigated areas, and so will add to the 'push' pressures. Overall, there is a tendency for employment potential in the non-farm sector to be higher where agriculture is commercialised, or where the villages are close to growing urban centres. The policy conundrum is that rural areas do not appear to fall into *either* healthy growth in agriculture *or* healthy growth in the non-farm rural economy. Rather, areas exhibit *either* healthy agriculture and non-farm growth, *or* stagnation in both, the exception being villages falling within the footprint of urban centres, which may have a healthy non-farm economy despite stagnating agriculture. Wages and migration patterns tend to follow these trends.

Two findings immediately relate back to earlier discussions: one concerns the notion that the rural economy is a 'residual sector' which simply acts as a pool of more-or-less surplus labour for higher productivity urban-based industries. Dev (2002) notes that since the 1980s, rural wages have been rising, and those in the non-farm economy generally more rapidly than in agriculture. This challenges the 'residualist' notion.

The second finding has to do with modes of employment: there is growing evidence of a reduction in traditional patron-client relations in favour of increased casualisation (Dev, 2002; Ruthven and Kumar, 2002, drawing on NSS data). This has been accompanied by increased wages, but also by reductions in the social protection arrangements offered by patrons, with no apparent increase in the availability of other arrangements. However, the poorest segments of the population continue to rely on wage labour in agriculture, which as an economic sector is growing only slowly and does not have high employment generation potential (i.e. has low employment elasticities, by contrast with construction and transport), so that, despite the low wages there are major problems of under-employment in many rural areas.

Although the fact that on average non-agricultural workers are better-off than agricultural workers does weaken the case for the 'residual sector' hypothesis, matters are more complicated. Chandrasekhar (1993) suggest much more complex non-linear relationships between agricultural prosperity and rural non-agricultural employment: increasing when villages manage to escape a stage of involution but have yet to enter a phase of sustained agricultural growth, and decreasing as they go through a phase of sustained irrigation-induced expansion in agricultural output, and increasing again in the mature green revolution phase when growth of land productivity tapers off and mechanisation reduces the demand for agricultural labour.

There are also problems with the argument that if wages rates are higher in non-agriculture than in agriculture, then the former cannot be a 'residual sector'. The problem is that any wage differential must be caused either by some barrier to entry into higher wage sectors due to skill, location, contacts leading to job access or some other specificity; or be a compensation for harder work or higher expenses such as commuting. Where barriers to entry into higher-productivity occupations are high, movements out of agriculture are unlikely to improve the overall quality of employment.

6.3 Classic studies of rural transformation: forces of change in Palanpur

To understand the dynamics of these broad changes observed through large sample data, more detailed village studies come into their own. A longitudinal study in Palanpur, Uttar Pradesh, between 1956 and 1993, throws light on processes of transformation, diversification and social change. Lanjouw and Stern (1998:118) propose three 'prime movers', or mainly exogenous forces of change. These are:

1. *Population growth*, which has been an important factor of socio-economic change though demographic changes itself (family structure, dependency ratios, etc) have been quite slow;
2. *Expansion of outside employment opportunities*; particularly in urban areas and in the non-farm sector;
3. *New agricultural technology*: including, irrigation, new seeds, inputs and practises; some mechanisation.

In addition several other 'prime movers' are identified:

1. *Terms of trade*: a decline in the price of wheat relative to other commodities has slowed the growth of average incomes, but assisted that of real agricultural wages, given high local consumption levels of wheat.
2. *Government intervention*: has played a limited role, except for credit for agricultural investment
3. *Cultural influences*: through growing links to the outside, urban world, such as the erosion of caste rigidities
4. *Abolition of* Zamindari (landlords of agricultural estates during the British rule), and the conferral of secure land rights on those who used to be tenants

How did this affect different groups? The authors note that 'the incidence of poverty in Palanpur has continued to decline – at a slow pace – since 1983–4…Palanpur is slowly winning battles against population pressure and declining land endowments…But the reduction of poverty is desperately slow, and absolute deprivation remains widespread (*Ibid*:174-5).' For casual labourers, wages for work outside the village increased at 2% p.a. from 1957–84 and thereafter accelerated. Agricultural labour wage rates rose too, with wheat wages rising from 3kg to 8kg per day over the 35 years (helped by a large increase in all-India wheat production). Interestingly, they note that wages stagnated until 1974–5 when a good deal of land-augmenting technological change had already taken place. This story fits with other research showing that that real wages showed no significant upward trend until the 1970s and 1980s when they rose at 3% p.a. (e.g. Lipton, 1983; Lipton and Longhurst, 1989; Walker and Ryan, 1990:126).

However, within this overall upward income trend, Lanjouw and Stern (1998) reported significant variations in upward and downward mobility. Most important among these were:

- demographic events: high fertility rates leading to higher dependency ratios and/or reducing land endowments;
- household partitioning, and lower economies of scale of the resultant nuclear families;
- death, illness, disability, particularly widowing (given restrained property rights, and income earning opportunities);
- inter-generational change, including upward mobility if a son obtains better work than his father;
- wage employment outside the village, which they noted was 'the most important basis of upward economic mobility' (*Ibid:*178) determined to some degree by educational attainment;
- drinking, gambling, or quarrels leading to court cases;
- poor access to contacts and thus inability to diversify, particularly among landless labourers.

Individual attitudes towards enterprise, particularly work attitudes, farming skills and propensity to save, were also seen to be very important. Indeed they claim that the rise of the Murao cultivating caste, and the downward mobility of the Thakur, cannot easily be explained otherwise. This is a point that Walker and Ryan (1990:99) also make and it raises questions about how such attributes can be supported by policy, if at all.

They also make a key observation with respect to the role of the non-farm economy in supporting the poorest: higher class households may have greater opportunities, but may also be more selective. The lower classes, with fewer options, may have to make greater use of what opportunities are available. If the Palanpur evidence is anything to go by, in villages which are still low on the prosperity curve, a high proportion of any increased non-farm employment will go to the poor, and so will be ‘equalising’, by contrast with more prosperous villages where the better off are more fully engaged in the non-farm economy.

Finally, on the role of public services, Lanjouw and Stern (1998: 207) note that ‘the availability of public services and amenities in Palanpur is…only marginally better now than it was at the beginning of the survey period’. Among 18 programmes they noticed a modicum of effectiveness for the three (subsidised credit, land consolidation and water supply) and at least some benefits (if not the intended ones) for two (IRDP, public employment programme/JRY). Particularly striking was the failure to do anything for the disadvantaged classes or castes. They note that all targeted or redistributive elements have failed, and that this reflects two political realities: first, redistribution has not been on the political agenda of any of the ruling parties or coalitions in UP since independence and, second, at the village level, collective institutions and public programmes are comprehensively dominated by privileged groups.

6.4 Changing occupations in the ICRISAT villages of Andhra Pradesh

A longitudinal study of over 26 years of two villages – Aurepalle and Dokur[30] – in Mahbubnagar District in Andhra Pradesh (Deb et al, 2002), arrives at very similar conclusions to those of Lanjouw and Stern (1998) particularly with respect to the diversification of livelihoods across all classes.

It notes how incomes have risen across all classes, but proportionately more among the lower castes/classes. This surprising result is attributable to two sets of factors pulling in opposite directions: on the one hand, agricultural prosperity in the 1970s and 1980s has been replaced by increasing uncertainty as self-sufficiency is reached, international tariffs are reduced (e.g. on oilseeds), the costs of managing pest problems increase on some crops (e.g. cotton), irrigated areas are restricted as watertables are lowered and the risks of not finding water after investing in new tubewells increases, and prices stagnate. For poorer castes, the agriculture slow-down, together with higher population pressures on land, were a powerful motive towards migration. In turn, this has brought back new confidence and skills as well as higher income. But for the higher castes, there are few migration opportunities compatible with their perceived status, and so little to compensate for a slowing of earnings in agriculture. Some evidence from this study suggests a growing confidence in migration similar to that noted from Epstein’s (1973) study villages, namely that migration may have been almost entirely a ‘coping’ strategy in the early period, but subsequently made substantively positive contributions to livelihoods as routes became established, migrants more confident in dealing with the ‘outside world’ and the social capital of useful contacts increased.

6.5 Multi-spatial, multi-sector households in Rajasthan

Jones (2002) presents evidence from a re-survey of a village in southern Rajasthan which he first studied in 1976–7 and then again in 1983 and 1990, together with data from interviews across this time with money-lenders.

As in Palanpur and the ICRISAT villages, he highlights population pressure, agricultural development and opportunities outside the village. But he also highlights the historic presence of diversification in the village, inward migration, growing agriculturally-linked non-farm economies

30 ICRISAT organised the first survey of these in the mid-1970s and either conducted or oversaw a number of further surveys – thus they have become colloquially known as the ‘ICRISAT villages’.

inside the village and, perhaps most importantly for policy, the role of finance and education in allowing access to diversification.

Migration is not just an outward phenomenon *from* villages. This trading and service village has witnessed a large increase in in-migration to the village, largely though officials posted to the village to work in the various government departments: 54 in 2001–2 of whom 16 are resident in the village. Partly as a result of this, trade- and service-related activities within the village, in terms of numbers of retail outlets, virtually doubled from 1976–7 to the present.

Jones (2002) emphasises that occupation patterns, even in 1976–7, were far more complex than those depicted in census data and other official statistics. This was particularly the case for women in the village, 65% of whom were classified by the census as non-workers. In fact, daily budget records showed that women in the village engaged in a wide variety of livelihood activities over and above domestic work. For each household there was a complex pattern of different types of livelihood activities conducted both inside and away from the village. In 1976–7 not a single household earned a livelihood purely on the basis of agriculture and land. To varying degrees, each household had a complex combination both inside and outside the village.

The 2001/2 data shows these trends to have continued with an ever-expanding range of livelihood activities and ever-increasing distances for location of livelihood activities. Whereas in 1976–7, just 11 households had at least one member working in Mumbai, this figure increased to 56 households by 2001–2. Similarly, whereas no households had anybody working in the Middle East in 1976–7, as many as 21 households in the village did have someone working in this part of the world. However, long-distance domestic migration within in the country still involves a very narrow range of poorly paid unskilled activities: in Mumbai working in tea stalls, in Gujarat in construction and domestic service.

Though there is considerable livelihood diversification in terms of location this does not usually mean departure from traditional caste/tribe work for the households concerned. Many of the Panchal (blacksmith) and Derzi (tailor) caste men who are now working in the Middle East are working in areas closely related to their traditional caste occupations of blacksmith and tailoring work.

Certain groups have continued to largely gain a livelihood within the village, e.g. the Jain (trader), Bhoi (gardener) and Bhangi (sweeper) households, though this may be for very different reasons, for instance, the Jains have been able to expand their trading and moneylending activities within the village while the Bhangis have been unable to find employment outside the nearby vicinity. Other castes have very high proportions of households with at least one member working in the Middle East, e.g. the Derzi and Panchal households. Other castes such as the Jogis (mendicants) have a very high proportion of households working in metropolitan cities. Indeed, Jones observes that changes in livelihood diversification over the 25-year period, in terms of location, departure from traditional work and regularity/periodicity of income, have been greatly influenced by the caste/tribe membership of the individual and households concerned.

As in 1975–6, links *between* some of the different communities in the village played an important role in providing employment through long distance labour migration, e.g. many of the tribal and low caste men working in tea stalls in Mumbai are working in establishments owned by households belonging to higher caste groups in the village and district.

Two final important areas that Jones' (2002) study relate to are financial markets and education. The establishment of the village bank had not led to any reduction in the activities of the moneylenders in the village. Nor has money-lending decreased. The increase in long-distance labour migration is reflected in larger proportions of loans advanced to finance travel to Gujarat and Mumbai. The money-lender attributes the reduction in some of his non-lending interest charges to the greater awareness and sophistication of his largely tribal clientele – an awareness and sophistication that has no doubt been positively affected by livelihood diversification.

With respect to education, Jones notes that where a household member within the ST and SC communities has a regular source of income then the education levels of the children are strikingly higher than for ST and SC households without such an income source. This extends to the sending of such children to a private school that has been established in the village. These findings give us important policy leads on how to support positive diversification, through supporting access to human and financial capital.

6.6 Rural transformations: conclusions

This brief, India-specific contextualisation of concepts relevant to diversification helps to highlight trajectories of opportunity and access that may be open (or closed) to the poor. The main findings include:

- A recognition throughout that, although a *necessary* tool, orthodox microeconomic analysis is not *sufficient* for understanding how and why people do or do not diversify. Risk levels are high and choices constrained, and rarely do the poor act as 'free agents' or take decisions purely on economic grounds.
- The rural economy (both farm and non-farm) is not a 'residual' operating at some low-level equilibrium, serving merely the survival of a pool of labour eventually to be absorbed into (urban-based) industry. It offers real opportunities, both in itself and as a base for circular or other types of migration, but access to these opportunities is constrained in terms of caste, class and gender, and to remove these constraints poses particular challenges for policy.
- Official data tend seriously to underestimate the extent of diversification, especially for women, perhaps contributing to insufficient pressure on policymakers to attend to the requirements of migrants.
- Labour relations have become increasingly casualised, providing higher earnings on the one hand, but an erosion of traditional patron-client relations, with little effective modern equivalent to take their place, on the other.
- Migration may be more than just a coping strategy for the very poor, and there is some evidence of a 'dynamic' within villages, in which what begins as a coping strategy eventually becomes a substantively positive part of livelihoods (through not only income but also increased skills and confidence to negotiate) as contacts and routes become established.
- Migration plays this role predominantly for the middle and lower castes – some retain their caste-based occupations, but for many it is an opportunity to break out of these. Upper castes are less inclined to engage in (status-threatening) migration, but incline towards creating multi-locational households in which individuals might specialise but the (aggregate) household be quite diverse. Beyond the Rajasthan village (Jones, 2002), how much evidence is there that migration has given the poor the confidence to put downward pressure on interest rates for informal loans in their home villages, and prompted the inclination to invest heavily in their children's education to help them in breaking out of traditional (caste-based) restrictions?

7 Conclusions

A central question in development studies concerns the nature of economic transformations and how these affect social and political structures and patterns of well-being. Part of the answer will depend on whether transformations are global, national or regional. Taking the RNFE as an example, the irony is that the same infrastructure and technology that will connect rural goods to urban markets will also allow urban goods to compete with those from the RNFE; for many (not all) rural enterprises, the non-tradeability which currently protects them will be eroded. Paradoxically, the similar ‘opening up’ of the global economy may allow the revival of a new RNFE through a restructured, more modern form of rural, small-scale, non-farm production based on flexible specialisation, urban sub-contracting and clustering of economic activity.

A similar conclusion could be reached for diversified livelihoods. In structurally adjusting and unstable economies, flexibility and adaptability are the order of the day. For economies in which neither agriculture nor the non-farm economy provide the prospect of full-time specialisation, multiple livelihoods may be the most appropriate way for poor people to achieve flexibility and adaptability. The structural transformation of developing economies may one day be completed. Until then, diversified livelihoods will persist as a symptom of a transitory phase, and in many countries, this may be a very long transition.

These issues remind us that the study of livelihood diversification is about more than multiple income sources; it relates to the current transformations of global, national and local economies. The implications for rural societies, traditional ways of peasant life and well-being are paramount. Who will win and who will lose? Such questions will continue as key debates for social scientists in coming years.

There are two general ways in which we can address these questions. One draws upon a largely micro-economic understanding of individual preferences and rational choice. A second emphasises the role that institutions and political economy play in constraining the ways in which people choose to pursue their economic opportunities. Each of these frameworks has a contribution to make to the understanding of agrarian transformation and livelihood diversification within the rural economy, but the respective contributions will vary according to the immense variations in rural context over time and space. From a policy perspective, a focus on rational choice alone is problematic in the sense that it generates a rather empty understanding of the ways in which people obtain (or are denied) access to new economic opportunities opened up through economic diversification.

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