

# 3

## Improving livelihoods

This chapter outlines an approach to improving the livelihoods of poor, excluded, and deprived people, and improving local environments. The approach presented here has no generally recognised name, although it has been dubbed ‘participatory environmental assessment’ and also ‘the sustainable livelihoods approach’. However, neither captures fully what is presented here, and indeed what is already being used by some development practitioners. The chapter’s focus is on improving livelihoods and environments through a good understanding of power relations and environmental change, with help from the sustainable livelihoods framework, and through the use of participatory approaches.

Development agencies make choices based on ethics, political analysis, or other factors, and virtually all development agencies aim to alleviate poverty, to reduce human suffering, and to reach better levels of social justice (see chapter 5 for a detailed account of the policies of some development agencies). What is presented here works towards those aims, and is rooted in practical attempts to achieve them, as well as in theories of people–environment relationships and sustainability (see chapter 2). The chapter begins with some case histories of projects in which Oxfam staff and counterpart organisations worked with deprived people, with the ultimate aim of enhancing both local environments and livelihoods.

In section 3.2 the sustainable livelihoods framework is presented. This is an aid to asking the right questions about poverty reduction, livelihood sustainability, and environmental change.

Particularly important in any approach to improving livelihoods and environments is the principle of *participation*. Section 3.3 discusses lessons from social theory and development practice about power relations and interactions between various stakeholders in the development arena, including groups of deprived people, development agencies, government departments, and many other social actors.

## 3.1 Sustaining livelihoods and environments: lessons from practice

### 3.1.1 Urban environments and livelihoods

There are important differences between rural and urban contexts that need to be understood for the development of effective urban anti-poverty programmes. For example, in towns and cities people depend more on markets; housing security is more central to people's lives and livelihoods; there are higher levels of environmental and health risks that are at least partly preventable; there is more social diversity and change; and bad government has a bigger impact.<sup>1</sup> Residents' needs for improved livelihoods thus differ from those in rural areas, but the differences are gradual and not fundamental.

In large human settlements, environmental health (water supply, sewerage systems, etc.), housing rights, and public services are of greatest concern to excluded and poor people. For accessing services and improving (urban) lives and livelihoods, democratisation has become the central concern of citizens' groups and NGOs, as is shown in the following case history from Recife, Brazil.

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#### Democratic space in Brazil

The democratisation process in Brazil in the second half of the 1980s, and in particular the adoption of a new constitution in 1988, created new opportunities for citizens' engagement with processes of decision making. SCJP (*Serviço Comunitário de Justiça e Paz* – Community Service for Justice and Peace) in Recife is an NGO with a long history of providing legal and practical support to citizens' groups struggling for the improvement of their *favelas* (slums).<sup>2</sup> About half the population of this city's 1.3 million inhabitants live in *favelas*. SCJP and its predecessor CJP were important from 1987 onwards in achieving new legislation that defined the terms for citizens' participation in municipal policy-making; but since the 1970s CJP had helped groups who occupied urban wastelands and claimed collective rights to construct houses.

A municipal law was approved in 1990 that formalised the rights of citizens to take part in local governance through referendums, councils, and sectoral committees and associations. Among the plethora of structures and processes that were created was a process of 'participatory budgeting' that takes place in six city-regions that are governed by hundreds of elected delegates. Also created was a municipal 'forum for zones of special social interest' (PREZEIS), with 'citizens' committees for

urbanisation and legalisation' (COMULs), which concerned the urban neighbourhoods settled by squatters, i.e. neighbourhoods that were essentially illegal *favelas*.

Through PREZEIS and the COMULs, an important democratic space has been created where citizens from poor neighbourhoods can operate, with support from NGOs. This space is institutionalised and it is a legal space, in which (for example) land disputes are addressed. Its establishment is seen as a very important achievement for NGOs and citizens' groups. NGOs across the country played a key role in the formulation of the Brazilian Constitution during the 1980s. In Recife, NGOs had already been supporting citizens before these changes came, in particular NGOs with their roots in so-called liberation theology, as promoted by Dom Helder Camara, the former Archbishop of Olinda and Recife. NGOs also played a central role in setting up PREZEIS, and now they have an institutionalised role in the PREZEIS and COMULs. Their role now is that of advisers to citizens' groups and representatives in the many formal bodies. NGOs train residents and employ experts in legal matters and town planning.

SCJP works primarily to create and strengthen housing associations, in particular through legal aid. It accompanies urban communities once they have been legally recognised and the inhabitants can start participating in the many forums that are associated with their newly acquired status. SCJP is one of six NGOs with such a role in Recife, and a recent evaluation shows that its comparatively political approach makes it more successful in ensuring public investment in infrastructure in the communities, compared with other NGOs and associated *favela* communities. It is seen as a very significant achievement that *favelas* have been made legal, that citizens' participation has been institutionalised, that plans are being made for infrastructural improvements, that some public investment has been made, and that the authorities are now really listening to the representations made by marginalised people. Nevertheless, SCJP is also criticised for not making more efforts to overcome differences with the other NGOs and for failing to initiate collective, city-wide action for higher overall investment by the municipal government.

However, ten years of forums, legal processes, and the development of democratic space do not necessarily result in much actual influence for excluded and marginalised people. Their leaders go from one meeting to another, may have to give up their jobs in order to participate, and have little time left to consult their constituencies. Decisions take a long time to emerge, and power-brokering is conducted outside formal structures. Furthermore, NGO staff have in some cases become substitutes for the

citizen-representatives, for example on technical committees; and NGOs have become partly financially dependent on the local authorities. The elaborate systems are now seen by some as a way for the government to legitimise its actions and deal with local tensions, but without much real improvement in poor people's environments, lives, and livelihoods.

Comparatively little is delivered in terms of practical outcomes and public infrastructure in *favelas*; the supply of decent housing and the environmental conditions have not improved much as a result of democratisation. The municipal government's budget for investments in what constitute the neighbourhoods of half its population is no more 1.4 per cent of the total municipal budget, and less than half of this tiny amount has actually been spent over the past five years. The evaluator of SCJP estimates that, at the present rate of investment, the implementation of the plans that are being made by the many committees or are waiting to be implemented would take 124 years to be completed.

Co-option by local politics and administrative systems is one hazard in what is essentially an important step towards the empowerment of *favela* dwellers. In this situation, participation is institutionalised, and politics is central. Behavioural change, participatory tools, and analytical processes facilitated by outsiders with some level of neutrality seem less relevant and do not really appear in the language of NGOs and citizens' groups in Recife, even though they do have the roles of facilitators and enablers. It could be argued that it is in exactly this kind of situation that the ones with power should be targeted for behavioural change. The way to achieve this goal might have to be equally political, and it requires more than just technical support for citizens' representatives.

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Current experience suggests that many development agencies focus their support for excluded and deprived people in cities on services related to (environmental) health (including physical infrastructure) and also on housing, and less so on *direct* support for livelihoods.<sup>3</sup> Development agencies and poor people are concerned about people's capacities, social capital, and people's rights as enshrined in law and as affected by government policies or the behaviour of large-scale industries. Extensive NGO documentation of projects that give indirect support to livelihoods in the informal economy shows a focus on microfinance, technological support, and various types of training and capacity building, organisational development, and support for networks, and also on enabling (local) lobby work. There is a large body of practical experience from infrastructural projects, i.e. improvements to housing and water-supply and sanitation systems, and there is particular

concern for the mitigation of environmental risks from pollution and (for example) mud slides.<sup>4</sup> In other words, urban livelihoods are supported mainly indirectly, and not with physical inputs into production processes.

For example, a workshop on environmental health and participatory research methodologies in Cairo, Egypt, addressed the progress of projects in response to the concerns of the *Zabbaleen*, a community of garbage collectors and recyclers. Their concerns were primarily about public health within their own community, and generally about the social and political conditions for livelihood strategies, rather than about physical production assets. They suffer various types of pollution and waste accumulation in their neighbourhood and they need improved sanitation and supplies of safe drinking water. Their main concerns are that they are denied support from the authorities and feel victimised by the national press, despite providing the city with an important service.<sup>5</sup>

A review of the environmental impact of 68 small engineering workshops in Bangladesh showed very limited impact on the wider environment, but uncovered important issues related to health and worker safety.<sup>6</sup> It was assumed that large numbers of small-scale informal production workshops would have some negative cumulative impact, and it was felt that this needed careful monitoring. That is still continuing, but initial findings do not suggest that there are particular grounds for worry, beyond the occupational hazards posed to the workers. Poor people's urban livelihoods are based on employment and informal trade, besides informal production and processing. The main respect in which they are 'informal' is that they tend to be too small and numerous for governments to be able to inspect and enforce health, safety, and environmental regulations: limited regulatory capacity is more usefully employed in large-scale industries. Improvements – or, rather, reduction of risks – should therefore come from awareness-raising and self-regulation, which is what NGOs such as ITDG attempt to support (see also section 4.2.2).<sup>7</sup>

Analysis of the experience of international and local development agencies related to *urban* livelihoods and environments has identified the following issues, among others.

***Key questions for urban livelihood improvement<sup>8</sup>***

- 1 What are the environmental health risks for a particular group of urban poor, or social actors, at work and at home?
- 2 Which physical infrastructure and technological capabilities are essential for poor people to access in order to ensure a safer environment?
- 3 What are the critical capabilities of poor and vulnerable urban people to enable them to make a living?

- 4 Which social policies, institutions, organisations, and networks play a critical role in enabling urban people to make a living, from petty trade, services, or small-scale manufacture?
- 5 Which policies, institutions, organisations, and networks are critical for achieving land and housing security for poor people?

### **3.1.2 Rural livelihoods: two case histories**

Two rural case histories in which early forms of the sustainable livelihoods framework and a range of other analytical and development tools have been used are described below. The Niassa food-security programme in Mozambique focuses on a number of villages in three districts in the south of Niassa province; and in Vietnam there is a cluster of small projects in Lung Vai, a rural commune.<sup>9</sup> In both cases, agricultural production is of central importance to livelihoods and indeed to the programmes' activities. The presentations follow the structure of the most recent version of the sustainable livelihoods framework, which is discussed in detail in section 3.2. Each case history contains conclusions about project impacts, and in the subsection following these two cases some common lessons are drawn out.

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#### **Food security in southern Niassa, Mozambique**

The current Niassa Food Security Programme (NFSP) was formulated in 1996. It is rooted in Oxfam GB's earlier involvement in the south of Niassa province in Mozambique during and immediately after the civil war, in particular with distributions of seeds, tools, and clothes, and road rehabilitation. There are now an estimated 86,000 inhabitants in the three districts which comprise southern Niassa. After 1994 some staff training took place in participatory needs-assessment and monitoring, and also in the fundamentals of sustainable livelihoods. A review of programme impacts in 1998 focused particularly on the agricultural sector and has subsequently been updated.

#### **Livelihood strategies**

Agriculture is the main livelihood strategy of the majority of people in the districts. The better-off households have prepared sizable fields, on which foods for consumption and some cash-crops are grown. Maize and cassava are the most important staples, but many individual families in all three districts lack staples, are dependent on gifts and *ganbo-ganbo* (piece work), and eat forest foods in at least part of the year. Social-ranking exercises indicated that in 1996 50-80 per cent of households

lacked staple food from their own fields; by 1998 this had declined to 10-20 per cent in some communities, while in others up to 50 per cent of families still suffered shortages. The improvements are largely attributed to the stability that has come with peace.

The rearing of small livestock is being stimulated, but the scale of these activities is still limited – keeping cattle is not possible, because of tsetse infestation. Cotton is the main cash-crop in the region (grown on contract for a large cotton enterprise), and other cash-crops such as groundnuts, maize, and tobacco are also sold in small quantities. Small markets and petty trade have started in the district towns. Some imported goods are coming from Malawi, and excess maize and other products are taken out of the region on bicycles over very large distances, in part to Malawi. Some micro enterprises have been set up, including sunflower-seed processing for cooking oil, for local consumption.

### **Human capital**

In most villages in the district, children have access to basic primary education; but there is no secondary education at all, and boys are in the majority at school. The infrastructure is very basic, and teaching quality very low. Although schools have been established since 1959, most women have not been educated.

The main diseases are preventable, but there is a lack of capacity for the conduct of vaccination campaigns. There is a very rudimentary curative health service in each district, and in every village there are traditional healers and birth attendants. A few of those have received professional training in nutrition practices and attending births. The Mozambican Red Cross has health visitors who reach 15 small communities in Nipepe district with some basic drugs. Similar efforts are made in the other districts, and some new international aid is expected, but the health of the population remains very precarious.

In agriculture the main limiting factor is the availability of labour for opening new *machambas* (fields). The poorer families have less labour available; the least well-off in this respect are young couples who have not yet cleared fields, the recently arrived (who were earlier displaced by war), old and sick people, and single mothers. The poorer families also have limited time to prepare their fields, because they are earning money through *ganbo-ganbo*. There are three government agricultural extension workers in each district who conduct some very basic agricultural training courses and who manage demonstration plots and visit farmers. There is a lack of knowledge about the effects of pesticides among farmers who cultivate cotton, although the foreign-owned cotton enterprise does give some basic instruction when it delivers the chemicals.

### **Social capital**

There is a strongly paternalistic culture, which is reflected in social networks, family structures, and local decision making. About 1700 people in the three districts are members of farmers' groups that were initiated by the NFSP. Of this membership, a minority are women, and women rarely participate actively in community meetings in the presence of men. They do talk and engage with problem issues when working in women's groups, for example on issues related to health. The older women with a traditional role as birth attendant or otherwise are the most prominent in such meetings. Participatory research in 1994 revealed that many of the women had control of part of their household money during the war, when many families were separated; however, research in 1996 suggests this situation has now reverted to normal, i.e. household money is the sole responsibility of men.

The social networks, determined by family ties and traditional structures of governance, do appear to be of critical importance in the redistribution of food produce to the infirm, old, and most needy in the communities. The Catholic Church and some Moslem groups are also important for welfare and service provision, and particularly for spiritual well-being.

### **Natural capital**

The area is thinly populated, tropical humid savannah and dry forest. It is widely agreed that maize harvests in the early 1990s failed or almost failed in two consecutive years, but in 1996/7 yields were good, and the 1997/8 harvest slightly less so. Erratic rain with an average of almost 1000 mm/year is the main explanation for relative success or failure of staple crops; drought stress appears to occur roughly every other year.<sup>10</sup>

There are few fruit trees beyond old mango stands, and the poorest people harvest wild roots and fruits from the forest in times of crisis, especially in the so-called hungry season. Near some of the permanent streams and rivers, people cultivate vegetables and tobacco, but not all communities have access to an all-year water source. Local people clear forest and then cultivate for two or three years, but the less well-off are obliged to use depleted soils – land that has been cultivated for several years already.

Large wildlife, in particular elephants and monkeys, are considered a nuisance, because they occasionally raid fields of staple crops, especially those grown at some distance from settlements. Hunting is not an important activity.

### **Physical capital**

The distances are huge and the road conditions bad, but road rehabilitation is being supported by some international development

agencies. Since 1994, vehicles have been able to enter the remotest district towns of southern Niassa, but some villages are still accessible only on foot. The cotton industry has been re-established in the region with the return of the João Ferreiro dos Santos (JFS) cotton-trading company. They engage with farmers through negotiating contracts, delivering seeds and pesticides, and buying the cotton against prices set by the government of Mozambique. They transport the produce out of the region and have made a very minor contribution to initial road repair.

In almost all communities, there are problems with drinking-water supply from badly protected traditional wells at the end of the dry season (August–November). Some concrete and brick buildings of low quality can be found, but only in the district towns. Electricity is hardly available.

### **Financial capital**

The cotton industry is the most important source of cash income for local people. The Portuguese-owned JFS re-entered the area in 1994 and started discussions with elders and other members of the population about reviving cotton production, which had been an important cash-crop in the colonial era. Cotton production did not restart until the 1995/6 season, increased substantially in 1996/7, but levelled off after that. This is partly due to low prices and a stop in the supply of pesticides to the smallest farmers, who failed to grow sufficient cotton to pay for the costly inputs.

Surplus produce is still regularly exchanged for clothes or other necessities, instead of being sold for cash. Very few farmers have the means to invest in agricultural inputs such as pesticides or fertilisers. Most use cash to buy basic necessities like salt, cooking oil, clothes, shoes, medicines, and materials for schoolchildren. Single mothers have particular problems in obtaining cash. The local markets have been slowly reviving since peace arrived in 1993, but there is still a lack of information about market prices in the towns and the even remoter villages. Traders need information about excess production of tradable goods such as beans and maize (in some years and some villages).

### **Policies, processes, and structures**

There is strong male dominance in the traditional and formal structures. The *regulos* (local chiefs) are the community leaders, *muenes* are local chiefs in charge of smaller units, and *pia muenes* are local women leaders. The government administration works with these traditional leaders. The extension services and development programmes are very male-dominated too.

The most important factor that has affected livelihoods in southern Niassa is the signing in 1993 of the peace accords between the government

and RENAMO – the armed opposition. In 1994 national elections were held, soldiers were demobilised, and people started to return to the villages where they had lived before the war. This meant that people could start cultivating crops, traders could develop their businesses, and the State could start rebuilding its service provision. However, in 1999 politics between the two main political parties of Mozambique was played out at local level, which led to tensions with Oxfam staff. As a result of this, Oxfam had to close down its activities in one of the three districts.

The District Department of Agriculture and Fisheries (DDAP) has extremely limited resources in terms of transport, staffing, and technological capabilities, and the departments of Health and Education and Public Works have also very limited capacity. This means that national, provincial, or district policies in these areas have limited impact. Besides the Mozambican Red Cross, there are several international NGOs and bilateral agencies working in the area, all with financial resources that surpass those of the local government; they therefore wield considerable influence.

The cotton-trading company JFS is the most significant private enterprise in the province. Cotton farming is regulated by the government through minimum farm-gate prices, but the government does not have the capacity for the effective monitoring and control of practices such as the use of chemical pesticides. An important operator in food trading is the parastatal trading organisation IMC, but private traders are gaining in strength.

In neighbouring areas, a significant group of white settler farmers from South Africa have established some very large farms, at the invitation of the Mozambican authorities. The area is as yet thinly populated, and problems related to private land titles and traditional cultivation rights have not (yet) been reported.

### ***Impacts of the Oxfam programme on livelihoods and environments***

**Expenditure.** Over the two years 1996/7 and 1997/8, the actual programme expenditure (including most overheads) was £309,784, or £182 per family of direct beneficiaries, as organised in groups in two years (i.e. an estimated £36 per benefiting family member). This cannot be described as cheap, in particular since the impact of the programme is still limited. This can at least in part be explained by the very high transport costs to reach the areas where the programme works, and because the starting point for the programme was a situation of extremely limited local capacity. The programme will have to continue for several more years before real benefits in terms of improved livelihoods and environmental quality can be expected.

**Recovery from war.** Over the years since the war, the most important impacts of the programme are perceived to be on transport (and indirectly on trade) and on the revival of agricultural production, both of which started as emergency rehabilitation efforts. Distributed seeds were usually open-pollinated varieties, purchased locally, which means that the local genetic stock was maintained and not unwittingly contaminated with inappropriate varieties. Agricultural tools were distributed at a time when markets were incapable of supplying them, and indeed people had no capacity to buy tools even if they had been available. Distributions of seeds and tools reached the majority of the population. Rehabilitation of roads and bridges was carried out with local technology and labour, and with payments in kind and also in money. Most of these impacts were attributable to activities and expenditures that pre-dated the NFSP and what has been mentioned above.

**Farmers' groups and capacities.** Since 1997, the NFSP's agricultural sector has worked through 26 locally recruited animators, of whom initially just three were women, working with the four Oxfam supervisors and staff of the District extension services. Later more women animators were recruited. The NFSP works with 104 farmers' groups in total, comprising an estimated 1700 members, of whom about 27 per cent are women. Within the farmers' groups there is as yet little management capacity, although traditional forms of collaborating do exist. Nevertheless, leader-farmers were expected to take over the role of the animators in the course of the year 2000. Some of the communities with farmers' groups are among the worst-off in terms of agricultural production and food security; others are among the better-off. Assuming a total estimated population of 86,000 people in the three districts, and an estimated family size of five people, it seemed that the NFSP was reaching 10 per cent of the population in 1998 through its agricultural work, and this percentage is rising.

**Sunflower oil and micro-enterprises.** The distribution of sunflower seeds by the NFSP has created some enthusiasm among farmers, partly because they see it as an alternative to cotton as a source of income. Sunflower production has become significant, and seeds are being processed into oil for local consumption. The micro-enterprise sector has, however, not been very successful, because of errors in project design and also because the potential for micro-enterprises is very limited. The programme supplied loans to about 25 people, mostly men, for oil presses and other micro-enterprises. Some oil presses and tools are under-used, because of problems with the supply of raw materials. Following repayment problems, a moratorium on loans was declared in September 1997, but new initiatives to support micro-enterprise and especially trade

were launched in 1999, with the stimulation of markets and trade as a focus for the second phase of the programme (1999-2002).

**Staple crops and production technology.** There is so far not much impact on the productivity or sustainability of staple-crop production that can be attributed to the NFSP extension activities, although recent distribution of improved maize varieties (open-pollinated, short-duration) has been welcomed by farmers. The NFSP has also distributed sweet-potato vines, cow peas, groundnuts, sorghum, and millet seeds. These distributions have helped to revive or stimulate production of those crops, albeit on a limited scale.

Traditional practices include certain ways of inter-cropping, but it is doubtful that nitrogen fixed by the leguminous plants is actually benefiting other plants under current practice (due to late sowing of the beans). The NFSP has promoted alternative planting techniques and established some on-farm variety trials, but the results have not yet been analysed with and by farmers. There are very few small animals and no cattle in the area, which makes it difficult to maintain soil fertility with organic waste and dung.

**Horticulture and livestock.** Horticulture has not developed much beyond a few villages with a good water source, but since 1998 horticultural seeds have been distributed. A very small-scale initiative to distribute small livestock and rotate the offspring in 1994 was assessed and extended to a larger scale in 1998.

**Institutional capacity.** Oxfam supervisors, government extension staff, and animators have attended a number of workshops, covering group organisation, extension, and some technical issues. However, the staff's knowledge of both conventional and low-external-input farming techniques remains limited. Farmer-controlled trials and the introduction of new technologies are still at an early stage. In 1999 a national NGO partner began to participate in the work, which is a promising development.

**Nutrition.** The nutrition-awareness activities of the programme have had very limited impact on dietary habits. The NFSP has identified the need for support in the grinding of maize and other foodstuffs, and is undertaking initiatives in this respect.

**The position of women.** The activities in the agricultural sector have not had much impact on gender relationships. It is still difficult to ensure the active participation of women in community meetings in the presence of men. Anecdotal evidence suggests some changes, but as yet there is no firm evidence of improvements in women's position in the communities. There are significantly more girls attending school, compared with the pre-war years, but boys are still the majority, and anyway this change

cannot be attributed to the programme. The NFSP has made a good effort to include women in the farmers' groups; they are still a minority, but women are clearly present in most groups – a change that is unlikely to have taken place without active encouragement.

**Markets.** The activities of Oxfam and its local counterparts before the start of the NFSP helped to revive trade through improved transport and agricultural production, which is demonstrated by government data. Markets have emerged in the district towns, but not elsewhere in the districts. Local people earn cash through selling small quantities of food crops, like maize and groundnuts, as well as cotton that is traded through a foreign company. There are problems with low crop prices, which are set by traders. There is also a lack of information about traders and prices among the local people, and traders lack information about surplus production. Over the past years, the programme has played a small role in stimulating trade through the communication of prices and product availability, which should improve in future.

**Livelihood diversity and vulnerability.** Many local households have recovered their former production levels, some have started to diversify crops and ventured into small-livestock keeping, and a few are involved in petty trade or micro-enterprises. Maize varieties that can produce under some drought stress have been introduced. Local capacities are being developed, and women's voices are slowly strengthening. The conclusion that vulnerability to adverse events has decreased for many people seems to be justified.

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### **Improved livelihoods in Lung Vai**

Oxfam GB has supported projects in the commune of Lung Vai in Muong Khuong district, Lao Cai province, in Vietnam since early 1994. This work was initiated after a request from the authorities for agricultural development support for a small group of displaced people. In response, Oxfam staff organised a training workshop on Participatory Rural Appraisal (PRA), combined with the use of the sustainable livelihoods framework. Oxfam works through a number of project partners, mostly departmental services of the province and district. In 1994 the Land Allocation Project was initiated, later followed by the Agroforestry Project. Both took a participatory approach. Teachers in the area were also supported, as was the construction of basic facilities for primary education in some hamlets. More recently a programme of support for agricultural extension services was launched. Other activities include a credit and savings scheme for women, support for a small irrigation system, the

building of some small bridges, and a programme for building capacities throughout the province in participatory irrigation management.

### **Livelihood strategies**

A large majority of the population are involved in agriculture in one way or another. Shifting cultivation has declined strongly in the past few years, but farming on steep slopes is widespread. All the households are involved in rice production for consumption, and some are able to sell their surplus. Rice is cultivated in the valleys, and dry-land rice is grown on the hillsides; but farmers prefer the lower fields, where irrigation and paddy cultivation are sometimes possible.

In the 'hungry periods', forest foods, root crops, cassava, and maize are eaten; the latter is also cultivated as fodder. Most households keep livestock (buffaloes, cows, pigs, and sometimes chickens).

Illegal logging from the forests benefits a few people from towns and some labourers from a State Farm which is located in the commune but managed separately and has a separate community of people. Local people are allowed to use timber, but beyond that they do very little forest exploitation or trade in forest products.

There is a marketplace in the commune centre where tradespeople from towns and other communes come, and there is some petty trading by locals (mainly the sale of chickens or wine). From some households young men have left to find work in occupations such as construction, and they send money back to their families.

### **Human capital**

Overall school enrolment has improved gradually since 1993. There are now classrooms for primary-school Grades 1 and 2 in (for example) Bo Lung and Ta San hamlets, which means that the youngest children no longer depend on the school in the main settlement of Lung Vai, where a lower-secondary school was built in 1997.

Despite some adult literacy programmes, the literacy rates among adults remain low in comparison to other parts of the country, especially among women of the ethnic minorities, who often do not speak Vietnamese (i.e. *Kinh*) at all. Some men have undergone basic instruction courses at an agricultural college and have also benefited from technical briefings from the extension service. The provincial Department of Irrigation provides training for two people in each commune (including Lung Vai) to improve local management of irrigation systems, and those two are responsible for sharing what they learn with other irrigators in their commune.

The health infrastructure in the district has recently improved, and the health status of the communities is gradually improving: witnessed, for example, by a strongly reduced incidence of malaria since 1993. There is a 'culture centre' in Lung Vai with access to television, and some of the better-off households have TV sets, although rarely so in the remoter hamlets where various ethnic minorities live. In particular in these communities there is a general lack of understanding of laws and regulations, including the land-allocation process that was initiated in the late 1980s.

### **Social capital**

The population of the commune is just over 2000 people. There are various formal and informal groups in the commune, for example a Water Users' Association, an Agricultural Extension Club, and savings and credit groups. The members are mostly men, but the local branch of the national Women's Union has played an important role in a credit and savings project.

Wives participate in decisions about family spending, and sometimes they market produce and procure necessities; however, in general husbands control household money. Women tend not to go out in the evening, but in the daytime some of the older ones do attend community meetings; only men attend the community meetings that are held in evenings.

Hamlets are represented in commune discussions by their leaders, who tend to be men elected from among themselves. The hamlets tend to be ethnically homogeneous, or dominated by one particular group. (There are in total seven distinct ethnic groups living together in the commune, of which one is the nationally dominant Vietnamese or *Kinh* group, most of whose members migrated into the area in the second half of the twentieth century.) The ethnic minorities have strong kinship ties beyond their hamlets and commune, but tend to be less influential in commune affairs and are generally among the poorer people.

### **Natural capital**

The commune area is approximately 5500 ha, made up of 'barren hills' (usually covered with shrubs) and forest and some low-lying agricultural land, the latter of which is less than 300 ha. It also includes a large tea plantation (the State Farm).

Swidden agriculture on the higher and steeper slopes has caused soil erosion. Twenty families from a neighbouring commune were displaced to a lower-lying part of Lung Vai as a result of landslides caused by a combination of heavy rainfall and reduced soil cover. Swidden agriculture has now virtually stopped. Most families now have Land Use Certificates (LUCs) for low-lying agricultural land.

Some of the 'barren hills' and parts of the forest are now managed by small groups, the commune, or the District. Forest patches continue to be logged legally, and also illegally. Timber and fruit trees have been planted in small stands near homesteads and on fields; they show reasonable survival rates, but few are yielding as yet.

Water is tapped from some of the permanent streams for drinking and irrigation, but this does not benefit all hamlets or households of the commune.

The households in the medium-to-better-off range own two or three buffaloes each (mainly used for ploughing), cows, pigs, and/or chickens. The main crop is rice, but maize, soybean, cassava, and potatoes are also grown.

### ***Physical capital***

School-building, bridge-construction, and irrigation schemes have helped to improve some of the infrastructure in the commune. Most people live in wooden houses; those of the better-off have tiled roofs, and the others have thatched roofs. The poorest have 'temporary houses'. The better-off households have small machines such as threshers and huskers. Some own bicycles, and a very few have motorbikes.

The majority of households can afford to buy at least some improved seed varieties, (subsidised) fertilisers, and also pesticides and livestock drugs.

### ***Financial capital***

The average agricultural production was estimated by the authorities to be 310kg/person of 'rice equivalent' in 1993, rising to 360kg in 1997. This is more than twice what is internationally thought of as the consumption requirement, indicating a fair amount of marketed surplus for the commune as a whole.

The government provides loans and subsidies for seeds and fertilisers. Other sources of money are The Bank for the Poor and allowances from the Resettlement Programme. There is also a small credit and savings scheme for women, managed by the Women's Union, which increased from 33 to 49 million Dong over two-three years until July 1998. Some households receive small war-pensions from the government.

The better-off households are able to save every year, and sometimes benefit from remittances. There are some artisans and petty traders, and there is a fairly well-established regular market in the commune. Farmers sell produce to traders, who transport it to towns farther away – the commune is situated along the road between the provincial capital Lao Cai and Muong Khuong district town.

### **Policies, processes, and structures**

The government introduced a classification system for the land and it issues land-use certificates (LUCs). If the land is not used, the State may reclaim it, but otherwise the arrangement is equivalent to a long-term lease, with the possibility of inheriting the title. The provincial Land Law and Land Management Department regulates and implements the issuing of LUCs, with guidance from the equivalent national ministry. Land-surveying for the purpose of issuing LUCs can now be replaced by consultation with local leaders and reference to sketch-maps. LUCs now feature the names of both husband and wife, whereas formerly only the head of household was mentioned.

The Province Department of Agriculture and Rural Development manages rural extension services and also the bigger irrigation schemes. There are similar structures at district level, but with considerably fewer resources. New national laws enable local farmers' groups to manage small irrigation systems.

The government effectively subsidises the provision of hybrid seeds (especially rice) and inputs such as fertilisers and pesticides. It has improved veterinary care through a better supply of drugs and free vaccinations of livestock. It has reinforced its policy of forbidding the practice of shifting cultivation in forests and the so-called barren hills. There is also strict regulation governing where cows and buffaloes can be kept, particularly at commune level.

### **Impacts on livelihoods and environments**

**Expenditure.** Oxfam has spent about £28 per person in Lung Vai, over a period of about four years, on projects that are directly beneficial to the commune. Further expenditure has benefited staff of Oxfam's (government) partners and some advocacy activities. The total expenditure on Lung Vai and some wider activities was expected to be £123,504 by early in the year 2000, or £60 per capita over five years. This excludes some internal Oxfam overheads. Given the mostly encouraging impacts of the programme, the costs are considered acceptable.

**Well-being and equity.** Some of the poorest families in all the hamlets have progressed from a state of extreme poverty, while almost all of the very poorest have improved their livelihoods, although in some cases to only a very small degree. Many of the better-off have achieved greater improvements than the poorest, and there is now somewhat greater socio-economic inequality in Lung Vai than there was in 1993, both between individuals in the hamlets and between hamlets.

**Production.** Livelihood improvements are at least partly due to new hybrid seed varieties, the provision of loans, and the availability of subsidised fertilisers and livestock drugs (none of which was due to the specific projects, as all are part of general government policy), besides normal life-cycle events (for example children growing up and starting to help on the fields). The subsidised agricultural inputs have contributed to increased rice production, as have improvements in irrigation, which was partly supported by the projects. The Oxfam-supported credit scheme has had some impact on the lives of poor women.

The production improvements carry some environmental risks, and longer-term production and natural resources may be jeopardised. Monocultures increase the risk of pest occurrence, pesticides create resistance (a problem that increases over time), and hybrid varieties (i.e. the subsidised seeds) usually require more fertilisers and pesticides, which implies an increase in health risks. The farmers will become increasingly dependent on these external inputs. Risks of increased pests are greatest for the poorest farmers, who can least afford inputs – and there is a risk that subsidies may be reduced in future.

One positive aspect of agricultural intensification accompanied by improved veterinary care is the development of pig-keeping and the related production of dung, so that a potential for improved composting exists (the use of manure on fields is common practice).

**Land policy.** The government's approach to land allocation has changed dramatically, in Lao Cai province and now also elsewhere in Vietnam, partly on the basis of experience in Lung Vai, where consultation with farmers and the use of sketch-maps was pioneered. Land allocation now formally requires consultations with farmers and leaders, use can be made of sketch-maps, and two names must now be included in LUCs – those of wife and husband – which is seen as offering women a better chance of guaranteed access to land, in the case of divorce or death of the husband. The actual impact of this latter change can however not be substantiated yet. These policy changes were achieved in collaboration with other international agencies and government departments. Scope exists for policy dialogue in other fields, such as agricultural technology development, subsidisation of agricultural inputs and services, and building of capacities in participatory approaches and organisational development at the lowest levels.

**Land.** Several farmers who have benefited from the allocation of land have been stimulated to invest time, effort, and money in the cultivation of trees, and to implement some measures to conserve soil and water, with strong support from the projects.

Permanent cultivation of crops on established fields (on slopes) following a virtual halt to shifting cultivation is due to a combination of stronger policing and the provision of subsidised inputs for wet-land rice cultivation in particular. These changes imply reduced pressures on forest and 'barren hills', reduced risks of landslides, soil erosion, and improved water conservation. The agro-forestry project has supported these changes and made many tree seedlings available; however, the better-off families received more seedlings, for a number of reasons, which suggests that once the trees are mature, socio-economic inequality will increase.

**Forests.** Some forests have been allocated to particular hamlets, an initiative that is said to have reduced conflicts over these resources. Local management with strong restrictions on commercial felling may be expected to bring environmental benefits too, while local people benefit in terms of their own timber and fuelwood requirements.

**The poorest.** The very poorest people in Lung Vai commune do not take much part in the new production methods or environmental improvements. They were not (and are not) responsible for felling trees in the forests, and they were not pioneers in opening new fields on 'barren hills'. Some of them can afford some hybrid seeds and fertilisers, partly because of the subsidies; some have done some successful pig-keeping, but others, lacking access to the veterinary services, watched their animals die. Most managed to plant just a few trees; they have only a limited amount of registered land on which trees would be planted. They have very little land for paddy cultivation, usually insufficient for home consumption.

**Voice.** The research has not produced conclusive evidence that the poorest and most vulnerable families within hamlets now participate more in the affairs of the commune; in fact in this case there seems to have been no change and no impact. Nevertheless, there is some evidence that women participate more readily at commune level. Within households women may have stronger voices, in some cases, but it is doubtful whether credit for this can be claimed by the projects. More generally, people across the commune now communicate with some ease with outsiders; they openly articulate their problems, needs, and opinions. There is more interaction between the most marginalised ethnic minorities and outsiders as a result of the projects. More opportunities have been created for local leaders to voice their concerns to higher-level authorities.

**Institutional capacities.** There has been a significant impact on the attitudes of the staff of service departments. The projects have strongly promoted participatory approaches to extension, irrigation management, and land allocation in the various departments at district and province level. Extension staff now recognise the need for further collaboration

with farmers, in order to achieve technological improvements and higher and more sustainable production. Operational/lower-level staff were trained in participatory approaches and some technologies, but they still lack skills in project monitoring and evaluation.

The commune leaders involved in the Management Board of the agro-forestry project and the women's credit and savings scheme have learned some management skills. Ideas of farmer-to-farmer extension are being developed. Comparatively little capacity building and organisational development has happened in terms of farmers', women's, and youth groups or irrigation-management organisations at commune or hamlet levels, but this is being considered.

**Livelihood diversity and vulnerability.** Most local households have increased their productivity and production levels; many have planted at least some fruit and timber trees; risks of soil erosion have decreased; and some are doing well from keeping pigs. The government subsidises hybrid seeds, pesticides, and fertilisers, which may imply some risks. But institutional capacities are strengthening at all levels, and farmers are benefiting from various extension initiatives. The voice of women and ethnic minorities is gradually strengthening. Prospects of employment elsewhere and of small trade are improving. Socio-economic inequality is increasing, but even the poorest are getting a little more prosperous. Local livelihoods of the large majority are more secure now, compared with the situation five years ago.

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### **3.1.3 Lessons from Niassa and Lung Vai**

There are important similarities – and differences – between the situations in Niassa and Lung Vai. In southern Niassa, ethnicity is fairly homogeneous. This very remote area has strongly underdeveloped markets and a very low population density; literacy and health services and administrative structures are extremely weak; and the country is emerging from decades of war, which still resonate in local political controversies. Lung Vai is comparatively remote from major centres of population, and in fact the area was deeply affected by a border-war with China in 1979, which added to the devastation of the wars before 1975. However, recovery has gradually taken place: relations with China have improved; markets are much more developed; the political situation is very stable; services are present and getting stronger as a result of national economic growth; and administrative structures are highly developed. Unlike Niassa, the residents of Lung Vai belong to seven distinctly different ethnic groups, and there are strong discrepancies between them in, for example, access to education.

### ***Participation and civil society***

Oxfam has worked with local authorities, rather than through local NGOs, over a substantial period of time, but in both cases grassroots groups are emerging, and citizens are more involved in local decision making: a microfinance project operates through the Women's Union in Lung Vai, and in Niassa collaboration has started with a local NGO. Participatory approaches to project management have contributed to this gradual strengthening of civil society and have helped to change the behaviour of some local leaders and officials, in particular in the Vietnamese case. Nevertheless, for involvement of civil society in decision making more needs to be done, including conscious efforts to organise new structures and groups.

A very important interface exists in Niassa where local, traditional leadership structures in villages and districts interact with administrative structures and the political leaders of the two main political parties. In Lung Vai, the administrative structures and political leaders also interact with the leaders of hamlets, which are often dominated by just one ethnic group, with its own culture and rules of authority.

In the case of Lung Vai, there are indications that the voice of the ethnic-minority groups at the level of the commune is heard more clearly, but that gain is modest. The lesson here seems not so much that empowerment is impossible, or that the programmes were not well implemented, but that empowerment is a slow and difficult process, and it requires persistence on the part of the external agency to create forums in which minorities can voice their concerns and demonstrate their abilities. Significant change in the behaviour of project staff and officials is reported from both sites; skills were learned, and analysis of development processes improved. Perhaps the most important conclusion is that *'participation is difficult'*, in the words of an outsider-facilitator.

### ***Women's participation and influence***

The interfaces between local people, local political officials, and higher-level government administrators are strongly male-dominated in both cases. It is where most local power and decision-making are concentrated, and an outsider-initiative cannot and should not attempt to circumvent this fact. The participatory events, monitoring visits, and (participatory) impact assessment in both programmes suggest some progress in terms of the involvement of women in community decision making, but only on a very modest scale. One obvious lesson from this is that any positive change in the status of women, their incomes and food security can be expected only from real change in the behaviour of men (at these interfaces), and indeed from the participation of women in formal and informal decision-making processes. In both cases some success can be claimed in this regard, for example the inclusion of wives'

names on Land Use Certificates in Vietnam; but there is largely unexplored potential for more work with *men* in which gender relationships, and gendered relationships between people and natural resources, would be addressed.

### ***Politics and policy change***

In both cases, the importance of politics is visible in the interfaces between local and higher authorities, district, province, and national government, and between national NGOs and international donors. In Niassa, political wrangling between local representatives of the two political parties (one dominates government) spilled over into criticism of Oxfam staff, and the programme had to withdraw from one of the districts. National and provincial policies, laws, and regulations are important, because they determine the democratic space and the rules of engagement between citizens and formal decision-making processes. However, these rules are not fixed. This was expressed in Lung Vai, where experience of the participatory allocation of land-use certificates (i.e. the implementation of a national policy) led to the acceptance of the use of sketch-maps in the absence of detailed topographical surveys. The lessons for external NGOs appear to be: don't get entangled in local politics, yet do assume that policies and laws can change on the basis of good development work and close engagement with policy processes.

### ***Livelihoods and production***

In both cases, the impacts of the projects on livelihoods and agricultural production were moderately positive. The greatest impacts were from very particular activities, such as seed distribution in Niassa, and in Vietnam through government subsidies on seeds and other inputs, and tree planting supported by Oxfam. Oxfam's most important contribution to improving the livelihoods and production of the poorest in Lung Vai (and indirectly elsewhere) may have been its support for land allocation. Thus the impact studies showed that a strategically chosen intervention, based on good analysis of needs and realities, is more important than aiming to support all the assets and capacities of local people and national livelihood policies.

In both cases, efforts by extension staff to change agricultural practices and enhance farmers' technological knowledge were geared towards reducing dependency on external inputs and improving both the size of yields and the sustainability of production. Obviously more time and very significant resources are required, if real impact on a substantial scale is to be achieved. In neither case did the projects manage to develop a fully effective system, which would have involved training selected farmers and facilitating farmer-to-farmer technology transfer in a comparatively short period; but both programmes have laid the foundations for such an approach (for example, farmers' groups were set up).

### ***Environments***

Natural resources are used by farmers in both cases, and in Vietnam efforts were made to protect and regenerate them, through strengthening local forest management, tree-planting initiatives, and some efforts to conserve soil and water and to discourage shifting cultivation on comparatively steep hills. In Niassa the dominant environmental risks relate to the provision of drinking water (which the project did not address), and the use of pesticides without proper protection and training (in cotton farming through contracts with a big company). In both cases the technological changes include improvements in soil fertility and pest resistance through 'sustainable' or 'low-external-input' techniques. The successes in this respect are modest, as argued above. These alternative techniques must be developed and spread much more widely, partly because the poorer farmers cannot afford agro-chemicals, but also because of the risks to the health of farmers and consumers, and the potential damage to future productivity.

### ***Analysis: towards strategic choices***

Any positive changes and impacts arising from development projects are the result of very complex interactions between different social actors, and should not be seen to follow automatically from participation in project management, the empowerment of women and minorities, or farmers' increased capacities. Development agencies generally aim to improve the plight of the poorest and the excluded, improve social equity, and enhance environmental sustainability. They use their influence to persuade others to adopt policies and practices that serve those goals – they participate, as other stakeholders do. Although synergy from working towards these different objectives can certainly happen, it depends very much on whether the analysis of complex reality has indeed uncovered the most strategic type of intervention from a bewildering array of themes and approaches: work on health, education, farmers' technological knowledge, farm inputs, microfinance, the many government policies and processes that influence lives and environments, the operation of markets, etc. The next section elaborates on the so-called sustainable livelihoods framework, which systematises such themes and can be used as a tool for analysis.

## **3.2 The sustainable livelihoods framework**

This section presents a detailed discussion of the sustainable livelihoods framework, which is referred to in many parts of this book. It can be seen as an analytical framework that structures when and why environmental issues are important in human lives and particularly in relation to livelihoods, but without ignoring the complexity of the human reality. The current shape of

the sustainable livelihoods framework evolved during the 1990s, based on some theoretical work and practical experience, in particular in programmes of the UNDP, CARE, and Oxfam.<sup>11</sup> In earlier versions the framework has been used in the formulation of development programmes and (smaller) projects that were looking for ways to address both social and environmental concerns.<sup>12</sup> Attempts to improve environmental sustainability alone, divorced from the social and economic context, had met with limited success, and it became clear, as the first sub-section here concludes, that there is indeed a need to systematise relations between people and nature, and not just to list environmental categories. The framework is presented in detail in sub-sections 3.2.2–3.2.6. Sub-sections 3.2.7 and 3.2.8 discuss how it can be used in analytical processes, based on experience gained from actual use of the framework and from training staff in its use.

The framework is compatible with the participatory and rights-based approaches to development that are used in the case histories discussed in section 3.1, and which are explained in more detail in section 3.3. The sustainable livelihoods framework is thus part of a wider approach to development.

### **3.2.1 Checklists of environmental issues**

Environmental issues that are important for poor people have been assigned to categories that can be found in the very diverse and sometimes contradictory literature on social and political sciences, geography, biology, or other natural sciences, and philosophy too. Categories usually include various *aspects of nature* (for example trees, forests, and wild plants, land and soil, oceans, rivers, fisheries, and wildlife); *human-made environmental resources* (such as physical infrastructure, factories, and housing); issues of *social relations* (including access to and control over environmental resources); *disasters* (flooding and drought, earthquakes and volcanic eruptions, cyclones, and industrial disasters); and environmental *quality* (water supply and sanitation, energy, and various types of pollution).<sup>13</sup>

People, their surroundings, and livelihoods are affected by global and national change processes in, for example, markets and by changes in environmental phenomena. The driving forces behind local environmental change are partly international: inequality in wealth and power, unregulated consumption of (natural) resources, and unregulated trade lead to wasteful patterns of consumption among the rich minority. Poor people or local decision makers do not necessarily perceive this to be important. Besides local environmental concerns, there are thus wider issues to consider:<sup>14</sup> global *climate change* (consequent on the production of greenhouse gases); reduction in *bio-diversity* and developments in *bio-technology* (with risks for

global and local ecosystems); *atmospheric changes* (for example 'acid rain', or destruction of the ozone layer, with risks of skin cancer and also impacts on certain flora); *pollution* across borders (for example nuclear fall-out, pollution of seas, oceans, international rivers and aquifers); and *depletion of resources* (especially from the global commons, such as fish from oceans, rainforests that absorb carbon dioxide and act as 'sinks' for greenhouse gas, and also fossil fuels and ores).

Attempts to systematise environmental issues and present them in checklists for assessing the potential environmental impact of projects can be useful (see also chapter 4). However, they often result in unwieldy overviews, they lead to an undue focus on the physical aspects of environmental change, or they are incomplete. A synopsis of environmental categories can also be problematic, because classifying or grouping issues is an arbitrary business in the absence of some kind of reasoned relationship between people and their surroundings. Furthermore, any framework needs to be compatible with the analytical concepts of the people who are both the main target of the project and the ones who are expected to participate in – if not lead – the development processes that are assumed to produce improvements in their lives and surroundings. The sustainable livelihoods framework attempts to accommodate the complexity of real life and the entirety of the world-view of deprived people, and it provides an outline of the relationships between environments and social processes.

### **3.2.2 Sustainable livelihoods: definition and diagram**

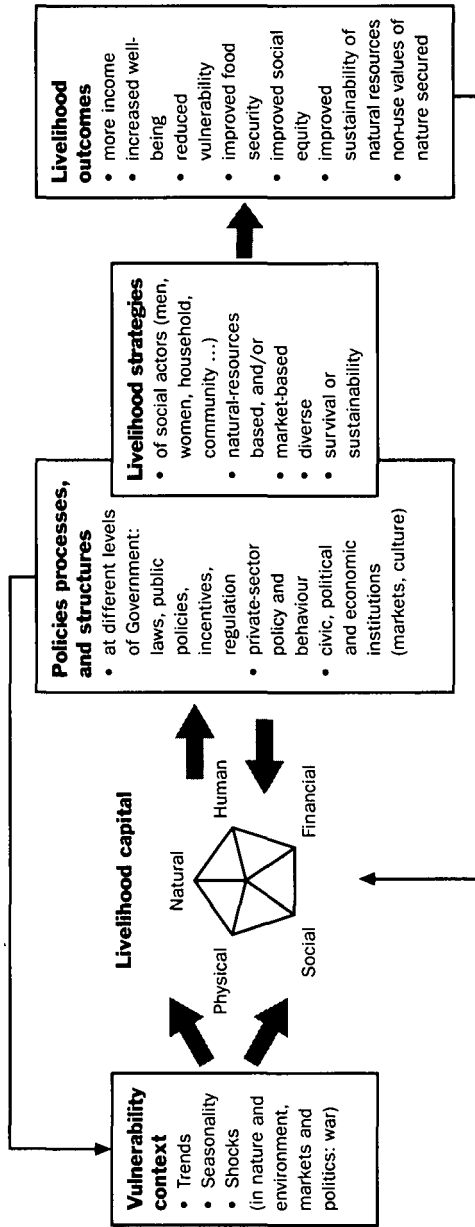
The concept of sustainable livelihoods has been defined as follows:

*A livelihood depends on the capabilities, assets (including both material and social resources) and activities which are all required for a means of living. A person or family's livelihood is sustainable when they can cope with and recover from stresses and shocks and maintain or enhance their capabilities and assets both now and in the future, without undermining environmental resources.*<sup>15</sup>

The sustainable livelihoods framework, as expressed in Figure 3.1, is essentially people-centred and aims to explain (in a necessarily abstract and simplified way) the relationships between people, their livelihoods, and their environments, (macro) policies, and all kinds of institutions.<sup>16</sup>

Obviously this framework is a simplification of real life. It contains some 'feedback' arrows that suggest flows between categories, and there is overlap between two of them, which suggests a strong interlinking; but not all possible links are shown. This picture of the framework should not be read in a 'linear' way, with a starting point and a finishing point, and not even necessarily from left to right, even though it draws attention to *outcomes* at the right-hand side. *Livelihood outcomes* will have a strong influence on both

Figure 3.1: The sustainable livelihoods framework



how *capitals* (i.e. assets, capabilities) are built up, and also on how they are substituted for one another, although the latter happens in particular in the process of pursuing livelihood strategies.

*Livelihood strategies* have been made to overlap with the *policies, processes, and structures*, which suggests an intimate and direct relationship between people's strategies, social institutions, and public policies. The feedback arrow from *policies, processes, and structures* to *vulnerability context* suggests that, whereas people cannot directly influence this context, some inroads can be made through policy change and the collective action of governments and others, in particular in respect of non-natural trends and shocks.

Participatory processes, as discussed in section 3.3, generate a range of perceptions of the different factors of the framework, even in one particular project or community. The framework sets out to provide a common language for development managers and officials, beneficiaries, and also activists, and a way of thinking about livelihoods that accommodates the approaches of economists and environmentalists alike. The framework should be seen as slightly more sophisticated than a conventional checklist of the factors that analysts need to consider before making overall judgements about environmental degradation or improvement in livelihoods and sustainabilities – but no more than that. The framework is generally compatible with the holistic, interrelated, and complex way in which poor people think about their own livelihoods.

As with every tool, it is necessary to keep in mind what it can be used for, and it should be stressed that not every stakeholder in a development process has to understand the full details and workings of it; some actually do not need it. Experience shows that the degree of abstractness and the level of sophistication of the framework make it hard for field-level staff and partners to understand and operationalise: some attempts to discuss it with local people have left them dumbfounded. However, if the design of the framework serves the purpose of broadening the analysis of higher-level development professionals, or specialists in natural-resource management, it will have done its job. In citizens' groups and community meetings, a basic list of general questions and semi-structured dialogues will normally suffice to identify local needs and problems, their causes, and opportunities for improvement: expert outsiders can keep the framework to themselves.

### **3.2.3 Livelihood outcomes and strategies**

Livelihood outcomes are the most normative part of this framework. They can be seen as the overall aims of certain social actors. The more detailed or lower-level objectives of (for example) deprived people and development agencies can be found elsewhere in the diagram. Ultimately, most will agree that well-

being, income, food security, resilience (or livelihood security), and social equity should improve, for both present and future generations. Improving resource ownership and maintaining the quality of the various capitals are one step before that: i.e. they are a means to those ends. However, the achievement of sustainability, perceived as the maintenance of welfare (i.e. maintaining total utility), is ultimately possible only if what cannot be substituted or created is protected: of the five capitals, four can be fully created by human beings, but natural capital (in all its forms and qualities) cannot be so created. Environmental-resource sustainability can thus be seen as essential for intergenerational equity, and as a genuine outcome.

For those who want to go further down the 'strong sustainability' track, another outcome may be the sustaining of aspects of the environment that cannot be considered as capital assets or as material resources for human utility – but which have a spiritual or political value. For example, people may choose to protect a sacred bush in Uganda and keep tourists away from it. 'Eco-warriors' in the UK chain themselves to concrete blocks and bury themselves several metres under a site destined to become an airport runway, in order to mobilise political support. (See also chapter 2.)

The desired outcomes of change processes depend strongly on the dominant group of stakeholders in the analysis or development intervention. For development agencies, gender equity and wider social equity may be a desired outcome of livelihood strategies, although they may be less important for some of the other social actors involved. Securing the symbolic value of a natural feature may be a religious necessity for local people, yet be seen as a waste of opportunity by entrepreneurs. There may also be differences of opinion about the desired income levels and degrees of food security and resilience to which a project should aspire.

The sustainable livelihoods framework has much in common with rights-based approaches to development that stress the importance of improving political, social, and economic rights, but it focuses on material improvements. Some local people, development agencies, or other stakeholders may also aim for outcomes that are not articulated as such in the framework: for example, freedom from violence, increased political participation, improved levels of education or social services, or a reduced incidence of disease and death. These aims (or: outcomes) are subsumed in the framework under other categories, and are thus portrayed as intermediary steps or means towards livelihood outcome. For example, good health and high and equitable educational achievements are essential in enhancing human capital. Other development aims, for example 'reduced risks of injury or death from natural hazards', and 'greater ability to pay school fees', can be seen to follow almost automatically from reduced vulnerability, as a result of improved physical infrastructure or increased income.

*Outcomes* represent the ultimate changes that people, citizens' groups, governments, and development organisations want to achieve, which prompts the word *impact*. Impact is the lasting and significant change<sup>17</sup> that is achieved and that can be attributed to the people themselves, and for example to a development project or to a campaign for a policy change. Opinions about desired changes differ between stakeholders, and the actual impacts of a project or a policy change are normally assessed by means of indicators that say something about them (i.e. outcome or impact indicators). However, actual impacts cannot be claimed to be fully objective either, because perceptions of the quality of change and value judgements about the contributions to change made by one or another stakeholder differ and need negotiating too. And impacts on differing communities, social groups, or household members are not always identical. (See sub-section 4.3.2 for more on the subject of outcomes.)

Individual women and men, households, and communities usually pursue multiple livelihood strategies. These strategies may or may not depend on environmental resources, and they depend more or less on markets and employment in the formal or the informal economy. People can use what is accessible in their immediate environments and they can migrate, for example between cities and rural areas. Their choices depend on their degrees of vulnerability and poverty, and on the assets or *capitals* that they can access. Their strategy may be one of survival, or it may be one of sustaining and improving what they already have and do.

The people who are central to the analysis and who generally also take part in the analysis can be seen (or see themselves) as individuals, households, groups of men and of women, as ethnic groups or age groups, and as communities. Most importantly, individuals and particular groupings are social actors, for example as members of a political party, religious society, or tribal clan. Analysis should combine and contrast the change observed and perceived by various social actors, because people live primarily in these realities, i.e. in families, communities, and peer groups (see section 3.3 for more on social actors and interfaces).

### **3.2.4 Livelihood capitals**

Of primary importance for poor and marginalised people seeking to pursue their livelihood strategies are the necessary assets or *capitals*, including natural resources, infrastructure, money, social capital, and above all their own labour, skills, and knowledge – *human capital*. Different types of capital have been conceptualised by many analysts, with the aim of developing models and theories that enhance understanding of the interaction between

social processes and environmental change. Different capitals are what people have at their immediate disposal, or not, for pursuing their livelihood strategies.<sup>18</sup> They include intangible assets, which can be expressed as *human* and *social capital*, and also *financial capital*, *physical capital*, and *natural capital*. The capitals thus include tangible resources as well as human capabilities to create, use, maintain, and improve them.

The concept of capital implies a valuation of a stock of tangible or intangible assets. A stock is a quantity, and a capital is a quantity with a certain unit-value. A smaller stock in future, compared with today's stock, can thus represent a larger amount of capital, if the unit value has increased. The science and practice of development struggle with quantifying all the values of (for example) human and social 'stocks', and of natural stocks. They are not as easy to count as money, or as easy to value in monetary terms as physical, human-made stocks. This is especially complex, because not all dimensions of human, social, and natural stocks actually contribute to material well-being or utility: it is possible to appreciate and value nature simply for its own sake and, for example, to demand education for spiritual development, which means that time, effort, and money are spent to achieve something non-material.

To make matters more complex: capitals flow. Money and other stocks change hands, and in this process the stocks are valued in some way or another. Furthermore, one capital can be substituted for another, which is what happens in human societies and economies, even though absolute values and quantities cannot easily be ascribed to all the capitals in the livelihoods framework. Nevertheless, societies seem to arrive at ever-changing balances of different capitals through political-economic processes. Aspects of nature are turned into resources (stocks) when they are seen to be useful for human beings, and natural capital is valued when the resources enter into markets (or hypothetical markets, as in 'willingness to pay' assessments – see also section 2.2.4 on environmental economics). Once sold, this natural capital turns into financial capital for the seller, and, once used by the buyer, into physical capital (for example, a tree is turned into a log and later into a bridge). It can also be consumed (for example, a wild plant or fish is eaten); basic consumption is essential for life and reproduction, and thus the consumed fish contributes to maintaining and building up human capital. It can be argued that there are just two 'ultimate' sources of all those capitals: human beings, their labour and ingenuity, and nature (interpreted as the world without human society). Table 3.1 explains the different capitals and gives further examples of how capitals are substituted for others.

**Table 3.1:** Livelihood capitals and capital substitution

<b>Type of livelihood capital</b>	<b>Definition and explanation<sup>19</sup></b>	<b>Examples of substitution</b>
Human capital	<i>Skills, knowledge, ability and potential to labour, and good health, which together enable people to pursue different livelihood strategies<sup>20</sup></i>	Human capital increases with good health services, education and training, which are normally enabled by a strong sense of community (social capital) and need to be paid for with money. Human capital (labour, technological knowledge) forms the core input in the process of (for example) turning steep forested slopes (natural capital) into terraced agricultural land or a human settlement (physical capital).
Social capital	<i>The social resources upon which people draw in pursuit of livelihood objectives, including networks, membership of groups, and relationships of trust. Strong groups are beneficial for group members but may exclude other (possibly very poor and vulnerable) people.</i>	Development agencies do much to develop organisations and institutional capacities. High levels of trust and collaboration (social capital) enable individuals and households to get help from peers and to be obliged to return the favour at a later date, which shows a direct interaction with human capital. Good collaboration between people (high social capital) often means that technologies and management processes develop which are essential for the creation of (for example) better water quality and more efficient use of fossil fuels, i.e. it is essential in the substitution processes between physical and natural capital.

**Table 3.1:** Livelihood capitals and capital substitution (continued)

<b>Type of livelihood capital</b>	<b>Definition and explanation<sup>19</sup></b>	<b>Examples of substitution</b>
Natural capital	<i>Natural resource stocks from which resource flows are derived that are useful for livelihoods.</i> The quality of resources must be taken into consideration when assessing stocks, because (for example) land with depleted nutrients is of less value to livelihoods than high-quality, fertile land. In explaining natural capital, some make a distinction between environmental goods (i.e. stocks) and services (for example pollution sinks). <sup>21</sup>	Livestock is in essence natural capital, even though animals are domesticated. Indeed it can be kept solely for reasons of status or as a stock of (natural) capital, and only be substituted in times of crisis for something else, or consumed. By being sold or used as collateral, it is turned into financial capital (it can provide access to money). If the cow ploughs, it becomes a 'producer good' (physical capital), and when its dung is used to fertilise fields, it helps production too (this requires an input of human capital as well). Natural capital is also used up (i.e. substituted) through the manufacturing of (for example) machines or chemicals (creating physical capital) or the transport of people (contributing to social capital), which all require inputs of natural resources, result in air and water pollution, and use space for manufacturing plants and roads.
Physical capital	<i>The basic infrastructure and the producer goods used to support livelihoods;</i> this can also be called 'human-made capital'. <sup>22</sup>	Physical capital ranges from chemical inputs into production processes to infrastructure such as factories, roads, and water-supply systems. It also includes a pasture planted with monoculture grass, supplied with a drainage system, and maintained by people (i.e. by inputs of human capital, social capital) and inputs like cow dung and fertilisers (also physical capital). The grassland is an area of land and possibly forest (natural capital) that was converted with all those inputs. <sup>23</sup>

**Table 3.1:** Livelihood capitals and capital substitution (continued)

<b>Type of livelihood capital</b>	<b>Definition and explanation<sup>19</sup></b>	<b>Examples of substitution</b>
Financial capital	<p><i>The financial resources that are available to people in pursuit of their livelihoods, including savings and credit.</i></p> <p>This includes flows as well as stocks, and it can contribute to consumption as well as production.</p>	<p>Financial capital basically represents other stocks, i.e. natural or human or other capital that has been converted: it is an intermediary in all kinds of substitutions (transactions) between the other capitals, and in that sense represents wealth and utility. It usually takes the form of money: paper, coins, or numbers on bank accounts that derive their value from trust in the markets, banks, and State institutions. Savings can also be accumulated in (for example) precious metals (on display around our necks or not), or in what is essentially one of the other capitals, like livestock. In that case, payments become 'in kind', and we talk of barter trade.</p>

### 3.2.5 Policies, processes, and structures

The stocks or capitals represent an endowment, in other words a quality that is represented by them which, like a talent, may or may not be used. This endowment of the capitals, this promise of positive benefit can be turned into a real benefit for poor and vulnerable people only if they can *claim* it, i.e. if they can effect their right to make use of it. This means that the sheer existence of a capital, whether social, human, physical, financial, or natural capital, is not enough, even if its quality is high. Legal rights to capitals are important, but in themselves are not sufficient to ensure improved livelihood strategies either. Individual people, households, and certain groups or classes of poor and vulnerable women and men must actually access capitals in order to turn endowments into real livelihood and 'environmental entitlements', through their knowledge, skills, and in particular the social institutions that mediate their claims.<sup>24</sup>

Of central importance in claiming rights are local, national, and international institutions like markets, the system of governance and policies of a country, its

laws, or the traditional rules and organisations that govern allocation of land in rural areas.<sup>25</sup> Governments generally make the policies, laws, and regulations that set the rules for such institutions, with some degree of participation by citizens in the process. All these things – the government structures, policies, laws, markets, cultural practices and institutions – are important in defining rights and responsibilities and also in defining the terms on which different capitals can be used and (re)generated, and be substituted for others. They are decisive in determining whether capitals can be used by poor and marginalised people. These policies and processes are thus of key importance for the creation of livelihood opportunities and strategies of poor and excluded people.

The policies, structures, and processes are obviously hugely diverse and complex, and they operate at several levels, from the social group and local community to agreements between governments. They can also be influenced by people in a more or less direct way at local, national, and also international levels. Citizens' groups, as part of 'civil society' (representing certain institutions and also certain 'social capital' in Figure 3.1), are in turn also influenced by the policies and behaviour of government and private businesses. The 'structures' here can be thought of as the organisations of government, citizens, and the business sector. Citizens' groups and NGOs often need support if they are to have an effective dialogue with the business sector and authorities – support that is called 'capacity building' or 'institutional development'.<sup>26</sup> In other words, they need strong social and human capital to influence the policies and structures that mediate between capitals and livelihood strategies. The interaction between social actors and policies and structures is highly dependent on knowledge and power, which are interrelated. In fact, policies and formal structures and processes are means to regulate the use of power and the dominance of one knowledge over another. However, power can also be used to violate rules and bypass structures.

Peet and Watts (1996) have written that they would like to see 'more politics in political ecology', and the same could be said about sustainable livelihoods, following the experience of a number of agencies over the last few years. As an analytical tool, the sustainable livelihoods framework pays direct attention to policies, and it should be emphasised that policy processes are all deeply political. However, the importance of power is not very obvious from the diagrammatic representations of the framework. Laws and also policies define rights, but power cannot be brokered as easily as that. Power cannot be expressed in straightforward capitals either, whether social or human or financial capital, yet it is an essential factor in the ability to pursue one livelihood strategy or another. Related to a more political approach is the idea of empowerment and participation, which is discussed in section 3.3.

The framework suggests that analysis needs to look at democracy, the role of the State, the private business sector, and the role of civil society. These are in some ways problematic divisions and they do indeed overlap (is a political party that is in parliamentary opposition to a government part of civil society or part of the State?), but they can help us to understand what is happening in a particular context. They are related both to the notion of *social capital* and to *policies, processes, and structures*. The question that can legitimately be asked by stakeholders in any situation is whether one accepts laws and policies as they operate, or whether they need to change. Also important is the question of how one can judge whether social capital is both high and good, or just high: crime syndicates often make strong networks and are based on high levels of trust.

### **3.2.6 Vulnerability context**

Some factors are outside the immediate control or influence of people who pursue their livelihoods. Changes in this *vulnerability context* can happen in three different ways: trends, seasonality, and shocks.<sup>27</sup> *Trends* are gradual changes, partly predictable: examples are demographic trends, economic and technological developments, trends in resource use and degradation, and also gradual political changes, for example 'becoming more democratic' or 'becoming more authoritarian'. *Seasonality* occurs in the production of crops and food prices, in health (in particular because certain disease vectors are related to climatic factors), and also in employment opportunities, i.e. in labour markets. The latter are particularly seasonal in agriculture, but also in tourism, and trade is usually good in festival seasons such as the end-of-Ramadan celebration of Eidh, or the Chinese New Year. *Shocks* occur in market prices (a good coffee harvest in Brazil, for example, may cause a sudden slump in world market prices, and thus a shock for (say) small coffee producers in the Caribbean region), and in particular in nature. Drought, flood, volcanic eruptions, or earthquakes cannot be predicted with any certainty, although the regions where they are likely to occur are well known. In so-called 'complex emergencies', famine usually has a combination of causes, including war and the breakdown of parastatal food-trading organisations. In more general terms, famines occur as a result of a lack of 'exchange entitlements'.<sup>28</sup> Many processes of gradual change (i.e. trends) may have been happening, including soil degradation, reduced crop productivity, and a gradual concentration of land ownership in the hands of just a few. Crisis is then triggered by some event that may of itself be relatively minor, like a modest climatic drought. Other shocks include outbreaks of epidemics of human diseases, livestock diseases, and crop pests (see sections 2.3, 4.2.3, and 4.3.3 for more on vulnerability, shocks, and livelihood recovery).

Trends, shocks, and seasonality in contextual factors strongly define poor people's vulnerability. They may be anticipated in many cases, but are usually not in ordinary people's sphere of direct influence. Preparing for a decline in producer prices or a drought is often implicit in livelihood strategies: people build up capitals that reduce their vulnerability. Nevertheless, survival may be at stake, and responding to crisis situations is difficult: there is always a short-term cost and also a long-term cost. The context thus entails the risks and uncertainties that need to be lived with, and certain livelihood strategies will aim towards mitigation, without influencing them in a direct way. With regard to coping with shocks and stresses through improved resilience, the framework looks at environmental, economic, social, and institutional sustainability. Sustainabilities should be analysed at local, national, and also international levels. In sections 2.3 and 2.4 the notions of sustainability and also vulnerability, security, and resilience were discussed in some detail. A central question is: *what needs to be sustained?* Financial capital, the ability to herd cattle, or the education of children – or some sort of sum total of all capitals? Capital assets can be substituted for others, and that needs to be considered in an analysis that leads to value judgements: substitution (where at all possible) can be considered good or bad, depending on who is asked the question. Setting off against each other the trends in the five different capitals in the pentagon of Figure 3.1 is always a subjective exercise. Nevertheless it is useful at least to make a qualitative judgement of the trends in how the different capitals in the livelihoods of particular women or men, households, communities, or whole countries are changing. Maintaining some form of sustainability can also be seen as an aim in itself, and as such may be considered an important livelihood outcome.

### 3.2.7 Analysis of livelihoods

It is important that the sustainable livelihoods framework should not be used to define or structure the vastness of what *can* be researched, but it can be helpful in prioritising what *should* be researched and analysed. It is critical to ask questions about the most important livelihood strategies and outcomes in a particular situation; and in the case of particular people to consider the most important assets, policies, structures, and hazards that may uncover their vulnerability. It is pertinent that the critical social actors and social interfaces are identified and engaged with.

In fact, the use of the framework in conjunction with several existing analytical tools, at differing stages of development processes and in differing situations, has led some to regard the idea of sustainable livelihoods as an

*approach*, not a methodology or tool in itself. Nevertheless, the framework discussed in the previous sub-sections should primarily be taken as a tool. 'Sustainable livelihoods' as an approach is broad, stresses popular participation, articulates reduced poverty as the main outcome, and encompasses a range of levels and approaches to improving livelihoods, from local micro-projects to international campaigning for policy changes. It combines several methodologies when used in long-term programme planning, project planning, and evaluation, or in campaigning.

Based on theories of political ecology, gender and environment, and environmental economics (section 2.2), a summary list of what an analysis should consider in development processes is given in sub-section 3.3.3. It is stressed there that consideration of social difference at every stage is essential, and an undifferentiated concept of community would severely limit the value of an analysis. Leach *et al.* (1997a,b) also stress the need for historical analysis of ecological and social change, in order to challenge accepted wisdom about the ideal or optimum ecological or social composition of a society. A good analysis ensures a dynamic analysis – to make sure that the static picture of today's situation of social difference, of landscape, and of resource use is not the core message, but how it became what it is, and whether there is potential for further change. For example, a landscape with forest patches in open savannah in semi-arid West Africa has conventionally been seen as a situation in which deserts encroach because people deforested the area. In this view, the forested patches would be the leftovers that are under threat – but historical analysis suggests the reverse, i.e. that people have created the forest patches in what has been open savannah for centuries.<sup>29</sup>

The sustainable livelihoods framework has been perceived as applying primarily to rural development. Although this may be suggested by its origins, there are no obvious ways in which the framework contradicts urban realities of poor and vulnerable people.<sup>30</sup> The framework does stress the significance of markets, which are increasingly important even in remote rural areas. Factors that are especially important in urban livelihoods appear to be included in the concept of social capital and physical capital, and the breadth of policies, processes, and structures is such that the relative weight of those in dense human settlements could easily be accommodated.

The language of *livelihood strategies* and *livelihood outcomes* articulates the dynamic nature of the framework, and it also helps to strengthen the notion of what all the processes of social and ecological change and mediation by institutions are for: women and men want to eat better, and to enjoy higher and more equal incomes and a sustained, healthier, and more

productive environment. Scoones (1998) proposes that professionals and researchers should consider the following matters in order to ensure what he calls 'optimal ignorance', arguing that the right questions must be asked in livelihood analysis and that we should seek to find out only what it is necessary to know. This is an interpretation of his list:

- *Sequencing*: what capital, policy change, or action is the starting point for a particular person, social group, or social actor to establish a successful livelihood strategy?
- *Substitution*: Which combination of capitals is needed for the livelihood strategy, and can they be substituted for each other?
- *Clustering*: Do particular social groups or actors have access to particular clusters of capitals?
- *Access*: What access is available to social groups at differing levels (household, community, and region) to various resources or capitals?
- *Trade-offs*: What trade-offs confront particular social groups in deciding upon a certain livelihood strategy and the use of certain capitals, and by what rules, organisations, and power relations are they determined?
- *Trends*: What are the trends in the availability of resources (capitals), in terms of access and in terms of the external context?

There remains the question of how to prioritise specific topics to research in a project planning or review exercise, or in order to support long-term strategic planning of development programmes in countries or regions. Which part of the framework gets paid most attention will emerge from a gradual process of ever-increased understanding – see also chapters 4 (on projects) and 5 (on long-term strategies and policies).

Table 3.2 lists some practical methods for assessing various aspects of the livelihood framework – indeed, of people's livelihoods. These methods are based on research experience and will be of direct help in (for example) needs assessments or impact reviews. It should be noted that most of the methods concern certain social groups, women and/or men, and they should be used at household, community, regional, and/or country levels.

Some analytical tools stress quantitative and physical data, such as demographic statistics and aerial photographs, and others focus on qualitative and less objective data, including tools associated with (for example) PRA. (See also sub-sections 3.3.2 and 4.3.1.)

The next sub-section presents some lessons derived from the actual use of the framework.

**Table 3.2: Practical methods of livelihoods analysis<sup>31</sup>**

<b>Livelihood outcomes</b>	<ul style="list-style-type: none"> <li>• Well-being ranking of social groups, communities, or populations in regions (at different moments in recent history)</li> <li>• Social mapping</li> <li>• Cause–effect diagrams</li> <li>• Study of historical aerial photographs and remote-sensing images and data, with a particular focus on environmental change</li> </ul>
<b>Livelihood strategies</b>	<ul style="list-style-type: none"> <li>• Ranking of income sources</li> <li>• Mapping of migration patterns</li> <li>• Inventory and ranking of income and expenditure</li> <li>• Seasonal calendars of production, employment, and income.</li> </ul>
<b>Policies, processes, and structures</b>	<ul style="list-style-type: none"> <li>• Venn diagrams</li> <li>• Actor network analysis and ‘power network diagrams’</li> <li>• Cause–effect and flow diagrams</li> <li>• Market inventories and commodity-price tracking</li> <li>• Narratives or institutional histories from key informants (including traditional rules, tenure law and practice, and/or markets)</li> </ul>
<b>Livelihood assets (capitals)</b>	<ul style="list-style-type: none"> <li>• Livelihood diagrams</li> <li>• Asset surveys and resource mapping, including soil and vegetation surveys and inventories of the quality of housing stock, water supply, and sanitation systems</li> <li>• Seasonal calendars of asset availability and quality</li> <li>• Social network and Venn diagrams</li> </ul>
<b>Vulnerability context</b>	<ul style="list-style-type: none"> <li>• Study of meteorological and demographic data</li> <li>• Research in historical archives, with a particular focus on political conflict and market fluctuations</li> </ul>

### **3.2.8 The sustainable livelihoods framework: lessons from practice**

Staff in Oxfam GB and some Novib partners have been trained in the theory and use of the sustainable livelihoods framework. It was presented as part of a bigger ‘package’, with other tools for good management of development programmes, in particular participatory methodologies. Together they make up an approach to development that is expected to improve practice and

outcomes. This is elaborated further in chapter 4 with particular relevance for project management, and also in chapter 5 regarding strategy formulation and campaigning.

In the two rural projects discussed in section 3.1 (in Niassa in Mozambique and Lung Vai in Vietnam), Oxfam staff, staff from various levels of government departments, and representatives of civil-society organisations were trained in participatory methodologies and behaviour, and in facilitating analytical processes. For the latter, the sustainable livelihoods framework was introduced as a means to ensure that the most important issues would be covered in participatory assessments, at the planning stages in 1993/1994 and several years later at review stages. This capacity development was reinforced by follow-up training in later years, which was combined with project reviews.

These 'participatory events' were thus facilitated by social actors who were mostly from outside the local communities, but were mixed groups made up of some of the key-stakeholders: the donor, partner organisation (government departments), and some local leaders. The assessments followed the pattern of engagement, data collection, and analysis that is described in chapter 4; they included meetings between various stakeholders, and dialogues with people from particular social groups (the poorest families, particular women, certain ethnic groups). Some of the events were more open-ended and participatory: that is, they allowed more space for the views of local women and men, in particular at the planning and appraisal stages, whereas the later reviews and evaluations followed a more extractive methodology. In both Niassa and Lung Vai, monitoring visits from Oxfam and higher-level authorities to the local project sites took place in between the assessments, which provided information on progress. These visits have influenced local actors' behaviour, but in neither case has monitoring (yet) become as structured and participatory as project managers wish; but good progress is being made.

There remains the question of whether the use of the sustainable livelihoods framework had a real impact. Initial assessment in the two cases and twelve others suggests that the actual use of the analytical framework remained weak. Nevertheless, the projects did adopt a broad or holistic approach, quite different from a 'rural integrated approach' that would attempt to 'do a bit of everything'. They began with workshops on participatory methodologies and sustainable livelihoods, and initiated participatory monitoring events, support for livelihood activities through training in sustainable agriculture, support for processes of land allocation, and various activities aimed at regenerating and protecting environmental resources. In more general terms, an assessment of the work of Oxfam and partners led to the following conclusions.<sup>32</sup>

- The sustainable livelihoods framework is too abstract for field-level, operational staff, even though much of their experience and practice seems to be neatly compatible with its holistic nature. Nevertheless, some learning resulted from the use of the framework.
- The sustainable livelihoods framework is used by higher-level staff in strategic planning processes, but very little in project appraisal or assessment.
- The idea of ‘sustainable’ was a message that appealed to many participants, but not the detailed idea of it in an environmental sense.
- Direct results from most of the field-based workshops on participatory methodologies and sustainable livelihoods were demonstrated in terms of new project initiatives; this includes initiatives that relate to environmental sustainability, and in particular to sustainable natural resource management (SNRM).
- Project management (planning, monitoring, evaluation) was supported through better data, improved skills in analysis (partly as a result of the stress on the analytical process, with the framework as the key tool), and improved participation by local people.
- However, the data are inconclusive about the attribution of programme impacts (on environment, livelihoods, etc.) to the use of the sustainable livelihoods framework in the workshops and thereafter.

These conclusions do suggest that the sustainable livelihoods framework, or more broadly an approach with popular participation and good analytical tools at its core, can help to achieve better impact on livelihoods, environmental sustainability, and social equity. It helps to improve development practice, but it is not a panacea, nor a substitute for common sense.

### **3.3 Negotiating change**

The sustainable livelihoods framework can be applied to the analysis of the livelihood strategies of particular individuals or any social group. Whatever the particular focus of the analysis, livelihood strategies are influenced by other individuals, organisations, businesses, and authorities, who all have some stake in society, environmental resources, and other capitals. This section discusses processes of social interaction that determine changes in livelihoods and environments. It lays the groundwork for these processes to be influenced in order to achieve particular goals – through projects (see chapter 4) or campaigning to influence policy (see chapter 5).

*Participation* and the associated term *empowering* are words that express the idea that poor and excluded people get more influence over their lives and livelihoods; it implies a positive bias in development projects and policy processes towards excluded people. The first sub-section elaborates on the notion of participation and power, and interaction between various social actors. Sub-section 3.3.2 discusses some aspects of participatory approaches used by development professionals (particularly PRA). The final sub-section stresses the importance of negotiation in social interactions and gives examples of cases where social processes were geared towards improvements in the livelihoods and environments of deprived and excluded people.

### **3.3.1 Power and action**

People power and people's participation in social-political processes and development activities have been analysed, and various typologies of 'participation' have been derived. The following typology is one of many, and expresses well the many interpretations of the word.

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#### **Typology of participation**

##### Information Processes

1. Unilateral announcement
2. Listening
3. Consultation
4. Data collection

##### Project-Related Activities

5. Instrumental involvement
6. Functional involvement
7. Negotiation
8. Externally initiated organisation
9. Conflict resolution

##### People's Initiatives

10. Self-mobilisation
11. Empowerment

(extracted from Adnan et al., 1992)

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Most of the forms of participation featured in the list are top-down or externally initiated, and only the latter two types could be classified as activism, where local people themselves take control of their resources,

environments, and livelihood opportunities. Only 'empowerment' expresses the idea that disadvantaged and poor people increase their 'freedom of choice and bargaining power in relation to ... more powerful groups'.<sup>33</sup>

Development NGOs usually declare empowerment as an important aim, but they practise or achieve only some of the information-related or project-related forms of participation. Participation in the sense of activism is different. Local people set the agenda, and often charismatic individuals or small elite groups dominate social movements. The motivation for people to take part in them may be related to ecological conditions or to the need to find an alternative path of development. The latter does not necessarily mean that they oppose economic development. For example, concerning the well-known Chipko movement in India it has been said that 'Chipko's ecological successes resulted in new environmental regulations that compounded the lack of economic opportunities and development in the region ... I challenge some contemporary views that see new social movements in the Third World as grassroots agents seeking alternatives to development ... social movements in India are, contrary to these views, centrally concerned with access to development'.<sup>34</sup>

The question *who participates?* in a process of social change is critical, because at the heart of the process are aspects of power. Nelson and Wright (1995) present three ways of looking at power, as follows.

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### **Three ways of looking at power<sup>35</sup>**

#### **'Power to'**

Here power is seen as a personal attribute that can be increased through (for example) increased awareness, improved confidence, better negotiation skills, and stronger social networks. 'Human development' can increase the power to act and influence. Power is seen as something that can grow without necessarily having a negative effect on the power of others. The implication of this is that to some extent 'empowerment' is apolitical and non-confrontational. This view of power is held by many development professionals who declare the aim of empowerment.

#### **'Power over'**

In this approach there is a total amount of power in a given society; it can neither decrease nor grow, but groups of people and individuals fight, negotiate, and struggle over it. Power is exercised over social processes and social groups. Power is the object that everybody tries to get hold of, for example through participation in political decision-making processes. Power can be gained in particular from getting access to the formal institutions of society, for example through collective action.

### **'Decentred and subjectless power'**

In this third way, power is considered not as a 'thing' that can be possessed; no institution or individual can claim to 'have' it. Power is seen as something that happens through a complex interaction of events, public discourse, and accepted ideology, institutions (especially those of the State), and social actors. This interaction leads to a particular outcome in terms of social relations – outcomes that are virtually impossible to plan and in fact are knowable only retrospectively. This notion of power challenges the idea of empowerment, by asking how power can be transferred if it is not 'held'. Real decentralisation of power, or empowerment of the weak and poor, requires a very high level of awareness and commitment of those who are embedded in the institutions that are influential in social processes.

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Common reasons for groups of social actors to participate in social change processes, including development projects, are aspirations to material benefit, access to the development process, and more influence and control. External agencies may see participation *as a means* to achieve project goals efficiently, or *as an end* to enable local groups to take more control of their own situation.<sup>36</sup> The former can imply a stress on local people's knowledge of their own environments: they know about it, and can therefore manage it better than others. It tends to stress the tangible outcomes and impacts of development programmes. The idea of participation *as an end* usually implies some sort of positive bias towards including the poor and marginalised in the development process. It tends to be based on a political or ideological position: poor, subordinate people have the right to determine their own lives and livelihoods, and they must be supported in that.

The word 'stakeholder' has come to convey the idea of an 'interest group', i.e. a group (or person) with some stake in a policy, a project, a process, or organisation. The idea of multiple stakeholders, as in 'stakeholder analysis' or 'stakeholder society', suggests that projects, policies, or, for example, public services rarely have one homogeneous interest group. There are managers, politicians, donors, NGOs, and citizens of differing ages, ethnicities, genders, and social classes. Development organisations also talk of 'primary stakeholders', such as the poorest, or vulnerable women, or whomever they see as their target group – the ones towards whom the organisation has a positive bias. Interaction between stakeholders happens in complex and multiple ways. Development organisations are virtually always adding to this complexity, because they are stakeholders themselves, even in cases where they do no more than make a financial donation to essentially self-generated

campaigns for social or political change. This interaction happens with a purpose and under certain conditions. Rules, laws, institutions, and customs influence the interaction, which is depicted in the sustainable livelihoods framework as *policies, processes, and structures*. Central to this interaction is power, however power is perceived, and people-power is generated in social groups, which is partly expressed in the framework as *social capital*.

Long (1992) does not use the language of stakeholders, but rather that of 'social actors', which seems essentially the same idea and is perhaps more clearly expressed. He writes: 'social actors are not simply seen as disembodied social categories (based on class or some other classificatory criteria) or passive recipients of intervention, but active participants who process information and strategize in their dealing with various local actors as well as with outside institutions and personnel'.<sup>37</sup> He also explains that social actors, such as political parties or church organisations, peasant associations, women's unions or other citizens' groups, are those who have some decision-making capacity and ability to implement decisions. In other words, social actors must have the quality of 'human agency', i.e. they must be both 'knowledgeable' and 'capable', so that they can influence social change processes. The notion of human agency is thus closely related to knowledge and also to power, and all depend to a large extent on the social networks in which the actor takes part.

Long's 'actor-oriented paradigm' is by no means limited to the powerful or dominant actors. It is important to stress that a social actor is not a natural given, a fixed entity, but rather it is a social construction that changes perpetually. All actors, including those who are subordinated to others, are seen to have some power and agency and are therefore able to influence social change, and all are part of (and shaped by) the same wider structures. He attempts to relate these wider structures (or 'macro' context) of (regional) political economies to the 'micro' particularities of what actors do, decide, and contribute to social and environmental changes. The 'macro' includes institutions such as markets, which mediate social-environmental change, i.e. how local people, agencies, and other actors negotiate and arrive at decisions that have an impact on poverty and environmental sustainability. The actor-oriented approach makes the assumption that there is room for choice and decision at the micro level, partly independent of these wider structural processes and trends, and that social transformation and change in environments is thus a result of human agency: even subordinate people have room for manoeuvre.

It then becomes essential to map or identify the strategies and rationales of particular actors in order to understand the changes within a certain (regional) political economy, and to be able to make a sensible guess at how external intervention might influence it. That is, influence it in such a way that

oppressed and marginalised people improve their situation and the (environmental) sustainability of local livelihoods. The relationship between local grassroots groups on the one hand and national lobby groups or, for example, a local government project on the other can be seen to operate at several interfaces, where the exchange of experience and ideas happens, and where one social actor influences another. Studies of 'interface encounters', i.e. interaction between an individual or a group of actors with others, show how actors' values, knowledge, and perceptions are changed by the encounter itself.<sup>38</sup> That happens of course within a broader institutional context with differences in, for example, power and culture.

One particularly important and practical notion seems to arise from the concepts of *social actor* and *interface*: it is the need for focus in the research, analysis, and interaction of external development agencies. Not all social groups that appear homogeneous (for example 'the poorest women in the village') are social actors (because these women do not necessarily form a cohesive group); they may still be the main target group of an intervention. Not all interfaces are important encounters; not all actors' strategies need to be known; not all interactions are essential for understanding the main dynamics of a social-political arena; and not all social processes have a significant impact on poverty, deprivation, and exclusion. In participatory development programmes, it is often said that 'all important stakeholders' need to be included. However, 'all' is too many, and 'important' requires prioritisation.

A review of conservation farming projects in Kenya showed that the impacts of eight small NGOs and grassroots groups on local livelihoods, capacities, environments, and policies and structures were considerable. Various social actors participated in different ways in this review, in particular groups of women and men farmers, staff of local NGOs and national resource NGOs, staff of an international NGO, and members of national and international agricultural research organisations. The existing interface between some NGO staff and smallholder farmers was examined and new interfaces were created, in particular between the local NGOs and researchers. The review reached a good degree of consensus, despite obvious differences in power and interests. NGOs promote sustainable farming techniques and attempt to mobilise farmers to adopt these techniques and officials (including researchers) to support the development of the techniques. The review concluded that impacts of the NGOs on national research and agricultural policies had been minimal and needed to be strongly reinforced if greater impact on livelihoods and the sustainability of agricultural production was to be achieved. An update of the review a year and a half later showed that this agreement had been followed through at least in part,<sup>39</sup> which suggests that the review itself had generated action.

### **3.3.2 Participatory approaches**

Development agencies operate at different interfaces, and most have the declared objective of stimulating the participation of excluded and poor people. Various approaches to achieve this have developed over recent decades. Ideas from adult learning and wider development practice, sociology, and geography produced what became known as PRA: *participatory rural appraisal*. This developed out of RRA, *rapid rural appraisal*, and later also became known as PLA, *participatory learning and action*. The shift from PRA to PLA expresses that the activity is not just rural and not just about appraisal, and that it aims at 'learning and action' – some kind of social change.

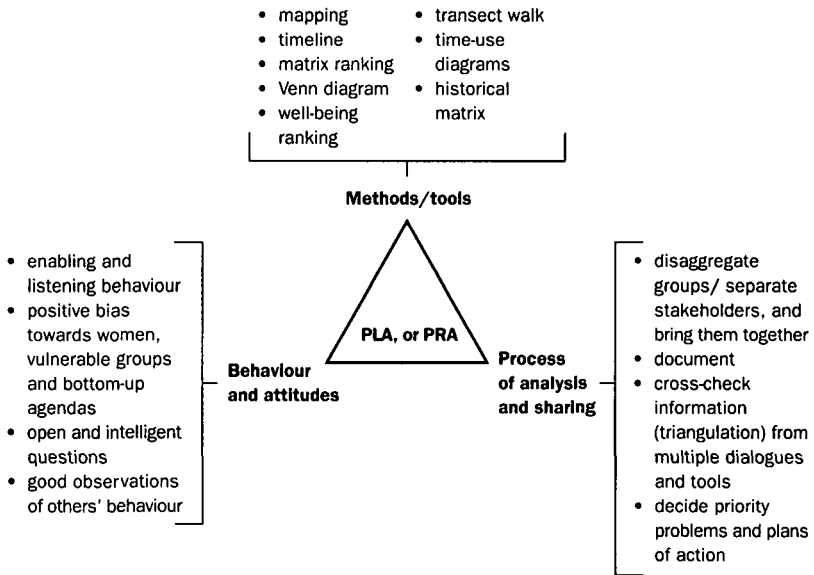
PLA is an approach, not a tool, and has been given many different meanings in different circles. There are those who tend towards a standardised method for project management through needs-assessments and baseline surveys, and who 'do a PRA'. Others see PRA or PLA as a term that indicates a certain type of behaviour, and as an expression of the radical empowerment of weaker groups in society and of social transformation, usually seen in terms of supporting and influencing change processes in favour of oppressed and vulnerable groups. Nevertheless, in essence it happens within the realms of 'development' with outsiders coming in, usually uninvited, and starting to play a role (i.e. becoming actors or stakeholders). The big challenge remains how to overcome the paradox of external intervention (of some kind) versus the ideal of vulnerable people's empowerment (see also 'decentred and subjectless power' in sub-section 3.3.1).

Figure 3.2 depicts the three core aspects of PLA:<sup>40</sup> tools, behaviour, and process.

Proponents of PLA promote shifts in behaviour and reversal of the conventional roles taken by development professionals and bureaucrats.<sup>41</sup> In processes of learning and action, meetings and interviews are set up where PLA tools are used to enable communication between 'outsiders' and 'insiders'. Insiders may include certain excluded and deprived people, but also a range of other social actors with whom researchers or staff of development agencies interact; but in fact each stakeholder can at some point be an insider and at other moments an outsider.

Of the three main aspects of PLA, 'analytical processes' (also called 'process of sharing') is possibly the most difficult one. Shared analysis between (for example) people with local knowledge and those with scientific and/or global perspectives, or between the weaker, less powerful, and poorer groups and the more influential and better-off, obviously cannot be resolved by bringing them together in a few public meetings. A process has to have a clear aim, it must have a beginning and an end, and it needs to be structured in the sense of the interfaces that it creates in meetings and forums. The framework of

**Figure 3.2:** Basic aspects of participatory learning and action



sustainable livelihoods provides a basis for dialogue and shared analysis.<sup>42</sup> It can be seen as a checklist for the outsider, but not necessarily as a useful dictionary for insiders who are being interviewed and enabled to take part in the analysis. For those who initiate and facilitate processes of learning and action with a range of social actors, the following considerations should be borne in mind. (See also section 4.3 on a learning and action process that is integrated with the sustainable livelihoods framework.)

**Facilitating processes of analysis and action<sup>43</sup>**

- A strengthened, renewed, or innovative process of progressive analysis and learning will react to or link in with existing processes of change. This enhanced activity can be structured, at least to some extent, and needs to be managed if it is to be successful. The initiative may come from 'insiders' and/or 'outsiders', and in all cases it is important that the lead or responsibility for co-ordination lies with a mix of stakeholders or actors, including (those close to) deprived and excluded women and men.
- This co-ordination group must give the enhanced process a clear aim, and set up a series of events that can be seen as interfaces between certain social actors.

- It is important to make explicit any expectations of positive biases towards particular social groups, such as 'the poorest women' or 'the most vulnerable ethnic group'. The choices in this respect relate directly to the aims of the project, policy, or development organisation concerned. This is also expressed in questions and hypotheses of 'action research'.<sup>44</sup>
- Important social actors among the target group and other social actors, i.e. individuals and groups with some human agency, need to be identified. These are *not* the same as presumed homogeneous groups of one gender, one social class, or one ethnic identity.
- The main strategies of these important actors that lead to social and environmental transformation need to be mapped and analysed, in particular if they are relevant to the livelihoods and environments of poor people.
- It is common practice to separate and (later) bring together stakeholder groups. *Disaggregated social groups* are sometimes called 'focus groups'; however, such groups should not be confused with social actors, because they may not act as one group. These groups cannot on their own decide the paths of change, and interfaces with others need to be created or used for arriving at decisions, and implementing them.
- Triangulating information and opinions from various actors and arriving at trustworthy conclusions that are acceptable for all is difficult, but the aim of facilitation should in all cases be to arrive at a good degree of consensus. This will involve negotiation, and sometimes conflict and mediation.
- Leaders or facilitators of change processes can be outsiders or insiders. In all cases they have, and need to make use of, levels of authority: they are social actors themselves, and need to address the apparent paradox of being comparatively powerful themselves and attempting to empower others. Key roles of facilitators include mediation between conflicting groups, enabling reporting and providing (secondary) information, interpreting positions, summarising and feeding back, and sometimes using authority, for example in order to break deadlocks and speed up decision making.
- Facilitators must also help to achieve, monitor, and report continuous progress in analysis. This progress is possibly the main motivation for participants to become involved in the process.

PLA tools contribute structure to dialogues and yet help to retain a fair amount of real-life complexity regarding the subject discussed. The tools avoid oversimplification and stimulate the discussion of inter-related problems and opportunities for change, which can be taken as 'holistic' analysis. The productive use of tools by outsider-facilitators depends on their behaviour

and skills in guiding a step-by-step, 'semi-structured' dialogue from a very broad initial discussion to the specifics of comparing and challenging and changing what other participants in the dialogue assert. This is explained further as follows.

### ***Dialogues at the interface***

A 'semi-structured' interview or dialogue is often presented as a PRA tool, but wrongly: it happens all the time, in any encounter or 'interface'. A dialogue is a two-way (or multiple-way) process of communication and not simply an extractive exercise, which is the common understanding of what constitutes an interview. 'Semi-structured' usually refers to the idea that certain questions and topics have been prepared by outsider-facilitators, possibly with aids such as the sustainable livelihoods framework. A dialogue can also be 'semi-structured' as a step-by-step dialogue that is initiated by a facilitator, as follows:

- 1 Introduce people.
- 2 Introduce the main objective of the encounter: mutual learning/engagement in a dialogue.
- 3 Present the general issue that you want to discuss: ask the first, general question.
- 4 Note or memorise the first answers.
- 5 Start structuring what has been said, for example with a diagram (a PRA tool) and by summarising (in different words) what has been said, and checking the correctness of the summary.
- 6 Ask more specific questions; register (and possibly summarise) answers.
- 7 Make further use of the diagram, if appropriate.
- 8 Observe participants' behaviour, and respond to that by 'handing over the stick', if appropriate, so that participants themselves develop the diagram and direct the dialogue.
- 9 Allow the discussion to evolve. Become a participant in the dialogue: raise new issues, contribute secondary information and 'external' ideas. Challenge, probe, rephrase, and summarise before moving the discussion on.

These dialogues constitute a very important part of the analytical, empowering process, in particular because they involve shifts in behaviour – unlike conventional interactions between officials and development professionals on the one hand, and excluded, poor people on the other. Shifts in behaviour can be summed up as follows.<sup>45</sup>

***The facilitator (initiator, or 'outsider'), who by convention is dominant***

Establishes rapport  
Converses, catalyses, facilitates, inquires  
Suggests, adapts, improvises  
Watches, listens, learns  
'Hands over the stick'  
Probes

***The facilitated (participants, or 'insiders'), who are usually subordinate***

Map, model, and draw  
Rank, score, quantify  
Discuss, analyse  
Inform, explain, and demonstrate  
Identify and choose priorities  
Plan, present, take action

The behaviour shifts promoted here are particularly geared to changing people who belong to the most influential institutions. (Compare the third way of looking at power: 'decentred and subjectless power' in sub-section 3.3.1; for more on behavioural skills, see also chapter 4.)

Chambers (1997) argues that power is in fact a disability: the realities of powerful people become dominant, but 'the realities of socially dominant professionals are often neither true or right'. He explores power relationships as a source of error, in particular error perpetrated by development professionals for whom interpersonal relationships are shaped by power differences.

Criticism of the practice of PLA/PRA and other participatory approaches used by development agencies includes the charge that real participation and empowerment of women and minority groups is not being achieved. It has been argued that participatory processes can in fact be exclusionary.<sup>46</sup> Guijt and Kaul Shah (1998) describe the origins of 'gender naivety' in development practice as partly the result of 'the myth of community': communities are difficult to delineate geographically and socially, communities are diverse, and above all communities are social arenas in which power and politics are as important as they are at any other level. In the case study from Niassa in Mozambique, presented earlier in this chapter, rural communities are defined by local people as 'pertaining' to particular leaders, which means that people of different communities are often geographically mixed: neighbours do not necessarily belong to the same community.<sup>47</sup>

Gender naivety in PLA-based processes can be further explained by the dominance of male development professionals with low levels of gender-awareness; by the dominance of poverty agendas; by the lack of sufficient time to build rapport with women; and by the failure of project documentation. Guijt and Kaul Shah also argue that feminist movements and gender studies have had limited impact on participatory approaches to development. They suggest practical reasons why gender analysis and efforts to include women in participatory processes have been comparatively

unsuccessful, including a lack of appreciation of the constraints on women's time and space that make it hard for them to take part in dialogues.<sup>48</sup> They propose to address this *de facto* exclusion through methodological improvements and innovations, and in particular through ensuring more clarity on the meaning of the (local, contextual) concepts of gender, participation, community, and empowerment.

### **3.3.3 Negotiation to improve poor people's surroundings**

Guijt and Kaul Shah (1998) also address the 'myth of consensus'. They stress that social change often involves forms of conflict, which may make it necessary for the outsider-facilitator to mediate between members of a community. Outsiders are influential in deciding which social actors are included, and they often exercise a certain influence over the outcome of participatory processes. This influence can of course be used positively if, as a result of their involvement, the most deprived are included. However, outsiders may misrepresent the knowledge and needs of poor local women or other social groups and actors, and may sometimes convey a false notion of consensus when communicating the outcome of the participatory processes.

Participatory approaches are essentially about power and change, and gender is an important dimension of this. Cornwall (1998) explains that there are several misconceptions regarding gender and gender relations, including the fact that gender is not necessarily the dominant source of difference and identity, that Western conceptions of gender difference and concerns have tended to dominate development efforts, and that power is not held by all men, nor by men exclusively. Participatory analysis must address complex gender relations, rooted in power differences; and the cultural values, particular identities, and the differing positions of individuals who move in different domains need to be recognised. She also warns the facilitators of participatory processes not to create 'notionally homogeneous interest groups according to wealth, age and so on [...] Creating artificial groupings according to presumed differences can produce misleading conclusions and, in addition, may offer little in the way of prospects for future work, as such groups would probably not exist otherwise'.<sup>49</sup> This is consistent with the assertions of Long (see 3.3.1).

Thus, on the one hand, participatory processes need to involve all significant social actors, who will negotiate their interests in different ways and at different interfaces. On the other hand, externally initiated processes must lead to benefits, especially for the most vulnerable and poor people in a particular community (and for the environments on which they depend).

In the case of the Food Security Programme in Niassa (see 3.1), several childless elderly couples and widows were ranked among the most vulnerable and food-insecure, yet they are not necessarily members of

traditional structures of governance (which include a 'queen' from a different lineage than that of the male community leader), recipients of traditional health care or other social services, or members of the project-related farmers' extension groups. They are (and should be) interviewed regularly by development professionals, and invited to community or focus-group meetings, but they have very little power to act and change things. Other, less vulnerable women have more agency as members of groups that play a role in the community and wider society. Negotiation about programme initiatives, such as work with direct benefits for women, had to be conducted with the male traditional leaders, with some women leaders, and with several (almost exclusively male) government officials. There were also forms of negotiation taking place between officials and traditional leaders. Assessment in 1998 suggested that elderly couples and widows got little direct benefit from the programme, but were benefiting from social and environmental improvements through welfare mechanisms in the community. The programme has little influence on these mechanisms, but must understand something about them, if only to be sure that the most vulnerable in a society are gaining at least something – which appears to be happening.

The case of participation in formal democratic spaces in Recife, Brazil (see also section 3.1) demonstrates that formal democracy takes a long time to develop, and indeed to actually deliver material benefits to excluded people. Project-management methodologies such as PLA are less relevant than hard bargaining in political arenas, where consensus is often far away; and violence is just around the corner. Participation of local stakeholders in responses to the effects of armed conflict is even more obviously dependent upon a precarious set of negotiations, as has been demonstrated in the Ikafa refugee settlement in Uganda (see section 4.3.2).

Poor people usually value their environments positively, as something to improve and sustain. The main reason for this is obvious: they depend directly on their environments. This also means that in the social negotiation processes their positions tend to stress conservation and/or improvement of environments. Small farmers in marginal areas of Kenya, in particular women farmers, are adopting 'conservation farming' techniques to increase and sustain the productivity of their fields and increase their income (see also section 4.3.2<sup>50</sup>) In mountainous Lung Vai in Vietnam, poor farmers equate 'environment' with tree planting, soil conservation, and integrated pest management. Their motivation to engage in these activities is also primarily an interest in (future, sustained) production and income.<sup>51</sup> In north-east Sudan, nomadic Beja men point knowledgeably to the multiple uses of wild plants in times of drought crisis, and to the risks for human survival of the spread of the exotic and invasive mesquite tree, *Prosopis juliflora*.<sup>52</sup> The Zabbaleen in Cairo,

garbage collectors who recycle a large proportion of the city's waste, define as their main environmental concerns those related to their personal health, including a lack of safe drinking water and inadequate sewerage systems; the risks for girls and women of cutting their hands on sharp objects inside refuse liners (which they must open while sorting waste); and the hazards caused by smoke from self-igniting plastic bags (the main unrecyclable type of garbage) in the alleyways of their settlement.<sup>53</sup> Owners and employees of small engineering workshops in Faridpur, Bangladesh, do not perceive their activities to be particularly related to the wider environment at all, but they appreciate the critical importance of occupational risks to health and safety.<sup>54</sup>

This contrasts with much (Northern) alarmist environmentalism and also with regulations imposed by both Southern and Northern governments, which are predominantly concerned with minimising negative impacts of (for example) road building, airport extension, pollution from manufacturing plants, and the loss of wildlife habitats to the urban sprawl.<sup>55</sup> Poor and marginalised people depend on their environments, change them, and negotiate changes with others. To understand the reasons why people change their environments in particular ways, and how these changes affect social relations, theories of gender, environment and development, political ecology, and environmental economics are being developed (see section 2.2), and lessons from experience can be called upon. In summary, these theories and lessons show that it is important to consider the following.

### ***Analysis of environmental and social changes***

- Keep local environmental knowledge and perception central to the analysis.
- Ensure the best possible data to record physical environmental changes.
- Identify the social actors and interfaces that cause the main pressures on local environmental resources. The actors are linked through institutions such as markets, State regulatory systems, or local customs and traditional arrangements. Show how macro-policy relates to changes in local livelihoods and environments.
- Look for evidence of the (local) gender-determined division of labour, men's and women's knowledge of environmental resources, gendered control over technology, gendered property rights, etc.
- Analyse the changes in surroundings and livelihoods of specific social groups (defined by gender, class, caste, ethnicity, and age) and social actors, and relate environmental changes to gender and other social relations.

- Consider present and future economic values of environmental resources, in particular those externalities that are usually ignored (for example deforestation and the loss of non-timber products, and pollution), and also the non-use values of other aspects of nature.
- Identify the (potential) effects on the prospects for sustaining environmental resources that are implied by government regulations, market-based instruments such as taxation, and the behaviour of producers and consumers.

Development practitioners and researchers need such guidance to enable them to explore the complexity of social relationships and changes in livelihoods. The environmental problems that affect the livelihoods of very poor people and the (local) solutions that they explore are of course enormously diverse. Furthermore, it is important to realise that environments are not always a *problem* for poor people: in fact, in most cases environments (or, better, surroundings) are intrinsic aspects of their livelihoods and lives – they are lived in and lived with, cherished and regenerated. The sustainable livelihoods framework conceptualises the complexity of interactions and changes, but no more than that. Only specific case studies or project assessments can show the real richness of social interactions and changes in environments and livelihoods.