

Putting the principles of the Sustainable Livelihoods Approach into fisheries development policy and practice

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Abstract

The Sustainable Livelihoods Approach (SLA) combines a conceptual framework with a set of operational principles to provide guidance on policy formulation and development practice. The SLA has been widely used in coastal and fisheries development research and has informed the design of development programmes but experience of operationalising it remains largely undocumented. In the Sustainable Fisheries Livelihoods Programme, which involves 25 West African countries, the SLA has helped to align fisheries policy with wider poverty reduction initiatives and to identify means of contributing to poverty reduction that do not directly increase pressure on fully or over-exploited fish resources.

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1. Introduction

The Sustainable Livelihoods Approach (SLA) is prominent in recent development programmes that aim to reduce poverty and vulnerability in communities engaged in small-scale fishing, fish processing and trading [1,2]. The ‘capitals and capabilities’ framework [3,4] underpinning the SLA has been used to design research into the role of small-scale fishing in rural economies and to inform policy that seeks to enhance the contribution of small-scale fisheries to poverty reduction and improve livelihoods and food security of fisheries-dependent people [5–7]. The SLA is, however, an *approach* to development policy and practice—not just a research or conceptual framework. Thinking through issues in fisheries with the SL framework is really only the first step in applying a ‘livelihoods approach’. To date, there is little documented experience on application of the SLA in fisheries management and development programmes. This paper aims to illustrate how the principles underlying the SLA were turned into

development programme or policy actions in the West Africa Sustainable Fisheries Livelihoods Programme (SFLP).

2. Poverty in small-scale fisheries and the Sustainable Livelihoods Approach

The definition and measurement of poverty has evolved from a focus on low income and consumption, first to encompass a lack of basic needs (access to food, shelter, health and sanitation), then to include a lack of basic human rights, and finally to reflect more qualitative understandings that capture peoples’ own experiences and definitions, including psychological aspects such as feelings of powerlessness, humiliation and insecurity [8]. The literature on ‘social exclusion’ [9] adds a political dimension by focusing on how, through their relations to the more powerful, groups of people may become excluded from economic opportunities, social networks and political processes. Related to these definitions is the concept of vulnerability (of a person or livelihood), which is a function of the risks to which people may be exposed, the sensitivity of their livelihood system to those risks, and their ability to

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adapt to, cope with, or recover from the impacts of an external ‘shock’ to their livelihood system [10].

The multi-dimensional nature of poverty and the relationship between poverty, vulnerability and social exclusion in fishing communities is increasingly acknowledged [11]. Townsley [12] observes that “fishing communities are often characterised by overcrowded living conditions and inadequate services, low levels of education and a lack of skills and assets (particularly land)...”, and FAO emphasises that some fishers “live in remote and isolated communities, are poorly organised and politically voiceless and ... often highly exposed to accidents and natural disasters” [13].

Understanding and responding to these multiple dimensions of poverty requires a broad, multi-disciplinary approach. The SLA is useful in this context as it provides both a set of guiding principles and an analytical framework.

2.1. The SLA principles

The core principles that underlie SL thinking can be summarised as:

- *Putting people’s social and economic activities at the centre of the analysis*, acknowledging that attempts to reduce fishing pressure or allocate rights of access to the poor requires us to understand more about people than just their ‘fishing effort’.
- *Assessing options for management and development intervention that transcend sectoral boundaries* such as fisheries, agriculture, pastoralism, wage labour or small enterprise, and that incorporate issues affecting all people, irrespective of occupation, such as access to social services (e.g. health, education, social security), political representation and judicial services.
- *Making micro–macro links*. Livelihood approaches encourage explicit consideration of links between local issues (such as resource allocation among different types of resource-users in a fishing port), meso-level processes (such as decentralisation of government bringing planning and financial management of fishing ports or landing sites under the control of local authorities) and wider concerns, including national policy and economic or social change (such as the adoption of a new fisheries policy or legislation, the liberalisation of markets and the withdrawal of production-related subsidies).
- *Being responsive and participatory* in addressing management priorities which involves working in partnership with fishers and other stakeholders in the public and private sectors and promotes a dynamic, adaptive and learning approach to management.
- *Building on strengths*. Although development aims to reduce incidences of low incomes, poor health, lack of education, food insecurity, social exclusion, or vulnerability, the livelihoods approach encourages ways of tackling these problems that make the most of peoples’

existing capabilities. In fishing communities, these may include extensive local or indigenous technical knowledge, strong vocational skills and diverse and flexible livelihood strategies.

- *Taking a broad view of sustainability*. The four key dimensions to sustainability—economic, institutional, social and environmental [14]—are all important to fishery management. The livelihoods approach makes these dimensions explicit. The SLA also recognises the dynamism of peoples’ lives and does not view sustainability in static, equilibrium terms. Sustainability is viewed instead as the capacity of elements of a livelihood system (people, institutions, environment and economy) to withstand shocks and adapt to change. The concept of resilience is similarly defined in recent writings on linked social–ecological systems [15].

While none of these principles are new or unique to the livelihoods approach, taken together, they represent a new way of working in development that have yielded positive results in other areas of rural and natural resource development [16,17].

2.2. The livelihoods framework

The livelihoods framework brings together assets and activities and illustrates the interactions between them (Fig. 1). The social and economic unit considered is typically the household, conceived as the social group which resides in the same place, shares the same meals and makes joint or coordinated decisions over resource allocation and income pooling.

The *capital assets* owned, controlled, claimed, or by some other means accessed by the household are grouped into five categories. These comprise physical capital (at household level—boats, house, bicycle etc., but also, at community or citizen level, access to infrastructure such as harbours, road networks, clinics, schools etc.); financial capital (savings, credit, insurance); natural capital (fish stocks, areas of seabed leased or accessed by licence, land owned, crops cultivated etc.); human capital (people’s ‘capabilities’ in terms of their health, labour, education, knowledge, skills and health); and social capital (the kinship networks, associations, membership organisations and peer-group networks that people can use in difficulties or turn to in order to gain advantage).¹

Access to both assets and activities is enabled or hindered by *policies, institutions and processes* (PIPs), including social relations, markets and organisations. PIPs include access and rights regimes and how they work—or do not. These are of course at the heart of fisheries management. The SLA helps ensure that any fisheries, coastal policy or management intervention considers the range of resources that people may be able to draw on and

¹Some argue that this framework would benefit from the addition of additional categories of capital—political and cultural [2].

Legend : H: human; N: natural; F: financial; P: physical; S: social ...Capital

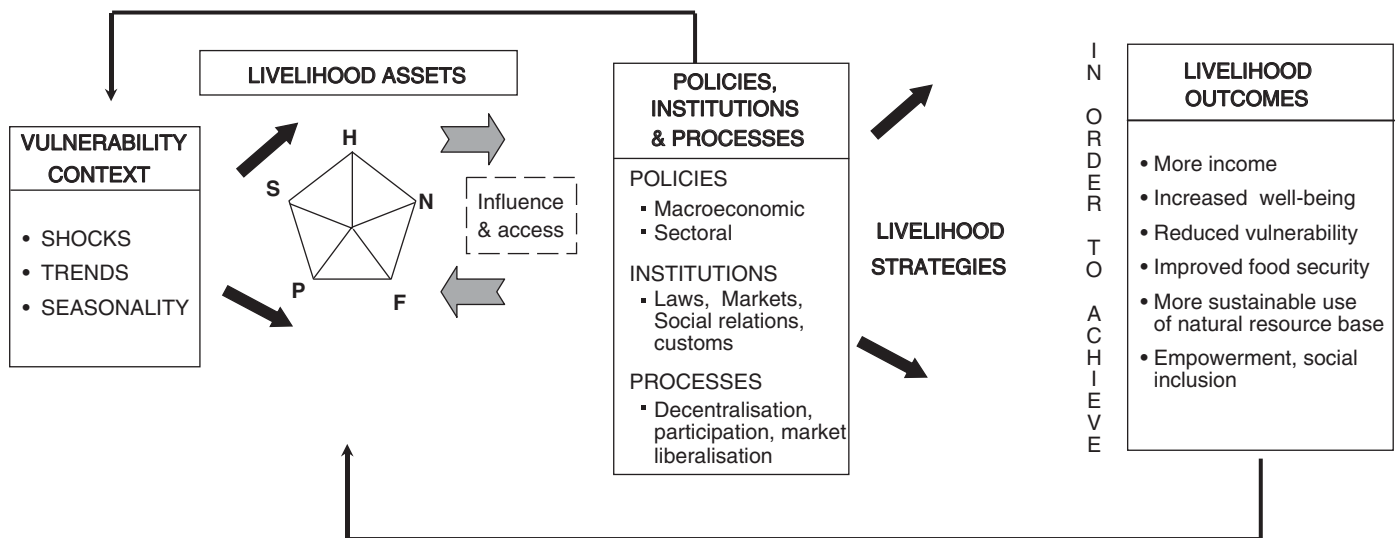


Fig. 1. The rural livelihoods framework as a means to understand natural resource management systems. (Source: modified from UK Department for International Development.)

the factors that may help some to do so, while hindering others.

Livelihood sustainability is also affected by external factors, referred to as the *vulnerability context*², comprising cycles (e.g. seasonality), trends and shocks that are beyond the household's control. Trends might include decreasing catch rates, increasing prices for fish, and factors unrelated to fisheries that nevertheless impact on fishing households, such as rising costs of food staples or medicines. Shocks include storm damage to shore facilities, toxic algal blooms, fuel-price hikes and currency devaluations that affect the costs of fishing inputs and market prices for fishery products. At a household level, illness or death of a family member and the theft or loss of a fishing net are obvious shocks.

Understanding how people succeed or fail in sustaining their livelihoods in the face of shocks, trends and seasonality can help to design policies and interventions to assist peoples' existing coping and adaptive strategies. These may include improving access to education and health care facilities, strengthening rights to land for settlement and agriculture (i.e. not just rights of access to fish stocks), reforming local tax and licence systems, providing financial and enterprise development services (and not just credit for purchase of fishing gear) and promotion of diversification³—all issues seldom addressed in fisheries management and policy.

²What is known as the vulnerability context in the livelihood framework is conceptually similar to what is termed 'risk exposure' in the literature on vulnerability.

³Diversification need not mean diversifying out of fishing entirely; it includes promoting alternative activities that may supplement fishing and reduce dependency on fish stocks.

Capital assets permit *livelihood strategies* to be constructed by individuals or households.⁴ Livelihoods incorporating small-scale fishing are typically either occupationally diverse, geographically dispersed, and sometimes both [5,6]. Mobility and migration is an important component of many fisherfolk's livelihood strategies (both men in the catching sector, and women in the post-harvest sector). Strategies can also relate to people's consumption choices (e.g. 'doing without' or the sale of assets). Short- and long-term measures to ensure survival are often distinguished as 'coping' and 'adapting', respectively [18].

Finally, this framework points to *outcomes*. A livelihood is sustainable if people are able to maintain or improve their standard of living related to well-being and income or other human development goals, reduce their vulnerability to external shocks and trends, and ensure their activities are compatible with maintaining the natural resource base in this case the fish stocks.

The concepts and methods of livelihoods analysis have recently been applied to understanding the role that fisheries play in the rural economy in coastal, lakeshore and floodplain areas in both developing and developed countries, in order to inform policy debates on fisheries management and development [e.g. 1, 5, 6, 19–23]. The next part of this paper documents how the SLA has influenced the purpose, design, process and activities of a major fisheries development initiative, SFLP in West Africa.

⁴Some authors object to the term 'strategy' for what they see as the outcome of a bundle of reactive and unplanned actions [42].

3. The Sustainable Fisheries Livelihoods Programme (SFLP)

The SFLP involves twenty-five countries⁵ in Western Africa, where an estimated seven million people are directly employed in fishing-related activities and where fishing in both marine and inland waters makes important contributions to local and national economies and to food security [24]. The programme represents a 7-year partnership initiated in November 1999 between the participating developing countries, the Food and Agriculture Organization of the United Nations (FAO) and the Department for International Development of the United Kingdom (DFID).

3.1. SLA influences on fishery development programme purpose, design and processes

The SLA has guided SFLP's goal: "to reduce poverty amongst coastal and inland communities in West Africa through sustainable use of aquatic resources" and purpose: "livelihoods in artisanal fisheries communities improved". Poverty reduction and livelihood improvement are envisaged to take place largely through the development of social and human capital in fisheries-dependent communities, by maintaining or enhancing the natural assets used by those communities, and by supporting the development of appropriate policy and institutional environments. This contrasts with previous donor and government-led fishery development approaches, which aimed largely to improve fishing incomes through introduction of new technologies and marketing systems, rather than the strengthening of existing systems [25].

As well as its regional development aims, SFLP intends to provide a basis for lesson-learning and policy-development in the application of the FAO Code of Conduct for Responsible Fisheries (CCRF) in the context of poverty-reduction objectives. The key premise for the CCRF is that aquatic resources, renewable but finite, need to be properly managed if their contribution to the nutritional, economic and social well-being of the world's growing population is to be sustained [26]. To achieve this, states and all those engaged in fisheries management should, through an appropriate policy, legal and institutional framework, adopt measures for long-term conservation and sustainable use of fishery resources [26]. Testing ways of uniting the CCRF and the SLA is important to FAO, which has a global mandate to support all developing countries in the management of their fisheries and aquaculture and has also pledged commitment to help meet the millennium development goals, particularly the goal to reduce

by half the number of poor and food-insecure people by 2015 [27].

Governments throughout the West African region are also committed to poverty-eradication, decentralisation and civil service reform, often encapsulated in national Poverty Reduction Strategy programmes [28,29]. These have led to the redefinition of the roles of central and local government, with significant responsibility for service-delivery and development now being allocated to local government. Decentralisation brings government planning closer to the primary resource-users and generates new opportunities for their participation in natural-resources management. Therefore, the programme design also makes explicit the importance of addressing micro-macro and cross-sectoral links.

The SFLP aims to

- help national governments develop policies and plans which reflect the principles enshrined in the CCRF which is primarily concerned with sustaining and building 'natural capital',
- assist the various stakeholders in increasing the participation of artisanal fishing communities in the national development processes, including achieving appropriate representation in national PRSPs,
- help communities develop the capacity to participate more directly and effectively in local development and fisheries planning and management,
- introduce systems for rehabilitating and/or enhancing aquatic environments,
- improve the efficiency of existing artisanal systems for the production, processing, marketing and distribution of fish and fish products, and
- assist fisheries communities in strengthening diversified livelihoods and/or identifying and promoting alternative livelihood options in their strategies.

It is recognised that people face risks to their livelihoods other than declining fish resources. Addressing these elements of fisherfolk's livelihood vulnerability may increase their capacity and incentive to participate in fisheries governance [30]. SFLP interventions therefore also address this vulnerability context, identified through diagnostic studies using the SL framework.

3.2. SLA-related methods for assessing poverty among small-scale fisherfolk

In order to ensure that the programme reaches the poor, and provides the type of support most appropriate to building on their existing capabilities, there is a need both to identify the poor within fishing-dependent communities (where distribution of capabilities, entitlements and assets are by no means homogenous) and understand the root causes of poverty and vulnerability.

SFLP developed a poverty-profiling methodology to inform its interventions [22]. that involved collecting data

⁵Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, and Togo.

Table 1
Examples of the multiple dimensions and causes of poverty, vulnerability and marginalisation in West African inland fisheries

Lake Volta, Ghana: fishing communities have poor access to services because the region is isolated from markets and routes of communication. Fisherfolk are also geographically mobile and communities are often of recent origin (the lake was created by damming the Volta river in the late 1950s). Both access to social services and communities' own social organisations are therefore absent or weak.

Lac Kossou, Cote D'Ivoire: since independence in 1960, financial support for fishing and agriculture came from agricultural credits established by the Banque Nationale de Developpement Agricole (BNDA). With closure of the BNDA in 1991, there are no longer any financial intermediaries for securing credit among the poor.

Lake Selingue, Mali: declining catches and indebtedness of fisherfolk to the fish-traders that they sell to threatens livelihood security, as does the low level of land-ownership among the fishing people, which leaves them highly dependent on the state of the fish stocks for income and livelihood security throughout the year.

Source: SFLP poverty profiles: www.sflp.org/eng/007/pub2/index.html.

on the range of assets controlled or accessed by households; the laws, policies and regulations and informal customs, beliefs and social norms that affected livelihoods; development programmes and projects operating in the area and external factors such as demographic trends; the conditions of the natural resource base; macroeconomic factors and the security situation. This method provided rapid characterisations of the main issues faced by the poor in the region's fishing communities, some examples of which are given in Table 1.

3.3. The influence of the SLA on development programme activities and outcomes

To achieve its objectives SFLP provides three different kinds of direct support to the participating countries:

- *Institutional capacity and policy development*, including support to formal representative groups which integrate the poor; improved service delivery to fishing communities; participation of communities in the definition and implementation of policies and processes that affect them; and communication of poverty reduction and responsible fisheries objectives at all levels, from local to global.
- *Community projects* designed to be used for low-cost, small-scale poverty-focused initiatives, aiming at informing policies and demonstrating the implementation of the principles of the CCRF.
- *Pilot-projects* that address significant regional or sub-regional issues or constraints which are clearly related to livelihood security of many poor fishing communities. The issues were identified through an extensive participatory process by national representatives of fishermen, fish processors and fish traders, senior staff of fisheries

departments and NGOs. Three pilot projects are underway, each in four countries; they are on inland fisheries co-management, participatory management of coastal fisheries and post-harvest sector development.

On-going progress with the above initiatives is documented in a quarterly publication, the SFLP/PMEDP 'Liaison Bulletin', and in a series of 'Infoflashes', both of which are also available via the project website (www.sflp.org). Here we discuss a few examples of the implementation of the SFLP processes outlined above.

The SFLP strategy is based on the combined application of the SLA and the CCRF. The SLA can facilitate the application of the CCRF by identifying ways in which fisherfolk can conform to 'responsible fishing and post-harvest practices' to achieve or improve their livelihoods. Likewise the CCRF can facilitate the application of the SLA by providing guidance on the PIPs related to sustainable use of fisheries and aquatic resources. In essence, the CCRF provides guidance on how to manage fish stocks, while the SLA provides guidance on how institutions and people can be assisted to do so.

From SFLP's poverty-profiling work, aimed at understanding the assets, vulnerability context and livelihood strategies of fishing communities, there has arisen 60 small projects aimed at bringing immediate benefits to communities and at using the lessons from these projects to inform and influence higher-level policy. Examples of these projects are given in Table 2. They show that the types of interventions identified through SLA differ from those typically arising from a more sectoral approach. More conventional development activities in the fisheries sector have included provision of new technologies and credit to purchase them, centralisation of marketing, government-led fish stock enhancement programmes, and strengthening of government monitoring and enforcement capabilities [31]. The interventions identified through the SLA framework are more often targeted at overcoming institutional barriers to the effective development of existing technologies, financial service provision and marketing arrangements. They have less emphasis on the direct role of government and more on creating the conditions that allow resource users to become involved in monitoring, surveillance and enforcement of fishery management. Interventions are also cross-sectoral, and may address the specific social needs of fishing communities, such as the need to address high prevalence of HIV and incidence of AIDS-related illness in some communities [32,33], or means of addressing gender inequalities where these result in differential access to education, resources and decision-making power.

SFLP recognises that no donor programme can address the individual needs of every village in a country, let alone a region. It also accepts that the sustainability of such interventions is exposed to decisions made at higher levels, or to the effectiveness of the institutions which may be

Table 2

Interventions that can support strengthening of the 'asset platform' upon which livelihoods are constructed, with examples from SFLP community projects

Asset category	Possible areas of intervention	Example SFLP community projects
Human	Training, education, awareness raising, improved food security and access to better diet, improved access to health and education services	All 60 community projects have a capacity building component in areas such as: adult literacy (Niger, Sao Tome and Principe), household resources management (Mali), livelihoods diversification (Cameroon, Senegal), post-harvest techniques (Sao Tome and Principe), fishing techniques (Burkina Faso), addressing HIV/AIDS (Congo, Benin)
Natural	Assisting communities to use their resources more sustainably, improving the post-harvest use of resources, improving access to sectoral service provision, supporting rehabilitation of degraded environments	Reliable and accessible sources of fuel wood to women fish processors through the establishment of a community woodlot initiative (Ghana), fisheries enhancement initiatives (Niger, Burkina Faso), fisherfolk's participation in surveillance of fishing areas (Guinea, Nigeria), fisheries co-management (eight countries)
Financial	Much can be done indirectly through other assets. Social organisation can improve access to credit and provide savings mechanisms, awareness-raising in formal institutions can increase access to formal credit, support can be provided to assist the establishment of insurance schemes. Improving natural assets can improve financial flows. Providing business training can improve the management of finances	Improved access of fisheries communities to existing savings and credit scheme through training (Benin, The Gambia, Niger, Nigeria), small business management and saving scheme for women fish traders (Sao Tome and Principe)
Physical	Helping to improve access to infrastructure, providing access to information on improved technologies, building capacity in communities to improve or develop their own physical assets	The development of human and social assets in community projects is intended to facilitate access to and management of physical assets. Participation of fisherfolk organisations in the management of fisheries infrastructure (Benin, Cape Verde); well construction (Burkina Faso); restoration of community fish ponds (Niger)
Social	Strengthening community organisation skills, building on existing institutions, raising awareness of social organisational structures and functions, building up trust, providing leadership training, encouraging the inclusion of marginalised groups, supporting networks	There is a social capital strengthening component in each project. Some are specifically focused on the strengthening of fisherfolk associations (Benin, Gabon, Mauritania). Particular attention is paid to gender aspects (Sao Tome and Principe) and the inclusion of migrant fishers (Congo) in the organisations

involved in providing support. These may include, but are not limited to

- policies in the fisheries sector, for national poverty reduction, for decentralisation and good governance, and in health and education,
- institutions, including both the way that organisations operate within the public and private sectors and the rules and norms governing peoples' interactions and activities. These may include systems of taxation, land tenure arrangements, social and professional organisations, the way markets function, traditional and religious authorities, kinship and ethnic networks and community-based organizations,
- the processes of effecting change in policies, organisations and institutions, include partnership arrangements, funding mechanisms, stakeholder consultation mechanisms, decision-making forums and participatory monitoring systems.

In many countries the poor and vulnerable are not well taken into account by sector-based organisations. Addressing these PIP issues as an entry point for development

provides a powerful way of helping the poor and marginalised in the long term.

The SLA, when combined with the CCRF, thus provides a sound framework for mapping and understanding the various PIPs which influence the livelihoods of artisanal fisheries communities. SFLP worked to improve PIPs in partnership with all the different stakeholders from community to central government, based on developing an understanding of local-level constraints and strategies to overcome them. Examples of how community-level (micro) interventions were linked through meso- and macro-level PIPs are given in Table 3.

In addition to the West African regional programme, SFLP aimed to influence policy and practice among fisheries sector actors at global level through dissemination of training and awareness-building materials (manuals and brochures), publication of research outputs in the academic literature and as FAO technical papers and reports, and development of a series of policy briefs called 'New Directions in Fisheries' (also available from www.sflp.org) which aims to inform approaches to development in fishing communities that are outside the normal scope of fisheries sector agencies and to foster new partnerships to implement

Table 3

Examples of community-level development interventions supported by SFLP, lessons from which have been used to influence policies, institutions and processes at multiple organisational levels

Examples of interventions at community level ^a	Resulting improvement of policies, institutions and processes		
	Micro level (village, port, landing site)	Meso level (district or sub-national)	Macro level (national, regional, global)
Participatory fisheries surveillance (Guinea)	Provision of training and equipment (GPS, radio) for fishing communities to participate in surveillance activities in areas reserved for artisanal fishing	Partnership with National Fisheries Surveillance Centre resulting in strengthened capacity to defend rights of exclusive access to the artisanal fishing zone against incursions by industrial vessels	Participatory surveillance methodology promoted as part of a move towards co-management, in Guinea, Gabon, Congo and Mauritania
Adult literacy surveys and training (Gambia, Burkina Faso, Niger, Cameroon, Guinea and Sao Tome and Principe)	Surveys of literacy levels identified needs and uses in fishing communities; literacy training given to enhance livelihood opportunities, e.g. for women fish traders	Capacity of local-level service providers (NGOs, district government) to deliver literacy training assessed and enhanced where necessary	Guidelines for preparation of community projects produced. Dialogue between fisheries and education ministries established by ministerial-level participation in a UNESCO and FAO-sponsored summit on Education for Rural People in Addis Ababa, September 2005
Enhancement of fish stocks through release of cultured juveniles (Niger, Burkina Faso)	Community-based organisation for management of fishing grounds supported; ponds for fry and fingerling production restored	Sites for culture-based fisheries identified; work plans developed for implementation through district government development programmes	Fisheries and aquaculture sector fully integrated into the National Rural Development Programme and Poverty Reduction Strategy in Niger
Responding to HIV/AIDS among fisherfolk (Benin, Congo)	Surveys of 'transactional sex' linked to the fish trade and sex work in fishing communities. Social communication and community mobilisation around AIDS prevention through 'forum theatre'	Established partnership with health-sector NGOs working in HIV and AIDS to improve health service delivery to fishing communities	Promoted integration of fisherfolk into National AIDS Control Programmes; secured funding and resource allocation for prevention, treatment and mitigation among fisherfolk; contributed to global awareness-raising of impact of HIV and AIDS on the fisheries sector

^aMany interventions are interlinked, for example one element of the HIV prevention programme is to use literacy training to provide livelihood alternatives for women engaged in sex work in fishing villages and to empower women through creation of SPOs so they can challenge so called 'sex-for-fish' transactions more effectively. Guidelines for Community Development Programmes, developed as part of the literacy strategy, are disseminated for use in all types of community-level interventions in fishing communities. Sources are SFLP Bulletin, Info-flashes and field reports, all found on the SFLP website (www.sflp.org).

these approaches. SFLP also participates in relevant policy fora, such as the recent FAO expert-consultation on small-scale fisheries, which has produced a new set of technical guidelines to assist countries to implement the CCRF [34], and the August 2005 NEPAD/WorldFish Center 'Fish for All' meeting in Abuja, Nigeria, which aimed to gain political support for fisheries and aquaculture in the context of African development [35].

4. Discussion

SFLP has contributed to building the capacity of organisations in West Africa to connect fisheries sector issues with wider development processes (e.g. see Table 3). Future work will track the uptake of SLA and CCRF principles and processes through analysis of fishery management discourses (documents, policy discussions,

presentations at meetings etc.) at local, national and regional level. This will provide a means of assessing their influence on approaches to fisheries management and development, and on subsequent poverty reduction goals.

The SLA is not new, conceptually, but this does not lessen its practical utility. The 'capitals and capabilities' framework is derived from Amartya Sen's work on capabilities [36], and the framework and principles result from weaving Sen's ideas together with two other major strands in development thinking—the role of institutions in shaping economic development outcomes [37] and the importance of paying attention to process, particularly participatory process, if development goals are to be achieved equitably and sustainably [38]. The SLA has many synergies with rights-based approaches to development [39], themselves built on Sen's conceptualisation of 'entitlements' [40].

Adoption of the SLA has improved understanding of the problems confronting fisherfolk and has identified ways to address them. The SL framework is useful as a checklist of issues to be considered when designing interventions for policy and practice. Often, much of the information needed to identify target groups and development needs is already available but has not been processed. Management and policy change can be based on existing understanding of livelihood issues, synthesised from key informants and from representatives of different stakeholder groups, rather than investing in detailed research to quantify all the boxes and linkages. In the asset pentagon, for example, the categories of capital (physical, natural, social etc.) are immediately useful as a reminder that people use not only money, boats and fish to support their livelihood but may also draw on their family labour, physical strength, educational and professional skills, political influence, the social services provided by the state, infrastructure funded by taxpayers, and a host of other ‘assets’ that policy and management interventions potentially support, undermine and redistribute.

In the context of the fisheries sector, the SLA has emphasised the cross-sectoral diversity of household livelihood strategies among fisherfolk, the pervasive influence of formal and informal institutions on livelihoods and resource management, the social and economic heterogeneity of households engaged in fishing and the multi-dimensional nature of poverty and the importance of process considerations in attempts to address them. The SLA can help prioritise interventions, and reduces the need to provide forms of livelihood support that are ineffective or damaging to resource sustainability.

The SLA helped SFLP partners find room for manoeuvre around a key dilemma in the small-scale fisheries sector: how to decrease poverty and vulnerability of fishing-dependent people without increasing fishing effort. SL approaches have shown how development interventions that build human and social capital among people involved in fisheries can support their existing attempts to reduce their poverty, vulnerability and resource dependency and address the institutional factors preventing them from adopting resource conservation measures to protect their own livelihoods.

Although the SLA has provided useful concepts and operational guidance to SFLP, it also has weaknesses in the way it is represented and therefore interpreted [41–43]. These include

- an essentially managerial and structural perspective that is insufficient for analysing and addressing power and power relations,
- limited utility in conceptualising human agency, experience and conflicts over values,
- with its focus on ‘households’ it does not explicitly consider intra-household differences in livelihoods (e.g. between women and men, youth and elders) and the impact of larger scales of social organisation, such as the

occupational group, community, ethnic group and nation,

- limited utility for understanding the highly fluid, organic ways in which people’s livelihoods shape and are shaped by local institutional practices and relationships,
- limited engagement with community development approaches and concepts,
- the importance of markets and their roles in livelihood development and poverty reduction is under-emphasised, hidden as it is in the PIPs box,
- overemphasis on the ‘asset pentagon’, to the detriment of the issues above.

Some of these criticisms apply only if the SLA is used uncritically as a ‘blueprint’ and the framework used only to take a static ‘snapshot’ of livelihoods rather than attempting to understand changes over time.

SFLP’s use of the SLA in francophone West Africa has provided an important challenge to the previously prevailing ‘paradigme halieutique’ [44], whereby the biological component of the fishery system is addressed by fishery agencies to the neglect of the social and economic components and only fisheries biologists had the legitimacy to inform fisheries decision-making. Although the shortcomings of this view had already been made apparent by extensive field-based social research [44] much of this was inaccessible to policy makers, managers, NGOs and resource users. SL perspectives have helped make this material more widely accessible. One of the key strengths of the SLA has been the strong, interactive relationship between research, policy and practice [45].

Without the explicit adoption of the SLA, SFLP may not have been able to place high on the fisheries development agenda issues such as incorporating fisheries planning in poverty reduction strategies [28], accounting for livelihood diversity and migration and mobility in the design of fisheries co-management systems [46] or addressing links between gender relations, the dynamics of the fish trade and the high prevalence of HIV in fishing communities [32,33].

Livelihoods approaches are evolving and merging with rights-based approaches and community-development, most notably in the way that community-based or co-management systems are being analysed, designed and supported by development programmes. The emphasis in livelihoods approaches has perhaps shifted away from a preoccupation with assets and strategies, and recognises the key importance of interventions that address the ‘PIP box’. It is no accident that the PIP box is at the centre of most livelihoods diagrams (Fig. 1). It is policies and institutions that determine access to assets, set the vulnerability context and determine peoples’ livelihood options, reactions and strategies, and ultimately, the outcomes of those strategies in terms of their ability to make a living and willingness to invest in helping to conserve the natural resource base. Addressing governance

therefore remains the key challenge for both poverty reduction and responsible fisheries.

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References

- [1] Neiland AE, Béné C, editors. 2004. Poverty and small-scale fisheries in West Africa. Dordrecht, Netherlands: Kluwer, Rome, Italy: FAO; 2004.
- [2] Stirrat RL. Yet another ‘magic bullet’: the case of social capital. *Aquatic Resources, Culture and Development* 2004;1(1):25–33.
- [3] Chambers R, Conway GR. Sustainable rural livelihoods: practical concepts for the 21st century. Institute of development studies discussion paper no. 296. Brighton, Sussex, UK; 1992.
- [4] Bebbington A. Capitals and capabilities: a framework for analysing peasant viability, rural livelihoods and poverty. *World Development* 1999;27(12):2021–44.
- [5] Allison EH, Ellis F. The livelihoods approach and management of small-scale fisheries. *Marine Policy* 2001;25(5):377–88.
- [6] Allison EH. The fisheries sector, livelihoods and poverty reduction in eastern and southern Africa. In: Ellis F, Freeman HA, editors. *Rural livelihoods and poverty reduction policies*. London: Routledge; 2005. p. 256–73.
- [7] Béné C, Macfadayan G, Allison EH. Enhancing the contribution of small-scale fisheries to poverty alleviation and food security. Fisheries Technical Report No. 481, FAO, Rome; 2006.
- [8] Narayan D, Chambers R, Shah MK, Petersch P. *Voices of the poor: crying out for change*. Oxford: Oxford University Press; 2001.
- [9] Sen A. Social exclusion: concept, application, and scrutiny. *Social development papers no. 1*. Manila, Philippines: Office of Environment and Social Development, Asian Development Bank; June 2000.
- [10] Adger WN, Brooks N, Bentham G, Agnew M, Eriksen S. New indicators of vulnerability and adaptive capacity. Technical Paper No. 7, Tyndall Centre for Climate Change Research, University of East Anglia, Norwich, UK; 2004. 128pp.
- [11] Béné C. When fishery rhymes with poverty: a first step beyond the old paradigm on poverty in small-scale fisheries. *World Development* 2003;31(6):949–75.
- [12] Townsley P. Livelihoods and aquatic resource management. In: Carney D, editor. *Sustainable rural livelihoods: what contribution can we make?* London: Department for International Development; 1998. p. 139–54.
- [13] FAO. Poverty in coastal fishing communities. Advisory committee on fishery research third session 5–8 December. Rome: Food and Agriculture Organization, <<http://www.fao.org/DOCREP/MEETING/003X8905E.html>>; 2000. [accessed 20th August 2005].
- [14] Charles AT. *Sustainable fishery systems*. Oxford: Blackwell Science; 2001.
- [15] Berkes F, Colding J, Folke C, editors. *Navigating social-ecological systems: building resilience for complexity and change*. Cambridge, UK: Cambridge University Press; 2003.
- [16] Ashley C, Carney D. *Sustainable Livelihoods: Lessons from Early Experience*. London: Department for International Development; 1999.
- [17] Neely C, Sutherland K, Johnson J. Do sustainable livelihoods approaches have a positive impact on the rural poor? A look at twelve case studies. *Livelihoods support programme, Working paper 16*. Rome: Food and Agriculture Organisation; 2005.
- [18] Ellis F. Household strategies and rural livelihood diversification. *Journal of Development Studies* 1998;35(1):1–38.
- [19] Béné C, Neiland AE, Jolley T, Ovie S, Sule O, Ladu B, et al. Inland fisheries, poverty, and rural livelihoods in the Lake Chad basin. *Journal of Asian and African Studies* 2003;38:17–51.
- [20] van Oostenbrugge JAE, van Densen WLT, Machiels MAM. How the uncertain outcomes associated with aquatic and land resource use affect livelihood strategies in coastal communities in the Central Moluccas, Indonesia. *Agricultural Systems* 2004; 82(1):57–91.
- [21] Whittingham E, Campbell J, Townsley P. *Poverty and reefs*. Paris: DFID-IMM-IOC/UNESCO; 2003. 260pp.
- [22] Pittaluga F, Corcoran E, Senahoun J. Poverty profiles of artisanal fishers: methods based on the SLA model. In: Neiland AE, Béné C, editors. *Poverty and small-scale fisheries in West Africa*. Dordrecht: Kluwer, Rome: FAO; 2004. p. 103–19.
- [23] Salmi P. Rural pluriactivity as a coping strategy in small-scale fisheries. *Sociologia Ruralis* 2005;45(1–2):22–36.
- [24] Horemans B. The work of the sustainable fisheries livelihoods programme (SFLP) in West Africa. In: Neiland AE, Béné C, editors. *Poverty and small-scale fisheries in West Africa*. Rome: FAO, Dordrecht: Kluwer; 2004. p. 229–43.
- [25] Cycon DE. Managing fisheries in developing nations: a plea for appropriate development. *Natural Resources Journal* 1986;26:1–14.
- [26] FAO. *The code of conduct for responsible fisheries*. Rome: Food and Agriculture Organisation; 1995.
- [27] The Millennium Development Goals, United Nations, New York, <www.un.org/millenniumgoals/> [accessed 31 August 2005].
- [28] SFLP. Integrating small-scale fisheries in poverty reduction planning in West Africa—report of the consultation. *Sustainable fisheries livelihoods programme field Report, SFLP/RF/15*. Cotonou, Benin, <<http://www.sflp.org/eng/fr/003/doc/rconsuleng.doc>> [accessed 9th September 2003].
- [29] Thorpe A, Reid C, van Anrooy R, Brugere C. When fisheries influence national policy-making: an analysis of the national development strategies of major fish-producing nations in the developing world. *Marine Policy* 2005;29(3):328–62.
- [30] SFLP. *Reducing fisherfolk’s vulnerability leads to responsible fisheries. New directions in fisheries no. 1. Sustainable fisheries livelihoods programme*. Rome: Food and Agriculture Organisation of the United Nations; 2005.
- [31] Neiland AE. Fisheries development, poverty alleviation and small scale-fisheries: a review of policy and performance in developing countries since 1950. In: Neiland AE, Béné C, editors. *Poverty and Small-Scale Fisheries in West Africa*. Rome FAO; Dordrecht: Kluwer; 2004. p. 189–208.
- [32] SFLP. *Fisheries and AIDS’ SFLP liaison bulletin no 17 & 18, Sustainable fisheries livelihoods programme, Cotonou, Benin; September/December 2004*. p. 2–35, available from <www.sflp.org>.
- [33] Kissling E, Allison EH, Seeley JA, Russell S, Bachmann M, Musgrave SD, et al. Fisherfolk are among groups most at risk of HIV: a cross-country study of prevalence and numbers infected. *AIDS* 2005;19(7):1939–46.
- [34] FAO. *Increasing the contribution of small-scale fisheries to poverty alleviation and food security. Technical guidelines on implementing the code of conduct for responsible fisheries, vol. 10*. Rome: Food and Agriculture Organisation; 2005.

- [35] World Fish Center. Declaration of the NEPAD-fish for all summit. Abuja, Nigeria, 22–25 August 2005. World Fish Center, available from <www.fishforall.org> [accessed 31st August 2005].
- [36] Sen A. *Commodities and capabilities*. Amsterdam: North-Holland; 1985.
- [37] North DC. *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press; 1990.
- [38] Mosse D, Farrington J, Rew A, editors. *Development as process: concepts and methods for working with complexity*. London: Routledge; 1998.
- [39] Leach M, Mearns R, Scoones I. *Environmental entitlements: dynamics and institutions in community-based natural resource management*. *World Development* 1999;27(2):225–47.
- [40] Sen A. *Poverty and Famines: An Essay on Entitlements and Deprivation*. Oxford: Clarendon Press; 1981.
- [41] Toner A. The possibilities of managing sustainability: exploring sustainable livelihoods approaches in relation to two interventions in Tanzania. Paper presented at the development studies association conference on 'Rio plus 10 and sustainable development', 7th November 2002, Greenwich, UK Available from <www.devstud.org.uk/publications/papers/2002.htm> [accessed August 31st 2005].
- [42] Dorwood A, Poole N, Morrison J, Kydd J, Urey I. Markets, institutions and technology: missing links in livelihoods analysis. *Development Policy Review* 2003;21(3):319–32.
- [43] Brocklesby MA, Fisher E. Community development in sustainable livelihoods approaches—an introduction. *Community Development Journal* 2003;38(3):185–98.
- [44] Chauveau J-P, Jul-Larsen E, Chaboud C, editors. *Les peches piroguieres en afrique de l'ouest: pouvoirs, mobilites, marches*. Paris: CMI-IRD-KARTHALA, Institut de Recherche Pour le Développement; 2000.
- [45] Solesbury W. *Sustainable livelihoods: a case study of the evolution of DFID policy*. ODI working paper no. 217. London: Overseas Development Institute; 2003.
- [46] SFLP. Dossier: co-management. SFLP liaison bulletin no 19& 20. Cotonou, Benin; June 2005. p. 3–35, available from <www.sflp.org>.