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The Sustainable Livelihoods Approach as an impact assessment tool for development interventions in rural Tigray, Ethiopia: opportunities & challenges

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Abstract
Measuring the impact and sustainability of development programmes requires the development of appropriate assessment tools. This paper examines the Sustainable Livelihoods Approach's (SLA) potential to be transformed to and called in as a practical instrument to evaluate the impact of development interventions in rural Tigray (Northern Ethiopia).

Fieldwork has been carried out in communities in woreda Dogua Tembien using participant observation and open interviews as methods.

Next to more general challenges of defining, measuring and comparing livelihood assets, context specific factors complicate the operationalisation of the SLA as an impact assessment tool in the area. The SLA distinguishes between livelihood assets on the one hand and transforming structures and processes on the other. The latter lend meaning and value to the former. This conceptual distinction is worthy as it makes the two-way interaction between both categories explicit and escapes from reducing institutions, organisations, policies and legislation to context or background. However, in practice the boundaries are fuzzy and not easy to interpret. The example of religion as a cross-cutting organizing principle illustrates this assumption. Moreover the distinction complicates the operationalisation of the SLA as it implies the meaning and value of capitals to be volatile and depending on the prevailing social, institutional and organisational environment. This is exemplified with the big transforming power of policy shifts in the area.

For the SLA to serve as an impact assessment tool, it requires a culture- and policy-sensitive analysis of farmers' asset base. Only a sound understanding of the interactions between livelihood assets and transforming structures and processes can lead to a locally contextualised, meaningful and workable impact assessment tool that measures asset levels using indicators that reflect farmers' own criteria to judge development interventions.

Keywords: SLA, Tigray, rural development, livelihood impact assessment

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1 Introduction: the research objective

Nowadays the willingness to think about the impact and sustainability of development programmes is common in development circles. To constructively translate this reflective attitude into a practical step-forward in the realisation of development ambitions, appropriate impact assessment tools are required. This paper contributes by examining the Sustainable Livelihoods Approach's potential to be transformed to and called in as a practical instrument to evaluate the impact of development interventions in rural Tigray, Ethiopia.

2 The Sustainable Livelihoods Approach (SLA)

With the development of the Sustainable Livelihoods Approach (SLA) the British government's Department for International Development (DFID) formulates a new way of thinking about the objectives, scope and priorities for development. In essence it is a way of putting people at the centre of development, thereby increasing the effectiveness of development assistance. The SLA's core concepts are: 1) people-centred, 2) holistic, 3) dynamic, 4) building on strengths, 5) macro-micro links and 6) sustainability (DFID 1999).

As a starting point most literature on the SLA uses Chambers' and Conway's definition (1992) of a sustainable livelihood (Toner & Howlett 2001, Lautze et al. 2003). Following this definition a livelihood comprises the capabilities, assets (material as well as social means) and activities required for a means of living. A livelihood is sustainable which can cope with and recover from stress and shocks, maintain and enhance its capabilities and assets and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

To understand and analyse the livelihoods of the poor, DFID developed a framework (Figure 1). This framework endeavours to provide a way of thinking about livelihoods that will stimulate structured and coherent debate and reflection, thereby improving performance in poverty reduction. In its simplest form the framework views people as operating in a context of vulnerability. Within this context they have access to certain assets or poverty reducing factors. These gain their meaning and value through the prevailing social, institutional and organisational environment. Moreover transforming structures and processes that constitute the environment influence the livelihood strategies – ways of combining and using assets – that are open to people in pursuit of beneficial livelihood outcomes that meet their own livelihood objectives (DFID 1999).

![Figure 1 The Sustainable Livelihood framework (DFID 1999)](image-url)
The asset pentagon lies at the core of the livelihood framework. This pentagon gives information on people's access to the different assets i.e. on people's livelihood status. The assets are presented along five axes. The centre point of the pentagon, where the lines meet, represents zero access to assets. The livelihood framework identifies five core asset categories or types of capital upon which livelihoods are built: 1) human capital, 2) social capital, 3) natural capital, 4) physical capital and 5) financial capital (DFID 1999).

3 Methodology and study area description

The SLA's potential to serve as an impact assessment tool for development programmes in general will be discussed on the basis of existing literature. Literature research and fieldwork are combined to assess the opportunities and challenges for the operationalisation of the SLA in the case study context of rural Tigray (Northern Ethiopia). Fieldwork has been carried out in rural communities in woreda Dogua Tembien in the highlands of Central Tigray (Figure 2) in the course of October and November 2004. Both participant observation and open interviews have been used as methods.

The predominant agricultural practice in the study area is small-scale mixed subsistence farming. Land is prepared with an ox drawn plough, the *maresha*. Naudts (2003) distinguishes between two important agro-ecological zones within the Tembien highlands. The zone situated on basaltic parent material (2600-2800 m) is characterized by fertile soils, high population densities and a scarcity of grazing land. The main crops are teff (*Eragrostis tef*), wheat, barley and horse bean. In the zone on limestone parent material (2000-2500 m) soils are less fertile, villages are fewer and further between and rangelands are more abundant. Maize, barley, sorghum and teff are the main crops in this zone.

![Figure 2 Research area. On the map the study area is indicated with a rectangle.](image)

4 Results and discussion

4.1 The SLA as an impact assessment tool for development interventions

Development interventions aim at the realisation of a sustainable improvement of their target group members' living conditions. Within the SL framework such improvement takes the shape of an enhancement of people's livelihood asset base. Measuring the impact of a development
intervention consequently implies assessing the extent to which it contributes positively to the different forms of capital people have at their disposal.

However literature research reveals a number of factors that complicate the use of the SLA in its raw form to evaluate the effects of a development intervention. The asset pentagon's pivotal position in the SL framework on the conceptual level, does not obviously translate into operative power for impact assessment. Defining, comparing and measuring assets are considered major challenges (Scoones 1998, Toner & Howlett 2001, Macqueen 2001).

It can be questioned if breaking up a livelihood status in the five proposed asset categories enables its meaningful description. Baumann & Subir (2001) suggest that power issues are in danger of escaping from analysis if political capital is not given equal status as other capital assets. Critique is also given on the failure of the asset pentagon to distinguish between personal and common assets (Hussein 2002). Other authors state that the overall concept is ethnocentric and not easily translated (Toner & Howlett 2001). Particular difficulties are encountered in defining social capital (Toner & Howlett 2001, Bahigwa et al. 2001). The latter mention that, despite the use of participatory approaches, not one single type of social capital could be identified in rural communities in Uganda.

Measuring and comparing changes in people's livelihood status is impracticable unless the asset axes' dimensions are laid down and the axes are calibrated. At present there are few indicators associated with any of the capital assets other than financial capital. Still fewer are the indicators which can be used to compare increases or decreases between capitals (Macqueen 2001). However development interventions may alter the balance of capital assets in complex ways, enlarging some assets at the expense of others. The incomparability of capitals and the inability to evaluate changes in livelihood status that follows, make some authors suggest that the SL framework is inoperable (Macqueen 2001, Davis 2001). In this view the asset pentagon is not sufficient for prioritising investment or as a decision making tool, as they require the assessment of the relative merits of one combination of assets against each alternative combination.

The measurement malaise may promote active discrimination against certain important components of development interventions. Macqueen (2001) puts the less easy it is to quantify an asset, the more averse one is to consider it equal in value to an easily quantifiable one. Systematic underweighting particularly of human and social capital is the result.

The development of indicators that can measure the level of the different livelihood assets and changes in this level induced by development interventions can be concluded to be a major obstacle to negotiate in the operationalisation of the SLA as an impact assessment tool for development interventions.

4.2 The SLA as a livelihood impact assessment tool in rural Tigray
The SLA distinguishes between livelihood assets on the one hand and transforming structures and processes, or policies, institutions and processes (PIPs), on the other. The latter lend meaning and value to the former. The distinction is worthy on a conceptual level as it makes the two-way interaction between both categories explicit and escapes from reducing institutions, organisations, policies and legislation to context or background. However, in practice the boundaries are not clear-cut or easy to interpret. Moreover the distinction complicates the operationalisation of the SLA as it implies the meaning and value of capitals to be volatile and depending on the prevailing social, institutional and organisational environment.
In the case study context religion on the one hand and government policies on the other add to the more general challenges encountered in the operationalisation of the SLA as an impact assessment tool for development programmes. Being part of the SLA category of policies, institutions and processes, they intervene with the category of assets to such degree that boundaries between categories threaten to become fuzzy. Both factors are elaborated upon below as they are expected to have to contend with in any attempt to operationalise the SLA to assess the impact of development interventions in the area.

In rural communities in woreda Dogua Tembien religion can not simply be reduced to the background against which people's lives play. The large majority of the case study area's inhabitants practice a local version of the Christian orthodox belief and people's religious conviction sets boundary conditions under which decisions with respect to other livelihood aspects are being taken. Religion can be considered a cross-cutting, recurring and directing motive upon which not only people's socio-cultural and mental life rests, but which also structures their economic and physical life.

The organization of the agricultural calendar pre-eminently testifies of the role of religion as an organizing principle in the domain of agriculture and its most important economic function, the production of food for subsistence. On numerous occasions farmers abandon their agricultural activities in favour of celebrating religious holidays. By doing so they choose to refrain from combining their assets so as to increase their harvest or the productivity of their land. This not only contradicts the conception of a farmer as a rational profit maximiser or risk minimiser, but also challenges the use of straightforward indicators such as income for measuring people's livelihood status. Farmers' behaviour could be conceived of as an investment in 'religious' or 'cultural' capital at the expense of material asset types, which bares the fuzziness of boundaries between the SLA categories of assets on the one and PIPs, or transforming structures and processes, on the other hand.

The presence of church forests that surround the orthodox churches in the study area, and which are considered the only relicts of the original vegetation in an otherwise degraded landscape, can be read according to the same line of reasoning. Their protection could be considered as an investment in ‘religious’ or ‘cultural’ capital with the, maybe unintentional, positive side effect of biodiversity conservation. In this case interpreting biodiversity as natural capital and religion or culture as institutions that mediate access to the former may stretch realities on the ground.

With respect to government policies a similar argumentation can be followed. In the case study area policy too prominently influences people's livelihoods to be considered background. Most farmers have to cope with serious limitations in their asset base and room for choice when weighing out investments and taking decisions on how to combine assets. In this context of limited buffer capacity at household level, policy is a powerful instrument as policy changes may directly alter assets' values and the fitness of established livelihood strategies.

In the study area government interventions in general are numerous and people interact closely and regularly with the lower government levels especially. The extent of public investments in education, health and infrastructure, the mobilization of people for extension workshops and sensitization campaigns and the massive participation in government's food for work programmes are only a few examples of the close entanglement of people with their institutional environment.

Land issues in the case study area illustrate government policy's big transforming as well as freezing power. Land in woreda Dogua Tembien is both an indispensable asset and a scarce good, and crop land should be redistributed continuously in order to realize farmers' constitutional use
rights to land. In practice Tigray's regional government refrains from redistributing land. However the 1997 Tigray land proclamation does not expressly rule out future land redistribution (Dessalegn Rahmato 2004). Such land policy inconsistencies render the value of land volatile and hamper decisions on preferable ways to combine assets as to realize one's livelihood outcomes. Investing in land productivity means risking to be hard hit in case of land redistribution. Investing outside agriculture endangers one's land use rights as the Tigray legislation strongly implies that access to land is conditional on continued residence in the area (Dessalegn Rahmato 2004).

A recent policy shift in the field of access to land for grazing in the study area once more exemplifies the close entanglement of PIPs and livelihood assets. Free stubble grazing on crop land after the harvest is commonly practiced in the area (Figure 3). As it is considered an inefficient way of using natural resources, the woreda administration decided to abandon free grazing on crop land in some selected areas. The measure is meant as an incentive for farmers to invest in their land by planting its borders with trees and fodder crops and maintaining soil and water conservation structures (otherwise respectively nibbled and trampled by roaming cattle). The policy shift may be expected to interfere profoundly with asset definitions as it alters among other things the value of communal grazing land, of crop land within the closed areas compared to that of crop land outside the target areas and of cattle itself.

The recent abolishment of food aid in the case study area is another example of how government policies directly influence people's asset base. Receiving food aid has been a long established strategy to meet food requirements for the majority of the households, and its abolition compels people to achieve a new balance in combining assets to meet their livelihood objectives.

5 Conclusion

It can be concluded that the definition, meaning and value of capital are neither universal nor neutral, but reflect a specific cultural, political, socio-economic and historical context. For the SLA to serve as an impact assessment tool for development interventions in rural Tigray it needs a culture- and policy-sensitive analysis of farmers' asset base. Only a sound understanding of the interactions between livelihood capitals and transforming structures and processes will lead to a locally contextualised, meaningful and workable asset polygon that can measure asset levels using indicators that reflect farmers' own criteria to judge development interventions. If this challenge is taken up, the SLA could be converted from a conceptual framework to a practical instrument to assess the contribution of development programmes to the enlargement of farmers' asset base, and thus to the sustainable enhancement of rural livelihoods in Tigray.
References


