

Review

Review on Rural livelihood diversification among the smallholder farmers in some Africa countries

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Past studies revealed vulnerability associated with agricultural production rural livelihood diversification in Africa. A livelihood comprises capabilities, material and social resources and activities required for a means of living which also takes into account the role played by structures, policies and processes in influencing the choice of livelihood strategies by the rural poor. There are no recent reliable estimates to see if the diversification strategies have been improved after the introduction of economic reforms in Africa. Many studies hypothesized that the availability of assets such as savings, land, labor, education, access to market or employment opportunities and other public goods is a primary factor in determining a household's capability to diversify their livelihood. Therefore, this study reviews diversification techniques adopted by different scholars in the estimation of livelihood of the smallholder farmers in Africa. It will also fill the gaps that have been yet addressed by the researchers in a study related to livelihood diversification.

Keywords: Africa, smallholder, farmers, livelihood diversification, rural.

INTRODUCTION

Over the past decades, there has been an outstanding trend of activity diversification in rural areas in developing countries. A rich related literature suggests that rural households adjust their activities either to exploit new opportunities created by market liberalization (Delgado and Siamwalla, 1997) or to cope with livelihood risks (Barrett et al., 2001(a); Carter, 1997). These adjustments are found to have an important impact on income, income distribution and welfare across rural households (Ellis, 1998, 2000; Hoogeveen, 2001; Reardon et al., 2000).

African rural economy has been diversifying at various levels. First, the agricultural production itself has been diversified with a constant decline of farming and a steady rise of husbandry, forestry and fishery in terms of output value (Adugna, 2005). Second, the importance of grain in the farming sector has dropped rapidly in favor of cash crops, whose share increased from 20% per cent of total sown area in 1978 to 35 per cent in 2003. Third, non-farm activities have thrived as illustrated by both the prosperity of rural enterprises and the huge flows of rural migrants to urban areas. Diversification of income sources, assets, and occupations is the norm for individuals or households in different economies, but for different reasons (Adugna, 2005). Despite the traditional believes that view rural non-farm sector as a low productivity sector, recent years have witnessed a shift away from this position towards a recognition that of the rural non-farm contribution to economic growth, rural employment, poverty reduction

(Lanjouw and Lanjouw, 1995) (Hagblade et al., 2007). Ecological and environmental influence due to human developmental activities has been steadily increasing and causing unprecedented magnitude and rate of global ecosystem change. The rural poor have developed the capacity to cope with increasing vulnerability associated with agricultural production-diversification, intensification and migration or moving out of farming (Ellis, 2000).

Rural livelihood strategies are the combination of activities that people choose to undertake in order to achieve their livelihood goals. Rural people partake in a number of strategies, including agricultural intensification, and livelihood diversification, to attain their livelihoods goals.

However, the contribution to be made by livelihood diversification to rural livelihoods has often been ignored by policy makers who have chosen to focus their activities on agriculture (Carswell, 2000). Understanding what factors have led to livelihood change will be important on-going question in the research, particular factors affecting agricultural and non-agricultural opportunities, and the need to manage livelihood portfolios in relation to risk.

The study of smallholder farmer's livelihood diversification patterns in a developing country such as Sub-Saharan Africa is important for several reasons apart from its expected impact on income and poverty reduction. First, in a context of missing or imperfect markets for credit, insurance, or land livelihood diversification choices are supposed to reflect optimal strategies followed by farm households in order to

balance their expected returns with the related risk exposure they face. Since all livelihood diversification strategies may not be equally lucrative, understanding both the incentives and the constraints that rural households face in their decision between alternative options can offer important insights as to what policy might effectively improve the rural poor access to higher return activities. Second, livelihood diversification choices not only reflect the allocation of household assets, but also the allocation of household labor resources across various activities. Therefore, the purpose of this review is to highlight the smallholder farmers' livelihood diversification and the main factors that drive smallholder farmers' livelihood diversification as well as individuals in their decision to diversify their economic activities by taking some theoretical and empirical literatures conducted in some of the African countries.

The Review Process

The Concept of Livelihoods

There are number of definitions of livelihoods that have been put forward. Examples include; (Chambers, 1989) who defined livelihood as "adequate stocks and flows of cash to meet basic needs". This was later expanded by (Chambers, and Conway, 1992) who described livelihood as the capabilities, assets and activities required for a means of living. Though this definition does not clarify how these adequate stocks and flows of cash come about, (Ellis, 2000) in attempt to bring together various definitions defines livelihood as: "A livelihood comprises the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household."

In summary, a livelihood comprises capabilities, material and social resources and activities required for a means of living which also takes into account the role played by structures, policies and processes in influencing the choice of livelihood strategies by the rural poor. It is considered sustainable when it can cope with and recover from stresses and shocks maintain or enhance its capabilities and assets, while not undermining its natural resource base (Scoones, 2000). Taken together, these definitions reveal that the term livelihoods is a multi-faceted concept referring to what people do to make a living with the assets at their disposal and what they accomplish by doing it in a particular context (Niehof, 2004). The concept of livelihood is therefore about individuals, households or communities making a living, attempting to meet their various consumption and economic necessities, coping with uncertainties and responding to new opportunities (de Haan and Zoomers, 2005). A livelihood strategy

would include activities that generate income to a household. It not only captures what people do in order to make a living, but also resources that provide them with the capability to build a satisfactory living, risk factors they consider in managing their resources as well as the institutional and policy context that either helps or hinders them in pursuit of an improved standard of living.

Overview of the Sustainable Livelihoods Framework (SLF)

The SLF forms the core of the Sustainable Livelihoods Approach and serves as an instrument for the investigation of poor people's livelihoods. It provides a useful guide for the analysis on livelihoods suggesting that livelihoods comprise capabilities, assets and activities required to make a living. Livelihood assets and capital are used interchangeably as they are an important component of the SLF because they form the strength upon which people construct their livelihoods and achieve their goals (Bebbington, 1999). According to Kollimar and Gamper (2002), the framework in [Figure 1](#) depicts stakeholders as operating in a context of vulnerability, within which access certain assets. These gain their meaning and value through the prevailing social, institutional and organizational environment known as transforming structures and processes. This context influences the livelihood strategies that are open to people in pursuit of their self-defined beneficial livelihood outcomes. The framework does not work in a linear manner but rather seeks to provide a way of thinking about the livelihoods of poor people which should help in identifying more effective ways to support livelihoods and reduce poverty.

Livelihood Resources

The analytical framework described by Scoones in his paper adopted an economics metaphor to describe the basic material and social, intangible and tangible assets that people have in their possession. These resources were the 'capital' base from which livelihoods could be constructed. He offered a simple set of definitions:

Natural capital – natural resource stocks (soil, water, air, genetic resources etc) and environmental services (hydrological cycle, pollution sinks etc) from which resource flows and services useful for livelihoods are derived.

Economic or financial capital--including infrastructure the capital base (cash, credit/debit, savings etc), infrastructure, and other economic assets which are essential for the pursuit of any livelihood strategy.

Human capital – skills, knowledge, ability to work and good health important for the successful pursuit of livelihood

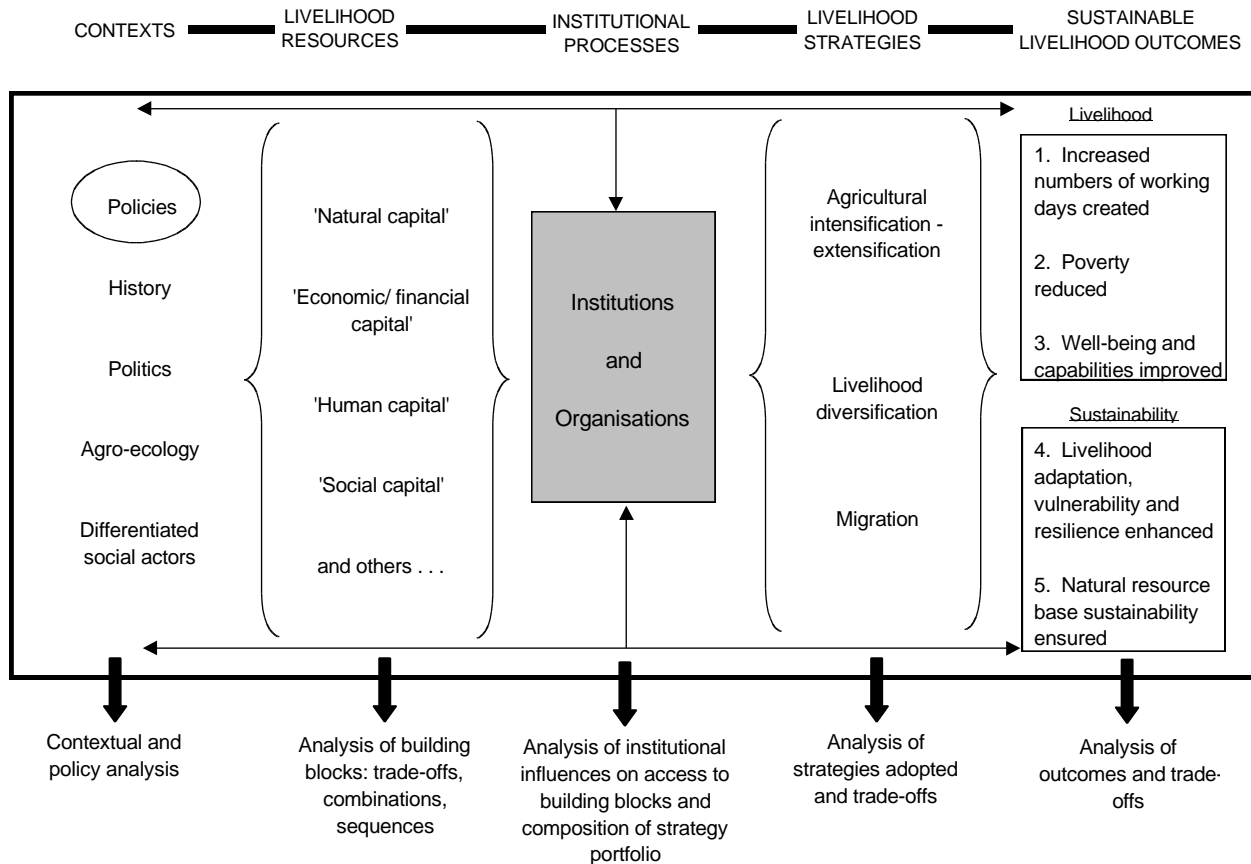


Figure 1. Sustainable Livelihoods Framework (SLF): Adapted from Scoones (2000).

strategies.

Social capital – the social resources (networks, social relations, associations etc) upon which people draw when pursuing different strategies.

Whilst more 'capital' sources could be identified, the main point was that in order to construct livelihoods, people should successfully combine all or some of these 'capital' endowments (Scoones, 2000).

Institutions and organizations

A broad definition of institutions, derived from the sociological and anthropological literature is taken here. This sees institutions as 'regularized practices (or patterns of behavior) structured by rules and norms of society which have persistent and widespread use' (Giddens, 1979). Institutions may thus be formal and informal, often fluid and ambiguous, and usually subject to multiple interpretations by different actors. Power relations are embedded within institutional forms, making contestation over institutional practices, rules and norms always important. Institutions are also dynamic, continually being shaped and reshaped over time. They are thus part of a process of social negotiation, rather

than fixed 'objects' or 'bounded social systems'. Institutions (in North's terms the 'rules of the game') therefore are distinguished from organisations (the players) (North 1990), the interplay of both being important in the framework (Figure 1). According to Davies (1997: 24): "institutions are the social cement which link stakeholders to access to capital of different kinds to the means of exercising power and so define the gateways through which they pass on the route to positive or negative [livelihood] adaptation" So what?, you may ask. Why do institutions really matter for the policy and practice of development for sustainable livelihoods? A number of inter-related reasons can be forwarded:

Understanding institutional processes allows the identification of restrictions/barriers and opportunities (or 'gateways') to sustainable livelihoods. Since formal and informal institutions (ranging from tenure regimes to labour sharing systems to market networks or credit arrangements) mediate access to livelihood resources and in turn affect the composition of portfolios of livelihood strategies, an understanding of institutions and organizations is therefore key to designing interventions which improve sustainable livelihood outcomes.

An institutional approach sheds light on the social processes which underlie livelihood sustainability.

Achieving sustainable livelihoods is not a deterministic

affair; contestations, negotiations and trade-offs are evident at every turn. An insight into social relationships, their institutional forms (both formal and informal) and the power dynamics embedded in these is therefore vital. Interventions in support of sustainable livelihoods therefore must be attuned to such complexity, if suitable institutional entry points are to be found.

Livelihood strategies: portfolios and pathways

Identifying what livelihood resources (or combinations of 'capitals') are required for different livelihood strategy combinations is a key step in the process of analysis. For example, successful agricultural intensification may combine, in some circumstances, access to natural capital (For example. land, water etc.) with economic capital (For example. technology, credit etc.), while in other situations, social capital (For example. social networks associated with drought or labour sharing arrangements) may be more significant. Understanding, in a dynamic and historical context, how different livelihood resources are sequenced and combined in the pursuit of different livelihood strategies is therefore critical. Unravelling the connections between such complex and dynamic processes and the outcomes of different strategy combinations is therefore a key part of any investigation of sustainable livelihoods. One step in any such analysis requires an unpacking of each of the three core livelihood strategies to distinguish different dynamics and outcomes. Drawing on reviews of the wider literature, the following distinctions (or, more accurately, continua) can be seen: Agricultural intensification/extensification – between capital-led (supported often by external inputs and policy-led) and labour-led (based on own labour and social resources and a more autonomous process) intensification Livelihood diversification – between an active choice to invest in diversification for accumulation and reinvestment, and diversification aimed at coping with temporary adversity or more permanent adaptation of livelihood activities, when other options are failing to provide a livelihood. Diversification therefore may involve developing a wide income earning portfolio to cover all types of shocks or stress jointly or the strategy may involve focusing on developing responses to handle a particular type of common stress through well developed coping mechanisms. Migration between different migrations causes (For example. voluntary and involuntary movement) effects (For example. reinvestment in agriculture, enterprise or consumption at the home or migration site) and movement patterns (Barrett et al., 2001).

Understanding Livelihood Diversification

Livelihood diversification is defined as the process by which rural families construct a diverse portfolio of activities and

social support capabilities in their struggle for survival and in order to improve their standards of living (Ellis, 1998). Very few people collect all their income from any one source, hold all their wealth in the form of any single asset, or use their assets in just one activity which makes diversification the norm (Barrett et al., 2005). Livelihood diversification can be seen as an attempt by individuals and households to find new ways to raise incomes and reduce environmental risk (Haggblade et al., 2007). Livelihood diversification would include both on-and off-farm activities undertaken to generate income additional to that from the main household agricultural activities. Households may diversify through the production of other agricultural and non-agricultural goods and services, sale of waged labour, or self-employment in addition to other strategies undertaken to spread risk. Income derived from farm livelihoods comprise both consumption-in-kind of own farm output and cash income from output sold. Off-farm income refers to wage or exchange labour on other farms-i.e. within agriculture. It also includes labour payments in kind, such as the harvest share systems and other non-wage labour. Non-farm income refers to non-agricultural income sources such as (i) non-farm rural wage to-rural remittances arising from within national boundaries, and (ii) international remittances arising from cross-border and overseas migration (Barrett et al., 2001). From the definition by Ellis (1998) of rural livelihood diversification, it can be implied that prompted by survival or the need to improve their standard of living, households construct a diverse portfolio of activities and social support capabilities. They can combine a number of livelihood activities like agricultural crop production, livestock production, wage work, cottage industry etc. to provide or supplement income. The mix of activities will depend on a household's ability to access different livelihood opportunities (Ellis, 1998; Bryceson, 2002).

Migration is another livelihood strategy increasingly pursued by rural households. It may be seasonal, circular, rural-urban or international mediated by capital endowment of migrants and their households (de Haan 1999). Taylor and Wouterse, (2008) suggest that "household members who migrate can facilitate investments in new activities by providing liquidity, in the form of remittances, as well as income security, in the form of a promise to remit to the household in the event of an adverse income shock." This means migrant remittances can be useful in relieving rural credit constraints which may be viewed as a livelihood diversification strategy, as they are a source of income not related to household income from agriculture. Where formal insurance services and credit markets are not existent, migration can provide income that enable households cope with adverse income shocks as well as overcoming liquidity constraints. In a study on emigration to South Africa's mines by household members from Botswana, Lesotho, Malawi, Mozambique, Lucas (1987) noted that emigration reduces crop production in the subsistence sector in the short run, but remittances enhances

both crop productivity and cattle accumulation in the longer run.

Driving forces for livelihood diversification

The detailed look at diversification activities was an attempt to see how poor rural households worked, and to counter the view that they were purely agriculture-based. As a result, it was hoped that policy makers could be encouraged to look, if necessary, at policies outside the agriculture sphere that might be more effective in assisting the households concerned. As Toulmin et al. (2000) said in their report (*Diversification of Livelihoods: evidence from Mali and Ethiopia*, Toulmin et al, Research Report 47, 2000, IDS), 'If equity and gender issues are of particular importance, may diversification provide a more effective pathway to improving livelihoods than reliance on raising crop yields alone?' Indeed, they questioned whether a poor household would ever be able to generate enough assets and labour to run a farm and whether it would be better for them to focus their efforts on a specific niche activity such as trade, market gardening or firewood collection.

The many contextual factors that might influence the choice of livelihood diversification strategy have been examined on several occasions. The factors influencing the dynamics of livelihood diversification and rural non-farm employment in space and time (Jeremy Swift, 1998, IDS), Swift points out that high population density, good road networks and incoming migrants might all increase the potential for economic diversification, but that the range of off-farm activities that were actually employed depended, in the end, as much on factors like access to credit and savings, household size and composition, levels of education and in some places, on cultural constraints. Ellis in *Rural Livelihoods and Diversity in developing countries* (2000, OUP) adds geographical location, household characteristics, market opportunities, the relationship between farm and off-farm activities and the influence of formal and informal institutions as factors that will influence the choice of livelihood diversification strategy undertaken (Roseland, 2001).

The availability of assets such as savings, land, labour, education, access to market or employment opportunities and other public goods is a primary factor in determining a household's capability to diversify (Warren, 2002). Opportunities to diversity vary among households (Mutenje et al., 2010), with differences in resource endowments (land, labour, capital) and access to markets and institutions playing a central role in the extent to which diversification occurs (Barrett et al., 2001). The extent of diversification of the household portfolio of activities is determined not only by asset portfolios but also by it having the skills, location, capital, credit and social connections to pursue other activities (Hussein and Nelson 1998:19). Consideration should also be given to how assets can be complemented given that some assets are only effective

if combined with others (Barrett et al., 2001). Diversification may also develop as a coping response to the loss of capital assets needed for undertaking conventional on-farm production. As households face decreased availability of arable land, increased producer/consumer ratio, credit delinquency and environmental deterioration, diversification can be an immediate response (Warren, 2002). Consequently, the choices that people employ regarding the use of their asset portfolio in pursuing income, security, wellbeing or other productive and reproductive goals define their livelihoods (Ncube, 2010).

A study by Webb and Kevern (2001) on diversification in Ethiopia revealed that level of assets owned i.e. livestock ownership is positively and significantly associated with income diversification, even controlling for level of income. Assets are not only an essential factor of production representing the capacity of the household to diversify but indicators of improved household income. The findings confirm that households surviving the famine with higher than average income and food consumption levels also had a more diversified income base and more valuable assets in hand (especially livestock). In addition, greater income diversification (out of cropping) was positively associated with per capita income level, higher dependency ratio, location in the highlands, and ownership of non-farm assets (Ncube, 2010).

The study of Roseland, (2001) In Mali, in the two case study areas, revealed the pursuit of diversification activities could be a source of tension within wealthier families because it increased competition within the household in Zaradougou. Whilst the activities themselves might make a family financially better off, well-being and sustainability sometimes decreased, with some families coming close to splitting up. In Dalonguebougou, however, diversification was undertaken by different members of the household at different times, essentially within the structure of the extended multigenerational household. There was a close association between asset ownership and household size and asset ownership with sustainability. Those families with more assets had larger more stable family groups. Likewise there was a direct link between successful crop production and cattle ownership and well holdings.

The study of Smith et al. (2001) also indicated that numerous factors determine the abilities of rural households to diversify their livelihood strategies away from both crop and livestock production into off- and non-farm economic activities. These determinants are identifiable both as pre-conditions, namely history, social context and agro-ecology; and the ongoing social change linked with extreme interventions, such as infrastructural and service provision.

According to Ellis (2000), reasons for income diversification are seasonality, risk strategy, response to labor and credit markets failure, accumulation strategy and coping behavior, and adaptation. (Tefera et al., 2004)

agree with Ellis, and go to say that there is usually a negative correlation between income and the extent of household's reliance on natural resources for livelihood. Households who depend heavily on natural resources and have little in the way of alternative sources of livelihoods have comparatively lower incomes.

According to Bryceson and Jamal (in Tefera et al., 2004), 40- 45% of an average African household-income is from non-farm employment and has increasing importance overtime. Ellis contends that livelihood diversification is more than income diversification and includes property rights, social and kinship networks, and access to institutional support (Tefera et al. 2004). Empirical evidence shows that activity and income diversification in rural livelihoods in sub-Saharan Africa has become an increased importance (Barret et al. in Tefera et al., 2004).

CONCLUSION

In summary, a livelihood comprises capabilities, material and social resources and activities required for the means of living which also takes into account the role played by structures, policies and processes in influencing the choice of livelihood strategies by the rural poor. Livelihood diversification would include both on- and off-farm activities undertaken to generate income additional to that from the main household agricultural activities. The many contextual factors that might influence the choice of livelihood diversification strategy have been examined on several occasions. These factors specifically categorized under geographical location, household characteristics, market opportunities, the relationship between farm and off-farm activities and the influence of formal and informal institutions as factors that will influence the choice of livelihood diversification strategy undertaken. Many literatures revealed that the availability of assets such as savings, land, labour, education, access to market or employment opportunities and other public goods is a primary factor in determining a household's capability to diversify their livelihood. Moreover, others contend that livelihood diversification is more than income diversification and includes property rights, social and kinship networks and access to institutional support. Therefore, since there is also such a range of intervention options possible, and trade-offs between these are always evident, negotiation and discussion must continue throughout any intervention process. Planning for identifying the potential driving forces for livelihood diversification strategies by smallholder farmers is therefore necessarily iterative and dynamic.

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REFERENCES

- Adugna L (2005). The Dynamics of Livelihood diversification in Ethiopia Revisited: Evidence from Panel Data, Department of Economics University of Massachusetts, Boston.
- Barrett C, Bezuneh M, Abdillahi A (2001). Income diversification, poverty traps and policy shocks in Cote d'Ivoire and Kenya. *Food. Policy.* 26, 4: 367–384.
- Barrett CB, Bezuneh M, Clay D, Reardon T (2005). Heterogeneous constraints, incentives and income diversification strategies in rural Africa. *Q. J. Int. Agric.* 44, 1: 37-60.
- Barrett CB, Reardon T, Webb P (2001). Nonfarm income diversification and household livelihood strategies in rural Africa: Concepts, dynamics and policy implications. *Food. Policy.* 26, 4: 315-331.
- Bebbington A (1999). Capitals and capabilities: A framework for analyzing peasant viability, rural livelihoods and poverty. *World Development.* 27, 12: 2021-2044,
- Berhanu A (2006). Effective Aid for Small Farmers in Sub-Saharan Africa: Southern Civil Society Perspectives. Canadian Food Security Policy Group. Addis Ababa. 22.
- Bryceson DF (2002). The scramble in Africa: Reorienting rural livelihoods. *World Development.* 30,5: 725-739.
- Carswell G (2000). Livelihood diversification in southern Ethiopia. IDS working paper 117.
- Carter MR (1997) Environment, Technology, and the Social Articulation of Risk in West African Agriculture. *Economic Development and Cultural Change.* 45, 3: 557-59.
- Chambers R (1989). Editorial introduction: vulnerability, coping and policy. In: Chambers, R. (Ed.), *Vulnerability, Coping and Policy.* IDS Bulletin 20, 2: 1–7.
- Chambers R, Conway G (1992). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. IDS Paper No. 296. Sussex: Institute of Development Studies. 132.
- CSA (2009). Central Statistical Authority population estimates. Ethiopia, Addis Ababa. 27.
- Davies S (1997). 'Livelihood adaptation', Paper for workshop Making Livelihoods work – women, men and children in Rajasthan', mimeo, Brighton: IDS. 149
- Delgado CL, Siamwalla A (1997). Rural Economy and Farm Income Diversification in Developing Countries. MSSD Discussion Paper No. 20.
- Ellis F (1998). 'Household strategies and rural livelihood diversification', *J. Dev. Stud.* 35, 1: 1-38.
- Ellis F (2000). Rural livelihoods and diversity in developing countries. Oxford: Oxford University Press.3,4: 145.
- Giddens A (1979). Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis, London: MacMillan.1,22: 38.

- Haan de L, Zoomers A (2005). Exploring the frontier of livelihoods research. *Development and change*.36, 1: 27-47
- Haggblade S, Hazell P, Reardon T (2007). Transforming the Rural Nonfarm Economy. Baltimore: Johns Hopkins University Press. 321-345.
- Hoogeveen JGM (2001). Income Risk, Consumption Security and the Poor. *Oxford Development Studies*.30, 1: 105-121.
- Kanji N, MacGregor J, Tacoli C (2005). Understanding market-based livelihoods in a globalizing world: combining approaches and methods. International Institute for Environment and Development (IIED). 108.
- Kollmair M, Juli G (2002). The sustainable livelihoods approach. Zurich: University of Zurich. 55.
- Mutenje MJ, Ortmann GF, Ferrer SRD, Darroch MAG (2010). Rural Livelihood Diversity to Manage Economic Shocks: Evidence from South East Zimbabwe. Agricultural Economics Research. *Policy and Practice in Southern Africa*.49, 3: 324.
- Ncube A (2010). Impact of livelihood diversification on household food security: the case of Hurungwe district, Zimbabwe, submitted in accordance with the requirements for the Master of Arts degree in the subject of development studies at the University of South Africa. 34.
- Niehof A (2004). The significance of diversification for rural livelihood systems. *Food. Policy*. 29, 321–338.
- North D (1990). Institutions, Institutional Change and Economic Performance, Cambridge: Cambridge University Press. 67-69.
- Reardon T, Taylor J, Stamoulis K, Lanjouw P, Balisacan (2000). A. Effects of nonfarm employment on rural income inequality in developing countries: An investment perspective. *J. Agric. Econ*. 51, 2: 89.
- Scoones Ian (2000). *Sustainable Rural Livelihoods: a framework for analysis*. IDS Working Paper no. 72, Brighton: Institute for Development Studies. 45.