

## 15 Access to Livelihood Assets: Inclusion, Exclusion, and the Reality of Development Interventions

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### Abstract

In development studies with a focus on livelihoods, assets (also referred to as resources, capital, or means) represent a crucial dimension that influences people's ability to secure a livelihood. Lack of access to land, water, or education often leads to poverty. The present paper summarises research findings from an international research network, the Swiss National Centre of Competence in Research (NCCR) North-South, regarding the crucial relation between such assets and access to them. It brings together insights obtained in studies around the globe as to why some people are excluded from access to assets. Beyond this, it raises the question of whether gaining access is sufficient – does access to resources in itself lead to benefits, or do we need to broaden the concept of access? In addressing these and other questions, this review of NCCR North-South research embeds the concepts of assets and access within a broader understanding of contested political processes, informed by contemporary social science debates. In the concluding section, this enhanced understanding of social realities is contrasted with social analyses underpinning (donor-supported) development interventions.

**Keywords:** Livelihoods; assets; access; development politics; power relations.

## 15.1 Introduction

Lack of access to assets (also referred to as resources, capital, or means)<sup>10</sup> that allow people to secure a livelihood is widely considered one of the key issues underlying poverty, preventing people from escaping poverty and leading to resource-related social tensions. Lack of access to agricultural land, to water for irrigating this land, and to schools and health facilities (to build up human capital), as well as lack of access to decision-making processes (due to a lack of social capital, for example) that determine the direction of developments at the local level, is a form of exclusion that hinders the abilities of individuals and households to secure a livelihood. Therefore, enhancing access to existing assets and providing access to new resources has become a crucial field of development intervention for states, civil-society organisations, and donors. Still, current social realities in many countries of the South indicate that while some people are in a position to secure a livelihood, many are not – despite development interventions over several decades. This raises specific questions about the factors that support or hinder people in gaining access to the means they require. Moreover, it is necessary to examine whether development interventions by states and donors are dealing with these issues.

These are core questions for development researchers, and questions with which members of an international development research network, the Swiss National Centre of Competence in Research (NCCR) North-South, are also engaged.<sup>11</sup> The present review brings together some of the insights gained by these researchers into these questions. Within the framework of the NCCR North-South, studies were undertaken in different contexts, with different epistemological approaches, and based on different ontological assumptions. Thus, we are not attempting to make statements that require general validation. Rather, the intention here is to stimulate thoughts and to present issues considered crucial or in need of further analysis.

Many assets are required for a livelihood, of course, and many factors are involved in accessing them. This paper focuses on assets broadly related to land-based income generation, that is, land proper, forests, irrigation water, production inputs, product markets, etc.<sup>12</sup> Moreover, the focus is on the ‘grassroots’, although issues of access are important at higher levels as well – for example, at the levels of regional or national administrations. Important issues at these levels include access to decision-making (e.g. by civil-society groups) and access to means that enable participation (e.g. the necessary funding to delegate staff to international conferences on agri-

cultural trade).<sup>13</sup> Here, however, we focus on people who are more directly involved in making use of land-based means for their livelihoods, especially (smallholder) farmers, but also rural labourers.

As a basis for this review, we chose the following studies from the vast body of NCCR North-South publications because they address rural land-based issues from social science perspectives (for bibliographical details, see the list of references on pp 328–330):

- South Asia: Research by Shahbaz (2007, 2009), Steimann (2005), and Geiser (2005, 2009) and colleagues in Northwest Pakistan, with an emphasis on forest resources. Research by Nair and Ramakumar (2007) and Strasser (2009) and colleagues addressing livelihoods in and along the Western Ghats.
- Southeast Asia: Research by Epprecht (2009) and colleagues on the spatial dimensions of rural change.
- Central Asia: Research by Steimann (2010) and colleagues on changes in rural livelihoods and specifically the use of pasture resources.
- West Africa: Research by Fokou (2008) and colleagues on resource conflicts in the Lake Chad region, encompassing parts of Nigeria, Chad, and Cameroon.
- Latin America: Research by Fritschi (2007) and colleagues on changes in rural livelihoods in western Mexico. Research by Bottazzi (2008, 2009) and colleagues on land disputes in lowland Bolivia.

Recent research-based insights have influenced the structure of this paper. As is shown in the following section, the initial focus on livelihoods research and related development practices regarding assets has given way to a more critical engagement with the social and political questions of gaining access to a means of livelihood. This, however, calls for addressing the link between (which) assets and (which) livelihoods, with reference to recent debates about the diversity and/or processes of diversification of livelihoods (section 15.3). We then present some insights as to why some people are excluded from accessing land-related means (section 15.4). However, other dimensions have to be given attention as well, such as the question of whether gaining access to assets means that livelihoods will automatically improve (section 15.5). This brings us to the core of the matter: processes of

social dispute and struggles over inclusion and exclusion. Finally, having embedded the concepts of assets and access within a broader social understanding of contested political processes, in section 15.6 we examine to what extent the challenges we identified are taken into consideration in (donor-supported) development interventions.

## 15.2 A brief reminder of the main debates over assets

Discussions of the role of assets in overcoming poverty are not new, but they have taken different directions over the course of time. In 1976, the International Labour Organisation (ILO) did not use the notion of assets, but defined basic needs as

*“the minimum standard of living which a society should set for the poorest groups of its people”, [including] meeting the minimum requirements for personal consumption of food, shelter and clothing; and access to essential services such as safe drinking water, sanitation, health, education and transport; and “the satisfaction of needs of a more qualitative nature: a healthy, humane and satisfying environment, and popular participation in the making of decisions that affect the lives and livelihood of the people and individual freedoms”.* (Stewart 2006, p 15)<sup>14</sup>

Although criticised and subsequently replaced by more production- and income-oriented discourses, the asset-oriented ideas of the basic needs approach persisted, even forming an important pillar of the present Millennium Development Goals and the contemporary emphasis on ‘livelihoods’ (DFID 2001). Indeed, livelihood thinking combines basic needs issues and production and income concerns. Constructing livelihoods requires a range of resources, that is, social, physical, natural, human, and financial assets. In simple terms, it can be argued that having such assets, and having the skills and knowledge to use them, secures livelihoods and prevents people from falling into poverty. However, this focus on assets has recently been the subject of considerable criticism. Although dominant concepts such as the livelihoods approach of the United Kingdom Department for International Development (DFID) hint at the importance of social and political processes with their famous ‘PIP box’<sup>15</sup>, these processes are often bypassed. It is therefore important to make a clear distinction between access and property. The physical proximity to a resource is not necessarily sufficient to enhance livelihoods. In recent social science debates, “access” is rather used as “the

ability to derive benefits from things” (Ribot and Peluso 2003, p 153), which implies economic facilities, social capital, political influence, the ability to make decisions, and institutional security (e.g. Sen 1999; Larson and Ribot 2004). In other words, access is the process that brings stakeholders from endowment to entitlement (Leach et al 1999)<sup>16</sup>. It is in this respect that several of the NCCR North-South studies provide new insights.

### **15.3 The starting point: (smallholder) farmers or multiple income-earning rural households?**

Before focusing on issues of access, we need to briefly clarify the concept of assets in rural contexts. As a matter of fact, poverty has long been associated with small and marginal farmers in rural areas, suggesting that agriculture is the mainstay for them and their families. Is there a need to re-visit the notion of the ‘smallholder farmer’? Indeed, many NCCR North-South studies indicate that the income composition of rural households goes beyond land-based sources. Here are a few examples:

Steimann (2005) and Shahbaz (2007) showed that although most households in hilly Northwest Pakistan cultivate maize and wheat for subsistence needs, the low land/person ratio does not allow them to produce any surplus for sale. Besides, local markets are very small, while access to regional markets is often limited due to long distances and poor roads. Consequently, most farming households revert to non-farm labour, which is hardly available at the local level, leading to regional, national, or international labour migration, including to the Middle East. Specifically, Shahbaz (2007) revealed that out of 400 randomly selected households, 29% were earning the major part of their cash income from remittances, followed by non-farm daily wage labour (26%) and salaries (15%). Agricultural farming, livestock, and forests were a major source of cash income for only 13%, 2.3%, and 2%, respectively, of the households surveyed. In the northern uplands of Vietnam, household livelihood decisions are strongly influenced by labour endowments and the availability of family land (Minot et al 2006). Larger households with relatively small areas of land tend to have multiple sources of income, with a large share coming from off-farm activities. Such households typically have higher crop values per hectare, but tend to market a smaller share of their farm output compared to households with more land. Good access to markets tends to facilitate specialisation, whereas access to electricity appears to enable households to diversify into non-farm activities. Strasser’s (2009) analysis of smallholdings in Kerala, India, shows that

only smallholdings with enough income from rubber trees can sustain their families on the basis of on-farm income alone. All others are forced to diversify their income either on other farms (as labourers) or in the service sector (including outmigration).

NCCR North-South researchers also studied whether the multiple incomes of rural households reflect a recent trend in income diversification, as proposed by Ellis and Biggs (2001) and de Haan and Zoomers (2003), or whether they represent a diversity that has characterised livelihoods for a longer period of time. The first position is confirmed by Fokou's (2008) research in the Lake Chad area in West Africa. Scarce pockets of resources are diminishing as a result of climatic vagaries, demographic pressure, change in relative prices, and institutional change. He observes that the ethno-professional specialisation that prevailed in the past is giving way to more 'opportunistic strategies' adopted by actors to cope with uncertainties. For example, prices for cattle nearly tripled between 1992 and 2001, and prices for fish also nearly tripled between 1980 and 2003. This change in prices led to a diversification of sources of income. More farmers are now investing in livestock, and a new category of absentee landowners made up of traders and city dwellers investing in land and cattle is emerging. Economic changes have also had far-reaching consequences in Mexico: Following the opening to foreign trade and reduced public-sector support, farmers have come to face major difficulties in sustaining their livelihoods when continuing to focus on the cultivation of staple foods such as maize. Market prices for maize decreased by 46% between 1994 – the year in which the North American Free Trade Agreement (NAFTA) came into force – and 2004 (Eakin and Appendini 2008), while the costs of agrochemicals rose steadily. Fritschi (2007) found that farmers increasingly combine maize production with participation in land-leasing arrangements and agribusinesses – mainly from the agave tequila sector – to diversify their sources of income. Furthermore, in view of the massive emigration of young people to urban areas and the United States, these land-leasing arrangements allow elderly farmers to keep their agricultural land productive even though their households face labour shortages. Studies in Vietnam reveal similar trends: Crops and livestock still represent more than half of the household income in the northern uplands. However, out of a total of eight income categories<sup>17</sup>, the average number of different income sources per household increased from 4.43 in 1993 to 4.97 in 2002 (Minot et al 2006). In addition, the importance of crop income decreased markedly, while the share of income from wages and forestry increased.

In contrast to these studies, Strasser (2009) – focusing on smallholder rubber cultivators in Kerala – found that diversity of incomes is not a new phenomenon. Such diversity has long been an important strategy for many smallholders. Bottazzi (2009) pointed out that income diversification is not always an option. In lowland Bolivia, market drivers influence indigenous people to switch from a livelihood based on multiple forest products to a livelihood relying solely on unsustainable forest timber extraction. While this creates important short-term incomes, it also initiates an irreversible process of land degradation.

These glimpses of NCCR North-South research show, first, that the importance of land-based assets varies even in the category of ‘smallholder farmers’, a category for which this importance is often taken for granted. Second, they show that access to non-farm employment opportunities plays an important role in many places, be it as an option to improve livelihoods or as a requirement to survive hard times. Studies in Kerala (Nair and Ramakumar 2007) showed that people are often forced to diversify into lower-return activities due to variations in land ownership. For instance, crop diversification was an adequate livelihood strategy only for households that possessed larger areas of land. For small and marginal farmers and labourers who owned land, crop diversification necessarily had to be accompanied by other options such as accessing non-agricultural employment and migration. For landless labourers, migration was the only livelihood strategy available. Most of the migrants were employed as non-agricultural manual labourers. Migrants’ working conditions were often gruelling, and migration was associated with major socio-economic hardship and complications for family members left behind. Hence the NCCR North-South studies caution us, on the one hand, to take account of the often heterogeneous asset portfolios on which rural households depend, but, on the other hand, not to automatically interpret asset diversification as an expression of efforts to improve livelihoods.

#### **15.4 Inclusion and exclusion: problems of access to assets**

The empirical case studies mentioned so far bring us to the question of the dimensions influencing and qualifying access to the range of assets important for rural livelihoods. In neo-liberal terms, access to land, irrigation water, and production inputs depends on the respective markets and an enabling environment. However, a more differentiated analysis of social processes shows that ‘access’ is embedded in a much broader reality, mediated

through social categories such as class, caste, gender, 'ethnicity', or age – categories that are manifested in norms and value systems, in everyday practices, and in the forms of organisations.

In line with neo-liberal arguments, geographic remoteness from centres of socio-economic activity is often seen as a key factor limiting access. Research in Vietnam, however, shows that although physical proximity to local product markets does have a clearly positive effect on household welfare, access to production inputs and product markets in small urban centres is defined to a larger extent by sociocultural factors (Epprecht et al 2009). Households belonging to ethnic minority groups consistently benefit less from proximity to local markets than households belonging to the ethnic majority population. Similar social realities have also been confirmed by researchers in Kerala, based on village case studies. In the villages surveyed in the district of Wayanad, the relationship between land and social category was crucial. Eighty per cent of the poor households possessed less than half an acre (0.2 hectares) of land. Half of this 80% were almost landless, with less than 0.1 acres (0.04 hectares) of land owned. More than 70% of the poor in the villages belonged to the tribal community of Paniyan (Nair and Ramakumar 2007). In the Lake Chad area of West Africa, access to resources is often contested along lines of ethnicity. In the Logone floodplains, resources used to be held and managed by people from the Kotoko ethnic group, considered as the 'masters of the land' but representing less than 8% of the total population, while Musgum and Arab Choa agro-pastoralists had no property rights. This system remained in place as long as the local elite were able to maintain customary institutions. But with the collapse of traditional management regimes in the 1980s and 1990s as a result of the democratisation process,<sup>18</sup> power changed hands and majority groups (Arab Choa and Musgum) took advantage of this in order to exclude their former masters (the Kotoko) from key resource pockets (Fokou 2008). In the mountainous regions of Northwest Pakistan, access to forests is highly contested between the state and an array of stakeholders (Suleri et al 2008). The state strives to control the forests through its formal institutional arrangements, but customary practices of forest use governed by traditional institutions are also deeply embedded in rural culture. These institutions are dominated primarily by influential persons and/or major tribes. Research by Shahbaz (2007) has shown that people belonging to low-income groups or weaker tribes have restricted access to forest resources and the related formal and customary decision-making mechanisms. Exclusion based on ethnicity is also very common in Bolivia (Bottazzi 2009). During the 1990s the government, influenced by civil society, established a new category of 'collective



land' controlled by indigenous peoples (such as the Tsimane', Mosekene, and Mojeño), especially in the country's lowlands. Around 18 million hectares are now under indigenous governance *de jure*. Still, access remains a problem for indigenous people, as land scarcity in the upper Andean part of the country caused millions of people to migrate to the lowlands, thereby accelerating conflicts over land between whites, mestizos, indigenous people, and Andean farmers. Collective titles given to indigenous peoples become very vulnerable under such conditions.

Thus, NCCR North-South studies indicate that real opportunities to access assets depend on the close interplay between market forces, institutional change introduced by the state, and often enduring and routinised local power relations. Their everyday combinations, and the consequences their interplay entails for the rural poor, however, are very site-specific.

### **15.5 From endowments to entitlements and capabilities: benefiting from access?**

The examples given above vividly document the social dynamics that go along with the notion of access. In recent debates, though, it has even been argued that, in itself, having gained access to assets does not ensure that the people concerned can improve their livelihoods. It is even more crucial that the accessed resources can be used in a productive way, ultimately generating the benefits required by people to secure a livelihood (see especially the entitlements approach in Leach et al 1999). For example, having gained access to land and thus the opportunity to cultivate it is important, but it does not necessarily signify that livelihoods will indeed improve. Though subsistence needs may be covered to some extent, being denied opportunities to access production inputs or product markets will prevent people from obtaining the full benefits of cultivating land.

Our review of NCCR North-South research indicates that this question has not yet received sufficient attention, and few insights are available. Research in post-socialist rural Kyrgyzstan has examined this access-benefit nexus to some extent (Eriksson 2006; Shigaeva et al 2007; Steimann 2010). In the course of a nation-wide campaign to privatise formerly collective agriculture, rural households were endowed with private land and livestock in the early 1990s. However, most small farmers in remote areas still struggle to use their land in a productive way, and many cannot even satisfy their subsistence needs. Why is this the case? On the one hand, land was often dis-

tributed in several small parcels spread over a large area, making cultivation cost-intensive. Due to high transport costs, many households can work a few parcels only, abandoning or renting out the remaining land. On the other hand, the decreasing availability of inputs has lowered agricultural productivity. Seeds, fertiliser, and pesticides have become rare and expensive, while irrigation schemes have not been maintained or operated in a proper way. Moreover, many small farmers lack experience in cultivating land, since most of them worked in completely different areas in the socialist economy. Bottazzi's research (2009) in Bolivia on the security of land rights should also be noted here. It shows the challenges faced by poor people in the context of the state's land regularisation process, which aims to secure access to land and thus give opportunities to users. Indigenous peoples like the Tsimane', Mosekene, and Mojeño from the Beni department to the north of La Paz have received access rights to land which can be described as rights of use. In contrast, migrants from Andean regions have been given private property rights. Such unequal entitlements make indigenous people vulnerable, as they are exposed to various strategies by outsiders who try to seize their rights of use.

The examples given illustrate that in many cases access is enabled or hindered by a range of social relations. Of specific importance is the role played by market forces, state regulations, and local social power relations, with the resulting constraints on the rural poor. The challenge in terms of development then is to seek possibilities for change, that is, ways and means by which factors that deny access can be overcome. As a matter of fact, recent social theory offers several concepts for use in investigating efforts to achieve change. Structuration theory, for example, reminds us of agency, that is, the capability of people to intervene (or to decide not to intervene) in the world (Giddens 1984), and Scott (1985) proposes to research the 'weapons of the weak', just to mention a few. Indeed, the conditions under which people are able to counter structures that exclude them constitute a core research field. While some researchers in the NCCR North-South discuss issues of participation, their approach is often influenced by dominant (and often apolitical) discourses of development practice, rather than more recent theorising in the social sciences that emphasises unequal social relations and the challenges faced by interventions that do not sufficiently take account of power relations. Thus, besides important insights into some fields, our review also shows that the issue of social contestation has not yet been adequately addressed within the NCCR North-South.

## 15.6 Development interventions

We now know more, though, about the role played by development interventions. Being closely linked to poverty, aspects such as providing assets, enabling access to assets, and the fostering of skills to use assets have been core mandates of developing states and donor-supported interventions since at least the mid-1970s. What light do NCCR North-South research insights throw on states' and donors' perceptions of 'problems' which, in turn, shape their planning? And what are the consequences of these interventions?

Again, we can provide but a few glimpses. Donor-supported interventions in forestry in Pakistan, for example, focused on bringing state forest officials and local people together for joint decision-making. Village-level committees were established, assuming that such committees of 'empowered local forest users' would work hand in hand with the state Forest Department in managing natural forests. Studies showed that, though this was well intentioned and practiced over a period of almost two decades, it did not improve forest management. These studies argued that this was due to core underlying social relations and tensions not being addressed, for example the lack of legitimacy of state interventions in the eyes of many local forest users, or the dominance of the timber mafia nexus between local elites and state officials (Geiser 2005). Well-established customary governance practices are also not taken into consideration by donor-led interventions (Geiser and Shahbaz 2009). Moreover, village committees are often controlled by local elites, and fully dependent on the authority of Forest Department staff (Shahbaz and Ali 2009). Discrepancies between intentions and reality also hinder farmers in accessing development schemes offered by the state in Kerala (Strasser 2009): Farmers with very little land, and thus only a few rubber trees, cannot access government schemes intended to support income diversification because the options offered are too expensive, or because the 'target groups' do not fulfil the requirements for scheme eligibility (e.g. they are unable to provide maps of the land). In West Africa, people in the Waza-Logone region (Lake Chad area) were deeply affected by the severe droughts of the 1970s. Accordingly, in 1979, development actors constructed a dam upstream as well as an embankment along the Logone River for irrigated agriculture. This project, however, led to changes in the flooding pattern, endangering not only pastoralists but also wildlife in the Waza-Logone Park. A subsequent re-flooding project financed by the Dutch government and implemented by the International Union for Conservation of Nature (IUCN) in the 1990s was enthusiastically announced as the return of water (Loth 2004). However, the

accompanying participatory resource management endeavours did not help to secure local people's livelihoods. A cost-benefit analysis for populations in the floodplain reveals that benefits cover only 13% of losses in terms of restricted access to pastures and fishing ponds or damage to crops and livestock by animals from the park (Fokou and Haller 2008). Our final example stems from Mexico: In 1992, a new agrarian law came into force, facilitating the privatisation of community-based land tenure (*ejido* land). A large-scale land regularisation initiative known as PROCEDE<sup>19</sup> was launched. As a result, farmers were provided with new land rights, such as the rights to rent or sell their plots of land. By 2006, PROCEDE had covered 93% of all Mexican *ejidos* (Barnes 2009). However, the reform has so far led neither to a more dynamic land market nor to an increase in agricultural productivity (Nuijten 2004). Fritschi's (2007) case study conducted in western Jalisco demonstrates that land rentals are frequent, but not primarily driven by the new land reform. Informal land rentals had already been commonplace before the land titling process started. For example, the landless population had access to the common lands via temporary land use agreements in order to cultivate maize for subsistence. Such arrangements were essential, since about 47% of households in the case study area lacked permanent access to land. With the new agrarian law of 1992, however, landless people came to worry that the *ejido* would no longer grant them access to the lands they were using. Several farmers also complained that measurement of the farming plots was not carried out with precision and that the maps were faulty, privileging some farmers while discriminating against others. There is even strong evidence that the land titling process initiated by PROCEDE is leading to the (re)emergence of land tenure conflicts.

## **15.7 Discussion**

This paper has presented a review of research done within the framework of the NCCR North-South programme on assets and access to assets. The insights gained highlight a series of crucial issues. One is that although conventional wisdom about rural life based on agriculture is still valid and reflects realities in many parts of the world, rural lives are increasingly characterised by a variety of income sources. Whether this represents a trend or whether, in certain contexts, multiple livelihoods have long been the rule, is a question requiring closer attention. Still, complex rural livelihoods draw our attention to an array of assets that people require or aspire to.

Second, and more important, the findings reiterate and illustrate the social dimension and the importance of analysing it using analytical approaches that go beyond mainstream assumptions about ‘the rural’, doing justice to, and linking up with, recent debates in the social sciences (e.g. regarding issues of agency and structure, power, and actual everyday practices).

The insights illustrate, third, the heterogeneity of this social dimension. We identified the interplay of market forces, state regulations, and enduring local social relations as key factors determining access to assets or exclusion. The outcome, however, largely depends on local circumstances. These circumstances are also critical as to whether assets can be used beneficially and in such a way that livelihoods can indeed be secured and even improved.

A fourth point concerns local manifestations of the social and political dimensions of access. Examining the importance of ethnicity, income groups, or social caste, NCCR North-South studies clearly show the social construction of access. Less, though, is known about the everyday working of this social construction within specific settings: How do people try to overcome exclusion? What happens in these social arenas of contact between various agents? How is ‘power’ manifested and how does it ‘work’? These are but a few questions that require closer attention.

As a fifth and last point, many crucial insights were gained into the mechanisms of ‘development’, that is, the interaction between development policies and practices (as designed by state agencies and/or donors) and the real livelihoods of their ‘target groups’. Indeed, several researchers point to the discrepancy between policy intentions and livelihood realities – with the ‘social dimension’ being a crucial link between them. The insights gained raise questions about the extent to which the strategies for development interventions are based on a thorough understanding of everyday realities. The case studies indicate that insights into power structures, unequal social relations, and uneven endowments with bargaining power do not always inform project policies. To what extent do (well-intended) development projects merely scratch the surface?

## Endnotes

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<sup>10</sup> In this paper, we use 'assets', 'resources', 'capital', and 'means' synonymously.

<sup>11</sup> For more details on research partnerships within the Swiss National Centre of Competence in Research (NCCR) North-South, see <http://www.north-south.ch>.

<sup>12</sup> Regarding access to non-farm employment opportunities through labour migration, see Thieme (2006); regarding access to decision-making, see Geiser and Rist (2009).

<sup>13</sup> For an NCCR North-South example involving irrigation, see Luzi (2007); regarding forests in Pakistan, see Rothen (2006).

<sup>14</sup> At the ILO's 1976 World Employment Conference, the objective was set of meeting basic needs throughout the world by the year 2000 (Stewart 2006, p 15).

<sup>15</sup> PIP: 'policies, institutions and processes' (DFID 2001).

<sup>16</sup> Leach and colleagues (1999, p 237) define endowment as the "initial ownership", for instance of land or labour power. Regarding entitlement, they refer to Sen's (1983, p 754) definition of the term as "the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces".

<sup>17</sup> The analysis by Minot and colleagues (2006) divides household incomes into the categories "crop", "livestock", "forestry", "fisheries", "non-farm enterprise", "wages", "transfers", and "other income".

<sup>18</sup> For details on this complex process of change, see Fokou (2008).

<sup>19</sup> Programme for the certification of ejido land rights and the titling of urban house plots.

## References

Publications elaborated within the framework of NCCR North-South research are indicated by an asterisk (\*).

- Barnes G. 2009. The evolution and resilience of community-based land tenure in rural Mexico. *Land Use Policy* 26:393–400.
- \* Bottazzi P. 2008. Linking 'socio-' and 'bio-' diversity: The stakes of indigenous and non-indigenous co-management in the Bolivian lowlands. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 81–110.
- \* Bottazzi P. 2009. Indigenous governance, protected areas and decentralised forestry: A comparative analysis of two Tsimane' territories in the Bolivian lowlands. In: Geiser U, Rist S, editors. *Decentralisation Meets Local Complexity: Local Struggles, State Decentralisation and Access to Natural Resources in South Asia and Latin America*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 4. Bern, Switzerland: Geographica Bernensia, pp 155–189.
- De Haan L, Zoomers A. 2003. Development geography at the crossroads of livelihood and globalisation. *Tijdschrift voor Economische en Sociale Geografie* 94(3):350–362.
- DFID [Department for International Development]. 2001. *Sustainable Livelihoods Guidance Sheets. Section 5: Policy Reform*. London, UK: Department for International Development. Also available at: <http://www.eldis.org/go/topics/dossiers/livelihoods-connect/what-are-livelihoods-approaches/training-and-learning-materials>; accessed on 1 February 2011.
- Eakin H, Appendini K. 2008. Livelihood change, farming, and managing flood risk in the Lerma Valley, Mexico. *Agriculture and Human Values* 25(4):555–566.
- Ellis F, Biggs S. 2001. Evolving themes in rural development 1950s–2000s. *Development Policy Review* 19(4):437–448.
- \* Epprecht M, Müller D, Minot N. 2009. How remote are Vietnam's ethnic minorities? An analysis of spatial patterns of poverty and inequality. *The Annals of Regional Science, Online First*. doi:10.1007/s00168-009-0330-7.
- Eriksson C. 2006. *Changing Land Rights, Changing Land Use: Privatisation Drives Landscape Change in Post-Soviet Kyrgyzstan*. Minor Field Studies No. 353. Uppsala, Sweden: Swedish University of Agricultural Sciences.
- \* Fokou G. 2008. *Communal Resource Management and Power Relations: An Anthropological Study of Institutional Change in the Logone and Lake Chad Floodplains* [PhD dissertation]. Yaoundé, Cameroon: University of Yaoundé.
- \* Fokou G, Haller T. 2008. Are local stakeholders conservationists? Livelihood insecurity and participatory management of Waza National Park, North Cameroon. In: Galvin M, Haller T, editors. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 3. Bern, Switzerland: Geographica Bernensia, pp 325–360.
- \* Fritschi A. 2007. *Local Perceptions of Environmental Change: Case Study in the Ayuquila Watershed, Western Mexico* [Master's thesis]. Zurich, Switzerland: University of Zurich.
- \* Geiser U. 2005. Contested forests in North-West Pakistan: The bureaucracy between the 'ecological', the 'national', and the realities of a nation's frontier. In: Sivaramakrishna K, Cederloef G, editors. *Ecological Nationalism: Nature, Livelihoods, and Identities in South Asia*. New Delhi, India and Seattle, WA: Permanent Black, University of Washington Press, pp 90–111.
- \* Geiser U, Rist S. 2009. *Decentralisation Meets Local Complexity: Local Struggles, State Decentralisation and Access to Natural Resources in South Asia and Latin America*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 4. Bern, Switzerland: Geographica Bernensia.



- \* Geiser U, Shahbaz B. 2009. 'Donor-driven' forest governance in northwest Pakistan: Challenges and future outlook. In: Carter J, Schmidt K, Robinson P, Stadtmüller T, Nizami A, editors. *Forests, Landscapes and Governance: Multiple Actors, Multiple Roles*. Zurich, Switzerland and Bern, Switzerland: Helvetas, Swiss Agency for Development and Cooperation (SDC), and Intercooperation.
- Giddens A. 1984. *The Constitution of Society: An Outline of the Theory of Structuration*. Cambridge, UK: Polity Press.
- Larson AM, Ribot JC. 2004. Democratic decentralisation through a natural resource lens: An introduction. *European Journal of Development Research* 16(1):1–25.
- Leach M, Mearns R, Scoones I. 1999. Environmental entitlements: Dynamics and institutions in community-based natural resource management. *World Development* 27(2):225–247.
- Loth P, editor. 2004. *The Return of the Water: Restoring the Waza Logone Floodplain in Cameroon*. Gland, Switzerland, Cambridge, UK: International Union for Conservation of Nature (IUCN).
- \* Luzi S. 2007. *Double-edged Hydropolitics on the Nile: Linkages between Domestic Water Policy Making and Transboundary Conflict and Cooperation* [PhD dissertation]. Zurich, Switzerland: Swiss Federal Institute of Technology Zurich (ETHZ).
- \* Minot N, Epprecht M, Tran TTA, Le QT. 2006. *Income Diversification and Poverty in the Northern Uplands of Vietnam – Patterns, Trends and Policy Implications*. Research Report No. 145. Washington, D.C.: International Food Policy Research Institute (IFPRI).
- \* Nair KN, Ramakumar R. 2007. *Agrarian Distress and Rural Livelihoods: A Study in Upputhura Panchayat, Idukki District, Kerala*. CDS Working Paper No. 392. Trivandrum, India: Centre for Development Studies (CDS).
- Nuijten M. 2004. Peasant 'participation', rural property and the state in Western Mexico. *Journal of Peasant Studies* 31(2):181–209.
- Ribot JC, Peluso NL. 2003. A theory of access. *Rural Sociology* 68(2):153–181.
- \* Rothen A. 2006. The impact of forest-related international norms in Pakistan. In: Sustainable Development Policy Institute], editor. *Troubled Times: Sustainable Development and Governance in the Age of Extremes*. Islamabad, Pakistan: City Press, pp 69–87.
- Scott JC. 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*. New Haven, CT: Yale University Press.
- Sen A. 1983. Development: Which way now? *The Economic Journal* 93(372):745–762.
- Sen A. 1999. *Development as Freedom*. Oxford, UK: Oxford University Press.
- \* Shahbaz B. 2007. *Analysis of Institutional Changes in Forest Management and Their Impact on Rural Livelihood Strategies in NWFP, Pakistan* [PhD dissertation]. Faisalabad, Pakistan: Faisalabad University of Agriculture.
- \* Shahbaz B, Ali T. 2009. Donor-driven participatory forest management and 'local social realities': Insights from Pakistan. In: Geiser U, Rist S, editors. *Decentralisation Meets Local Complexity: Local Struggles, State Decentralisation and Access to Natural Resources in South Asia and Latin America*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 4. Bern, Switzerland: Geographica Bernensia, pp 249–273.
- \* Shigaeva J, Kollmair M, Niederer P, Maselli D. 2007. Livelihoods in transition: Changing land use strategies and ecological implications in a post-Soviet setting (Kyrgyzstan). *Central Asian Survey* 26(3):389–406.
- \* Steimann B. 2005. *Livelihood Strategies in North-West Pakistan: Results from the Sustainable Livelihoods Survey 2004, North-West Frontier Province (Pakistan)*. IP6 Working Paper No. 5. NCCR North-South Dialogue Series. Zurich and Bern, Switzerland: Department of Geography, University of Zurich, and Swiss National Centre of Competence in Research (NCCR) North-South. Also available at: [http://www.nccr-north-south.unibe.ch/publications/Infosystem/On-line%20Dokumente/Upload/IP6\\_WP5.pdf](http://www.nccr-north-south.unibe.ch/publications/Infosystem/On-line%20Dokumente/Upload/IP6_WP5.pdf); accessed on 11 May 2010.
- \* Steimann B. 2010. *Making a Living in Uncertainty: Agro-pastoral Livelihoods and Institutional Transformations in Post-socialist Rural Kyrgyzstan* [PhD dissertation]. Zurich, Switzerland: University of Zurich.

- Stewart F. 2006. Basic needs approach. In: Clark DA, editor. *The Elgar Companion to Development Studies*. Cheltenham, UK: Edward Elgar Publishing Ltd.
- \* Strasser B. 2009. "We Are as Flexible as Rubber!" – *Livelihood Strategies, Diversity and the Local Institutional Setting of Rubber Small Holders in Kerala, South India*. Delhi, India: Manohar Publishers.
- \* Suleri A, Shahbaz B, Geiser U. 2008. *Stakeholders of Natural Forests in North West Frontier Province of Pakistan: Typology, Influence and Conflicts*. Islamabad and Karachi, Pakistan: Sustainable Development Policy Institute (SDPI) and Sama Publishers.
- \* Thieme S. 2006. *Social Networks and Migration: Far West Nepalese Labour Migrants in Delhi*. Culture, Society, Environment – South Asian and South East Asian Studies, Vol. 7. Münster, Germany: LIT Verlag.