Journal of Contextual Economics 137 (2017), 69–92 Duncker & Humblot, Berlin

# Development, Informal Institutions and Agency Analyzed through the Lens of New Institutional Anthropology: A Modification of Ensminger's Framework on Institutional Change

By Johanna Friederike Goetter\*

### Abstract

In development research, much effort has gone into analyzing the impact of economic and political institutions and their adequate design. However, unforeseen factors such as the impact of the cumulative behavior of individuals as shaped by informal institutions especially social norms and moral values - may also determine the pace and path of development. Thus, positive economic, social or political triggers may only then translate into development if the relevant actors adapt their strategies and actions appropri-Similarly, while negative triggers may induce a deterioration of the socioately. economic situation if no adaptation or a mal-adaptation takes place, in another real-world setting with a different set of institutions and actors it may in turn be possible to preserve the status quo. Sound analytical frameworks are needed to gain a deeper understanding of the complex and dynamic interaction of factors leading to a case-specific outcome and history of change. These frameworks have to be specific enough to allow the interpretation of complex changes and dynamics and at the same time general enough to fully cover a broad range of diverse settings and all important but possibly unforeseen aspects. In this paper, I present a modified version of the Framework for Modeling Institutional Change developed by Jean Ensminger (1992). Accounting for the relationships and dynamics of incentives, formal and informal institutions, bargaining power and the constellation of actors, Ensminger's framework, which is rooted in the theoretical approach of New Institutional Anthropology, merges important aspects from New Institutional Economics and anthropology. However, it fails to leave room for agency which, as the paper illustrates, has been shown to play an often important role in development. The modified version of Ensminger's framework incorporates agency as a main factor. For the purpose of demonstration, it is applied to a case study on informal constraints to cope with cattle rustling in Madagascar. The paper illustrates the modified framework's analytical strength for a meticulous investigation of a wide range of empirical cases and discusses to which development-related cases and research interests it fits best.

JEL Codes: B52, O1, N57, Z13

<sup>\*</sup> Department for Environmental Economics, Brandenburg University of Technology Cottbus-Senftenberg, Erich-Weinert-Str. 1, 03046 Cottbus, Germany. The author can be reached at johanna.goetter@posteo.de.

Journal of Contextual Economics 137 (2017) 1-2

### 1. Introduction

It has long been acknowledged that processes of development are dependent not only on economic and political institutions, but also on informal institutions (e.g., Weber 1904). Most institutionalists understand informal institutions as shared ideas and mental models, social norms, moral values, and habits and routines. Often subsumed under the label of 'culture' (North 1994; Sjöstrand 1993), informal institutions are even said to make "almost all the difference" in economic development (Landes 2000, 2).

The current research on informal institutions and development faces two big methodological and theoretical challenges: First, the numerous complementary approaches are perceived as being all too simplistic, formulaic, linear and static (Chang 2011; Sen 2004). They thus fail to deal with the multiple, complex and non-causal connections between informal and formal institutions as well as additional factors such as incentive structures on individual behavior, shaped by the structural and historical setting (Yousfi 2011; De Soysa and Jütting 2007a). Development outcomes thus depend on this mixture and are difficult to foresee or transfer to other settings. Second, the development discourse has recently moved towards a "greater acknowledgement of relational interdependence between social context and the contributions of individuals to social and cultural transformation" (Yousfi 2011, 28). Thus, the challenge is how to consider the impact of individual agency on institutional change and cultural continuity (Yousfi 2011), while at the same time taking into account the heterogeneity in each culture (Yousfi 2011; Sen 2004). These challenges illustrate the need for a sound theoretical framework which allows for a thorough analysis of qualitative data and cases guided by theory.

Today, a broad range of frameworks for institutional analysis with different foci and from diverse disciplines exists. Among those best known are the 'Institutional Analysis and Development' and 'Social-Ecological Systems' frameworks elaborated by Ostrom and colleagues (e.g., Ostrom 1990; 2009), the 'Institutions of Sustainability' framework by Hagedorn, Arzt, and Peters (2002), the 'Framework for Institutions and Development' by De Soysa and Jütting (2007a), or the actor-centered framework by Mayntz and Scharpf (1995). Given the right setting and focus (e.g., natural resource use, collective action), these are very useful for analyzing a given situation. However, these frameworks are not suitable for most issues beyond static settings which deal with institutions and processes of change, e.g., development and contra-development or fallbacks (e.g., due to war, social insecurity, market clashes, and maladaptation). Although there are a number of 'dynamic frameworks,' most of them are designed for rather specific sceneries (e.g., De Moor (2008) for corporate collective action, Sterns and Reardon (2002) for agrifood systems, Thiel (2014) for eco-institutional settings).

An exception which addresses the role of informal institutions in a broad range of dynamics and pattern of changes is the relatively unknown Framework for Modeling Institutional Change by Jean Ensminger (1992). This framework and her corresponding theoretical New Institutional Anthropology approach merge the perspectives and strengths of two disciplines, New Institutional Economics and anthropology. One of the strengths of the framework is its 'unpacking of the box' of the internal dynamics of institutional change, that is, the linkages between institutions, individual action, bargaining power and ideology (Haller 2010). Nevertheless, this framework also fails to explicitly consider agency as a crucial factor.

Thus, the main goal of the present paper is to introduce a modified version of the framework that takes into account collective or individual agency as a factor of change. Some additional aspects based on incoherencies noted by myself and other scholars are also discussed. To illustrate the framework's general functioning and how the adjustments feed in, I apply the modified version to a case study on cattle rustling in Madagascar. Cattle rustling is a serious security problem affecting pastoral development in many African regions (e.g., Bollig 2006; Schilling, Opiyo, and Scheffran 2012). I analyze how the pastoralists' coping capacities are positively and negatively determined by the interplay of informal institutions, agency and other factors.

The paper is structured as follows: Section 2 gives a short summary of the views on development taken by the academic disciplines, especially by New Institutional Economics (NIE) and anthropology as the theoretical background to the approach of New Institutional Anthropology (NIA) and the presented framework on institutional change by Ensminger (1992). NIA, the original framework and the suggestions for modification are presented in section 3. This is followed by the application of the framework to the case study on cattle rustling (section 4). The last section discusses the suitability of the modified framework as a tool for analyzing different kinds of change related to development and social institutions.

# 2. Institutional Perspectives on Development from Different Disciplines

Informal institutions have become more important in development studies since development is seen beyond the classical terms of economic growth and poverty alleviation. Development is today perceived as a process leading to enhanced well-being of people (Platteau and Peccoud 2011), determined by factors such as the individual's adaptation capacity (Cannon and Müller-Mahn 2010; Sherman et al. 2016), or economic actors' capability to participate in economic life (Feldman et al. 2016; Sen 2003). Here, development thinking focuses on the aim to "help the 'poor' produce a cultural consensus that best

advances their own collective long-term interests in matters of wealth, equality and dignity" (Yousfi 2011, 29) – in other words, informal institutions that enhance people's capabilities for individual agency and adaptation.

Additionally, informal institutions gain importance when studying the many rural regions of the developing world that are "at the margins" where development happens per se "under-the-radar, and outside the influence and control of aid interventions or state policies" (Catley, Lind, and Scoones 2013, 8). This may not only be due to a weak presence of the state. In some rural regions, small-scale societies have developed the 'art of not being governed' (Scott 2009) and social life is managed solely through local institutions. Development can then be understood as processes driven by local people reacting to chances such as new technologies or market opportunities, but also to threats, e.g., climate change or security problems. Thus, assessing whether a particular institutional environment is complementary to development or works against it and how that environment changes requires an understanding of how individual behavior is guided by social and moral norms, obligations and conventions, as well as actor networks (De Soysa and Jütting 2007b).

However, development policy has long focused on the field of designed change of formal institutions (Yousfi 2011), as has the research. As De Soysa and Jütting note, informal institutions "often relate to dimensions of a society's culture that economists and other social scientists prefer to avoid" (2007a, 30). As a consequence, all disciplines have consistently failed to take informal institutions appropriately into account or at least for some decades lost sight of them. In contrast to many other disciplines, anthropology has a long history of dealing extensively with informal institutions, also in the context of developing countries. Although 'informal institutions' is not a common concept in theoretical or empirical anthropological work, the discipline has had an enduring interest in informal institutions, labeling them with terms such as 'culture,' 'customs,' 'traditions,' 'rituals,' 'beliefs,' 'values' or 'narratives.' The three latter ones can be subsumed under the term 'ideology.' This field is of course not solely treated in anthropology. Institutional economics also gives much attention to ideology in terms of shared ideas, concepts, or 'mental models' about the world (e.g., Denzau and North 1994; North 1981). Due to these conceptual overlaps, the rich anthropological writings on ideology provide important insights from which other disciplines such as institutional economics benefit. However, anthropology has largely abandoned the informal institutions issue when addressing contemporary societies and their development. Referring to Africa, Meagher argues that the "ethnographic and historical strengths of the informal institutional literature of the 1960s and 1970s seems to have been lost in the 'shadows'" (2007, 407) and is only slowly on the rise again.

For New Institutional Economics (NIE), prominent scholar Douglass North (1990) already underlined the importance of the interplay between formal and

informal institutions back in the 1990s. However, institutional economics has been blamed for not giving enough weight to understanding the role of informal institutions in shaping people's choices (Acheson 1994; Douglas 1986; Eggertsson 2013; Granovetter 1985). Williamson acknowledged that the underlying set of informal institutions shaping economic activities ('embeddedness') is "taken as given by most institutional economists" (2000, 596) but not further analyzed. This 'blind spot' for informal institutions has diminished somewhat over time (e.g., North 2005), but most studies still deal exclusively with the role of formal institutions such as formal law and especially property rights (for prominent examples see Acemoglu, Johnson, and Robinson 2005; De Soto 2000).

NIE's great merit is that it integrates perspectives from economic, historical and cultural analysis, being "aware of the importance of history, culture, tradition and other so-called 'path dependent' factors in shaping economic behavior" (Yousfi 2011, 33). Among the core interests of NIE are the generation of institutions through the behavior of individuals, and how these institutions influence economic productivity and exchange. Especially with regard to the seminal work of Douglass North (1990), anthropological scholars such as Mary Douglas acknowledge that it "reconcile[s] anthropological observations about culture with economics" in the frame of rational choice theory and "starting from problems of coordination that beset poor economies" (2004, 98–99). Anthropologists Ensminger and Rutten see the strength of NIE in having abandoned "many of the assumptions that have bothered anthropologists: costless transacting, perfect rationality and information, and narrow economic self-interest [... and] emphasizing the significance of institutions and ideology" (1991, 684).

Regarding the contribution to development research by NIE's specific perspective, there are some notable changes. For some decades after its emergence, the topics discussed mainly resembled the typical themes of Old Institutional Economics, i.e. political and economic institutions in industrialized societies (Acheson 1994). Issues of the developing world were handled from an institutionalist's perspective starting with the work of Robert Bates (1976; 1981; 1989) on the role of political institutions in development in Africa. Institutional economists then put a lot of emphasis on the analysis of institutions and development from the viewpoint of transaction costs. It was argued that efficient institutions are those that reduce transaction costs and by doing so have a positive impact on market activity and thus economic development. It also puts a strong focus on property rights, thus sharing common ground with development research. Property rights is also the first concept from institutional economics incorporated into anthropological work (Acheson 1994). However, some development researchers argue that the strong focus on property rights is misleading (Yousfi 2011).

Furthermore, NIE has focused mainly on market exchanges and ignored forms of non-market exchange such as gift-giving (Acheson 1994) which plays an important role in developing countries in matters of economic and social security (Dercon 2002; Dobuzinskis 2003). Many institutional economists also still focus heavily on development through the formalization of rules, and take as given the superiority of modern, entrepreneurial societies of 'open social order,' formal law and impersonal relations towards 'traditional' societies marked by 'limited-access social order' based on personal relationships (North, Wallis, and Weingast 2006). This view is very similar to the former modernization theory whose shortcomings are well-known (Douglas 2004; Yousfi 2011). NIE has also often been criticized for lacking a coherent understanding of the role of changes in relative prices in institutional change. As Bardhan points out, these changes "may at most change the costs and benefits of collective action for different classes [...] but cannot predetermine the balance of class forces or the outcome of social conflicts" (1989, 1391).

Some of the main points of criticism raised against institutional perspectives on development apply not only to NIE, but also to other disciplines such as anthropology, especially those relating to the 'appropriateness' of institutions, the assumed static character of culture, and the 'blind spot' concerning agency: Development research often put a lot of weight on defining the 'appropriateness' or 'inappropriateness' of institutions for development (e.g., Lund 2006; Platteau and Peccoud 2011; Ruttan and Hayami 1984). This is often perceived as an excessive "searching for the Holy Grail of good institutions" (De Soysa and Jütting 2007a, 41, emphasis in original). Some anthropologists complain that their discipline is stuck in the "dilemma" (Acre and Long 2000, 1) of observing non-western cultures through a lens of western rationality and a onesided commitment to progress and modernity (Comaroff and Comaroff 1993). Other ethnographic approaches, on the other hand, often completely neglect this issue. As Edgerton (2000, 130) argues, even the most bizarre, inefficient or harmful traditional belief or practice is treated by most anthropologists as still having an important value and being positively adaptive "once it is understood."

Culture has in most disciplines wrongly been handled as a stable system that changes only in reaction to external triggers, e.g., in institutional economics due to changing costs and prices (North 1994). Institutional economists largely see culture or informal institutions as "communities of common ideologies and a common set of rules that all believe in" (North 1987, 421). Similarly, anthropologists are criticized for having worked with a concept of society "as a thing" instead of "as a context of actions and results of actions" of individuals (Barth 1992, 31). Society and culture are today widely acknowledged to be "dynamic and interactive" (Sen 2004, 55) and "reproduced and transformed not through social determinism but in a constant interaction between the individual's actions and the social world, as meanings are negotiated and as these meanings

change through individuals" (Yousfi 2011, 28; Giddens 1984). On the contrary, ethnographic perspectives often ignore the heterogeneity and interdependency of institutions and interests within a society and thus the naturalness of dissent and power plays among its members (Acre and Long 2000; Appadurai 2004). Also, NIE often treats "social processes as aggregates of individual behavior, [...] imply[ing] that groups in civil society act collectively, whether or not they are formally organized, in single-minded pursuit of shared goals" (Berry 1997, 1228). This leaves no space for differences in individual perceptions and enactments of informal institutions in the same society or individual agency.

Agency and agents who think about and aspire to things in the future and their "wants, preferences, choices, and calculations" [...] have been largely invisible in the study of culture," although culture should be seen as "a dialogue between aspirations and sedimented traditions" (Appadurai 2004, 67, 84). Peoples' aspirations and ways of thinking are framed by their perception of the situation, their ideas, mental models, interests, personal relations, and networks and the distribution of resources and power. As a consequence, institutional change not only involves a change in institutions, but necessarily goes hand in hand with modifications in norms, interests, and power plays (Campbell 2004; Nee and Swedberg 2008). Theoretical approaches should thus "allow for the elucidation of actors' interpretations and strategies, and of how these interlock through processes of negotiation and accommodation" (Long and Long 1992, 5-6). Furthermore, the concepts should give room to the fields of interest and nature and structure of networks and personal relations. To analyze development, these factors, their interplay, and the outcome of this change need to be understood, taking into account the case-specific settings.

# 3. New Institutional Anthropology and the Framework for Modeling Institutional Change

New Institutional Economic Anthropology – often called simply New Institutional Anthropology – and the Framework for Modeling Institutional Change are based on anthropologist Jean Ensminger's seminal work *Making a Market* (1992) on institutional change among the pastoral Orma people in Kenya. Her work is on the one hand rooted in the anthropological work of Fredrik Barth (1981) who investigated the relationship between individual behavior and the generation of institutional Economics, particularly from North (1990). Her approach departs from the point that institutions on the one hand determine economic performance and distribution, and are on the other hand changed by the action of individuals. These actions are shaped by choices and calculations in the context of changing prices, but also social incentives, goals, strategies and constraints.

In the following sections, I will give an introduction to the framework (Ensminger 1992, 10) and its theoretical assumptions (see also Haller 2010) and present a suggestion as to how agency as an additional factor of change and other improvements may feed in. Afterwards, I demonstrate the modified framework's functioning by applying it to a case study. Although Ensminger's approach and especially her view of processes such as cultural change as being caused by economic alterations was perceived as a "fresh outlook" and was expected to "have a major impact on anthropological studies of economic change" (Bollig 1994, 141,144), her framework has only been used to guide a small number of case studies in developing countries all dealing with changes in property rights (Goetter and Neudert 2016; Haller 2010, 2013; Landolt and Haller 2015). For the structure of its inner 'black box' (see Figures 1 and 2), however, I assume the framework to be a very valuable tool for analyzing a wide range of different settings and topics in the developing world, especially those with informal institutions such as mental models and ideology and individual actors as agents playing a major role. Thus, I apply it to the case of cattle rustling in southwest Madagascar and social constraints to a new pattern of pastoral mobility as an adaptation option.

#### 3.1 The Original Framework

Ensminger's framework distinguishes three main elements and steps: Changes in 'external factors' trigger 'internal change' which then has 'distributive consequences' (e.g., regarding natural resources) for individuals and their 'behavior.' In the form of a feedback loop, the variation in individual behavior triggers a change in the 'external factors'. At the heart of the framework lies the unpacking of the box of 'internal change' into the following elements: institutions, ideology, bargaining power and organizations, and their interplay (see Figure 1).

The 'external factors' are changes in the social and physical (ecological) environment, the population and technology inducing a change in so-called relative prices. Relative prices are understood as "the value of something in relation to what one must give up for it" (Ensminger 1992, 4). The concept of relative prices is the economic perspective taken in this approach (see also Demsetz 1967; Libecap 1989; North and Thomas 1973). Ensminger emphasizes that these changes in external prices do not lead directly to a shift in the institutional setting, but only via changes in the interplay of the internal factors as triggered by the alteration of the behavior of individual actors. The behavior of all involved actors is however not based solely on strategic economic considerations, but also on (informal) institutions and what Ensminger has subsumed under the term 'ideology.' The importance of taking ideology and bargaining power into account in historical depth has especially been pointed out

for cases dealing with the distribution of natural resources (Acheson 2003; Agrawal 2001).

Following North (1990), Ensminger rather broadly defines institutions as formal rules (such as legal regulations put in place by the state or a community), informal constraints (such as social norms), and their corresponding enforcement mechanisms (including self-imposed standards of behavior). The framework is rather meticulous in distinguishing between informal institutions and ideology. In Ensminger's view, ideology "provides the model we invoke to determine both what we 'ought' to do and 'how' we might best do it." It comprises people's values, mental models, and beliefs that "determine people's goals and shape their choices" (Ensminger 1992, 5). Unlike many neo-classical economists and anthropologists, Ensminger considers not only institutions as changing. Ideology is also seen as an unstable factor that responds to triggers from 'outside' (e.g., changes in relative prices) and is in constant interplay with the other factors in the box of 'internal change.'

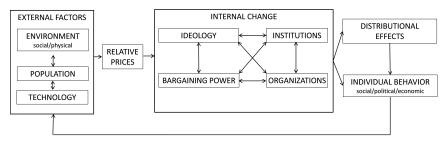


Figure 1: Original Version of the Framework for Modeling Institutional Change (Ensminger 1992)

Ensminger defines organizations as political, economic or social bodies or "groups of individuals bound by some common purpose to achieve objectives" (cited in North 1990, 5). Together with institutions, organizations "determine what power people have and what price they must pay to pursue their goals" (Ensminger 1992, 4). Bargaining power is understood as "one's ability to get what one wants from others" (*ibid.*, 7). This power may arise from social position, economic wealth, or the ability to influence the ideology of others. The bargaining behavior of individual actors is seen as being driven by their striving for material and non-material benefits, such as "power, status, and even the ability to assert one's own ideological preferences over those of others" (Ensminger argues that it is not necessarily the institutions which are best for the society that survive or are created, but the ones that serve those actors who bargained for them most successfully. With this strong focus on individual bar-

gaining, power and conflicts, the link to post-structuralist approaches (e.g., Bayart 1999; Comaroff and Comaroff 1993) becomes apparent.

#### 3.2 Modification of the Framework

Most suggestions for modifying the framework deal with extension or a relabeling of concepts or terms (see Figure 2): For ideology, Haller (2010) suggests including 'discourses' and 'narratives.' A discourse is here defined as an ideologically shaped "specific way of linking issues and rationalizing topics in a logical way" (Haller 2010, 57), while a narrative is an explanation for a specific phenomenon. As Merten (2008) notes, Ensminger's writing on the Orma people also deals with the phenomenon of 'modernization discourse.' Haller (2010) also observes that external changes may not only be found in the social and physical, but also in the political and economic environments.

When describing 'organizations,' Ensminger claims that "we must constantly look at how an individual's current standing in the existing structure affects his or her motivations and relative bargaining power" (Ensminger 1992, 12). Thus, Goetter and Neudert (2016) suggest that 'organizations' should be relabeled as 'constellation of actors,' as this better takes into account the importance of the roles of individuals in the 'organization' (e.g., a small-scale society), for example in terms of authority for rule creation and enforcement. Furthermore, depending on the case the framework is applied to, it may be worthwhile to use a more detailed and sharper differentiation between different types of institutions instead of the one based on North (1990). For example, Goetter and Neudert (2016) have opted to further distinguish between appropriation rules and provision rules (e.g., Ostrom 1990). One may also use the 'Grammar of Institutions' by Crawford and Ostrom (1995) which differentiates between rules, different kinds of norms, and institutionalized personal strategies.

On a more conceptual level, the original framework may be criticized for its handling of 'individual behavior' or agency: The behavior of individuals is depicted as being changed as an outcome of the internal change, directly as well as indirectly via a change in the distributional effects. Vice versa, individual behavior may induce internal changes via changes in the external factors and relative prices. However, behavior is relevant not only after the situation has undergone a change with distributive effects, but also beforehand. Although not depicted by the framework, all three factors shaping institutions (bargaining power, constellation of actors, ideology) do not have any means to influence institutions other than through the behavior of individuals. Putting an emphasis on the behavior of individuals and how this shapes change may thus contribute to a more thorough and deep analysis. This also reflects the high importance individual action is given in the NIA approach and in Ensminger and Knight's

(1997) work on bargaining for change. Thus, I suggest including 'agency' as a fifth factor in the box of internal change (see Figure 2).

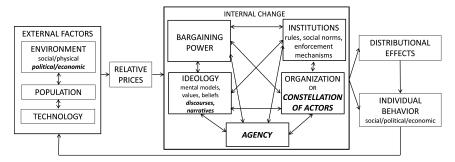


Figure 2: Modified Framework for Modeling Institutional Change by Ensminger (1992) (Modifications in Italics and Bold, Own Ones and after Haller (2010) and Goetter and Neudert (2016))

# 4. Illustration: Coping with Cattle Rustling in Southwest Madagascar

The Mahafaly Plateau region in southwest Madagascar with its subsistence agro-pastoralists is a good example of a pastoral region 'at the margins.' Development efforts from outside have mainly failed and the region is claimed to be a development 'project cemetery' (UNICEF 2011). In recent decades, several factors including climate change have led to even more severe poverty and food shortages (Hänke 2016; FAO and WFP 2014). The region consisting of the plateau itself and the neighboring coastal plain is also rather underprivileged in terms of general infrastructure, health and governmental extension services, market access, and education (Neudert et al. 2015). Informal institutions play a major role in all aspects of social life. For example, land use is mostly governed by ideologies and ancestral norms which override not only state regulations but also local community rules (Goetter and Neudert 2016).

In recent years, cattle rustling has become a serious problem in the Mahafaly Plateau region and in the south of Madagascar in general – so much so that it has regularly made it into international news (e.g., New York Times 2012). The attacks of often organized and heavily armed raiders have led to a decline in economic activity (Fafchamps and Minten 2006; Rakoto 2010), the death of people, and the displacement of villagers (OCHA 2012). In the Mahafaly Plateau region, a new transhumance movement of pastoralists and their herds has developed over the last 15 years in an attempt to escape the organized gangs entering the region for the purpose of raiding and leaving immediately. Fear of

these gangs is high, as they are not only said to be often armed with machine guns, they are also believed to have been rendered invincible by sorcery. Stealing of animals by people from the Plateau region itself also occurs, but is less frequent and above all less violent and frightful. In the new pattern of transhumance – a long-range, predictable seasonal movement (Behnke et al. 2011) – the herders now stay part of the year in the villages of the more secure neighboring coastal plain (Feldt and Schlecht 2015). The movement mirrors the traditional transhumance from the plain to the plateau, with shifted seasons and directions and a reversal of the roles of plateau and coastal herders acting as guests or hosts. In the traditional transhumance movement, the coastal herders and their cattle spend four to six months on the grasslands of the neighboring plateau due to a seasonal lack of fodder on the dry coastal plain.

In the following paragraphs, the case of the new transhumance movement based on interviews I conducted with herders and other villagers (Goetter 2016) will be analyzed through the lens of the modified framework (see Figure 3), addressing the following questions: Which factors play a negative or positive role in the development of the new transhumance movement and what is the role of agency? How do the different factors influence each other? A crucial question is why there are herders that do not take part in the new movement although staving at home implies the risk of being robbed. Are there institutional constraints on the herders' and their animals' mobility, such as not being allowed to cross territories or to use the local fodder resources? Here, as a characteristic pattern in pastoral societies around the world, informal institutions and ideology are assumed to be more important than formal institutions. Pastoral mobility is typically grounded in social norms shaped by mental models and ideologies of solidarity, reciprocity and kinship, rather than on formal agreements and rigorous property rights (Bollig 2006; Bromley 2001; Fernandez-Gimenez and Le Febre 2006; Thébaud and Batterbury 2001).

The establishment of the new transhumance movement was possible because of favorable setting in what Ensminger's framework calls the 'internal factors,' especially the interplay between 'institutions,' 'ideology' and the 'constellation of actors' (see Figure 3): Formal rules that could constrain the transhumance movement do not exist. The only formal rule a moving herder has to follow is that he has to register his stay in the host village with the village chief. Besides this, there are only social norms to be considered and – due to similar livelihoods and 'culture' – these are identical for coastal and plateau villages and thus implicitly known to all herders. Also common to coastal and plateau societies is a traditional ritual for trust creation. Today, this ritual is frequently used as a tool of 'agency' by moving plateau herders who aim to increase their social acceptance in the host villages.

Furthermore, pastoral mobility is not constrained by the typical conflicts of interest between (agro-)pastoralists and non-cattle-keeping pure agriculturalists

known from many other African regions (e.g., Bevene 2009; Tschopp et al. 2010). This is due to two reasons situated in the frames of 'ideology' and the 'constellation of actors:' The society of the plateau and coastal people is a 'cattle civilization' (Hoerner 1990, 150), that is, cattle play an important cultural and socio-economic role and still today in the villagers' mental models all people are per se agro-pastoralists – even today around 60% of the region's households are too poor to keep cattle (Neudert et al. 2015). In the local ideology, not owning livestock does not mean one is not a pastoralist as this is perceived as being just a temporary state, even if it lasts for decades. Furthermore, there are no fixed groups of cattle keepers and non-keepers, as animals are frequently bought or sold, and given away at cultural events (Feldt et al. 2016; Hänke 2016), causing a high fluctuation between the state of possessing or not possessing animals. This ideology of 'we are all pastoralists' means that overall solidarity with moving herders and their need for shelter and fodder is high, even among non-cattle-keepers, and it is also rooted in traditional moral values of solidarity.

However, there are herders who do not go on transhumance, and as a 'distributive consequence' (see Figure 3) of not moving they face the risk of being attacked by raiders. This behavior is caused by changes in the 'internal factors' entailing different kinds of social constraints on pastoral mobility: Looking at the 'constellation of actors,' the non-moving herders belong to the ethnic group of Mahafaly, while nearly all moving herders are mainly Tanalana people. While the coastal plain is traditionally and today still almost exclusively inhabited by Tanalana people, the Mahafaly are the traditionally predominant ethnic group of the Mahafaly, the Tanalana and Mahafaly consider themselves as two different groups, albeit bound together by inter-ethnic and inter-regional marriages. Kinship bonds are closest between the coastal villages founded by coastal Tanalana some decades ago.

Formerly, relations between the people of the plateau and coastal plain were in general shaped by a social value of solidarity rooted in a mental model of kinship, seeing all people of the region as being one kin or "all one family," regardless of whether they are Mahafaly or Tanalana people (see Figure 3: Ideology). However, over time these mental models of kinship have become narrower, leading to constraints of mobility. This change is triggered by the general environment of fear and mistrust towards all strangers created by the rustling attacks, possibly together with other factors related to social change (see Figure 3: External Factors changing Ideology). Today, Mahafaly plateau herders coming to a coastal village where they do not have a relative, friend, or at least a personal acquaintance with some inhabitant, are, as a kind of mental model, today considered 'not trustworthy' and 'non-kin.' This is relevant, as unconditional hospitality and related social norms about one's duty to host any

herder aiming to stay on transhumance have been replaced by conditional hospitality. Therefore, guest rights and host duties now apply only to kin. As a consequence, the Tanalana villagers do not like moving herders who are not kin, friends, or otherwise known in the village to stay. As a form of agency, they force them to leave (see Figure 3: Ideology changing Institutions changing Agency).

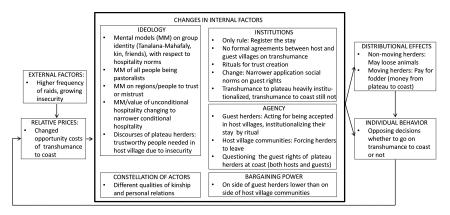


Figure 3: Modified Framework for Modeling Institutional Change (Ensminger 1992) Applied to New Transhumance and Its Constraints

Irrespective of the coastal villagers' acceptance, the ideology of many plateau herders themselves puts constraints on transhumance (see Figure 3: Ideology changing Individual Behavior). According to many plateau herders' discourse, a stay on the coastal plain necessarily requires having a relationship to some villager there. Not having such local kin or friends increases the likelihood of being a victim of cattle rustling. However, this discourse does not take into account that rustling is in fact frequent on the plateau while being very rare at the coast, and so the risk of being attacked is rather low.

Social constraints are far more relevant to the new movement than to the traditional movement as this is strongly 'informally institutionalized.' Due to the long tradition of transhumance, neither the hosts nor the guest herders question the herders' right to stay on the plateau, irrespective of whether they are kin of the hosts or not. Therefore, coastal Tanalana people not only stay on transhumance in the Tanalana villages on the plateau, but also in the rather pure Mahafaly villages without having any personal or kinship relations with a villager. In terms of 'bargaining power,' the coastal villagers are in a far better position, as the strong institutionalization of their transhumance stay on the plateau means that they do not need to bargain. The village communities' institutional repertoire includes formal agreements between village communities or clans.

However, formal agreements that could institutionalize the move between plateau and coast, especially the acceptance of plateau herders in the coastal host villages do not exist (see Figure 3: Institutions changing Bargaining Power). As a consequence, every moving plateau herder needs to institutionalize his personal stay and bargain to be accepted in a coastal village, for example by practicing the known ritual for trust creation (see Figure 3: Bargaining Power plus Agency changing Institutions).

The picture of the transhumance movement seen through the lens of the framework is completed by looking at the factors outside of the box of 'internal factors.' The external background as well as relative prices are shaped not only by the risk of rustling, but also by other factors: Unlike the plateau's savannahs where grazing is 'free,' due to a recent privatization process of the coastal fodder resources, when going on transhumance to the coast the moving herders need to buy most of the fodder. This increases the relative price of going on transhumance for preventing the loss of animals and indeed in some cases has influenced a herder's decision towards not moving (see Figure 3: Distributional Consequences changing Individual Behavior and Relative Prices). On a more general level, the new transhumance movement shifts economic resources from the plateau to the coast and increases the local demand for fodder.

### 5. Discussion and Conclusion

In this paper, I discussed the role of formal and informal institutions and agency for development and stressed the need for a rigorous analytical framework and theory. I review the strengths and weaknesses of New Institutional Economics and other disciplines when analyzing development. The Framework for Modeling Institutional Change (Ensminger 1992) rooted in a combination of NIE and anthropology called New Institutional Anthropology is presented as a solid analytical tool for development research. However, one of the main weaknesses the different disciplines are criticized for is also mirrored in Ensminger's framework – it does not explicitly give room to agency. Therefore, I present a modified version of the framework which includes agency as one of five core analytical elements influencing development and change. I then apply the framework to the case of adaptation to cattle rustling in Madagascar in order to demonstrate the framework's mode of operation and to create a basis for discussion of its general applicability and the usefulness of the integration of agency. This is done in the following.

The application to the empirical case demonstrates that the framework is effective for presenting a comprehensive picture of the relevant factors and how these influence each other. The analytical strength of the framework clearly lies in the box of 'internal change.' This box is able to depict a detailed setting with different actors (individuals or groups) brought together in a specific constella-

tion and bargaining for or against a certain change with their own power resources, shaped by their ideology, informal and formal institutions. Another very valuable characteristic of the framework is shown to be the distinction between informal institutions in terms of social norms and other informal institutions, here labeled 'ideology.' In many cases it is essential to make sure that ideology, a factor that is even more 'invisible' to the researcher's eyes, is not forgotten and also does not get mixed up with 'other' informal institutions. In the present case study, the interplay between these mental models, moral values, discourses and narratives turns out to be highly complex and central to the development of the adaptation strategy, but also to its constraints.

Regarding agency, the application also proves that giving agency more room helps one to better understand the story and the interplay of factors. In this case, it becomes clear that one of the central points is that the moving plateau herders actively bargained for institutionalizing the new pastoral movement but did not really succeed because other people focused their agency on restraining the movement. Without agency as an independent factor, this aspect would easily have fallen out of the analysis due to having no proper visualization. Agency may be found to be a less relevant factor when applied to cases that differ from the one illustrated here in that they are shaped less by intended or designed change than by evolutionary change, e.g., cultural change.

Limitations to the use of the framework for empirical studies in the sense that the framework is not appropriate for the case are rare, as its specific structure means it can be adapted for use, that is, one may make use of parts of the framework only, especially the box of 'internal change.' This analysis will always give important insights, while in many empirical settings other factors may turn out to be irrelevant or difficult to apply. In the presented case study, for example, 'distributional effects' and 'relative prices' are not essential to answer the research question and may be ignored. A case in point where these factors cannot even be filled with empirical material is Ensminger's own study on young Orma bargaining to change the social norm on whom they are allowed to marry (Knight and Ensminger 1998). Of course, there are also cases where the changes in the internal factors are directly linked to the distribution of economic resources, for example changes in property rights to natural resources (e.g., Goetter and Neudert 2016; Haller 2010). Looking at the comprehensive picture of the interplay of economic incentives with people's behavior and agency shaped by bargaining power, institutions and agency may be most valuable when dealing with cases of evolutionary change, e.g., typical cases of cultural change.

Taking the box of 'internal factors' alone with its complex and detailed structure may also be appropriate for analyzing rather static situations or settings in the broader development context which are found to be critical for understanding why development is accelerated, hampered, or taking another road than assumed. This broad fit is due to the interesting point that although the framework is said to be designed for analyzing institutional change, it does not leave much space for depicting the change itself (e.g., in the form of an illustration with situation A leading to situation B). Furthermore, its design does not predict that the analyzed changes have to be of predominantly institutional character (e.g., changes in formal institutions). Thus, the framework also fits to other societal processes predominantly shaped and driven by non-institutional factors, e.g., cultural change with main changes in informal institutions and ideology.

### References

- Acemoglu, D., S. Johnson, and J. A. Robinson. 2005. "Institutions as a fundamental cause of long-run growth." In *Handbook of Economic Growth, Volume 1A*, edited by P. Aghion and S. N. Durlauf, 386–472. Amsterdam: Elsevier.
- Acheson, J. 1994. "Welcome to Nobel country: A Review of Institutional Economics." In Anthropology and Institutional Economics, edited by J. Acheson, 3–42. Lanham: University Press of America.
- 2003. Capturing the commons: Devising institutions to manage the Maine lobster industry. Hanover, NH: University Press of New England.
- Acre, A. and N. Long. 2000. "Reconfiguring modernity and development from an anthropological perspective." In *Anthropology, Development and Modernities*, edited by A. Acre and N. Long, 1–30. London and New York: Routledge.
- Agrawal, A. 2001. "Common Property Institutions and Sustainable Governance of Resources." *World Development* 29 (10): 1649–1672.
- Appadurai, A. 2004. "The Capacity to Aspire: Culture and the Terms of Recognition." In *Culture and public action*, edited by V. Rao and M. Walton, 59–84. Stanford: Stanford University Press.
- Bardhan, P. K. 1989. "The new institutional economics and development theory: A brief critical assessment." World Development 17 (9): 1389–1395.
- Barth, F. 1981. Process and Form in Social Life: Selected Essasy of Fredrik Barth, Vol. 1. London: Routledge & Kegan Paul.
- 1992. "Towards greater naturalism in conceptualizing societies." In *Conceptualizing Society*, edited by Adam Kuper, 17–33. New York: Routledge.
- Bates, R. H. 1976. *Rural Responses to Industrialization: A Study of Village Zambia*. New Haven: Yale University Press.
- \_\_\_\_ 1981. Markets and States in Tropical Africa: The Political Basis of Agricultural Policies. Berkeley: University of California Press.
- 1989. Beyond the Miracle of the Market: The Political Economy of Agrarian Development in Rural Kenya. Cambridge: Cambridge University Press.

- Bayart, J. F. 1999. *The criminalization of the state in Africa*. Oxford/Bloomington: James Currey/Indiana University Press.
- Behnke, R. H., M. E. Fernandez-Gimenez, M. D. Turner, and F. Stammler. 2011. "Pastoral migration. Mobile systems of livestock husbandry." In *Animal Migration – A Synthesis*, edited by E.J. Milner-Gulland, J. Fryxell and A.R.E. Sinclair, 144–252. Oxford: Oxford University Press.
- Berry, S. 1997. "Tomatoes, land and hearsay. Property and history in Asante in the time of structural adjustment." *World Development* 25 (8): 1225–1241.
- Beyene, F. 2009. "Property rights conflict, customary institutions and the state: The case of agro-pastoralists in Mieso district, eastern Ethiopia." *The Journal of Modern African Studies* 47 (2): 213–239.
- Bollig, M. 1994. "Review: Ensminger, Jean: Making a market. The institutional transformation of an African society." *Zeitschrift für Ethnologie* 119 (1): 141–144.
- 2006. Risk Management in a Hazardous Environment. A Comparative Study of Two Pastoral Societies. New York: Springer.
- Bromley, D. W. 2001. "Property rights regimes and institutional change." Paper read at Property Rights and Institutional Change, September 19–11, at Fredericia, Denmark.
- Campbell, J. L. 2004. *Institutional Change and Globalization*: Princeton University Press.
- Cannon, T. and D. Müller-Mahn. 2010. "Vulnerability, resilience and development discourses in context of climate change." *Natural Hazards* 55 (3): 621–635.
- Catley, A., J. Lind, and I. Scoones. 2013. "Development at the margins: pastoralism in the Horn of Africa." In *Pastoralism and Development in Africa: Dynamic Change at the Margins*, edited by A. Catley, J. Lind and I. Scoones, 1–26. Abingdon: Routledge.
- Chang, H.-J. 2011. "Institutions and economic development: theory, policy and history." Journal of Institutional Economics 7 (4): 473–498.
- Comaroff, J. and J. Comaroff. 1993. *Modernity and its malcontents: ritual and power in Africa*. Chicago: Chicago University Press.
- Crawford, S. E. S. and E. Ostrom. 1995. "A Grammar of Institutions." *The American Political Science Review* 89 (3): 582–600.
- De Moor, T. 2008. "The Silent Revolution: A New Perspective on the Emergence of Commons, Guilds, and Other Forms of Corporate Collective Action in Western Europe." *International Review of Social History* 53: 179–212.
- De Soto, H. 2000. *The mystery of capital: why capitalism triumphs in the west and fails everywhere else.* New York: Basic Books.
- De Soysa, I. and J. Jütting. 2007a. "Informal Institutions and Development: How They Matter and What Makes Them Change." In *Informal institutions: How social norms help or hinder development*, edited by J. Jütting, D. Drechsler, S. Bartsch and I. de Soysa, 28–43. Paris: OECD Publishing.

- 2007b. Informal institutions and development: Think local, act global? Overview Paper for the Roundtable Discussion at the International Seminar on Informal Institutions and Development – What do we know and what can we do? Paris: OECD.
- Demsetz, H. 1967. "Towards a Theory of Property Rights." The American Economic Review 57 (2): 347–359.
- Denzau, A. T. and D. C. North. 1994. "Shared Mental Models: Ideologies and Institutions." Kyklos 47 (1): 3–31.
- Dercon, S. 2002. "Income risk, coping strategies and safety nets." The World Bank Research Observer 17: 141–166.
- Dobuzinskis, L. 2003. "Gift-giving and Reciprocity in the Global Era." In *Turbulence and New Directions in Global Political Economy*, edited by J. Busumtwi-Sam and L. Dobuzinskis, 107–125. Basingstoke, UK: Macmillan.
- Douglas, M. 1986. How institutions think. Syracuse: Syracuse University Press.
- 2004. "Traditional culture Let's hear no more about it." In *Culture and public action*, edited by V. Rao and M. Walton, 85–109. Stanford: Stanford University Press.
- Edgerton, R. B. 2000. "Traditional Beliefs and Practices Are Some Better than Others?" In *Culture matters: How values shape human progress*, edited by L. Harrison and S. Huntington, 127–140. New York: Basic Books.
- Eggertsson, T. 2013. "Quick guide to New Institutional Economics." *Journal of Com*parative Economics 41 (1): 1–5.
- Ensminger, J. 1992. *Making a market. The institutional transformation of an African society*. Cambridge: Cambridge University Press.
- Ensminger, J. and J. Knight. 1997. "Changing social norms. Common Property, Bridewealth, and Clan Exogamy." *Current Anthropology* 38 (1): 1–24.
- Ensminger, J. and A. Rutten. 1991. "The Political Economy of Changing Property Rights: Dismantling a Pastoral Commons." *American Economic Review* 18 (4): 683–699.
- Fafchamps, M. and B. Minten. 2006. "Crime, Poverty, and Isolation: Evidence from Madagascar." *Economic Development and Cultural Change* 54 (3): 579–603.
- FAO and WFP. 2014. FAO/WFP crop and food security assessment mission to Madagascar, 23 October 2014. Rome.
- Feldman, M., T. Hadjimichael, T. Kemeny, and L. Lanahan. 2016. "The Logic of Economic Development: A Definition and Model for Investment." *Environment and Planning C: Government and Policy* 34 (1): 5.21–5.21.
- Feldt, T., R. Neudert, P. Fust, and E. Schlecht. 2016. "Reproductive and economic performance of local livestock in Southwestern Madagascar: Potentials and constraints of a highly extensive system." *Agricultural Systems* 149: 54–64.
- Feldt, T. and E. Schlecht. 2015. "Analysis of GPS-trajectories to assess spatio-temporal differences in grazing patterns and land use preferences of domestic livestock in south-western Madagascar." *Pastoralism: Research, Policy and Practice* 6 (5): 1– 17.

- Fernandez-Gimenez, M. E. and S. Le Febre. 2006. "Mobility in pastoral systems: Dynamic flux or downward trend?" *International Journal of Sustainable Development & World Ecology* 13 (5): 341–362.
- Giddens, A. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press.
- Goetter, J. F. 2016. "The cattle raiders leave us no choice: New transhumance in the Mahafaly Plateau region in Madagascar." *Madagascar Conservation & Development* 11 (1): 12–22.
- Goetter, J. F. and R. Neudert. 2016. "New rules are not rules: Privatization of pastoral commons and local attempts at curtailment in southwest Madagascar." *International Journal of the Commons* 10 (2): 617–641.
- Granovetter, M. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." American Journal of Sociology 91 (3): 481–510.
- Hagedorn, K., K. Arzt, and U. Peters. 2002. "Institutional Arrangements for Environmental Co- operatives: A Conceptional Framework." In *Environmental Cooperation* and Institutional Change: Theories and Policies for European Agriculture. New Horizons in Environmental Economics, edited by Konrad Hagedorn, 1–25. Cheltenham, UK and Northhampton, MA, USA: Edward Elgar.
- Haller, T. 2010. Disputing the Floodplains. Institutional Change and the Politics of Resource Management in African Wetlands. Leiden: Brill.
- 2013. The Contested Floodplain: institutional change of the commons in the Kafue Flats, Zambia. Lanham: Lexington/Rowman & Littlefield.
- Hänke, H. 2016. Livelihoods on the edge: farming household income, food security and resilience in southwestern Madagascar. PhD diss., Georg-August University Göttingen.
- Hoerner, J. M. 1990. La Dynamique Regionale du Sous-Developpement du Sud-Ouest de Madagascar. Perpignan: GERC.
- Knight, J. 1992. *Institutions and Social Conflict*. Cambridge: Cambridge University Press.
- Knight, J. and J. Ensminger. 1998. "Conflict over changing social norms: Bargaining, Idelogy and Enforcement." In *The New Institutionalism in Sociology*, edited by M. C. Brinton and V. Nee, 105–126. Stanford: Stanford University Press.
- Landes, D. 2000. "Culture makes almost all the difference." In *Culture matters: How values shape human progress*, edited by L. Harrison and S. Huntington, 2–13. New York: Basic Books.
- Landolt, G. and T. Haller. 2015. "Alpine Common Property Institutions under Change: Conditions for Successful and Unsuccessful Collective Action by Alpine Farmers in the Canton of Grisons, Switzerland." *Human Organization* 74: 100–111.
- Libecap, G. D. 1989. *Contracting for property rights*. Cambridge: Cambridge University Press.
- Long, N. and A. Long. 1992. *Battlefields of Knowledge: The Interlocking of Theory and Practice in Social Research and Development*. London, New York: Routledge.

- Lund, C. 2006. "Twilight Institutions: Public Authority and Local Politics in Africa." Development and Change 37 (4): 673–684.
- Mayntz, R. and F. W. Scharpf. 1995. "Der Ansatz des akteurszentrierten Institutionalismus." In *Gesellschaftliche Selbstregulierung und politische Steuerung*, edited by R. Mayntz and F. W. Scharpf, 39–72. Campus Verlag.
- Meagher, K. 2007. "Introduction: Special issue on 'informal institutions and development in Africa." Afrika Spektrum 29: 241–248.
- Merten, S. 2008. Strategic traditions. changing livelihoods, access to food and child malnutrition in the Zambian Kafue Flats. PhD diss., University of Basel.
- Nee, V. and R. Swedberg. 2008. "Economic Sociology and New Institutional Economics." In *Handbook of New Institutional Economics*, edited by C. Ménard and M. M. Shirley, 789–818. Berlin and Heidelberg: Springer.
- Neudert, R., J. F. Goetter, J. Andriamparany, and M. Rakotoarisoa. 2015. "Income diversification, wealth, education and wellbeing in rural south-western Madagascar: Results from the Mahafaly Region." *Development Southern Africa*: 1–27.
- New York Times. 2012. "Madagascar: Villagers Fend Off Attacks by Gang Seeking Cattle." September 3, 2012.
- North, D. C. 1981. *Structure and Change in Economic History*. New York: W. W. Norton.
- 1987. "Institutions, Transaction Costs and Economic Growth." *Economic Inquiry* 25 (3): 419–428.
- 1990. Institutions, Institutional Change and Economic Performance. Cambridge: Cambridge University Press.
- \_\_\_\_ 1994. "Economic Performance through Time." American Economic Review 84 (3): 359–368.
- 2005. Understanding the process of economic change. Princeton: Princeton University Press.
- North, D. C. and R. P. Thomas. 1973. *The Rise of the Western World. A New Economic History*. Cambridge: Cambridge University Press.
- North, D. C., J. J. Wallis, and B. R. Weingast. 2006. "A conceptual framework for interpreting recorded human history." NBER-Working Paper 12795. Accessed October 24, 2017. http://www.nber.org/papers/w12795.
- OCHA. 2012. "Madagascar: Dahalo Attack Displaces People in the South, Situation Update". Accessed November 24, 2014. http://reliefweb.int/map/madagascar/madagascar-dahalo-attack-displaces-people-south-situation-update-21-june-2012.
- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- 2009. "A general framework for analyzing sustainability of social-ecological systems." *Science* 325 (419): 419–22.

- Platteau, J.-P. and R. Peccoud. 2011. "Revisiting the role of culture." In *Culture, Institutions, and Development. New insights into an old debate*, edited by J-P. Platteau and R. Peccoud, 247–259. Abingdon: Routledge.
- Rakoto, I. 2010. "L'insécurité rurale liée au vol de bœufs : quelques propositions de solution." *Taloha* 19: 1–10.
- Ruttan, V. W. and Y. Hayami. 1984. "Toward a theory of Induced Institutional Innovation." *The Journal of Development Studies* 20 (4): 203–223.
- Schilling, J., F. E. Opiyo, and J. Scheffran. 2012. "Raiding pastoral livelihoods: motives and effects of violent conflict in north-western Kenya." *Pastoralism: Research, Policy and Practice* 2 (25): 1–16.
- Scott, J. C. 2009. The art of not being governed: An anarchist history of upland Southeast Asia. New Haven and London: Yale University Press.
- Sen, A. 2003. "Development as Capability Expansion." In *Readings in Human Development*, edited by S. Fukuda-Parr and A. K. Shiva Kumar, 3–16. Oxford: Oxford University Press.
- 2004. "How does culture matter?" In *Culture and public action*, edited by V. Rao and M. Walton, 37–58. Stanford: Stanford University Press.
- Sherman, M., L. Berrang-Ford, S. Lwasa, J. Ford, D. B. Namanya, A. Llanos-Cuentas, M. Maillet, S. Harper, and Ihacc Research Team. 2016. "Drawing the line between adaptation and development: a systematic literature review of planned adaptation in developing countries." *Wiley Interdisciplinary Reviews: Climate Change* 7 (5): 707– 726.
- Sjöstrand, S.-E. 1993. "On Institutional Thought in the Social and Economic Sciences." In *Institutional Change. Theory and Empirical Findings*, edited by S.-E. Sjöstrand, 3–31. Armonk, New York: M.E. Sharpe.
- Sterns, P. A. and T. Reardon. 2002. "Determinants and Effects of Institutional Change: A Case Study of Dry Bean Grades and Standards." *Journal of Economic Issues* XXXVI (1): 1–16.
- Thébaud, B. and S. Batterbury. 2001. "Sahel pastoralists: Opportunism, struggle, conflict and negotiation. A case study from eastern Niger." *Global Environmental Change* 11: 69–78.
- Thiel, A. 2014. "Developing an analytical framework for reconstructing the scalar reorganization of water governance as institutional change: The case of Southern Spain." *Ecological Economics* 107: 378–391.
- Tschopp, R., A. Aseffa, E. Schelling, and J. Zinsstag. 2010. "Farmers' Perceptions of Livestock, Agriculture, and Natural Resources in the Rural Ethiopian Highlands." *Mountain Research and Development* 30 (4): 381–390.
- UNICEF. 2011. Le sud cimetiere de projets? Document de synthèse preliminaire. Unpublished document.
- Weber, M. 1904. *The Protestant Ethic and the Spirit of Capitalism*. Edited by S. Kalberg, *The Protestant Ethic and the Spirit of Capitalism with Other Writings on the Rise of the West*. London and New York: Routledge.

- Williamson, O. E. 2000. "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature* 38 (3): 595–613.
- Yousfi, H. 2011. "Culture and development: the continuing tension between modern standards and local contexts." In *Culture, Institutions, and Development. New insights into an old debate*, edited by J.-P. Platteau and R. Peccoud, 20–64. Abingdon: Routledge.