



LiveDiverse

Socio-economic vulnerability. Conservation-development trade-offs and agency in multi-level governance processes.

(Deliverable 6.1: A multi-disciplinary, analytical framework to integrate livelihood and biodiversity analysis across multiple cases, including the household survey and case study protocol)

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Executive summary

This deliverable 6.1 lays the groundwork for the work of WP6 in LiveDiverse. The term vulnerability is discussed and positioned vis-à-vis related terms, especially robustness and resilience. Resilience refers to ‘the capacity of a system to absorb and utilize or even benefit from perturbations and changes that attain it, and so to persist without a qualitative change in the system’s structure’. Robustness and resilience differ from each other ‘in the extent to which (non-structural) changes in dynamics may be introduced into a system under the impact of perturbations. Resilience allows for temporary changes in functioning and dynamics, as long as the system remains within the same stability domain’. Vulnerability then refers to ‘situations in which neither robustness nor resilience enables a system to survive without structural changes. In such cases, either the system does adapt structurally or it is driven to extinction’.

We explore the relation between socio-economic vulnerability and biodiversity depletion, noting that approaches that try to address both problems often fail. We argue that an important reason for this failure is that existing approaches often focus exclusively at the local level and pay little attention to natural resource management and incentives for sustainable use. This will be the focus of our work package, to address conservation-development trade-offs at multiple levels and explore mechanisms for support sustainable use.

We argue that modern day governance processes are multi-level in nature. This creates challenges and opportunities for local communities that want to defend their livelihood or implement changes to such livelihoods. We suggest that to get their way, such communities must become adept in the use of five strategies: idea development, coalition building, the spotting and use of windows of opportunity, venue shopping and networking. This fivefold distinction in strategies will be used later on in the project to analyze the capabilities of the communities in the various case study areas and to suggest ways of improving such capabilities.

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1. Introduction

This deliverable lays the conceptual foundation for the work in WP6 'Socio-economic vulnerability' in the project LiveDiverse. The goal is to outline a framework which helps us analyze the situation in the various case study areas in a systematic fashion. Reflecting the disciplines and interests of the two authors involved, the note focuses on two aspects of socio-economic vulnerability: (1) conservation-development trade-offs at household, community and regional level or, more broadly, the relationship between socio-economic vulnerability and biodiversity and multiple levels, and (2) agency in multilevel governance processes.

The section on socio-economic vulnerability in relation to biodiversity will discuss the role and relative importance of natural resources for socio-economical vulnerability, and analyze the local capacity to adapt. The idea behind is that socio-economic vulnerability depends on many factors, but that given the high incidence of poverty in biodiversity-rich regions (Fisher and Cristopher 2007) it is important to pay specific attention to how poverty, socio-economic vulnerability and biodiversity are linked. Key to understanding how biodiversity can be protected while reducing socio-economic vulnerability is to understand the conservation-development trade-offs: ultimately, reducing poverty requires development and biodiversity protection requires conservation and these two objectives do not go together well. In order to come up with approaches that effectively address both socio vulnerability and biodiversity protection, the tension between these factors needs to be addressed. Thus, the section will first explore the determinants of socio-economic vulnerability and then discuss how socio-economic vulnerability and biodiversity might be linked. Finally, the section ends with an elaboration of potentially interesting approaches to address socio-economic vulnerability and biodiversity at the same time.

In the section about agency in multilevel governance processes we will outline five strategies that communities can utilize to influence decision making at higher levels. These strategies are idea development, coalition building, windows of opportunity, venue shopping, and networking. This set of strategies will be used later in the project for measuring community vulnerability to developments (political, economic, and ecological) that emanate from higher scale levels. It will also be used as a tool for comparison between the various LiveDiverse case study areas and as a tool for learning on how to reduce vulnerabilities. To better position these two aspects, we first introduce our understanding of vulnerability and certain related concepts in the next section.

2. Vulnerability

Vulnerability is a concept that denotes a state of susceptibility to harm. Persons, communities, countries, technologies, infrastructures, but also ecosystems – all for simplicity's sake from here on referred to as systems- are said to be vulnerable when their current condition is potentially disturbed by internal and external threats. The greater the likelihood of a disturbance that will upset the current condition a system is in, the greater the vulnerability to that particular disturbance of the system in question.

Systems differ in their capacity to maintain their current state under disturbance (Lebel et al., 2006; Walker and Salt, 2007). Systems manage and absorb disturbance in different ways, with some systems essentially breaking down because of the disturbance, others maintaining their state and functions, and yet again others transforming into a different state. The terms resilience, robustness and vulnerability are all useful here (see e.g. Folke et al., 2004; Lebel et al., 2006). Robustness refers to the 'structural and other properties of a system that allow it to withstand the influence of disturbances without changing structure or dynamics' (Young et al., 2006: 305). Resilience refers to 'the capacity of a system to absorb and utilize or even benefit from perturbations and changes that attain it, and so to persist without a qualitative change in the system's structure' (ibid.) Robustness and resilience differ from each other 'in the extent to which (non-structural) changes in dynamics may be introduced into a system under the impact of perturbations. Resilience allows for temporary changes in functioning and dynamics, as long as the system remains within the same stability domain' (ibid., 305-306). Finally, vulnerability refers to 'situations in which neither robustness nor resilience enables a system to survive without structural changes. In such cases, either the system does adapt structurally or it is driven to extinction' (ibid, 306).

Obviously, vulnerability is the key focus of the LiveDiverse project. In determining vulnerability, it is important to distinguish between the characteristics of the potential disturbance and the characteristics of the system in question as these interact in producing a certain level of vulnerability. Subsequently not every system will be equally vulnerable to the same disturbance. Categorization of disturbances is possible through different sets of overlapping distinctions. Some disturbances will be external to the system, others internal. Disturbances may be of a social, cultural, religious, economic or ecological nature. The disturbances may take place at various jurisdictional scales (local, regional, provincial, national, continental, and global). The disturbances may be short term and rapid, but some involve long term processes (see Duit and Galaz (2008) for a discussion). As for the characteristics of systems that influence vulnerability, it has been argued that the networked nature of social-ecological systems is a factor. Highly connected networks are potentially more vulnerable to disturbances that are channelled through these connections than less connected networks, and centralized networks more vulnerable to attacks on the central node than decentralized versions (Janssen et al., 2006). In asking questions about vulnerability one needs to be precise in focusing the attention. It should be clear which system is studied and what disturbances are taken into account: 'the vulnerability of what to what' (see also Lebel et al., 2006). In addition it is important to specify the normative position from which one starts the analysis. Concepts such as 'vulnerability', 'system', and 'resilience' often carry connotations of equilibria. Their use tends to implicitly suggest that the current systems are worth preserving as they are (Nadasky, 2007). This is however not always the case, especially when it is clear that the current equilibrium is not sustainable in the long run. It is in these situations that tensions arise between concepts such as resilience, adaptation and adaptability. Some undesirable equilibria may be extremely resilient and adapted to current situations, but this does not mean that such equilibria are desirable or that the adaptability of the system is necessarily great.

The attention in this paper will be focused on the socio-economic system that is present locally and regionally in the case study areas of the LiveDiverse project. The livelihood of the human communities in these areas is what interests us. In the present stage of the project we are still in the process of getting a clearer picture of the current and future disturbances that may affect such livelihoods (internal/external, social/cultural/economic/ecological, etc.) and neither whether such disturbances should be welcomed or resisted. The latter normative question will be approached in our future work by emphasizing the interest and normative positions of the local communities (which may be divergent) and the preservation of high levels of biodiversity. One part of our analysis will be explicitly economic and indicator based; another part will analyze the capabilities of local communities to organize and influence political decision processes that are undertaken at higher jurisdictional scale levels. Both types of analyses will shed light on the socio-economic vulnerability of the local communities in the case study areas.

3. Socio-economic vulnerability and biodiversity

3.1 Introduction

When addressing socio-economic vulnerability in relation to biodiversity, it is important to realize that biodiversity is highest in the poorest regions of the world (Fisher and Cristopher 2007)¹. This is not surprising since it is often exactly the lack of developmental investments that explain the high level of remaining biodiversity, and this is also the main reason why poverty is high. Clearly, the relationship is not always so simple, but lack of development is one of main causes of poverty and lack of investment in roads, services and electricity constrains natural resource exploitation in an important way. Poverty is defined as the lack of means to fulfill basic human needs, and economic development is expected to reduce poverty by increasing the availability of means. Scholars like Amartya Sen have pointed out that poverty is, however, much broader than a lack of means (e.g. income) only, and that even when people have sufficient means they might still not be able to fulfil their needs because they have no voice in decision-making, lack the capacity to pursue their needs (poor health, illiteracy) or are simply not safe (see for example Sen 1983, 1995).

Poverty and socio-economic vulnerability are closely related because the poor are by definition socio-economically vulnerable since they lack the means to protect themselves against external risks. Also, in line with the broader definition of poverty, poor people are vulnerable because they lack the capacity to influence decision-making and to express their developmental, and risk mitigation, needs. This is especially relevant because in many biodiversity rich regions local

¹ Please note that we are not addressing possible linkages between poverty and eco-climatic regions: In tropical regions, the natural biodiversity is generally higher than in more temperate zones, and poverty is often higher as well, but this is not something we will address. What we are referring to here is the remaining biodiversity in a specific region and how this might be related to poverty.

populations are indigenous and indigenous people tend to have little voice in decision-making (see also the next section) and their property rights are often poorly defined. Given that in many biodiversity-rich regions large investments in hydropower, mining or other types of resource extraction are planned, having no voice in the decision-making puts local livelihoods at risk: local communities are displaced, the environment is degraded by the inflow of migrants and natural resources are harvested at a non-sustainable rate. This is not to say that investments in natural resource exploitation are not welfare enhancing, which they might well be, but that developmental investments do not necessarily improve local livelihoods, especially when the local population is not involved in the decision-making and when the side-effects of the investments can affect the local population in a negative way..

Here it is important to briefly consider the ownership of natural resources and the costs and benefits of natural resource use. Often, natural resources are owned by national governments, but ownership may also be communal (e.g. indigenous territories) and the use of natural resources maybe be privatized as well (e.g. logging concessions). Also, natural resources may be protected in national parks or reserves, in which case park management is responsible for the use and protection of natural resources inside the park. Usually, it is the owner who benefits from the use of the resources, although ownership and user rights might be separated too. In general, allocating user rights to natural resources is difficult because the use of natural resources has impacts at different scales. In economics, the external effects of resource use on other agents are called externalities, and sustainable resource use and management requires that these externalities are addressed (Starett 2003). In the case of biodiversity, which has intrinsic value but which also crucially supports ecosystem functioning, there are externalities up to the global scale: The benefits of ecosystem service provision (e.g. the production of natural resources (timber, fuel), but also the provision of food (agricultural land) and drinking

water) are largely regional, but some ecosystem services (especially carbon storage) are global and the intrinsic and cultural values of biodiversity are global too (MA 2005). Thus, although the ownership of natural resources, and the embedded biodiversity, might be national, the global community also has an interest in the protection of biodiversity, for which it is (and should be) willing to pay (Pearce 2007).

The most effective way of protecting biodiversity is in protected areas and (national) parks (Bruner et al. 2001, secretariat of the CBD 2006). These parks might benefit the local economy, by generating tourism, but they can worsen local livelihoods also, by restricting access to natural resources or by increasing wildlife damages to livestock and crops (Hayes 2006, Bulte and Rondeau 2007). In some cases, local communities are actually displaced by park establishment, increasing their socio-economic vulnerability many times (Cernea and Schmidt-Soltau 2006) At present this usually does not happen any longer, but in several of the case study regions problems relating to formerly displaced communities still play a role. Depending on local involvement in park management, the costs and benefits of park establishment can be shared: there are more and more examples where local communities are allowed to use protected areas for (limited) grazing, fishing and the collection of non-timber forest products and/or where they share in the receipts from tourism (Brooks et al. 2006, Coomes et al. 2004). Community involvement in park management has another potential benefit as well: communities can help lower the costs of local enforcement and control. Directly, their involvement may reduce poaching and illegal protected area use, indirectly, local communities often have specific knowledge that can benefit the management of the park (see also Adams et al. 2004, Chan et al. 2007, Gibson et al. 2005, Tai 2007, Bowles and Gintis 2002).

In the rest of this part of the conceptual note, we will discuss the conceptual relation between socio-economic vulnerability and biodiversity and the potential mechanisms for addressing

conservation and development. The first section will elaborate the concept of socio-economic vulnerability, and the factors determining socio-economic vulnerability at individual, household and community level. The second section zooms in on the linkages between poverty, livelihoods and nature, or on how socio-economic vulnerability and biodiversity are linked. The third section discusses potential sustainable development mechanisms, including eco-tourism, and global payment mechanisms, exploring how biodiversity can be sustainably managed and how the costs and benefits of biodiversity protection can be shared.

3.2 Socio-economic vulnerability

Socio-economic vulnerability, or the lack of means to protect oneself from external risks, and risk exposure, and the lack of capacity to adapt, is caused by many factors, but in this part of the paper we specifically consider nature's role. Given the limited time frame of the LiveDiverse project, we will not consider whether the natural risks for local livelihoods are increasing, or how socio-economic and ecological vulnerability are linked, but instead focus on the capacity of individuals, households and communities to protect themselves against external (environmental) risks and analyze their capacity to adapt. Given our ultimate interest in developing sustainable development mechanisms that can address socio economic vulnerability and biodiversity at the same time, external risks are not defined exclusively as environmental risks, they will include risks related to developmental investments in the case study regions too. The concept of socio-economic vulnerability has recently been developed in the literature on risks and environmental hazards. The concept adds an extra dimension to the well-established poverty literature by paying explicit attention to the external risks that determine vulnerability, and to the role that adaptive capacity can play. This makes the concept more dynamic, although there is attention for risk and vulnerability in the poverty literature too. The poverty literature distinguishes between two types of poverty, absolute and relative poverty (Anand

and Sen 1997, Sen 1995). Absolute poverty is defined by a threshold, with those under the threshold being considered absolutely poor. Usually, the threshold is defined by the income required to fulfill the most basic human needs (minimum calorie intake, housing etc.), including non-monetary income sources (own food production, etc.). The World Bank's poverty indicator of a dollar a day (purchasing power) is a good example of such an approach.

Since it is increasingly acknowledged that poverty is not limited to a lack of means (income), indicators like the human poverty index have been developed to account for the role of health, education and safety/basic shelter too. For example, the human poverty index includes the probability (at birth) of not surviving to age 40, the adult literacy rate, the percentage of the population having no access to improved water sources and the percentage of children under weight-for-age (see UNDP's Human development indices and reports). Relative poverty is more concerned with the societal position people have: if everybody else has more income or is more literate, a well-fed, more-or-less healthy person might still be considered relatively poor. In order to assess relative poverty it is important to have information about the average standard of living, literacy and life expectancy in a country or region to be able to compare. Table 1 provides a nice overview of the different concepts of human development and poverty, and how they can be measured and compared.

Table 1 Concepts of human development and poverty

| | Income information | Information on human living |
|---------------------------|-------------------------|-----------------------------|
| Conglomerative (relative) | GNP per capita | Human development index |
| Deprivational (absolute) | Income poverty measures | Human poverty index |

Source: Anand and Sen (1997)

Not included in these indices, but important determinants of people's vulnerability and adaptive capacity, are the assets people have. Literacy and health are two assets that are included in the figures, but land ownership, livestock, savings and other assets are important determinants of the extent to which people can protect themselves against disturbances and have adaptive capacity too. In the analysis, asset ownership and user rights will be included, paying attention to non-monetary assets and income sources (subsistence farming) as well. When assessing socio-economic vulnerability it is important to be aware that men and women are vulnerable in different ways. Thus, interventions reducing the vulnerability of men might not be effective for women, as improved access to means may not be shared. Households differ in terms of asset ownership, landless households being more vulnerable than households with (irrigated) land. Also, the vulnerability of communities may differ, downstream communities being more vulnerable for changes in water use than communities upstream. Also, indigenous communities are likely to be more vulnerable than non-indigenous communities, since they have different social networks and, usually, less influence at regional scale. Thus, it is important to account for some of the structural factors that are expected to determine adaptive capacity and vulnerability when assessing socio-economic vulnerability, in order to ensure that interventions are effective for addressing socio-economic vulnerability at different levels.

3.3 Poverty, livelihoods and nature

The previous section has shown that socio-economic vulnerability and adaptive capacity are determined by several factors, in which income (subsistence and market-income), asset ownership, health and participation in the decision-making play an important role. Clearly, when income, asset ownership and health depend highly on nature, this means that natural resource degradation will affect local livelihoods in a significant way. Thus, it is important to get

insight into the linkages between poverty, livelihoods and nature, in order to understand how socio-economic vulnerability and biodiversity are linked, and how interventions might help. Biodiversity as such can play a role in local livelihoods by providing medicine, craft and building material and food (MA 2005). Clearly, biodiversity might also have cultural and spiritual value, but in this paper these values will not be assessed. Biodiversity can also have an economic value if it generates recreational returns. Poor people might not be able to really enjoy the recreational value of biodiversity, but if outsiders come to spend money, this can support local livelihoods. An important issue here is whether the benefits of tourism trickle down: often, tourism revenues go to national authorities or commercial (outside) agencies, and do not benefit local communities much. Whether tourism could benefit local communities also depends on the capacity of local communities to profit, in terms of for example craft selling, but also in terms of the local capacity to organize and to co-manage recreational facilities, protected areas and national parks (Hayes 2006).

Indirectly, biodiversity contributes to local livelihoods through the provision of ecosystem services (MA 2005). The concept of ecosystem services became popular after the Millennium Ecosystem Assessment (2005), which introduced the term to underline the inextricable linkages between biodiversity, ecosystems and human well-being. Ecosystem services are 'the benefits people obtain from ecosystems' and by putting ecosystem services central in the debate on nature conservation, the Millennium Ecosystem Assessment stresses the societal benefits of nature conservation and the need to align conservation and development goals. Important ecosystem services are food, fuel, timber and water provision, carbon storage and sequestration, soil formation, climate and disease regulation, aesthetic benefits and spiritual values (MA 2005). It is important to note, however, that regions that produce many ecosystem

services are not necessarily high in biodiversity, or the reverse (Naidoo et al. 2008). For example, production forests can perfectly store and sequester carbon but are low in biodiversity, whereas water provision does not depend on biodiversity, but biodiversity does depend on water supply. Thus, it is important to be explicit about which ecosystem services we are considering when addressing the linkages between poverty, nature and livelihoods.

The main ecosystem services that we will consider in the remainder of this part of the paper, and that have a direct impact on people's livelihoods, are the ecosystem provisioning services of food, timber, water (quality), fodder, medicine and non-timber forest products (NTFP's). Biodiversity is not always crucial for provisioning these services (a monoculture production forests also provides timber) but we will not further explore the actual linkages between biodiversity and the provision of ecosystem services. We do need to pay some additional attention to water, as water is both input and output for biodiversity, and we need to be clear about the perspective we use. We here consider water as an output of biodiversity, acknowledging the importance of good ecological status of water bodies for ensuring good water quality and considering the absorptive capacity of ecosystems, which can help reduce the impacts of extreme (climatic) events. Summarizing, we consider the direct and indirect contribution of biodiversity to people's subsistence, income, assets and health by considering the role of eco-tourism, crafts and medicinal plant use and of ecosystem service provision in the form of food, timber, fuel, fodder and water (quality).

Finally, it is important to also analyze the relation between poverty, livelihoods and nature the other way around. Poverty can be an important driver of natural resource degradation, and reducing poverty is generally believed to reduce natural resource degradation (Scherr 2000, MA 2005): Poaching, overgrazing, slash-and-burn agriculture and other exploitative forms of natural

resource use are often linked to poverty, and reducing poverty might reduce these exploitative uses of nature. On the other hand, given that poor people often have little means for natural resource exploitation, their activities might only have a marginal effect. Sunderlin et al. (2005) indicate that although poverty is one of the factors driving deforestation, the relationship between forests and livelihoods is ambiguous. Thus, reducing poverty will not automatically lead to better nature conservation, as this requires that the main threats to biodiversity are specifically addressed.

Deforestation is an important threat to biodiversity, but water scarcity, and pollution, and overgrazing and overharvesting of resources are important threats to biodiversity too. In all cases, it is important to acknowledge what the main drivers are. For example, poaching might be driven by hunger, but it may be fueled by urban demand or the demand of Chinese customers too. In the first case, reducing poverty might help reduce poaching, but in the other two cases it won't. This brings us to the need to consider integrated conservation-development efforts at a broader level, considering not only local livelihoods and impacts, but considering the drivers of poverty and natural resource degradation too.

The need for a broader perspective to consider development-conservation trade-offs is confirmed by the disappointing experiences with projects that attempt to address development and conservation at the same time (eg. Integrated Conservation and Development Projects (ICDP) (Adams et al. 2004, Blaikie 2006). ICDP sometimes succeeded in addressing poverty, or in improving conservation, but they hardly ever succeed in addressing both (Sunderlin et al. 2005, Blaikie 2006). Some argue that this is because conservation and development cannot go together (see for example Sunderland et al. 2008, Salafsky and Wollenberg 2000, Garnett et al.

2007), but we would like to argue that it is more likely that they fail because of a) their exclusive focus at the local level and b) their lack of attention for natural resource management and decision-making at regional and national scale.

3.4 Improving local livelihoods and conserving biodiversity

For decades, Integrated Conservation-Development projects (ICDP) were popular because of their promise to reduce natural resource degradation and poverty at the same time (Barrett et al. 2005, Sunderlin et al. 2005). This was highly welcome, especially in the field of nature conservation where interventions had often increased local vulnerability by displacing communities and constraining livelihoods (Cernea and Schmidt-Soltau 2006, Adams et al. 2004). ICDP approaches were not successful, however, because they either improved local livelihoods, but failed to improve natural resource management, or they improved natural resource management, but failed to improve local livelihoods. Given that poverty is usually driven by factors other than degrading ecosystems, and natural resource degradation is driven by factors other than poverty, merely stimulating local conservation and economic development is insufficient to reduce poverty and improve conservation at the same time.

Ferraro and Kiss (2002), Kareiva et al. (2008) and Salafsky and Wollenberg (2000) suggest that payments for ecosystem services (PES) can be effective in generating local income and improving conservation levels, by providing funds for development and incentives for sustainable use: When people actually derive income from using resources sustainably, this improves their income and gives natural resource management an economic return. The question with these types of mechanisms is, however, who is willing to pay for nature

conservation (see also Pearce 2007), and if there are interested parties, for what services they are willing to pay, how much they are willing to pay and to whom.

Wunder (2007) defines PES schemes as “a) a voluntary transaction where b) a well-defined environmental service (ES) or a land use likely to secure that service c) in being ‘bought’ by a (minimum one) service buyer d) from a (minimum one) service provider e) if and only if the service provider secures service provision (conditionality)”. Starting from this definition, there are several issues that need to be addressed to make PES work. First, there is the voluntary nature of the PES mechanism. PES systems may be either user or government based, but in both cases contributions depend on the individual actor’s voluntary willingness-to-pay. Depending on the type of ecosystem service, the number of potential contributors and the private benefits of participation will vary. For example, in the case of biodiversity protection the number of potential contributors is enormous and the private benefits of participation are small (Engel et al 2008). This makes it difficult to organize payments, because large group size reduces the incentive to contribute voluntarily (REF). Also, although willingness to pay studies indicate that there is a willingness to pay for biodiversity, the actual amounts that the global community is spending on global conservation are much lower (Pearce 2007). Second, translating ecosystem service values to actual financial flows requires a legal and institutional context in which explicit service provision contracts between ecosystem service providers and beneficiaries can be designed and enforced. Ecosystem service provision involves their non-use or sustainable use of natural resources. Since information about the costs of ecosystem service provision is lacking, it is difficult to know what the price of these contracts should be: The buyer does not know the costs of ecosystem service provision (hidden information) and whether the seller will actually deliver provision of the public good (hidden action) (Ferraro 2008). The problem of

hidden action is usually addressed through investments in monitoring, enforcement and control. Targeting communities instead of individuals can lower the costs of monitoring as communities have their own mechanisms of social control (Bowles and Gintis 2002). The problem of hidden information is usually addressed through auctions: by asking the ecosystem service provider to compete for PES contracts, the informational rents can be reduced (Engel et al. 2008).

Although PES programs are not designed to alleviate poverty, they can be used to re-distribute income from rich beneficiaries to poor ecosystem service providers (Pagiola et al. 2004): paying the inhabitants of poor, but biodiversity rich, regions for ecosystem services provision could theoretically improve nature conservation and alleviate poverty at the same time. Pagiola et al. (2004) indicate that the impact of PES in terms of livelihood improvement and poverty alleviation depends on the extent to which local communities can participate in PES schemes, both in receiving PES payments and in defining the rules of the game. Important constraints for local communities to participate are lack of entitlements, costs of participation and technical and organizational constraints (Pagiola et al, 2004, Corbera and Brown 2008). Also, at village level, poor households often simply don't have the time to join village meetings as they need to spend this time on paid activities to make ends meet.

In addition, there are other reasons why community-based approaches often contribute little to improving the livelihoods of the poor: elite captures, neglect of poor household's interests in decision-making and other factors structurally impede socially efficient and equitable outcomes at community scale (Galasso and Ravallion 2005). The main problem, however, is lack of (formal) entitlements, which obstructs local participation. Communities might have traditional entitlements to ecosystem uses, but formal entitlements are often in the hands of the

government, park authorities or commercial parties. Clearly, these actors might be interested in PES arrangements also, but in that case the resources do not go to local communities and potential poverty, livelihood, nature linkages are often ignored. However, even when communities have entitlements to enter PES arrangements, it is difficult to ensure that the payments benefit all. Usually, benefits are shared by the community, but they will be insufficient to provide alternative livelihoods, and thus the incentive to reduce natural resource degrading livelihood activities may be small. Especially when people are absolutely poor, the individual incentive to poach, over-harvest or cut trees may continue, especially if alternative livelihood options are few. Hence, nature conservation organizations like Conservation International are experimenting with approaches that create alternative livelihoods in combination with contractual obligations to use and co-manage natural resources sustainably, offering communities public benefits (schools, hospitals etc) but providing individual benefits in the form of tractors, seeds and other productivity enhancing investments too (Niesten et al. 2009). Whether these approaches work is not clear yet, but they seem interesting to explore in LiveDiverse.

Apart from innovative arrangements as the ones mentioned, there are the more established possibilities of eco-tourism and eco-labeling. Eco-tourism generates local income from wildlife and other natural resources, thus creating an incentive to protect natural capital (see also Daminana and Bulte 2007). However, attracting eco-tourists requires a huge organizational capacity and world class facilities that few poor communities have. Alternatively, parks might share tourism benefits with local communities, in return for which communities monitor sustainable use. Again, the problem is that usually not all people in the community benefit and that the benefits offered are relatively small.

Eco-labeling can be interesting for commercial actors, to create an incentive for sustainable production: eco-labeling creates extra value which can be used to compensate the lower returns. Less irrigated pineapples, for example, can reduce water over extraction and sustainable forestry projects can reduce over-harvesting. The market for eco-labeled products is relatively small, however, and good marketing channels need to exist.

Summarizing, there are a number of potentially interesting mechanisms that can help address socio-economic vulnerability and biodiversity protection at the same time, but each of these mechanisms has its limitations and difficulties and most of them require a legal and institutional setting which might be missing at local level. However, given the objective of the LiveDiverse project to “manage biodiversity threats while at the same time providing livelihoods for the local population”, it will be crucial to better understand the poverty, livelihood and nature linkages in the study sites and explore how these can best be addressed, taking the known difficulties and requirements of integrated conservation-development approaches into account. This will be the aim of this work package in the LiveDiverse project, and for the conceptualization of the problem and focus of the research this section has presented some ideas.

4. Agency in multilevel governance processes

4.1 Introduction

In this part of the conceptual note for LiveDiverse we are concerned with the way in which local actors can influence multilevel decision processes. This will often require them to focus their efforts on other levels than just their own village; the regional, national and international levels then become important. In this part of the paper, we present a typology of strategies that those seeking to affect multilevel decision making can apply in their efforts. This typology was developed by Huitema and Meijerink (2009) on the basis of the policy sciences literature and has proven a very effective of analyzing how individuals and groups influence decision processes in natural resources management in a variety of contexts. Before we delve into these strategies however, we will sketch the context in which such strategies are used, which is one of multilevel governance.

4.2 Multilevel governance

In the 1990s, scholars seized on the term 'governance' to make better sense of the situation that had arisen in many countries after the 1980s, when 'big' government had retreated under the pressure of neo-liberal reformers like Ronald Reagan and Margaret Thatcher (Rhodes 1996). Some have suggested that the turn from government to 'governance' was driven by big business and its desire to weaken the regulatory powers of the nation state (e.g. Swyngedouw 2005). Others offered more prosaic explanations, including the financial crisis of the state in the 1970s and 1980s, and the associated ideological shift towards the market and 'new public management' (Pierre and Peters 2000). What attracts social scientists to the term 'governance' is its ability to 'cover the whole range of institutions and relationships involved in the process of governing' (Pierre and Peters 2000: 1). Clearly, 'governance' is not the same as government: while government centers on the institutions and actions of the state, the term governance allows non-state actors such as businesses and civil society to be

brought into an analysis of societal steering. Governance is also not the same as governing. 'Governing' refers to those social activities which make a 'purposeful effort to guide, steer, control, or manage (sectors or facets of) societies' (Kooiman 2003: 2; Rosenau 1992: 4). 'Governance', on the other hand, describes 'the patterns that emerge from the governing activities of social, political and administrative actors' (Kooiman 1993: 2). It concerns 'the ways and means in which the divergent preferences of citizens are translated into effective policy choices, about how the plurality of societal interests are transformed into unitary action and the compliance of social actors is achieved' (Kohler-Koch 1999: 14). Over the course of the last decade in particular, the governance 'turn' in social science scholarship has generated much theorizing and conceptual (re)sorting, but there is still surprisingly little comparative empirical work. Further empirical investigation could certainly help to arbitrate between some of the more extreme claims made about the extent and/or timing of governance. Thus, Rhodes (1996: 652-3) claims that governance is synonymous with 'a *change* in the meaning of government; a *new* process of governing; or a *changed* condition of ordered rule; or the *new* method by which society is governed' (emphasis added). By contrast, Pierre (2000a: 5) and Pierre and Peters (2000: 25) are more circumspect in arguing that government endures in the new era of governance, but its form and function vary in several important respects. Knill and Lehmkuhl (2002), and Jordan *et al.* (2003; 2006) make broadly the same points in relation to EU and national environmental policy-making. In the governance literature there is still relatively much disagreement about what governance *is*. There is however relatively widespread agreement on a number of basic points. First and foremost, most scholars seem to associate governance with a decline in central governments' ability to steer society (i.e. the narrower interpretation above). In this respect, larger shifts in governance can be observed in many European countries. Figure 1 below signifies these shifts.

Figure 1: shifts in governance

| | | |
|---|--|---|
| | Markets <i>PPS and Privatization</i> | |
| Higher and lower levels of governments <i>Europeanization, regionalization</i> | ▲ ◀From nation state to▶ ▼ | Communities <i>Self governance, participation</i> |
| | Courts <i>Judicialisation</i> | |

Source: Huitema (2005)

According to Stoker (1998: 17), governance refers to the emergence of ‘governing styles in which the boundaries between and within public and private sectors have blurred.’ Pierre and Peters (2000: 83-91) contend that the state is losing its steering ability as control is displaced: upwards to regional and international organizations such as the EU; downwards to regions and devolved localities; and outwards to international corporations, NGOs and other private or quasi-private bodies. Stoker (1998: 26) claims that governance marks a ‘substantial break from the past.’ Rhodes (1997: 47) argues that it provides a new ‘operating code’ for government. Other commentators are much less assertive in their claims (see above), but while the precise importance of governance is often left tantalizingly undefined, in most accounts its significance is nonetheless implied.

Second and more controversially, governance and government are often (and most notably in the older political science literature) regarded not as discrete entities, but two poles on a continuum of different governing types (Finer 1970). If the extreme form of government was the ‘strong state’ in the era of ‘big government’ (Pierre and Peters 2000: 25), then the equally extreme form of governance is an essentially ‘self-organizing’ and coordinating network of societal actors (Schout and Jordan 2005). Crucially, such networks are said to ‘involve not just influencing government policy but taking over the business of government’ (Stoker 1998: 23). They are self-organizing in the sense that they actively

resist government steering (Rhodes 2000: 61). To use Osborne and Gaebler's (1992) popular distinction between 'steering' (setting policy goals) and 'rowing' (delivering those goals through the selection and use of instruments), they steer as well as row. Luhman (1982) goes even further with his claim that 'autopoietic' or 'self-referential' governing systems render ineffectual any attempts made by central government to steer society.

Third, that there is no governance 'theory' or even proto theory (Pierre and Peters 2000). Many scholars use the term governance to problematize the relationship between the state, the market and civil society i.e. how and through what mechanisms is the state attempting to adapt to changes in its external operating environment? Thus, under a 'government' approach, it is commonly assumed that society is steered from the centre (normally by the state), whereas in a 'governance' model, 'society actually does more self-steering rather than depending upon guidance from government' (Peters 2000: 36).

The basic points have consequences for the practice of governing. We will mention two. The first is that the nation state is no longer the central jurisdictional level of decision making. Although the nation state continues to be of great importance as it holds a certain level of control over some other levels (local government and international organizations), its power vis-à-vis such other levels has waned. Especially in the European context, the European Union has acquired independent decision powers and a certain level of agency on its own (see e.g. Jordan et al., 2010). This is why the term multilevel governance has attained such prominence in the study of European policy studies (see e.g. Marks, 1993). There, the term referred 'a system of continuous negotiation among nested governments at several territorial tiers' (ibid.)

As international organizations at the global level also grow in importance, multilevel governance is however becoming a useful term for the study of governance worldwide. The

second effect is addressed by Skelcher (2005), who suggests that what sets the current era apart from previous periods, is a relaxation of the traditional assumptions of democratic constitutional engineering. In the past, the ideal governance system was one consisting jurisdictions at a limited number of hierarchical government levels (national, regional and local) without any overlaps in tasks. This is also known as the 'classical modernist' approach to institutional design (Hajer, 2003). Such a system is now seen as unfeasible, ineffective and inefficient. The old fashioned mutual exclusivity between jurisdictions operating at the same level, and the rational hierarchical ordering of jurisdictions at different spatial levels, has been abandoned (see e.g. Hooghe and Marks, 2003). Responsibilities of the state have been shifted, hived off, privatized and decentralized to a whole range of new organizations. These can be agency type, club like, or more self-organizing and deliberative in nature (Skelcher, 2005). The mixing and mashing of institutions creates 'a spaghetti' of responsibilities, which deviates considerably from the clearly delineated set of responsibilities in government of yesteryear. In its place a system with a more diffuse underlying order, a different division of authority, and more complicated set of hierarchical relationships (McGinnis, 2000) and 'political spaces' (Hajer, 2003). Hajer (2003) has referred to this situation with the term 'institutional void'. The term does not so much refer to an empty space, but rather to a situation where it is unclear who is responsible for what and how. This situation creates possibilities and challenges from a governance perspective. Some issues may fall between the cracks, whereas others draw many organizations who want to be involved, and who will subsequently compete. The development must be regarded in connection with the globalization of social-ecological systems (Young et al., 2006). Globalization implies a far greater connectedness of the network of ecosystems and societies across the world. This means that problems potentially spread much faster (think of viruses) and tend to affect more countries, even those that play no role in causing them (climate change for instance). It also means however that the response capacity has expanded,

as scientific practices across the world integrate, the internet makes it easier to follow stories around the world, and the rudiments of a global response capacity to environmental issues are emerging. The balance between these and other effects remains to be seen (Young et al., 2006). Networks of actors are supposed to play a role in the creation of a response capacity and have subsequently drawn much interest (see e.g. Rydin and Falleth, 2006; Janssen et al., 2006). Such networks are sometimes assumed to be 'self organizing' and 'scale free', which refers to the contention that they emerge spontaneously, are flexible in which issues they choose to address, and can tailor their interventions to the scale of the problem at hand. Both such rosy assumptions can be intensely questioned. There are serious collective action problems in organizing networks, networks differ greatly in terms of their characteristics such as centrality and connectivity (see Janssen et al., 2006), and some of better suited for the local level than for the global level. Issues of leadership and 'entrepreneurship' loom large in the evolving network literature (see e.g. Rydin and Falleth, 2006; Huitema and Meijerink, 2009; Westley and Antadze, 2009) and this is why our next section is on the strategies that communities or their leaders can use to affect multi level governance.

4.3 Strategies for affecting multilevel governance processes

4.3.1 Introduction

In this section we highlight strategies for influencing multilevel decision processes. We borrow from the policy science literature on 'policy entrepreneurs' (see Huitema and Meijerink, 2009), which analyzes how individuals and groups can influence public policy. The more or less generic strategies listed below may or may not be at the disposal of any particular player. Whether or not various types of individuals seeking to affect multilevel decision making have access to and are able to use a certain strategy is an empirical question finding answers in the case studies.

Although we do not suggest that the strategies below are necessarily used in chronological order, for ease of presentation, they are listed as if for application in sequence. In fact we expect the strategies to be used in wildly differing orders and combinations to suit varying circumstances. Which strategies are used and combined, in which order, by whom, and to what effect is, again, an empirical question for exploration in the case studies.

4.3.2 The development of ideas

This strategy refers to the development of a vision that can guide subsequent action. There is probably a certain difference between actors which seek conservation of the existing situation and those who want to push the current situation in a new direction. In the first case, defense against certain disturbances is the goal, in the other case the purpose is actually creating such disturbance to make a transition happen. In either case, action will have to be guided by certain ideas that guide action. Such ideas will coalesce around certain 'frames', 'images', 'long term visions' or 'story lines' (Schön and Rein, 1994; Baumgartner and Jones, 2002; Loorbach and Rotmans, 2004; Van der Brugge et al., 2005; Hajer, 1995).

There is a long-standing debate in the policy sciences on the relative importance of ideas as opposed to interests (e.g. Majone, 1992), which does not require us to take a position here. We are sympathetic to the notion that ideas shape interests, but also aware that (perceived) interests can be a motivating factor behind the entertainment and development of ideas. The link between interests and ideas may vary according to the forum as, for example, the discourse of scientists occurs in an environment that is less accepting of interest-based arguments (argumentation) than the forum of markets, parties and politicians that allows much more open expression of interests (brokering). We do make the point, however, that the

initiation or blockage of change requires at least the germ of an idea to provide the direction in which the situation needs to evolve.

The policy sciences suggest that more extreme visions of alternative futures develop among actors who are outside the government. Because they are free from governmental constraints they are also more likely to pursue major change than incremental change (see e.g. Sabatier and Weible (2007); Roberts and King (1996). Huitema and Meijerink (2009) confirm this point and suggest that pilot projects can subsequently be a good way of impacting policy processes with new ideas. They are often effective in testing the feasibility of those ideas and can function as boundary object, which helps communication.

Huitema and Meijerink (2009) show how ideas resonate in multilevel governance systems. There are several discourses on ecosystem management that have credibility in global policy circles. Such ideas include notions of privatization, but also of decentralization and increased public participation, and of integrated approaches, river restoration, etc. Most of these ideas originate in developed countries, where practitioners have developed them, or they have been thought out by academics. Once applied on the smaller scale in developed countries, they tend to form one new aspect of government policies alongside longer standing elements. They are subsequently scaled up to the international level, and adopted by organizations such as the World Bank. There the new ideas become tied to subsidy streams, and countries that receive international support often have to formally adopt the new ideas as a condition for receiving funding. In such cases, it is crucial for those who seek to influence governance processes that their ideas connect to international discourses. However, once such subsidies are won, troubles are not over. In several cases discussed in Huitema and Meijerink, the implementation of such innovations is quite problematic as bureaucracies resist them, or they are hijacked by elites and

their own particular agenda. Thus there is more to influencing multilevel governance processes, as the next paragraph will show.

4.3.3 Build coalitions

In almost all circumstances, collaboration will be necessary for the realization of the ideas the community may have and this by implication drives the building of coalitions. Such coalitions are referred to as 'discourse coalitions,' 'advocacy coalitions,' and 'shadow networks.' Coalition building is often a delicate task as it entails sensitive issues such as differences of opinion and power asymmetries among actors. Various theories from the policy sciences propose different mechanisms through which coalitions are built. Discourse analysts such as Hajer (1995) suggest that storylines or narratives, preferably with a certain ambiguity or multiple interpretability, are key in attracting new actors to new ways of understanding. This attraction is referred to by Hajer as 'affinity,' a concept that stresses the attractiveness of a new vision in coalition building. Benford and Snow (2000) think along similar 'ideational' lines as they speak of 'frame alignment' as the key factor in coalition building. Folke et al. (2005) and Olsson et al. (2006) discuss the creation of 'shadow networks,' describing the fact that there is more room outside official policy making circles for open debate and ideas that may be somewhat unconventional. The role of academics and scientists connected to lower ranking bureaucrats is important in such shadow network. Sabatier (1993) sees coalition building as a way to 'pool' resources, observing that coalition-building efforts emphasize shared beliefs and explicit agreements on how to use the resources of the actors involved to achieve common goals. Huitema and Meijerink (2009) suggest there are three potential bases for coalition building. The first is ideational (world visions are shared), the second in the sphere of interests (coalitions will form if interests align), and interdependencies (which implies some actors support idea on the basis of an expectation that they will get something in return later). Rydin and Falleth (2006) suggest

that ideational coalitions will only emerge if a common knowledge base is developed. They also suggest that interdependencies will stimulate coalition building when all parties involved realize that they are dependent on each other. Rightly or wrongly, this is not always the case and in cases where there is no realization of dependencies, coalition building may be difficult (ibid.).

4.3.4 Recognize and exploit windows of opportunity

Even if ideas are well matured and coalitions have been built, this does not always automatically result in success in the influencing the direction of governance processes. In the policy sciences, John Kingdon's concept of 'windows of opportunity' are often used to explain why proposals may be effective at certain points in time (Kingdon, 1995). The term was borrowed from space travel, where rocket launches need to be timed in accordance with a range of favorable circumstances that need to appear at the same time. Windows in governance processes can be of various types, but an often used distinction is the one between problem windows and political windows. Problem windows appear when a certain issue starts receiving much attention by the public and the media – for instance in the context of 'focusing events' such as floods and fires, or when monitoring programs continue to expose an undesirable situation. Political windows occur in the context of elections, or other moments when political leadership changes or when political leaders are looking for issues to get involved with. Kingdon helpfully points out that solutions are often around for a while, before they are successfully connected to emerging problems. In multilevel governance settings, the number of windows multiplies and those seeking to affect decision making need to keep an eye at developments at several levels. A key lesson from Kingdon's work is that the rational problem solving model, which works from problem analysis, through a consideration of potential solutions, to choice and implementation of a solution, may thus often not predict

accurately what goes on in practice. Instead a much fuzzier distinction between problems and solutions.

Kingdon is best known for highlighting the unpredictability of windows of opportunity. However, Huitema and Meijerink (2009) suggest that the anticipation, recognition, and exploitation of such windows is a key quality of those who successfully influence governance processes. They do so by preparing their ideas and solutions before the windows open, and after they have opened how their solutions should fit the problem that is now recognized. To be successful policy entrepreneurs need to be both good advocates of their ideas. In posterity, focusing events are often seen as logically related to a specific societal response. In reality, the period after a focusing event is much more chaotic, with advocates for different possible solutions involved in what is termed 'framing contests' (Birkland, 1997; Boin et al., 2009). Indeed, Huitema and Meijerink show that societal responses to perceived crises often hang in the balance and advocates of specific solutions need to be extremely proactive in approaching the media to make sure that their message gets across. Once problem analyses become more or less accepted wisdom, solutions will also be sought in line with them.

4.3.5 Recognize, exploit, create and/or manipulate the multiple venues in modern societies

In a world where democratic thought - expressed for instance in the separation of powers - is close to being the only system that forms public discourse on the functioning of government (and governance for that matter), and in a world where the Internet allows networking on a scale previously unseen, there are many 'venues' that can serve as a base for the instigation of policy change. The term 'venue shopping' describes the strategic behavior associated with the

choice between the various possible places where an individual or group can try and effect change. When engaged in venue shopping policy actors 'try to alter the roster of participants who are involved in the issue by seeking out the most favorable venue for the consideration of their issues. In this process, both the institutional structures within which policies are made and the individual strategies of policy entrepreneurs play important roles' (Baumgartner and Jones, 1991, p. 1045). Within government, actors may decide to by-pass a decision process that offers unfavorable terms for representing their arguments, waiting instead for the next opportunity. Alternatively actors can try to exploit venues for the representation of arguments that were not originally intended for that forum, thereby attempting to change the nature of the venue. The strategies available to those seeking to affect governance processes range from exploitation of the advantage brought simply by the existence of multiple venues (Richardson, 2000), to the highly directed use of multiple venues at various levels of governance (Baumgartner and Jones, 2002; Pralle, 2003) and of those outside government (media, research, etc.), to the manipulation of venues (their composition, decision-making rules, etc.), and the creation of new venues. Huitema and Meijerink (2009) show that multilevel governance settings offer many opportunities for influence. We already mentioned how international organizations shape the maneuvering space for national government by idea development and subsidy conditions. In addition, international treaties or agreements also tend to offer fora where the presentation of arguments is possible, including courts that oversee the implementation of those treaties. Especially when the effect of bringing a court case is to halt developments and court cases take very long to resolve, threatening with such a case may be an avenue for gaining influence.

4.3.6 Orchestrate and manage networks

A relationship exists between coalition building and network orchestration. We distinguish between them, however, on the basis that any coalition will be confronted with a much broader set of actors engaged in a certain policy domain, a set we refer to as a network. We previously discussed how some see networks as spontaneous, self-organizing entities. From a state-centrist view, this is correct, because networks will exist without state intervention - although the state can actively alter the existence and operation of networks (e.g. Putnam, 1994). A lesser state-centered view sees networks as far from self-organizing and spontaneous. In fact much effort goes into creating and maintaining a network. Policy networks range in nature; they can be relatively closely knit and rather well aligned in terms of collective views and actions (in the policy sciences these are called 'policy communities'), but they can also be relatively ad hoc and short lived (issue networks in the policy sciences) (Rhodes and Marsh, 1990). In most domains where governance interventions take place some level of institutionalization takes place, that is, certain problem views tend to be subscribed to and a network of actors form that shares these views. Steering policy in an entirely different direction thus often requires the alteration, manipulation, breaking open, or breaking up of policy communities that have crystallized around a policy domain. This can be done by working within the network and changing the outlook of members through discussions, publications and activities such as pilot projects; in other cases the network itself needs to be altered, for instance by stimulating the influx of new actors (Kickert, Klijn and Koppenjan, 1997; Meier and O'Toole, 2001; Klijn, 1996; 2005).

This discussion connects to an often made distinction between the 'bonding' and 'bridging' versions of capital embedded in networks (Putnam, 1994; Rydin and Falleth, 2006). Bonding refers to the extent to which members of a network share views and feel connected to each

other – whether the network offers a sense of community. Bridging refers to the extent to which networks reach across geographical and jurisdictional levels. Members of networks form ‘nodes’ in a web of relations, if these members are able to connect the network to decision process at other geographical scales, they have bridging capital. On the basis of a medium sized set of international comparative case studies in developed and developing countries, Rydin and Falleth (2006) demonstrate how bonding and bridging capital interact in the management of natural resources. Bonding capital is necessary from the perspective of coordinated action. It is only in a strongly bonded situation that sufficient trust develops to overcome collective action dilemmas. The risk is however that strongly bonded networks resist interactions with other networks and become relatively parochial in their outlook. As bonding is often associated with local communities this potentially implies problems of fit as local communities are unwilling to regard issues from another perspective than that of their community. Ironically however, strongly bonded networks are a requirement for effective bridging. This is because bridging implies representation as one member of the network speaks on behalf of the members to representatives of another network. Effective representation is only possible if trust exists that the representative has exercised his or her duties on the basis of a solid knowledge of the views within the network and on the basis of an understanding that what the representative will commit to will be followed up upon by other members of his/her network. A certain balance between bonding and bridging social capital thus needs to be found. Either form of capital, argue Rydin and Falleth (2006), is difficult to build but it requires the development of common problem frames (see the section on ideas) and instilling a sense of mutuality. Engagement with others is the basis of both requirements. Engagement requires that networks invest resources (financial, knowledge, personnel) in contacts; Rydin and Falleth (2006) suggest that such investments tend to pay off with handsome dividends. At the same time however, they

acknowledge that some networks lack resources and thus may miss out in a multilevel governance setting as their bridging capability cannot develop.

4.3.7 Interactions between the strategies and forward look

It is important to realize that the five strategies discussed here do not work independently from each other. There are connections between idea development, certain forms of coalition building, and bonding in networks. Effective bridging activities, allow the detection of windows of opportunity, but they do require coalition building through brokerage (Rydin and Falleth, 2006). By treating the strategies separately we merely suggest they can be distinguished in an analytical sense. How they interact in practice remains to be seen in our case study work. This leads us to the question how the lens of the five strategies will be applied in our case studies. We see the case studies as areas where we can test the degree to which local communities are able to influence multilevel decision process. The degree to which they effectively use the strategies will be indicative of their vulnerability to outside pressures. This will be expressed on a to be developed scale (possibly ranging from 1-10) which will then be a composite of how well communities perform in idea development, coalition building, etc.

Table 2 Relevant questions to develop a scale in scoring community capabilities for influencing multilevel governance processes

| Strategies | Relevant questions for scoring |
|------------------------|--|
| Idea development | <ul style="list-style-type: none"> • Are there attempts to commonly study the relevant issues? • Has a common problem frame arisen? • Has the common problem frame led to a shared vision of change? |
| Coalition building | <ul style="list-style-type: none"> • Does the community realize it is dependent upon others for the realization of its ideas? • Are the ideas that the community proposes inclusive in the sense that multiple interests are served? |
| Windows of opportunity | <ul style="list-style-type: none"> • How effective is the community in talking to the media? • Does the community keep track of the development of the problem stream and the political stream at higher levels? • How effective is the community in connecting its ideas to the problem frames of others? • To which extent is the community flexible in framing and reframing its solutions? |
| Venue shopping | <ul style="list-style-type: none"> • Is the community aware of the various venues that exist to press its points? • Does the community have a strategy for considering which forum to take its case to? • Does the community create new fora for discussion and deliberation? |
| Networking | <ul style="list-style-type: none"> • Is the community closely knit, with high levels of bonding social capital? • If the community is surrounded by other communities, how closely knit are they? • Can the relevant policy networks at the regional and national be described as issue networks, or rather as policy communities • Does the community have trusted ambassadors that connect it to other communities and the relevant policy networks? • Does the community have trusted ambassadors that manage the links to NGOs and international organizations? |

In addition to giving us an opportunity to measure current capabilities to influence multilevel governance processes, our case studies will also give us an idea about the underlying dynamics that explain such capabilities. Cultural aspects will be relevant and are explicitly mentioned by Rydin and Falleth (2006), who suggest that such factors determine which actors can develop into a leading role and which ones not. Institutional factors will also be important. Huitema and Meijerink (2009) show for instance that influencing strategies in China must be adjusted to fit the centralized institutional environment that exists there. Contacts with central government, and especially leading figures in the communist party, are essential for effective strategy use. Especially the contrast between bonding and bridging capital is potentially very helpful in explaining differences between the various communities, but there may be other relevant factors that explain how well the communities play the multilevel governance game. Insights in such dynamics, coupled with a systematic comparison across the case studies, will help us participate in the scenario work that will take place later in LiveDiverse and possibly to formulate certain suggestions for improvement in these capabilities. To achieve these aims, the case studies will have to be analyzed in a systematic and similar fashion, and that is why our next step will be the development of a case study methodology which will spell out the approach to be followed in every case study in methodological terms.

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Appendix 1: Household survey

Final version LIVEDIVERSE Household Survey 2010 (April 9)

| | |
|--------------------------------------|--|
| Village/hamlet (name) | |
| Household number and respondent name | |
| Time and date of the interview | |

Hello, my name is and I am carrying out interviews with randomly selected local residents on behalf of(mention case study partner or IVM) and the EU funded LiveDiverse project. Do you have 30 minutes time to answer some questions? The questionnaire is meant to collect information about how people make a living and depend on nature to do so, so that we can better understand what could be done to improve people's livelihoods and protect nature at the same time. For this purpose we would like to ask you some questions about your land use and your access to water and other natural resources (such as wood, animals, plants), your main sources of income and the management of resources in your village. Also, we have a couple of questions about how you see the management of the nearby protected area (NAME), your relationship with the authorities and if you feel you are able to influence the decisions made. Your answers will be treated as completely confidential; we will not tell anyone what answers you gave. The findings from this study will be used to inform policy-makers. Your effort in answering the questions would be highly appreciated. Thank you very much.

Household = All persons in the household who eat from the same cooking pot/kitchen and who are normally resident at least 15 days per month

1. Please list the household members with their age, sex, literacy and occupation (Please don't read all categories aloud, but ask the respondent about the different household members with their age, sex, literacy and occupation, and mark the answers below)

| Household member No. | Age | Sex M=1 F=2 | Literacy Yes=1 No=0 | Current occupation | Sector | Current occupation codes | | | | | | | | | |
|----------------------|-----|-------------------|---------------------------|--------------------|--------|--------------------------|------------------------------------|----------------------|-------------------|----------------------|---------------|------------------|--------------------|-------------|---------------------|
| | | | | | | 00= child below 6 years | 01= child (>6) not going to school | 02= school/education | 03= self-employed | 04= temporary labour | 05= permanent | 06= non-employed | 07=household tasks | 08= retired | 09= other (specify) |
| Respondent | | | | | | | | | | | | | | | |
| 02 | | | | | | | | | | | | | | | |
| 03 | | | | | | | | | | | | | | | |
| 04 | | | | | | | | | | | | | | | |
| 05 | | | | | | | | | | | | | | | |
| 07 | | | | | | | | | | | | | | | |
| 08 | | | | | | | | | | | | | | | |
| 09 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |

2. Does the household receive any remittances (money sent home) from outside family members, and how important are these remittances for the household's income?

| | | | | | |
|-------------------------|--------------------|---------------------------|--------|----------------|---------------------|
| 01= yes, very important | 02= yes, important | 03= yes, not so important | 04= no | 00= don't know | 99=refuse to answer |
|-------------------------|--------------------|---------------------------|--------|----------------|---------------------|

3. Has the household been in the village for the last 20 years, and if not where is it from?

| | | | | |
|-----|---------|---------|-------------|-------------|
| 01= | 02= no, | 03= no, | 04= no, in- | 05= no, in- |
|-----|---------|---------|-------------|-------------|

| | | | | |
|-----|----------------------------------|--------------------|----------------------------------|--------------------------|
| yes | displaced (protected area) | displaced (dam) | migrant regional/nation al | migrant international |
|-----|----------------------------------|--------------------|----------------------------------|--------------------------|

4. Does the household have any agricultural (farm) land?

If no, continue to question 6

| | |
|-------------|--|
| Yes=1, no=0 | |
|-------------|--|

5. Could you tell me the total size of your landholding and how much of it has access to irrigation (water for crops)? And do you own this land, do you rent it or is it communal land?

Finally, what are the main crops you grow on your land, and what do you on average produce (kg/acre) (or plot)?

| Size (acres) | With irrigation (acres) | Owner ship | Cr o p | Kg/ac re | Ownership codes | Crop codes (multiple answers possible) |
|-----------------|-------------------------------|---------------|--------------|-------------|-------------------------|--|
| | | | | | 01=private ownership | 01= rice |
| | | | | | 02=communal land | 02=mais |
| | | | | | 03= rented land | 03=cabbage |
| | | | | | 04= no entitlement | 04=beans |
| | | | | | 05= other (specify) | 05=sweet potato |
| | | | | | | 06=tomato |

6. Could you tell me how many (read out the relevant type of livestock) you own and for what purpose they are used (for example own consumption or production for the market or own ploughing or to rent out)? Also, could you tell me how you feed your livestock (free grazing, own pasture, crop residue)?

| Type of livestock | Num ber | Purpo se | F e e d | Main purpose codes | Feed codes (multiple answers possible) |
|----------------------|------------|-------------|------------------|-----------------------------|---|
| Cattle- plough | | | | 01=household consumption | 01= free grazing |
| Cattle- dairy | | | | 02= selling to market | 02= own pasture |
| Cattle- meat | | | | 03= market+ consumption | 03= crop residue |
| Goat | | | | 04= manure | 04= community pasture |
| Sheep | | | | 05= transport | 05= buy feed |
| Pig | | | | 06= asset/savings | 06= household waste |
| Horse/don key | | | | 07=ploughing | 07= other (specify) |
| Fish (ponds) | | | | 08= rent to others | 00= not applicable |
| Chicken/d uck | | | | 09=other (specify) | |

7. What products does the household collect directly from nature (ie the forest/wetland/bush)? (more choices possible) like for example meat, fish, medicinal plants, flowers, fruit, nuts, vegetables, timber, fuel, fodder, material for the house etc? (Please probe a bit and ask whether the household collects merely for its own use or broader and mark the answers below)

| | |
|--------------------------------------|---|
| None | 0 |
| Meat for consumption | 1 |
| Meat for the market (selling) | 2 |
| (Shell) fish for consumption | 3 |
| (Shell)fish for the market (selling) | 4 |
| | 0 |

| | |
|---|----|
| | 5 |
| Fruits, berries, nuts etc. for consumption | 06 |
| Fruits, berries, nuts etc. for market (selling) | 07 |
| Mushrooms, vegetables etc for consumption | 08 |
| Mushrooms, vegetables etc for market (selling) | 09 |
| Medicinal plants, dye etc for own use | 10 |
| Medicinal plants, dye etc for market (selling) | 11 |
| Construction material, timber etc. own use | 12 |
| Construction material, timber etc. for market (selling) | 13 |
| Fuel, fodder etc. for own use | 14 |
| Fuel, fodder etc. for market (selling) | 15 |
| Flowers, plants for ceremonial purposes | 16 |
| Other (specify) | 17 |
| (Refused to answer) | 99 |
| (Don't know) | 00 |

8. Are any of these products collected in a protected area (NAME)?

Yes=1, no=0

9. How important is the collection of these products for the household's livelihood?

| | | | | |
|-------------------|--------------|---------------------|------------------|----------------|
| 01=very important | 02=important | 03=not so important | 04=not important | 00= don't know |
|-------------------|--------------|---------------------|------------------|----------------|

10. What is the household's average income per month? Please include the income received from wages, selling products, remittances (money sent home), pensions, grants etc. FROM ALL HOUSEHOLD MEMBERS, excluding taxes. (If the respondent mentions an exact amount, please note this done. Otherwise, ask the household whether they earn somewhere between (higher category) and (lower category) and mark below. Please probe a bit when the amount seems very low or high)

| | Household |
|------------------------|-----------|
| No income | 01 |
| 1-2000000 VND | 02 |
| 2000001 -3000000 VND | 03 |
| 3000001-4000000 VND | 04 |
| 4000001-6000000 VND | 05 |
| 6000001-8000000 VND | 06 |
| 8000001-12000000 VND | 07 |
| 12000001-18000000 | 08 |
| 18000001 VND and above | 09 |
| (Uncertain/Don't know) | 00 |
| Refuse to answer | 99 |

11. What is the household's main source of drinking water?

| | Rainy season | Dry season |
|----------------------|--------------|------------|
| Individual tap | 01 | 01 |
| Collective tap | 02 | 02 |
| Water carrier/tanker | 03 | 03 |
| Borehole/well | 04 | 04 |
| Surface water | 05 | 05 |

12. Does the household have access to electricity?

| | |
|-------------|--|
| Yes=1, no=0 | |
|-------------|--|

13. What is the household's main source of fuel for cooking, and does the household buy or collect?

| | |
|----------------------------------|----|
| Charcoal/firewood, self-produced | 01 |
| Charcoal/firewood, bought | 02 |
| Electricity | 03 |
| Cow dung/crop residue | 04 |
| Kerosene/coal/natural gas | 05 |
| Other (specify) | 06 |

Are members of the household participating in any of the following voluntary organisations?

| | Type of voluntary organisation | Active member | Inactive member | Don't belong | Not applicable |
|----|----------------------------------|---------------|-----------------|--------------|----------------|
| 14 | Church or religious organization | 03 | 02 | 01 | 00 |
| 15 | Micro-credit group | 03 | 02 | 01 | 00 |
| 16 | Producer group | 03 | 02 | 01 | 00 |
| 17 | Labour union | 03 | 02 | 01 | 00 |
| 18 | Water user/forest/NRM group | 03 | 02 | 01 | 00 |
| 19 | Women's group | 03 | 02 | 01 | 00 |
| 20 | Other (specify) | 03 | 02 | 01 | 00 |

21. Do you feel you have any influence on how decisions are made at the village level?

| | | | | | |
|----------------|------------------------|------------------------------------|------------------------------|---------------|---------------------|
| 01=yes, always | 02= yes, in most cases | 03=sometimes, depends on the issue | 04= no, except in some cases | 05= no, never | 99=refuse to answer |
|----------------|------------------------|------------------------------------|------------------------------|---------------|---------------------|

22. Do you feel that your village is able to influence the developments that affect how local people make a living?

| | | | | | |
|----------------|------------------------|------------------------------------|------------------------------|---------------|---------------------|
| 01=yes, always | 02= yes, in most cases | 03=sometimes, depends on the issue | 04= no, except in some cases | 05= no, never | 99=refuse to answer |
|----------------|------------------------|------------------------------------|------------------------------|---------------|---------------------|

23. When your crop fails, or you lose your main income source, how do you cope? (more choices possible)
(Please don't read out all categories, but ask the question and mark the answers below)

| | | | | | |
|----------------------------|------------------------------------|-------------------------|-------------------------------|---------------------------------|---------------------|
| 01= we eat less, more poor | 02=we sell land, livestock, assets | 03= we depend on family | 04=we depend on the community | 05= we depend on the government | 99=refuse to answer |
|----------------------------|------------------------------------|-------------------------|-------------------------------|---------------------------------|---------------------|

24. Does your household usually have enough to eat?

| | | | | |
|----------------|------------------|--|---|----------------------|
| 01=yes, always | 02= yes, most of | 03=no, we sometimes don't have sufficient to | 04= no, we often don't have sufficient to eat | 99= refuse to answer |
|----------------|------------------|--|---|----------------------|

| | | | | |
|--|----------|-----|--|--|
| | the year | eat | | |
|--|----------|-----|--|--|

Now, we would like to ask you a couple of more personal questions

25. What is your ethnicity or caste?

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 01= | 02= | 03= | 04= | 05= | 06= |
|-----|-----|-----|-----|-----|-----|

26. Are you of the same ethnicity/caste as the rest of the household?

If yes, continue to question 28

| | |
|-------------|--|
| Yes=1, no=0 | |
|-------------|--|

27. If not, what is the ethnicity/caste of the rest of the household members? (relevant codes)

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 01= | 02= | 03= | 04= | 05= | 06= |
|-----|-----|-----|-----|-----|-----|

28. What is your religion

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 01= | 02= | 03= | 04= | 05= | 06= |
|-----|-----|-----|-----|-----|-----|

29. Are you of the same religion as the rest of the household?

If yes, continue to question 31

| | |
|-------------|--|
| Yes=1, no=0 | |
|-------------|--|

30. If not, what is the religion of the rest of the household members?

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 01= | 02= | 03= | 04= | 05= | 06= |
|-----|-----|-----|-----|-----|-----|

31. Where does your knowledge come from?

| | | | | | | |
|-------------------------------|----------------------|------------------------|----------------|----------------------|----------------|---------------------|
| 01= village elders/traditions | 02= education/school | 03= family & ancestors | 04= government | 05= God/higher power | 00=d on't know | 99=refuse to answer |
|-------------------------------|----------------------|------------------------|----------------|----------------------|----------------|---------------------|

32. Generally speaking, would you say that people can be trusted?

| | |
|--------------------------------------|----|
| People can almost always be trusted | 01 |
| People can usually be trusted | 02 |
| People can only sometimes be trusted | 03 |
| People can hardly ever be trusted | 04 |
| Don't know | 00 |
| Refuse to answer | 99 |

33. Now, turning to the local authorities, would you say they can be trusted?

| | | | | | |
|----------------------|--------------------|---------------------------|-------------------------|----------------|---------------------|
| 01 =trust completely | 02 =trust somewhat | 03=do not trust very much | 04 =do not trust at all | 00= don't know | 99=refuse to answer |
|----------------------|--------------------|---------------------------|-------------------------|----------------|---------------------|

34. Do you feel you have control over your life?

| | | | | | | |
|----------------|------------------------|------------------------------------|------------------------------|---------------|----------------|---------------------|
| 01=yes, always | 02= yes, in most cases | 03=sometimes, depends on the issue | 04= no, except in some cases | 05= no, never | 00= don't know | 99=refuse to answer |
|----------------|------------------------|------------------------------------|------------------------------|---------------|----------------|---------------------|

Finally, we have a couple of questions about the management of the protected area/park (NAME) and your beliefs with regard to nature

35. Has the household been affected by the establishment of a protected area/park? (NAME)

If no, continue to question 37

| | |
|-------------|--|
| Yes=1, no=0 | |
|-------------|--|

36. Would you say that the effect has been mostly positive, or negative, or neither?

| | | | | | | |
|-----------|------------------------|------------|------------------|---------------------|-----------|--------------|
| 01=mostly | 02= more positive than | 03=neutral | 04=more negative | 05= mostly negative | 00=d on't | 99=no effect |
|-----------|------------------------|------------|------------------|---------------------|-----------|--------------|

| | | | | | | |
|----------|----------|--|---------------|--|------|--|
| positive | negative | | than positive | | know | |
|----------|----------|--|---------------|--|------|--|

37. Do you feel that the rules and regulations with regard to the use of the protected area (NAME) are effectively enforced?

| | | | | | |
|-----------------------------|---------------------------------|------------------------------|----------------|----------------|---------------------|
| 01 =rules are well-enforced | 02 =rules are somewhat enforced | 03=rules are hardly enforced | 04 =not at all | 00= don't know | 99=refuse to answer |
|-----------------------------|---------------------------------|------------------------------|----------------|----------------|---------------------|

38. Do you know of households that are breaking the rules in using natural resources in the protected area/park (NAME) (poaching, timber felling, fishing, grazing etc)

| | | | | | |
|-------------------------|-------------------------|------------------------------|--------|----------------|----------------------|
| 01=yes, many households | 02= yes, few households | 03=yes, but mostly outsiders | 04= no | 00= don't know | 99= refuse to answer |
|-------------------------|-------------------------|------------------------------|--------|----------------|----------------------|

39. Now, if some organization would try to improve park management and the protection of nature, would you be willing to cooperate and report households that are breaking the rules (poaching, timber felling, fishing, grazing etc)?

| | | | | | |
|----------------|------------------------|-------------------------------------|--------|----------------|----------------------|
| 01=yes, always | 02= yes, in some cases | 03= no, except in case of outsiders | 04= no | 00= don't know | 99= refuse to answer |
|----------------|------------------------|-------------------------------------|--------|----------------|----------------------|

40. Do you feel you can influence the use and management of the protected area/park (NAME) ?

| | | | | | |
|----------------|------------------------|-------------------------------------|--------|----------------|----------------------|
| 01=yes, always | 02= yes, in some cases | 03= sometimes, depends on the issue | 04= no | 00= don't know | 99= refuse to answer |
|----------------|------------------------|-------------------------------------|--------|----------------|----------------------|

Please ask the respondent to respond to the following statements:

41. The balance of nature is so delicate that it is easily upset by human activities

| | | | | | |
|-------------------|----------|------------|--------------|-----------------------|-------------------|
| 01=strongly agree | 02=agree | 03=neutral | 04= disagree | 05= strongly disagree | 99= refuse answer |
|-------------------|----------|------------|--------------|-----------------------|-------------------|

42. The earth has only limited space and resources such as water, plants and animals

| | | | | | |
|-------------------|----------|------------|--------------|-----------------------|-------------------|
| 01=strongly agree | 02=agree | 03=neutral | 04= disagree | 05= strongly disagree | 99= refuse answer |
|-------------------|----------|------------|--------------|-----------------------|-------------------|

43. Humans may use water, plants and animals as they please

| | | | | | |
|-------------------|----------|------------|--------------|-----------------------|-------------------|
| 01=strongly agree | 02=agree | 03=neutral | 04= disagree | 05= strongly disagree | 99= refuse answer |
|-------------------|----------|------------|--------------|-----------------------|-------------------|

44. Only rarely does modifying nature and the world around us for human use cause serious problems

| | | | | | |
|-------------------|----------|------------|--------------|-----------------------|-------------------|
| 01=strongly agree | 02=agree | 03=neutral | 04= disagree | 05= strongly disagree | 99= refuse answer |
|-------------------|----------|------------|--------------|-----------------------|-------------------|

45. There are no limits to economic development for your country

| | | | | | |
|-------------------|----------|------------|--------------|-----------------------|-------------------|
| 01=strongly agree | 02=agree | 03=neutral | 04= disagree | 05= strongly disagree | 99= refuse answer |
|-------------------|----------|------------|--------------|-----------------------|-------------------|

46. Humans are dependent on natural resources such as water, plants and animals for their livelihood

| | | | | | |
|-------------------|----------|------------|--------------|-----------------------|-------------------|
| 01=strongly agree | 02=agree | 03=neutral | 04= disagree | 05= strongly disagree | 99= refuse answer |
|-------------------|----------|------------|--------------|-----------------------|-------------------|

Thank you very much for your cooperation and we'll be back to present the results!

Appendix 2: Case study protocol multi-level governance analysis

1. Introduction

This protocol is intended as a practical translation of the conceptual note that was written for WP6 'Socio economic vulnerability' in the LiveDiverse project.

The protocol is especially intended to structure the work that the IVM team will conduct in connection with our desire to study the capability of various actors to influence multilevel decision processes. It is our understanding that multilevel decision processes may affect the livelihoods of local communities and biodiversity in the case study areas and their capabilities to influence decision processes are an important factor in determining the vulnerability of current livelihoods and biodiversity levels.

This document is version 1 of a generic case study protocol, which will be elaborated into three separate documents for the case study areas in Costa Rica, India and South Africa. The Vietnam case study will take somewhat later in 2010 and will also be planned on the basis of a document like this.

The protocol contains further information on the locus and focus of our work (§2), a model planning (§3), interview questions (§4), a tentative list of interviewees (§5), guidance on document analysis (§6) and guidance on how our results should be registered and stored (§7). This set up can be expanded as the situation requires.

Please note this is a living document. Any comments you have are very welcome and will be used to improve it. Please do make as many concrete text suggestions and corrections as you can.

2. Locus and focus

At a very generic level the student will analyze decision making about parks in all case study areas. They shall perform analyses at all governance levels implied in the discussion, doing work at the local, regional, and national levels. The influence of international actors will be evaluated only if they can be encountered at these three levels.

Under the heading 'park decisions' multiple aspects can be analyzed, and a more precise focus needs to be developed in the period until the South Africa meeting in March.

The following topics are interesting from an analytical perspective:

- The geographical bounding of the park. How are the outer boundaries of the protected area determined?
- The mission of the park: purely ecological or also space for human activities? If purely ecological, which ecosystems are targeted and prioritized and which ones not? If human activities are allowed:

which ones, which ones not and on the basis of what motivation? How are existing populations treated and why?

- Decision structures: how will decisions about park management be taken in the future? Is there a specialized body for the management? How does this body take its decisions procedurally and on the basis of which considerations does it decide? What is the role of local communities in and outside the park?

There shall be a clear distinction between existing and functioning parks and parks that are in the process of creation. This will affect the choice of the specific case or cases to a degree. In existing parks it is important to give some historical background as to why it is functioning the way it does and then analyze some more recent proposals that may have been made to change the functioning. For new parks, the analysis can be at a higher abstraction level.

We expect park decisions to be affected by a range of actors. The strategies of these actors need to be charted and analyzed. In all cases, the local analysis is likely to be limited to one or two villages and analysis will be made of the way in which these are affecting decision processes.

3. Model planning

In this planning, the assumption is made that there are six weeks available for the field work, which in reality will sometimes be more.

The logic of the schedule is that the analysis at the national level gives the broadest perspective on the various issues and is thus a good start to orientate ourselves on the work. It allows for a confrontation of national images and plans with local realities later on, and to build on the fact that the two students doing the household survey have been onsite for one month when the 'governance' student arrives. The national work will also take place closer to the airport, giving a bit more time to settle into the situation before going to the case study areas. It is possible that the students can revisit some of their work in the national capital before flying back, so as to complete the circle and connect statements and findings from the local level back into the national network.

Weeks 1 and 2

- Arrival in country, meeting up with host organization and settling in
- Visiting of host organization/university library to find literature on topic
- Linking up with host organization team and/or local students
- 10-15 interviews with decision makers at the national level. Targeted interviewees (to be arranged beforehand): representatives of national ministries involved, national and international NGOs, elected politicians from the region.

- Archive research (official documents, media reports) on park discussion

Weeks 3 and 4

- Arrival in region, settling in regional capital
- Visiting of (university) library to find literature on topic
- Linking up with host organization team and/or local students
- Around 10 interviews with decision makers at the regional level. Targeted interviewees (to be arranged beforehand): representatives of the regional government involved, regionally active NGOs, elected politicians.
- Archive research (official documents, media reports) on park discussion

Weeks 5 and 6

- Arrival in Case study area, meeting up with Household survey students and settling in
- Linking up with host organization team and/or local students
- About 5-10 interviews with those people who have been identified by the household surveys as dealing with multilevel governance questions. Analyzing local influencing strategies for various villages (4-6).
- Archive research (official documents, media reports) on park discussion

4. Interview questions

Introduction, to be elaborated by the interviewer. Explain locus and focus of your subject. Explain purpose of research. Ask about anonymity. Promise to send a summary of the interview report. The interview will last about 90 minutes; make sure your interviewee reserves that amount of time. If it is not possible, tailor your questions to the specific person you're talking to. It often helps to give some feedback to interviewees about what others have told you; this tends to increase the level of satisfaction of the interviewee, it also helps you ask sharper questions. If this means you learn to ask better questions, that is something you should act upon.

GENERAL QUESTIONS

- What is your position?
- What is your involvement with the decision process and how long have you been involved?

IDEA DEVELOPMENT

- Could you explain to me where the idea for this decision came from?
- Who brought the idea forward, when did they do so and on the basis of which arguments?

- Who are the main instigators of new ideas more generally?
- Do local communities play a role in idea development?
- Is the idea that is currently decided upon worthwhile and will it be effective in attaining its goals?
- Are there alternative ideas/visions around?
- Who proposed those ideas, when did they do so and on the basis of which arguments?
- To which extent are the ideas that are propagated supported, underpinned by empirical evidence as to their efficacy?
- To which extent are these proposals connected/adjusted to stories and perceptions that are relevant for various audiences?

COALITION BUILDING

- Is it possible to discern certain coalitions (groups of parties that have bonded and strive for a common agenda) in this debate?
- If so, which coalitions would those be?
- If not, have attempts been made at coalition building? By who, aimed at involving whom, and why have they failed?
- If coalitions exist: are the coalitions permanent or temporary? What is the nature of these coalitions: are they based on common convictions, worldviews? Or are they based on negotiation/exchange?
- Are some coalitions better at spanning different jurisdictional scales than others? If so, please indicate which ones.

WINDOWS OF OPPORTUNITY

Introduce this part of the interview by explaining the concept of a window of opportunity.

- What is currently the most important issue talked about in connection with park management?
- How do these problems affect the decision process?
- Do you perceive changes in the problems that are being talked about?
- Have certain focusing events taken place? Events that everyone talks about and direct the discussions a lot?
- Have certain political changes taken place in the past years that affect the decision process? You can think of new political leaders
- How have they affected the decision process?
- Some organizations presenting their ideas are very creative in connecting their plans to events that unfold (political, natural). Do you perceive certain organizations to be particularly effective in this (more so than others)?
- How is this for some of the local communities involved? Are some of them better able to connect their plans to the opportunities that arise than others?
- Sometimes effective use of windows of opportunity requires the rephrasing of ideas (different slogans, different headings). To which extent has this happened in this case? Who did the rephrasing?

VENUE SHOPPING

Decisions tend to be produced at various different places. Sometimes they involve the courts, sometimes community meetings or Parliaments, sometimes scientific bodies, sometimes assessment procedures are required, and sometimes the decisions are taken in the back rooms.

- What, in your opinion, is the place where decisions on the park are being taken?
- Is this a logical choice from your perspective or not? If so, why do you think that? If not, what would be a better place and why do you think that?
- In your opinion, have some of the organizations involved been able to deliberately influence the place where decisions are being taken? If so, which organizations are able to this and how did they do this?

NETWORKING

Activities such as coalition building and the use of windows of opportunity require networking. Such networks differ in the degree to which they bond the members and the extent to which they span levels.

- Which networks of actors are involved in the decision process I am analyzing?
- How would you describe these networks in terms of bonding? Are they very strongly bonded (community appearance) or weakly bonded (more ad hoc and issue oriented)?
- The networks you have described, could you explain whether they reside at one level of decision making specifically, or rather span across levels?
- To which extent are local communities connected to the networks you describe?
- Are the communities in or around the park strongly organized or rather loosely connected?
- Do these communities have connections to higher jurisdictional levels? If so, do they use these connections to influence decision making?

5. Tentative list of interviewees (intentionally left blank for the moment; case study partners, please insert your suggestions)

6. Document analysis

It will be helpful and necessary to gain access to some of the formal records pertaining to the decisions we are analyzing. The added value of performing an analysis of the written record is that the written record was done at the time the decisions were being made and contains the considerations that were relevant at that time. Interviews tend to result in an image of the past that is colored by current knowledge. Given legal obligations about transparency, etc. the written record also offers a good starting point to at least find out which formal reasons are given for certain decisions.

The document analysis in the LiveDiverse case study areas can consist of the following aspects:

- If available, official plans pertaining to the natural areas. There are often multiple versions of those plans and comparing them can give insights into how plans have changed (e.g. when it comes to geographical boundaries of the park).

- Environmental impact/assessment reports or other documents prepared in the course of decision making. In many cases, such reports combine natural science arguments with a report of representations made about the plan in question.
- Meeting reports of representative bodies and councils.
- NGO reports/inputs to the decision process.
- Newspaper reporting on the case at hand. Often somewhat less reliable for scientific reporting as journalists often have to work quickly, but a good source for direct quotations and finding names of people to interview.

It is good practice to make photocopies of relevant documents. In some cases actual examination of the documents has to wait until the phase wherein the report is being written.

7. Reporting and archiving

Good scientific analysis is transparent and allows for replication by other researchers. From that perspective it is important to make sure that records are kept of the analysis. The following will be applied in our analysis

- Interviews will be digitally recorded and the files with those interviews will be stored at the IVM intranet.
- The interviewer will make notes during the interview. These notes will be typed as a word file after the interview. Where direct quotes are included in the interview report, these will be checked against the sound file for accuracy.
- The summary reports will be sent to the interviewees for comment.
- When interviewees want to remain anonymous this will be made possible. If their statements are referred to in the report, they will be described in general terms without revealing their identity.
- The summaries of all interviews will become part of the LiveDiverse data files. When interviewees only wanted to speak on the basis of anonymity, these summaries will not be included in the LiveDiverse files as those will possibly be made available for the general public and other researchers.
- Copies made of all relevant documents will be kept for at least 5 years after thesis completion by either the students doing the analysis or the IVM archive.