Measuring Sustainable Livelihood Restoration in Hydropower

Commensuration and its effects on Voluntary Adoptors of the IFC Performance Standards

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Abstract

An increase in stakeholder focus on the environmental and social impacts of large infrastructure projects has led many actors to engage in Corporate Social Responsibility. In no area is this truer than in large scale hydropower projects, where developers have often been criticised for putting profits ahead of the livelihoods of Project Affected People.

To address this criticism many actors have begun adopting the International Financial Corporation's Performance Standards which amongst other things mandates livelihood restoration for Project Affected People. In order to meet this commitment however, livelihoods need to first be measured and then the restoration of these livelihoods evaluated.

This thesis focuses on how the complex, diverse and qualitative nature of household livelihoods are transformed into a quantitative metric via the process of commensuration. The paper follows a case study approach with the subject being a hydropower project in Albania. the project operated by a Norwegian energy producer. I contribute to the existing social science literature on commensuration through providing rich descriptions detailing the process in a livelihood restoration context. My findings support earlier case study literature noting that commensuration is achieved through the exclusion of information deemed irrelevant or incommensurable and the simplification of the remaining information. Furthermore, I find that the process masks some of the underlying uncertainty inherent in the measurement of livelihoods.

The majority of hydropower developers complying to the IFC Performance Standards are required to do so due to their project financing obligations. "HyrdoCo" has no such requirement for the current project which makes the company one of only a few international hydropower developers voluntarily adopting these standards. It is through the context of voluntary adoption that this study aims to contribute to the academic literature, given this phenomenon has not been examined in detail by other scholars. I find HyrdoCo deals with the ambiguity in the performance standards through applying industry norms and relying on management's previous experience with the IFC Performance Standards. I also find that without adequate disclosure and reporting transparency the uncertainty and embedded assumptions within the calculation of Project Affected Peoples livelihoods limits external stakeholders' ability to evaluate the success of livelihood restoration.

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Abbreviations List

CSR- Corporate Social Responsibility

SHP- the Subsidiary Hydropower Company

EP- Equator Principles

ESIA- Environmental and Social Impact Assessment

ESMP- Environmental and Social Management Plan

GoA- Government of Albania

HH- Household

IFC- International Finance Corporation

IFC PS- International Finance Corporation Performance Standards

LSD- Livelihood and Social Development

PAH- Project Affected Household

PAP- Project Affected person

IHA- International Hydropower Association

RAP- Resettlement Action Plan

SOE- State Owned Enterprise

WBG- World Bank Group

1.0 Introduction

Over the last several decades, there has been a significant increase in the number of large infrastructure projects across the developing world. Although these projects provide economic growth and promote development in many areas, they also often result in the displacement of local peoples. Historically people displaced by these projects have not always been adequately compensated for their loss of land and livelihood. These practices began changing in the late 1980s after the establishment of the concept of sustainable development (SD) which was presented in the "Our Common Future" report released by the Bruntland Commission in 1987. Here sustainable development is defined as:

> *"development which meets the needs of current generations without compromising the ability of future generations to meet their own needs"* (WCED 1987)

The importance of SD has become widely recognised in more recent times and large infrastructure projects are now often required by legislation and various stakeholders (international development agencies, financial institutions or civil society) to address any negative effects to both the environment and local communities resulting from a project's construction and operation.

Even though the importance of SD and sustainable resettlement has been widely accepted the complex and often-qualitative nature of these issues means that developing a universally accepted measurement approach has been difficult. At first glance this may not appear to be a significant issue, however as the old managerial control maxim reminds us: "that which gets measured gets done", and fundamentally the definition of what constitutes a livelihood will impact the calculative devices used to approximate that livelihood. What is maybe more significant however, is that these constructed accounting devices may not accurately reflect the realities underlying livelihoods. This would mean evaluating livelihoods based on these measures has the potential to leave vulnerable people negatively impacted as the entirety of the situation may not be taken into account.

Currently the most widely adopted framework is the International Financial Corporation's Performance Standards, which mandates the restoration of the income of Project Affected Households to pre-project levels (IFC 2012a). Due to the success of these standards in gaining

widespread adoption, leading infrastructure project developers have begun incorporating the performance standards into their general Corporate Social Responsibility (CSR) practices.

Although the phenomenon of voluntary adoption of other CSR standards such as GRI have been extensively studied (see examples: Nikolaev & Bicho, 2011, Alonso-Almeida, Llach, & Marimon, 2014, Adams & Frost, 2008), there has been limited focus on the voluntary adoption of the IFC Performance Standards by individual firms. This gap in the literature extends to the how these firms measure and report on livelihood restoration. Addressing this gap is important given the recent growth in firms turning to voluntary adoption in this area. In addition, as livelihood restoration will continue to have significant impacts on the lives of millions of vulnerable people, understanding better how firms measure this process has large practical ramifications.

What is also worth noting is that income is by no means the only candidate indicator to approximate household livelihoods. A significant body of literature already exists around difficulties in utilising this measurement approach. However, the vast majority of this literature relates the work of governments and NGOs in this area, with far fewer studies exploring these challenges in the context of privately funded infrastructure projects. As the resources, expertise and motivations of private firms differ markedly from these other actors this study contributes by expanding the understanding of income measurement in this context.

As alternative approaches do exist, it is important to reflect on the process by which the qualities of a livelihood are transformed in to a given indicator and what difficulties and opportunities arise for various stakeholders as the results are evaluated over time. In this study I introduce the concept of commensuration to frame the analysis of this process of transformation.

Commensuration's role as the transformer of the underlying qualities of livelihoods to quantifiable values is important in understanding uncertainties within each model and has broader implications on how firms monitor their compliance with voluntary CSR standards such as the IFC Performance Standards. A body of literature exists around the social process of commensuration however little of this literature has extended to the study of the role of commensuration in livelihood measurement.

1.1 Study Aims

The purpose of this study has two main aims: Firstly, it aims to identify and detail some of the key underlying uncertainties and complexities associated with the measurement of household livelihoods in the developing world context, specifically in areas where communities are heavily dependent on agricultural activities and the informal economy.

Secondly the study aims to investigate the relationship between the process of commensuration, the uncertainties and complexities underlying livelihoods and the evaluation of livelihood restoration by voluntary adopters of the IFC performance standards.

Based on a review of the academic literature on development studies there is already a degree of understanding on the uncertainties and complexities associated with livelihood measurement generally. There is however a clear tension in the literature as to what is the most appropriate way to measure livelihoods amongst scholars, with reputable scholars arguing for a variety of different approaches.

Furthermore, in the practitioner literature documenting the evaluation of livelihood restoration efforts, there has been mixed results. Very few of the projects that have committed to restore the livelihoods of Project Affected People have achieved full restoration across the entire population. This again calls into question the appropriateness of measurement methods utilised in restoration programs.

At the same time, there has not been significant attention paid to the process of commensuration in the context of livelihood measurement. As such there is an opportunity to develop new insights in the academic area of sustainability control systems through investigating the relationship that commensuration has with these various other elements. If novel insights are uncovered there is the potential that the tension surrounding livelihood measurement is resolved and that the future approaches to the measurement and evaluation of livelihoods for project affected people start to converge.

In addition, the new trend of voluntary adoption of the IFC PS has not been studied in the academic literature. With firms adopting these international standards as part of their commitment to Corporate Social Responsibility (CSR), internal management control systems

need to be created in order to ensure compliance with the standards. As a result, voluntary adaptors, may face additional uncertainty with regards to interpretation of the standards as well as more freedom in determining their approach to measurement. Thus this extreme case may offer additional insights into the relationship between livelihoods, commensuration and evaluation.

I believe that there is a compelling argument to conduct a study based on the two proposed aims, given the potential for a significant contribution to the existing academic literature on managerial control systems and CSR. Whether through the provision of new research insights or by helping to resolve tensions in the existing body of literature surrounding livelihood measurement.

1.2 Research Question

Thus based on the stated research aims this thesis will attempt to answer the following research question:

How does commensuration affect the evaluation of sustainable livelihood restoration for IFC Performance Standards voluntary adopters?

Here I adopt Espeland and Stevens' (1998) definition of commensuration as the process of transforming different quantities into a common metric. The specifics of this process will be discussed in detail as part of the literature review section.

Although there are different interpretations of what sustainable livelihood restoration represents and that idea is at the core of this study, I adopt the IFC Guidance Note 5 definition of livelihood as:

> "*the full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering.*" *(IFC 2012, pp1)*

and note further analysis is provided as part of the literature review section.

Finally, voluntary adopters in this context is take to mean firms that are not legally bound by lending relationships to adopt the IFC performance standards, but who instead choose to do so independently as part of their Corporate Social Responsibility commitments.

In answering the research question I achieve the second aim of the study explicitly through explaining the process by which commensuration affects livelihood evaluation for the organisation under study. The first aim is met implicitly though collecting data that juxtaposes the measurement of income and the underlying realities of Projected Affected Households' livelihoods in order to inform the discussion on commensuration.

1.3 Relevance and Purpose

The social impacts of large resource and infrastructure projects are becoming increasingly important to stakeholders and as such, the need for accountability has grown. This spurred the development of initiatives such as the IFC performance standards and the Equator principles with which lending institutions have tried to regulated the social and environmental impacts of their borrowers.

In recent years the IFC performance standards have become recognised as the international benchmark for good practice in project related corporate social responsibility. This has led some firms, who are not reliant on project financing, to adopt these standards voluntarily to demonstrate their commitment to socially responsible business practices.

One of the key social impacts that project affected communities are faced with is involuntary displacement. Within the performance standards, lenders are required to return livelihoods of project affected people to their pre-project levels. This requirement has resulted in a significant body of academic literature addressing the measurement and valuation of livelihoods and livelihood restoration. There has however, been little literature addressing the role of commensuration as part of livelihood measurement. Commensuration's role as the transformer of the underlying qualities of livelihoods to quantifiable values is both important in understanding uncertainties within each model, but also in providing insights into the origins of tensions in the academic literature surrounding specific livelihood valuation models.

As such this study attempts to partially address this gap in the literature on sustainability in management control systems, while also adding to the diverse range of case study literature dealing with commensuration in the field of social science.

Firms choosing to voluntarily adopt the IFC performance standards as a component of their CSR strategy is a relatively new practice and because of this there is little literature addressing this phenomenon. Compared to companies required to adhere by the IFC PS, voluntary adopters face more relaxed policing of compliance with the standards and potentially greater freedom in designing their livelihood measurement approach. This could in turn alter the effects of commensuration on the evaluation of livelihood restoration for these actors. A discussion examining how commensuration affects the measurement approaches of this new group of sustainability minded companies may also shape future policy and regulation in this area of study.

1.4 Structure

The study is divided into the following sections: the first introducing the subject. The second serving to chronical the existing literature and attempting to place this study within the existing body of work. Section three outlines the methodological considerations and research design. After that, I present the data and research findings. Section five provides a discussion based on the study's findings before the last section summaries findings, makes concluding remarks and suggests future research directions.

2.0 Literature review

In this section I present the relevant academic literature require to inform a discussion around the research question. I provide an overview of the significant academic contributions and illustrate how this paper fits in to the existing body of academic work.

The review is structured into two subsections: The first addresses the academic literature relating commensuration and present the framework that will be used as a basis for analysis in the findings section. In section two I discuss academic literature relating to the measurement of sustainable livelihoods. The subsection continues by summarising the key complexities and uncertainties that have been previously identified by researchers in this area.

2.1 What is Commensuration?

In this section I discuss the literature around the process of commensuration. Which will hopefully familiarise the reader with concept, illustrate the commonly cited effects and provide a framework for the analysis of commensuration in the context of livelihood measurement. The section starts with a definition of the concept before examining how it has been explored in the literature to date. Finally, I outline where this paper fits in relative to the existing literature.

2.11 Background

While academics such as Simmel (1991) and Porter (1986) were discussing the concept earlier, much of the contemporary social science research on commensuration builds on the work of Wendy Espeland, which was published in the late 1990's. Espeland & Stevens (1998) presented several cases involving commensuration to illustrate how commensuration works in practise. The authors also established the definition that is now commonly used in academic works on commensuration:

> *"Commensuration is the expression or measurement of characteristics normally represented by different units according to a common metric."* (Espeland & Stevens 1998, pp3)

The process of commensuration is often implicit. One of the main metrics utilised by commensuration is monetary value (MacKenzie, 2009). Money allows society to measure the relative value of goods and services compared to each other. Commensuration is however not just limited to the monetising of goods and can take other forms. Ratings systems and indicators are also devices that utilise commensuration in order to compare seemingly different items.

Commensuration as a social process has been explored in a broad range of topics, including: Corporate reputation ratings (Bermiss, Zajac, & King, 2013), Environmental policy (MacKenzie 2009), City valuation (Samiolo 2012), University Rankings (Espeland & Sauder 2007), cultural asset valuation (Styhre 2013). Although some of the existing literature investigates commensuration within the internal managerial control systems of organisations (See: Samiolo, 2012 and Styhre, 2013), these investigations currently do not extend to

commensuration in the context of firms' CSR practises and the underlying managerial control systems supporting them. This area is of significant importance because as McWilliams, Siegel & Wright (2005) argue firms are increasing using CSR as point of strategic differentiation. This means the process of commensuration in the measurement and evaluation of CSR activities within the company can have direct impact on its financial performance as well as an impact on the company's external stakeholders.

2.12 Investigating commensuration

The process of commensuration differs depending on context and the initial qualities that are being transformed into the final metric. In Espeland & Sauder (2007) the authors provide a framework for the analysis of the process of commensuration, noting that information can be organised, integrated and eliminated with the help of commensuration. In addition, the authors then go on to identify simplification as an important element in the process of commensuration, developing this idea further by arguing:

> *"The processes of simplification obscure the discretion, assumptions, and arbitrariness that infuse information, as well as absorb uncertainty and contingency."* (Espeland & Sauder 2007, pp17)

A similar approach to the investigation of commensuration is adopted by Styrhe (2013) who identifies similar themes in the valuation of cultural assets in a case study based in Sweden.

In addition to identifying and describing the process of commensuration the literature has expanded to analyse how certain actors utilise commensuration as a device to achieve their objectives. Porter (1995) argues that as characteristics are quantified through calculative devices such as accounting they gain a sense of authority and objectivity. As these devices are often controlled by the powerful entity in a given interaction this means that the devices are often reflective of the views and interests of power.

This is not always the case in instances where organisations seek external validation or verification of their activities. In these cases, the responsibility for the development of metrics of calculative technologies often falls to a credible third party. In this way the power then rests

with the organisation responsible for the conception of the measure or metric rather than with the corporation under examination (Power 2000). Power (2000) notes that this shift is an attempt to promote accountability, but in doing so in reduces information into that which is auditable creating a difference between the characteristics present in the real world and that which can be audited and measured.

Examples of such shifts are prevalent in the literature. Merry (2011) discusses how The need for accountability has empowered international organisations such as the World Bank and the IFC. Noting that adoption of standards developed by these organisation has the ability to establish credibility for the adopter but also involve accepting the calculative devices provided by the standard setter which may not present the nature of the situation completely or accurately. Espeland & Sauder (2007) and Kornberger & Carter (2010) outline instances where rankings and ranking agencies have gained power through the wide spread adoption of their measures, but whose adoption has also had unintentional consequences for the measurement process.

Standards in the context of this study are also set in a top down fashion by the International Financial Corporation. In this sense it can be expected that the calculative devices provided to the company in the case study may not may not fully represent the reality of the underlying situation. One important distinction between the Merry (2011) and the scenario discussed in this paper it the fact that here, the company under study is a voluntary adopter of the standards. As a voluntary adopter the policing of compliance with standards and the external reporting requirements are more relax which could generate some differences how commensuration functions in this context relative to the existing academic literature.

2.2 Measurement of Sustainable Livelihoods

Within the development literature the concept of livelihoods is a key one. As governments, NGOs and private actors seek to monitor and evaluate the impact of their actions on communities, it is important to establish a working definition of livelihoods (Rakodi, 2002). The most commonly adopted definition is that of the International Financial Corporation which was discussed in the previous section.

This definition seems reasonable in theory, but how do you measure the full range of means that specific groups utilize to make a living? The solution often given is that you do so through an indicator which measures the result of the application of these means. Practically this is done through measuring the group's income. With the reasoning being the greater the range of means utilized; the greater the resulting income generated. The process of transforming the data associated with the means of making a living into a specific indicator is fundamentally commensurative as it involves excluding incommensurable data and organising the remaining information into a meaningful value.

In addition to excluding and reorganising information, commensuration is also responsible for absorbing measurement uncertainty into the final indicator. This absorption process occurs as the final information is presented in an authoritative and simple form that leads the information user to overlook or to be unaware of the complexities in the transformation process. The uncertainty and measurement error associated with income measurement has been explored in the development context within the academic literature and the next subsection will summarise findings in this area.

2.21 Income measurement uncertainty

The first thing that needs to be understood in income measurement is that the process is fundamentally dependent on self-reporting. Types of self-reporting could include: income tax assessments, census data or participant livelihood surveys in the field work context. A group's income is difficult to determine without a certain level of participation from the population under study. Thus, the quality of income data will depend on the quality and accuracy of the responses given by participants (Falkingham, 1999).

In rural contexts where record keeping practices are limited, respondents are dependent on their ability to recall accurately income generated in a given period prior to the survey. Falkingham, (1999) explains that it is common practise to ask participants to recall income generated in the previous year. (Deaton, 2001) found however, in this approach that participants often underestimated the income generated, unintentionally omitting a portion of the transactions that occurred during the period.

Another approach often adopted is to ask participants to recall income over shorter periods and extrapolate this data over a twelve-month period. The shorter recall period increases the accuracy with which respondents recall income during the period (Deaton, 2001) but as (Paxson, 1993) points out revenues are often subject to seasonal fluctuations and this approach does not take that fact into account. In situations where agriculture or seasonal wages make up a large portion of a household's income there is a significant risk that data from the recall period is not representative of the rest of the year and thus the calculated income value could be either grossly over- or underestimated.

In addition to recall problems, several studies indicate that another source of inaccuracy in income reporting is that participants deliberately understate their income when asked (Heemskerk, 2005, Falkingham, 1999). In an attempt to explain this phenomenon Heemskerk (2005) argues that it was likely a result of a weariness of negative tax or cultural implications if they disclosed incomes that were too high. On the other hand, the opposite behaviour also takes place. Some survey respondents were overstating their income, possibly due to the negative social pressures of being perceived to be poor or unsuccessful by the broader community.

Self-reporting challenges are important in accounting for the difficulties in income measurement, but there are also key methodological considerations that greatly affect the reported income values. Firstly, the measurement unit boundaries play an important role in this process. In the development context this concept is best thought of in terms of what constitutes a household.

The reported income figure will vary greatly depending on the determined system boundaries (Fields, 1994, Falkingham, 1999). For example, in households where a member is working in a remote location but supporting the household through remittances, these transactions may be included or excluded based on the system boundaries, which would obviously have a significant impact on the reported revenue figure. In other situations, the boundaries may not be as clear-cut. For instance, in multi-generational households where outside relatives provide occasional support or childcare services. If these relatives are absorbing some of the costs associated to the household, should they be included within the household's system boundaries?

In addition to these general income measurement issues, much of the academic literature has focused specifically on the measurement challenges affecting subsistence farming households (OECD 2002, Yograj 2016, Harvey et al 2014). By definition, subsistence farmers consume the agricultural goods that they produce. As such income is not an appropriate indicator for measuring livelihoods, as income is zero. In such circumstances, it is necessary to measure the quantity of agricultural products instead of income. Alone however, the quantities of different agricultural products are not commensurable. They need to be made comparable through the estimation of their individual economic value, which in practical terms means multiplying the quantities by a given market price for each of the different kinds of produce.

Many of the problems identified in the literature are in the determination of an accurate market price in contexts where; firstly, only a small portion of output is traded and secondly the variation in the bargaining powers of merchants and middle men greatly affects the price that the farmer would have received at the farm gate if he was hypothetically to sell the produce and not consume it (Falkingham, 1999).

As has been seen the problems in income measurement is an area that has been heavily researched. It is important to point out however, that the vast majority of the literature relates the work of governments and NGOs in this area with far fewer studies exploring these challenges in the context of privately funded infrastructure projects. This is significant as the resources, motivations and expertise available to these actors differs markedly to those of governments and NGOs. Thus, I believe that this study has the potential to contribute to existing academic literature through expanding the understanding of income measurement uncertainties affecting the livelihood monitoring practises of private firms.

2.22 Expenditure measurement uncertainty

In an attempt to avoid some of the difficulties outlined in the income measurement section some practitioners use a household's expenditure as an indicator for livelihood. On the surface this seems to be a promising approach as it avoids the concerns that survey participants have in disclosing their income values accurately (Fields 1994, Deaton 2001).

Expenditure measurement is however, not without its own uncertainty. It is true that the indicator is not exposed to the cyclic nature of agricultural income, but expenditure does have

some season specific components such as higher input costs like fertiliser and fuel at certain times of year. Thus the trade-off between recall accuracy and extrapolation uncertainty still exists.

Another problem with the use of expenditure as an indicator for livelihoods is that it assumes that a growth in expenditure is correlated with an increase in household livelihoods, but in reality, this might not be the case. In circumstances where households' expenditure is increasing but this increase is being facilitated through borrowings then the link between increased expenditure and increased livelihoods is unclear. What is more, in overlooking this fact the system may be encouraging unsustainable borrowing behaviours.

The final key uncertainty that has been observed in the measurement of expenditure is how surveys are able to effectively measuring the value of goods and services received in kind and the value of farmers own consumption. For many rural communities the informal economy makes up a large portion of economic activity (Falkingham, 1999). If goods are bartered by households then the price has to be determined though establishing a market price for the good received which can be a convoluted and inaccurate process. In addition, in situations where a good is exchanged for a service or the provision of labour the uncertainty in establishing a market price in contexts where only an informal labour market exists is even greater.

Again the valuation of the household's consumption of their own agricultural produce is also a source of uncertainty as the determination of a market price is difficult in areas were efficient and transparent markets are non-existent.

2.23 Asset based livelihood approaches

Other approaches have been developed in the assessment of livelihoods. A key approach that contrasts the approach adopted by the International Financial Corporation is known as the Sustainable Livelihoods Approach (SLA). At the core of SLA is the alternate definition of what constitutes a livelihood:

> *"A livelihood is comprised of capabilities, assets (including both material and social resources) and activities required for a means of living."* (Chambers & Conway, 1991, pp6)

In this definition, the value of a livelihood is based on the aggregation of the household's underlying assets. Thus it is an attempt to directly value livelihoods rather than the more indirect evaluation that takes place using the revenue method. The SLA was further refined by academics at the British Department for International Development (DFID) who classified livelihood assets into five distinct categories: Human Capital, Social Capital, Natural Capital, Financial Capital and Physical Capital (Carney, et al., 1999). In addition, they expanded the model to incorporate elements such as livelihood strategies and a vulnerability context in which the assets exist. The Final approach was called The Sustainable Livelihoods Framework (SLF).

The Sustainable Livelihoods framework has been widely applied in many circumstances since its conception in the form of case studies (Morse et al. 2009, Tao & Wall 2009, (Allison & Horemans, 2006)) as well as in empirical studies using indicators to approximate the capital forms presented in the SLF (Chen, et al., 2013, Wang et al. 2016, Ellis & Bahiigwa, 2003).

In a review of various models, Moser and Dani (2008) weigh up the advantages and disadvantages of the use of the SLF. The key advantages of the approach include: i) the approach is people centric ii) The multisector focus provides a framework for assessing a wide range of policy issues iii) Its multidisciplinary approach takes into account other income streams than just farming in a rural context.

The literature does however note three main criticisms to the framework: Firstly, the framework is often considered too complex to implement in many operational contexts. Secondly, the framework fails to address issues relating to politics, power and voice, rights and empowerment. Finally, the framework is limited in terms of macro- micro linkages, which hinder its ability to be scale up from the local level. In a paper, discussing the history of the framework by one of its principle contributors (Scoones 2009) the author acknowledges these weaknesses and notes that the inability to address these criticisms in the framework was a reason for its decline in popularity. He does however make the claim that the framework still offers an important lens for looking at complex rural development questions, which provides an explanation for its prevailing use in current literature.

3.0 Methodology

I outline in this section the process that I went through in constructing the study. I introduce and provide explanations of my choices of research approach and design. In addition, I describe how the practical, theoretical and ethical considerations have shaped the methodology adopted in this paper.

3.1 Research approach

3.11 Research purpose

As a first step in tackling the methodological considerations, I needed to determine what the purpose of the study actually was. Study purposes generally fall into one of the following three categories: to explore, to describe or to explain (Saunders et al. 2009, Yin 2009, Swanbourn 2010). The names of these types of studies give a relatively good indication as to what they entail. It is however, important to note that Descriptive and Explanatory studies differ from Exploratory studies in that they are contingent on the researcher having a complete understanding of the nature of the phenomenon in question in order to conduct the research (Saunders et al. 2009).

This purpose of this study will be both descriptive and explanatory. In introducing my research question, I noted that the social process of commensuration had not been studied in detail in the academic literature associated with the measurement of livelihood restoration. Thus it will be necessary to describe what commensuration does to the measurement of livelihood restoration. Then the study will explain how the relationship between commensuration, voluntary adoption of IFC standards and the assessment of livelihood restoration operates.

3.12 Deductive, Inductive and abductive

Another key consideration in the design of a research approach is determining if the study will follow an inductive, deductive or an abductive approach. The objective of any piece of research is to have the empirical world confront theory (Dubois & Gadde, 2002). The choice between these approaches is essentially a question of how the researcher views the interplay between theory and research (Saunders et al. 2009, (Bryman & Bell , 2011)).

In the Deductive approach the researcher develops a hypothesis based an understanding of current theory and then uses research findings to either prove or disprove the hypothesis and thus influence theory. On the other hand, in the Inductive approach the researcher collects

findings and interprets them in order to build theory. Finally, the abductive approach has a non-linear relationship between data and theory. Proponents of the abductive approach posit "that theory cannot be understood without empirical observation and vice versa". (Dubois & Gadde, 2002). In adopting this approach it allowed me to consult thoroughly with the existing academic literature on commensuration prior to arriving in country as the research got under way and data began to be compiled the literature was then reviewed again to gain an understating as to how the emerging data fitted within the framework for commensuration.

A key element in the abductive approach is the presence of a framework for analysis, this provides the initial context that frames the researchers understanding of the empirical world (Timmermans & Tavory, 2010). After the data is collected it can then be analysed through the context of the framework. Findings which are unexpected or do not tie in to the initial framework allow the researcher to further the body of literature in the research area and the framework evolves as a result.

The study will follow an abductive approach. This is logical as it is an explanatory study where I am looking to build on existing theory rather than creating a whole new theory, where an inductive approach may be more relevant. The deductive approach was also discarded as the structured nature of the approach limited its usefulness in answering an explanatory research question based primarily on qualitative data. In addition, the research question in its current form is not compatible with hypothesis testing.

3.2 Research Design

Having now established the research approach, the next step was to determine how I was going to design the study. Research designs are categorised in different ways depending on which piece of methodological literature one is reading, the differences however mostly result from researchers using different terms across disciplines. In this section, I refer to the classification used by Bryman & Bell (2011) who identify the following five categories: Experimental design; cross-sectional or social survey design; longitudinal design; case study design and comparative design.

I selected the case study approach for this piece of work. The main reason for this was that in order to answer the research question there needed to be a focus on depth rather than breadth. In addition, the fact that the case study approach allowed me to utilised data sources provided

a rich array of different perspectives and allowed me to triangulate findings between multiple different sources and data types.

I feasibly could have used a cross-sectional or a comparative design approach which would increase the case sample size from one. As the aim was to produce generalizable findings for projects facing simular measurement issues I deemed that the most effective way to answer the research question was to focus on a single case in order to explain the process of commensuration in a specific context before describing the details of that context. This would allow future studies to address generalisability through analysing if findings were consistent in other similar case studies.

3.21 Case Study Considerations

The academic community measures case studies against all the normal standards for research quality in social science research (Swanborn 2010). The most contentious issue in relation to case study research the extent to which research findings from a single case can be generalised to a broader population. Byrman & Bell (2011) claim that generalisation based on a single case is not possible. At the core of the argument is the fact that the researcher cannot determine if observations and results are representative of a broader population or an outlier.

Flyvbjerg (2006) touts this view is as a misconception and argues that findings from a single case study, given the appropriate nature of the case and the process of selection, can in fact be generalised. A simular sentiment is shared by Cooper & Morgan (2008) who add that case studies have the ability to spark interest in an academic field. In the selection of the SubsidiaryHydro project (SHP) it is likely that the generalisability of the study could have been increase if statistical sampling methods were implemented or if I was able to define the case as representative of the broader population of hydropower projects (Bryman & Bell , 2011). In reality, factors such as access and financial constraints where also contributing factors for my choice of the SubsidiaryHydro case.

It is difficult to make conclusions around the generalisability of research findings based on the design in this study. It is thus important to describe the boundaries, context and technical qualities of the case at hand. By adequately describing these elements, it will be possible for other studies to evaluate to what extend the effects of commensuration identified in this paper

are applicable in other contexts. With that in mind, in the next section I focus on describing the context of the "SubsidiaryHydro" project and provides background into the use of the IFC Performance Standards

3.22. SubsidiaryHydro Case study

The SubsidiaryHydro Project encompass three distinct but linked hydropower plants along a River in central Albania. As a result of the company constructing the dams and creating the reservoirs an estimated 70 households will be resettled and 646 people will have their livelihoods significantly affected (Company document, 2013). The project is currently in the construction stage and the resettlement of all Project Affected Households (PAHs) has yet to be finalised. Based on the company's Environmental and Social Management Plan (ESMP) SubsidiaryHydro will assist the resettlers in relocating to villages in areas close to their original homes.

The SHP baseline survey indicates that the PAPs are located in a predominantly rural setting. The households in most cases have mixed livelihoods with on average 46% of their livelihoods (225,000 LEK) coming from agriculture. For many households in the project area agricultural produce is predominantly consumed by the household with only a small excess of their agricultural products being available for sale. The remaining elements that constitute their livelihoods are off-farm income and use of common natural resources. The report also notes that a significant portion of PAHs benefit from remittances received from family members living in neighbouring countries, Italy and Greece.

The livelihoods of the PAPs in general are significantly below the Albania average. INSTAT (the Albania government statistics department) notes that average annual wage for an individual in Albania in Q3 of 2013 was 631,000 LEK (INSTAT, 2016), at the same time the average house income of PAHs, according to company documents only amounted to 486,000 LEK. In addition, the baseline survey noted relatively basic public infrastructure, services and sanitation in the villages affected by the project.

"HyrdoCo", the ultimate owner of the project, is a voluntary adopter of the International Financial Corporation's Performance Standards and thus has the obligation of restoring the livelihoods of project affected people to pre-project levels (70% of the affected people per the

company's Environmental and Social Management Plan). It aims to do this by introducing a livelihood restoration program in the affected communities and will monitor and report on the changes to the livelihoods of PAHs overtime using periodic surveys.

It is important to note that HyrdoCo is 100% owned by the Norwegian state, this fact has significant impacts on the organisations commitment to CSR and more specifically the IFC PS. In 2009 the Norwegian government published a white paper outlining their commitment to CSR and their expectations for the actions of Norwegian companies at home and abroad. The report states that the government has expectations that Norwegian companies adopt international standards and guidelines for critical CSR related issues noting such examples as UN Global Compact, ILO guidelines and OECD guidelines, also noting:

> *"In principle, corporate compliance with the guidelines and standards described in this chapter is voluntary. The Government expects Norwegian companies to base their international operations on such guidelines and standards."* (The Norwegian Ministry of Foreign Affairs, 2009 pp74)

Thus, although not technically required by regulation to follow these international standards, there is clearly strong pressure from the company's external stakeholders to conform with the expectations of the broader society on these sustainability related issues.

In addition to external pressure, the company sees sustainability as a key strategic pillar of its corporate vision and CSR is very much embedded within the organisation's corporate culture, something which is formalised in what the company calls "*the [HyrdoCo] Way*" (company website, 2017). According to HydroCo these international standards are a way of formalising the company's commitment to environmental and social responsibility and to integrate it into the entity's core business. On its website HyrdoCo explains:

> *Corporate responsibility is an integrated part of [HyrdoCo's] management system, The HyrdoCo Way. The management system facilitates structured and coordinated handling of the company's corporate responsibility, and the system is regularly evaluated to adapt it to new expectations and challenges."*

The organisation sees the adoption of the IFC PS as the integration of a range of CSR issues, such as involuntary resettlement and livelihood restoration, into the company's management system. There is a significant focus placed on the need for the standards to be internationally recognised as this provides external validation and credibility for the internal management control systems adopted by the organisation on these CSR issues.

3.23 What are the IFC Performance Standards?

In this section I start by providing some background in the development of the IFC performance standards. Next I outline the guidance given by the standards in relation to the key concepts of livelihood restoration and sustainability. Finally, I engage with the existing literature on the practical application of the standards, both in terms of the Equator Principles and then in a more general context.

3.231 Background

The International Financial Corporation is the private lending arm of the World Bank. The organisation provides both project financing and technical assistance to infrastructure projects across the developing world (IFC, 2016). The IFC has significant exposure to large hydropower projects and as a result potentially also exposure to involuntary displacement of local communities in project areas.

The IFC first introduced the Performance Standards in 2006 in response to criticism towards its lending practices by civil society actors. The IFC hoped that through formalising and making public the policies around its lending practices it would encourage sustainability and help mitigate the social and environmental risks that it faced at the project level.

The latest version of the performance standards was released in 2012 after numerous reviews by the World Bank's Internal Evaluation Group and significant consultation with stakeholders of the standards. The section of the Performance Standards which is of interest to this study is Performance Standard (PS) 5: Land Acquisition and Involuntary Resettlement and the accompanying Guidance Note.

PS 5 outlines the considerations and the specific requirements that the IFC expects borrowers to meet in the event that a project involves land acquisition or involuntary resettlement. At the

core of the IFC requirements it the right of Affected People to compensation. Clause 9 of PS5 states:

> *"the client will offer displaced communities and persons compensation for loss of assets at full replacement cost and other assistance to help them improve or restore their standards of living or livelihoods."* (IFC 2012a, pp3)

In this statement the IFC establishes the right of Project Affected People (PAP)s to not only received compensation for lost assets but also explicitly states the borrower's requirement to restore the livelihoods of PAPs to pre-project levels. Following on from this statement the IFC defines a livelihood in the following terms:

> *"Livelihood refers to the full range of means that individuals, families, and communities utilize to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade, and bartering."* (IFC, 2012b pp1)

This definition has significant implications for the measurement of livelihoods in practical terms, as I discuss in the next section. A variety of other definitions exist for what constitutes a livelihood but in this context the IFC has chosen to limit the meaning of livelihoods specifically to the income streams of PAPs.

The other key element of PS 5 in the context of this study is the requirement for so called sustainable restoration of PAPs' livelihoods. The standards do not however provide a definition of what constitutes sustainability, instead they simply note that the borrower has met its requirement when:

> *"displaced persons are deemed to have been provided adequate opportunity and assistance to sustainably restore their livelihoods"* (IFC 2012b pp13)

This in essence leaves the definition of what constitutes sustainable up to the borrower, or if the social impacts are deemed to be significant enough then the assessment of the extent to which the borrower has sustainably restored the livelihoods of PAPs will be performed by an independent consultant.

3.232 Voluntary adoption of IFC Performance Standards

Currently the Equator Principles predominantly apply to project finance. In addition, the IFC Performance Standards are mandatory for infrastructure projects funded by the World Bank Group or the International Financial Corporation. Although these two categories cover a large share of the major infrastructure projects globally there are some projects which are not covered, mainly: a) Projects funded by banks who are not signatories of EP b) Projects developed by SOE with public funds c) large multinational companies that only use corporate debt and equity to fund specific projects.

In these scenario, the project would not legally need to be in compliance with the IFC Performance Standards. Some large multinationals however, given the strong brand credibility of the IFC PS, are choosing to voluntarily comply with the standards as a strong signal to their commitment to CSR. Some notable examples include Barrack Gold (Barrick, 2012) and Rio Tinto (Rio Tinto, 2015) in the extractive industries sector.

Although the phenomenon of voluntary adoption of other CSR standards such as GRI have been extensively studied (see examples: Nikolaev & Bicho, 2011, Alonso-Almeida, Llach, & Marimon, 2014, Adams & Frost, 2008), the IFC Performance Standards have not featured prominently in this this literature to date. Thus this paper expands the literature in analysing measurement in the context of voluntary adoption of IFC performance standards.

3.23. Data Collection

I utilise a range of different primary and secondary data in this study. In this section, I introduce each of these sources, the sampling approach and some addition considerations.

3.231 Interviews

One of the key sources of data for this study is interviews. Interviews play an important role in explaining how commensuration affects the evaluation of livelihood restoration. Secondary data such as company documents and reports can provide some insight into the manager control system behind the measurement of livelihoods, but the process of commensuration is inherently obscured in this form of evidence. By collecting data recalling the experiences of people designing the measurement approach, conducting the measurement and having their livelihoods measured I develop an understanding the realities of how measurement and evaluation occur rather than how they are expected to base on the company's frameworks and

policy documents. In addition, interviews offered key insights into the uncertainties and complexities underlying livelihoods which would have been difficult to obtain from other data sources.

As part of the study three separate types of interviews were conducted. In order to gain access, and get a general understanding of the project environment I conducted an interview with a member of HyrdoCo management in Norway prior to arriving in Albania.

The second type of interviews were interviews with members of the company's environmental and social management team. As the majority of data I wanted to obtain from interviews was qualitative the goal of sample selection was not to have a sample that is sufficient to demonstrate generalisability of findings but to have a sample that adequately answers the research question (Marshall, 1996). As the aim of interviews with staff members was to get an in-depth understanding of the measurement and livelihood restoration process, a judgment sample was utilised. By using a judgement sample, the most productive sample to answer the research question is actively selected by the researcher (Marshall, 1996).

The staff interview sample was made up of Key informants, who were chosen based on the roles within the organisation. In order to hold their positions in the organisation they required expert knowledge in certain areas and as such would be the most productive people to interview. Prior to arriving in Albania I reviewed the company's public documents to assist in identifying the key informants to be interviewed however there was not enough detail to determine a sample so I planned to utilise snowball sampling, with which the researcher conducts an initial interview and then gets recommendations for other interviewees from the first informant (Saunders et al. 2009). Subsequent to arriving however I received a document outlining organisational structure in more detail allowing me to select my Key Informants.
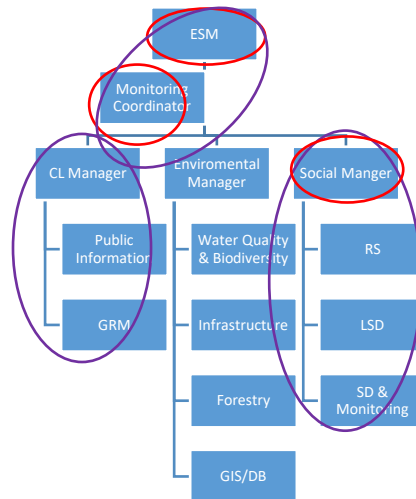
Figure 1:Orgchart- Red: Key informants, Purple: present during shadowing

Based on a better understanding of the organisation I chose three Key Informants for staff interviews: The Environmental and Social Management Manager, the Monitoring Coordinator and the Social Manager. Interviews with Key Informants lasted approximately an hour. The interviews were semi structured in and interviewees were provided an interview guide in advance (refer to Appendix 1). As the key informants had differing areas of expertise the questions differed and the conversations took different directions. This flexibility was one of the key reasons for selecting a semi-structured interview format. Interviews were recorded and transcribed for two of the respondents however for the third interviewee conversations were spread over several interactions where discussions were written up as field notes and email communications were also used to confirm wording for key points. Interviewees were also asked to review transcript excerpts that were used in the findings section to ensure accuracy and their points of view correctly represented.

Key Informant #	Job Title	Date	Duration
1	Environmental & Social Director	08/06/2016	~ 0h 40m
2	ESM Monitoring & Data Management Senior Expert	01/06/2016	~ 1h 00m
3	Resettlement and Social Development Manager	30/05/2016	~ 1h 00m
4	Head of Environmental and Social Governance-Group	22/02/2016	~ 1h 20m
		Total time	~ 4h 00m

Table 1: Summary of company interviews

The final type of interviews conducted as part of the study was with a sample of Project Affected Households. This sample also utilised a Judgement Sample. The total population was Project Affected Households (PAH)s in the down stream Project. instead of simply selecting a random sample I wanted to ensure that I was getting a sample that had families from a diverse geographic distribution. This was important as villages in the project area are not homogeneous, with different areas having different livelihood profiles, access to markets and services and significantly different project related impacts. By not taking these differences into consideration there was a higher risk of omitting unique insights from individual households.

As the PAHs were also affected to varying degrees by the project I wanted the sample to reflect this diversity of project impacts. Some households had received livelihood packages while others had received full resettlement packages. As these groups faces different livelihood challenges, have different complexities and uncertainties associated with their livelihoods as well as potentially have different feeling towards the project I felt like it was important to include both of these groups in order to get a more complete picture of commensuration across the whole PAH population.

Subsequent to selecting the sample there was two instances where the households were not available to be interviewed as they were out of town. For these two instances the excluded households were replaced by another household in the same village.

The interviews with PAHs were unstructured in nature and were used to delve deeper into households' responses to the questionnaire. As household interviewees did not speak English a translator was used to facilitate communication between the household interviewees and myself. The translator used was an Albanian member of the Livelihood and Social Development team who had a completed higher education in English and whose role included translating in the field for other HyrdoCo employees not proficient in Albanian. Question and responses were recorded together with the questionnaire responses from the household. In addition, non-verbals and other observations were recorded in field notes over the cause of the interviews. A total of twenty interviews were conducted with households. Interviews ranged from ten to thirty minutes with an average of approximately twenty minutes.
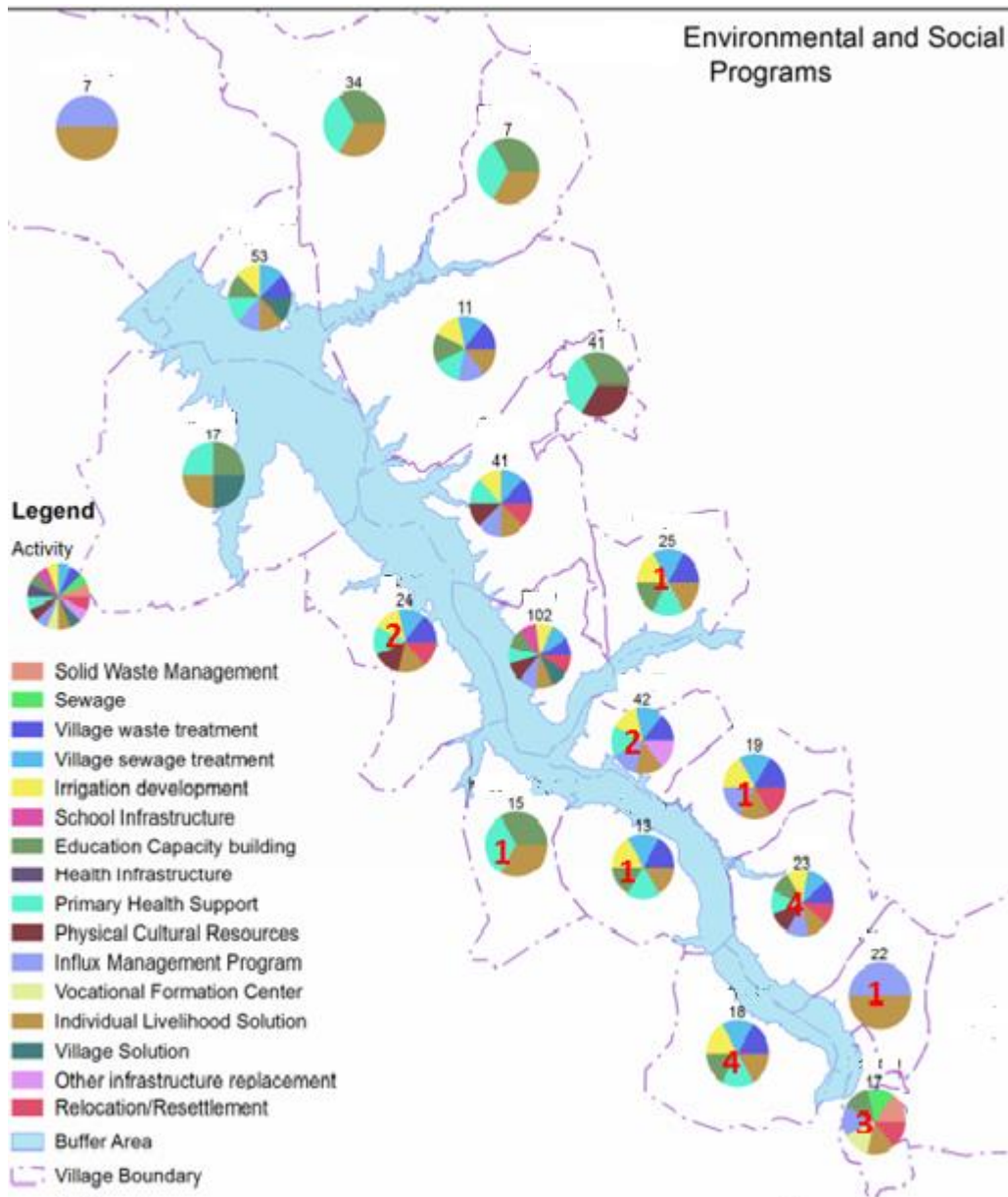
Figure 2: Interview/questionnaire sample by village overlaid on the ESMPs project impacts map (village names removed)

3.222 Shadowing

The second type of data collection method that I used in this study is shadowing. Shadowing involves following and observing the actions of a subject over a period of time. The subject was members of the Environmental and Social Management (ESM) team at SubsidiaryHydro . Shadowing provides a good complement to interview based data (Czarniawska, 2008) as it allows the researcher to triangulate data points. By shadowing a subject, the researcher is able to see to what extent the actions of the subject are consistent their perceptions or recall of those

actions. Collecting of data from shadowing is dependent on the researcher maintaining field notes that can later be analysed.

I needed to consider a range of other factors in shadowing, these included: language barriers, my influence on data and ethical considerations. In this specific context, the fact that a portion of the ESM team's day-to-day work is in the Albanian language may have limited the usability of some of the data gathered as part of shadowing. I hoped to manage this issue through discussions with the subjects and clarification during the process.

The second key consideration is how my presence in the field alters the behaviours of those under observation. This phenomenon is exhaustively documented in the literature (Johnson 2014, Czarniawska, 2008, Saunders et al., 2009, McDonald, 2005), these studies note that by being there the researcher influences the actions of the subject, but paradoxically without the presence of the researcher there would be no data. The impact of this phenomenon is dampened by the fact a multi-method design is being adopted and the use of shadowing is to supplement other data collection techniques. In addition, as the study focuses on measurement processes and not directly on performance of individual subjects the risk of obtaining inaccurate data through observation is somewhat diminished.

The ethical considerations with this collection technique are the final thing to discuss. Although the subject maybe agree to participating in the study the nature of the shadowing means that the subject may come in contact with other people who are not willing to participate in the study. As part of the shadowing process, I endeavoured to obtain permission from these third parties and if they agree, include them anonymously. However, it is not practical in every situation to obtain permission from everyone present. In such instances, I recorded observations in a general fashion, as is consistent with the academic literature on shadowing (Johnson 2014).

Shadowing is contingent on the movements and activities of the subjects in order to generate data. As such a different set of observations and potentially conclusions may have been drawn if I was in Albania at a different time observing different activities. The company was in the process of filling the reservoir while I was on site, this was naturally the priority at the time and this limited the amount of monitoring activities performed by the ESM team. The majority of shadowing data was collected on three separate days in the field. This included consultation

meetings with affected households, assisting a household in resettlement and the delivery of a variety of livelihood inputs to families in the Livelihood and Social Development Program.

Shadowing Field work			
Date	**Location**	**Duration**	**Main Activity**
23/05/16	Damsite	~3hrs	- Presentation of project - Dam site visit
23/05/16	Village	~2hrs	- Resettlement of a HH - House inundation - Stakeholder Dialogue
03/06/16	Damsite office	~6hr	- Livelihood package delivery - Process - benefit distribution - Discussions with PAHs - process- benefit distribution
26/05/16	Village	~2hrs	- Revisit and follow up with PAH - Relocation Logistics
08/06/16	Community information center- upstream	~5hrs	- Community liaison - Stakeholder dialogue - meeting with PAPs - Explanation of benefits and resettlement process
	Total time	**~18hrs**	

Table 2: Summary of shadowing activities

3.223 Secondary Data

The third source of data utilised for this study is secondary data. In exploring a measurement phenomenon, it makes sense to review the output from these measurement activities. The main secondary data utilised in the study are the company's measurement framework, publicly available documents, internal reports and internal survey and questionnaire documents. Unlike the data collected through interviews and shadowing has not influenced by my presence as a researcher.

I negotiated access through interviews with gatekeepers, but also relied on publicly available documents to a certain extent. As the review of private company documents is contingent on the provision of access, there is a risk that SubsidiaryHydro could choose to omit documents in order to present themselves in a more positive light. I partially mitigate this risk through interpreting data in a critical manner as well as triangulating against other data sources (Saunders et al. 2009, Swanborn 2010) and as mentioned before there is little incentive not to provide a complete dataset as the study is not focusing on the company's performance.

In discussions with the SubsidiaryHydro project team the use of sensitive or personal information needs to be done in compliance with Albanian data protection laws (The Assembly

of the Republic of Albania, 2008). As part of the study, I reviewed these requirements in order to ensure compliance.

3.224 Questionnaire data

In exploring the research question, I gained an understanding of the measurement practices and the characteristic of the PAPs based on a review of secondary data from project documents. I felt however, that the company's baseline surveys lacked some important information for my analysis, for example the appropriate level of disaggregation and the payment method according to PAHs' income streams, so I developed a questionnaire for the project-affected people to fill in these gaps.

The sampling method as Judgement Sampling as outlined in the interview section. As the sampling method was not random, the findings are not strictly generalizable to the entire population of PAPs but will act as support and corroborate for the qualitative data collected in shadowing and interviews.

As discussed in the previous section ethical and privacy considerations have been taken into account in the questionnaire and the identities of households have been anonymised in the findings section. As the questionnaire respondents did not speak English the questionnaire was designed in English (Refer to Appendix 3) and then translated into for the respondents to read and fill out. As not all of the households were literate, households received the option of either being assisted by a translator or filling out the questionnaire or completing it themselves. Prior to filling out the questionnaire PAHs were provided with information as to how their data would be used, the voluntary nature of the survey and the purpose of the study. If respondents, then agreed to take part in the survey they signed a consent form (Appendix 4). The consent forms and the original survey data was collected and stored in accordance with Albanian Privacy Laws, and the process was conducted in consultation with The HyrdoCo team in Albania.

3.24 Data Analysis

In this subsection I provide an overview of the analysis methods applied to the data collected as part of this study.

As the majority of data that was collected as part of this study was qualitative an approach for data analysis needed to be used to create order and decipher meaning. Eriksson & Kovalainen,

(2016) explain that qualitative data analysis falls into two main categories: categorisation analysis and interpretation analysis. Categorisation aims to provide a general and holistic picture of the subject while Interpretation aims generate meaning through understanding the phenomenon under study. In this study I utilise both forms of qualitative analysis.

As a large portion of the data collected was written texts including interview transcripts, field notes and secondary documents I undertook categorisation in the form of coding in order to identify relevant findings in order to address the research question. As a starting point passages relating to measurement, livelihoods and monitoring were identified. From this starting point the data was then coded into the three main themes influencing the process of commensuration as was noted in the framework presented in Espeland & Saunder (2007). These themes being: inclusion/exclusion, simplification and uncertainty. Once the data had been coded in to these categories the data within each of these subcategories was then reviewed to identify patterns and themes to inform the findings section of the paper.

In deciding on the categorisation process I was faced with a choice of coding manually or using electronic coding software (Saunders et al. 2009, Eriksson & Kovalainen 2016). In the end given that coding was being done thematically with the unit of analysis being themes rather than key words or phrases I decided to code the data manually, which reduced the risk of omitting or missing passages relating to the target themes.

In addition to utilising categorisation analysis it was also important to use interpretation analysis in order to answer the research question. This was because answering the research question required the data to be interpreted to describe how the process of commensuration worked. This in turn relied on the synthesis of different information sources in a process that was less structured then the categorisation process described earlier.

4.0 Findings

4.1 Introduction

In this section I present the findings and explain how commensuration affects the evaluation of sustainable livelihood restoration in the context of the Project Affected People adjacent to the SubsidiaryHydro project in Albania. From the review section, the academic literature

suggests that to achieve commensuration the initial information needs to be a) simplified and b) included or excluded from the metric. In addition, commensuration masks the uncertainty in the underlying information.

Thus the structure of this section will be such that a subsection will be devoted to each of these elements before findings relating to the SHP's indicator targets and evaluation will be presented in the final subsection.

4.2 Inclusion/ exclusion of Livelihood elements

In developing a measurement metric for the livelihoods of PAHs the first action is to determine which elements of livelihoods are to be included and which (if any) are to be excluded. Based on data collected this decision happened in two separate categories: first in what income was to be included in the metric and secondly which Project Affected Households would be included.

4.21 Including/ Excluding Income sources

To demonstrate that PAH's livelihoods have been returned to pre-project levels the company needs to monitor livelihoods over the duration of the restoration period. In discussing the company's monitoring practices *Key Informant 2* said*:*

> *"We measure livelihood models focused on income situation and we want to prove in the end, based on income situation, that livelihood restoration has been established on Albanian like values."*

With the mixed nature of livelihoods for Project Affected People it is important to determine what aspects are included in the income indicator. These decisions generally occur when the company establishes a baseline to compare progress against.

I was interested in getting an understanding of the relative importance of income sources utilised by the PAHs. As part of the ESIA, Norconsult asked a similar question however it only encompassed PAH's top three most important income sources, which as can be seen in my data in Figure 3, was not sufficient to capture the whole picture of PAH's livelihoods.

As part of SHP's socio-economic baseline the company recorded income from various sources across the villages in the project area. They noted that on average The largest contributor to livelihoods was the "other" category which accounted for 47% of all income. This category included off-farm wages, pensions and other miscellaneous sources. The second most important source was agriculture which accounted for 33% of income, followed by remittances (20%) and natural resources, which in the baseline accounted for just 1% of livelihoods. In comparing these results to my questionnaire responses it is possible to see similar patterns. What we do see however is that the majority of households have some degree of dependence on agriculture, pensions and natural resources.
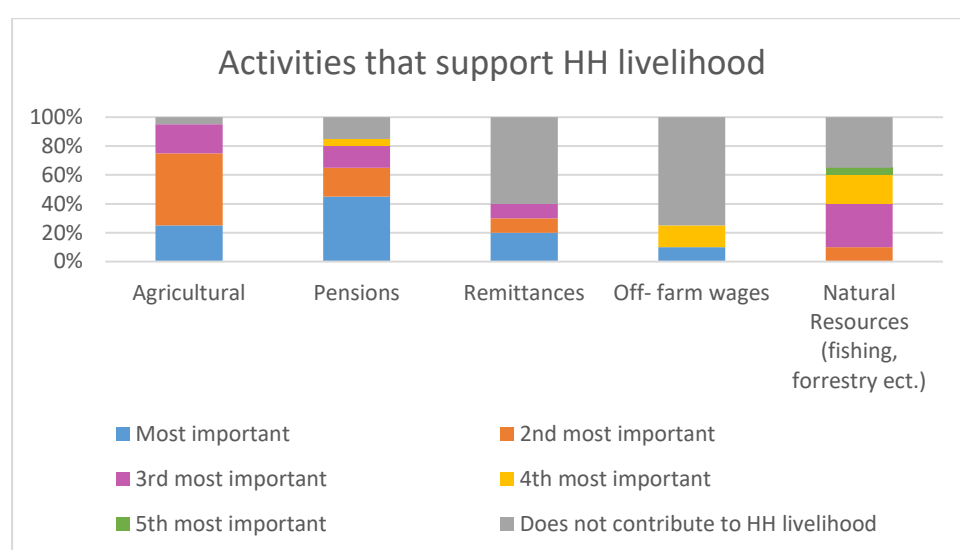
Figure 3:Relative importance of HH livelihoods

In further discussions with *Key Informant 2*, remittance is excluded from the company's assessment of livelihood restoration:

> *"We do not include remittance in the Albanian LEK value that we want to reach simply because the project cannot be responsible for things that we cannot change."*

Many of the project affected people were heavily reliant on remittance prior the project coming to the area and will likely remain that way as other aspects of their livelihoods are restored. However, if the migration patterns change within the area, the household sizes, availability of

labour and domestic incomes could change and this could in turn have an impact on the indicators for livelihood restoration. When I put this scenario to *Key Informant 2* they said:

> *"We have had a lot of discussion on this issue. My argument on this one is that our positive or negative impact on remittance is basically zero. Some would argue in the long run that maybe development here would change immigration patterns and that may have a long term impact, but for the individual houses my argument is that we have a very limited impact on remittances and therefore we should not include it in the calculation of the livelihood model."*

The company does have a question in its monitoring survey asking respondents to quantify the amount of remittance received during the year. Although not included in the income indicators used for evaluation of livelihood restoration, this question will identify if remittance patterns change significantly in the future.

Pensions, which arguably are also outside of the control of SHP are included in restoration indicators under the category noted in the ESMP as other income. In describing the level of disaggregation used in the measurement of the livelihood baseline *Key respondent 2* remarked:

> *"If you would have the time and the resources you could break down what was other income, much further down: how much do you get from working in the public sector, how much you get from pensions and so on."*

In further discussing the decision to include the other income in livelihood measures *Key Informant 2* went on to say:

> *"In general there will be a shift away from agricultural activities to off-farm activities and we see that as a positive development, so we want to include it. Not many but some of our packages are off farm, so we want to include it into the analysis."*

As was noted by the key informant, off-farm household specific livelihood packages are limited. The extent to which SHP is responsible for changes in the off-farm incomes of households is thus debatable. In addition to the livelihood packages however, the company also has community development programs such as scholarships to the regional vocational school that may increase off-farm incomes (*Key informant 3).*

Ultimately SubsidiaryHydro is making active decisions to include and exclude specific elements of PAH's income from the measurement. This has the effect of distancing what the

livelihood indicator is measuring and the empirical reality of PAHs livelihoods. By choosing to measure and include some elements of the PAHs' income while excluding others, there is the risk changes in the incomes that the company considers out of scope may be material for a given household. By failing to measure all sources of income the company's reported restoration figures may in reality over or understate the degree to which the household's livelihood has actually been restored, which could in turn affect their commitments under the IFC PS.

In the ESIA households were noted as utilising natural resources, which, in the project area is mainly fish, firewood and medicinal herbs. This was also consistent with my own discussion with PAHs. The company decided to include natural resource income in the restoration indicator, but after I reviewed the seemingly low baseline values outline in the ESMP *Respondent 2* was asked about the calculation of the natural resource component of the income indicator. They responded that the amount only included firewood that households sold and not the quantity that they collected for their own consumption. This approach was at odds with the methodology used by the company in accounting for agricultural income, where it values the quantities of produce used for personal consumption based on a determined market price for the produce.

The majority of PAHs that I interviewed said that they collected firewood for their own consumption, however *Households 5, 11, and 14* said that they sold firewood to supplement their incomes. PAHs indicated that the inundation had little effect on the areas that they used to gather firewood. In addition to firewood *Households 15, 12 and 2* reported that they supplemented their income with the sale of medicinal herbs collected on public land. Again the inundation had little impact on the abundance, or PAHs access to these resources.

This choice by the company to only include a portion of the natural resource based livelihoods of PAHs in the income measure is another example of how the company excludes a part of the initial information in order to achieve commensuration.

From the sustainability perspective, as much of the collection of natural resources is unregulated and is done on public land it is it not immediately clear whether an increase in the exploitation of these reserves is a positive for the community and PAHs.

A large number of PAHs interviewed that admitted to collecting firewood did so illegally on the west side of the river. *Household 18,* a long-time resident of the affected west side voiced frustration with people from other villages going into the forest near to the respondent's home and harvesting firewood. They then went on to say that they felt that the practice was worse after SHP constructed the bridge over the river at the town increasing the access to the West bank.

4.22 Excluding Project affected people

As was noted early in section 4.21 the targets for the restoration of project affected people's livelihoods is limited to those PAHs that are involved in the livelihood restoration program. The question then is why are some affected people excluded from monitoring?

In response to this question *Key Informant 2* explained:

> *"Our program is voluntary and on the other hand it is also voluntary from the households that join the monitoring. If you decide to join, you join for the whole process: the baseline survey, provision of input, provision of technical assistance and continuing monitoring."*

At any point the households have the option of opting out of the program, which makes sense in the respect that the company cannot force households to fill out their monitoring surveys and thus the company cannot monitor or assist in the restoration of the Households' livelihoods.

Key informant 2 continued:

> *"So if somebody is saying "thank you very much for the cow, but the technical assistance and monitoring… I'm not interested" then we will not include them"*

Key informant 2 then went on to explain the rigorous nature of the consultation process with the affected households, explaining:

> *"We have normally a couple of meetings, LSD* (Livelihood & Social Development) *go to households that didn't want to join and have a couple of meetings. We record these meetings; we have them sign that that the information has been read. And then after a certain number of meetings if there is no development then the last option is that they decide not to join the program."*

In addition to households that received livelihood assets but did not want continue in the program. *Key Informant 2* also explained that there were also 3 households that signed up to

the program however they were not satisfied with package offered by the company and thus declined the package.

Another, and probably the most significant group excluded from the monitoring program is the households that were unwilling to cooperate with the GoA and SHP in the involuntary land acquisition proceedings. The majority of this group was from a specific village in the project area where the ESMP identified 87 Project Affected Households. This group was not satisfied with the compensation and held out in hope of a better deal. HyrdoCo was able to convince some of the families to join the program:

"We have now 15 households in [specific village] that have joined the program and we will have included them in the baseline." (*Key informant 2*)

However, the remaining affected households received the standard cash compensation and had their land forcibly acquired prior to inundation. By rejecting the voluntary support offered by HyrdoCo it is likely that their livelihood outcomes will be worse than the PAHs in the program, but as data is not collected on affected people outside the program statistics on this comparison is not available.

As part of my shadowing activities I participated in a town hall meeting with future resettlers in the upstream dam connected with the project. During the meeting SHP was practising stakeholder engagement and explained to the local population their entitlements under the resettlement package. Several of the locals present voiced concern about being relocated, specifically because SHP was unable to provide assurance as to where their new houses would be built due to the fact that the government was responsible for the final land allocation.

The select group of households said that they would not sign the agreement to be part of the livelihood restorations program prior to receiving confirmation of the new location. This was something outside the power of the company as a signature is require prior to the government land allotment. Thus it is possible to see how a situation such as this could escalate and lead to households dropping out of the program and thus being excluded from the livelihood restoration PAH population.

Figure 4: gathering of local households prior to community meetings

In addition to Households choosing not to take part in the program, the company in some cases, reserves the right to stop household's participation in the restoration program. Although this is not common place it has happened over the course of the project. In talking about the instances *Key informant 2* explained:

> *"We had two or three households that decided to sell their inputs, that for us is clearly, from my perspective a voluntary decision to drop out of the program. If you sell your inputs, then we cannot provide technical assistance to restore the livelihood."*

In these cases, by selling the livelihood assets provided by the company, the household has reduced the company's ability to help restore their livelihood. In addition, if the company was then to replace the asset it would set a damaging precedent for the rest of households.

Key Informant 2 then when on to clarify:

> *"I'm not talking about extraordinary circumstances, if somebody is coming up and says "I had a fatal accident, or something happened- my husband died and we had to sell the cow now". So there may be exceptional circumstances where the project could discuss what to do about it."*

This situation described by the informant has not happened to date in the project so it is difficult to speculate as to the outcome of such discussion but it is however important to note that the IFC performance standards do not provide specific guidance in relation to this matter.

As we have seen over the course of this subsection the company has made choices both based on judgement and measurement practicalities in relation to which PAHs to include in the livelihood restoration indicator and which to exclude. In excluding what the company believe as irrelevant to facilitate the commensuration process the impacts on the households that fall outside of the indicator are obscured from vision. Based on the publicly available information in the ESMP there is no mention of the magnitude of the households that fall outside the scope and whether willing or not this distorts the true impacts of the SubsidiaryHydro development. A graphical representation of PAH exclusion findings has been included in Figure 5 below.
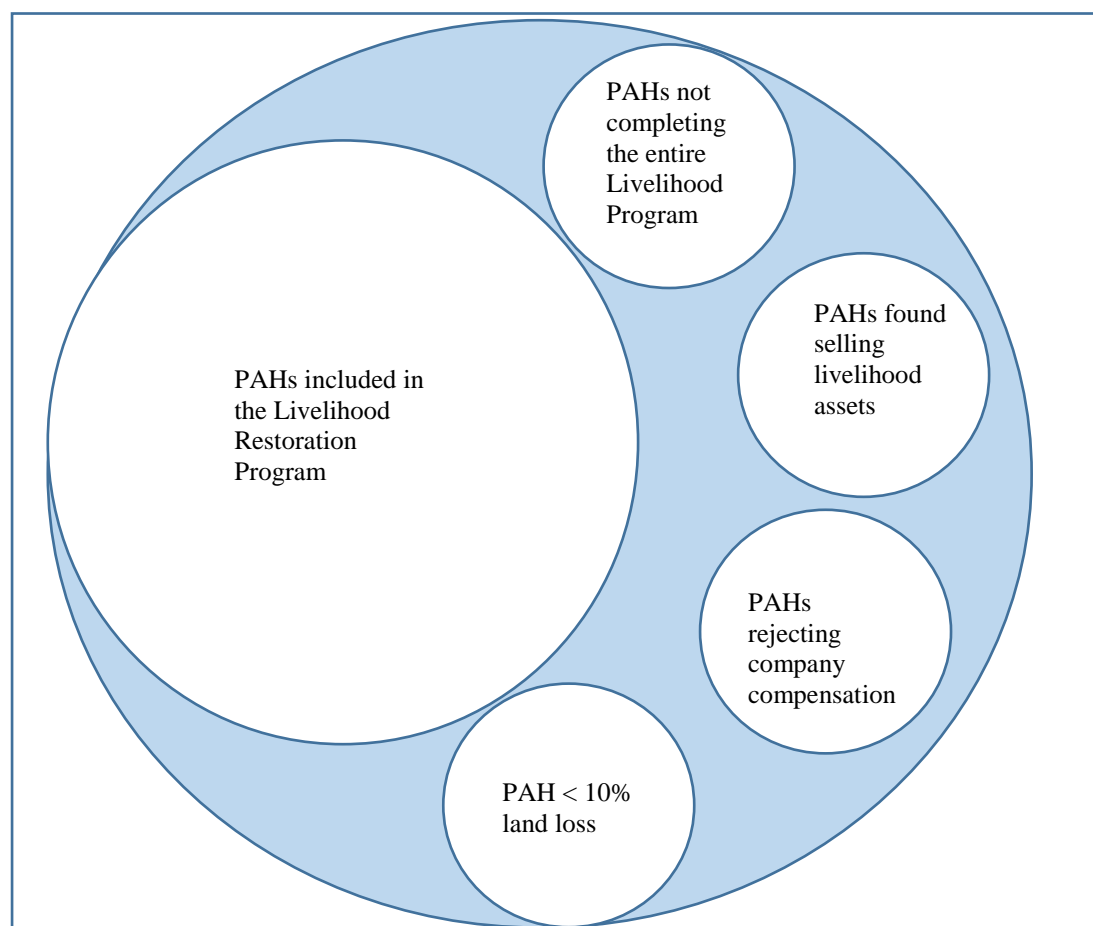

Figure 5: Summary of Excluded PAHs

In order to report and evaluate on the restoration of project affected people's livelihoods, there first needs to be an attempt to measured and incorporated them into SHPs management control

systems. People and attributes that can't be readily commensurated are thus lost from the monitoring process. The justifications for excluding specific affected people is that without doing so it would not be possible to consistently report on any of the affected peoples livelihoods, but these exclusions distance the reality of livelihoods from what is being measured thus a balance needs to be struck between apposing positions.

4.3 Masking of livelihood uncertainty

By valuing household livelihoods in monetary terms it creates the perception for users of the monitoring reports that the documents have a certain degree of accuracy. In this subsection I present findings on uncertainties in the measurement of PAHs' livelihoods. From discussion with Key Respondents, questionnaire results, secondary data and interviews with households three major categories of uncertainty have been identified in the measurement process, these being: Measurement error uncertainty, underreporting of income and demographic shift uncertainty. Findings on each of these categories will be discussed in detail below.

4.31 Measurement error uncertainty

In a review of the company's monitoring plan SHP uses a yearly recall survey to gather data on the incomes received by households in a given year. Different methodologies exist for the evaluation, as was outlined in the literature review, including taking a short recall period and extrapolating over the entire year. In discussing the approach adopted *Key informant 2* said:

> "*We have faith in the year to year, on one hand if we ask what happened in the last four weeks it will work for off-farm but not for agriculture because you have to the seasonal thing. And if you ask for the season[al survey response] you will have the problem that it is difficult for them to remember.*"

In discussions with all three Key Informants it was noted that obtaining accurate income data from households was a challenge for the project. Interested in understanding if intentional underreporting was an issue this question was posed to *Key Informant 2* who noted that Livelihood and Social Development team believed that their close relationship and understanding of individual households' livelihoods mitigating the risk of underreporting however *Informant 2 also* said:

> *"Their [the LSD team's] assessment is that it is not a problem, but this is a more qualitative assessment, but the statistical analysis indicate that this could be a problem."*

Households apparent reluctance to declare their realities in other projects often comes down to either that households have a financial incentive for inaccurate reporting or that disclosing income is socially difficult and a reluctance is driven by stigma. *Key informant 2's* assessment was that it was more socially driven than incentive driven, explaining:

> *"We have certain package sizes which are pretty much close to what actually somebody is losing but there is no formal entitlement on that. So there is no immediate rational incentive."*

Even though livelihood packages are mostly once off provision of livelihood assets a portion of packages is made up of inputs and technical assistance so *Informant 2* went on to say:

> *"In general, if I would report very high at my baseline and afterwards I try to under report all the time that would put pressure on the company eventually to provide more input."*

Although it is possible that some of the households were thinking along these line, *Informant 2* did not believe that this was currently a problem. As the socioeconomic surveys conducted by the project are heavily dependent on households self-reported data I was keen to find out if the company had any recourse in the event that households were systematically underreporting their incomes to which they responded:

> *"As long as they continue the same we still reach our target at one point. If it is a standard problem, we would put in a question to try and convince them to be more honest."*

Findings from questionnaire data indicated that measurement recall driven uncertainty could be an issue for the Project Affected People interviewed. Questionnaire respondents were asked for each of previously identified income sources what the predominant way they received payment was. For agricultural products, 35% of households indicated that production was predominantly consumed by the family (refer to Figure 6). For many of the families on the west bank of the river, who historically have had poor road access, the majority of their produce is consume instead of being taken to the market. *Household 14* remarked that subsequent to the establishment of the new road and a reliable bus the family has started selling a portion of its diary produce in the town nearby.
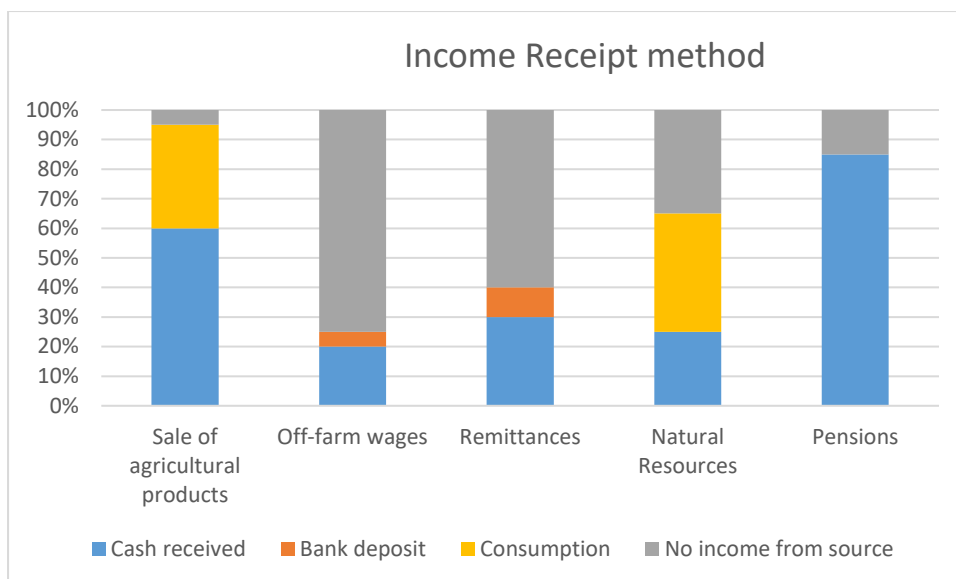
Figure 6: Income receipt graph

In relation to the sale of agricultural produce, the majority of PAHs interviewed said that they did not maintain records of production quantities and prices. *Household 14,* one of the more affluent families interviewed, had over 3,000m^2 of cash crops and said that paperless transactions were common in the area and few small scale farmers kept detailed accounts.

This was also the case for households consuming the majority of their agricultural produce. *Household 13* who have mixed agricultural production of a few livestock, bee hives and a small vegetable garden did not weigh produce prior to consuming it. Without any form of record keeping practises or weighing of produce the risk of incorrect recall grows substantially. A fact not mention in SHP's public reporting potentially because the existence of uncertainty has the ability to undermine the credibility of the metric used.

The final important finding on how PAHs received income is in the area of remittance. As previous sections indicated for many of the families interviewed, remittances from abroad is a critical income source for supporting their livelihoods. In general, families that receive seasonal remittance such as *Households 6,12 and 16* reported carrying cash back from abroad. This method of transferring cash is not only unsecure but with the lack of record keeping means that it is difficult to validate the magnitude of remittance and for households to accurately remember the amount on a yearly recall.

PAHs who did not receive remittance via carry utilised either bank transfer (*Households 20 & 10*) or the use of money transfer companies such as Western Union or MoneyGram

(*Households 11,14 and 17*). The respondents who used Western Union said that they did so for a range of reasons including convenience, timeliness, a distrust of banks or difficulties associated with setting up a bank account in the host country given their migrant status. As the presence of a paper trail may increase the PAHs ability to remember the magnitude of remittance received during the year it is unlikely to increase the willingness of PAHs to voluntarily provide this data for monitoring purposes especially if relatives providing remittance are doing so through the provision of illegal labour.

4.32 Underreporting of income

As part of the questionnaire PAHs were asked to estimate their incomes from each of the individual income sources. The amounts were then aggregated and sorted into income ranges. As can be seen from the graph the majority of the reported incomes clustered below 450,000 LEK.
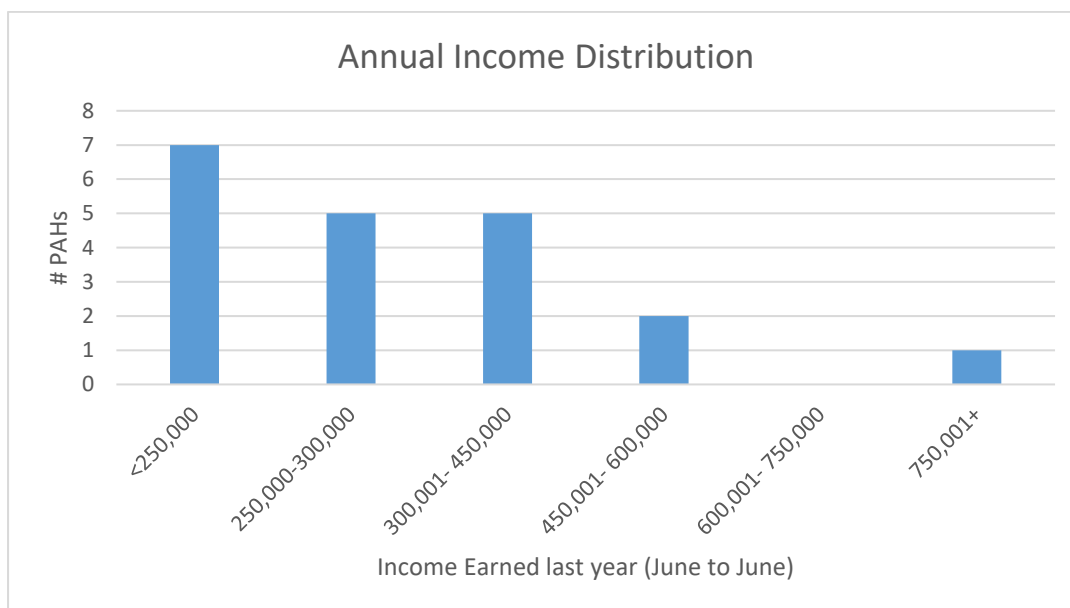
Figure 7: Reported income from questionnaire

When compared to the company's baseline survey were the average income disclosed in the downstream project area was 653,988 LEK, there is a significant difference.

The likely explanation for this difference could be one of three things: 1) PAHs were significantly underreported income 2) Economic circumstances in the area have declined significantly during the years since the baseline survey 3) The sample was not representative of the broader population surveyed during the baseline. As SHP has to date not conducted a

survey subsequent to the baseline from 2012 it is not possible to say with certainty which of the explanations is correct.

A key observation however is the fact that the relative importance on incomes sources is consistent between the baseline survey and my survey data. If the relative importance of income sources is accurately reported in both the baseline and the questionnaire it would indicate that the sample is reasonably representative.

In addition, if there had been a significant decline in the economic circumstances one would expect changes in importance of income sources as constant values such as pensions to start to account for a larger portion of the total due to the decline in more variable incomes such as remittance and agricultural products, which they don't. This would suggest the income values are being underreported in my questionnaire sample rather than the other two options.

Further indication of underreporting is evident based on individual survey responses. *Household 1* reported that it received income between 250,000-300,000 LEK which was from pensions alone. On the other hand, *Households 16 & 19* declared that they received less than 250,000 LEK whilst reporting four separate income sources. For *Household 16* these were agricultural, remittance, pensions and natural resources of which pensions was only the family's third most important source. Although pension levels can vary based on the PAHs individual circumstances, the reported differences between *Household 1* and *Household 16* seem unreasonable. When ask how they perceived the project had affected them *Household 1* answered very positive while *Household 16* perceived that the project has had a negative impact on them. The same profile of low reported income, negative perceived impact and multiple income source was also present in the data obtained from *Household 10.* This link between possible underreporting of income and negative perception of the project was however was limited to these two instances in the sample.

As was mentioned in the measurement error subsection the study's Key Informants did not believe that the Project Affected Households had a significant motive to deliberately underreport on their household income as the provision of livelihood support was not driven by the reported income number of individual households. However, households receive technical assistance throughout their participation in the livelihood restoration program. Thus a situation could be envisaged where PAHs were deliberately underreporting in order to get

additional advice for the company's agricultural experts. This behaviour would be directly linked to commensuration as households are able to exploit the differences in their underlying quality of life/ livelihood and the values actually reported to the company.

As the monitoring of livelihoods of PAHs is done based on collecting income data reported by the households, there is the potential that with the understanding of the measurement approach PAHs could game the system by reporting lower agricultural output or omitting income from other sources. Commensuration and resulting transformation of livelihoods into a single income metric does not adequately address the complexities associated with self-reporting especially in the context where PAHs are attempting to maximise their personal benefit from the project.

As has been seen in this subsection a portion of the interviewed population has showed signs for the potential of underreporting their annual income amounts. Although this cannot be confirmed base on the partial evidence obtained, it does support the claim that measurement uncertainty exists in the income metric adopted by SHP as these values are dependent on amounts disclosed by households. SHP does acknowledge this fact in its publicly available ESMP but it does not quantify the level of uncertainty present. In addition, the company has developed an income triangulation method whereby reported income values are assessed for reasonableness based on quantities reported by PAHs and a market price. The quantities reported are also then checked for reasonableness based on regional agricultural productivity data provided by GoA, but as we will see in the Simplification of Livelihoods subsection the income triangulation tool is not without uncertainty either.

 By transforming the qualities of a livelihood into the quantitative income metric reported by households there is a risk that income figures provided do not accurately reflect the economic situation of PAHs. Not having a complete and verifiable valuation of the livelihoods of households may impact the ability of SHP and other stakeholders to effectively evaluate the livelihood restoration program.

4.33 Demographic shift uncertainty

As part of the questionnaire provided to PAHs that took part in the interview process, demographic information was also collected (refer to Figure 8). In the sample 40% of household's had four family members while the rest of the sample was spread between two and seven members. Many of the households surveyed had three different generations under the same roof, while others had only one generation. Seven of the households surveyed has household heads over the age of 65 which increases the likelihood for significant changes to household demographics.
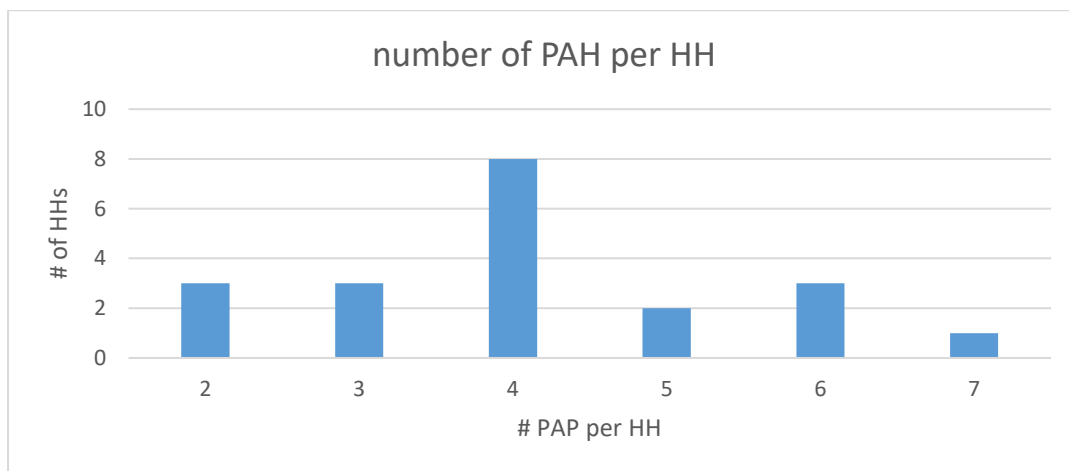

Figure 8: Household composition graph

When interviewed *Household 13* shared that one of its members had recently passed away, this had a significant impact on the family's livelihood as the household was dependent on pension payments, as its only other income source being agricultural production for its own consumption. In addition to the reduction in pension income, the family also faced labour difficulties as the remaining two members struggled to take on the additional work load.

In addition to births and deaths, household composition in rural Albania is dependent on migration trends. Many of the households surveyed had relatives working abroad and sending remittance home.

In addition, *Households 6, 12 and 16* reported that they had permanent household members that worked seasonally in Greece to provide extra income for the family. Many Albanians crossing the border into Greece for work do so illegally. For many families this is an important income source but is not without risks. The household head from *Household 6* reported that his son was currently incarcerated in Greece after being caught working illegally. This incident

has had an impact on the family's livelihood due to decreased remittance and reduced available labour during harvest time.

Other families including *Households 10 & 20* reported having family members with work visas abroad. The head of *Household 10* reported having a son currently working in the construction industry in Kazakhstan whose contract was set to expire in three months' time. The family was not optimistic about their son's future employment prospects as the project in Kazakhstan was approaching completion.

In summary discussions with questionnaire respondents suggested household composition are subject to change, often resulting in reduced/increased incomes and changes to families' expenditure patterns as households either expand or shrink. In discussions with SHP key informants, changes to household compositions are not reflected in the reported income metric used to evaluate project completion. In addition, as pensions represent a key source of livelihood for many of the families in the project affected area, and SHP has no direct control over the income generated from this source, there is a risk that the commensurate livelihood indicator is not reflective of the impacts of the livelihood restoration program.

SHP does not have the ability to directly affect key aspects of livelihoods such household size or pension receipts. By including them in the valuation of a household's livelihood SHP creates a situation whereby the outcome measure it is using to evaluate the success of its restoration program incorporates elements outside its control. The difficultly in evaluating livelihood in this context again comes back to the process of commensuration and SHPs ability to transform the realities of PAHs' livelihoods into a quantitative metric.

4.4 Simplification of Livelihoods

In this subsection I explain how commensuration is achieved through the application of calculation methods to simplify the initial characteristics of the PAHs' livelihoods. I start by looking at the income triangulation method. Before addressing the inflationary component in the livelihood target. Finally, I concluded the section by examining benefit sharing and changes in expenditure.

4.41 Triangulation income method

As was outlined in the livelihood uncertainty section the monitoring strategy of SHP attempts to mitigate the underreporting issue through triangulation of household reported production and price figures with independent data under the "inputted income" and "indirect" approaches. These approaches do however have their limitations in terms of accuracy.

The inputted income method uses the quantity reported by the household and multiplies it by a market price. With the reasoning being that households are less sensitive to disclosing and less forgetful in recalling quantities in comparison to revenue. Ultimately if a household was motivated to underreport then the inputted income method would not stop them as it is still reliant on self-reporting.

Where a lot of the uncertainly lies with this process is in relation to the price. SHP estimates a price for a given quantity of the agricultural product based on either regional prices or surveys at local markets. This data is provided on an interval basis either daily, weekly or potentially monthly. On the other hand, SHP plans to perform livelihood surveys either once every three months or once a year. It is unlikely, as discussed in the measurement error section, that households keep dated detailed records of sales quantities. Thus uncertainty arises as to which date to use because you can't match a given quantity with a daily price. The solution is the take an average price for the given period and multiply it by the quantity reported. By performing this calculation, characteristics of livelihoods are simplified and uncertainty is absorbed into the metric.

Other than the temporal price difference, the company also faces three other problems with price estimation. Firstly, the fact that the market price is not necessarily the price that producers receive at the farm gate, middle men also receive a cut. This cut is also not necessarily uniform either as it depends on the volumes traded and the interpersonal relationship between the two parties which can be hard to model.

Secondly the price assumes that the agricultural produce is the final product being sold and no additional value is being added by the farmer, which is not always the case. For instance, several of the grape growing households surveyed said that they used their grapes in the home distillation of Raki, a traditional spirit whose home production is illegal but widespread and generally unregulated. Raki was produced by households where it is generally consumed or given to friends or relatives as gifts. Thus valuing grapes in this context poses significant difficulties.

Finally, the inputted income method assumes that the quality of a given type of agricultural produce is uniform across the market, which is not the case. Levels of technology adoption, fertiliser and pesticide use and greenhouse infrastructure varies greatly from farm to farm meaning that there will be a natural deviation in the quality of goods and even if price elasticity is low, it will still translate into a difference in price for a kilo of give produce.

The indirect method also shares the same simplification assumptions and resulting uncertainty as it seeks to utilise an external price. In addition, it aims to model the quantity that the household produces. Thus eliminating the need to rely on the data reported by PAHs. To do this it uses data from the department of agriculture which outline yields for different crops in different regions of Albania. This report is known as the Statistical Yearbook. When discussing the yearbook, Key Informant 2 explained:

> "*The typical yearbook gives different values for different areas of Albania so we can differentiate between the mountainous areas, here, from the large plains in Elbasan. We cannot if there was a difference in {village A or village B}, that is too much.*" (Key informant 2)

These values again represent an average. Within a given valley or even a specific farm plot the yield per unit area can differ substantially. In addition, as the government data is not updated regularly any improvement in agricultural intensity for the affected households would not be factored in, meaning if this process alone was used it would not reflect the performance of the livelihood restoration program gains. This means that these approached are limited to sense checking data from the PAHs reported revenue numbers rather than replacing them.

4.42 Inflation Simplification

Within the ESMP SubsidiaryHydrooutlines the income targets that it sets for the restoration of livelihoods "*At least a 10% improvement on the average baseline value, plus annual inflation.*". Although the target of increasing incomes is non-binding given the IFC PS only requires restoration of livelihoods not improvements, targets need to be moving in order to reflect inflation. Determining the most relevant inflation rate has a large impact of the onerousness of income targets down the line. In the context of the project there are three

candidate choices for inflation rates. Firstly, just adopting the national CPI values. Secondly adopting a regional value which is likely to be more reflective of the growth in the region (see figure 9). Finally, the last approach would be for SHP to measure the inflation in the local area through regularly sampling the prices of goods at local shops.
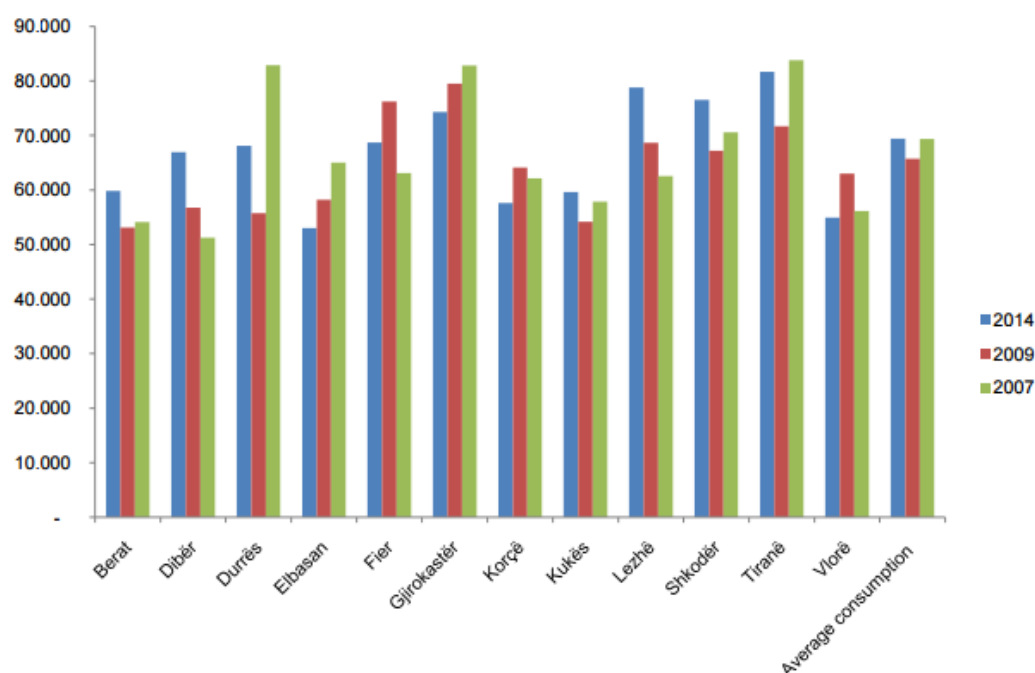

Figure 9: Albanian inflation figures. source INSTAT

Using the national average would be the easiest approach for SHP to adopt and just relies on the headline rate reported by the Albanian government statistics bureau. The regional rate could also be determined from government statistics as these provide sufficient disaggregation to reach the provincial level. Based on Figure 9 what can be seen is that consumption values for the project area appear to be deflating. This is not consistent with the rest of the Albanian's provinces which, on the whole have enjoyed modest growth in the same time period.

The third and final approach of collecting CPI data is using a local basket to track price changes on selected items over time. This approach is likely to provide the most accurate data (given a large enough sample size and the utilisation of robust survey techniques) on the real state of inflation in the project area but again there is significant costs for SHP unlike the other two options, so there is a trade-off. In addition, given that there is no specific guidance from the IFC on best practice inflation measurement methodology in relation to livelihoods this is an

area that has the potential to be manipulated by infrastructure project developers if the company's measurement approach is not transparent enough. At the time of key informant interviews SHP staff had not determined which of the approaches the project was going to take.

4.43 Benefit sharing and changes in expenditure

The complex nature of family run agribusinesses in Albania makes it sometimes difficult to attribute the benefits of a specific livelihood asset such as an animal or piece of machinery to a single household. In the interview with *Household 1,* who received an agricultural livelihood package from SHP, the respondent said that the goats received would be kept on a relative's grazing land and the income generated from the animals will be shared between the households.

This nuanced commercial relationship is unlikely to be captured in SHPs income metric as the livestock livelihood survey only records the quantity of dairy products produced, the amount of meat sold and the price. The survey would also not take into account the fact that a portion of the proceeds would be distributed to relatives for their contribution of either labour or grazing land instead of being retained by the asset owner.

This type of win-win scenario for farmers and their extended families may represent an efficient allocation of resources and a viable adaptation strategy for PAHs facing loss of agricultural land. For SHP however the complexities of these relationships are difficult to reconcile within their management control system as livelihoods are commensurated into a single income metric. There are several reasons for this: Firstly, in very practical terms the company would need to extend the length of its livelihood monitoring questionnaire to have the potential to capture the relevant data relating to the sharing of benefits between PAHs and other villagers. This would in turn increase the time and resources required for the LSD team to interview a given number of households. Leading to either a higher monitoring budget and lower overall profitability for the project or, a reduction in the benefits available to PAHs given the same restoration and monitoring budget. Ultimately there is a trade of between monitoring livelihoods and providing resources to restore them.

Secondly many of these benefit-sharing relationships fall within the scope of the informal economy where there is little in the way of a paper trail. The LSD team would be dependent on the self-reported data relating to these relationships which again carries risks associated with

participant recall, intentional misreporting and misunderstandings based on the new survey questions.

The last key issue relating to measuring and incorporating these benefit-sharing relationships into the company's management control system is that these relationships are generally not at arm's length. As such the price paid by the household for use the resources of these related third parties may not be at a determinable market price. This in turn makes it very difficult for SHP as the monitoring organisation to determine what the accurate net benefit figure for household is, as the price being paid to relatives could be either above or below the market price creating a situation where the PAHs livelihood is either being subsidised or subsidising that of the third party. In addition, as these relationships are likely to be quite heterogeneous the LSD team would need to individually review each relationship, which again could be quite time intensive.

This situation provides an illustrative example of how the realities of household livelihoods may not be accurately reflected in the income metric because an element of the PAHs livelihoods is excluded from the commensurative processes i.e the benefit sharing relationships. Conversely however, if these relationships were to be included the uncertainties and complexities underlying the measurement may also mean that the indicator is not reflective of the true nature of household livelihoods. No guidance is provided by the IFC PS on how to address this inherent contradiction, instead leaving decisions regarding livelihood measurement to the individual projects.

In addition to benefit sharing, the use of revenue as the metric for measuring livelihoods assumes that an increase in income directly increase the value of livelihood of the household. This is only the case however where the marginal increase in revenue exceeds the marginal increase in household expenditure required to generate that income. In other words, the household is no better off if it moves from 10$ to 20$ a day if its production cost increase from 3$ to 13$. The excess available to the household is still the same and thus the household has not benefited for the increase in household income.

In the initial household inventory surveys the expenditure level of PAHs were not recorded and as a result it will be difficult to assess the extent to which income grow over time has contributed to the increase in the value of household livelihoods. This is especially significant

given that many of the livelihood restoration strategies promoted by SHP involve the intensification of livelihoods, including: irrigation, farm machinery and higher value cash crops, which also potentially carry additional inputs and operating and maintenance costs.

4.5 Evaluation of Livelihood Restoration

In the previous findings subsections, I detailed how the process of commensuration acted on the underlying characteristics of PAHs' livelihoods to excluded information deemed to be irrelevant and incommensurable, mask underlying uncertainty and to simplify livelihoods under the income metric. In this section I examine how this process ultimately affects the evaluation of the sustainable restoration of livelihoods. The subsection will be broken into three parts: the first being evaluating livelihood restoration and the second being evaluating on non-income based metrics and the third being the sustainability element of the evaluation.

4.51 Livelihood Restoration Evaluation

As part of the company's compliance with the IFC standards it must demonstrate that the livelihoods of PAHs are restored to the pre-project baseline. The standards do not give a concrete set of criteria on what needs to be demonstrated to achieve restoration, but instead leave it to the company to justify the projects final outcomes. Based on a review of secondary data I knew that the company's target was the restoration of 70% of PAHs and this was confirmed by *Key Informant 1* adding that the target only included project affected people in the livelihood restoration program.

When queried as to the rationale behind the 70% figure *Key Informant 1* stated:

> *"It is taking the position that one hundred percent is not possible so it is a midway between one hundred and fifty. So that is an acceptable graduation rate, more positive than negative."*

Adding the importance of considering other projects in determining graduation rates:

> *"So looking at other projects and saying "what is reasonable and what is feasible?" and then establishes a target that is within reach."*

Before stressing that the Livelihood restoration team:

> *"Do not really work towards a seventy percent target they work towards a hundred percent target, but we know from experience that that is not possible. The IFC is more of a guideline."*

Key informant 2 shared a similar sentiment when asked about the overall restoration of livelihoods saying that:

> *"It will work out for most of the households but for sure there will be households where it doesn't."*

This approach of determining the tolerable level of livelihood restoration is not stated explicitly in either the IFC performance standards or their accompanying guidance notes. The view that a 100% graduation rate is not feasible reflects the fact that the commensuration process absorbs a degree of uncertainty into the metric and the 30% haircut in the graduation rate is how the organisation addressed this uncertainty. As a result of these events outside of the control of the project a portion of the PAHs may face events that lead to negative observed livelihood outcomes (for example the death of a family member). In the view of practitioners, a portion of affected people will not be measured as having their incomes fully restored based on the income metric, but as long as the majority is observed to benefit from the restoration process this outcome can be deemed as acceptable.

Interested in finding out more I asked if *Key Informant 1* would be in favour of more explicit requirements in the standards or valued the flexibility in its current form, to which they went on to explain:

> *"IFC is created so that you can manage this in terms of the individual project. Because it is used by everybody all over the world, it can't just be… "ok you require". IFC also doesn't tell you what severely impacted is, it is up to the project and the IFC person, if you have IFC money."*

If the project is not a client of the International Financial Corporation then the organisation does not provide specific guidance or consultation in the interpretation of performance standards, as such companies that choose to voluntarily adopt the standards are free to individually define the extent of livelihood restoration.

4.52 Non income Metrics

In addition to the assessment of livelihoods through the income metric that has been discussed extensively throughout this paper SHP also commits to bettering the lives of PAHs in other ways. The figures below presents the list of the non-income indicators from the company's ESMP. Some of the key indicators relate to health, education, sanitation and access to water. What SHP is hoping with the provision of these resources and services is that they will ultimately increase the income and by extension the livelihoods of PAHs.

Desired Outcomes	Outcome Indicators Used to Measure Performance	Baseline	Target
Employment during project implementation period	• Number of local people hired by ___, contactors and other parties during construction	0	P is not responsible for direct employment from the construction of the various HPPs but this employment generated will be measured to assist in the assessment of the overall project contribution to the local economy.
Livelihood improvements and intensification for PAHs	• Number of new hectares under production by PAHs (irrigated and non-irrigated areas)	0	30 hectares
	• Number of greenhouses established	8	24 greenhouses or other production intensification farming structures provided through the LSD
	• Number of small business activities supported (in kind)	N/A	20 small businesses started/assisted over a 5 year period.
	• Amount of income/consumption derived from ___ supported (agricultural) livelihood initiatives.	Average Agricultural Income 226,003ALL	10% increase
Improved environmental conditions in the ___	• Number of households using communal land fill	0	10 villages
	• Number of households connected with sewage network	< 50% of total HHs	70% of total HHs
	• Number and types of trees planted within the required re-forestation area (1,421 ha).	N/A	To be defined as per GoA requirements

Table 1: Outcomes, performance indicators and targets

DHP Desired Outcomes	Outcome Indicators Used to Measure Performance	Baseline	Target
		remittances) is 260,315 ALL	
PAHs have improved access to markets and services	• Number of village with all-weather road access to villages or improved road conditions	27 villages	30% with improved road access
PAHs have improved health conditions	• Access to health care (operational health facilities or regular visits by health professionals)	14 Health Centers / 1 Hospital	Improved access to village HC or ⬛⬛⬛ Hospital for 80% of project villages.
	• Support for participation in training programs for health center staff and attendance of these programs	14 Health Centers	20 attendees
	• Upgrading and improving health facilities with required equipment	14 Health Centers	Provision of basic equipment to each of the health centers.
PAHs have better access to water	• Number of Households with domestic water supply directly to the house.	N/A	100% of Resettlement / Relocation houses built.
PAHs have improved sanitation	• Number of HHs with functioning indoor latrines	N/A	100% of Resettlement / Relocation houses built.
PAHs have improved education	• Number of children attending secondary schools in the Project Area.	N/A	monitoring trends in attendance/enrolment levels
	• Number of training programs for teachers and attendance of these programs	N/A	20 attendees
	• Items of equipment provided to primary and secondary schools	N/A	100% of school in the Project area received equipment package as decided by ⬛⬛⬛
	• Number of project affected pupils/students benefiting from education support programs (including training)	N/A	30 (from 2013-2019)

Table 3:Non-Income indicators (ESMP)

In the context of the IFC Performance Standards, where the interpretation is linked directly to livelihoods, these non-income-related indicators are thought of as fundamentally incommensurable with the purely income based metric. For instance, if the project was consistently failing to meet its livelihood restoration targets but was providing excellent education to children in the project area, could the positive educational performance be netted off against the poor income result? The answer is clearly no. The IFC PS's fixation on the income metric has the potential of negatively affecting the adoption of other philanthropic and development projects as this is not the most efficient way to maximise the household income in the short term and achieve livelihood restoration.

In addition to the review of the company's non-income related in metrics I also incorporated several questions into the PAH questionnaire to gauge the households' perception of SubsidiaryHydro and the impacts of the project implemented subsequent to the commencement of development.

PAHs were asked to outline to how they felt the Project had impacted them at its current stage of implementation. As was noted earlier in the limitation section of this paper the fact that the Albanian translator was a representative of SHP may have impacted the responses given by survey respondents, but with that in mind the results are as follows:
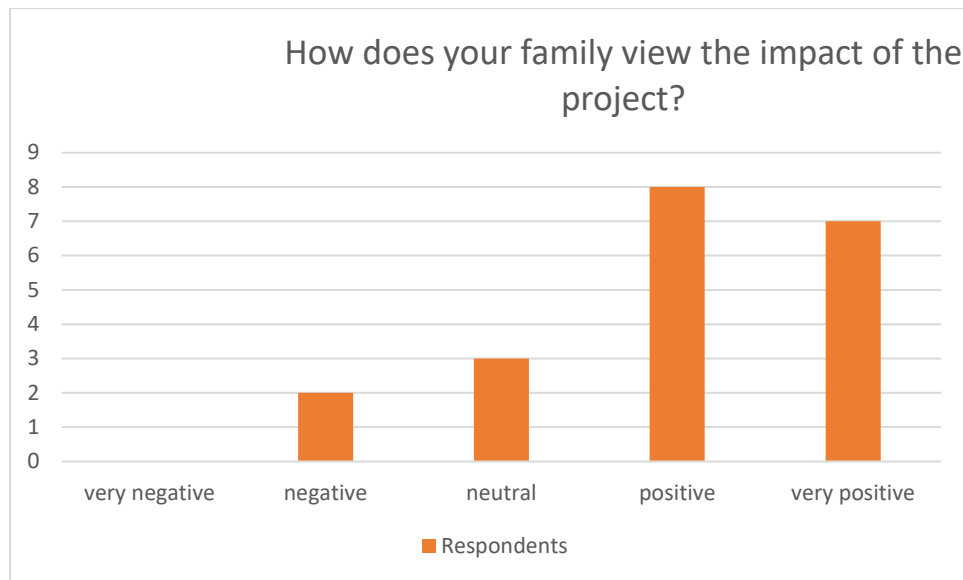

Figure 10: PAHs perception of benefits

The households who answered that they believed that the project had impacted them negatively (HH10 &16) explained this by saying that they were not satisfied with the level of investment by SHP in infrastructure, especially in irrigation. They also voiced concerns that the cash funds that they received from the GoA had undervalued their land. On a whole however the majority of respondents saw the benefits of the project as being either positive or very positive. Many of the Households interviewed were satisfied with communication from SHP, more so than with the communication that they had received from the GoA. It should be noted that this perception of the company may have differed considerably for households that had not received compensation from SHP or livelihood assistance.
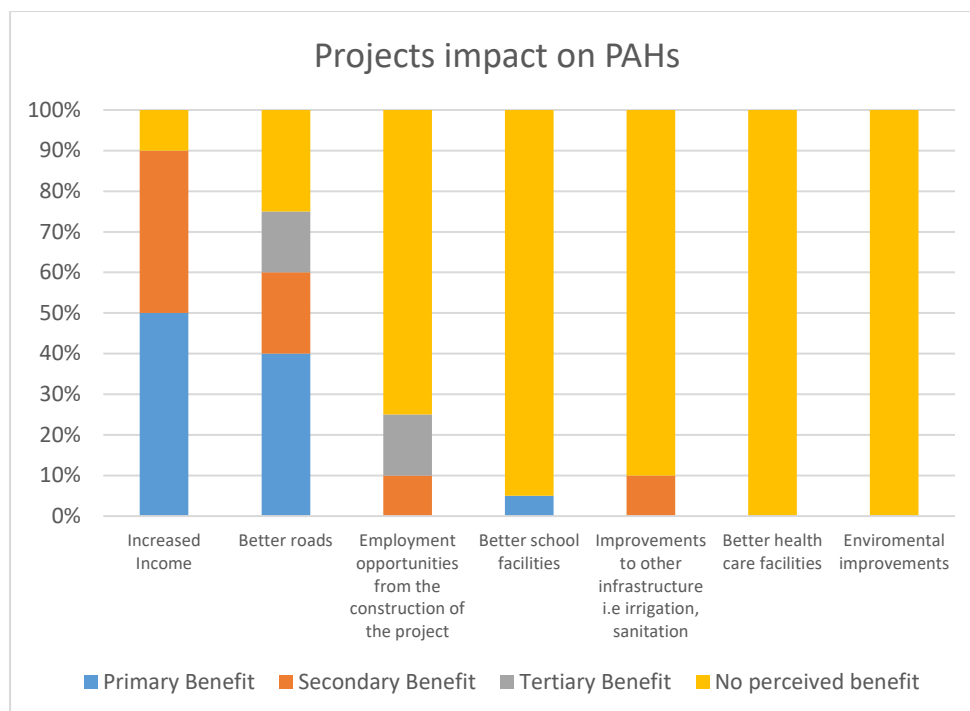
Figure 11:Project benefits graph

Although the majority of respondents were positive to the impacts of the project, these benefits were concentrated around the provision of employment opportunities with few respondents seeing any measurable change to social aspects such as health, education. Many PAHs saw large benefits from better roads. For the West bank 75% of respondents described better road infrastructure as the primary benefit of the project a significant difference when compared to the total sample figure of 40%. The construction of the bridge over the river at the adjacent town was an important part of the improvements which allowed *Households 14 and 18* the opportunity to sell excess diary produce in town and provided a job for a member of *Household 19* who drives the bus on the newly established route.

The road improvements have also increase PAHs access to healthcare services with an elderly member of *Household 17* sharing that before the bridge sick villagers were pushed by wheelbarrow over the footbridge to the hospital in the town. Villages on the East side of the river and in the town tended to see the economic benefits of the project as being more important relative to other potential benefits.

In focusing only on the income metric the IFC and project developers risk losing benefits that are may not be so evident at first glance. The new roads have had significant affected on the

livelihoods of people on the west bank of the river, increasing their access to markets, healthcare, education and a more engaging social life in the town.

4.53 Sustainability Evaluation

One of the other key elements of the Performance Standards are that the restoration of PAHs' livelihoods needs to be done in a sustainable way. Again this term is no explicitly defined in the standards or guidance notes meaning voluntary adopters are free to define sustainable in their own terms.

> *"Basically our definition of sustainable livelihoods is that at least two years in a row our PAHs (Project Affected Households) have to have an income higher than… at least the same or higher than the baseline that we have." (Key informant 2)*

Once livelihoods are restored to pre-project levels many projects continue their monitoring programs in order to demonstrate that livelihoods are sustained above this level. The length of post restoration monitoring differs from project to project. *Key informant 1* said that they had been involving in projects where monitoring had continued for five years subsequent to restoration. The decision to limit the monitoring in SHP to two years was based on management's assessment of the projects social impacts, which were deemed to be relatively low compared to other hydropower development projects. Obviously the company does not make this decision in complete isolation. At the Social and Environmental Impact assessment stage external consultants were engaged to perform the initial assessment and if significant risks were identified then the completion procedures may have been different.

When asked why the company limits monitoring to two years *Key respondent 2* said:

> *"I think we could monitor over a longer period but for a private company that is a financial issue. But I think that the most important step now is that our input side has been designed in a way that supports sustainable livelihoods."*

On some levels this seems reasonable as the longer monitoring needs to be conducted the larger the company's CSR budget needs to be, but on the other hand the company runs the risk that

restoration is not sustainable as potential declines in agricultural yields, depletion of natural resources and availability of local jobs may be lagged by longer than one social economic survey. The IFC does however ask projects to consider the need for an external panel of experts to evaluate the sustainable restoration of livelihoods as part of project completion measures. HyrdoCo's position currently is that a panel of experts will not be necessary given the low social and environmental impacts at the downstream project site. This assessment is made based on a benchmark with previous project experiences and the input of external stakeholder such as consultants and NGOs.

In discussing the project's approach to sustainability *Key informant 2* said:

> "*We go at it from two different angles. On the one hand a very simple approach on the output side of things we say, ok we meet [targets] for two years and that we consider as a sustainable level and then we say we got you up to that and now it is your turn…. what I think we should try to do is that from the input side it is set up in a way that is designed to achieve sustainability.*"

In building sustainability into the input side, the company provides livelihood packages as a once off event and limits the inputs such as fertiliser and fodder. This in turn provides households the opportunity to increase in income levels organically and thus achieved the livelihood objectives without the company propping up income growth, which reduces the risk of a significant drop in incomes subsequent to the ending of the restoration program.

In a sense the company is again using the process of commensuration, this time to transform the concept of sustainability into an indicator over a period of time. SHP's interpretation of what sustainable is and their choice to measure it in terms of income may differ from the definition help by other stakeholders. This could create a tension between stakeholders' views on the evaluation of the effectiveness of livelihood restoration for the Project Affected People.

5.0 Discussions

In this chapter I examine the key findings presented in the previous section in the context of existing academic literature. The chapter comprises of four parts. The first subsections discussing the study's finding in relation commensuration as a social process. The second

discusses the findings in the context of the IFC performance standards. The third discusses the how voluntary adoption changes the accountability in livelihood restoration. Finally, the chapter concludes with a discussion of the studies scope and limitations.

5.1 Commensuration

This study analysed how the process of commensuration works to transform the diverse characteristics of PAHs' livelihoods into a common income metric. Overall the findings supported earlier studies on commensuration. Although different commensurative processes, similarities with Espeland & Saunder (2007) and Samiolo (2012) were observed in the way information was excluded, simplified and uncertainty was masked.

Similar to Espeland (1993) which analysed commensuration in the context of impact assessment at the planning phase of a new hydropower project, this study identified difficulties in commensurating aspects of PAHs' livelihood that did not fit neatly into the income assessment metric. As a result, these incommensurable items were either excluded completely from the company's monitoring activities (example: social and relationship capital) or included in monitoring but only under the company's auxiliary performance indicators (example: access to healthcare or literacy rates).

In addition, to the exclusion of incommensurable aspects of PAHs' livelihoods this paper also found that there was a number of households directly affected by the project that were also deemed incommensurable or irrelevant when compared to the broader PAH population included in monitoring. Households were deemed irrelevant if they fell outside of the scope of the livelihood restoration program. These exclusions were justified based on the fact these households would be unlikely to provide survey data and were not deemed to be the responsibility of the project subsequent to them receiving compensation and resettlement.

In documenting the uncertainty associated with the income measurement of PAHs' livelihoods, many of the findings supported the existing development literature in the area. From the household questionnaire and key informant interviews I found indications of underreporting of incomes similar to that discussed in Heemskerk (2005). In addition, through interviews with Project Affected Households I identified that the lack of formal record keeping relating to farm produce in the area. Through key informant interviews concern around the PAHs' recall

abilities was identified, which was consistent with the problems identified in Deaton (2001) and Falkingham (1999).

Several other key uncertainties were identified in the measurement of PAHs' livelihoods. Based on key informant interviews and interviews with households the issue of system boundaries and household unit boundaries were identified. This supported the findings presented in Fields (1994) which found defining these aspects was important in collecting income/ consumption data. In addition, the monitoring approach adopted by SHP did not address other key uncertainties such as shifting demographics and determining inflation. These measurement problems were not discussed explicitly in the existing academic literature review.

Within the findings section, analysis was done outlining the livelihood measurement related uncertainties observed and the nature of uncertainties that had been reported in publicly available project documents of SHP. This analysis noted that many of these uncertainties were not discussed, with the exception being income underreporting. This finding is in line with other commensuration literature including Espeland & Saunder (2007) and Bermiss, Zajac, & King, (2013) who argue that often the credibility of a metric is contingent of absorption of some of the underlying uncertainty.

From observations and interview data I found key informants dealt with this uncertainty and the resulting difficulties affecting the evaluation of their results by utilising internal benchmarking and project experience as well as seeking validation for their management control systems via consultation with other industry actors. This convergence and collaborative establishment of industry standards and norms, to increase credibility and deal with uncertainty, is something that has not been documented in commensuration literature to date and represents a contribution of this paper to the existing literature.

Before concluding this subsection on commensuration, I will discuss three important measurement themes how based on the findings they have significant impact on the valuation and evaluation of PAH livelihoods. Through discussions with Key Informants it was noted that a number of the Project Affected People were excluded from the livelihood monitoring population (for details refer to figure 5). This information is not stated explicitly with in the company's ESMP and the information regarding the number of people affected by the project and not included in monitoring is not readily available. As these PAHs do not receive or are

not entitled to participate in the livelihood restoration program offered by SHP it is likely that they will be disadvantaged relative to the PAHs that are involved. By not measuring the livelihoods of this group who is likely to be worse off, SHP is essentially underestimating the project's social impacts. The company does however go to great length to include households in the program, however as the program is voluntary in nature it cannot force affected people to take part. Without the cooperation of PAHs, monitoring the projects impacts on the livelihoods of these specific households cannot continue.

In documenting the uncertainty underlying the income metric it was surprising to see the magnitude of pension reliance for the majority of households. In addition, as pension and other non-farm income data are not recorded at a disaggregated level SHP cannot determine the extent to which its non-farm livelihood programs are restoring livelihood because the metric includes pension income which fluctuates according to deaths and people reaching the pension age. These changes in demographics can have a significant impact on the income generated by a family and as the pension income is completely out of the control of SHP it has the potential to impact the restoration indicator.

Finaly, in light of the significant uncertainty in the income reported by PAHs there is no guidance with in the IFC PS addressing the income restoration target. If this amount is not reachable due to deliberate underreporting or extenuating circumstances outside the project developer's control what is the process or recourse available to developers and PAHs. In the case study SHP's solution was to reduce the target to 70% of PAHs giving them a buffer, but this amount seems very arbitrary and does not address the issue of systematic underreporting which could lead to great than 30% of PAH not reaching income targets.

5.2 IFC Performance Standards

A key aspect of this study was documenting how SHP applied the performance standards, specifically IFC PS 5 in the context of the downstream Project. As there is limited case study literature addressing the practical application of the standards, this study sheds light on the interplay between what is written in the Performance Standards and what is actually done or planned to be done by the project developer. The study went further in looking into this relationship specifically in the narrower context of the of a voluntary adaptor of the standards.

The IFC PS require that the company restore the livelihoods of the PAHs to pre-project levels and advocates the use of household income as the appropriate metric for the measurement of this objective. In SHP's actual monitoring plan, several of the elements of PAHs' livelihoods have been excluded at the discretion of the company.

In addition, a number of Affected Households were excluded from the restoration targets of the company. IFC doesn't provide specific guidance on this issue so through discussions with Key Informants it was determined that these decisions were taken internally, but the industry norms and approaches adopted on other projects had a large impact on determining the reasonableness of SHP's individual approach.

The view that the IFC Standards are more of a set of guidelines than a set of requirements resurfaced in many other areas of SHP's livelihood restoration and monitoring plan. The company set the restoration target at 70% of PAHs involved in the livelihood program. Key Informants argued that a 70% graduation rate was acceptable as measuring and verifying a 100% restoration of livelihoods was deemed to be unfeasible based on the realities of the project.

This observation is significant as it provides insight into the interplay between the underlying uncertainties in the livelihoods of PAHs, the measurement of household income and the restoration target. The income indicator is a metric for household livelihoods, but livelihoods are more than just what is presented in the income indicator. Through the process of commensuration some of these qualities have been excluded, simplified and some of the uncertainty has been absorbed. This creates the situation where the company restoration initiatives are not the only driver for income of households and as such the company is unable to commit to a restoration of 100% of PAHs' livelihoods to pre-project levels.

SHP communicates publicly the view that there is uncertainty within the measurement process and that external factors may impact the success of its livelihood restoration program as measured by the household income outcome indicator. In providing this information to the public it stresses that SHP may not be able to demonstrate full restoration of all households in the monitoring program, but this doesn't mean that the PAHs aren't better off then prior to the

project, just that the outcome measure and the process of commensuration are not sufficient to demonstrate full restoration.

Based on Key Informant interviews it was noted that SHP planned to implement income triangulation as an additional tool to deal with the difficulties in evaluating the restoration of PAHs' livelihoods. Although the metric used under this method is still income the idea is that the measurement uncertainty can be minimised through relying on independent third party information as the basis for the income calculation.

In terms of sustainability and the IFC PS the company uses a similar approach of adopting industry norms in the assessment of the need for an external completion audit and the determining the definition of sustainability. The company has defined sustainable as the achievement of income targets for two consecutive periods this is a far cry from the robust and intergenerational sustainability advocated in sustainable development literature and by the Bruntland Commission. Under the situation where the IFC PS is a set of guidelines rather than a set of requirements, companies if not required, may opt for the less costly option if it still allows them to stay compliant and receive the associated CSR benefits.

5.3 Voluntary adoption and accountability

This study's findings on HyrdoCo/ SHP's motivation for voluntarily adopting the IFC PS supported the academic literature of Lynes & Andrachuk (2008) and Sparkes (2014) which related more generally to CSR. With Key Informants indicating that license to operate, being a good corporate citizen and long-term strategy were all key drives for the firm adoption of the IFC PS. In addition as a Norwegian company operating abroad there is a strong societal expectation for responsible business practices, a claim that is supported by formal expectations for CSR published by the Norwegian legislative branch of government.

A key element to being a good corporate citizen is being accountable to stakeholders and civil society. The voluntary adoption of IFC PS gives SHP a mechanism to hold itself to account. Porter (1995) argues that indicators have the ability to facilitate accountability and give authority to the claims of the users. Merry (2013) notes however that the metrics mirror power imbalances as the creators of indicators are usually the entities with the power in a given relationship. Based on the data collected in the case of SHP there appears to be a degree of

information asymmetry between the company and the PAHs as well as limited transparency to the design of indicators and monitoring information within the company's publicly available documents.

On the surface of it the income metric advocated by the IFC PS appears to be impartial and voluntary adoption would mean a strong commitment to minimising the social impact of large infrastructure projects. Based however on the finding presented earlier, as SHP treats the IFC PS as guidelines and has the control over a significant number of variables and discretion over including or excluding different income sources. The company has the opportunity to frame results in accordance with its own agenda.

To be very clear there was no indication of any of these practices at SHP. The complex nature of livelihoods and the process of commensuration into an income metric however, gives rise to the potential for companies to practice social greenwashing and overstate the restoration of livelihoods. Though manipulating the underlying assumption and inputs of livelihood calculation the company might overstate the impacts of its livelihood restoration program. It is thus very important for voluntary adopters to be transparent on the assumptions and inputs utilised in the calculation of livelihoods and clearly communicate why a given target is deemed appropriate.

5.4 Scope and Limitations

An important part of conducting research is identifying and communicating the limitations of the study (Yin 2013, Flyvbjerg, 2006). I believe that the main limitations in this thesis are generalisability, Time dependency and language and access constraints.

As this study utilises a case study design and focuses in depth on a single case the findings based on data collected may not be readily applicable in a broader context. As no two hydropower project or involuntary displacement cases are the same there is a possibility that the effects of commensuration on the measurement of livelihood restoration found in this study may not apply elsewhere. However, finding on the effects of commensuration in this study at SubsidiaryHydro are consistent with findings of earlier studies such as Espeland & Stevens

(1998), suggesting there may be grounds to argue generalisabilty. Subsequent research would have to be undertaken to determine the relevance of findings in other contexts.

As the majority of data collected, is primary data i.e interviews, field notes and questionnaires it is time dependent and represents a static picture of the phenomenon under examination. Fieldwork conducted at a different time in the project lifecycle may have resulted in different observations and thus potentially different results and conclusions being drawn. Given the time and context dependent nature of observations it is unlikely that the study's findings will not be independently reproducible, with this in mind I have attempted to clearly present the methodology I adopted in this study and to demonstrate the accuracy of findings.

In addition, the study was limited on my dependency on project staff members providing me full access to information, documents and households. As there is little publically available information on the company's internal documents, and the identity of project affected households there is the potential for a biased or incomplete view being conveyed by subjects. I dealt with the information asymmetry by being critical of information provided by the company and where possible triangulating observations and data from multiple sources.

6.0 Conclusion

In this paper I addressed the research question of how commensuration affects the evaluation of sustainable livelihood restoration for IFC Performance Standards voluntary adopters. I found evidence indicating that through the process of commensuration the qualities of PAHs' livelihoods were transformed into an income indicator consistent with the guidance of the IFC PS. This process however requires the simplification of livelihoods and the exclusion of supposedly incommensurable ad irrelevant aspects of those livelihoods.

The process also absorbed a degree of uncertainty into the income metric and masked the underlying assumptions made by the project developer. Through a series of qualitative interviews with Key Informants and Project Affected Households, as well the utilisation of other mixed research methods I was able to get an understanding of the complexities of household livelihoods in the project area and build a picture of the key uncertainties in the measurement of livelihoods.

Subsequently interviews were conducted with key project staff members to understand the monitoring indicators and the proposed income targets. I found that in order to address the ambiguity and uncertainty posed in the IFC PS, management relied on industry norms and experience from other projects in in establishing realistic targets for livelihood restoration.

Despite this approach the need for self-reporting and the absence of formal bookkeeping by PAHs meant that obtaining accurate income data will be potentially difficult for the monitoring team. On the other hand, as a voluntary adopter the case study subject can determine what elements of PAHs' livelihoods are to be included in the income indicator and given the level of information asymmetry there could foreseeably be a risk that livelihoods were not accurately represented. Thus transparent reporting on a calculative device's underlying assumptions and data is key in addressing the potential evaluation issues arising from the process of commensuration.

6.1 Contribution to knowledge

This study had potentially several contributions to the existing body of academic literature. Firstly, as a detailed case study on the topic of commensuration it adds to the literature by examining the social process of commensuration in a new context, namely that of measuring livelihoods, the study found parallels with earlier works on commensuration in the way the underlying qualities of livelihood were transformed into the income metric.

Secondly the paper contributes to the existing literature, in detailing the specific implications for companies promoting sustainability and corporate social responsibility via the voluntary adoption of the International Financial Corporation's Performance Standards on the measurement and evaluation of livelihoods based on a deeper understanding of underlying uncertainty in the data.

6.2 Future Research

The study points to several possible future research directions. Firstly as this study only focused on the company's practices surrounding livelihood restoration, further research could look at other areas of the project's Sustainability control system and to see if simular measurement and monitoring challenges exist in compliance with other aspects of the IFCs but also HyrdoCo's other CSR commitments such as Un Global Compact or GRI. The study could also be extended

to analysis the Sustainability Control system and its use in compliance with the company's concession agreement with the government of Albania.

The second clear direction for future academic research that results from this study is the investigation of commensuration in the measurement of livelihoods within the asset based measurement approach. As discussed in the literature review the IFC PS income metric is not the only way to measure livelihoods. In recently years, development scholars have theorised and tested different frameworks and approaches to the measurement of livelihoods, amongst them the asset based approach. A logical extension of this study would be to investigate how the commensuration impact the measurement of livelihoods in these different approaches and compare the results to this papers findings on commensuration in the income metric context.

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8. Appendices

Appendix 1: Interview Guide Key Informants

Interview Guide

NHH

Devoll Hydropower staff interview series

Interviewee Name:
Gender:
Age:
Job title:
Interviewer: Date: Location:

- Overview of my research

- How would you describe your job responsibilities?

- How does your work relate to the resettlement and monitoring activities of the organisation?

- In your opinion, what should the main goals of resettlement and livelihood restoration be for this project?

- Discussion of data collection processes and practices in the following areas:

  - Income
  - Health and Education
  - Infrastructure
  - Livelihood restoration measures

- Other key measurement practices?
- Can you recommend a colleague that would be interested in being interviewed

Appendix 2: Household profiles

The section will provide a brief background for each of the families involved in the questionnaire, this will provide context for the rest of the findings in this subsection. The profiles have been kept deliberately general in nature as to keep the identity of respondents anonymous.

Figure 12: Visiting a Household for interviews in the village adjacent to the project

Household one

The household lives in the town and comprises of three permanent members, with additional members living abroad. The family is heavily dependent on a state pension however received a livestock livelihoods package from SHP for agricultural land lost. The household head is male and in his 50s and was the respondent. The interview took place at an alfresco café in town.

Household two

The household lives on the east bank of the river, it has a mixed livelihood including the harvest of medicinal herbs. It has been the beneficiary of a new house provided by SHP. The household has three permanent members and the survey respondent was a male in his 50s who was also the household head.

Household three

The household consists of four permanent members and, with the household head being male and in his 60s. Both the HH head and his wife were present for the interview which took place on their veranda. The household lost significant agricultural land as a result of inundation however was compensated with an agricultural intensification package including grapes vines and machinery. The HH is located on the east bank.

Household four

The household is located on the east of the river, has seven members. The HH head is in his 60s and the family is heavily dependent on agriculture for their livelihood. The family received

a livelihood package including a greenhouse and grapevine seedlings. The interview took place at the village restraint overlooking the family's vineyard.

Household five

Located on the east bank of the river, the HH is comprised of six permanent members with the household head being in his 30s. Both he and his wife were present for the interview in their front courtyard. The HH has a mixed livelihood and waiting to receive an agricultural livelihood package including a greenhouse.

Household six

The Household is located in the town with the HH head being a man in his 70s. The HH has five permanent members. They were resettled and received a new house and a livelihood package from SHP. The interview took place in the sitting area outside a local deli in town.

Household seven

The household has four permanent members. It is headed by a man in his 50s, who participated in the interview on his veranda with his wife also present. They live on the west bank and have a mixed livelihood including the collection of firewood.

Household eight

At the interview the household head who is in his 70s was present as well as his son who was in his 30s. The family had four permanent members. The family live on the west bank and have a mixed livelihood including off-farm wages. They are eligible for an agricultural livelihood package however to date it has not been received. The interview was conducted on the couch in the family's living room.

Household nine

The household has six permanent members and is headed by a man in his 50s, his wife was also present during the interview which took place in the sitting room of their large house overlooking the river. The family received an agricultural livelihood package including inputs for a lavender crop and a pump irrigation system. The family has a mix livelihood with a member being employed as a civil servant in the local municipality. The residence is located on the west bank of the river.

Household ten

The HH has five permanent members with eh household head being in his 70s. The residence was located on the east bank and is heavily dependent on remittance to support their livelihood. The HH has received grapevines as an agricultural livelihood package. The HH has lost significant land under use as a result of inundation. We met the respondent at the village's small deli.

Household eleven

The survey respondent was in his 60s, we met him a local restaurant down the road from his property. HH has four permanent members and is located on the east bank. The HH has a mixed livelihood including significant remittance. The HH has been a recipient an agricultural livelihood support package.

Household twelve

The Household has three permanent members. The HH head was a female in her 50s and was the respondent to the survey. The interview took place in her courtyard. The HH has a mixed livelihood and including the collection of medicinal herbs, agriculture and remittance. The residence is on the left bank and the family lost grazing land to inundation. They were compensated with an additional livestock and an agriculture package.

Household thirteen

The household has two permanent members is headed by a female in her 60s. The residence is located on the east bank of the river and the family's grazing land is some distance away, the interview was conducted on the veranda of the family residence with a small white dog also present. The HH is heavily dependent on pensions. The family lost access to grazing land under use to inundation and received additional livestock and bee hives as compensation. In addition, the family also had a large vegetable garden for consumption.

Household fourteen

The household comprises of four permeant members and the HH head is in his 70s, his wife and two teenage were also present during the interview which took place on their veranda. The residence is located on the west bank of the river. The family a mixed livelihood including off farm income. The family has lost grazing land as received a dairy cow as and hay as part of a livelihood package.

Household fifteen

The family is located in the town. The HH head is in his 40s. The family of four lost access to grazing land to inundation and were provided beehives to help restore their livelihood. The family also relied on the collection of medicinal herbs as an important livelihood strategy. The interview was conducted under a tree near the family's bee hives.

Household sixteen

 The HH is located on the east bank has six permanent members. The HH head is in his 40s and took part in the interview which took place on his grazing land with his goats. The family is heavily dependent on seasonal remittance and lost agricultural land to inundation. The HH received a livestock package of goats to restore their livelihoods.

Household seventeen

The HH head is in his late 70s and lives together with his wife. They live on the west bank and lost agricultural land to roadworks. The couple have received grape vines as a livelihood restoration package. Both were present for the interview which took place in shade of their garden.

Household eighteen

The family of four reside on the west side of the river and depend heavily on livestock for their livelihood. The HH head is in his 50s and hosted us on his veranda. The family produces milk and cheese and received a livestock restoration package with addition dairy cows and feed for their lost grazing land.

Household nineteen

HH has just two permanent members. The HH head is in her 40s and her son was also present during the interview which took place in the family's kitchen. The family has a son who works as a subcontractor for the roads project and they receive remittance as a part of their livelihoods. The residence is located on the west side of the river. The family received grape vines as their livelihood restoration package for loss of agricultural land. The family also keeps livestock.

Household twenty

The household has four members and is located on the west bank of the river. The HH head is in his 70s and his wife was also present during the interview which was conducted on their veranda overlooking their vineyard. The family has a son working in Norway and receive a large remittance relative to their other sources of income. The family lost agricultural land to inundation and have received a livelihood package consisting of grape vines and agricultural inputs to complement their existing vineyard.

Appendix 3: PAH questionnaire English

Project Affected People Questionnaire

1. How many people currently live in your household?

2. Which village/ region do you live in?

3. What is the age of the household head?

4. What was your household income last year (LEK)?

○ < 300,000

○ 300,001- 450,000

○ 450,001- 600,000

○ 600,001- 750,000

○ 750,001+

5. Rank the importance of the following sources of income (1= most important, 6=least important)

	Agricultural
	Off- farm wages
	Remittances
	Natural Resources (fishing, forestry ect.)
	Pensions
	Other income source

6. Do you have the following?

	Yes	No
A bank savings account	○	○
Loans with a bank/ financial institution	○	○
A credit/ debit card	○	○
Mobile phone	○	○
Smart phone or computer	○	○
Access to the Internet	○	○
A car	○	○

7. How do you usually collect income for the following sources?

	Cash in hand	Bank Deposit	Goods/ Services in kind	I do not receive income from this source
Sale of agricultural products	○	○	○	○
Off-farm wages	○	○	○	○
Remittances	○	○	○	○
Natural Resources	○	○	○	○
Pensions	○	○	○	○

8. How do you feel about the Hydropower project?

	Very Negative	Negative	Neutral	Positive	Very Positive
I am:	○	○	○	○	○

9. Which of the following project benefits are most important to your family? (1= most important, 5=least important)

	Increased income
	Employment opportunities from the construction of the project
	Better school facilities
	Better roads
	Better health care facilities

10. Additional Comments

Appendix 4: Consent Statement & form English

Consent statement for PAH questionnaire

Dear questionnaire respondent,

Thank you for agreeing to participate in this survey.

The survey is part of a broader research project to understand the measurement of livelihood restoration in the ▮▮▮▮▮▮▮▮▮▮▮▮▮. The research is being done **independent of** ▮▮▮▮**Hydropower Sh.A** and your **participation is voluntary**.

The information provided by you in this questionnaire will be used for research purposes. It will not be used in a manner that would allow identification of your individual responses. All data collected will be used and stored in accordance with Albanian Law on "Protection of Personal Data".

Anonymised research data may be published in summary form as part of a Master's thesis or similar academic research paper.

Regards,

Lindsay Peter Ellis
Norwegian School of Economics
+355 69 525 2915
lindsay.ellis@student.nhh.no

I would like to thank you very much for considering completing this questionnaire, I appreciate and value your input.

Please ensure that you follow the instructions carefully:
This questionnaire should only be completed by you and no-one else

CONSENT FORM
Please initial each box

I confirm that I have read and understood the information sheet for this study. I have had the opportunity to consider the information. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason.

.... ☐

I agree to take part in this study

.... ☐

Your name:

Date:

Your signature:

Appendix 5: Non income project indicators

▢' Desired Outcomes	Outcome Indicators Used to Measure Performance	Baseline	Target
Employment during project implementation period	• Number of local people hired by ▢, contactors and other parties during construction	0	▢ is not responsible for direct employment from the construction of the various HPPs but this employment generated will be measured to assist in the assessment of the overall project contribution to the local economy.
Livelihood improvements and intensification for PAHs	• Number of new hectares under production by PAHs (irrigated and non-irrigated areas)	0	30 hectares
	• Number of greenhouses established	8	24 greenhouses or other production intensification farming structures provided through the LSD 20 small businesses started/assisted over a 5 year period.
	• Number of small business activities supported (in kind)	N/A	
	• Amount of income/consumption derived from ▢ supported (agricultural) livelihood initiatives.	Average Agricultural Income 226,003ALL	10% increase
Improved environmental conditions in the [▢	• Number of households using communal land fill	0	10 villages
	• Number of households connected with sewage network	< 50% of total HHs	70% of total HHs
	• Number and types of trees planted within the required re-forestation area (1,421 ha).	N/A	To be defined as per GoA requirements

Table 1: Outcomes, performance indicators and targets

▢' Desired Outcomes	Outcome Indicators Used to Measure Performance	Baseline	Target
		remittances) is 260,315 ALL	
PAHs have improved access to markets and services	• Number of village with all-weather road access to villages or improved road conditions	27 villages	30% with improved road access
PAHs have improved health conditions	• Access to health care (operational health facilities or regular visits by health professionals)	14 Health Centers / 1 Hospital	Improved access to village HC or Gramsh Hospital for 80% of project villages.
	• Support for participation in training programs for health center staff and attendance of these programs	14 Health Centers	20 attendees
	• Upgrading and improving health facilities with required equipment	14 Health Centers	Provision of basic equipment to each of the health centers.
PAHs have better access to water	• Number of Households with domestic water supply directly to the house.	N/A	100% of Resettlement / Relocation houses built.
PAHs have improved sanitation	• Number of HHs with functioning indoor latrines	N/A	100% of Resettlement / Relocation houses built.
PAHs have improved education	• Number of children attending secondary schools in the Project Area.	N/A	monitoring trends in attendance/enrolment levels
	• Number of training programs for teachers and attendance of these programs	N/A	20 attendees
	• Items of equipment provided to primary and secondary schools	N/A	100% of school in the Project area received equipment package as decided by DHP
	• Number of project affected pupils/students benefiting from education support programs (including training)	N/A	30 (from 2013-2019)