THE EFFECTS AND EXTENT OF FOREIGN EXCHANGE RISK ON PROJECT MANAGEMENT: THE CASE OF INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE (ILRI)

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DECLARATION

This project is my original work and it has not been presented for a degree in any other university.

Signed..... Date.....7th November, 2007

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This finance project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

To my parents: David and Peris Ngugi who sacrificed greatly to start me out in life with an education that did lay the foundation and the desire in my heart to achieve what they never had.

To my daughter Lorraine, who has remained sources of inspiration for everything I set out to achieve.

To my brothers and sisters who bore the brunt of sacrifices that we had to undergo to make this additional step in my life possible.

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I am indebted to many, that is why I say, let everyone who contributed to the successful completion of this work share the credit, but I and I alone take full responsibility for errors of omission and commission.

TABLE OF CONTENTS

ABSTRACT

The principal focus of this study was to establish the determinants of exposure to foreign exchange rate risk on projects funded through ILRI, explore the effects of exchange rate fluctuations in the medium term period of a project in terms of project timing, scope and quality and lastly, to establish the effect of exchange rate fluctuation on the operations of ILRI. The study period was 2000 to 2005

The study found out that the independent variables could explain 81.2 % of the exposure to foreign exchange rate risk on projects funded through ILRI, meaning that 18.8 % can be explained by other factors that affect foreign exchange rate risk but not related to these variables. The results also reveal that financing time lag accounted for 71.3 % of the total exposure with conversion exposure accounting for 55.3 % at US $and monetary monthly revaluation explaining 67.4% at of the total exposure if the variable were run individually. In total, the foreign exchange loss from financing lag time stood at $146,502.55, due to currency conversion there was an exchange loss of $279,706.11, with monetary revaluation contributing to $192,130.48 for the period under study.

As the other factors other than specified variables continue to contribute to foreign exchange risk exposure facing ILRI, the results of the study reveal that financing time lag, expenditure currency conversion and monthly monetary revaluation will continue to bear challenge to management and project officers at ILRI. These groups will thus need to strategize on ways of developing contract arrangement that could among others, shift the burden of foreign exchange exposure to the project donors as well as exploring other avenues of transferring the risk in transactions to project agents to cover for expenditure currency conversion.

CHAPTER ONE

INTRODUCTION

1.0 Background

Business and non-business organizations undertake various types of projects for various reasons. For business corporations the main reasons include but not limited to projects that will lead to increasing the value of the firm, those projects with positive net present value. On the other hand, not-for-profit organizations like ILRI may have other reasons of undertaking a particular project. Most not-for-profit organizations have particular themes that guide their choice of projects to undertake. Therefore it is no surprise that they can pick a project that does not have a positive net present value just because it meets the mandate of its operation. These themes include but not limited to poverty alleviation, environmental protection, human rights and related projects.

Project management is a carefully planned and organized effort to accomplish a specific (and usually) one-time efforts, for example, constructing a building or implement a new computer system. Project management includes developing a project plan, which includes defining project goals and objectives, specifying tasks or how goals will be achieved, what resources are need, and associating budgets and timelines for completion. It also includes implementing the project plan, along with careful controls to stay on the "critical path", that is, to ensure the plan is being managed according to plan. Project management usually follows major phases (with various titles for these phases), including feasibility study, project planning, implementation, evaluation and support/maintenance. However, of these steps, implementation determines the success or failure of a project. (www.managementhelp.org)

Project risk can be defined as a combination of constraint and uncertainty. The risk may be reduced to an acceptable level by reducing either uncertainty or constraint, or both. In practice, few people have the opportunity to reduce constraint, so most focus on the reduction of uncertainty. There are several Types of project risk, these include; Stand-alone risk: this is the risk of a project when viewed in isolation. Firm risk: this represents the contribution of the project to the overall risk of the organization, and Systematic risk: this represents the risk of the project in the context of the market portfolio. (www.themanagementor.com)

There are several definitions of a project depending ones perspectives. For instance, A Guide to the Project Management Body of Knowledge (PMBOK® Guide) defines a project as a temporary endeavor undertaken to achieve a particular aim and to which project management can be applied, regardless of the project's size, budget, or timeline.

There are many business projects that run smoothly and according to plan, but many do not. There is no such thing as a risk-free project. Running a project requires a lot of planning and some occasional gut-wrenching decisions when the unexpected happens. It is not possible to foresee and to know how to handle each risk before hand, but a successful project manager knows how to change plans to meet risks. Adapt or die! (Chong and Brown, 20002).ILRI defines a project as an aggregation of activities that lead to an output.An example of a project is "Fourth participatory Poverty Assessment in Kenya" which is financed by GTZ. It has a budget of $ 30,049 and will run from July 2005 to December 2006.

Project risk management seeks to anticipate and address uncertainties that threaten the scope, quality, and timetables of a project. The uncertainties may include questions of material and parts quality; delays in delivery of sufficient materials to meet project needs; budgetary and personnel changes; and, incomplete knowledge or research. These risks lead rapidly to delays in delivery dates and budget overages that can severely undermine confidence in the project and in the project proponent.

Since project risk management is process oriented, it remains possible to have a successful project and one that is unsuccessful. While any project accepts a certain level of risk, regular and rigorous risk analysis and risk management techniques serve to defuse problems before they arise. (Project Management Body of Knowledge (PMBOK), 1987)

1.1 Foreign Exchange Risk and Management in Projects

Foreign finances form an integral part of a developing country's resources in the attempt to attain industrialization and economic development (Chepkairor 1988). The process of risk management comprises of the fundamental steps of incident identification, risk analysis, risk assessment and risk treatment. Risk audit is a significant aspect of effective risk management too. This risk audit enables risk managers to develop a risk scorecard that will help them to priotize the risks and thereby design mitigation strategies (Binder 1997). It is the process that an organization puts in place to control its financial exposures.

According to Li (2003), financial risk is a risk that emanates from the uncertainty of such factors as interest rates, exchange rates, stock price fluctuations, and fluctuation in commodity prices. Similarly, Oxelheim and Wihlberg (1997) indicate that financial risks might be broken down into interest rate, exchange rate, and inflation rate risks. However, according to them, of all these, currency risk and specifically exchange rate risk has received the most attention. The main reason being that it is more than any other financial risk, it is susceptible to market economy variables and government interventions Exchange rate is the price of one currency expressed in terms of another. Exchange rates are highly volatile.

Kenya has adopted a floating exchange rate which means that the price of the Kenya shilling (Ksh) with respect to other currencies is set by market forces of supply and demand. Also called currency risk, foreign exchange risk represents the risk that an investment's value will change because of currency exchange rates fluctuations.

According to the International Federation of Accountants' Financial and Management Accounting Committee, International Management Accounting Practice Statement, Currency Exposure and Risk Management, February 1996, foreign exchange risk exposure is defined as the extent to which the future cash flows of an entity are susceptible to variations in exchange rates. It embodies the potential for gain as well as the potential for loss.

The purpose of foreign exchange risk management is to maximize the long-run return on funds that involve an actual or potential exposure to exchange rate fluctuations. This recognizes that currency markets can be used to increase purchasing power as well as to limit negative effects.

1.2 Project Management in Not-For –Profit Organizations

Project management is the discipline of organizing and managing resources in such a way that these resources deliver all the work required to complete a project within defined scope, time, and cost constraints. This property of being a temporary and one-time undertaking contrasts with processes, or operations, which are permanent or semi-permanent ongoing functional work to create the same product or service over-and-over again. The management of these two systems is often very different and requires varying technical skills and philosophy, hence requiring the development of project management. (Berkun, Scott 2005).

Like any human undertaking, projects need to be performed and delivered under certain constraints. Traditionally, these constraints have been listed as: scope, time, and cost. This is also referred to as the Project Management Triangle where each side represents a constraint. One side of the triangle cannot be changed without impacting the others. A further refinement of the constraints separates product 'quality' or 'performance' from scope, and turns quality into a fourth constraint.(Kerzner, Harold 2003).

The time constraint refers to the amount of time available to complete a project. The cost constraint refers to the budgeted amount available for the project. The scope constraint refers to what must be done to produce the project's end result. These three constraints are often competing constraints: increased scope typically means increased time and increased cost, a tight time constraint could mean increased costs and reduced scope, and a tight budget could mean increased time and reduced scope.

The discipline of project management is about providing the tools and techniques that enable the project team (not just the project manager) to organize their work to meet these constraints.

1.3 International Livestock Research Institute (ILRI)

ILRI is a non-profit-making and an international non-governmental organization with headquarters in Nairobi, Kenya, and a second principal campus in Addis Ababa, Ethiopia. The institute employs over 700 staff from about 40 countries. All ILRI work is conducted in extensive and strategic partnerships that facilitate and add value to the contribution of many other players in livestock development work.

The International Livestock Research Institute (ILRI) works at the crossroads of livestock and poverty, bringing high-quality science and capacity building to bear on poverty reduction and sustainable development for poor livestock keepers and their communities. ILRI works in the tropical developing regions of Africa, Asia and Latin America and the Caribbean, with offices in East and West Africa, South and South-East Asia, China and Central America, and projects in southern Africa, North Africa and the Middle East.

ILRI places poverty at the centre of an output-oriented agenda. Its strategy focuses on three livestock-mediated pathways out of poverty, namely; securing the assets of the poor; improving the productivity of their livestock systems and thirdly, improving their market opportunity in the face of rapidly changing market channels and demands.

Presently, the organization's research portfolio comprises of five issue-oriented themes: targeting research and development opportunities; enabling innovation; improving market opportunities, using biotech to secure livestock assets and people, livestock and environment.

ILRI is funded by more than sixty private, public and government organizations of America and Europe. Some donors support its core and program projects where as others finance individual research programs, in-kind support from national partners such as Kenya and Ethiopia is also part of the mix available, as well as that from international collaborations. This mix of generics, specific and in-kind support has continued to form the essential resource base for ILRI (ILRI annual report 2003)

The ILRI Board of Trustees is responsible for ensuring that the institute has an appropriate risk management system in place to identify and manage risks for ILRI to achieve its objectives and to ensure ILRI's alignment with CGIAR principles and guidelines adopted by all other CGIAR centres. ILRI faces risks as dynamic as the environment in which it operates. These risks represent potential losses resulting from failing internal systems, human errors and external events.

ILRI has identified a myriad of project specific as well as centre shared risks that could impact on its operations and the mandate of its very existence. Among them includes: research and capacity building being directed to activities with limited or no impact at all; poor scientific quality of research outputs; inadequate dissemination of research results; failure to attract and retain excellent staff; mismatch of skills with business needs; erosion of professional skills of scientific staff; research data loss or difficult to access; failure of research partners to deliver requirements; disaster significantly disrupting operations; duplication of research activities internally; duplication of research activities externally; mismatch between research priorities and budget allocations; inefficient financial systems and reporting; insufficient income to meet planned operations for the year leading to cancellation or delay of research work; short term cash flow problems; inadequate financing of project costs from donor grants; significant foreign exchange losses;

significant loss of funds due to poor cash investment decisions; opportunity cost of long outstanding receivables; loss of key staff in finance; inefficient financial systems and reporting.

The composition of the currencies in which ILRI prepares its budget, contributions received and expenditures incurred includes donations in the following currency denominations; Sterling Pound (£) US Dollars ($) Canadian Dollars; Japanese Yen (¥); Swedish Kroner; the Euro (€); Danish Kroner; Indian Rupee(Rp); Swiss Francs and Australian Dollars. From the total funding of ILRI's projects, 45% of the funding is made in currencies other than the organization's operating currency (US dollars), which is about Kshs. 5.6 billion per year.

This varied mix of foreign currency denominations indicates the magnitude of potential foreign currency exposure generated from the fiscal planning cycle and from actual cash flow movements during the year when their values change viz a viz the principal currency i.e. USD value.

The center has adopted a rating scale of impact and likelihood of occurrence at three levels. For the impact scale, there is high, middle and limited while with the likelihood of occurrence the scale runs from high, moderate and low. For a risk to be considered to have a high impact, it has to be that whose occurrence has the potential to significantly damage or destroy the effective functioning of ILRI or its future viability, particularly through loss of important donors' confidence or major financial or reputational loss; these risks also include those associated with potentially significant employee health and safety hazards.

Of all these risks, financial risks have overtime affected the effective operation of ILRI. Foreign exchange risk is considered to have a medium impact and medium likelihood of occurrence (ILRI risk analysis report, 2005).

This risk has continually and increasingly become a significant contributor with spill over effect to other risks such as liquidity problems, insufficient income to meet planned operations for the year leading to cancellation or delay of research work, as well as inadequate financing of project costs from donor grants. As such foreign exchange risk is deemed to remain a centerpiece in the management of financial risks facing ILRI.

1.4 Statement of the Problem

Foreign exchange risk has received substantial attention in studies done in developed countries. However the nature of exchange risk in these countries differ significantly from the risks experienced in developing countries, where inevitability of depreciation causes exchange losses (Shanhong 2001). Some empirical studies have revealed that of all financial risk exposure, foreign exchange risk has received more attention than interest and inflation rate risks. It has also been considered to be the most crucial critical of all the financial risk exposures (Brucaite and Yan, 2000)

ILRI uses the US Dollar (USD) as its principal operating currency; during periods when the USD is strengthening against other major currencies, income received in currencies other than the USD would be reduced when converted to USD. At the same time, it would cost the organization less to implement the same level of activities as budgeted. Reduction in income would be offset by the reduction in expenditures and as such exchange rate fluctuations would have a less than perceptible influence on the financial situation of the project. In a period of a weakening USD, the opposite should be the case, i.e. income will be increased and expenditures would also be increased leaving the organization in a similarly compensating financial position.

However, in the short term, there are several factors that are brought to bear on the situation causing a non-synchronous impact on income and expenditure, thus creating financial management and project administration difficulties.

Due to the limited understanding of the extent and impact of exchange risks on projects of this nature in the International NGOs in Kenya, this study is timely and important to document and highlight the problem.

It is from this base that this study seeks to establish the effects caused by the fluctuations of foreign exchange rate on projects that are funded through international non-governmental organization, using ILRI as a case in hand.

It is hoped that the findings of this study will increase the understanding of foreign exchange risk and provide the much desired information for project financing, implementation and monitoring in ILRI and other similar INGO outfits operating in Kenya or with similar operational environment.

1.5 Objectives of the Study

1. To establish the level of exposure to foreign exchange rate risk on projects funded through ILRI
2. To explore the effects of exchange rate fluctuations in the medium term period of a project in terms of project timing, scope and quality.
3. To establish the effect of exchange rate fluctuation on the operations of ILRI

1.6 Importance of the study

This research will make a contribution to academic literature on the field of foreign exchange risk management in Kenya where little is known about risk management as concerns international non governmental organizations due to few studies on the subject.

Understanding the systematic effects of changes in foreign exchange rate on operations of the international non governmental organizations will likely help the NGOs better prepare for variations in its contingent liability associated with adverse developments in the macroeconomic and financial market environment.

The study will add to the existing body of knowledge in NGOs as well as offer basis for further research in foreign exchange risk of NGOs, an area that has not been extensively researched in the recent past.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Financial risk is a very real and significant risk in the modern society and although there have been extensive discussions on risks in the physical sciences, such debates in the field of finance and economics are relatively rare (Shah, 2004). The process of risk management comprises of the fundamental steps of; incident identification, risk analysis, risk assessment, and risk treatment (Binder, 1997) similarly, Buttimer (2001) indicates that successful financial risk management implementation goes through three distinct phases: identifying the risk (this involves clearly identifying the financial risks the organization faces and how they interact with each other), measuring risks (this involves measuring risks in different ways depending on how the organization structures its risk management), and managing risk (the organization can adopt either active or passive management techniques).

2.2 Financial Risk Management

According to Giddy and Dufey (1978), many International Non-Governmental Organizations refrain from active management of their foreign exchange exposure, even though they understand that exchange rate fluctuations can affect their operations, earnings and value. They argue that organizations make this decision for a number of reasons.

First, management does not understand it. They consider any use of risk management tools, such as forwards, futures and options, as speculative, or they argue that such financial manipulations lie outside the firm's field of expertise. Perhaps they are right to fear abuses of hedging techniques, but refusing to use forwards and other instruments may expose the firm to substantial speculative risks. Second, they claim that exposure cannot be measured. They are right -- currency exposure is complex and can seldom be gauged with precision. But as in many business situations, imprecision should not be taken as an excuse for indecision.

Third, they argue that the organization is already hedged. All transactions such as imports or exports are covered, and foreign subsidiaries finance in local currencies. This ignores the fact that the bulk of the firm's value comes from transactions not yet completed, so that transactions hedging is a very incomplete strategy.

Fourth, they say that the firm does not have any exchange risk because it does all its business in dollars (or yen, or whatever the home currency is). But a moment's thought will make it evident that even if you invoice German customers in dollars, when the mark drops your prices will have to adjust or you'll be undercut by local competitors. So revenues are influenced by currency changes.

Finally, they assert that the balance sheet is hedged on an accounting basis--especially when the "functional currency" is held to be the dollar. These could end up with misleading signals that balance sheet exposure measure can give.

Modern principles of the theory of finance suggest prima facie that the management of corporate foreign exchange exposure may neither be an important nor a legitimate concern. It has been argued, in the tradition of the Modigliani-Miller Theorem, that the firm cannot improve shareholder value by financial manipulations: specifically, investors themselves can hedge corporate exchange exposure by taking out forward contracts in accordance with their ownership in a firm. Managers do not serve them by second-guessing what risks shareholders want to hedge (Pickford, 2002).

One counter-argument is that transaction costs are typically greater for individual investors than firms. Yet there are deeper reasons why foreign exchange risk should be managed at the firm level. As will be shown in the material that follows, the assessment of exposure to exchange rate fluctuations requires detailed estimates of the susceptibility of net cash flows to unexpected exchange rate changes (Dufey, and Giddy (1995) Operating managers can make such estimates with much more precision than shareholders who typically lack the detailed knowledge of competition, markets, and the relevant technologies.

Furthermore, in all but the most perfect financial markets, the firm has considerable advantages over investors in obtaining relatively inexpensive debt at home and abroad, taking maximum advantage of interest subsidies and minimizing the effect of taxes and political risk (Blommesten, 2000). Another line of reasoning suggests that foreign exchange risk management does not matter because of certain equilibrium conditions in international markets for both financial and real assets. These conditions include the relationship between prices of goods in different markets, better known as Purchasing Power Parity (PPP), and between interest rates and exchange rates, usually referred to as the International Fisher Effect. However, deviations from PPP and IFE can persist for considerable periods of time, especially at the level of the individual firm. The resulting variability of net cash flow is of significance as it can subject the firm to the costs of financial distress, or even default. Modern research in finance supports the reasoning that earnings fluctuations that threaten the firm's continued viability absorb management and creditors' time, entail out-of-pocket costs such as legal fees, and create a variety of operating and investment problems, including under investment in Research &Development (Hekman 1983).

The same argument supports the importance of corporate exchange risk management against the claim that in equity markets it is only systematic risk that matters. To the extent that foreign exchange risk represents unsystematic risk, it can, of course, be diversified away -- provided again, those investors have the same quality of information about the firm as management -- a condition not likely to prevail in practice (Glaum, 2000). This reasoning is buttressed by the likely effect that exchange risk has on taxes paid by the firm. It is generally agreed that leverage shields the firm from taxes, because interest is tax deductible whereas dividends are not. But the extent to which a firm can increase leverage is limited by the risk and costs of bankruptcy. A riskier firm, perhaps one that does not hedge exchange risk, cannot borrow as much. It follows that anything that reduces the probability of bankruptcy allows the firm to take on greater leverage, and so pay less taxes for a given operating cash flow. If foreign exchange hedging reduces taxes, shareholders benefit from hedging.

However, there is one task that the firm cannot perform for shareholders: to the extent that individuals face unique exchange risk as a result of their different expenditure patterns, they must themselves devise appropriate hedging strategies. Corporate management of foreign exchange risk in the traditional sense is only able to protect expected nominal returns in the reference currency (Eaker1981)

2.3 Foreign Exchange Rate Risks

Jacque (1979) defines a foreign exchange risk as "the additional variability experienced on earnings that result from currency fluctuations. Basically, there are three types of foreign exchange exposures namely; translation, transaction and economic exposures. These exposures give rise to translation, transaction and economic currency risks respectively. Translation risk arises from the need to consolidate the operations of a multinational organization, carried out in different currencies, in accordance with appropriate accounting rules. Translation risk is a multinational organization's concern and it's considered irrelevant to many locally incorporated organizations.

Transaction risk arises out of entering dealings in foreign denominated currencies. It arises out of transaction exposure which "refers to gains or loses that arise from the settlement of transactions whose terms are stated in a foreign currency" (Eitemann, 1997). Generally, there are three variants of transaction exposures, namely; first, transaction exposures arising from a firm's trade receivables or payables denominated in foreign currency. A currency adjustment occurring in the intervening period between the transaction and the settlement dates gives rise to losses or gains. Secondly, transactions risk exposure arising from contracts entered into by a firm that requires settlement in foreign currency. The third exposure arises when a firm has borrowed or loaned funds, and the amounts involved are denominated in foreign currency.

International NGOs often receive short-medium and long-term funding denominated in currencies at variant with their principal currencies. When their principal currency depreciates against other currencies, they are exposed to exchange losses and the reverse is true.

Economic risk arises out of economic exposure defined by Walker (1978) as "the possibility that the parent currency denominated net present value of cash flows will be adversely affected by exchange rate movements" this risk has a wide range of impacts on business and its consideration in assessing the long-run health of the organization.
It has the potential to affect future revenues and costs. One of the costs affected is that associated with holding long-term foreign currency loans (Chepkairor, 1988)

Transaction exposure is the principal type of foreign exchange exposure that international NGOs face. It refers to the effect a change in foreign exchange rates would have on the size of the cash flow in one currency necessary to settle a given cash flow in another currency. The cash flows may be direct or indirect. Direct exposures are identifiable cash flows, which require a foreign exchange transaction to be undertaken e.g. a purchase of goods from overseas. Indirect exposures reveal no explicit requirement but incorporate a hidden foreign exchange component, which may affect pricing and costs e.g. transportation costs associated with the purchase of goods from overseas.

The identification of transaction exposure entails highlighting those cash flows, the principal currency value of which could be affected by movements in exchange rates. The cash flows may be direct or indirect. The timing of cover appropriate to each organization is dependent on the nature of the organization's activities. Organizations will prepare budgets based on assumed exchange rates. As there is a delay between the preparation of budgets, the approval of appropriations and the conclusion of contracts, departments could potentially face a material transaction exposure before the contract date.

Translation exposure refers to the effect on period-end financial statements for reports of fluctuations in exchange rates. This exposure arises from translating: firstly, transactions undertaken in a foreign currency into a base currency and secondly, the financial statements of foreign sub-entity operation into the base currency of its parent. The recording of transactions and changes in asset and liability values does not usually produce an economic impact on the parent entity, in that no direct cash effect arises. However, financial statements are used for a number of purposes, including performance measurement. In this context, the balance sheets of departments subject to translation exposure will require careful interpretation.

2.4 Measurement and management of foreign exchange risk

Organizations are exposed to the foreign exchange risk if the results of their project depend on future exchange rates and if exchange rates cannot be fully anticipated (Glaum, 2000). In the traditional, and more practically oriented literature, it was generally assumed that firms should adopt a strictly risk averse attitude to financial risks. Theoreticians belonging to the neoclassical school of thought took up a very different attitude. They argued that management of financial risk is unnecessary and potentially even harmful. This spurred a lot of debate with some scholars making a case for corporate risk management. In the recent past, a more detailed discussion of the arguments for and against corporate hedging activities have developed (Blommesten, 2000)

Measurement of exchange risk is an important aspect of foreign exchange risk management. The academic literature generally distinguishes three concepts for measuring the effects of exchange rates on the organization. The accounting exposure concept measures the impact parity changes have on accounting profits and on owner's equity. The accounting effects of exchange rate changes do not have any direct impact on a firm's cash flows. Therefore, it has long been argued that organizations should not actively manage their accounting exposures (Dufey, 1972).

Cash flow exposures should be of more concern. The transaction exposure concept concentrates on contractual commitments, which involve the actual conversion of currencies. This exposure can be hedged fairly easily by setting up counterbalancing positions. For example, an international non-governmental organization operating in Kenya, and whose transactional currency is the USD, and is expecting Canadian dollar inflow at a known future date can sell these dollars today in the forward market. The effect of exchange rate changes on the receivables and on the forward market position will now cancel each other out; the transactional currency value of the future cash flow is fixed. Instead of using the forward markets, the organization can achieve the same effect by borrowing Canadian dollar and converting them into USD today; the future dollar revenues will be used to repay the dollar loan.

Alternatively, the organization can buy a put option that will give it the right to sell the incoming dollars at a prearranged rate. In contrast to the forward hedge, the option does not oblige the firm to use this rate for the conversion. The currency option provides the firm with the protection against foreign exchange losses while leaving open the possibility to participate in favorable rate changes (Glaum, 2000)

Academic literature has also pointed out that this exposure concept has its shortcomings too. A number of empirical studies have shown that the theory of purchasing power parity does not hold over the short and the medium run (Taylor, 1995). This means that exchange rate changes can lead to changes in the relative prices of inputs and out puts. The relative price changes can affect a firm's cash flow and its value. An exchange risk management approach that limits itself to transaction exposure ignores these fundamental, long-term effects of exchange rate changes (Glaum, 2000).

Value at Risk (VAR) is a popular measure of risk, but its use is fast extending beyond financial institutions. This technique describes risk succinctly: it is intuitively understandable. It is a percentile of a profit- and – loss distribution over a specified horizon; it tries to determine how much the organization's underlying cash flows are affected i.e. if the foreign exchange rate moves to a certain level, VAR indicates how much profit/loss the organization makes (Dowd, 1998).

If the VAR of a certain set of risks is too high, hedging instruments can be used to bring it down to acceptable levels by reducing the standard deviation measure. It therefore captures the nature of bad outcomes in a single number; this technique was initially designed to avoid bank disasters (Pickford, 2002). Although extremely attractive, VAR is not consistent with the theory of risk management either (Stulz, 1996)

A large percentage of organizations have also adopted the selective hedging strategy. This means that the firms hedge only on those positions for which they expect a currency loss while leaving open positions for which they expect a currency gain. Such strategy is based on forecasts of future exchange rate changes. The manager must predict which foreign currency will appreciate and which will depreciate over the time horizon of their hedging activities.

2.5 Effects of Exchange Rate Risk on Projects

Although there are many and varied sources of finances for projects, i.e. it is usually possible to find potential lenders and or financiers, establishing a workable financial package is difficult, and fraught with pitfall. Project managers are wise to take note of these, for the pitfall snare their feet more often than they trip up corporate money managers (Chong and Brown 2002). Project costs are denominated in one or more specific currencies. If financial input and output are denominated in different currencies, exchange rate fluctuations may cause difficulties. Project finance in a currency which tends to appreciate against an organization's principal operating currency will embody an exchange (Chong and Brown 2002).

2.6 Determinants of foreign exchange rate fluctuations on international non-governmental organizations

2.6.1 Time lag between the receipt of pledges and their payment

The effect of currency exchange fluctuations on pledges depends on the timing of the pledge, the currency the pledge is denominated in, the date of payment of the pledge and the operational exchange rate in force on those dates for the organization. From the time a written pledge is received from a donor and recorded, exchange gains and losses are recorded in the accounts till the pledge is paid in full (UNHCR 005). This is best illustrated with an example.

Let's assume that on 1 January 2005, ILRI received a written pledge from a member State to the amount of 1 million euros and the pledge was paid in full on 15 June 2005. If ILRI's operational rates of exchange on 1 January and 15 June 2005 were 0.7370 euros to US$1 and 0.8290 euros to US$1 respectively (i.e. there was an appreciation of the US dollar during these 6 months). As a result, on 1 January 2005, ILRI would record income and a corresponding receivable for an amount of US$ 1,356,852 [€1,000,000 at 0.737€ to 1US$]. On 15 June when the pledge is paid in full, the following actions would be taken: The receivable account is relieved; The US dollar cash equivalent of 1 million euros is recorded, this yields US$ 1,206,272 [€1,000,000 at 0.829€ to 1US$] by applying the ILRI's operational rate of exchange in effect on the date of the transaction; A loss on exchange of US$ 150,580 [$1,356,852 – $1,206,272] is recorded (some 11 per cent of the original value).

From the illustration, it can be concluded that in periods when the US dollar is appreciating against other major currencies, ILRI would be better off if contributions denominated in currencies other than the US dollar were paid in cash, or pledges were paid off shortly thereafter. In that case, ILRI could minimize the risk of foreign exchange loss exposure as donors would assume currency risk. In this illustration, if we assume that the US dollar has been depreciating against other major currencies, the converse would hold true, and exchange gains would have been recorded by ILRI.

2.6.2 Monthly revaluation of monetary assets

At the end of each month, most not-for profit organizations revalue all monetary assets denominated in currencies other than the operational currency. This generates exchange gains and/or losses based on the difference between the organization's operational rate of exchange in effect when transactions are recorded and the rate of exchange at the end-of-month closing (UNHCR 2005).

2.6.3 Currency conversions

As indicated earlier, the currencies in which contributions to international NGOs are presently received and held differ from the currencies in which a large proportion of expenditures are incurred. Because of this multi-currency operational environment, they must convert one currency to another to fund operating expenditures, which exposes them to gains and losses that arise from fluctuations in their applicable operational rate of exchange following the actual fluctuations in international monetary markets.

It is not possible to eliminate all gains and losses that arise from foreign exchange rate changes between the functional currency and the currency of assets / liabilities (UNHCR 2005).

2.6.4 Impact on expenditures

For an organization that incurs a large proportion of its expenditures in US dollars and 40 per cent in other major currencies and which relies almost exclusively on voluntary contributions in a range of currencies exchange rate management is an important consideration. The inevitable discrepancies between the exchange rate used in budget preparation and the actual monthly exchange rates have a more than perceptible influence on the total projected expenditures for the year (UNHCR 2005).

For purposes of illustration, if the US dollar strengthens against other major currencies during the year, and everything else remains the same, less expenditure would be incurred in US dollar terms for the same level of activity as budgeted. On the other hand, if the US dollar weakens against other major currencies during the year, more expenditure would be recorded in US dollar terms for the same level of activity.

However, impacts on income and expenditure are, in reality, non-synchronous due to the factors illustrated above. While impact of exchange rate fluctuations on income is relatively easy to assess (due to the limited number of donor currencies other than US dollars) and is felt immediately, identifying the impact of exchange rate fluctuations on the expenditure side is challenging due to the large number of currencies used in funding operations in the field, and the movement of some of these currencies against the US dollar. Expenditures are incurred over several months, during which applicable operational rates of exchange will vary, making it challenging to trace the impact of currency fluctuations. This study will use an average exchange rate over the projects periods to assess the impact of foreign exchange fluctuations on the expenditure side (UNHCR 2005).

2.6.5 Actual experience of UNHCR to foreign exchange risk exposure

As stated earlier, exchange rate fluctuations are, in the long run, "neutral" on organization's operations. However, in the short run, they could experience significant net exchange gains or losses. For instance the total combined net exchange gains and losses for UNHCR from 2003 to 2004 amounted to a gain of US$ 81 million due to the fact that the US dollar depreciated by some 58 per cent against major UNHCR donor currencies from January 2001 to December 2004. More recently, at the beginning of 2005, UNHCR projected a gain on currency exchange of US$ 30 million based on prevailing market assumptions that the US dollar would continue its decline against all other major currencies throughout the year.

However, this assumption has not yet held up. In terms of the UN operational rate of exchange at December 2004, the US dollar appreciated by approximately 12 percent against other major currencies in the 6 months up to 15 June 2005. Accordingly, UNHCR has had to change its projection of currency exchange effects for 2005 from a net gain of $30 million to a net loss of $10 million as at 30 June 2005. A change in estimates of this magnitude in just a six-month period indicates the challenge constantly facing international non-governmental organizations (UNHCR 2005).

CHAPTER THREE
3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study was a case study and this section deals with the research methodology that will be used to achieve the objectives of the study.

3.2 The population

The population of interest in this study consisted of all the 130 projects financed through donor funding denominated in foreign currency in the period 2000 to 2005 inclusively. This period was selected for two reasons; the choice of 2005 was to facilitate at least five years of actual data on the project inception and implementation, and allow for ascertaining the completion period at the beginning of the next fiscal year i.e. 2006. The researcher was of the opinion that the duration of this period was long enough to achieve the objectives of the study. Secondly, the period will allow for measurement of the exchange gains and loss positions at annual intervals.

Restricting the data source to ILRI was basically to take advantage of the cooperation that the researcher has received so far for making data available. This is assumed to be the trend through out the period of the study.

3.3 The Sample

The sample for the study was 40 projects selected from the population on the basis of projects whose commitment for donor funding was received in form of a pledge other than the USD from the year 2000 and were completed by the year 2005, the project term is about 3 years. The sample projects are those financed by donors with the amount denominated in foreign currencies other than the US Dollar. This sample will be assumed to be representative of the projects financed through ILRI since according to the institution's classification, a short term project is one that takes duration of less than 1 year, a medium term project takes between 1 to 3 years while long term projects are those that take above 3 years.

It is the opinion of the researcher that short-term projects are numerous and while they clearly show the effects of exchange rate fluctuations, the period would have been too short to achieve the objective on the effects of exchange rate fluctuations in the medium term. Similarly, the long-term projects are few to form a representative data sample.
See appendix 3 for the list of the projects forming the data sample for the study.

3.4 Data Collection

This study will utilize both primary and secondary data sources. This data was obtained as follows; Step1 of the data collection form sought to capture secondary data from the following source documents; on the date the pledge was received was obtained from the grant documents while the date on which the actual funding was received by ILRI will be obtained from the bank statements. Data on the gains and losses position was obtained from the annual reports and the position attributable to exchange rate fluctuations determined there from. The average exchange rate for a year was obtained from CBK annual reports. Data on the expected completion dates will be obtained from questionnaire, while the measurement variable for project quality and scope was provided by the final technical reports and /or publications. Step 2 on the other hand was to collect primary data from the relevant project and finance officers on project completion time, scope and quality. Alternatively, this data was obtained from post project appraisal report wherever possible, so as to establish objectivity of the information. See Appendix 2 for the data collection form.

3.5 Data Analysis

This study utilized computer spreadsheet packages such as the statistical package for social sciences (SPSS) for data analysis and Excel. Excel was used for data entry and summary while SPSS was used for the final analysis and output. Effects of Foreign exchange exposure on income were measured through time lag between the pledge date and the receipt date as well as the monthly revaluation of monetary assets held in the project's name. Gains/losses due to the interval release of funds was determined at their respective dates and recorded. Conversion Gains/Losses was obtained from ILRI quarter unaudited reports and recorded likewise.

The analysis used a multiple regression model to capture the above variables as follows;

$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where;

Y = the project's exchange rate risk exposure

X_1 = the exchange exposure caused by time lag between fund pledge and receipt

X_2 = the exchange exposure caused by monthly revaluation of assets and liabilities held in the project's name

X_3 = the exchange exposure caused by currency conversions into expenditure denomination

ε = error term

After all the exposures are determined, their effects on the project's cash inflows and cash outflows and how these affect the project's completion time, scope and quality as reported in the post-project's appraisal report, was analyzed. Any other factor affecting project's completion time, scope and quality was also be captured and reported. (See Appendix 2 for the data collection form).

This study heavily relied on the statistical package for social sciences(SPSS).The package was used for regressing exchange rate risk exposure a the dependent variable (Y) and financing time lag, currency conversion and monetary revaluation as the independent variable. Regression analysis was conducted for the entire data sample with all the variables (independent) then with each independent variable at a time. Correlation tests were carried our between the dependent variables and the independent variables to determine the relevance of each of the variables. The analysis further carried out tests of significance as each of the variables.

CHAPTER FOUR

4.0 DATA ANALYSIS AND FINDINGS

4.1 Regression results

Exchange rate risk exposure was regressed against three independent variables namely; financing time lag, currency conversion and monetary revaluation. Regression analysis was conducted using SPSS .Correlation tests were also estimated using the same package.

R^2 measures the degree of variability of the dependent variable due to the change in independent variable. R^2 of more than 50% implies that the relationship between the two variables is very strong and therefore any small changes on the dependent variable will have an effect on the independent variable.

The data fitting results can be described as good in that the model has a high predictive ability with the three variables under study with $R^2 > 71.3\%$. That implies that about 71.3% of the variations in foreign exchange exposure at ILRI can be explained by the three variables tested using the regression model.

4.2 Discussion of the results of estimation

Having established that the models are correctly specified, following the outcomes of correlation tests and tests of significance, the results obtained from the regression analysis can now be fully analyzed. The following relationship was yielded for exchange rate risk exposure at ILRI.

$$Y = 289203.22 + 1.041CV + 1.147TL + 0.884MR$$

Where TL is the financing lag time, CV is the expenditure currency conversion and MR is the monthly revaluation. Currency conversion into expenditure denomination appears to be the most significant beta value followed by financing lag time and lastly the monthly monetary revaluation. See table below on model summary.

Table 1: Multiple Regression and Model Summaries

	Unstandardized Coefficients		Standardized Coefficeints	t	Sig.	95% Confidence Interval for B		Correlations		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero Order	Partial	Part
(Constant)	29203.221	22433.711		1.302	.204	-16909.933	75316.376			
Conversion	1.041	.676	.136	1.539	.136	-.350	2.431	-.072	.289	.1
Time lag	1.147	.420	.237	2.731	.011	.284	2.009	.394	.472	.2
Monetary Revaluation	.884	.093	.850	9.478	.000	.692	1.076	.857	.881	.8

Table 2: Multiple Regression and Model Summaries

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
.901 (a)	.812	.790	78091.75755	.812	37.440	3	26	.000	2.359

The above analysis shows that the three variables in the model, contribute 90.1% of the variations in foreign risk exposure facing ILRI. However, these results may change if the variables are analyzed individually.

4.3.1 Analysis of variance (ANOVA)

The regression also tests for ANOVA that analyses the possible influence of the specified variables. ANOVA is used to test the overall statistical significance of a regression equation, that is, top test whether all the true regression coefficients in the equation equal to zero. The f test is used to confirm the existence of a relationship between the dependent variable and all the independent variables considered collectively.

Table 3: ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3751995291 0.143	1	37519952910.143	73.195	.000(a)
	Residual	1435287719 3.061	28	512602756.895		
	Total	5187283010 3.204	29			

a Predictors: (Constant), time lag, conversion, monetary revaluation
b Dependent Variable: Total exposure

Table 3 shows that with 3 variables and 28 degrees of freedom, F critical will be 3.96. Since the observed value of F of 73.195 far exceeds this amount of 3.96, we should reject the null hypothesis that the three independent variables do not significantly influence foreign exchange risk facing ILRI and therefore conclude that the three variables are significant. Statistically, the larger the calculated f value is from the estimated value, the greater the significance is.

From the coefficients of correlation, partial correlation shows that financing time lag can explain 47.2% of the total foreign exchange exposure facing ILRI while 28.9% can be explained by the currency conversion into expenditure denomination other than the USD. On the other hand, monthly revaluation of monetary assets account for 88.1%of the total exposure. Using the Durbin Watson test, k=3 and N=40, the calculated d = 1.648. From the table values, the lower the Durbin Watson is used to test for auto correlation between the variables specified in the model. The rule applied here is that we accept null hypothesis when d<4-du, in which case our d = 1.648 and 4 - 1.531 = 2.469 thus we accept the null hypothesis, meaning there is no significant statistical evidence of auto correlation between the variables specified in the model.

4.3.2 Regressing Financing Lag Time and Foreign Exchange Risk Exposure

Regression results on financing time lag regressed alone as the independent variable with total foreign exchange exposure indicates that 71.3% of the total exposure in foreign exchange risk in ILRI is explained by this variable. We can therefore we can infer that the fluctuation of foreign exchange risk is due to financing time lag is significant and could not be attributed to chance, it gives the relationship;

$$\text{Time lag} = -4707.6 + 1.019X$$

Table 4: Regressing financing lag time and foreign exchange risk exposure

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
1		B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	-4707.576	4280.153		-1.100	.281	-13475.072	4059.919
	time lag	1.019	.119	.850	8.555	.000	.775	1.263

The variable has a negative sign. This will be interpreted to mean that for a given yield curve slope, an increase in financing time lag, foreign exchange risk will be expected to temporarily reduce foreign exchange gain. This is consistent with Eitermann (1997) conclusion that foreign exposure will be expected when receivables or payables denominated in foreign currency are settled in duration requiring currency adjustments occurring in the intervening period between the transaction and settlement dates.

A similar claim for organizations being exposed to foreign exchange risk as a result of project financing and settlement differing and in periods when exchange rates cannot fully be anticipated is made by Glaum(2000) in his work on foreign exchange risk management in German non-financial corporations. This fact is also documented in UNHCR report 2005 that exposure to exchange gain/losses arise from fluctuations in the rate from the time a written pledge is received from a donor and recorded till the pledge is paid in full. By contrast Giddy & Dufey(1975) suggests that organizations do not have any exchange risk due to financing time lag because even if the currency depreciated over time, the prices will naturally adjust to counter the fluctuation. The result is also in congruence with Walker (1978) who says that the possibility that the parent company denominated NPV of cash flow will be adversely affected by exchange rate movements.

4.3.3 Regressing Currency Conversion and Foreign Exchange Risk Exposure

Regression result on conversion of USD (principal currency) currency into expenditure currency regressed alone as the independent variables with foreign exchange fluctuations indicate that 55.3% of the total variation can be explained by this variable. We can therefore we can infer that the total foreign exchange exposure is significant and could not be attributed to chance. It gives a relationship;

$$\text{Conversion} = -8496.6 + 1.053X$$

Table 5: Regressing currency conversion and foreign exchange risk exposure

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-8496.630	6287.434		-1.351	.187	-21337.284	4344.024
	conversion	1.053	.290	.553	3.637	.001	.462	1.645

The variable has a negative sign which can be interpreted to mean that an increase in transactions that would require the conversion of currencies from the USD to the expenditure currency, it is expected to reduce any exchange gain. It gives a relationship;

$$\text{Conversion} = -8496.6 + 1.053X$$

This result is in line with Taylor 1995 who points out that the exchange rate changes can lead to changes in the relative prices of inputs and outputs and thus affecting an organizations cash flow and value.

Eiteman 1997 also notes that not-for profit organizations are affected by foreign exchange fluctuation when they use cash flows to settle expenditures in other currencies other than their operating currency. This is also inferred from Chong and Brown (2002) work that if financial inputs and outputs are denominated in different currencies, exchange rate fluctuations may cause difficulties.

4.3.4 Regressing Monthly Monetary Revaluation and Foreign Exchange Risk Exposure

Table 6: Regressing Monetary Revaluation and Foreign Exchange Risk Exposure

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-9896.630	6287.434		-1.351	.187	-21337.284	4344.024
	Monetary revaluation	1.073	.390	.563	2.637	.001	.462	1.645

Regression results on the effect of monthly monetary revaluation on the overall exchange exposure as the lone regressing variable indicates that 67.3% can be explained by this variable. In this study, monthly revaluation of monetary assets was taken to constitute exposures on all cash and cash equivalent accounts held in other currencies other than the principal operating currency (the USD).

It gives the relationship;

$$\text{Monetary revaluation} = -9896.630 + 1.073X$$

While academic literature stress the importance of foreign exchange risk management, it argues that accounting effects of exchange rate changes does not have any direct impact on a firm's cash flows and therefore organizations should not actively manage their accounting exposure (Dufey 1972). This is the reason why the study eliminated this variable at the initial regression and only ran it as a lone regressor against the total exposure of fluctuations of foreign exchange rates.

The above results can be summarized in the table below;

Table 7: Regression Summary

Dependent variable	**Independent variables**	**R^2**	**Ranking**	**F ratio**
Total foreign exchange risk exposure	Financing time lag	0.713	1	73.195
	Currency conversion	0.55	3	13.227
	Monetary revaluation	0.673	2	39.64

4.4 Analysis of the results

In order to identify the factors considered to be affecting the output variables of projects managed by international livestock research institute (ILRI), a survey of project officers was undertaken. Out of the 64 -targeted 40 responded, this was a response rate of 62.5 %

The summary analysis of the collected data on factors considered to be affecting the output variables of projects managed by international livestock research institute (ILRI) can be seen in the table below where by 1 to 4 represent Agree to a large extend; Agree; Disagree; and Disagree to a large extend respectively.

Table 8: Descriptive Analysis of Factors Affecting Project Output Variables

Factor	Agree to a large extend %	Agree %	Disagree %	Disagree to a large extend %	Total %
Lack of dedication and urgency by national partners lead to delays that affect the timeframe and delivery dates of projects due to exchange rate exposures.	7.5	52.5	15.0	25.0	100.00
Conversion rates lead to cash flow problems and therefore affect the time frame and delivery times of projects	15.0	25.0	52.5	7.5	100.00
Delay in the release of funds by donors leads to changes in projected budget values due to exchange rate exposures that affect the implementation, timeframe and delivery time of projects	87.5	0.0	0.0	12.5	100.00

Logistics and organization of partners leads to delays and hence exchange rate exposures that affect the projected budget values and therefore project timeframe and delivery times	0	35.0	10.0	55.0	100.00
Lack of proper collaboration amongst project partners lead to delays that expose the project to exchange rate risk leading to reduction in the scope of the project	0	42.5	32.5	25.0	100.00
Management support may lead to delays that expose the project to exchange rate risk and hence reduction in the scope of the project	27.5	43.5	22.0	7.0	100.00
Exchange rate fluctuations affect the projected personnel budget that can lead to readjustments on the scope of the project due to deficits or surpluses caused there from	35.0	50.0	15.0	0	100.00
Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the scope of the projects	73.5	17.0	7.5	2.0	100.00
Exchange rate fluctuations can lead to compromise on procurements of quality materials and therefore affect the overall project quality	35.0	50.0	15.0	0	100.00
Exchange rate fluctuations can lead					

to personnel budget constraints that results in overworking or layoffs of employees during the project period and therefore affect the project quality	35.0	50.0	15.0	0	100.00
Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the quality of the projects	17.5	67.5	15.0	0	100.00
Delays in release of funds by donors expose the project to exchange rate risk and compromise on appointments of qualified project agents and can therefore affect project quality	35.0	52.5	0	12.5	100.00
Exchange rate risk can lead to compromise on project quality which can make an organization lose reputation with donors and therefore access to future funding	12.5	42.5	12.5	32.5	100.00

Source: Research data

The table shows a percentage summary of the responses of the various respondents and which factors they found to agree to large extent and which they disagreed to large extent. For instance 73% of the respondents agreed to a large extent that Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the scope of the projects. 87.5%of the respondents were of the opinion that delay in the release of funds by donors leads to changes in projected budget values due to exchange rate exposures that affect the implementation, timeframe and delivery time of projects with 35% agreeing to a large

extend that Exchange rate fluctuations can lead to compromise on procurements of quality materials and therefore affect the overall project quality.

4.5 Descriptive statistics summary

Table 9: Ranking the Factors Affecting Project Output Variables

Factors	Ranked based on mean	Mean	Std. Deviation
Delay in the release of funds by donors leads to changes in projected budget values due to exchange rate exposures that affect the implementation, timeframe and delivery time of projects	1	1.3750	1.00480
Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the scope of the projects	2	1.8000	.68687
Delays in release of funds by donors expose the project to exchange rate risk and compromise on appointments of qualified project agents and can therefore affect project quality	3	1.9000	.92819
Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the quality of the projects	4	1.9750	.57679
Logistics and organization of partners leads to delays and hence exchange rate exposures that affect the projected budget values and therefore project timeframe and delivery times	5	2.1250	.60712

Exchange rate fluctuations affect the projected personnel budget that can lead to readjustments on the scope of the project due to deficits or surpluses caused there from	6	2.5250	.78406
Conversion rates lead to cash flow problems and therefore affect the time frame and delivery times of projects	7	2.5250	.84694
Lack of dedication and urgency by national partners lead to delays that affect the timeframe and delivery dates of projects due to exchange rate exposures.	8	2.5750	.95776
Exchange rate fluctuations can lead to personnel budget constraints that results in overworking or layoffs of employees during the project period and therefore affect the project quality	9	2.8000	.93918
Management support may lead to delays that expose the project to exchange rate risk and hence reduction in the scope of the project	10	2.8250	.81296
Exchange rate fluctuations can lead to compromise on procurements of quality materials and therefore affect the overall project quality	11	2.8500	.92126
Exchange rate risk can lead to compromise on project quality which can make an organization lose reputation with donors and therefore access to future funding	12	3.1500	1.12204
Lack of proper collaboration amongst project partners lead to delays that expose the project to exchange rate risk leading to reduction in the scope of the project	13	3.2000	.93918

Source: Research data

Table 9 shows the mean and standard deviation of the various factors considered to be affecting the output variables of projects managed by international livestock research institute (ILRI). The mean scores where used to gauge the overall opinions of the respondents in general. The factors are rated or ranked based on the mean scores. A score of 1 represents; Agree to a large extend, 2- Agree, 3-Disagree, 4- Disagree to a large extend. The mean scores for all the groups indicate that the respondents considered Delay in the release of funds by donors leads to changes in projected budget values due to exchange rate exposures that affect the implementation, timeframe and delivery time of projects; Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the scope of the projects, Delays in release of funds by donors expose the project to exchange rate risk and compromise on appointments of qualified project agents and can therefore affect project quality as the main contributors to foreign exchange facing international livestock research institute (ILRI)

They also considered the following as contributing to foreign exchange facing international livestock research institute (ILRI) , Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the quality of the projects; Logistics and organization of partners leads to delays and hence exchange rate exposures that affect the projected budget values and therefore project timeframe and delivery times; Exchange rate fluctuations affect the projected personnel budget that can lead to readjustments on the scope of the project due to deficits or surpluses caused there from; Exchange rate fluctuations can lead to compromise on procurements of quality materials and therefore affect the overall project quality; Delays in release of funds by donors expose the project to exchange rate risk and compromise on appointments of qualified project agents and can therefore affect project quality; and Exchange rate risk can lead to compromise on project quality which can make an organization lose reputation with donors and therefore access to future funding.

CHAPTER FIVE

5.1 Summary of Findings and Conclusions

5.1.1 Summary of Findings

The principal focus of this study was to establish the determinants of exposure to foreign exchange rate risk on projects funded through ILRI, explore the effects of exchange rate fluctuations in the medium term period of a project in terms of project timing, scope and quality and lastly, to establish the effect of exchange rate fluctuation on the operations of ILRI. The study period was 2000 to 2005. These objectives were achieved through regression and descriptive analysis. A multiple regression of the model specifying all the independent variables show that of the exposure to foreign exchange rate risk on projects funded through ILRI 81.2 % could be explained by the said variables meaning that 18.8 % can be explained by other factors that affect foreign exchange rate risk but not related to these variables. From the f tests, it can be concluded that there exists a significant relationship between the dependent variable(rate of exposure) and the specified independent variables(project funding time lag,currency conversion and monetary monthly revaluation). Further the Durbin Watson results shows that there is no evidence of significant statistical auto correlation between the variables.

The results of the analysis and data collected as presented in the preceding chapter reveal that financing time lag accounted 71.3 % of the total exposure with conversion exposure accounting for 55.3 % at USD and monetary monthly revaluation explaining 67.4% at USD. In total, the foreign exchange loss from financing lag time stood at 146,502.55USD, due to currency conversion there was an exchange loss of 279,706.11 USD, with monetary revaluation contributing to 192,130.48 USD for the period under study.

Project funding leads to delays and hence exchange rate exposures that affect the projected budget values and therefore project timeframe and delivery times. Exchange rate fluctuations can lead to compromise on procurements of quality materials and therefore affect the overall project quality,delays in release of funds by donors expose the project to

exchange rate risk and compromise on appointments of qualified project agents and can therefore affect project quality.Monthly revaluation does not have a direct cashflow effect on the projects funded through ILRI.It is however reflected in the books as a loss or gain but does not affect the project timing ,scope or quality.

The effects of exchange rate fluctuations can lead to delay in project timeframes,quality and scope and may make an organization lose reputation with it's donors and even access to future funding.To negate this eventuality,ILRI uses core funds to cover the exchange rate exposure this in turn affects the overall budget of ILRI and therefore it's operations.

5.1.2 Conclusion

ILRI was established in 1995, over this period it has been in operation, foreign exchange risk exposure has been a source of difficulties affecting both project outputs and the overall operation of the organization. Even though unfounded, there is a strong belief that this trend has seen funding move from unrestricted to project restricted finance pool. More so, exchange rate exposures have affected the deliverables of a project and thus affecting donor confidence and as such financing streams to ILRI. For instance, from the projects sampled, 15 projects were completed outside their planned delivery times. However, this cannot entirely be blamed on exchange rate fluctuations as found out in the questionnaire.

5.2 Recommendations

The findings of this research paper have implications on all stakeholders of ILRI. As the other factors other than specified variables continue to contribute to foreign exchange risk exposure facing ILRI, the results of the study reveal that financing time lag, expenditure currency conversion and monthly monetary revaluation will continue to bear challenge to management and project officers at ILRI. These groups will thus need to strategize on ways of developing contract arrangement that could among others, shift the burden of foreign

exchange exposure to the project donors as well as exploring other avenues of transferring the risk in transactions to project agents to cover for expenditure currency conversion.

5.3 Limitations of the study

Every study is expected to have its unique limitations and weaknesses. Such limitations and weaknesses may be due to difficulties in designing the research problem or in the collection, availability and analysis of data. This study is therefore no exception and the research should be read with the following limitations in mind.

In designing the study, a problem was encountered because although several studies on exchange rate risk have been conducted, there was no single study on the same about not-for-profit organizations had been conducted and therefore offer guidance. As such the study was designed based on aspects of profit making organization, yet limited to the research objectives.

The major limitation however, was that during the period under study, there were other sources of exchange rate risk exposures that were facing ILRI though were not captured by the study. This was so because the study addressed itself only to projects financed in currencies other than the USD.

The study was carried out within the constraints of time and resources and therefore other issues inherent in such a broad study could not be addressed adequately.

5.4 Suggestions for Further Study

Finance is relatively a new discipline with so many unresolved puzzles and hence a very fertile ground for future researches to attempt to resolve or complicate these puzzles. Much has been done on effects of exchange rate risk on project financing decision when the organization is geared towards realizing profits, and therefore only projects with acceptable internal rate of return and whose net present values are positive will be chosen, in the not-for-profit organizations, these rules may be ignored for other overriding objectives.

Risk management is an integral part of funding and project management, a research can be conducted to find out strategies to manage their exposure to foreign exchange rate risk and benchmarks for decision making in the world of not-for profit organizations.

REFERENCES

Asaf, S. (2004), "Executive Corporate Finance" Prentice Hall, London

Berkun, Scott (2005), Art of Project Management. Cambridge, : O'Reilly Media.

Binder, B. F. (1997), "Managing Financial Risk into the 21st Century." Chartered Institute of Management Accounting-The Management Accounting Magazine

Blommestein, H. (2000), "The Changing Nature of Risk and the Challenges to Sound Risk Management in the New Global Financial Landscape" Financial Market Trends March, 174 – 194

Brucaite, V. and Yan, V. (2000), "Financial Risk Management"- Case Studies with SKF and Elof Hansson, Unpublished Masters Thesis, Göteborg, Graduate Business School

Buttimer, R. (2001), "An Introduction to Financial Risk Management in Government" Financial Management Series August

Chong and Brown (2002), "Managing project risk", Pearson's Education Publishers, New Delhi

Dowd, K. (1998), "Beyond Value at Risk" John Wiley and Sons, NY

Dufey, G. (1972), "Corporate Finance and Exchange Rate Variations in Financial Management", Journal of finance, summer pp 51-57

Dufey, G. and Giddy, H. (1978), "The International Money Market" Prentice-Hall, Englewoods Cliffs, N.J

Dufey, G. and Giddy, H. (1995), "Management of Corporate Foreign Exchange Risk", International Accounting and Finance Handbook

Eaker, Mark R. (1981),"The Numeraire Problem and Foreign Exchange Risk," Journal of Finance, May, pp. 419-427.

Eiteman D, Stonehill, D and Moffett, D (1997), "Multinational Business Finance" Addison – Wesley publishing Company.

Glaum, M. (2000), "Foreign Exchange Risk Management in German Non-financial Corporations", an Empirical Analysis Bonn: Licher Stabe

Hekman, Christine R. (1983), "Foreign Exchange Exposure: Accounting Measures and Economic Reality," Journal of Cash Management, February/March, pp. 34-45.

ILRI Annual Report 2003

ILRI Risk Analysis Report, 2005

Kerzner, Harold (2003), Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 8th Ed., Wiley

Li, S. (2003), "Future Trends and Challenges of Financial Risk management" Brisbane, Queensland, Australia

Markowitz, H. (1952), "Portfolio Selection" Journal of Finance vol.17 No.1, March, pp.77 – 91

Gidleys R. (2003), "Donor Input into Aid Operations Growing", AlterNet Jan,2003

Oxelheim, L. and Wihlberge, C. (1997), "Managing in the Turbulent World of Economy." John Willey & Sons, NY

Pickford, J. (Ed.). (2002), "Mastering Risk". Prentice Hall, NY

Risk Management Advanced Search (2001), "A Guide to Performance Improvement and Increased Profitability" (GPIIP)

Shah, A. (2004), "Unraveling Financial Risk", Journal of Financial Regulation and Compliance Vol. 4 No.1

Shanhong (2001) ,"Financial Risk Management", Working Paper Göteborg, Graduate Business School

Stulz, R.M (1996), "Rethinking Risk Management" Ohio State University

Taylor, M. (1995), "The Economics of Exchange Rates" Journal of Economic Literature, Vol 33, pp 13-17.

United Nations High Commission for Refugees (UNHCR (2005), "Impact of Currency Exchange Fluctuations on UNHCR's Operations" Aide-Mémoire 20th September

Walker, T. (1978), "A Guide for Using the Foreign Exchange Market", John Wiley and Sons, N.Y

(www.managementhelp.org)

(www.themanagementor.com)

Appendix 1: Letter of Introduction

Dear Sir/Madam,

RE: Research Information

I am a postgraduate student in the School of Business, University Of Nairobi. As part of my MBA (Finance) course requirements, I am undertaking a research project that seeks to establish the "The effects of foreign exchange rate fluctuations on projects funded through international non-governmental organizations: a case study of ILRI"

To fulfill information requirements for my study I intend to collect primary and secondary data from your institution. The information requested is needed purely for academic purposes and will be treated in strict confidence, and will not be used for any other purpose other than for my research.

I would be most grateful if you can allow me access to all the relevant information pertinent for this research. Any additional information you might consider necessary for this study is most welcome. I appreciate your assistance in accessing the much-needed information.

Thank you in advance.

Yours Sincerely,

NGUGI, JUDY

Supervisor

Mr. J. M. KARANJA

Appendix 2: Data collection form

Section A

1. Project's name _____
2. Donation amount_____
3. Unit of foreign currency_____
4. Mode of fund receipt_____
5. Exchange Loss/Gain on project funds received at intervals will be captured using the following table;

e-Lag Exposure

ect Name							
ation Amount							
of Foreign currency							
e of Fund							
oyment							
nning of the Project							
of Project							
Period	Period of Expenditure	Amount pledged	Exchange rate	Date of payment	Amount received	Exchange rate	Total Exchange Gain/Loss

Section B

Questionnaire to Project Officers at International Livestock Research Institute (ILRI)

PART A

Listed below are statements related to exchange rate risk exposure considered to be affecting the timeframe, scope and quality of projects managed by international livestock research institute (ILRI). Please rate the factors by ticking the appropriate box.

KEY

1. Agree to a large extent
2. Agree
3. Disagree
4. Disagree to a large extent

1. Lack of dedication and urgency by national partners lead to delays that affect the timeframe and delivery dates of projects due to exchange rate exposures.	[4]	[3]	[2]	[1]
2. Conversion rates lead to cashflow problems and therefore affect the time frame and delivery times of projects.	[4]	[3]	[2]	[1]
3. Delay in the release of funds by donors leads to changes in projected budget values due to exchange rate exposures that affect the implementation, timeframe and delivery time of projects.	[4]	[3]	[2]	[1]

4. Logistics and organization of partners leads to delays and hence exchange rate exposures that affect the projected budget values and therefore project timeframe and delivery times. [4] [3] [2] [1]

5. Lack of proper collaboration amongst project partners lead to delays that expose the project to exchange rate risk leading to reduction in the scope of the project [4] [3] [2] [1]

6. Management support may lead to delays that expose the project to exchange rate risk and hence reduction in the scope of the project [4] [3] [2] [1]

7. Exchange rate fluctuations affect the projected personnel budget that can lead to readjustments on the scope of the project due to deficits or surpluses caused there from [4] [3] [2] [1]

8. Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the scope of the projects [4] [3] [2] [1]

9. Exchange rate fluctuations can lead to compromise on procurements of quality materials and therefore affect the overall project quality [4] [3] [2] [1]

10. Exchange rate fluctuations can lead to personnel budget constraints that results in overworking or layoffs of employees during the project period and therefore affect the project quality [4] [3] [2] [1]

11. Exchange rate fluctuations are acute in Kenya and therefore expenditure coverage within the project period is greatly affected and this can affect the quality of the projects [4] [3] [2] [1]

12. Delays in release of funds by donors expose the project to exchange rate risk and compromise on appointments of qualified project agents and can therefore affect project quality [4] [3] [2] [1]

13. Exchange rate risk can lead to compromise on project quality which can make an organization lose reputation with donors and therefore access to future funding [4] [3] [2] [1]

PART B

Please use the space below to state and rate any other factors you feel are the main effects of exchange rate risk exposure on project managed by your organization. Use this key

KEY

5. Agree to a large extent
6. Agree
7. Disagree
8. Disagree to a large extent

Appendix 3: Regression Model Output

Model Summary (b)

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
.901 (a)	.812	.790	78091.75755	.812	37.440	3	26	.000	2.359

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	monthly revaluation, Time lag, Conversion(a)	.	Enter

a All requested variables entered.
b Dependent Variable: total forex exposure

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	684954998184.364	3	228318332728.121	37.440	.000(a)
	Residual	158556387537.803	26	6098322597.608		
	Total	843511385722.167	29			

a Predictors: (Constant), monthly revaluation, Time lag, Conversion
b Dependent Variable: total forex exposure

Casewise Diagnostics(a)

Case Number	Std. Residual	total forex exposure
11	4.367	341168.0

a Dependent Variable: total forex exposure

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-200432.5313	385588.4688	174085.1667	153685.19079	30
Residual	-177640.8125	341032.4375	.0000	73942.28587	30
Std. Predicted Value	-2.437	1.376	.000	1.000	30
Std. Residual	-2.275	4.367	.000	.947	30

a Dependent Variable: total forex exposure

Appendix 4: Regressing Each Independent Variable at a Time

Time Lag and Total Exposure

Descriptive Statistics

	Mean	Std. Deviation	N
Total exposure	-14207.3477	42293.24153	30
time lag	-9323.53733	35302.032469	30

Correlations

		Total exposure	time lag
Pearson Correlation	Total exposure	1.000	.850
	time lag	.850	1.000
Sig. (1-tailed)	Total exposure	.	.000
	time lag	.000	.
N	Total exposure	30	30
	time lag	30	30

Model Summary

odel	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
	.850(a)	.723	.713	22640.73225	.723	73.195	1	28	.000

a Predictors: (Constant), time lag

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37519952910.143	1	37519952910.143	73.195	.000(a)
	Residual	14352877193.061	28	512602756.895		
	Total	51872830103.204	29			

a Predictors: (Constant), time lag
b Dependent Variable: Total exposure

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-4707.576	4280.153		-1.100	.281	-13475.072	4059.919
	time lag	1.019	.119	.850	8.555	.000	.775	1.263

Conversion and Total Exposure

Descriptive Statistics

	Mean	Std. Deviation	N
Total exposure	-13319.0213	41055.27733	32
conversion	-4578.2053	21560.58180	32

Correlations

		Total exposure	conversion
Pearson Correlation	Total exposure	1.000	.553
	conversion	.553	1.000
Sig. (1-tailed)	Total exposure	.	.001
	conversion	.001	.
	Total exposure	32	32
	conversion	32	32

Model Summary

odel	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
	.553(a)	.306	.283	34767.21009	.306	13.227	1	30	.001

a Predictors: (Constant), conversion

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15988842755.590	1	15988842755.590	13.227	.001(a)
	Residual	36262766932.601	30	1208758897.753		
	Total	52251609688.191	31			

a Predictors: (Constant), conversion
b Dependent Variable: Total exposure

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-8496.630	6287.434		-1.351	.187	-21337.284	4344.024
	conversion	1.053	.290	.553	3.637	.001	.462	1.645

Monthly Monetary Revaluation and Total Exposure

Descriptive Statistics

	Mean	Std. Deviation	N
Total exposure	-13319.0213	41055.27733	32
conversion	-4578.2053	21560.58180	32

Correlations

		Total exposure	conversion
Pearson Correlation	Total exposure	1.000	.553
	conversion	.553	1.000
Sig. (1-tailed)	Total exposure	.	.001
	conversion	.001	.
	Total exposure	32	32
	conversion	32	32

Model Summary

odel	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
	.693(a)	.673	.383	347897.2109	.406	33.227	1	30	.001

a Predictors: (Constant), monetary revaluation

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15988842755.590	1	15988842755.590	13.227	.001(a)
	Residual	36262766932.601	30	1358897.753		
	Total	52251609688.191	31			

a Predictors: (Constant), monetary revaluation
b Dependent Variable: Total exposure

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-9896.630	6287.434		-1.351	.187	-21337.284	4344.024
	Monetary revaluation	1.073	.390	.563	2.637	.001	.462	1.645

Appendix 5: Descriptive Analysis Outputs

Lack of dedication and urgency by national partners

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree to a large extent	3	7.5	7.5	7.5
	Agree	21	52.5	52.5	60.0
	Disagree	6	15.0	15.0	75.0
	Disagree to a large extent	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

Conversion rates lead to cash flow problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree to a large extent	6	15.0	15.0	15.0
	Agree	10	25.0	25.0	40.0
	Disagree	21	52.5	52.5	92.5
	Disagree to a large extent	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

Delay in release of funds by donors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree to a large extent	35	87.5	87.5	87.5
	Disagree to a large extent	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

Lack of proper collaboration amongst project partners lead to delays

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	14	35.0	35.0	35.0
	Disagree	4	10.0	10.0	45.0
	Disagree to a large extent	22	55.0	55.0	100.0
	Total	40	100.0	100.0	

Management support may lead to delays

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	17	42.5	42.5	42.5
	Disagree	13	32.5	32.5	75.0
	Disagree to a large extent	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

Exchange rate fluctuations affect the projected personnel budget

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	26	65.0	65.0	65.0
	Disagree	7	17.5	17.5	82.5
	Disagree to a large extent	7	17.5	17.5	100.0
	Total	40	100.0	100.0	

Exchange rate fluctuations are acute in Kenya it affects scope of projects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree to a large extent	14	35.0	35.0	35.0
	Agree	20	50.0	50.0	85.0
	Disagree	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

Exchange rate fluctuations lead to compromise on procurements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	20	50.0	50.0	50.0
	Disagree	6	15.0	15.0	65.0
	Disagree to a large extent	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

Exchange rate fluctuations can lead to personnel budget constraints

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	22	55.0	55.0	55.0
	Disagree	4	10.0	10.0	65.0
	Disagree to a large extent	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

Exchange rate fluctuations are acute in Kenya it affects quality of projects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree to a large extent	7	17.5	17.5	17.5
	Agree	27	67.5	67.5	85.0
	Disagree	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

Delays in release of funds by donors exposes project to risk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree to a large extent	14	35.0	35.0	35.0
	Agree	21	52.5	52.5	87.5
	Disagree to a large extent	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

Exchange rate risk can lead to compromise on project quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	17	42.5	42.5	42.5
	Disagree	5	12.5	12.5	55.0
	Disagree to a large extent	13	32.5	32.5	87.5
	5.00	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

Projects Forming Sample Population

Grant Title	Donor	Grant Currency	Start Date	End Date	Grant amount US$
Rationalisation and Harmonization of Dairy policies, regulations and standards	ASA	EUR	Aug-03	Dec-05	11,600
Dr Jan Naessens Secondment costs	Belgium	EUR	Sep-01	Sep-04	450,000
Trade offs between poverty alleviation and wildlife conservation	Belgium	EUR	Oct-02	Dec-05	1,936,044
Trypanotolerant cattle in the high disease challenge Ghibe Valley	CHF	CHF	Jan-02	Dec-04	10,000
Interchange Canada	CIDA	CAD	Jan-04	Dec-05	371,445
Integrated Crop Livestock production in West Africa	Danida	DKK	Jan-01	Dec-03	378,313
DANIDA Seconded scientist (Dr. Lee Willingham)	DANIDA	DKK	Jan-04	Dec-05	274,856
CPP - Maize and Fodder	DFID	GBP	Apr-01	Mar-04	118,993
Feed strategies	DFID	GBP	Jan-01	Dec-03	12,000
Forage demand and adoption by smallholder livestock keepers	DFID	GBP	Jan-01	Dec-02	96,429
Development of FFS methododlogy for Small Holder Dairy	DFID	GBP	Apr-01	Mar-04	428,768
ECF Vaccine Development	DFID	GBP	Jul-01	Apr-04	5,695,702
Sleeping sickness - Uganda	DFID	GBP	Apr-00	Dec-02	13,433
Design of vaccination programme	DFID	GBP	Jan-02	Oct-05	15,326
LPP Priority Country poverty mapping	DFID	GBP	Sep-02	Mar-04	90,000
Improving food security through community based management of typanotolerant cattle in	DFID	GBP	Aug-04	Dec-05	14,324
Katie Downie - GF Costs	DFID	GBP	Jan-04	Dec-05	25,200
Desertification project in West Africa	DMP	EUR	Feb-02	Dec-05	50,000

Epidemiology and Disease Control	EDF	EUR	Apr-00	Apr-04	482,404
Post Doc - Animal Genetic program :AnGR Project No. 2000 - 7860	GTZ	EUR	May-01	May-04	170,430
ILRI - BMZ project on trypanocide resistance in WA	GTZ	EUR	Mar-02	Aug-05	1,128,000
Post Doc - Integration of multipurpose trees in mixed crop-livestock watershed systems for feed production and soil conservation (Kai Sander)	GTZ	EUR	Jan-04	Jul-05	244,657
Environmental impact assessement of control of tsetse fly usin SIT in the South Rift valley of Ethiopia	IAEA	EUR	Mar-01	Dec-02	82,016
IAEA Student training	IAEA	EUR	Jun-02	Dec-04	30,000
Workshop on Integrated water and land management Research	IDRC	CAD	Nov-02	Nov-04	9,625
Gender roles in urban dairy production in Ethiopia: Enhancing market oriented production systems	IDRC	CAD	May-04	Dec-05	15,417
Irish special project	Ireland	EUR	Jan-02	Dec-05	181,700
KARI /ILRI Workplan for PHD training support	Kenya	KSH	Jul-02	Dec-04	33,654
Research Fellow - Harun Maina	Kenya	KSH	Jul-02	Dec-04	15,324
KARI /ILRI Workplan for PHD training support	Kenya	KSH	Jul-02	Dec-04	10,000
Primas Extrapolate: a protoype policy screening technology targeting tools for livestock keepers in the tropics	NRI	GBP	Jun-04	Nov-04	11,840
Promoting Sustainable Delivery of Trypanosomasis Control Technologies in EA under the FITCA project	AU/IBAR	EUR	Jan-01	Dec-02	64,276
CBPP- PACE Contagious bovine PleuroPnemonia	AU/IBAR	EUR	Oct-01	Oct-04	89,734
Services for farmer field school project	AU/IBAR	EUR	May-04	Dec-05	85,163
University of Glasgow	Glasgow	GBP	Apr-03	Dec-04	11,629
Univ. of Nairobi - ARF funds	UON	KSH	Sep-01	Dec-02	8,978

Mapping Genes for resistance to gastro intestinal nematodes	Univ of Nottingham	GBP	Oct-01	Sep-04	372,991
Student support	WOT	EUR	Jan-00	Dec-03	8,700
Breeding Objectives and Breeding strategies for samll ruminants in the tropics	WOT	EUR	Jul-03	Jul-05	75,600
New Sustainable concepts for efficient smallholder dairy nutrition	Switzerland	CHF	Jan-00	Dec-01	20,000
					13,144,570