A Better Strategy? The Evolving Livelihood Strategies of Caribbean Banana and Sugar Workers in a Globalised Economy

By

Véron Lake

A Thesis Submitted to Saint Mary's University, Halifax, Nova Scotia in Partial Fulfillment of the Requirements for the Masters of Arts in International Development Studies

August 2010, Halifax, Nova Scotia

Copyright Véron Lake, 2010

Approved: Dr. Ryan Isakson
Supervisor

Approved: Dr. Saturnino Borras Jr.
First Reader

Approved: Dr. Tony Charles
External Reader

Date: 24th August 2010
NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protègent cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.
This thesis is dedicated to my mother Lida H. Lake who has always been constant in her teachings that "In everything you do put God first and he shall direct your path." It is also dedicated to my Grandmother Mary E. Lake Daulphin who loved me unconditionally and would have been overwhelmed with pride with this accomplishment."
A Better Strategy? The Evolving Livelihood Strategies of Caribbean Banana and Sugar Workers in a Globalised Economy

Véron Lake

Abstract

Across the developing world, globalisation is forcing tremendous change on the economies and societies that it encounters; the small agricultural economies of the Caribbean are no exception. The globalisation of governance and the rapid liberalisation of trade has systematically worked against the previously protected sugar and banana industries in Trinidad, St. Kitts and St. Vincent. This devastating trend has resulted in the sugar industry closures in Trinidad and St Kitts while orchestrating serious declines in banana revenue for St Vincent. This study uses an actor-oriented framework of analysis to examine and understand the types of coping strategies being used by rural folk in times of economic crisis. The findings from this study suggest that all groups of rural workers have been affected by the fate of the agro-industries, but some more so than others. The findings further suggest that although a plethora of coping strategies are being deployed to protect the integrity of the household and its members there are structural and institutional factors that enable or prevent the creation of meaningful sustainable livelihoods.
Acknowledgements
This thesis would not be complete without taking the opportunity to thank a number of individuals. First, I would like to thank my mother Ms. Lida Lake for her constant support and love during my academic endeavours. I would also like to express my profound gratitude to my thesis supervisor Dr. Ryan Isakson for sharing his knowledge and providing constant guidance throughout every stage of this process. I also want to say a heartfelt thank you to Dr Anthony O’Malley for everything he has done for me while studying at Saint Mary’s. Thank you to the director and staff of the Eastern Caribbean Centre in St Thomas for allowing me access to their archives while on island. Thank you to my stepmother Mrs. Ena Richardson and family, and the management and staff of the St Vincent Banana Growers Association without whom my research in St Vincent would have been impossible. It is also necessary to thank Mr. Deosaran Jagroo for his constant support while in Trinidad. I benefited greatly from the interest and support of my colleagues and friends and so I would like to say a sincere and heartfelt thank you to Ms. Kathryn Baker, Bjorn Carr, Dr. Asyll Warner, Carlos Michel, Stacey Menzies, Verena Rigz, Soraya Merchant, Dojn Lake-Kentish, Deborah Caines, Tracey Caines, Azuree Lake, Germaine Browne, Mario Williams and Andre Williams who took the time provide constructive reviews on the many drafts of my thesis. And finally to my scholarship providers the Organisation of American States, I thank you.
Table of Contents

ABSTRACT .......................................................... III
ACKNOWLEDGEMENTS ........................................... IV
LIST OF TABLES ................................................... VIII
LIST OF FIGURES .................................................. VIII
ABBREVIATIONS .................................................... IX

CHAPTER 1: INTRODUCTION ...................................... 1

1.1 THESIS PLAN .................................................. 3

CHAPTER 2: LITERATURE REVIEW ............................... 4

2.1 LIVELIHOOD PRESERVATION IN THE ERA OF GLOBALISATION 5
2.2 FRAMEWORK OF ANALYSIS ..................................... 7
2.2.1 CONTEXTUALISING THE FRAMEWORK OF ANALYSIS ....... 7
2.2.2 INTRODUCING THE SUSTAINABLE RURAL LIVELIHOODS APPROACH 8
2.2.3 SRLA AND THE CAPABILITIES APPROACH ..................... 9
2.3 ORIGINS AND GENEALOGY OF THE LIVELIHOODS APPROACH 11
2.4 THE SRLA FRAMEWORK AND A DISCUSSION OF THE ISSUE OF ASSETS 13
2.5 WEAKNESSES AND FUTURE TRAJECTORIES OF THE SRLA 16
2.5.1 GLOBALISATION ............................................ 19
2.5.2 POWER AND POLITICS ..................................... 21
2.5.3 LONG TERM CHANGE ....................................... 23
2.5.4 KNOWLEDGE ................................................... 24
2.6 STRATEGIES, VULNERABILITY AND RESILIENCE IN THE CONTEXT OF THE CRISIS 25
2.6.1 HOUSEHOLD STRATEGIES AND CRISIS ....................... 25
2.6.2 THE CONCEPT OF COPING .................................. 27
2.6.3 VULNERABILITY RESILIENCE AND THE HOUSEHOLD .... 27
2.7 EXPLORING LIVELIHOOD STRATEGIES AND THEIR DEPLOYMENT DURING CRISIS 28
2.8 AGRICULTURAL INTENSIFICATION AS A RESPONSE TO CRISIS 30
2.9 LIVELIHOOD DIVERSIFICATION ............................... 32
2.10 MIGRATION AS A STRATEGY IN TIMES OF CRISIS .......... 34
2.11 SOCIAL NETWORKS AND HOUSEHOLDS AS MECHANISMS OF CRISIS COPING 36
2.12 SOCIAL NETWORKS AND THEIR ROLE IN HOUSEHOLD RESILIENCE IN TIMES OF CRISIS 38
2.13 ECONOMIC CRISIS, COPING MECHANISMS AND RESPONSES IN THE HOUSEHOLD 40
2.13.1 WOMEN AND HOUSEHOLD COPING MECHANISMS .......... 44
2.14 ECONOMIC DECLINE AND THE RESPONSE OF THE AGRICULTURAL WORKER 46
2.14.1 THE INFORMAL ECONOMY AND ITS IMPORTANCE DURING ECONOMIC DOWNTURN 46
2.14.2 THE INFORMAL ECONOMY AND ECONOMIC GROWTH .... 48
CHAPTER 5 : SUGAR CASE STUDY # 2: ST KITTS

5.1 INTRODUCTION

5.2 RETRAINING

5.2.1 LIVELIHOOD CREATION AND GOVERNMENT INITIATIVES

5.3 SOCIAL SAFETY NETS OR SOCIAL NETWORKS

5.4 ENTREPRENEURSHIP AS A MEANS OF LIVELIHOOD CREATION

5.5 SOME FACTORS PREVENTING NEW LIVELIHOOD CREATION

5.5.1 PSYCHOLOGICAL ISSUES

5.6 HOUSEHOLD COPING MECHANISMS DEvised BY RURAL WORKERS

5.6.1 NON-FOOD RELATED COPING STRATEGIES:

5.6.1.1 CLOTHES PURCHASING BEHAVIOURS

5.6.2 FOOD RELATED COPING STRATEGIES

CHAPTER 6 BANANAS: CASE STUDY ST VINCENT

6.1 INTRODUCTION

6.2 CONTEXTUALISING THE ISSUES CREATING THE CRISIS

6.3 BACKGROUND TO THE INDUSTRY

6.4 RURAL RESPONSES TO ECONOMIC DOWNTURN

6.4.1 CROP DIVERSIFICATION

6.4.2 MANIPULATION OF FARM SPACE

6.4.2.4 LABOUR AVAILABILITY AS A CONSTRAINT TO FARM SIZE

6.5 OFF FARM EMPLOYMENT

6.6 LABOUR CONSTRAINTS AND LABOUR CREATION FOR PRODUCTION

6.7 HOUSEHOLD ADAPTATIONS TO ECONOMIC CRISIS

6.8 SUMMARY

CHAPTER 7 : ANALYSIS CONCLUSION AND RECOMMENDATIONS

7.1 CONCLUSION

7.2 POLICY RECOMMENDATIONS

BIBLIOGRAPHY

ANNEX
List of Tables

Table 4.1 Prices for ACP Raw Sugar 2005-2011 .................................................. 71
Table 4.2 Trinidadian sugar exports under EU/ACP regime (Value in 000 US$) ................. 76
Table 4.3: Awareness and participation in capacity building initiative ................................. 82
Table 4.4: Nutritional comparison of the cost of imported and locally produced food .............. 88
Table 5.1: Registration vs. Attendance in government retraining programs .......................... 102
Table 5.2: Proposed social initiatives for ex-sugar workers .............................................. 107
Table 6.1: Value of banana exports to UK under EU/ACP regime (Value in 000 US$) .......... 123
Table 6.2: Banana exports from St Vincent in Tonnes .................................................. 126
Table 6.3: Comparative cost of producing a box of bananas in Latin America and the Caribbean ...... 127
Table 6.4: Distribution of arable land among sample .................................................... 129
Table 6.5: Diversified vs. non-diversified farmers by gender .......................................... 130
Table 6.6: Share of land dedicated to banana and food crop cultivation by gender .................. 135
Table 6.7: Number of active banana growers in St Vincent over period 1993-2007 .................. 137
Table 6.8: Real prices of Vincentian bananas per box $USD 2000-2009 ............................. 141
Table 6.9: Number (%) of households growing crop by type .......................................... 142

List of Figures

Figure 2.1 Sustainable livelihoods framework: a checklist (Scoones 1998) .......................... 16
Figure 4.1 Raw Sugar production Costs for ACP producers ........................................... 73
Figure 5.1: Results for search for employment of those who received training ...................... 116
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACP</td>
<td>Africa, Caribbean and Pacific</td>
</tr>
<tr>
<td>CARICOM</td>
<td>Caribbean Community</td>
</tr>
<tr>
<td>CSME</td>
<td>Caribbean Single Market and Economy</td>
</tr>
<tr>
<td>CET</td>
<td>Common External Tariff</td>
</tr>
<tr>
<td>DFID</td>
<td>UK Department for International Development</td>
</tr>
<tr>
<td>EBA</td>
<td>Everything But Arms Initiative</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>EPA</td>
<td>Economic Partnership Agreement</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>LDC</td>
<td>Least Developed Country</td>
</tr>
<tr>
<td>MFN</td>
<td>Most Favoured Nation</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>SRLA</td>
<td>Sustainable Rural Livelihoods Approach</td>
</tr>
<tr>
<td>SSMC</td>
<td>St Kitts Sugar Manufacturing Corporation</td>
</tr>
<tr>
<td>SVGBA</td>
<td>St Vincent Banana Growers Association</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Background to the Problems facing Caribbean Agriculture

Across the developing world, globalisation is forcing tremendous change on the societies and economies that it encounters, the small agricultural economies of the Caribbean are no exception (World Bank 2005). The former Caribbean colonies of the British Empire have always enjoyed preferential trading arrangements with the United Kingdom (UK), centred on a quota system that reserved the bulk of the UK market for agricultural products exported from Commonwealth countries that traded in sterling. This preferential access has traditionally been protected by Protocol 5 of the Lomé Convention and its successor in the Cotonou Agreement. Following the creation of the Single European Market and the World Trade Organisation (WTO) ruling of 1995 and again in 1997, Caribbean sugar and banana producers have seen a steady dismantling of their preferential trading arrangements for agricultural products. This has reduced national revenues, and has forced the closure or destabilisation of many Caribbean agricultural industries, which has left thousands of Caribbean agro-industry workers unemployed. In this document, I draw upon the Sustainable Rural Livelihoods Approach (SRLA) to analyse the diverse ways in which economically challenged peasant households and the rural poor mix different livelihood activities in an effort to earn a living and cope with distress amidst the processes of globalisation, the decreasing role of agriculture, and income irregularity and stoppage. This research is very timely and important for Caribbean research. It aims to improve the understanding of the rural working poor in the Caribbean context, their means of livelihood strategising, logic of
decision-making, and means of organising. It will serve as a tool for researchers, policy-makers and development practitioners working on rural development. This study seeks to answer the following question: what are the coping strategies used by rural agricultural workers to continue making a livelihood in times of economic downturn? This can be broken down into questions that are more detailed: What are the effects of economic crisis on rural agricultural workers and what are their responses to economic crisis? What are the household strategies being employed by rural workers? What impact have these strategies had on the rural worker during the crisis period? Finally, what factors determine which strategies are deployed as opposed to another? I argue that the poor are aware of many options during times of crisis, they choose and mobilise the options best suited for them in a calculated fashion to ensure the survival of the household throughout the crisis period. In order to answer these questions I did three months of in depth field research in the Caribbean islands of St Kitts, St Vincent and Trinidad. I examined how sugar and banana workers were responding to this economic crisis in the relatively resource poor nations of St Kitts and St Vincent, as compared to sugar workers in the relatively resource rich nation of Trinidad. The data shows that in all three countries rural workers diversified their livelihoods, intensified agriculture, changed their consumption behaviours, consolidated households and engaged in various forms of informal labour arrangements and land manipulation practices. At the same time, coping strategies appear to differ among islands, ethnic groups, gender, as well as educational and professional backgrounds. My findings suggest that Caribbean rural actors coping in very creative, rational, and calculated way, using the various
assets at their disposal. Through these coping strategies, wealthier rural actors with education and access, and actors with more technical skills have managed to transform their lives and livelihoods in a very positive way. Poorer actors without these assets had to utilise a range of short-term survival strategies and medium-term coping strategies, but had not been able to improve their lives under the current conditions and were simply getting by.

1.1 Thesis Plan
The remainder of the thesis consists of six chapters. In chapter 2, I provide a theoretical review of relevant literature in an attempt to provide a theoretical framework of analysis that can be used to best understand the evolving coping strategies among Caribbean rural workers. In chapter 3, I outline the methodological procedures I used to collect my empirical data. Chapters 4, 5 and 6 respectively focus on my three case studies: Trinidad, St Kitts and St Vincent. In each case of these chapters, I contextualise the economic downturn of the country's agro-industries in terms of the globalisation of governance and the liberalisation of trade. I then examine the coping mechanisms that have evolved among rural workers in these islands as a result of this economic downturn. Lastly, in chapter 7, I synthesise and analyse my findings and discuss the policy implications for my research.
Chapter 2 : Literature Review
What are the local coping strategies being used by Caribbean agricultural workers in the islands of St Kitts, St Vincent and Trinidad in times of economic downturn? Contemporary academic literature is replete with documentation of the inventiveness and adaptability of peasant households in the developing world to cope with scarcity and income irregularity through a combination of diverse sources of income and social creativity (Nygren & Hirvonen, 2009). This study seeks to answer the question what are the strategies rural agricultural workers use to continue making a livelihood in times of economic downturn? This can be broken down into more questions that are detailed: What are the effects of economic crisis on the rural agricultural worker? What are the household livelihood strategies employed by rural workers and what was the response to economic crisis? What impact do these strategies have on rural workers during the crisis period? Finally, what factors determine which strategy is deployed as opposed to another? In answering these questions this study attempts to build and integrate a crucial piece of knowledge into the national development policies of microstates, but instead of using blanket prescriptions, to use informed, well-researched, theoretically grounded information that was gathered through a sound methodology. This research is timely and important because few studies have been conducted to assess the actual social and economic impact that trade liberalization and neoliberalism has on people in the Caribbean on a micro level. This research will fill a void in the academic literature on how micro-states and their citizenry are combating the effects of neoliberalism by looking at the evolution of government sponsored programs and peoples coping and
adaptation mechanisms in an attempt the transition away from traditional agro-industries. Throughout this thesis the terms economic downturn, crisis and financial distress are used interchangeably to refer to times of diminished opportunities for earning income in the formal economy.

The chapter is structured into four parts. First, I discuss livelihood preservation in era of globalisation by providing examples of successful livelihood preservation from around the world. This demonstrates how poor people operated in rational ways to preserve their livelihoods while being systematically inserted into the global economy. Second, I provide a formal introduction of the framework of analysis and its origin, explaining the reasons and rationale for its use. This entire section examines various aspects of the framework to shed light on the concept of coping, and the deployment of strategies during times of crisis. An examination will also be made of the framework’s weaknesses and possible future trajectories. Third, I discuss the concept of strategies in the context of crisis, to examine how households and villages create and deploy the strategies available to them in times of economic downturn. Fourth, I examine differentiated nature of the Caribbean rural worker in an attempt to show why this group of people is distinctly different from its European and Asian counterparts.

2.1 Livelihood Preservation in the era of Globalisation
A basic search of the literature or development project material uncovers numerous mentions of livelihoods approaches, perspectives, methods and frameworks. A mobile and flexible term, ‘livelihoods’ can be attached to all sorts of other words to construct whole fields of development enquiry and practice. These relate to locales (rural or urban
livelihoods), occupations (farming, pastoral or fishing livelihoods manufacturing, service, reproductive labour), social difference (gendered, age-defined livelihoods, class, ethnicity), directions (livelihood pathways, trajectories), dynamic patterns (sustainable or resilient livelihoods) and many more (Scoones I., 2009).

Among the first anthropologists to situate their ethnographic work in a global context were Sidney Mintz (1977) and June Nash (1981), who warned against overly deterministic readings of the world system. What Nash termed ‘the problem of the passive periphery’ in world systems theory i.e. its tendency to regard conditions in local communities as a reflex of their insertion into the world economy, could apply equally well to globalisation perspectives that regard neoliberalism as a monolithic process. With the emergence of globalisation, Nash (1994) observed that small farmers would have to adapt suddenly to the removal of tariffs and price supports (Nash, 1994), which suggests a dialectical relationship between structure and agency. Long (1992; 2000) and Torres (1992) provide support for this dialectical relationship by suggesting that marginalised peasants and rural poor cope with globalisation through the creation of diverse sources of income and social creativity. There is no shortage of academic literature that examines how the poor have acted rationally to preserve their livelihoods. For example, Massey (1987) has remarked on the complexity with which Somalian agro-pastoralists responded to a high level of uncertainty in their arid environment before the shrinking of pasturelands required an intensification that devastated the soils. Posey (1983) has documented the ingenuity with which the Amazonian Kayapo exploit their environment without despoiling the delicate balance of
faunal and floral resources. Walker (1985) has shown the balance maintained by Southeast Asian hill tribes as commoditized ventures such as poppy cultivation become part of their survival strategy. Anthropologists and those economists who consider micro-systems have also documented the devastation that development and export-oriented growth has brought to these systems.

2.2 Framework of Analysis

2.2.1 Contextualising the Framework of Analysis

In engaging the topic further, it is important that I introduce the analytical framework, and clearly define some of the terminologies associated with it. The concept of livelihoods sits at the centre of this theoretical discussion, however it is important to recognise that the term livelihoods mean different things to different groups of people (O’Laughlin, 2004; Farrington et al., 1999). As it stands, the concept of livelihoods can be approached and understood from two perspectives; its first approach uses the concept as a part of a general critique of old dualisms and evolutionary sequences from agricultural to industry, rural to urban etcetera. This approach recognises the complexity, diversity and historical specificity in rural life; it recognises that rurality is not coterminous with farming, but that to survive people combine different activities, one of which may be agriculture (O’Laughlin, 2004). The second approach to livelihoods promotes the term from a useful descriptive concept to a framework of poverty analysis, and this is the entry point for the concept of the “livelihood strategy”. The

1 Arhem on Tanzanian agro-pastoralists 1984; Barkin on Mexican cultivators 1987; Corea on Sri Lanka 1975; Mencher 1978, 1985 on the impact of the green revolution and the loss of a subsistence base in India; Pryor on Malawi and Madagascar 1990
concept of livelihood strategy shifts the focus from the individual or household to groups of people that work together to survive, these groups creatively combine multiple activities in order to minimise risk in contexts of vulnerability. This concept dictates that any analysis of livelihoods must start with an exploration of how different people in different places live (Scoones I., 2009). A variety of livelihood definitions are offered in the literature, including, for example, ‘the means of gaining a living’ or ‘a combination of the resources used and the activities undertaken in order to live’. Therefore, a working livelihood framework must portray a complex web of activities and interactions that emphasise the diversity of ways people make a living. This diversity may cut across the boundaries of more conventional approaches to looking at rural development, which focuses on defined activities: agriculture, wage employment, farm labour, small-scale enterprise and so on. Scoones (2009) rightly recognises, and aptly puts forward, that in reality people combine different activities in a complex “bricolage” of activities. This dynamic, longitudinal analysis emphasises such terms as coping, adaptation, improvement, diversification and transformation. Analyses at the individual level can in turn aggregate up to complex livelihood strategies and pathways at household, village or even district levels (Scoones I., 2009).

2.2.2 Introducing the Sustainable Rural Livelihoods Approach
Using the above-mentioned definitions and understanding of livelihoods, and the requirements of an analytical framework needed to frame this discussion, the Sustainable Rural Livelihoods Approach (SRLA) will be the primary analytical framework used to contextualise the present study. In recent years SRLA has become the more
formalised version of livelihoods analysis. It has taken over the field of poverty reduction in the field of development cooperation (O’Laughlin, 2004), as it takes a more modest approach to defining outcomes instead of overly ambitious goals (Start & Johnson, 2004). The British Department for International Development describes SRLA as “an improved way of thinking about the objectives, scope and priorities of development that will better meet the needs of the poor”; both at project and policy level (DFID, 2000). This consideration for the poor makes this framework of analysis best suited for this study, as it provides a comprehensive way of understanding how poor people make a living, the assets available to them, and the livelihood strategies they pursue. It also recognises that the poor are a vulnerable group, as such they are susceptible to shock, and bouts of crisis. More importantly it recognises there are ways in which communities, households and assets can be mobilised and resources reallocated in times of crisis.

2.2.3 SRLA and the Capabilities Approach
This approach draws heavily on the institutionalist approach of Amartya Sen (1985), which considers the ways in which individual actors actively shape their world within social and cultural constraints that define their capabilities and boundaries of legitimate action. This approach defines the advantage of an individual relative to another and hence influences the opportunities open to them. The individual can use that advantage as he chooses and the more advantages he has, the more freedom he has to choose a course of action that leads to wellbeing (Krantz, 2001). The capabilities approach of Sen (1985) and the SRLA framework put forward by Scoones (1998) complement each other.
in various ways. First, both realise that while economic growth may be essential for poverty reduction, there is not an automatic relationship between the two, the poor’s ability to take advantage of expanding economic opportunities is contingent upon their capabilities. Second, they both realise that poverty — as conceived by the poor themselves — is not just a question of low income, but also includes other dimensions such as poor health, illiteracy and lack of social services, as well as a state of vulnerability and feelings of powerlessness in general. Finally, development practitioners now recognise that the poor often know their situation and their needs best and must therefore be involved in the design of policies and projects intended to better their lives.

There are some differences in level of analysis between the SRLA and the capabilities approach. The capabilities approach is a broad normative framework for the evaluation of individual well-being and social arrangements, its scope is always on the individual (Robeyns, 2003). Meanwhile with the SRLA the unit of analysis can be described at an individual, household and village level. The SRLA can also go further to include regional or even national levels (Scoones I., 1998). Any level of analysis above that of the individual draws criticism from White (1989), who believes that the individual is the only suitable level of analysis in the SRLA framework. He argues that when the basic unit of analysis is raised from the individual to the household it becomes extremely problematic, as the ‘household’ is a very problematic concept—it is ambiguous, marred by power struggles and its inhabitants usually work to achieve different goals. White
(1989) subsequently proposes that researchers need to think more in terms of separately and carefully defined units of production, consumption and accumulation.

2.3 Origins and Genealogy of the Livelihoods Approach
The concept of livelihood is not new. Evans-Pritchard (1940) used it in 1940 when describing the Nuer’s strategies for making a living. Other social scientists who employed the term livelihood include Kimble (1960), Pandit (1965) and Freeman (1975). In their studies, ‘livelihood’ is used in a concrete manner to describe the ways in which people make a living, and mainly points to the economic resource base people have at their disposal for doing this. The term was taken for granted and constituted no issue for debate (Kaag et al, 2004).

Although it had an earlier history, it was only in the 1970’s that the term livelihood began to enter the development lexicon (Scoones I., 2009). Sustainable Livelihoods as a concept did not make its way into developmental thinking until 1992 when Robert Chambers co-authored a discussion paper with Gordon Conway and produced a working paper for the Institute of Development Studies (IDS) (Chambers & Conway, 1992). Therein they offered a working definition and initial framework for the understanding of sustainable livelihoods that was very similar to that subsequently adopted by the Department for International Development (DFID). According to Chambers and Conway, “A livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future,
while not undermining the natural resource base” (Ashley & Carney, 1999; Carney, 1998; Chambers & Conway, 1992).

Chambers and Conway explicitly recognised that they were both reacting against and building on earlier thinking. They criticised many previous analyses of production, employment and income as industrial and reductionist, which “do not fit or capture the complex and diverse realities of most rural life” (Chambers and Conway, 1992: 4). They presented sustainable livelihoods as a linking of the three extant concepts of capability, equity and sustainability. For each of these there was a tradition of research extending back through the 1980s and even earlier in some cases. For example, they refer to the work of Sen (1981), Jodha (1988) and Schumacher (1973) in relation to capability and to that of Pearce (1989), Lele (1991) and Swift (1989) in relation to sustainability, for which Chambers and Conway emphasised the social as well as the environmental dimension.

While the roots of the livelihood approach lie in the 1980s and early 1990s, the basic ideas have been further developed through contributions made by scholars from different disciplines over the years. At first, economists and human geographers constituted the majority, but later on, other disciplines such as anthropology and social psychology entered the debate. Kaag et al (2004) cite three types of contributions that can be distinguished. Firstly, most publications with a livelihood perspective are case studies that focus on the livelihood strategies of a particular group of people in a particular environment (Dekker 2002; Kanji, 2002; Taylor, 2002). Secondly, there are a few influential contributions that are more theoretical and broader in scope, such as those of Ellis (2000), Bebbington (1999), De Haan (2000), Moser & Norton (2001).
Thirdly, efforts have been made within policy circles to develop analytical frameworks to capture the livelihood situation of a target group for the formulation of adequate policy interventions. In 2000, livelihood frameworks received new inputs and redesign, partly from government-funded efforts to develop a sustainable livelihoods approach to poverty. DFID is the main contributor of such an approach, but the World Bank, Oxfam International, and others have also incorporated the livelihood theme within their policies (Kaag et al, 2004). Many authors have claimed that the SRLA approach is similar to the old Integrated Rural Development approach, which was also broad and multi-sectoral—this will not be discussed here, but the crucial difference is that the SRLA does not necessarily aim to address all aspects of the livelihoods of the poor. The intention of SRLA rather is to employ a holistic perspective in the analysis of livelihoods to identify those issues of subject areas where an intervention could be strategically important for effective poverty reduction, either at the local level or at the policy level (Krantz, 2001).

2.4 The SRLA Framework and a Discussion of the issue of Assets
Implicit in much of the thinking about livelihoods and development is the notion that resources can be conceptualised as capital assets and that capital assets are convertible, and are therefore subject to the logic of investment, meaning they can appreciate or depreciate in value and usefulness. Financial capital can be used to acquire other forms of capital, including human capital (labour and knowledge), social capital (loyalty, networks) and natural capital (water, land). Likewise, human capital can be used to acquire economic, social and natural capital, and so on. Thus, one form of capital can be
used to acquire other forms of capital, and the 'topography' of asset exchangeability is determined by moral, legal and cultural factors (Start & Johnson, 2004; Dershem L & Gzirishvili, 1998). The concept of capital assets (inputs) as a central feature considers how assets are affected by the 'vulnerability context' in which they are derived, and by 'transforming structures and processes' (alternatively labelled 'policies, institutions and processes'), to constitute 'livelihoods strategies' (outputs) which lead to various 'livelihoods outcomes'. The crisis literature recognises that all poor people have assets that they fall back on in times of vulnerability, i.e. hurricanes or economic downturn. These assets can be drawn on in times of vulnerability to save one's self or household from experiencing starvation (Adams et al, 1998; Baiquini, 2008). To deal with crisis, people will sell assets, such as a pig or a bicycle, or take on debt from a kin or an informal moneylender to secure food (Indiyanto, de Jong, Nooteboom, & White, 2006).

The assets discussed in this framework are different types of capital: natural, financial, social, physical (Scoones I., 1998). O'Laughlin effectively elaborates on what exactly these types of capitals are, and recognises that assets vary from person to person over time and geographical space (O'Laughlin, 2004). However, she feels that SRLA and some of its proponents are too fixated on the capitals issue. One has to be careful about overemphasising the value of these capital assets by trying to quantify or define them in a neoclassical context. Barette (2001) has argued that although capital assets offer a store of wealth and income, they can be very difficult to value in the developing world where secondary asset markets are often poorly developed, especially since asset fixity

---

2 Assets specific to certain activities e.g. ploughs for crop cultivation
generates highly variable returns to assets—especially in times of hyperinflation or
deflation (White, 2003). Beall (2001) rejects the conceptualising of livelihood assets in
this way. He argues that conceptualising in this way reduces them to neo-classical
economic concepts, which may have only a superficial value. He further argues that
doing this tells us nothing of the relationships between assets, or how assets may
change over a lifetime, or whether having high levels of one particular asset may
compensate for low levels of another. This is why the focus on ‘capitals’ and the ‘asset
pentagon’ has been both helpful and detrimental to the SRLA (see figure 1 Annex). It has
been helpful because it has kept the theoretical discussion about the SRLA firmly in the
territory of economic analysis (Scoones I., 2009), which, along with the input-output-
outcome elements of the livelihoods framework, makes the SRLA easily recognised by
economists. The focus on capitals is convenient for three reasons. First, because it gives
social scientists the means to persuade economists of the significance of social factors in
development (Naryan & Prichett, 1997). Second, it is a means of de-politicizing
development, thereby evading questions of power and wealth—which should be
included in any discussion that deals with the poor (Harriss, 2002). Third, it justifies
working with civil society rather than local governments. Nevertheless the focus on
assets has also been “detrimental” to the growth of the framework, because it has
prevented livelihoods analysis from moving much beyond the issue of assets and is
therefore missing out on wider social and institutional dimensions (Scoones I., 2009).
2.5 Weaknesses and Future Trajectories of the SRLA

Reviews of experience with the SRLA framework (e.g. Ashley and Carney 1999; Farrington 2001) have pointed to strengths and weaknesses of the framework. Among the strengths of the SRLA has been its people-centeredness and poverty orientation. The SRLA starts by recognising the vulnerability context of shocks, trends and seasonality. It then lists the five (or six with political) capitals, including influence and access to resources and services, taking into account of some structures and processes. It then gives space for livelihood strategies and allows for multiple livelihood outcomes, it has a complexity and comprehensiveness which is presented in Figure 2.1.

Figure 2.1 Sustainable livelihoods framework: a checklist (Scoones 1998)
With this comprehensiveness, the SRLA belongs to no discipline. Almost every development professional can identify with one of the five capitals – natural capital, physical capital, human capital, financial capital and social capital. In addition, if political capital is added, there is a place too for political scientists (Baumann, 2000). In his review, John Farrington (2001:1) added that the SRLA approach provided a reality check. Summing up its advantages, he wrote:

"SL approaches put the poor at the centre of analysis and aim to identify interventions to meet their needs and opportunities in ways not dominated by individual sectors or disciplines" (Farrington, 2001). However, some authors have suggested that the layout of the original Sustainable Livelihoods framework does not "suggest" this approach, and, in some cases, encouraged a "left-to-right" reading (Hamilton-Peach & Townsley, 2008). The linkages between different elements in the framework - the lines connecting Policy, Institutions and Processes (PIPs) with vulnerability, and strategies with assets vulnerability and PIPs - do not come across as important visual elements and are sometimes interpreted as being relatively unimportant, when in fact they are essential to the understanding of sustainable livelihoods (Scoones I., 2009; Peach & Townsley, 2006). This has raised questions about the diagram's (figure 2.1) ability to capture the complexity of the institutions and power relations, which shape the ways in which resources (or capabilities) are utilised in livelihood strategies. Scoones (2009:180) has responded to these criticisms by pointing out that:

---

3 The framework starts with the poor and their livelihood assets, which is essential in getting people to engage in a "people-centred" analysis. However, the layout of the original SL framework did not "suggest" this. The poor tend to be easily lost within the livelihood pentagon as observers looking at the framework sometimes focuses more on the assets and other factors than on the poor as people.
“Livelihoods approaches encompass a broad church, and there has been some important work that has elaborated what is meant, in different variants of different frameworks, by ‘transforming structures and process, ‘policies, institutions and processes’, ‘mediating institutions and organisations’, sustainable livelihoods governance’ or ‘drivers of change’.”

Other weaknesses have also become evident. In practice, the household is typically used as the unit of analysis, which tends to overlook gender issues including intra-house distribution and dynamics. The various frameworks have tended to be difficult for those who come to sustainable livelihoods for the first time. They can be constraining when interpreted too rigidly, especially with the analysis of field data, and when the categories—for example the capitals—are treated as boxes into which realities must be fitted rather than useful checklists to ensure coverage of significant reality. Further weaknesses include ignoring the net effects of livelihoods on others, and focusing only on the poor and not on the rich.

Where does the future of the SRLA lie? There have been a series of inputs from some of the most prominent authors in the development field as to what they feel is necessary to strengthen the SRLA (Chambers, 2005; Ellis, 2000; Scoones, 2009). The most innovative work on the way forward for the SRLA comes from the Scoones 2009 article where he identifies four challenges that need to be addressed in order for the SRLA to be responsive to new contexts: the need to articulate livelihoods perspectives with

---

4 He then goes on to mention that the works of Davies and Hossain 1987, Hyden 1998, Hobley and Shields 2000, DFID 2004 have addressed the social and political structures and processes that influence livelihood choices (Scoones, 2009:180).
concerns of knowledge, politics, scale and dynamics. Each offers opportunities for extending, expanding and enriching livelihoods perspectives from a variety of different perspectives.

The sections that follow describe these shortcomings as identified by Scoones, and highlight some of the recommendations that he has made to strengthen and reposition the SRLA framework in the development debate. The discussion covers globalisation and scale, power and politics, long-term change and dynamism, the politics of created knowledge and assets and capitals.

2.5.1 Globalisation
Scoones in his 2009 article has his own idea about why the SRLA approach has fallen from the prominence it achieved a decade ago. He identifies four failings of the livelihoods perspective that he feels is responsible for this happening. The first claim is the failure of SRLA to engage with the processes of economic globalisation. Scoones highlighted that it was the weak economic input, idealism, and complexity that prevented SRLA from being able to engage with issues on a macro-economic or global scale. He claimed the SRLA, is too project focused and its micro scale approach was in-applicable to issues on the global scale. Similar criticisms are made by de Haan (2008:2) who argues that, "... despite the importance of "locality", in my view the one-sided local orientation - prominent in many livelihood studies - is outdated. What we witness under globalization is the rise of multi-local livelihoods and livelihood studies are not fully aware of that yet - or perhaps better formulated — livelihood studies do not capture that transformation yet, because in my view the focus is too much limited to
migration...” In addressing this issue, Scoones has recommended that in order for the livelihoods perspectives to remain at the centre of the development agenda it must be able focus on not only the micro level, but it must be able to engage with debates about globalisation, which is essential in the reinvigorating process of the livelihoods perspective. This view is supported by Robert Chambers (2005) who recognises there are international and global dimensions to livelihood. De Haan (2008) also recognised that large numbers of people are no longer rooted in one place, therefore to study emerging diasporas, trading networks or transnational communities is a legitimate approach. Bebbington & Batterbury (2001) have emphasised that a focus on transnational livelihoods and the need to ground the political ecologies of globalisation in the notion of livelihoods, therefore scale, place and network should be more central to the livelihood approach. They further call for a broader enterprise that struggles to understand the ways in which peoples, places and environments are related and mutually constituted, and the ways in which these constitutions are affected by processes of globalisation. Scoones (2009) feels that the challenge of bringing scale further to the centre of the livelihoods perspective can be met through the development of livelihoods analyses which examine networks (de Haan, Globalisation and Livelihoods, 2008), linkages, connections, flows and chains across scales, but remain firmly rooted in place and context. This must go beyond a mechanistic description of links and connections. Such approaches must also illuminate the social and political processes of exchange, extraction, exploitation and empowerment, and so explore the multiple contingent consequences of globalisation on rural livelihoods.
2.5.2 Power and Politics
The second failing of the framework according to Scoones is the lack of attention that is paid to power and politics and the failure to link livelihoods and governance debates in development (Baumann, 2000; Scoones I., 2009). This is a grave failing of the SRLA as it fails to recognise that powerlessness is a central element of poverty; any focus on poverty, inequality, injustice, or exclusion involves power and power relations. Despite this acknowledgement, power is insidious and has remained invisible in the approach. To address the call for a more central position for politics within the livelihoods perspective, Scoones posits more explicit theorisation of politics, power and social differentiation is required (Scoones I., 2009), not just as a context, but as a focus for analysis in and of itself—beyond the local level to examine wider structures of inequality. This of course can be done through the lenses of political economy and histories of places and people and their wider interactions with colonialism, state making, and globalisation. Scoones suggests paying more attention to how livelihoods are structured by relations of class, caste, gender ethnicity, religion and cultural identity. He suggests that in order to understand the agrarian structures the question of Bernstein's (2007) must be asked; who owns what, who does what, who gets what and what do they do with it?
Rowlands (2003) has long argued that if the SRLA pays explicit attention to power relations, and acknowledges and addresses the power dynamics within which it operates, it is more likely to contribute to change. De Haan (2005:11) has called for the approach to struggle “out of the grasp of New Labour-like and neo-liberal flavoured
policies, which stress personal responsibilities - even for the poor - in contrast to the collective responsibility of the welfare state, downplaying structural constraints at the same time”. More recent work suggests a fusion between the idea of rights and the SRLA to produce a ‘livelihood rights approach’. This follows the premise that rights matter and that the poor must be supported and empowered to claim their rights (Moser and Norton 2001). Yet there is no acknowledgment of how it is to take place, who or what has to be disempowered for it to take place, or who will facilitate the empowerment exercise. In his 2009 article, Scoones does not claim that there has not been any attempt to link works on decentralisation and rights based approaches to issues around agrarian change, for there has (Hobley and Shields, Bauman, 2000 ). Conversely, he simply claims that the attempts made were simply not enough. Scoones suggests that often the theorisation surrounding politics and power was often weak, confusing and contradictory. Stated differently an intellectual articulation of both mainstream political science governance debates, and more radical agrarian change debate was missing. Rowlands (2003) weighed in on this debate with the view that that the approach needs to reinforce and strengthen other forms of power that will contribute to lasting solutions through their enhancement. The power of people acting collectively to make change, and the power of people knowing and demanding their rights in ways that cannot be ignored (Rowlands, 2003). Scoones (2009) feels that the livelihoods already have the necessary tools to deal with this type of political process across scales, but he insists that the contents of the livelihoods tool box be deployed and used in a more focused and analytical way (Scoones, 2009).
2.5.3 Long Term Change
The final shortcoming of the SRLA levelled by Scoones is its failure to grapple with long term shifts in rural economies and wider questions about agrarian change. He cites quite correctly that the approach does not address what livelihood futures should look like in coming decades (Scoones, 2009). Currently, the approach documents current local level adaptation, but it does not conceptualise what any fundamental transformations in livelihood pathways will look like in the future. This is a fundamental weakness of the SRLA because it neglects one of the biggest issues in development in the 21st century--climate change. Scoones claims that attempts were made to address the issue and points to evidence from Scoones (1995) and Mortimore (1989) but states that they may not have been enough for the academic community to feel as if the SRLA was engaging the issue with the seriousness that it deserved. According to Scoones (2009), instead of focusing on coping and short-term adoptions, the perspective must be able to address questions relating to what stresses and shocks are important. Questions like how is sustainability assessed, and how are issues related to the future are to be addressed; will bring attention to systematic transformations that are a result of secular change. Scoones argues, and rightly so, that without attention to the long run, a snap shot view of livelihood adaptation may miss gradual transformations as people strive for better, by intensifying production, improving environmental conditions, investing or migrating. To make the livelihoods perspective more dynamic, Scoones calls for a dramatic reconfiguration of the livelihoods perspective in order for it to be able to capture the long term changes that are taking place, especially regarding issues such as
climate change or environmental change. He resists the idea of simply dressing up and repackaging old language, instead he recommends a careful unpacking of the inter-relationships between vulnerability and resilience perspectives (Scoones, 2009; Nelson, 2007). Scoones also addresses the issue of sustainability in the livelihoods perspective citing that sustainability and resilience cannot always emerge through local adaptation in conditions of extreme vulnerability. Therefore, to enhance the livelihoods perspective and to enhance debates about sustainability, Scoones recommends that other literatures be incorporated into the livelihoods thinking as these literatures converge on key concerns for rural livelihoods.

2.5.4 Knowledge
Moving forward, Scoones notes that the processes of discursive framing⁵ have created a politic of knowledge around the livelihoods literature. The adoption of livelihoods by the World Bank and radical movements has created a new level of discourse that is changing the ways in which the debates around the concept of livelihoods are constructed and debated. Scoones expresses concern that the framework will become too much of what the World Bank wants it to be and not what it was originally intended to be. De Haan (2008:10) has echoed a similar sentiment, writing that “Despite its roots in various social science disciplines, the livelihood approach tended to focus much more on opportunities than on constraints, more on actor’s activities than on structure, more on neutral strategies than on failed access, power or conflicts. In this sense globalisation and its dominant neo-liberal ideology shaped the new understanding of livelihoods,

---

⁵ i.e. creating typologies and categories and defining inclusions and exclusions
because the approach did not want to choose between neo-marxism and neoliberalism, resulting in a somewhat non-ideological stand..." This institutionalisation of the livelihood approach creates a normative version of ‘good’ and ‘bad’ livelihoods, and ‘good’ and ‘bad’ rural futures, and defines ‘progress’ in a particular way. The hijacking of the term by the World Bank and radical movements has the effect of converting a malleable, neutral concept with rich diversity in empirical description, to instrumentalism of log frames and planning formats, which are deployed by institutions, which have commitments to neoliberal reform (Scoones I., 2009). Scoones therefore insists that moving forward the livelihood concept needs to remain open, and a process of appraisal, assessment and intervention must be encouraged.

2.6 Strategies, Vulnerability and Resilience in the context of the Crisis

The definition of livelihoods adopted by Carney (1998) and others suggests the need to understand livelihood strategies and vulnerability of the poor as the starting point in a livelihoods analysis. This section will consider three concepts: strategy, coping and vulnerability in the context of livelihoods, and attempt to clarify up some of the ambiguities and situate them further within the crisis literature.

2.6.1 Household Strategies and Crisis

An analysis of livelihoods has shown the need to distinguish between explicit strategies and reactions to systems of power and crises (Beall and Kanji, 1998). The word ‘strategy’ is attractive because it stresses agency. Although expressions such as ‘survival strategy’ or ‘household strategy’ are often used with reference to the activities of very poor
people, often for women, the use of the word 'strategy' implies that such people are more than helpless victims of circumstances. 'Strategy' also implies that, given some ingenuity, ways can be found to circumvent obstacles in the form of underemployment or unemployment. In other words, it focuses attention on less visible aspects of livelihoods such as the informal economy (White, 2004). The term 'strategy'—whether push or pull, is controversial, highlighting as it does the theoretical perspective of rationale choice. There is a strong feeling that 'strategies' overstate people's ability to act as agents, rather than having to react as victims of circumstance (Rakodi, 1991). White (2004) has warned that the use of the word 'strategy' should not imply the application of some universal criterion of rationality. Different plans appear 'rational' in different cultural contexts. Pine and Bridger (1998) argue that survival strategies are not necessarily 'economically rational' according to models of supply, demand and efficient self-interest. However, in terms of cultural meaning, local knowledge and understanding, and within the context of social relationships and networks, survival strategies are often the best and most sensible responses people can make. Therefore, for this thesis, livelihood strategies will refer to the diverse range activities that are undertaken by households during times of shock, income stoppage or income unreliability to preserve the social and economic integrity of the household. This definition is meant to delineate adaptive strategies from coping strategies. The former represents a household's response to recurring crises, while the latter represents responses to unexpected, and/or novel crises.
2.6.2 The Concept of Coping

The concept of ‘coping’ can be misleading understood simplistically as ‘surviving under difficult conditions’. This is misleading because it suggests that this is what most or all social groups who are experiencing crisis have been doing in recent years, i.e. seeking or employing ‘survival strategies’ (Indiyanto et al., 2006). One of the first lessons we can learn from ‘crisis studies’, or the related field of ‘disaster studies’ is that in crisis, there are certainly those who ‘cope’ in this sense, but there are also those who cannot or do not cope. There are also those who do much more than cope, turning crisis opportunistically to their advantage, i.e. capitalising on crisis in economic, social and/or political terms. Therefore, during a crisis, shocks, stresses and threats are also accompanied by new challenges and opportunities. More useful are notions of vulnerability and resilience and the factors and forces that generate them, as key dimensions for the analysis of crisis.

2.6.3 Vulnerability Resilience and the Household

‘Vulnerability’ points to conditions that reduce or constrain an individual’s ability to deal with hazards, and thus aims to operationalise the nature and degree of individuals or groups’ susceptibility to different kinds of economic or political shocks and uncertainties. Resilience, in contrast, points to conditions that positively affect this ability, thus implying a capacity to take preventive action, to use resources to extricate oneself from trouble, to adapt or innovate and to capitalise on new contexts and opportunities. Vulnerability and resilience then are not ‘consequences’ of crisis, but are generated during ‘normal’ (pre-crisis) life, and are not ‘realised’ or ‘tested’ until triggered by crisis, when they determine its nature and consequences (Indiyanto et al.,
2006). When shocks hit, behaviour changes as households and communities struggle to adapt. Consumption is often affected—particularly of food. When consumption and income levels move strongly together, it indicates that households are vulnerable yet a household becomes resilient when it is able to mobilise resources to mitigate its vulnerability.

2.7 Exploring livelihood strategies and their deployment during crisis

The livelihood framework defines three strategies employed during times of scarcity and vulnerability. I will first begin with the concept of livelihoods, followed by the concept of strategies defined in the livelihoods literature: agricultural intensification, livelihood diversification and migration. I will follow this with a theoretical analysis of the concept of assets and a discussion of their value to the poor in times of crisis. The following sections will unpack these three strategies in order to explain how and why livelihood strategies are deployed during times of crisis. They will further attempt to explain how these strategies are used to ensure survival during times of vulnerability. The following sections will reinforce the idea that these deployments are acts of resilience by rural agricultural workers who act—albeit rationale or instinctual—to ensure their survival.

A livelihood is more than just income (Lipton and Maxwell, 1992; Stark 2002). Income refers to the cash earnings of the household plus payments in kind that can be valued at market prices. The cash earnings component of income includes items such as crop or livestock sales, wages, rents, and remittances. The in-kind component of income refers
to payments in kind\textsuperscript{6} and transfers or exchanges of consumption items that occur between households in rural communities. To properly understand a livelihood, the level of analysis must go beyond just income and consider the complex and differentiated processes through which livelihoods are constructed. Scoones (1998) points out that it is insufficient just to analyse the different elements of livelihoods; one must also analyse the institutional processes and organisational structures that link these various elements. These encompass elements such as income—both cash and in kind, social institutions\textsuperscript{7}, gender relations, and property rights, which are required to support and sustain a given standard of living. They are also critical for interpreting the constraints and options of individuals and families distinguished by gender, income, wealth, access and assets. For example, differential access rights to land are often the key determinant of distinct livelihood strategies pursued by poor compared to better-off rural households. Likewise, social proscriptions on permissible courses of action for women can make big differences to the livelihood options available for women compared to men (Dwyer and Bruce, 1988; Davies and Hossain, 1997). A livelihood also entails access to, and benefits derived from, social and public services provided by the state such as education, health services, roads, water supplies and so on (Lipton and van der Gaag, 1993; Blackwood and Lynch, 1994). An often-stated finding of poverty research is the tendency for public service provision to be biased towards the better off and locations that are more accessible, communities, and social groups, thus

\textsuperscript{6} For example in food or repayment of social debt
\textsuperscript{7} Kin, family, compound, village etc
exacerbating the material deprivation already experienced by the poor as a result of inadequate levels of assets and income (World Bank, 1990; Lipton, 1996).

### 2.8 Agricultural Intensification as a response to Crisis

Agricultural intensification is defined as ‘increased average inputs of labour or capital on a smallholding, either cultivated land alone, or on cultivated and grazing land, for the purpose of increasing the value of output per hectare’ (Tiffen 1994:29). Agricultural intensification may manifest itself in three outcomes: a) an increase in the gross output in fixed proportions due to inputs expanding proportionately, without technological changes, b) a shift towards outputs that are more valuable or c) technical progress that raises land productivity. In theory, the intensification process may occur as a combination of these, but the relative feasibility of the three components is likely to vary greatly in different areas.

The crisis literature recognises that agricultural intensification is a common response of the rural poor during times of crisis, and takes place for several reasons. Working in Indonesia, White (2007) recognised that rural farmers intensified the production of cash crops to compensate for lost wages from the off-farm sector. Farmers also began growing a diversity of other crops for household consumption—mainly because of the scarcity of cash to purchase these goods in the market (Baiquini, 2008). The farmers’ rationale is that by increasing the value of output per hectare through agricultural intensification, they may enhance the sustainability of their livelihoods as well as its quality (Nygren & Hirvonen, 2009). Researchers have also observed that the high cost of
inputs usually drives the intensification of production on a smaller area of land. By doing this, the farmer attempts to reduce the acreage over which chemical inputs have to be distributed (Sutanto, 2008). If a country is experiencing a collapse in the export prices of a particular cash crop, it is usually followed by a collapse in demand for many peasant cash products. An example of this is during the 1930 depression in Indonesia, when prices of coconuts, declined more than that of rice. Because the peasants depended heavily on coconuts for a significant part of their regular income, the declining price of coconut meant 'a significant loss of income which translated into weaker purchasing power (White, 2003). To compensate for the reduction in the price of goods on the export market peasants may make two choices. If they can afford it, they may choose to intensify production in an attempt to produce more goods for sale to maintain their household. If they cannot afford it, they may tend to safeguard consumption needs by remaining at the previously achieved level of production (Sutanto, 2008). Amidst economic crisis, falling demand, and reduced purchasing power, farmers still need an income to take care of the expenses associated with residing in the state (Indiyanto et al., 2006). It is well documented that in some states peasants are usually more heavily taxed than the rest of the population. Taxes are another reason why peasants intensify crop production (Indiyanto et al., 2006). It would be a mistake then, to assume that peasant farmers are insulated from the effects of the depression by peasant 'self-sufficiency' (White, 2003).
2.9 Livelihood Diversification

Risk management is often cited in the literature as the primary motivation for diversification (Alderman and Paxson, 1992; Bryceson, 1996; Reardon, 1997; Scoones, 1998; Hussein and Nelson, 1998; Francis, 2000). Diversification works to reduce risk by spreading it across several enterprises in an attempt to establish, secure or enhance the livelihood of the household. This may occur both as a deliberate strategy (Stark, 1980), or as an involuntary response to crisis (Davies, 1996). It can be conscious or unconscious (De Jong, 2008), and it is found both to diminish rural inequality (Adams, 1994) and to accentuate it (Evans and Ngau, 1991). Diversification can act both as a safety valve for the rural poor (Zoomers and Keinpenning, 1996), and as a means of accumulation for the rural rich (Hart, 1995, Nygren & Hrivonen, 2009); it can benefit farm investment and productivity (Carter, 1997) or impoverish agriculture by withdrawing critical resources (Low 1986). Clearly, livelihood diversification can be both a coping and a thriving mechanism – thriving where it is driven by a growing and more flexible economy, and coping where diversification is an enforced response to failing agriculture, recession and retrenchment (Davies, 1996; Scoones, 1998; Francis, 2000). Diversification occurs as rural households construct a portfolio of activities and social support capabilities for survival (Ellis, 1998) or in a response to falling incomes (Stark, 2002).

Economic studies distinguish between several different categories and sub-categories of income sources when referring to diverse income portfolios. The primary categories are farm, off-farm and non-farm income sources (Saith, 1992). Farm income includes livestock and crop income, which comprises both consumption-in-kind of farm output
and cash income from output sold. Off-farm income typically refers to wage or exchange labour on other farms (i.e. within agriculture). It also includes labour payments in kind, such as the harvest share systems and other non-wage labour contracts that remain prevalent in many parts of the developing world (Hussein & Nelson, 1998). Non-farm income refers to non-agricultural income sources.

Many poor households in developing countries now combine farm and off-farm employment as a means to maintain livelihoods and meet daily needs (Baiquini, 2008). Despite the relative importance of the off-farm sector little is known about the opportunities and the activities that currently constitute this sector (Chen M., 2007). Despite large amounts of sectoral diversification in national and rural economies, the literature indicated that there are no simple occupational shifts from ‘peasant farmer’ to ‘factory worker’, but moves to increasingly diversified and multiple livelihood sources. These new livelihoods are seemingly stuck ‘betwixt and between’ a traditional agricultural peasant society and more commercialised, sometimes non-farm, labour markets (Bryceson, 1999; 2000). Research into the role of these supplementary activities in rural economies has led to divergent conclusions pointing to beneficial as well as adverse consequences of household income diversification (Ellis, 2000; Reardon et al., 2000). This is not entirely surprising, since authors have long recognised that the benefits of diversity are context specific. They apply most forcefully in contexts of high seasonality, high risk, absent markets, poor infrastructure, declining farm size, and similar adverse factors. Historically, the progression from low to high standards of living has typically involved a transition from diversity to specialisation. The relationship
between diversity and specialisation can be explored further by recognising that the meaning of these terms changes at successively higher levels of social aggregation (Schumpeter, 1947). On the one hand, a capability by individuals as well as households ‘to turn their hand to anything’ confers the benefits of flexibility in the presence of risk already identified. On the other hand, a household may diversify by placing different individuals in specialised occupations, thus securing flexibility at household level, while accepting a degree of occupational rigidity at individual level. In other words, diversity and specialisation do not stand in opposition to each other, except by reference to a single person taken in isolation (Ellis, 1999).

2.10 Migration as a strategy in times of Crisis

This thesis recognises three types of migration. The first is migration for coping and survival. The second is migration for additional work/income, which takes place after the harvesting all crops. The third is migration for better remuneration or a better work environment or opportunity to use skills or acquire new skills. Migration, whereby one or more family members leave the resident household in times of crisis for varying periods of time, is an important livelihood strategy (Itzihshon, 1995; Ellis, 2000). A dominant strand of migration studies stresses the rationality of the migrants who weigh rising opportunities in a new location against stagnating income earning opportunities at home (Zhang, 2006; McDowel & de Haan, 1997). Todaro, for example, assumed that migrants acted individually according to a rationality of economic self-interest (Todaro, 1969). In neo-classical economics, the influential Todaro-Harris model posits that the decision to migrate takes into account the expected probability of employment at the
destination; implicitly a personal cost-benefit analysis took place in the prospective migrant’s mind (Harris & Todaro, 1970). In reality, it is not exclusively the individual that decides to migrate, rather the household usually makes the decision about which family member migrates. This decision is guided by gender norms, intra-household power dynamics and the family’s perception of the candidates commitment to support the family and the household (Nygren & Hirvonen, 2009; Isakson, 2010). Therefore, the migrant must view migration as a form of household portfolio diversification, and not as a means of escapism (Stark O., 1991). While official statistics may show a slowing of permanent rural-urban migration, micro-level studies show increasing levels of circular migration ranging from trips that last several months to daily commuting for work. Various types of migration may be distinguished (Ellis, 1998). The first is seasonal migration, which refers to temporary migration determined by the agricultural season. Studies at the micro level show that invariably the poorest and most vulnerable households rely uniquely on agriculture for migratory work. In this context, ‘circular’ migration is an essential part of income diversification (IFAD, 2007). The second is permanent migration, which may involve migration from a village to a town or abroad. For people engaged in agriculture, agricultural slow-down, together with higher population pressures on land are a powerful motive towards migration (Start & Johnson, 2004). Depending on the distance of these employment sites, participation in labour markets may involve a daily, weekly or seasonal pattern of circular migration. It may involve all members of the household searching in an ad hoc manner, or one member employed full-time sending remittances from afar. Migration, when viewed in this light,
can be a normal part of rural livelihoods (de Haan, 1999) and is an essential coping mechanism or a means of accumulation (Bebbington, 1999). Bebbington (1999), ponders whether migration is best understood as a coping strategy or a strategy for accumulation. As a strategy of accumulation, it is relatively middle class households, who have access to more disposable income and assets which will be more capable of producing an international migrant (Indiyanto et al., 2006; Isakson, 2009). A migrant from this background helps to maintain the family’s political and economic strength in the home country (Nygren & Hirvonen, 2009). Other studies have suggested that “relatively deprived” households are more likely to engage in international migration than ‘better off’ ones (Stark O., 1991: 140). They are usually driven by economic desperation rather than the need to maintain wealth. However, Rao (2001) observes that there is a continuous transition between the different types of migration. Therefore coping migration can become accumulative over time, as information improves, skills are acquired and relationships with employers stabilise.

2.11 Social Networks and Households as Mechanisms of Crisis Coping
This section demonstrates how the household utilises the set of assets and institutions available at its disposal during times of crisis. I argue that these assets are not deployed in a haphazard manner but rather strategically. Choices are made on the household level, which determines which assets are disposed of and in what manner. This enables the household to survive the period of crisis and have some assets for the post crisis period.
Most of the literature in the SRLA revolves around groups of people that work together to survive. This is consistent with aspects of the crisis literature, which show that during times of vulnerability and socioeconomic change, kinship, and community relations are vital to survival strategies. They are a potential resource that can provide households with the exchange of food, financial assistance and labour. Before continuing this discussion, it is necessary to define a “household”. Doing so has presented several difficulties in localities such as the Caribbean where household compositions are fluid, and socially contested, (Nygren & Hirvonen, 2009; White, 1989). Following Rudie (1995), the household is a family-based co-residential unit that takes care of resource management and the primary needs of its members. The criterion of co-residence does not necessarily imply living under one roof; the proximity of household members has to be such that they share in – at least a major part of – household resources and daily activities. Defining household membership raises problems in a situation of much labour migration. Migrants do not participate in the daily activities of their household during their absence. Nevertheless, they may contribute to its resources through remittances, which is why they can be regarded as an asset to their household of origin. The level of household livelihood security is seen as the outcome of processes taking place within the household for which these resources are used. Therefore, they comprise a portion of the livelihood portfolio, which is the bundle of activities households engage in to generate a livelihood and achieve a certain level of livelihood security.

Feminists criticised the New Household Economics view of the household as a utility-maximising unit under the altruistic leadership of the household head as ignoring
gender-based intra-household inequalities. Anthropologists pointed to the danger of neglecting intra-household organisation and, by doing so, keeping the lid on the black box. However, when looking at how people provide for their daily needs one cannot do so without looking at the household, whatever form it takes. Rudie’s definition of household is appropriate for this thesis because of its emphasis on provision for primary needs and joint management of resources. It is a functional rather than a formal definition, and does not imply that resources are always pooled, and benefits and power are equally distributed. It is important to look at intra-household organisation because household members have different capabilities, obligations and needs, which will influence the pattern of resource allocation. There is also a moral dimension to the household economy (Cheal, 1989), which explains why household members share resources and dependants are cared for. Based on these factors, it is necessary to analyse the coping mechanisms of Caribbean households as fluid multi-purpose decision-making units in which acts of collaboration co-exist with those of confrontation in the context of differentiated distribution of resources, rights, and responsibilities.

2.12 Social Networks and their Role in Household Resilience in times of Crisis

The study of how rural households perceive and respond to risk goes back several decades. The economic perspective focuses on the subjective probability that individuals attach to a particular outcome, and the subsequent ‘management’ action that usually involves modifying allocation of critical factors of production in order to minimise losses (Ellis, 1998). The social and institutional perspective focuses on the
manner by which traditional rural societies mitigate risk through societal groupings and relations. It recognises that most people do not live in isolation but are part of local and supra-local networks of social relations (kin and friends), which help to cope with unexpected setbacks or make use of new opportunities (Indiyanto et al., 2006).

Other studies have shown that social networks and other institutional groups beyond the interpersonal boundaries of the household mediate resource flows—often critical to household livelihood, consumption, health, and status. Of particular interest is the extent to which the household draws upon social capital to access claims and transfers during crisis by virtue of kinship, or membership in village organisations. Although deployment of social networks is now a standard component of livelihood analysis, it is not always sufficiently recognised that individual and household crisis responses and strategies, and the vulnerabilities and resilience which they reflect, depend heavily on the deployment of social and political relationships (family, neighbourhood, community, extra-community) (Indiyanto et al., 2006; Nygren & Hirvonen, 2009). In central Mali, researchers observed, social networks, kinship and village-level associations acted to spread risk and enhance coping with crisis for 'member' households (Adams, 1993; Stark, 2002), by facilitating important non-market transfers of food, labour, employment, physical security, and credit (White, 2003; Stark, 2002). During the agricultural season of 1988, when food scarcity was widespread, over thirty per cent of the households surveyed reported having received cereal gifts or interest-free credit from kin and others. Further, among food and cash deficient households, informal social networks are a financial safety net by way of borrowing, identifying and gaining access
to scarce goods and services, and obtaining remittances and gifts. In Georgia, during the financial banking crisis, gifts and non-market credit covered over fifty percent of needs during the period of seasonal food shortage (Dershem. L & Gzirishvili, 1998). When agricultural workers have to migrate in times of crisis social networks has also been documented in playing a significant role in the process (Boyd, 1989; Curran et al, 2005; Gulimoto and Sandron, 2001; Massey et al, 1993) by providing potential migrants with information channels required to negotiate the process of migration (Cai, 1991; Zhang and Guo; 2003). Migrant social networks have long been regarded as one of the ways in which migrants can reduce high costs and risks of migration and increase the expected return.

2.13 Economic Crisis, Coping Mechanisms and Responses in the Household

In normal times, households attempt to minimise risk by diversifying income generating activities, increasing production, and investing in assets and exchange relationships. In the event that a shock or stress challenges the basis of a livelihood, the household usually begins to adopt ‘coping’ strategies, which are short-term ex-post efforts to support the basis of the livelihood during the stress period (Davies, 1993). Coping begins when the household is forced to mobilise resources in order to respond to crisis; savings are liquidated, assets are sold, labour is reallocated, and loans and gifts are claimed from kin and patrons. In his study of drought-affected Hausaland in Nigeria, Watts (1983) perceived strategy creation along a continuum corresponding to the intensity of the crisis experienced. Along this continuum, strategies are adopted in an order that
reflects decreasing reversibility and increasing commitment of domestic resources. For example, a strategy such as borrowing food is a pliant response to food crisis, while the sale of assets or pledging land is a potentially irreversible response, given the prohibitive costs and time involved in reconstituting these resources in the post-crisis period. However, as available resources are mobilised and expended, the household is obliged to re-evaluate the balance of objectives it pursues. This may result in deciding to favour one objective over others (e.g. livelihood over consumption), or to assume immediate or future costs that are not normally tolerated. For example, in attempting to reduce the risk of food insecurity in the rainy season, a household may choose to send a migrant worker to the city. In doing so, its consumption needs are immediately reduced, its livelihood base is potentially strengthened, and the prospect of remittances could delay the need to sell key assets to purchase food. This is consistent with Corbett (1988) who reasoned that households selectively and sequentially adopt and exhaust clusters of strategies based on the criteria of resource commitment, adaptive flexibility and reversibility. She identifies three clusters of responses. Stage one includes anticipating shortage by acquiring wild foods and livestock, building up food stocks and investing in reciprocal relations. After stage one responses, stage two involves disposing of key productive assets in order to purchase food. These responses may jeopardise the future economic welfare of the household. Stage three responses result in the destitution of the household. Echoing Corbett and Watts, Webb (1992) conceptualises three 'risk stages' that lie along a continuum of coping, which moves from long-term risk minimisation in the pre-crisis period, to crisis damage containment, to risk taking and
household collapse. Subsequent empirical observations of household behaviour during food crisis have identified a continuum of increasing stress that exists within clusters of strategies such as selling small ruminants before productive livestock (Devereux, 1993; Swift, 1993). Field studies have also revealed that a number of strategies may be undertaken at once and at variable intensities (Adams, 1992; Devereux, 1992). Households make trade-offs between preserving the assets and income that constitute the basis of their livelihoods and reducing food consumption (De Waal, 1989; Mortimore, 1991). For example, Swift (1993) describes two critical trade-offs which are made in the context of food shortage. The first is the trade-off between reductions in consumption and the value of assets, which must otherwise be disposed of to maintain consumption. The second is the trade-off between the assets' current market value and its impact on future entitlements (Swift, 1993). Using the example of food shortage, a household may ration intake, thereby jeopardising current consumption, health and status, in an effort to maintain long-term livelihood security. Reflecting these trade-offs, sequencing is apparent both between and within coping strategies as households exhaust preferred and/or reversible options, and resort to those that are less preferred and irreversible.

Referring to the previous example, with the onset of food shortage, concurrent strategies such as asset sales, moderate food rationing and borrowing from social networks may be employed. If these strategies yield little, and food crisis continues, more extreme responses are necessitated, such as severe food rationing, begging, or relying on low-status wild foods or relief aid (Adams et al., 1998). Once again, while
these strategies may be detrimental to immediate consumption, health and status, they are deliberately employed to avoid the distress sale of valuable productive assets, which constitute the basis of long-term livelihood security. Options and choices are reassessed constantly according to the availability of resources, and the length of the crisis. White (2003) highlights in the Indonesian depression of the 1930 the collapse in agricultural prices resulted in a serious ‘money famine’ among peasant agricultural workers. To meet the demands of tax, debt-payments and survival, people pawned their possessions until they were exhausted. When credit and pawnable reserves were exhausted, the next step as elsewhere in Java was the pawning of land (White, 2003). He also noted that people tended not to eat what they grew he notes:

“The average peasant eats gaplek [dried cassava], while rice, maize, soybeans and other food crops are sold and exported to neighbouring districts ... Although the land generally produces enough for subsistence, the majority of the population may be called poor...”—Taken from (Dingemans 1926 p. 7) in White 2007.

As the previous discussion illustrates, coping strategies are not fixed or generic across households. Rather they vary according to the particular exogenous and endogenous context of the household concerned (Adams, 1992). Factors endogenous to the household, such as its particular demographic and socio-economic characteristics, also influence coping. In turn, the capacity of a household to respond to crisis opportunities is dependent on particular household circumstances, including ratios between the number of economically active household members and dependants, the extension of households across space to pursue multiple livelihoods and the presence of older
people with access to state pensions (Stark, 2002). These factors powerfully condition the range of coping options at the household's disposal, as it determines access to and control over resources to pursue those options and ultimately, decision-making about the type, range and sequence of coping strategies it employs. There are number of recorded impacts and responses that economic crisis has on the household. For example during a downturn, it is expected that expenditures on basic needs like food, energy and transportation will fall. Household income and savings also fall because of price increases especially if the crisis is prolonged or unemployment persists. In order to cover their basic needs, households tend to mobilise more labour than before the crisis in terms of both quantity and the amount of hours worked (Baiquini, 2008). Households also respond to crisis by selling livestock, which represents a rational decision to forego household assets in an attempt to earn cash. In analysing these actions, one must consider the particular conditions of the seller, and especially the rationale and timing behind the decision to sell. For example, while the dry-season marketing of surplus livestock to purchase agricultural equipment is a risk-minimising strategy aimed at increasing productivity, the distress sale of the only household cow to pay for the medical care of a key productive worker represents a 'last resort' strategy to avert calamity (White, 2003; Adams et al., 1998).

2.13.1 Women and Household Coping Mechanisms
Women in households that are experiencing an economic downturn play an integral role in the creation and dissemination of coping mechanisms. These largely concern food preparation and distribution, and the use of common property resources such as wild
foods, controlling portion size and food rationing. They are also instrumental in many trade-offs made in the process of coping (Swift, 1993: 11). Women also sustain the flow of small gifts and exchanges that lubricate social networks, and are well positioned to call on small loans of condiments, cereal, cash or medicine from neighbours and kin in times of need. Men, on the other hand, are more concerned with long-term livelihood security and, to this end, tend to control market-based coping such as the sale of assets or labour, and loan arrangements with patrons and moneylenders. They also negotiate inter-household exchanges involving more substantial transfers of food, labour or cash (Adams, 1992). White (2003) recognises the role of women and their contribution to household survival in Indonesia. He cites that during times of economic downturn in the 1930s, labour-intensive low-return activities like woven bamboo crafts and handloom cloth weaving expanded. These activities grew, not through any demand-induced expansion, but simply due to the failure of the agricultural sector. While prices for products of rural craft and industry (as of all commodities) continued to fall, “the working population, and particularly the women, had to continue or to expand their production, no matter how low the return for their efforts, simply to meet the cash needs of their families” (White, 2008:8). Researching in Qwaqwa, Stark (2002) found a similar pattern of behaviour. She found that as agriculture failed in the region, women began selling fruit, drinks and snacks at the gates of Qwaqwa's schools, and although pickings from small-scale retailing were limited and few, people--especially recent entrants to the sector--managed to earn meagre incomes, they continued to sell to earn monies to feed the household.
2.14 Economic Decline and the response of the Agricultural Worker

In this section, I argue that the poor are aware of the options available to them during times of crisis. They mobilise these options in a calculated fashion to ensure the survival of the household through the crisis period. I also argue that activities in the informal economy are integral coping mechanisms during times of economic downturn. The poor resort to this sector as in some cases it provides them with the only means to make an income.

2.14.1 The Informal Economy and its Importance during Economic Downturn

Literature on economic decline and the labour literature suggest that during periods of economic adjustment, whether due to economic reforms or economic crises', the informal economy tends to expand (Chen, 2007; Stark, 2002). Retrenched workers move into the informal economy when public and private enterprises are downsized or discontinued. Also, rural and urban households in the developing world sometimes supplement formal sector incomes with informal earnings in response to inflation or cutbacks in public services (Nygren & Hirvonen, 2009). Therefore, employment in the informal economy has an impact on the financial viability of social security and social protection systems, which depend on revenues from the formal sector.

Some schools of thought take alternative views. For example, there are those who argue that the growth in informal sector activity is, in a real sense, a reflection of the rejection of the moral and legal authority of the government on the part of a broad cross-section of society. Therefore, the people who participate in the informal economy have a
willingness to circumvent the state notwithstanding that, in an earlier period, they would have functioned within the formal economy (Bennette, 1998).

Why should the persistence or expansion of the informal economy be of interest or concern? Simply put, there is a link between working in the informal economy and being poor (Chen, 2007). Average incomes are lower in the informal economy than in the formal sector. As a result, a higher percentage of people working in the informal economy, relative to the formal sector, are poor. However, there is no simple relationship between working in the informal economy and being poor or working in the formal sector and escaping poverty. The relationship between informal employment and poverty appears only when informal workers are classified by employment status and by industry or trade (Bennett, 1995). Informal incomes worldwide tend to decline across the spectrum of types of employment; from employer to self-employed, and from informal and casual wage-workers to industrial outworker. The link between working in the informal economy and being poor is stronger for women than for men, though a higher percentage of women than men worldwide work in the informal economy. Moreover, there is a gender gap in incomes and wages in the informal economy. This is because women worldwide are under-represented in higher income employment statuses in the informal economy (employer and self-employed) and overrepresented in the lower income statuses (casual wageworker and industrial outworker (Horn, 2009).

Anderson’s (1987) analysis of the Jamaican labour market emphasises that there are activities within the formal and informal sectors which, in terms of capital requirements,
skills and security of tenure, is no different between the two sectors. This is because in global value chains, production, distribution and employment can fall at different points on a continuum between pure 'formal' relations (i.e. regulated and protected), and pure 'informal' relations (i.e. unregulated and unprotected) with many intermediate categories. Workers and units can also move across the formal-informal continuum and/or operate simultaneously at different points along it while exploring income opportunities during times of vulnerability. These dynamic linkages of the formal and informal economies highlight the importance of understanding the 'informality' of the global economy and recession (Horn, 2009). Consequently, the implicit assumption in traditional dual market models that jobs in the modern sector are superior to those in the informal sector is not necessarily correct (Bennett, 1995). It has been demonstrated that incomes earned in some informal sector activities are higher than those earned in the formal sector (Anderson, 1987; Nural Amin, 1987). Hence, it is incorrect to assume that many of those who participate in the informal sector are simply waiting on job opportunities in the formal sector, as implied in the dual labour market models referred to earlier or in the migration models such as that of Todaro (1971).

2.14.2 The informal Economy and Economic Growth
Also noteworthy is the link between the informal economy, the poor and economic growth. In economic literature, economic growth is often thought to be essential for poverty reduction since growth may lead to increased employment, higher real wages, and increased public revenues. They can in turn be used to finance social infrastructure and safety nets. In its Executive Summary and Policy Recommendations regarding the
Caribbean region, the World Bank concluded: “Countries in the Caribbean that have sustained positive growth rates and invested heavily in human development, such as Antigua and Barbuda, the Bahamas, Barbados, and St. Kitts and Nevis have relatively low levels of poverty. Poverty has increased in countries that have had low or negative growth rates for protracted periods such as Guyana, Haiti, Jamaica, Suriname, and Trinidad and Tobago” (Baker, 1997).

This view is also held by the Inter-American Development Bank (IDB), which argues that faster economic growth leads to poverty reductions and that a “growth rate of substantially higher than three and four percent is required to secure meaningful reductions in the poverty rate” (IDB, 2002). Further evidence for this link is provided by Samuel Morley’s (1995) analysis of fifty eight recessions in Latin America during the 1980’s which found that poverty increased in fifty-five of the fifty-eight cases of recession, and poverty fell in twenty-two out of the thirty-two economic recoveries. Morley also found that recessions resulted in rising income inequality while economic recoveries were correlated with reductions in income inequality.

Where do the poor come in? Poverty in the Caribbean, as in most developing regions, is concentrated in the rural areas, where approximately sixty percent of poor people live (Baker, 1997). Thus, there are strong ties between poverty and agriculture, and poverty and household economic decline. However according to Bebbington (1999:2026) while many agrarian livelihoods might be in crisis, there are other rural livelihood options that emerge to help address the household’s material and human needs. The informal

---

8 A recession is defined as falling per capita income for at least two years
economy is one of these options that the household will utilise to earn an income, thus leading to its expansion.

2.15 Economic Downturn and Its Impact on Village and Farming Sector

In crisis literature, the rural village is important as it is the site where coping takes place for rural agricultural workers as well as migrants who still have links to it. Migrants resort to the village as a “fall back” or safety net which they return to, or call upon for aid in times of crisis. Researchers have documented cases in Indonesia to show that to cope with the effects of urban crisis; parents left children with grandparents in the village (Sutanto, 2008; Indiyanto et al., 2006). The high cost of an urban education and city living was transferred to the village. An area of research that has received little exploration in crisis literature is the effect on urban workers who are dismissed due to a downturn in the economy or other forms of crisis. Upon studying the crisis in Java, Giriashi and White (2003) documented cases where retrenched workers returned home in times of crisis. In documented instances, the workers returned to agriculture as a means of surviving, and also because they were forced to do so. Therefore, participation in agriculture can increase because of the declining capacity of the urban economic sector to absorb labour. Although this is not an extensively documented area of academic inquiry, it is keeping with the theory that in rural areas the agricultural work force tends to increase as a result of dismissals (Sutanto, 2008; White, 2003).
2.16 Differentiation among the Caribbean Rural Worker

This section explores the various levels of differentiation that exist among Caribbean rural workers and explains why it would be wrong to analyse this particular group based upon classical European or Asian experience. In this section, I argue that the abstract rigor of theoretical formulations usually prescribed for analysing socio-economic differentiation is inappropriate in the Caribbean context. Caribbean rural workers are differentiated in their livelihoods, identities and employment opportunities. For example, there are groups of people living in the rural areas who maintain only marginal production. They own the land so they are not “landless” but they are not wholly farmers. They use farming to supplement their food supply as well as their incomes, from handicraft making or the tourism sector. Therefore, they do not fit strictly into categories such as ‘landless proletariat’, wage labourers, or peasants. There is another group that does not farm, but is employed for various months of the year for a ‘capitalist’ type enterprise, which pays the workers a wage for their labour power. This group is also engaged in various other non-farm sectors (e.g. construction), and depends on the earnings and remittances from relatives abroad to offset the cost of living. This group may or may not own land, but it is not typically used in the sugar production process. There is yet another group of farmers who own small units of land—rarely exceeding five acres, but engage in various forms of off-farm activities for investment in agricultural production.

The above classification permits a clearer level of distinction of workers being described throughout this paper. The rural workers from St Kitts and Trinidad were not farmers,
for whom production of agricultural commodities was a business; nor were they peasants—tillers of the soil they owned; nor could they be treated as their own as part of a distinctive way of life. They were agricultural labourers possibly the rural proletariat (Mintz, 1985; Nurse & Sandiford, 1995), possibly peasants (White, 1989) who owned land, but not sufficient productive property or capacity to make a living from it, and thus had to sell their labour power to eat (Trouillot, 1988: 268). They were wage earners who worked for factories in the field. They did not produce anything except for the capitalist enterprise; nearly everything they needed came from somewhere else: cloth and clothing, shoes, sugar, writing pads, books, oil, building materials and medicine. Almost without exception, what they consumed someone else had produced, and what they had produced someone else consumed (Mintz, 1989). Are the small banana farmers in St Vincent are circumstantially similar to the ‘peasants’ that Kautsky (1899) spoke about? Perhaps, but nevertheless these people are different in the historical and structural circumstances that define their unequal access to land and other productive resources—in fact, at no time in Caribbean history was there a pre-capitalist peasantry like the kind found in Asia, Africa or Europe. Therefore, for the purpose of this study a description of the peasantry demonstrating this differentiation must be adopted, which is why I will situate my descriptions of the peasantry within the works of Sidney Mintz (1989). In this context, peasantry refers to those variously called peasant farmers, small farmers, and small cultivators who devote the majority of their time cultivating land on their own account, with little or no help from outside the family. Sidney Mintz (1985) argues that the Caribbean peasantry differs from that found in other parts of the world,
due to the “historical importance of slavery and the plantation; the complete population replacement represented by European conquest; the lack of traditional village or religious, or kinship structures; and lengthy colonial control” (Mintz S., 1985: 133). According to Nurse and Sandiford (1995), the Caribbean peasantry is a post-emancipation sector and is therefore best described as a “New World Hybrid.” This uniqueness of Caribbean peasantry has developed to be a source of empowerment that differentiates these peasants from plantation labour. As Mintz (1985:35) puts it, this form gives “free rein to the abilities of the individual that plantation labour does not. It requires more self-reliance and planning, and calls for more individual responsibility than does plantation labour”. Given this differentiation it may be difficult and indeed inaccurate to describe this group strictly as peasants within the classical European definition of the term (White, 1989), as it fails to capture the unique historical and gendered nature of rural life in the Caribbean. White (1989) has also argued against this type of broad typification, which he blames, partly on the difficulties and disagreements about specific issues. He argues that there is neither a correct or universal model of the peasantry, nor a universal form of agrarian differentiation. Instead he adopts a Leninist view that the form the peasantry assumes depends on the different locale and historical conditions under which it emerges (Lenin, 1976). White (1989) does not provide a solution to improving the categorising of rural people other than applying more flexible levels of analysis to the group.
2.17 Agrarian Structures in the Caribbean
The agrarian structure in the Caribbean has been greatly influenced and fashioned by the plantation system, and the institution of slavery. From their inception, Caribbean societies were constructed to serve the purpose of the economies. Therefore, from their creation, the economies of the Caribbean have been the overseas operations of an integrated enterprise whose ultimate control was located in the metropoles. Since then, the agrarian structures of Caribbean societies has not undergone any fundamental changes that have significantly changed the distribution of land by operational holdings. In the sugar producing islands, efficient cultivation often required large-scale producers and was restricted to flat agricultural areas which must be located within easy reach of the sugar mill. In St Kitts, after emancipation, much of the large land holdings remained in the hands of the plantation class while land seeking ex-slaves were forced to occupy marginal lands on the edge of the estates as small holders or become wage earners on the plantations. This was the unique case for St Kitts because it had a dense slave population, flat terrain and an established plantation system. Consequently, it was difficult for a peasantry to emerge in this island; therefore, those slaves who wanted to better themselves away from the estates had to migrate. The situation in Trinidad was different. It was a slightly larger country with a smaller slave population and a younger sugar industry, and this created many opportunities for land acquisition or rental by ex-slaves which led to the rise of the small holder class. In both countries of St Kitts and Trinidad, the sugar industries and all its lands were either leased or taken over by the governments to become national corporations and remained that way until the closure after which the government has dismantled the lands for sale to foreign investors and local businesses or individuals.

In St Vincent pre-existing colonial land owning structures associated with sugar production owned and operated most of the arable lands. However, after emancipation the presence of a
mountainous interior, the absence of an extensive plantation system and a sparse slave population, created opportunities for the acquisition or rental of land by ex-slaves and the development of a peasantry\(^9\). Thus, with the introduction of the banana project\(^{10}\) it was possible for banana production to be spread all over the island—even on rugged terrain—and to be embraced by most of the rural population. The evolution of this sector, was not smooth it led to conflicts with the entrenched plantation class over the acquisition of land -- a struggle which persist today. The transition from slave society to a free society maintained the same subordinate relationship as the centre of power shifted to the group of large farmers and merchants who have controlling interests in the agricultural export sector. For example, in St Vincent the board of the BGAs tends to be dominated by the large farmers. As a result, they are able to ensure that the provisioning of services (e.g. credit and fertilizer subsidies) works to their advantage (Thomson, 1987: 34). Added to the unequal distribution of land, discussed above, is the fact that the large landowners, many of whom are foreigners and absentee property owners, tend to be far more interested in land speculation than production and thus a large percent (25%) of the most arable land is left uncultivated or under-cultivated (Nurse & Sandiford, 1995). In St Vincent for example, it was estimated that in 1995 some 6,800 acres of arable land or 25% of the viable agricultural land being held by large landholders was not being cultivated. In spite of the crises, many of these large landholders remain reluctant to sell lands and have instead opted to buy the lands of some of the less fortunate small producers who are forced out of production\(^{11}\).

---

\(^9\) This is not to imply that after emancipation there was a sudden budding of peasant holdings in the country. In fact, in 1896 on British firm, D.K porter and Company controlled twenty-one estates containing 11,826 acres.

\(^{10}\) Part of this project included the distribution of land titles to rural people interested in banana production of no more than five acres (Grossman 1998).

\(^{11}\) This usually happens in instances where the land is located on flat, accessible lands.
In St Vincent these problematic aspects of banana production are further aggravated by the insecurity of the tenure arrangements (e.g. through squatting, sharecropping or a rent-payment system in cash or kind) that many peasants face. For instance, many small farmers who do not own land often do not know if they will be able to rent or occupy the same piece of land from year to year (Gomes, 1984). At the same time, it is common under a sharecropping system to find that large or absentee landowners are not interested in investing in agricultural development as the landowner is able to get a high and secure income without incurring any risk. The risks of production then fall upon the peasant farmer, rather than on the large landowners.

2.18 Conclusion
The SRLA is an appropriate theoretical framework in which to situate this thesis. It addresses many, but not all of the themes that are contained in the research. This framework provides the understanding that poor rural folk respond to bouts of crisis by deploying a series of coping strategies aimed at resisting the destruction of their livelihoods. Using their available capital assets, the rural poor undertake a bricolage of income generating activities in an attempt to protect themselves and their families from poverty and food insecurity. In many instances, these strategies begin in the household and radiate to spheres outside the home including the farm, social networks, the village or urban centres. Academics in the field are developing a better understanding of the importance of the interdependencies and the informal economy to the coping and livelihood creation process. This signals a shift in understanding from ideological perceptions embedded in neoclassical thought, to one that embraces the poor as a rational, calculated group that is aware of its options, and will utilise those options to
survive. However, the rural poor are not without constraints. They are constrained by issues of power, culture, wealth and institution of access that may prohibit their ability to create meaningful livelihoods. However, women and men may not have the same constraints. Poor females may have more limitations on their ability to create livelihood strategies because of cultural norms, and issues of power and politics within the household that work against their creative abilities.

Some attempt to address the fundamental shortcomings of SRLA has been undertaken by Scoones (2009). However the shortcomings do not detract from the overall usefulness of the approach to the study. In the following chapters, the analysis will focus on the evolving livelihood strategies of Caribbean banana and sugar workers in response to economic downturns created by an increasing global trade liberalisation project with the aim of filling the gap that exists in academic literature for that region of the world.

Chapter 3 : Research Methodology
In order to understand the coping strategies of Caribbean agricultural workers in St Kitts, St Vincent and Trinidad in times of economic downturn, this research focuses on one broad question that is broken down into a series of sub questions.

3.1 Research Questions
What are the strategies being used by rural agricultural workers to continue making a livelihood in times of economic downturn? This can be broken down into more questions that are detailed:
• What are the effects of economic crisis on rural agricultural workers and what are their responses to economic crisis?
• What household strategies are being employed by rural workers?
• What impact have these strategies had on rural workers during the crisis period?
• What factors determine which strategies are deployed, as opposed to others?

3.2 Hypothesis
1. The poor are aware of many options during times of crisis; they choose and mobilise the options best suited for them in a calculated fashion to ensure the survival of the household through the crisis period.
2. Social networks and the informal economy are important coping mechanisms during times of economic downturn, the poor resort to these resources, as sometimes they provide the only means to earn an income, sometimes even more so than the formal sector.

3.3 Theoretical Framework
This study is largely ethnographic, and therefore relied mainly on qualitative methods of data collection. There was some use of quantitative methods, which complimented and strengthen the qualitative techniques, but do not overshadow them. This combination facilitated the triangulation of data that was gathered using the various techniques. The preference to use a primarily qualitative approach permitted the ability to capture the processes and causal relations that existed in soft data such as impressions, conversations and observations. This approach gave me rich in-depth data that stressed depth rather than breadth.
This is not to suggest that the qualitative methodology was a panacea for all my data collection needs, it is not without limitations. However, some of these deficiencies have been minimized through the inclusion of selected quantitative methods.

3.3.1 Data Needed For Study: An Identification of where it was found
Based on the topic and the research questions, in this study a theoretical framework was selected from academic literature that dealt specifically with local coping strategies by agricultural workers in times of economic crisis. The academic literature used to contextualise this study came from the livelihoods literature, specifically literature that pertains to crisis and coping in the Sustainable Rural Livelihoods Approach. This approach is best suited to frame the methodological outlook because it provides a comprehensive way of understanding how poor people make a living, the assets available to them, and the livelihood strategies they pursue. It also recognises that the poor and marginalised are a vulnerable group, and are susceptible to shock, and bouts of crisis. Importantly it recognises that there are ways in which communities, households and assets can be mobilised, and resources reallocated to ensure household survival in times of crisis.

Strategies in the context of SRLA refer to three actions (a) agricultural intensification/extensification, (b) livelihood diversification and (c) migration. I collected data to determine whether a combination of these strategies are being employed, or in particular sequence during times of crisis. The deployment of these coping strategies indicated whether some measure of coping was taking place in the household.
Crisis literature was also important for informing the data collection for this study. It provided insight about the ways rural households sequenced their coping behaviour in response to increasing food insecurity and slowing incomes during a specific socio-economic condition, namely, economic downturn (a crisis). The crisis literature also provided information about the sequence in which household assets are utilised in times of crisis, and so during my data collection process. Based on the empirical data gathered, I used that criterion to determine what stage of coping the household were and determined whether the household is 'successfully' coping or 'failing' to cope.

3.4 Data Collection Strategy
To collect the qualitative data needed for this study, an ethnographic approach was taken. This approach allowed me to explore and gain insight into the values, beliefs, and behaviours of the people under study. Based on this rationale, fieldwork provided a better option than an archival method of research. Primarily because the economic situation and livelihood responses in the countries under study are dynamic; they change every day, therefore being in the field gave me a real-time view into the lives of the participants as they adjusted to their ever changing economic environment.

3.4.1 Location
The fieldwork for this study was done April through August 2009 on the islands of St Kitts, St Vincent and Trinidad with an aim of gathering qualitative data on local households' strategies of living, their assets, and income earning activities. These countries were chosen because they have unique characteristics that bring three different elements of analysis to the research project. They allow me to compare
strategies across different agricultural products, different ways of organising the labour process and different types of economies. The fieldwork took place in selected communities from which the sugar and banana industries drew the largest number of workers, and whose incomes supported the local economy. In St Kitts, these communities were located in the 'sugar belt'. These were the villages of Belle Vue, Saddlers, Parsons, Dieppe Bay, St Pauls, and Newton Ground. In Trinidad the target group came from within the 'sugar belt' district of Caroni, Couva and San Fernando. In St Vincent the selection took place in areas of the country where bananas are grown intensively; Mesopotamia, Richland Park and the High Field community. These communities were different with respect to economic options, agricultural resource endowment, infrastructure conditions, and cultural and economic systems. Thus, they provided an interesting case for analysing the ways in which peasant smallholders and wageworkers struggled to cope with scarcity of money, land, labour and income earning opportunities.

3.4.2 Interviewee Recruitment
To gather participants for the study, a multi-faceted approach was taken: employee lists were garnered from employing institutions, marketplaces were frequented and trade union representatives consulted. Using these sources a series of sampling techniques were employed in each country. The preferred methods were stratified random sampling, and random sampling. However, in the event those methods could not be used, I shifted between a series of non-probability sampling techniques, especially
haphazard sampling, sequential sampling and snowballing, and the preferred sampling methods were left for instances where opportunity presented itself.

3.5 Methodology:

3.5.1.1 Stage One: Policymakers and Private Sector
I conducted semi-structured, open-ended interviews with consenting representatives and members of government ministries, corporations, development projects, and non-governmental organisations (NGOs). I did this in order to understand the wider political-economic processes and institutional mechanisms that shape local livelihoods. In each case, I presented the nature and intentions of my research, and requested permission to record the conversation. If permission was granted questions were asked from a prepared question sheet. I supplemented this data with newspaper reviews, library archival searches and government documents.

3.5.1.2 The St. Vincent Banana Growers Association/Caroni 1975 Ltd/ St Kitts Sugar Manufacturing Corporation
The St Vincent Banana Growers Association (SVGA), St Kitts Sugar Manufacturing Corporation (SSMC), and Caroni of Trinidad are quasi-governmental institutions that were set up to manage the commercial agricultural activities in their respective countries. In most cases, they mediate transactions between the wageworkers/farmers and the international buyers. In Trinidad I interviewed the Chief Executive Officer of Caroni 1975 Ltd. In St Kitts, I conducted interviews with the Manager of the Transition Management Unit and the former Chief Executive Officer of SSMC. In St Vincent, I conducted interviews with the outgoing and incoming managers of the SVGBA. These management officials knew firsthand how changing global trade policy affected the
industries they managed over the years. I also sought to uncover the problems they had with re-training programs that they implemented to retrain workers for alternative forms of employment.

3.5.1.3 Ministry of Agriculture Officials

The Ministry of Agriculture is the arm of government that oversees the activities of the banana and sugar industries. Although the ministry does not manage the industry, it provides valuable resources such as extension officers and subsidy grants to the agricultural industries, which are essential to the functioning of the industries. In all three countries, I conducted interviews with the Minister of Agriculture, the Permanent Secretary of Agriculture as well as field extension officers. In St Vincent, additional interviews were conducted with the Chief Agricultural Officer, the Diversification Officer, the chairman of The Windward Islands Banana Development and Exporting Company (WIBDECO) and the local ambassador to the WTO. In St Kitts, I conducted additional interviews with the current Chief Agricultural Officer, the Permanent Secretary of Social Affairs and the project manager of the Basic Needs Trust Fund. In Trinidad, the Governments’ Chief Economist, the Permanent Secretary in the Ministry of Science, the manager of The National Agricultural Marketing and Development Corporation (NAMDEVCO) and the Chief Agricultural Planning Officer were among those interviewed. I conducted these interviews to get a broad idea of the types and effectiveness of programs the governments were putting in place to re-train displaced workers.
3.5.1.4 Members of the Private Sector/Chamber of Commerce
The private sector plays a key role in absorbing any surplus labour that has been produced by downsizing in the banana and sugar industry. In each country, interviews were conducted with the Executive Director of the Chamber of Industry and Commerce, and managers and operators of six large and small businesses. I interviewed members of this sector to get insight about the difficulty of absorbing the excess labour produced by a downsizing industry. I also inquired about the skills that ex-farmers and semi-skilled agricultural workers would need in order to be considered viable candidates for employment in the private sector.

3.5.2.1 Stage Two: Wage Workers/Banana Producers
This group of people sit at the centre of this study, and the data from this group greatly inform my results and findings. Two approaches were taken with this group of people. The first was the use of questionnaires with open-ended and closed ended questions, which I administered to rural workers in each community in all three countries. With each interviewee, I presented myself, explained the intention of my research, and asked permission to interview the person. If permission was granted, the questionnaire was administered. In cases where the interviewees were challenged or incapable of filling out the sheet, I asked the questions and the interviewee answered. In St Kitts, I interviewed fifty persons, while in St Vincent and Trinidad forty-six and thirty-seven persons were interviewed respectively. The sample size varied due to availability. I conducted these interviews to capture the opinions and beliefs of the workers as well as to obtain their demographic, geographical, and economic data. The workers interviews further served to increase the range of perspectives feeding into the study. These
interviews attempted to uncover the alternative types of income generating activities the interviewees were engaging in—or the lack thereof— in times of crisis. I also sought to uncover where and why these income generating strategies were taking place, and if there were other adjustments being made in the household or on the farm to cope with the loss of a stable income.

3.5.2.2 In-depth Interviews
The second approach involved in-depth interviewing with five interviewees from each country. The selection of the informants was based on a representative sampling of different types of households and different types of livelihood activities. I obtained detailed information on the impact the downturn had on the household, particularly its impact on the economic and social health of the household, and the types of grass-root strategies the household organised in response. These interviews provided valuable information on how the deployment of these strategies affected the household’s ability to cope with the crisis. The data was recorded in two ways: by audio recording, and in writing.

3.5.3 Focus groups
Another field research technique employed to gather data was the use of focus groups. The participants for this informal interview session were rural agricultural workers gathered through local community leaders or farmers cooperative groups. This allowed the group to be homogenous by job type, but diverse with respect household background. The session took place in neutral environments such as school and community centres at a time agreed upon by all involved—either late afternoon or early
evening. At each focus group, I presented my research intentions and obtained approval to meet and record the discussion. These groups consisted of ten members. Once permission was granted these members were encouraged to freely discuss a number of questions prepared before the meeting. These consisted of questions related to perceptions of the current economic crisis and the strategies being employed to deal with changes in household income.

3.5.4 Oral Life Histories
In addition to interviews and focus group discussions, oral life histories were conducted with two elderly individuals on each island. I chose one male and one female to get a gendered perspective of the ways that household survival strategies had evolved through different periods of crisis that have occurred throughout the decades. These interviewees were contacted through a parish priest or a community leader, in one instance. With each interviewee, I presented myself and my research intentions, and attained permission to record the conversations. Through moments of 'subjective reflection' these histories gave me an avenue to explore the ways rural workers have adjusted their living and farming situations over the years in times of economic downturn. This type of data was very valuable because archival searches revealed the paucity of qualitative historical information.
Chapter 4: The Sugar Industries of Caribbean: Contextualising the Problem

4.1 Background
Sugar had been an important feature of the Kittitian and Trinidadian economies and landscapes since 1640 and 1627 respectively. However, since the mid 1980's, the sugar industry in these islands has been going through a phase of serious decline. This decline is driven by: the failure to replace obsolete machinery, compounded debt, rapid soil degradation and reduction of a fixed arable area, increased production and labour costs, and reduction in the price of sugar on the European Union (EU) and the United States (US) sugar markets. This combination of factors—especially the 39% reduction in the price of sugar in 2005/2006—created the depression and eventual closure of selected
sugar industries in the Caribbean. This segment of the chapter highlights the chain of
global events that triggered the demise of Caribbean sugar, and shows how policy
changes on the global level and structural issues on the local level may have put the
proverbial nail in the coffin for Caribbean sugar. Special mention is made of Trinidad and
St Kitts because these countries will be looked at in detail in the remainder of chapter 4
and in chapter 5 of this study. Many of the issues discussed in segments 4.1 through 4.4
are issues that relate to both countries.

4.2 Global Trade Policy and the Caribbean
While the situation varies by country, most of the Caribbean’s sugar producers would
not be operating without preferential access to—and higher prices from—the European
Union (EU) and United States (US) sugar markets, which pay two to three times world
market prices for imports from quota holders. Since 1975 and 1982, respectively, the
six sugar producing countries of the Caribbean Community enjoyed trade preferences from the EU and US under their respective sugar regimes. These preferences allowed
quota-holding countries of the African Caribbean Pacific (ACP)-EU Sugar Protocol of the
Lomé Convention, to export cane sugar—raw or white—to the EU and US at guaranteed
prices, which were based on the prices received by domestic producers in the importing
country. Unlike most articles of the Lomé Convention, the Sugar Protocol does not
expire and cannot be changed unilaterally (Anderson, Taylor, & Josling, 2003). In
addition to these preferences, countries in the Caribbean Community (CARICOM) Single

12 Preferences are a form of assistance normally provided to developing countries by developed
countries whereby imports of selected products are permitted from recipient countries at lower
import duties than imports from elsewhere.
Market and Economy (CSME) have duty-free access while imports of raw sugar from outside the region face a 40% Common External Tariff (CET) (Mitchell, 2005). The original quantities specified to ACP countries were 1,294,700 tons of white sugar equivalents, and an additional amount was allotted to India. The total import commitment was for 1,304,700 tons. This amount has remained constant with reallocation of quotas among existing members when a country did not fulfil its quota. This Protocol, which is not simply a preferential arrangement, had special legal status recognised in the ACP-EU Cotonou Agreement, which was the mainstay of the Caribbean sugar industries. To emphasise the importance of this agreement to Caribbean sugar, in 1995, the Special Preferential Sugar Agreement gave CARICOM sugar industries an additional valuable outlet in the EU of 100,000 tonnes at 85% of the Sugar Protocol price of EUR$523 per tonne (Myers, 2004). Then from 2000 to 2001, these sugar programs provided 85% of export quantities and 94% of export revenues for Caribbean sugar producers (Mitchell, 2005).

During the past decade, a number of significant global political and economic events took place that have directly affected Caribbean agricultural industries. One of the most significant of these was the signing of the Uruguay Round of talks under the General Agreement on Tariffs and Trade (GATT) at Marakkesh in 1994, which resulted in the formation of the World Trade Organization (WTO). This helped to usher in the globalisation of trading practices, particularly in the agricultural sector, but it did not affect every nation in the same way. While it benefitted larger integrated or subsidised producers, it presented severe challenges to the developing world, including the
Caribbean region. For sugar—one of the largest earners of foreign exchange in the Caribbean—the impact was not felt immediately as the industry had the protection of preferential marketing arrangements under the Sugar Protocol of Lomé Convention and the US Sugar Quota Act. Government documents and statistics show that each island felt the true effect of the change in trading practices over the period of 1994-2006. The details of the global trading policy changes and their effect on the Caribbean sugar and banana industries will be discussed below.

4.3 W.T.O Ruling and the Effect for Caribbean Sugar
In the aftermath of the creation of the World Trade Organisation (WTO), the special privileges offered by the Lomé agreement came under threat of extinction. In April 1996, the United States of America—in conjunction with Mexico, Guatemala, Costa Rica and Ecuador—filed a complaint to the WTO trading body (Myers, 2004). They charged that the Lomé Convention's Banana Protocol unfairly acted against the Central and Latin American banana producers, and should be discontinued. In April of 2005, the WTO concluded that the EU's sugar program subsidised exports in excess of the levels agreed to in the Uruguay Round Agreement on Agriculture, and should be removed (Anderson, Taylor, & Josling, 2003). This ruling was binding, and was enforceable because, as demonstrated in figure 2, the WTO sits at the zenith of the trading world and its decisions supersede all other trading bodies and arrangements in the world.

This new change meant that the white sugar support price would be reduced from EUR 631.9/ton to EUR 385.5/ton and the raw sugar support price would be reduced from EUR 523.7/ton to EUR 319.5/ton by the end of the transition period. Caribbean sugar
producers thus saw a reduction in the intervention price by 39% over two years starting in 2006 (European Commission 2005; Goodison, 2007).

Table 4.1 Prices for ACP Raw Sugar 2005-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Price per Tonne (Euro)</th>
<th>% Change (Cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/06</td>
<td>523.7</td>
<td>0</td>
</tr>
<tr>
<td>2006/07</td>
<td>496.8</td>
<td>-5.1</td>
</tr>
<tr>
<td>2007/08</td>
<td>496.8</td>
<td>-5.1</td>
</tr>
<tr>
<td>2008/09</td>
<td>432.1</td>
<td>-17.1</td>
</tr>
<tr>
<td>2009/10</td>
<td>335</td>
<td>-36</td>
</tr>
<tr>
<td>2010/11</td>
<td>‘Not less than 90% of the EU reference price’</td>
<td></td>
</tr>
</tbody>
</table>

Source: Goodison 2007

Although the Lomé trade preferences for bananas and sugar were extended until 2008, the EU delivered another devastating blow to the agricultural industries in the Caribbean with the enactment of the Everything But Arms (EBA) initiative which was signed into law on March 5, 2001. This initiative provided the world's 48 poorest nations—which housed the world's largest, most efficient and well-funded sugar and banana producers—with competitive duty free access to EU markets. Ironically, Haiti is the only Caribbean country among the Least Developed Countries (LDC) that qualifies for access, but it is not currently a sugar exporter. Thus, EBA did not directly benefit Caribbean sugar exporters.

From a policy perspective, the EU has claimed that the new policy “...will bring economic benefits to the world's poorest countries and people. It also represents an important political gesture indicating the EU's commitment to promote a more equitable distribution of the benefits of international trade...” (Stevens & Kennan,
2001:2). The EU has claimed that the new proposal will streamline the EU import policy and by removing the preferences, it makes access to EU markets more fair for international and domestic sugar producers. However, the comparison between relative benefits of the current regime for sugar and bananas with EBA is more complicated. Although ACP beneficiaries of the 'Sugar Protocol' obtain duty-free access, this benefit is quota-limited, whereas under the EBA initiative it is not. On the other hand, the Sugar Protocol provides that ACP beneficiaries will receive prices indexed to those within the EU (Goodison, 2007). Under EBA, the price received by LDCs would be subject to negotiation with importers, and is likely to be much lower (since the world price is one-quarter to one-third of the EU level) (Stevens & Kennan, 2001). In other words, EBA allows LDCs to export unlimited quantities of sugar to the EU (subject to the safeguard clause), but at lower prices, than those in the quota-restricted preferences of the Sugar Protocol.

4.4 Issues leading to the demise of Caribbean Sugar
This change in trading practices ushered in by the WTO has negatively affected the price of sugar on the world market in recent years. The price for Caribbean sugar has declined as producers strived to bring prices in line with the WTO's proposal for the achievement of consistent prices between cane sugar and beet sugar. As a result, in 2003 the six sugar producing countries of the Caribbean Community experienced one of the most difficult years in their recent histories. Total production fell, and production in Barbados, Jamaica, Trinidad & Tobago and St. Kitts and Nevis declined to levels not seen for decades. While production costs have increased and production and exports have fallen
in many Caribbean countries, the opposite has occurred in many other sugar-producing countries. World sugar production costs have declined by about 40% (real terms) since 1980 (LMC International, 2001), as production has increased most rapidly in low-cost producers such as Australia, Brazil, Colombia, Guatemala, South Africa, and Thailand. The combined share of world exports of these low-cost producers has increased from 24% to 52% between the periods 1980 to 2003 (UNCTAD, 2009; Goodison, 2007).

Figure 4.1 Raw Sugar production Costs for ACP producers

![Figure 4.1 Raw Sugar production Costs for ACP producers](image)
Debt has further undermined the competitiveness of Caribbean producers. Most Caribbean sugar producers have accumulated large debts from years of unprofitable operation. This debt reduces competitiveness by increasing interest payments, constraining equipment maintenance and replacement, and limiting application of production inputs such as fertilizer. Deferred equipment maintenance and replacement leads to more frequent equipment failure and increases factory downtime. Debt of private sector cane growers constrains their ability to undertake sugar cane replanting and apply adequate fertilizer, which in turn reduces yield and leads to further losses and additional debts. Once started, debt escalation is difficult to escape. In St Kitts the debt of the sugar sector over the period 1988 to 2003 totalled EC$286 (US$106) million by the end of 2003—40% of annual GDP (see Annex Table 1). In Trinidad, the state-owned sugar company, Caroni (1975) Limited, accumulated current and long-term debt of TT$1.5 billion (US$240 million) and total debt and liabilities of TT$3.4 billion (US$540 million).

Caribbean sugar producers have been plagued by a series of other problems: lack of economies of scale; damage from animals; man-made and natural disasters; inability to increase production and productivity; continued labour problems and high cost; few value added products; higher cost of inputs resulting from currency liberalisation; low use of technology; and inadequate research and development support.
These factors are not negligible. Escalating production costs meant that St Kitts and Trinidad were producing at costs twice and three times that of the world’s most efficient producers, meaning that none of these producers were competitive with low-cost world producers or major exporters (see figure 4.1). It was under these pressing conditions: a deteriorating preferential arrangement, reducing pricing arrangement, lack of competitiveness, and debt, that the countries of Trinidad and St Kitts decided to close their national sugar industries in 2005 and 2006, respectively. In both countries, the sugar industry employed a combined total of 10,200 persons, all of whose livelihoods depended heavily on the sugar industry as their main source of income. With the industries closed, these workers have had to find alternative means of earning an income in an already depressed post-sugar economy. The case studies of Trinidad and St Kitts explore some of the income-generating activities that have evolved as survival mechanisms among retrenched sugar workers amidst prolonged unemployment in countries with small economies and limited job options for the unskilled and academically challenged.

4.5: Sugar Case Study # 1: Case Study of Trinidad

4.5.1 Introduction
The coping mechanisms identified in Trinidad are slightly different from those practiced in the Leeward and Windward Caribbean for several reasons. The first is that Trinidad has a larger and more diversified economy than St Kitts or St Vincent. Instead of one primary industry, Trinidad has a thriving oil and natural gas industry that contributes heavily to the economy and thus provides more options for employment to people
seeking jobs outside the agricultural industries. Secondly, Trinidad has traditionally had two distinct ethnic groups that form the major part of its demographic and social structure. The first, Afro-Trinidadians, are people of African descent and whose presence on the island originated out of slavery; they currently make up approximately 40% of the island’s population. The second, Indo-Trinidadians are people of East Indian descent. This group came to the island as indentured labourers from the middle of the nineteenth century and currently make up one third of the island’s population.

Trinidad has historically benefited from the preferential trading concessions provided by the Sugar Protocol (SP) of the Lomé Convention and its successor, the Cotonou Agreement. Over the past three decades, this protocol allowed Trinidad’s exports preferential access to the EU market that, in recent years, reached €524 (US$620) per tonne (see Table 4.2).

<table>
<thead>
<tr>
<th>Table 4.2 Trinidadian sugar exports under EU/ACP regime (Value in 000 US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>--------</td>
</tr>
<tr>
<td>17043</td>
</tr>
</tbody>
</table>

Source: Conforti & Ford, 2007

Upon closure of the industry, Trinidadian policy makers anticipated that issues surrounding the lack of education, technical skills and financial assets would prevent ex-fieldworkers from coping properly in the period of unemployment and transition after the closure. The lack of education and technical skills meant that while employed in the sugar sector, these 'working poor' engaged in low-level occupations that required low
levels of skill and educational achievement, and paid low wages. While employed these issues actively prevented the redundant workers from accumulating material or financial wealth. Upon closure the vast majority of this group lacked the financial resources needed to cope with unemployment and income stoppage. This was because, Caroni fieldworkers survived on meagre incomes, usually on a week-to-week basis, and had little opportunity to accumulate any significant wealth or savings. According to the World Bank, this lack of education and functional illiteracy were the major causes of poverty for the Trinidadian sugar workers (World Bank, 1990), however, other observers agree that a poor distribution of wealth and the exploitation of sugar workers were also factors contributing to their poverty (Isakson, 2010).

4.5.2 Government Responses

In response to these concerns, the Trinidadian government offered a series of packages and incentives upon closure of the sugar industry to try and buffer the effects of unemployment, and provide the workers with varying forms of assets to make a livelihood in the aftermath of the closure. This took the form of training programs (to enhance their human capital), two-acre agricultural plots (to augment their natural capital), residential housing and financial severance packages (to augment their economic capital). Some of these government packages will be discussed below to highlight some of the ways in which workers were able to use these programs to eke out short-term survival strategies in some cases and long-term livelihood changes in others. Some attention will also be given to the issues and problems that prevented the retrenched workers from using these strategies to their advantage.
4.5.3 Agricultural Plots
In an effort to enable former workers to feed themselves and earn an income, the sugar company, Caroni 1975 Ltd, planned to offer land titles to seven thousand agricultural plots of land—approximately two acres in size, to former workers who expressed an interest in becoming farmers. Besides providing the workers with a means to create an agriculturally based livelihood from which they could draw an income, policymakers also viewed the provision of these plots as a major part of the long-term national development agenda. In full-scale production, the food produced on these plots would contribute to the country's food supply, thereby increasing the country's food security while decreasing import related expenses.

An inquiry among the rural Trinidadian workers revealed mixed attitudes towards this initiative. This mixed reaction could be seen in the differentiated adaptation of this initiative among the different tiers of educational and skill levels that existed in Caroni. For example, of the 8,000 workers that applied to be a part of this initiative, only 200 farms were in operation at the time of my research\textsuperscript{13}—slightly up from December the previous year—of this figure 67% of farm operators were ex-fieldworkers, 25% were administrative staff, while the remaining 8% were manufacturing staff. Among the field staff there was a higher level of participation among men than women (Rampasad, 2009). The participants indicated that they adopted this pathway for three main reasons: first was because it was very similar to what they had been doing before in Caroni; second, some adopters had been farming before as an extra source of income,

\textsuperscript{13} Farms were at various levels of production, while some farms were in full production, others were being tilled or still under sugar cane.
and chose to intensify their efforts, and expand the amount of land under production; third, because they saw it as a means to work for themselves.

Within this group of early adopters, I observed a male farmer in his 50’s who had successfully used his two acre plots to grow eggplants, which he sold at the market in Debe and Diego Martin every two weeks. He also met his daily expenses by selling fresh produce at the side of the road from a little makeshift hut to passers by. An interview with this farmer revealed that although the monies from the farm were seasonal and sometimes meagre, because he was an early adopter and one of only two eggplant producers the flow of money was steady because he had a niche market and loyal customers. Household labour was integral to the survival of his farm. The operating costs on the farm were reduced by the input of household labour from the farmer’s wife and grandson who did most of the roadside selling while he did the day-to-day farming. They also assisted with the farming when their services were needed.

Older fieldworkers, who indicated that they were too old to work the land, or learn a new skill, took a very intuitive way around the problem. One interviewee in his sixties acquired the land from Caroni and encouraged his son-in-law to start planting the land. A sixty-nine year-old interviewee who acquired land had encouraged his son to plant cassava, eddoes, cucumber, ochra and peas on the two-acre plot. Like other ex-workers over the age of sixty, these workers acquired the land because they saw ownership of land as a vital asset. However, although they cannot plant the land, they have been
leasing the land to other farmers or transferring the lease to their children in an attempt to earn money from the crops or the leasing arrangement.

4.5.5 Problems Preventing Participants from Creating Livelihoods

Among the individuals who chose to participate in the land granting initiative, how many were successful in turning this initiative into a livelihood? This segment will discuss the most common reasons why not everyone who signed up for the initiative was successful in turning this land into a viable asset or creating a livelihood. It is evident that there are factors beyond the control of the rural workers that prevented them from creating livelihoods, despite their ownership of land. Very early in the program, there were reports that a number of people who signed up had stopped or abandoned their farms. Official figures from Caroni show that at the beginning of the program in June 2008, there were 318 acres or 159 plots under cultivation. However, three months later that figure had dropped to 219 acres (109.5 plots) and the figure continued a steady decline towards the end of the year. Therefore, the question arises, why were these farmers abandoning their plot in times of economic crisis, and furthermore, why were not they able to use this method to create an alternative livelihood for themselves? Was it a matter of the redundant workers losing interest in farming? My research suggests otherwise. These workers quickly realised that small-scale agricultural farming was quite different from working for Caroni. There was much more work involved, and without the necessary infrastructure in place (i.e. access roads, drainage and irrigation facilities), the cost of maintaining a farm was more than many
participants anticipated. An ex-farmer indicated that he was forced to abandon his farm once the cost of preparing the two-acre plot rose above TT$4,000 (USD $628.00). Because the farm was still primarily virgin land, it was more expensive to prepare, much of the preparation money was paid from his savings, along with the cost of hiring labourers, chemicals and other farm input. After two planting cycles with modest returns, overhead expenses forced him to abandon the farm, as the farm was making him worse off financially. Animal damage was another deterring factor for new farmers. One farmer who borrowed money from the bank was unable to repay his loan after cows from a nearby farm destroyed all of his crops. He said with such losses he was unable to service the loan, or earn an income and so had to abandon his farm. These external factors offer valuable insight into why some rural workers were not able to capitalise on this opportunity.

In addition to external factors, these examples highlight the fact that many of the people who signed up for the program were not experienced farmers. They only became farmers when they signed up for the program and acquired the land (Rampasad, 2009). Therefore, they were not familiar with production techniques, planting cycles and farming logic. They were likewise unfamiliar with the concept of self-sacrifice for the survival of the farm, or other types of behaviour typical of small scale or peasant farmers. Most novice farmers made no attempt at farm size adjustment or acquiring input from household labour.
For some farmers, it was not that they did not want to become farmers—farming represents an anchor strategy for many of these rural workers—it was a case where the size of the farms that they were assigned may have been too large for the ex-workers to manage on their meagre incomes or severance packages. Having smaller farms would have allowed rural workers to manage a more diverse range of income generating strategies. The larger the farm, the more resources and time it required.

### 4.5.6 Retraining Programs

Enhancing the human capital of the retrenched workers was one of the top priorities of Caroni. Programs were designed to teach basic skills that would help the ex-workers acquire employment opportunities. These programs sought to provide training in computer literacy, traditional agriculture, aquaculture and small engine repair to name a few. There were also programs providing technical skills such as carbon steel welding, pipefitting and fabrication and building construction technology (see Annex Table 2). Nearly all the workers I interviewed (89%) had heard about the programs, but only 32% participated (See Table 4.3). Among those who participated, attendance at the training meetings was higher for administrative and other monthly paid staff (59%) than the daily paid field staff (16%).

<table>
<thead>
<tr>
<th>Have you Heard</th>
<th>Have you attended</th>
<th>Was it Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>4</td>
<td>12</td>
</tr>
</tbody>
</table>

Was it Helpful

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Among those who participated, attendance at the training meetings was higher for administrative and other monthly paid staff (59%) than the daily paid field staff (16%).

Table 4.3: Awareness and participation in capacity building initiative

Source: Authors Fieldwork
Members of the administration group who attended indicated that the courses were helpful in acquiring a new skill and expanding their current knowledge, but to other fieldworkers it became a short-term survival strategy. Participants were paid for their attendance and, in the absence of steady employment, some interviewees referred to the programs as their day jobs. Therefore, the program's stipend became a source of income during the period of unemployment. One person admitted that he attended solely for the financial assistance that was provided during the length of the courses, mainly to help with his weekly expenses during the unemployment period. This was substantiated by officials who picked up trends whereby numerous participants were attending multiple training sessions over an extended period of time, each time collecting weekly stipends for attendance (Henry, 2009; Rampasad, 2009).

Therefore, the question must be asked how many of these attendees have successfully used these government provided assets, specifically the human capital acquired through training and not land or other assets to create a livelihood in the aftermath of the closure? From the interviews with the ex-workers, 75% of all interviewed Caroni workers were able to find jobs (see Annex Table 3), however only a small fraction (23%) of these workers were able to find jobs in the private sector that utilised their newly acquired skills. Of great interest is that most ex-field workers who found jobs reported entrance into low skilled, labour intensive jobs such as domestic workers, security
guards, landscapers, gardeners, or they became small business entrepreneurs, fishermen, farmers or raised poultry.

4.5.7 Coping Mechanisms Devised by Rural Peoples
Research among the rural workers of Trinidad revealed that alternative means of earning income were in practice before the industry declined and eventually closed. It would be wrong to assume that all rural peoples did not engage in some form of informal or alternative income earning activity before the industry came to a close. This section will investigate the activities that have emerged or intensified as a result of the closure of the industry.

Before we can investigate some of the coping mechanisms that evolved, it is useful to highlight some of the ways in which the closure of the industry affected the lives of the sugar workers. From the research conducted, most of the rural workers were affected in ways that are common with general loss of income: reduced spending on basic goods, general feelings of helplessness and financial and social instability. Nevertheless, it is important to note that all affected respondents in the study were actively seeking exits from their predicaments caused by extreme lack of money.

There are a series of coping mechanisms that have evolved out of the two different ethnic groups in Trinidad. Some are common to both groups, whilst some are unique to either Afro or Indo Trinidadian respondents. The sections that follow will examine coping mechanisms as they have evolved among the different levels of educated
individuals within Caroni. Each group possesses different skill sets and each earns different categories of salaries.

4.5.7.1 Administrative Staff
At the time of closure, Caroni employed 1137 monthly paid administrative staff. This group was the most highly educated and highly paid. Although they did not possess much in the way of technical skills, their level of education was a very valuable asset. A sample among this group revealed that 70% found jobs within the first two months of the closure, and 10% within three to five months. Interviews with members of this group revealed trends that there were no drastic changes in their personal lives caused by the closure because they were the most employable as their skills were highly transferable. Some people had been rehired by the company, or had found other means of employment in the private sector, while other interviewees indicated that they had adapted to the crisis in several ways.

Many former staff members changed their consumption habits. One interviewee indicated that her family adjusted its spending habits after the downturn. They spent less on luxury items, such as brand name food and trips to the restaurant. The interviewee highlighted that instead of going to the restaurant several times a week for lunch or dinner, such an event was reserved for more special occasions. When they went to restaurants, they tended to go to less expensive ones in an effort to save money. Interviewees also indicated that they travelled less, both internationally and locally. Regional destinations were chosen over international ones and they reduced the amount of leisure driving in an effort to save on gasoline and other travel related costs.
One Indo-Trinidadian family noted that in an effort to cut back they opted to send less money to their child at university; instead of TT$4,000 (USD$628.00) per month they reduced that amount to TT$3,000 (USD$470.00), and encouraged their daughter to find a part-time job to make up the difference. In general former administrative staff did not cut back on all aspects of their consumption, instead they spent more cautiously. These observations suggest that with the onset of crisis people in a better financial position strive to preserve their lifestyles, and so will change aspects of their consumption to achieve this goal. On the other hand, the poor abandon the idea of lifestyle preservation, and devote all their resources to the preservation of self and their livelihood.

4.5.7.2 Field Staff
The other group of people from Caroni that adopted strategies to cope with the crisis is the group anticipated to have been the hardest hit—the unskilled fieldworkers. At the time of the closure, Caroni employed 7870 daily paid fieldworkers. This group had several characteristics that made them the most vulnerable to the closure. They were the lowest paid, and had the highest proportion of uneducated workers. Their most developed skill was usually directly related to their field jobs, or alternatively developed as a result of their socialisation (e.g. fishing, craft-making). In interviews, members of this group indicated that the downturn had reduced their ability to spend in a significant way, not only on basic goods and services, but it also hindered their ability to meet their social and financial obligations. Several Afro-Trinidadian fieldworkers mentioned that due to the downturn, they were unable to pay their weekly child support and were
taken to court, and even threatened with jail time. Interviewees reported feelings of mental frustration and hopelessness because they were unable to provide for themselves and their household. In some interviews, women mentioned that economic insecurity impaired their ability to form sustainable relationships. This provoked the breakdown of family communication, and led to frequent arguments in the household, which sometimes led to the breakdown of marriages. Others felt embarrassed by their inability to meet their social and financial obligations. Field observation suggested that these former field workers employed the most diverse range of economic and livelihood strategies to feed themselves and their families in the period of income shortage and unemployment. Some of these are discussed below.

4.5.7.2.1 Private Sector and Multi-Occupational Livelihoods
An official at Caroni indicated that the ex-workers were mainly turning to the private sector for alternative occupations, chief among these were jobs in the construction industry. Government officials had long predicted that the construction and oil and gas industries would be the two main sectors that would absorb some of the excess labour created by the closure of the sugar industry. In interviews with workers, I found that although some workers managed to find work in the construction industry (47%), most of this work was at the very lowest rungs of the construction industry. At this level, unskilled workers indicated that they were poorly paid and work was often inconsistent. As a result, workers often had multiple jobs, working for themselves, family and multiple contractors. In an interesting strategy, an interviewee explained that in addition to his half-acre farm, he makes himself available to three contractors for day jobs when jobs
were scarce. This way he could take advantage of any opportunities that arose while he was working on his farm. Another interviewee mentioned that he raised cattle and routinely sold beef on weekends. During the weekdays, he worked regularly for a contractor. If workdays became shorter, he increased his days selling beef to compensate for the lost income. It is interesting to note that these farmers utilised their assets, namely land and cattle (or 'natural capital'), that helped them get through the economic transition.

4.5.7.2.2 Lifestyle Adjustments
Some former fieldworkers indicated that they had undergone a lifestyle change since the closure of the industry. One Indo-Trinidadian man indicated that his family no longer takes part in holiday festivities such as Divali and the national carnival, which require large sums of cash in order to participate. He further mentioned that his family no longer spends money on things deemed unnecessary for household survival. For example, his children no longer attend movies, and his family has changed their eating habits. They now eat cheaper, and sometimes less nutritious locally grown food foods instead of the store bought imported foodstuff (see Table 4.4).

Table 4.4: Nutritional comparison of the cost of imported and locally produced food

<table>
<thead>
<tr>
<th>Item</th>
<th>Kilocalories/EC$1.00</th>
<th>Protein (g)/EC$ 1.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>1734</td>
<td>32</td>
</tr>
<tr>
<td>Flour</td>
<td>2751</td>
<td>79.3</td>
</tr>
<tr>
<td>Locally Produced</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Another interviewee indicated that although he has diabetes, he reduced his visits to the doctor and dentist as compared to when he had a stable job. He indicated that he now used more natural or herbal remedies to keep his condition under control and would go to the doctor only when his condition becomes severe.

Other interviewees revealed that adjustments in their children’s education was also a part of their coping strategies. However, only after prolonged periods of unemployment and financial hardship did interviewees indicate that they relocated their children to either a cheaper school, or one that was closer to home, in an effort to avoid transportation and lunch fees. In one extreme case, an Afro-Trinidadian woman indicated that she had to remove her daughter from high school before completion and encouraged her to get a job in a nearby mall because she could no longer afford the school fees.

4.5.7.2.3 Garden Plots
In the aftermath of the closure, there was a greater emphasis on the self-provisioning of food. Thirty two per cent of interviewees indicated that they relied more heavily on their backyard garden in the months after the closure to meet their daily dietary needs. The figures were higher among Indo-Trinidadian households, 64% of whom claimed that they had a few rows of vegetables on their property, which averaged approximately 0.06 hectares. In the central Caroni swamplands, most households had vegetable gardens or a built-up garden plot planted near village rice-lands, usually on natural
higher ground. In Bejucal, peas and beans were grown along with the root-crops cassava, eddoes, dasheen, and tannias. Mixed vegetable gardens were found near trailside dwellings at Bejucal, while corn and bananas were grown on the better-drained hills of Debe village. In general, crop diversification had become a means of hedging bets against ongoing crisis and a way of maintaining variety in the family's diet in times of hardship.

In one case, an interviewee mentioned that he eats almost exclusively what he grows, or what he can trade with neighbouring farmers. He mentioned that he has informal trading relations with five other neighbouring farmers who trade/barter the goods grown on their farms. These may include corn, cabbage and peas, chickens or goats. He could no longer afford to sustain himself and his family with foods bought in the supermarkets. Therefore, only things could not be produced on the farms were bought in the stores.

Younger, single people rarely owned their own land. The majority indicated that they helped their parents and grandparents from whom they got a portion of the harvests. The majority of respondents, particularly those with children, described the primary purpose of the garden plot was to secure the immediate survival of their families in situations where incomes had diminished or had become insufficient.

4.5.7.2.4 Food gathering
Interviews with ex-workers indicated that in the aftermath of the closure, livestock and other meat sources have become important sources of food and cash. Ex-workers
indicated that they actively bred, not bought, the various forms of livestock available to
them. In several communities, cattle were seen being tended, while chickens and goats
were seen in the backyard pens of many residences, often near the backyard garden.
The poorest of the interviewees indicated that fishing and gathering from the Caroni
and Oropouche swamps supplemented other food sources. Interviewees indicated that
food gathering accelerated in all communities after the closure, especially during rainy
seasons. The intensification of food gathering during the wet season suggests that a
greater mass and variety of edible fauna were available in brackish swamplands when
salinity was lowest after seasonal rains. Interviewees also mentioned that crabs and
crayfish had become part of their daily diet. These were gathered by men and boys, who
constructed small boats from reeds or old planks, while fishermen cast nets in Caroni’s
lagoons and swamp waters. Any fish caught was boiled with rice for home consumption,
or bartered. Any surplus Calalloo crabs or fish were sold along the highways of western
Trinidad.

4.5.7.2.5 Increased reliance on Kin and Consolidation of Households
The family and the household also play a critical role in the coping process. For some
interviewees, family was seen as the most important survival asset because family
members are reliable in times of need. In some cases, interviewees mentioned that they
now rely more on family and friends for handouts and other necessities for their house
and family, including food, clothing and loans. One Indo-Trinidadian family moved back
into the home of the extended family when the family depleted its savings and could no
longer afford their living expenses. Another trend that surfaced view among Indo-
Trinidadian respondents was the tendency for grandparents to move into a household. In Couva and San Fernando, many household heads mentioned that their household comprised of three generations. When respondents were asked whether they had invited parents to live with them because of financial pressures arising from the circumstances of the industry, 64% indicated they had done so intentionally. In normal times, the invitation would have been made in circumstances that were simply connected with the health and age of a parent who was in need of care. Whereas in this case the household was consolidated as an economic strategy. The move was used to raise funds from the sale or leasing of the grandparent’s house, and also to reduce food related expenses. It also reduced living costs for their adult children, while saved on childcare expenses. In an interview with an official at Caroni he indicated that this sort of drastic but temporary action was not uncommon in the Indo-Trinidadian community which has a well developed sense of thrift and responsibility to the extended family.

4.5.7.2.6 Livelihood Changes
Among fieldworkers, a larger percentage of people found jobs outside the sugar industry than those who were rehired. The trend in this skill set was a tendency towards low skilled jobs in construction, landscaping, taxi driving, gardening, government service or a combination of the above. In this group, the tendency to mix income-earning activities was more prevalent than among any of the other observed groups. As alluded to earlier, some members have indicated that they were daytime construction workers and weekend farmers, or beef salesmen. within this group there was a variety of job combinations chosen to continue earning an income. Interestingly, most of these jobs
developed from part-time, weekend or evening jobs that workers undertook to earn an extra income while working in the sugar industry. However, with the closure and the scarcity of employment, their part-time job had transformed into their full-time job.

There was a gendered aspect to new employment. Males showed a stronger tendency to find jobs more quickly. Ninety-one percent of males found jobs in the first 2 months while only 9% of females found jobs in this time frame. In interviews with ex-workers, male household heads who had found jobs often indicated their jobs required they travel to other communities or even into the city, for their work day. In these same households, females were often discouraged from working outside the community in which they resided. This discouragement turned into prevention if the newly found jobs were in communities that involved long periods of travel to the city of Port of Spain, or may have involved them staying away from the household for lengthy periods of time. This practice was prevalent in the Indo-Trinidadian community where certain jobs were seen as unacceptable: domestic jobs in hotels and homes, and work that involved travelling around the country such as sales persons or higglers. The rationale in many cases was that these jobs prevented women from performing their household duties such as cooking and caring for the children. While some husbands cited safety concerns, the more likely reason was one based in the traditional perception of gendered roles, and a woman's responsibility to the household. The women's value to the household was equated to, or exceeded her income earning capability. However, it could be argued that it is equally a part of women's survival strategies to keep working, for psychological reasons. Jobs were important because they were seen as lines of continuity with the
past, and a stable part of a women’s identity. Several women made comments like ‘I can’t imagine myself without work’ and said how frustrated they felt while unemployed. “Work is necessary. Domestic care sucks the energy out of you, Women should work” Even though some women complained about the actual working conditions, very few interviewees said they preferred being at home.

4.5.7.3 Manufacturing and Machine Shop Staff
The final group within Caroni 1975 Ltd that will be assessed is the manufacturing and machine shop staff, who possess primarily technical skills. This group of workers had a unique characteristic that may have made their livelihood readjustment strategies easier, and thus differentiating them from the other two groups. Unlike the administrative staff and the field workers who worked at varying intensities all year around in the active and dull crop season, this group of workers was often unemployed in the sugar industry in the dull season. As a result, this group of workers usually had two sets of regular jobs: one for the active season and the other for the dull season. During the dull season, these workers were usually employed in skilled trade jobs such as construction, plumbing or carpentry, which met their expenses for six months of the year. The regularity of this practice allowed these workers to become skilled at what they did, even in several cases achieving the title of master mason, craftsman, or carpenter. As a result, after the closure, the job-hunting period for this group of people was significantly shorter than that of the field workers, but generally not as short as the educated individuals in the administration section. In the transitory period, this group of workers adjusted to their new state of joblessness by financing their daily expenses
with their savings or income of an employed spouse, or small loans, while others intensified or regularised the jobs they did in the sugar off-season. The majority of the skilled workers became entrepreneurs and opened small businesses, such as grocery and petty clothing shops, repair services, or became taxi operators or mechanics. This was possible because members of this group received larger severance packages than the unskilled workers. They also had more exposure to formal education and skill development than the unskilled.

4.5.7.4 Small Farmers
Small cane farmers, numbering 4,000 in total had been selling some 60,000 tonnes of cane to Caroni 1975 Ltd annually. In the aftermath of the closure, some farmers responded to a shrunken market, increased operating costs and falling cane prices by reducing the acreage of cane under production. Others reduced the number of labourers on staff, and some even attempted to cut daily wages from a staggering TT$125 (USD$19)—without success. Some farmers are now cultivating alternative agricultural commodities and have abandoned cane farming completely. Besides vegetables, farmers are also rearing pigs, cattle, poultry, goats, and various forms of aquaculture. One small farmer indicated that after the closure he struggled to convert more than 75 acres of sugarcane fields to food-crop production. He attended a meeting organised by Caroni 1975 Ltd and signed up to produce three crops. To start his new venture he invested $USD60,000 in the purchase of a planter/harvester from Planti center in Brazil and has since begun harvesting 55 acres of cassava with a guaranteed price of $1.85 a pound.
There is some degree of cooperation involved to expand production and decrease overhead cost. For example, the farmer indicated that his two brothers, a nephew and two sons support him, all farming separately in the same vicinity on more than 125 acres of land. “We all have our separate land and operate independently but we corporate with each other and will all make use of the machinery we plan to invest in to maximise production and reduce costs,” he said. Their aim is to extend current contracts and acquire additional contracts to supply large quantities of root crops as well as vegetables to local institutions and businesses.

4.6 Summary
The empirical data illustrates that while workers from all categories had cut back on their consumption, the types of consumption they were foregoing were qualitatively different. Whereas former administrative staff tended to cut back on luxury consumption like eating out, former field staff were cutting on necessities of life like healthcare and nutritious food. Also noteworthy are people from the manufacturing group. Because they had more diversified livelihoods before the crisis (i.e. second jobs), the former machine shop workers adopted more quickly after the crisis and were less vulnerable. This reinforces the idea that a more diversified portfolio of economic activities renders rural actors less vulnerable. Also exemplified in this chapter is that rural actors may be unable to create sustainable livelihoods even though they have access to resources\(^\text{14}\). For example, rural workers may have had access to land and other form of productive resources, but external factors such as lack of access roads and

\(^{14}\) This lack of access to resources, especially financial resources and education may have been the reason for the under-reporting of ex-workers who emigrated to find work.
proper drainage, prevented some from utilising these resources to their advantage. As demonstrated in by the Trinidadian household of East Indian decent, power dynamics within the household can also restrict household members from exercising their free will to work, and hence prevent them from contributing to the household. This power may take the form of cultural and gender norms that give men power to prevent or allow his spouse to work. However, there is also power dynamic in the relationship between the state and rural actors, and the state and international structures. In the case of the state and rural actors, the state has displayed its power by closing the sugar industry despite protests by labour unions and other social movements, and in doing so has forcibly taken away the livelihood of thousands of workers. The relationship between the state and global trading bodies is slightly different. As exemplified in Figure 2 in the Annex, the state is in a position to receive decisions of the WTO but not to dictate trade terms, and despite the relative wealth of Trinidad, it has not been able to effect change on the decisions of the WTO. According to Susan Strange (1996) what this has made apparent is that whereas states were once the masters of markets, with the arrival of global governance and trade liberalisation, the markets are now the masters over the governments of states. Thus, the declining authority of states is reflected in a growing diffusion of authority to other institutions and global bodies, in a growing asymmetry between the larger states with structural power and weaker ones without it.

The data also illustrates that all categories of workers relied on access to kinship and social networks to provide them with varying levels of assistance during the crisis. This reinforces the fact that interdependencies during crisis are very important for
household survival during a crisis. However, while on some level the resources drawn from the networks appeared to be standard (i.e. food, money, labour), different ethnic groups appeared to utilise networks differently (i.e. household consolidation). While this sort of analysis is absent from the SRLA, its inclusion is necessary because it teaches us that cultural norms can constrain or permit how intensely one group of people utilise their social capital in comparison to another. From the empirical data, it is reasonable to conclude that the intensity of this utilisation can determine which households will survive and those that would not.

Chapter 5 : Sugar Case Study # 2: St Kitts

5.1 Introduction
The ability of rural workers to create short term or long term survival strategies in any Caribbean island is ultimately determined by the resources available to them during the time of crisis. Although not a homogenous group, on the island of St Kitts rural sugar workers can be typified as landless proletariats, a large portion of whom are “unskilled” with little or no formal education. The Skills Upgrading and Endowment Survey commissioned by the government of St Kitts in 2005 noted that of the 1407 sugar
workers employed by the industry in 2004, 731 (65.9%) could be classified as “unskilled labourers”. Further, the Economic Commission for Latin America and the Caribbean (ECLAC) indicated that 80% of the ex-workers had no education certification and 54.4% did not attend school beyond the primary level (see Annex Table 4). Thus at the time of the industry closure, it was likely that this vulnerable group had very little human and financial capital, and therefore had very little to fall back on when they became retrenched. However, the rural workers in St Kitts differ greatly from those in Trinidad and St Vincent. They enjoy a comparatively high standard of living: just over 86% of the sample had an internal supply of water, seven days per week. In addition, 94% of the sample had access to national electricity. Moreover, 96.2% of the sampled households used Gas/LPG for cooking—Only 1.1% of households used coal or wood. Furthermore, small-scale farming is not an activity that was practiced widely among the rural population, and while a minor portion of the sample reported having garden plots, their presence in village life had diminished as the country transformed from a plantation economy, to a smallholder economy, and more recently to a service economy. In the case of St Kitts, although the government was willing to provide the retrenched workers with long-term unemployment insurance benefits, the state’s financial position prevented this action. This meant ex-sugar workers had to take a

15 96.0% of all arable land has traditionally been used for sugar cane production
16 This is consistent with literature suggesting that states under financial pressure retrench on welfare provision, leaving people more to their own resources (Wallace, 2002).
17 This was because in 2005, country had an external debt of some $290,992,000 million and a slipping debt service ratio of 16.9% (Table 5 annex).
greater role in managing pensions, insurance, education, and healthcare, services which were customarily overseen by the St Kitts Sugar Manufacturing Corporation (SSMC).

Recognising this, the government deployed a series of sponsored programs designed to build the skill capacity of the retrenched workers, and give them assets they could use to create alternative livelihoods. These initiatives took various forms, and included land redistribution programs, retraining programs, and micro-credit and entrepreneurship programs, all of which were an expense to the cash strapped government. These initiatives, as will be discussed later, were an attempt to give people the necessary skills, agency, and support they needed to make a livelihood outside the sugar industry. However, this in no way implies that rural people did not create or utilise resources of their own. Rural people deployed resources in the form of social networks, technical skills, and entrepreneurial strategies. Others entered the private sector as low paid workers such as labourers, cleaners and domestic workers in hotels and private homes.

This chapter will discuss how ex-sugar workers reconfigured their livelihoods, strategically drawing upon both government programs and their own resources to create coping strategies and alternative livelihoods. I will attempt to show the evolution of livelihood reconfiguration and strategy creation across the three working groups in SSMC\textsuperscript{18}. This will demonstrate that access to assets such educational achievement, technical skills and formal credit markets, produces differentiated responses to crisis, and has a significant impact on strategy deployment. This chapter will first examine the

\textsuperscript{18} See annex table 6 for a comprehensive breakdown of SSMC employees
workers that took part in the government retraining programs, and consider their use of such programs. It will then examine coping and livelihood strategies that were created using the rural workers own resources, looking at their evolution and the factors that may have contributed to their success or failure. It will further examine coping strategies and livelihood creation across educational and gendered lines within the St Kitts Sugar Manufacturing Corporation (SSMC), showing how each group of workers utilised the assets available to them to survive the period of crisis. The chapter will end by considering some of the household adaptations and responses that emerged among rural workers in an effort to ensure food security and survival of the household during times of crisis.

5.2 Retraining
Closure of the sugar industry meant that ex-workers, many of whom would have worked most of their lives in the industry, had to be retrained to become active and productive members of other sectors of the economy (O.E.C.S, 2005). To do this, the government implemented retraining programs to retrain retrenched workers to produce a good or service to earn an income (see Table 5.1). These were relatively short, intense training courses, which covered a time span of three weeks to three months. The immediate goal of the retraining programs was to help ex-workers invest and save money, cope with private sector requirements and conduct themselves professionally in their new work places (O.E.C.S., 2005). While attending the retraining programs the ex-workers received a stipend of EC$250 (USD$ 93.00) per week.
Table 5.1: Registration vs. Attendance in government retraining programs

<table>
<thead>
<tr>
<th>Name of Course Offered</th>
<th>People Registered</th>
<th>People Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentry</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Landscaping</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>Plumbing</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Air conditioning/Refrigeration</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Business Seminar</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>House Keeping/ Hotel Trades</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Sewing Techniques</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Hair Care Techniques</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Rabbit Rearing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Baking and Cake Making</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Basic Baking Techniques</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Jewellery Making</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fruit Preservation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Small Engine Repairs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Processing Of Fruit Brewed Liquors</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Decorative Candle Making</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Basic Confectionary Making</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Greenhouse Floriculture Production</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>Greenhouse Vegetation Production</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Textile Art</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Welding and Metal Craft</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Dress Making</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Computer Literacy</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>Agro-Processing</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Masonry</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Culinary Art</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Electrical Installation</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Auto Mechanic</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Bartending</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Basic Basketry Making</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Child Care Management</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Secretarial Duties</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Counselling Saving &amp; Investment</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Counselling for Entrepreneurs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Counselling and Coping Strategies</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Job Fairs for Ex-works</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Duty free imports on buses and Taxis</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Government of St Kitts and Nevis Project Profile July 2005
5.2.1 Livelihood Creation and Government Initiatives
As indicated in interviews with government officials in various departments, only three programs from Table 5.1 had been successful in creating functional jobs for field workers. The first was the Women’s sewing course, which taught women basic sewing techniques; the second was the Air Condition and Refrigeration course, which taught male workers basic Air Condition and Refrigeration repair. In both cases, groups formed cooperatives to increase production, and sold their goods and services to government institutions. Attendees of both programs indicated that they were able to earn a reasonable income selling their services, but sales were both seasonal and slow, and were not as regular as the income provided by the sugar industry. They were unsuccessful in expanding into private markets because of a lack of advanced training and experience, which prevented them from pursuing higher income and creating a successful alternative livelihood. Both groups indicated that the failure to penetrate the private market was because private employers were unwilling to risk large sums of money to individuals with little experience. One group member made the transition into the private sector air condition repair working for a local hotel. However, he explained that this was facilitated by close family ties to the business owner.

Successful livelihood creation for the attendees of the Sewing and Air conditioning program was not simply working, as it was in the eyes of the government. Livelihood creation for these workers meant expanding their skills to obtain higher paying jobs in markets that were more lucrative, to provide sustenance for the household. This is
exemplified by workers who indicated that although they were able to earn an income from the venture, income was meagre and inconsistent. As such, they were unable to meet their usual financial obligations without sacrifice, and did not consider the retraining to be a viable means for creating a livelihood.

The Bus and Taxi Program was also successful. There were twelve participants for this program, all of whom were formerly well-paid males, division managers, and tractor drivers ages 41 to 52. My research revealed that those who invested in the vehicles were not only highly paid, but also had prior experience in driving passenger buses, and so were familiar with the industry. There was a noted absence of field workers from this group, primarily because field workers did not have access to enough monies to buy a bus, whose cost ranged from EC$75,000-95,000 (USD$27,900-35,800) without government subsidies. One fieldworker indicated he was sceptical about investing all his severance into a high-risk vehicle, in an industry in which he had no experience\(^{19}\). However, one male respondent in Kittsodart indicated that during a good week he usually earned EC$1500-$2000 (USD$562.00-749.00) per week, which was 2.2% more than his wage in the sugar industry. For this respondent it was considered a viable alternative livelihood. At the time of the interview, business was going so well he was able to buy an additional bus, in an attempt to increase his profit margins and to continue generating revenue in the event something unfortunate happened to the other bus.

\(^{19}\) World Bank (2002) cites that in times of uncertainty poor people are less likely to invest and more likely to hoard resources
5.2.1.1 Stipends

Stipends of EC$250 (USD$ 93.00) per week were given to all workers who received training for occupational and employment adjustment during the transition period (Budget Address, 2005). In an interview, the government minister responsible for Agriculture and Lands indicated that his Ministry felt it necessary to provide this stipend as:

"...the absence of such may have acted as a impediment to engaging in the training activities, although, such training would clearly increase their skills and marketability..."

Attendees and course facilitators indicated these programs were designed primarily for fieldworkers, not for administrative staff or others who possessed considerable technical skills. Interestingly, these programs functioned as a two-part strategy. The first strategy is that of the government, which provided the training, and used the stipends to encourage and enable workers to attend the training programs. The second is a short-term survival strategy employed by the workers. Ironically, although the government provided the stipend to enable workers to attend the training rather than other economic activity that day, the workers attended the training as an economic activity in and of itself, as there was no work available to them at the time. This observation is supported by my interviews with the workers, 68% of whom indicated that they were attending the training sessions solely to collect the stipend, which they used to meet their basic weekly needs and obligations. There was a noted gender differentiation in the reasons for attendance. Conversations with women revealed that
81% attended the training sessions for several reasons; the most cited were skills diversification, earning an income after completion, and curiosity about the courses, while the remaining 19% attended solely for the stipend. Seventy-one percent of men ages 30-45 who attended the sessions did so solely to continue earning an income in the transition period—mainly to meet household, legal and social obligations, while 29% attended for reasons other than this. There were reported cases where for a period of two months certain individuals would sign up for, and attend several training sessions, in each case collecting stipends for their attendance. The incidence of this appeared higher among males than females (Philip, 2006).

What was clear from these interviews was that the stipend became a form of income for ex-field workers. This meant that the government’s attempt at skill development, and long-term livelihood creation strategy, translated into a short-term survival strategy for many of the workers. Some attendees reported learning a new skill, but as emphasised later, most ex-workers were unable to use the newly developed skill to create a livelihood.

5.3 Social Safety Nets or Social Networks
In any country, the closure of an industry that employs 20-25% of the rural population is bound to have an unprecedented impact on the unemployed and their family members (SABAS, 1999). The impact of mass unemployment is far reaching, and one major problem which was expected to intensify was the lowering of living standards, have resulted in approximately 20-30% of the ex-workers slipping into poverty (ECLAC 2002).
In response to this, the government provided a series of social services specifically tailored to the sugar workers to combat the economic and psychological effects of unemployment. These programs took form in several initiatives that are highlighted in Table 5.2 below.

Table 5.2: Proposed social initiatives for ex-sugar workers

<table>
<thead>
<tr>
<th>Type of initiative</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Access to food Packages</td>
<td>Distribution of food packages to the needy and the elderly ex-workers above the age of 62</td>
</tr>
<tr>
<td>Assistance with home repair and upgrades</td>
<td>Improving the living condition of the ex-sugar workers by providing houses and land for 350 poorer ex-SSMC workers</td>
</tr>
<tr>
<td>Medical Assistance</td>
<td>Integration of former employees and dependants into the public health delivery system of the island. Distribution of Photo Health Card</td>
</tr>
<tr>
<td>Provision of home help for the elderly</td>
<td>To hire more social workers to assist the elderly and the shut-in’s.</td>
</tr>
<tr>
<td>Student Education Learning Fund</td>
<td>Assist ex-sugar workers to purchase educational material for their children</td>
</tr>
<tr>
<td>Counselling Sessions</td>
<td>To identify vulnerable households and attempt to counsel these households on coping strategies to prevent the fallouts of unemployment.</td>
</tr>
<tr>
<td>Funeral Grants</td>
<td>To provide assistance from EC$ 1000 - $6000 for funeral purposes</td>
</tr>
<tr>
<td>Assistance to fire victims</td>
<td>To assist with materials and money</td>
</tr>
</tbody>
</table>
From my fieldwork, five of the seven administrative staff interviewed indicated that they had accessed the above-mentioned government services to meet their needs. One respondent, who was previously an agronomist, mentioned that he was in the process of building a house when the industry closed. He was able to access the home and land initiative to secure monetary assistance to complete the construction of his home. Another field manager indicated that he accessed a funeral grant of EC$4,000 (USD$1,498) to assist him with final expenses for a family member. However, this assistance provided only a small fraction of the overall cost; additional monies were provided by either themselves or other family members. In the case of the agronomist, he indicated that his prolonged period of unemployment, forced him to borrow against his savings to finance the building of the house. His wife who was employed took over the majority of the household expenses, while he finished the house. It was interesting to note none of the respondents mentioned accessing these services because they were critical for them to do so. Instead, the services were accessed to maintain aspects of their lifestyles and perceptions of their social status. In the two above mentioned examples neither did the agronomist adjust the size of his house, nor did the field manager reduce the elaborateness of the funeral ceremony, as cost saving measures. Instead they used the programs to maintain their pre-existing lifestyles.
In contrast, 76% of all field workers indicated they were not interested in accessing the government services. They often found the services cumbersome to access and the procedures difficult to understand. Instead, ex-field workers turned to social networks to help them cope and manage the crisis during the transition period. Interesting among this group is that in households where both male and female are present, females turned to social networks for assistance with items crucial to the internal operations of the household (i.e. money, familial expenses, food and clothing). The men turned to networks for assistance with activities that contributed to the external wellbeing of the household (i.e. labour needs for the farm or house repairs)\(^20\). For example, a female respondent explained that when her savings were depleted after the closure, she sought help from her neighbours and family members to help her son who needed to receive an emergency abdominal surgery in Basseterre. Another, who went to Basseterre to buy a new stove and lost her purse, was eventually able to buy one because her friends raised the money.

In the sugar belt, I interviewed four male respondents who were in the process of building their own houses. Traditionally, homes in the sugar belt are built with hired labour and occasional help from friends. However, with the stoppage of income, most of the building was done on weekends and evenings with considerable support from relatives and friends, all of whom were compensated in kind. Assistance of such kind has become more regularised after the decline of the sugar sector, especially for funerals,

\(^{20}\) In a household where the female was the head of the household she would have to undertake all responsibilities alone, sometimes having to rely on neighbours, or relatives to perform the tasks related to household repairs.
which are sometimes in excess of EC$6,000 (USD $2,234.68). To help cover final costs, both male and female respondents mentioned they expected friends and neighbours to help by contributing monies for the casket, or toward food and drinks for the wake. Neighbours and friends have become a significant resource for many respondents, who had become both customers and providers of paid services/favours and sales/swaps of household items.

5.4 Entrepreneurship as a means of livelihood creation
The practice of street or market food sales in the West Indies is called “higgling,” and dates back to slavery, when slaves were allowed to sell any excess produce from their gardens and keep the money they made from these sales. As the government discovered through various surveys and studies, ex-workers had a clear desire to become self-employed (ECLAC, 2002). An ECLAC skills survey revealed that approximately 37% of sugar workers had some alternative form of employment, which they could use to earn an income in the aftermath of the closure (ECLAC, 2002). From interviews with workers from the administrative, manufacturing and field sections, I discovered that these workers used these alternative means to create livelihoods for themselves. All of the interviewed administrative staff were re-employed by an existing private enterprise, none of whom started a business of any kind. However, trends varied among the manufacturing and field staff. There were marked differences between the types of self-employed businesses pursued by the different groups. Interviews with ten technical staff members—all of whom were male, indicated that after the industry
declined they became fully self employed in businesses they did part-time while the sugar industry was operational.

In one exceptional case, a machine shop manager transformed his livelihood by, using monies from his severance package, and a bank loan to take over the machine shop division from the SSMC. He indicated to me that he had been a machine shop worker for 34 years and was skilled at using the various equipments to fabricate machine parts. He saw the purchase as an opportunity to have his own business and provide a one of a kind service to other businesses and individuals in St Kitts. He even mentioned that he had provided machining services to cruise ships on occasion. At the time of the interview, he indicated that he made more money as a private owner than as an employee, and also had a greater sense of satisfaction. In 60% of the other cases, technical staff members simply expanded the size of their operation after the closure. Their businesses included mechanic shops, petty retail, cattle farming, small grocery shops or landscaping services, most of which required high levels of capital investment (approximately EC$2000). The sources of capital for this group were noteworthy. In three cases, the venture capital came primarily from government assistance, in two cases from their severance packages; in the remaining four, capital was obtained from bank loans and savings. In the cases of the grocery shop owner, cattle farmer and landscaper, there were also multiple activities that emerged from the original business. For example, the mechanic repaired several lawnmowers and weed whackers that he rented to individuals, or hired out himself as a landscaper for a slighter higher fee. I witnessed the grocery shop owner managing a food stand at the weekly horse races in
Dieppe Bay, and although the cattle farmer sold his beef to the local abattoir, he also sold portions of beef from the back of his truck throughout rural villages. He also provided beef to his family to operate a weekly barbecue stand in St. Paul’s village, from which he received some proceeds. The rest would go to his family’s household.

Among field workers, self-started informal businesses such as selling a tray of goods at the roadside, or peddling low value goods had become the mainstay of 36% of female displaced workers\textsuperscript{21}. One of the noticeable economic activities that emerged among the more entrepreneurial ex-field workers was the selling of trays of sweets, nuts, fruits and small meals at the roadside to schoolchildren and other unemployed village people. In Saddlers Village, an elderly female in her 60’s reported that after the sugar industry closed she had no source of income; she was too old to work anywhere else, and did not want to leave her community where she had worked in and around all her life. She began making and selling sugar cakes. Her grandson would walk the streets selling the cakes on afternoons and weekends, and she would sell on weekdays. As her period of unemployment prolonged, and the business became more successful, she began producing more goods such as groundnuts, popcorn, and sweets, which she sold both on the streets and from her house. Another respondent in Saddlers Village known for her cooking, used this type of human capital to earn an income during her period of unemployment. She indicated that she had no interest in leaving her community to search for a job so she used the goods grown on her farm and offered goat water, black pudding, and other traditional food dishes for sale on weekends along with a few locally

\textsuperscript{21} No men were seen doing this type of activity
made drinks. Labour for the venture was provided by her daughters, sons and grandchildren. The proceeds were re-invested to buy inputs, and any profit was taken as an income. As the business grew the respondent indicated that a relatively ‘well off’ friend from her church offered her several opportunities to cater for events at her church at EC$ 600 (USD$225.00), per event. This friend also recommended her to a district politician to cater several of his rallies for a slightly larger sum. These events increased her popularity among a wider range of socio-economic backgrounds who were willing to travel to buy her food. She considered herself gainfully employed at the time of the interview, and indicated that her food business was affording her more money and a better lifestyle than she had in the sugar industry.

These examples point to two important facts. First, people with a better education and a more developed skill set were more likely to have a better chance at livelihood creation. Second, access to land, credit, capital and other institutions were vital for livelihood diversification. A lack of assets prevented the poorer, uneducated rural workers from entering into risk-reducing livelihood strategies with higher returns. The poor could not easily access non-agricultural activities or profitable alternative activities. However, these examples show that the poor typically enter into activities with low entry costs, such as selling low value goods or goods that require little or no cash investment but produce low returns. On the other hand, entry into high-return non-crop activities, such as cattle rearing or shop keeping—in which most households would like to engage, is restricted to richer households, with access to capital.

---

22 For a more in-depth discussion see Dercon, 2002
5.5 Some factors preventing new livelihood creation

Improper program design was the primary reason why participants were not able to create livelihoods using the training provided by the government. In an interview with an official at the Transition Management Office (T.M.O.), he indicated that the job placement program managed by the TMO was only partially successful in getting people placed. The official pointed out that for several reasons, after the courses ended, there was great difficulty in placing the attendees. The courses were relatively short, basic courses spanning only three months. In the eyes of potential employers or customers, the attendees were not skilled enough to perform the rigorous tasks, which affected their hiring rates. Facilitators of the courses at the Youth Skills Institution echoed the same sentiment. They felt that in three months, it was practically impossible to teach the attendees the material that would have taken a regular student two years to learn. In addition, the courses were not adequately designed to provide students with a suitable transition into the private sector. They pointed out:

"...a man doing an electrical installation course at the end of the program wouldn't be able to wire a house or read a blue print...neither would he be offered a job as an apprentice as predicted by the government because only long standing in-house workers are offered these positions...”

As a result many trainees were not placed in the field in which they were previously trained. T.M.O officials indicated that few ex-workers were absorbed into the private sector. Instead most of the trainees were hired by government institutions, usually not in areas related to their training, via direct reference from their Minister in Parliament.
Those who penetrated these sectors did so at entry level, working as such labourers, dockworkers, hospital cleaning staff, clerical staff, security guards, and kitchen hands, where wages were inconsistent with the training and education they received. Rural workers who penetrated these sectors displayed a high sense of pride because they were now uniformed, and no longer in the sugar industry—which has traditionally been associated with slavery.

5.5.1 Psychological Issues
Psychological problems also prevented rural workers from livelihood creation. Transition Management Office documents revealed that approximately 67% of females and 53% of males who had been placed, did not work for the institutions at which they were initially placed. The reasons cited were that employers observed that workers were unable to cope with the rigid workdays, as well as the hours and schedules that were assigned to them. Employers further observed that the workers normally stayed together when hired in groups, or isolated themselves when hired alone. In addition, some workers had problems working unsupervised and so appeared to be “idle” on the job.

T.M.O officials cited that there was a high incidence of job abandonment due to feelings of dissatisfaction, isolation, oppression, rigidity and lack of family and leisure time. Seven women mentioned that the new working hours (often 5 hours longer than before) shortened their time to fulfil their obligations to their young children and spouses. As a result, most women often accepted jobs that offered them the same type of flexibility as those they previously enjoyed in the sugar industry, and rejected jobs that they perceived to be overly strenuous or too restrictive (see Figure 5.1).
In nineteen interviews, sugar workers—especially older female workers between the ages 38-50—indicated that they found it extremely difficult to work long hours; it was not something to which they were accustomed. When asked why he thought this was happening, the T.M.O manager indicated that it was impossible to undo 30-40 years of an acquired behaviour in three months.

5.6 Household coping mechanisms devised by rural workers

5.6.1. Non-food related coping strategies:

5.6.1.1 Clothes purchasing behaviours

In interviews with ex-workers, I uncovered several non-food related coping strategies employed to prevent or delay food insecurity for all members. One such strategy was the delayed purchasing of clothing and other luxury apparel. This behaviour was apparent among the former administrative staff and the field workers. Eighty-one percent of fieldworkers, 60% of manufacturing staff and 42% of administrative staff reported delaying the purchasing of unnecessary clothing for themselves and their
family. Among fieldworkers, when clothes were bought, it was out of necessity, not luxury. In cases such as this, children usually were given preference ahead of parents. This group also reported receiving second-hand or new clothes from other individuals, family members and churches and buying less expensive clothes or buying clothes on credit. One cost saving strategy mentioned was parents bought fewer school uniforms, or extended the life of old ones from the previous school year. Ex-field workers were more likely to extend the life of the school uniforms, while the manufacturing and administrative workers were more likely to use a combination of buying new and reusing old uniforms. When asked why they cut back on clothing expenditures, 77% of ex-workers reported that it was to ensure there was sufficient money to buy food and pay for basic household necessities.

5.6.1.2 Decreased Spending on Education
Seventy-three percent of ex-field workers and 72% of administrative staff mentioned that during the period of transition, they reduced their children's' education expenditure as a part of their coping strategy. Parents reported strategies such as reducing or not giving any pocket money to children—lunches and snacks were prepared at home instead of being bought. Because public education in St Kitts is free, there was not a pressing need to move children from one school to another. However, one single parent in the administrative group mentioned that she moved her child from a private school to the public school system because of the decline in her income, and cost of a private education.
5.6.1.3 The delayed or alternation in payment of bills
The delayed or alternation in payment of bills was a coping strategy used primarily by the poorest ex-field workers. Respondents reported delaying or alternating the payment of electricity, telephone or water bills, until the receipt of warning letters or termination of services had occurred. One respondent stated, "I alternate the bills; I may pay electricity this month, and leave the water, if the services get disconnected for non-payment, they remain that way until the monies become available". This type of strategy was most prevalent among ex-field workers in the poorest parts of the sugar belt—the regions of St Pauls' and Newton Ground where the poverty rate is estimated at 39.3% (The Caribbean Development Bank, 2009). Government lump-sum payments or "goat water" usually made to sugar workers at strategic times of the year would have covered these bills, but with the loss of that additional income and the depletion of savings, respondents started making sacrifices to ensure there was money to buy food.

5.6.1.4 Lifestyle adjustments
Among ex-administrative and ex-field workers, there was evidence of lifestyle adjustments made to cope with the crisis. Some of the adjustments among the administrative group included being thrifty, planning for expenditures, buying less expensive products or shopping at cheaper places. The adjustments among fieldworkers were abstaining from or not giving gifts during special occasions, reducing their families' participation in festivals, such as festival de Cappisterre and the national carnival, being more open to receiving handouts, and requesting money from relatives or friends. One

23 I observed that rural workers ranked services in order of importance to the household; therefore the telephone and television services were deemed less important, than electricity then running water.
employed ex-worker indicated that these strategies were to ensure that money for food
and other household necessities would last until the next salary.

5.6.2 Food Related Coping Strategies

5.6.2.1 Food Stretching and Food Substitution
One of the first responses to the reduction or stoppage of cash by ex-field workers was
abstaining from, or reducing their weekly and monthly food related expenses. Food
stretching had become one of the two coping strategies related to quality of diet. This
strategy was common among male and female household heads. The respondents
described using less expensive food to prepare household meals such as eggs of creole
chickens, canned meat substitutes, small cheaper fish, and wild foods gathered in the
mountains or within the village limits. In 31 of the 50 households interviewed,
abstinence and substitution were mentioned as central strategies implemented in their
household as a result of a prolonged period of unemployment. Respondents indicated
that they abstained from certain store bought foods, such as foreign meats, chicken,
cheese, oranges and sweets that were considerably expensive. They substituted these
with cheaper local meats, creole chicken, and fruits that were in season such as sugar
apples, plums, maracas and mangoes that were in season.

Several members (71%) of the administrative group mentioned that they had not
changed the nature of their daily diets, but they had changed the nature of the
ingredients. Instead of buying expensive brand-name ingredients, they bought cheaper
substitutes, which were made locally or regionally. These included cheaper varieties of
rice, porridge, salt and oil, paste, sauces, bananas, instant noodles and flour.
5.6.2.2 Food rationing
There was some evidence of food rationing among respondents. This strategy relates to the quantity of food available for the household's consumption. Two female ex-field workers both with large families reported they reduced the food portions or the number of components of daily meals. Instead of having a meal consisting of a starch, meat and vegetables, family members were now given smaller portions of each, or a meal that included small portions of only meat and a starch, or in severe cases a starch item and vegetables. One parent mentioned that if food became extremely scarce parents would reduce their consumption so that they could feed their children properly. One parent commented "I buy them snacks on pay day" or "I don't buy too much meat or fruit myself, only for my children".

5.7 Summary

The research suggests that in a time of crisis rural workers will utilise any or all income earning options available to them. In the context of work, making do or "turin' one's han'," has emerged as an important coping mechanism necessary to make a living or making money outside of formally sanctioned career paths and structures of professional training-- as in the case of the cattle farmer/butcher. It could mean picking up odd jobs or starting one's own business, as in the case of the street vendor or other market vendors.

The empirical data also suggests that some categories of workers were able to transform their livelihoods while others were merely coping, but only on the micro level.
Transformation occurred easiest for administrative and manufacturing staff because of a better education and a more diversified portfolio of economic activities—making them less vulnerable in the period after the closure. The data suggests that with the onset of crisis workers from all categories quickly implemented money saving strategies, but the types of strategies varied by category. Whereas former administrative staff became more thrifty and shopped for, or substituted less expensive items, former field workers abstained from purchasing foreign foods and stretched or substituted them with locally produced foods. Access to institutional resources also played an important role in permitting people to create meaningful livelihoods. Demonstrated in the chapter, is that knowing about government programs and being able to navigate the bureaucratic structures involved with them, gives educated groups of people the power to access government resources and favours. This access to the financial, natural and social capitals through the political regime impacted on which individuals were able to successfully turn assets—whether human, financial or natural—into meaningful livelihoods.

The material covered in this chapter raises two interesting questions. First are the livelihood creation strategies devised by rural workers using their own resources better than those provided by external sources? The data suggests that when workers created their own livelihood they felt a vested interest in ensuring its success because it had more meaning to them and offered them a sense of pride and accomplishment. Second, how feasible are government self help approaches such as housing and microenterprise support in creating livelihoods? The data shows that in the end, such initiatives only
went as far as the participants were allowed to utilise them given the constraints of broader over-arching structures such as the size and diversity of the economy, political will of government leaders, or the structure of a dependent political economy (Bebbington, 2004: 175). However, although on the micro-level many of the respondents appear to be coping in the short term, there have not been many instances of successful adaptation or transformation. These latter processes are important for rural workers because the global liberalisation project will have long-term effects on nature of the Kittitian economy.

Using SRLA, to determine if these short-term coping mechanisms will translate into long-term sustainable solutions may be difficult, because as Scoones (2009) observed, the SRLA has never been very good in determining how long term shifts in livelihood strategies will emerge. However, if historical analyses were applied to the situation, we discover that a return to the natural environment and more creative ways of securing food occurred in both World Wars when trade blockades prevented food shipments from being delivered to Caribbean countries. In these instances of food scarcity, rural folk relied more on their natural environment and networks to meet their necessities in times of scarcity\textsuperscript{24}. Whether this behaviour persists ten to fifty years into the future can only be determined by follow up studies.

\textsuperscript{24} The shortage of flour was substituted by cassava and potato flour and edible roots.
Chapter 6 Bananas: Case Study St Vincent

6.1 Introduction
Banana production in the Windward Island of St Vincent has had the same fate as its sugar-producing neighbours of Trinidad and St Kitts. Banana production has been the mainstay of the Vincentian economy since 1937, replacing sugar, citrus and other agricultural crops in terms of export earnings, GDP and employment generation.

However, with the formation of the Single European Market (SEM), the introduction of the New Banana Regime in 1993 and the landmark rulings by the World Trade Organisation (WTO) in September 1997 and April 1999, the Vincentian banana industry has seen a steady liberalisation of the banana market, and an erosion of its preferential market access and guaranteed prices (Table 6.1).

Table 6.1: Value of banana exports to UK under EU/ACP regime (Value in 000 US$)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7347</td>
<td>6380</td>
<td>3963</td>
<td>4348</td>
<td>3646</td>
<td>3160</td>
<td>2198</td>
<td>2360</td>
</tr>
</tbody>
</table>

Source: Conforti & Ford, 2007

6.2 Contextualising the Issues Creating the Crisis
In order to understand the overarching problem, and the issues that have created the crisis that banana farmers are facing, one must look at the mid-1980s when there was a boom in the banana economy of the Windward Islands. It was in this decade that researchers began recording increased crop diversification and the combination of income earning activities with on-farm activity observed among rural Vincentian farmers today (Trouillot, 1988).
Careful research has uncovered that the banana farmers in the Windward Islands are responding to several types of crises that affect production. In response to these crises farmers have devised new strategies to mitigate the effects of these crises on banana production, and in doing so, continue to maintain a livelihood. The first crisis started positively with the banana price boom in the mid 1980s. This boom was a result of an appreciation of 29% of the British pound against the US dollar between 1985 and 1986. Because the Windward Islands banana commanded such a large share of the UK market (50-60%), this meant higher banana revenue in the UK market. The change in prices, plus a number of positive developments in the industry encouraged farmers to expand their banana production, which led to an upward movement in living standards.

The downside of this banana boom was that the economy of St Vincent and the Grenadines had become dependent on the economy and imported inputs of the UK. This exposed the fragility of the industry, which came to the forefront in the fall of 1992, just as the pound sterling depreciated. Banana earnings fell as the pound sterling, after reaching a peak of EC$5.33 (USD$1.99) in the first quarter of 1991, dropped to an all time low of EC$3.81 (USD$1.41) in February 1993. The exchange rate remained relatively stable thereafter, finishing the year at an average of EC $4.0770 (USD$1.51), a 14 % decline compared to 1992’s average of EC $4.7280 (USD$1.76) to the pound sterling. In addition, Windward Islands’ banana producers experienced a slump of 13% in production and export levels in 1993 compared to the previous year due to seasonal variations and minor tropical storms (WINBAN, 1993).
Because of these trends, the average annual price paid to the Banana Growers Association dropped from 62.2 cents per pound of banana in 1992 to 51.3 cents per pound in 1993. Average monthly prices in 1993 fluctuated from a high of 61 cents in April to a low of 35 cents per pound in December. Consequently, the banana industry experienced a drop in revenue of 28 per cent, from EC$376.2 million in 1992 to EC$269.9 in 1993 (WINBAN, 1993). In the context of Caribbean banana, these fluctuating trends were the result of several international events. First, the creation of a New Banana Regime in January 2006; second, the initial modification of the EU trade arrangements for bananas in an attempt to resolve the WTO dispute (from 1999); third, the implementation of EU banana sector reforms and associated modifications of the EU trade regime for bananas; and fourth the entrance of the UK into the Single European Market. The convergence of these processes contributed to the worst financial performance for the banana industry in the last eighteen years (see Table 6.2).
Table 6.2: Banana exports from St Vincent in Tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>Export Quantity (Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>79561</td>
</tr>
<tr>
<td>1991</td>
<td>62878</td>
</tr>
<tr>
<td>1992</td>
<td>77361</td>
</tr>
<tr>
<td>1993</td>
<td>64608</td>
</tr>
<tr>
<td>1994</td>
<td>34552</td>
</tr>
<tr>
<td>1995</td>
<td>54788</td>
</tr>
<tr>
<td>1996</td>
<td>48850</td>
</tr>
<tr>
<td>1997</td>
<td>32865</td>
</tr>
<tr>
<td>1998</td>
<td>40820</td>
</tr>
<tr>
<td>1999</td>
<td>40211</td>
</tr>
<tr>
<td>2000</td>
<td>43400</td>
</tr>
<tr>
<td>2001</td>
<td>33000</td>
</tr>
<tr>
<td>2002</td>
<td>39664</td>
</tr>
<tr>
<td>2003</td>
<td>28455</td>
</tr>
<tr>
<td>2004</td>
<td>30315</td>
</tr>
<tr>
<td>2005</td>
<td>27470</td>
</tr>
<tr>
<td>2006</td>
<td>23783</td>
</tr>
<tr>
<td>2007</td>
<td>17514</td>
</tr>
</tbody>
</table>

Source: WINBAN, CSO

In this respect, the initial problems proved to be particularly destabilising, as the new regime did not deliver good on the promise of adequate returns for African Pacific and Caribbean (ACP) banana producers and their importers. The removal of preferences for Windward Islands’ banana industry since 1993 has had a severe impact on the SVBGA and by extension, their farmers. The combination of exchange rate changes and the decline in export volumes and prices resulted in a significant shortfall in earnings to the St Vincent Banana Growers Association (SVBGA). The full impact of the shortfall in banana earnings was not passed on to the farmers immediately. The SVBGA attempted to cushion the blow through price support mechanisms. However, this strategy proved to be unsustainable as the level of subsidies (averaging as much as EC$500,000 per week (USD$186,219.74) per week) soon exhausted the surplus built up by the SVBGA from previous years. In fact, the SVBGA was driven into such debt that by December 1993, it carried a debt of EC$20 million (USD $ 7,448,789.73). Under financial stress, the SVBGA was forced to remove price support mechanisms paid to Vincentian banana producers, which brought

25 (A large number of marginal farmers went into banana cultivation until the early 1990s because of the high prices afforded by these preferences).
down the price for bananas to a low of 26 cents per pound or EC$10.40 (USD$3.87) per box. For most farmers, this price adjustment, which reflected world prices was lower than the cost of production—which is higher than international prices, and represented a deterioration of their real incomes.

Compounding the problem of low box prices was the high wage costs experienced by Windward Island banana producers, which were estimated to be three times higher than those of Latin American producers (see Table 6.3).

Table 6.3: Comparative cost of producing a box of bananas in Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>Price per box (USD)</th>
<th>Labour Cost (USD)</th>
<th>Price per tonne (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Farm gate FAO</td>
<td>CIRAD</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>2.95</td>
<td>2.95</td>
<td>3.97</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>3.25</td>
<td>3.25</td>
<td>4.23</td>
</tr>
<tr>
<td>Columbia</td>
<td>3.64</td>
<td>3.64</td>
<td>5.01</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>3.4</td>
<td>8.53</td>
<td>15.02</td>
</tr>
<tr>
<td>St Vincent</td>
<td>0</td>
<td>8.39</td>
<td>14.97</td>
</tr>
</tbody>
</table>

Source: Melville, 2003

On average, the daily cost of labour for Windward Island banana producers is EC$40 (USD$14.97) per day. While this is comparable with the equivalent jobs in other sectors of the economy, it increases the price per box to three times higher than the most cost effective producers in Latin America and the Pacific. While not the sole factor for the uncompetitiveness of Windward Islands bananas since a large percentage of growers are small farmers and use family labour, it does contribute significantly to the overall cost of production (see Table 6.3 above).
With these two factors eroding the reliability and regularity of the peasant farmers’ incomes, growers have been forced to find alternative ways to continue production and provide food and shelter for their families. This case study is an exploration of the strategies that Vincentian banana farmers have employed in the light of the banana crisis, to ensure the preservation of the household and the farm. These strategies involve a series of on and off farm cost saving measures that will be explored throughout this chapter.

6.3 Background to the Industry
Banana production in the Windward Islands of the Caribbean differs from that found in Latin America and other African Caribbean and Pacific (ACP) countries. In the Windward Islands, the banana industry is mainly comprised of smallholder farms owned and operated by peasants and their families (NERA, 2003; Grossman, The St. Vincent Banana Growers’ Association, Contract Farming, and the Peasantry, 2003). In St Vincent there are about 1,100 growers operating on an estimated 42,200 acres of land. In 2009, nearly 40% of the farms were less than three acres, 70% were between one and five acres and the remainder between five and 20 acres (see table 6.4).
The skewed distribution in banana acreage is a reflection of the unequal division of land in each of the islands. The total land area of St Vincent is 388 km$^2$. Approximately 23% of the land is used for agricultural production. Of this, 40 banana farms larger than five acres occupy 54% of the land, while 3,000 farms sizes one to five acres control only 4% (Nurse & Sandiford, 1995; Grossman, 2003). Most of these small farms are situated on steeper, marginal lands where access is difficult and the soils are shallow. This distribution of land is indicative of two things. First, more smallholder peasant farmers depended on the banana industry for a livelihood than large landholding farmers and second, larger producers dominate the banana industry. In the view of some authors, this mode of production has many characteristics of a plantation system (Trouillot, 1988): mono-crop production, limited inter-sectoral linkages, low value added, export and import orientation, external market dependence and foreign control (Nurse & Sandiford, 1995). However, as will be discussed below, this view is not particularly accurate.

### Table 6.4: Distribution of arable land among sample

<table>
<thead>
<tr>
<th>Size of landholdings (Acres)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>8</td>
</tr>
<tr>
<td>2.5</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>3.5</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>5.5</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>6.6</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>7.5</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>8.5</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>9.5</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>&gt;10</td>
<td>4</td>
</tr>
</tbody>
</table>

Mean Farm Size: 2.67
Standard Deviation: 2.59

Source: Author’s Fieldwork

The skewed distribution in banana acreage is a reflection of the unequal division of land in each of the islands. The total land area of St Vincent is 388 km$^2$. Approximately 23% of the land is used for agricultural production. Of this, 40 banana farms larger than five acres occupy 54% of the land, while 3,000 farms sizes one to five acres control only 4% (Nurse & Sandiford, 1995; Grossman, 2003). Most of these small farms are situated on steeper, marginal lands where access is difficult and the soils are shallow. This distribution of land is indicative of two things. First, more smallholder peasant farmers depended on the banana industry for a livelihood than large landholding farmers and second, larger producers dominate the banana industry. In the view of some authors, this mode of production has many characteristics of a plantation system (Trouillot, 1988): mono-crop production, limited inter-sectoral linkages, low value added, export and import orientation, external market dependence and foreign control (Nurse & Sandiford, 1995). However, as will be discussed below, this view is not particularly accurate.
6.4 Rural responses to economic downturn
In response to the ongoing crisis, farmers have been observed using a number of assets available to them to cope with escalating labour costs, falling banana prices and dwindling real incomes. As evidence from interviews with farmers indicates most peasant farmers in St Vincent have access to natural, human and social capital. In St Vincent, it is estimated that approximately 3,200 peasant farmers own approximately five acres or less, which they use to produce bananas for the export market. Seldom discussed are the strategies farmers combine to generate an income and livelihood from a declining banana industry. The following section examines the various strategies and assets being used by these peasant farmers, to ensure the viability of their livelihoods and the integrity of their households.

6.4.1 Crop diversification
It is a known fact that in St Vincent, small farmers rarely grow bananas according to the recommended system of monoculture prescribed by the St Vincent Banana Growers Association (SVBGA) (Grossman, 2003; Wiley, 2008). Eighty nine percent of the small farmers interviewed indicated that they intercrop other root crops—such as tannias, eddoes, dasheen, sweet potatoes and yams—among banana plants (see Table 6.5). Both farm intensification and mixed cropping are practiced in the same farm space.

<table>
<thead>
<tr>
<th>Table 6.5: Diversified vs. non-diversified farmers by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Diversified</td>
</tr>
<tr>
<td>22</td>
</tr>
</tbody>
</table>

Source: Author’s Fieldwork
Among farmers owning five acres or more the practice is slightly different. These farmers also display high levels of crop diversification, however in addition to the varieties of crops that were grown by smaller, poorer farmers, these farmers grew other higher value crops such as asparagus, ginger, cauliflower, broccoli and carrots. One female farmer mentioned that she grew orchids for the local market. These are crops that require greater levels of capital input and care, but whose returns are higher. Farmers owning more than five acres of land also tended not to intercrop. Instead, when diversifying they do so on a separate area of the farm or a separate plot of land. When asked why they diversify, small farmers indicated that low banana box prices meant that the revenue from bananas was sometimes not enough to cover household expenses; crop diversification was a way to ensure food security for the household, and diversity in the family’s diet, which in some households provides upwards of 60% of their daily meals. Four of the wealthier farmers mentioned that crop diversification was a way of supplementing their income from the banana portion of the farm and, in some cases, their jobs in the private sector. Furthermore, farmers indicated that since the price of bananas had slumped so drastically, they turned to the sale of these additional crops on the local and regional markets as a source of extra income. One male farmer indicated that an additional EC$700-$1500 (USD$260.00-$561.00) could be earned for every 500 pounds of ground provisions exported to the regional markets.
6.4.2 Manipulation of farm space
In contrast to Chaynovian visions of a resilient peasantry, social differentiation theorists have long assumed that in a situation of low prices or other economic adversity, all but the richest of farmers will be forced out of production and into landlessness, and becoming wage labourers. Contrary to this theory, Vincentian small farmers struggle to stay in production and still manage to continue earning an income selling bananas, however meagre the earnings. Vincentian peasant farmers have responded to the decrease in banana prices by adopting a series of intuitive strategies that revolve around land use practices, which includes farm intensification, farm expansion, and farm reduction.

6.4.2.1 Farm Intensification
Interviews with 63% of all small farmers indicated that one of the strategies they used to increase yield per acre, and stay in production, is to ignore the SVBGA's recommendations that banana plants be spaced eight feet apart in a square fashion, which farmers say only suitable for flat land. The majority of small farmers interviewed, indicated their farms were located on steep hillsides, and they did not have the farm space, or the topography to accommodate this type of spacing. They ignored the recommended technique on the basis that it was not an effective use of their limited arable land, since they would not be able to plant as many banana plants per acre. They further indicated that on steep hillsides, banana root systems and leaves had to be close together to prevent soil erosion. In addition, given the geographical location of their farms, a falling banana plant, planted in a square fashion, could easily set off disastrous chain of events that could knock down all other banana plants aligned with it. Instead,
farmers on steep hillsides space bananas four feet from one another in a diamond pattern, which is more compact and best for the steep terrain. Small farmers on flatter lands space banana plants four feet apart in a matrix method to maximise the amount of trees planted on a plot of land. This way the number of banana plants per acre is doubled which increases the boxes of bananas harvested per acre.

6.4.2.2 Farm Expansion
When a farmer wants to increase income, the most logical way to do so is to increase the farm size. However, in St Vincent this option is not readily available to many smaller rural farmers who do not have sufficient capital to purchase additional land. From the era of colonisation, the better quality lands in the sheltered fertile valleys and along the coastlands were owned by estates (Nurse & Sandiford, 1995). Other competing land-use demands such as housing, industry and tourism in flat and gently sloping areas is a further constraint to agriculture. Therefore, the only lands available to the peasantry are the least accessible, infertile, steep interior hillsides. To increase production, small farmers have been observed pushing production further into the hillsides. Of the 46 farmers surveyed, 15 small farmers reported that they had obtained new lands in the past ten years with the average size of the new parcel being 2.3 acres. Not many of these farmers reported that they purchased the land. Instead, they mentioned they acquired additional land through rental, hillside clearance or from a family member. However, from my data, the area under bananas cultivated by farmers who had expanded their landholdings was rarely greater than a mean acreage of 2.0 acres. A small number of comparatively wealthy large landowning farmers, who were better able
to withstand periods of low earnings, appropriated the land of their heavily indebted
neighbours and increased the amount of land they owned. However, as I will explain in
the next section, the area under banana production has remained the same or
decreased.

6.4.2.3 Farm Size Reduction
Farm expansion is not the only strategy employed by rural farmers to cope with the
dilemmas of the banana industry. Farmers have also reported the use of farm size
contraction as a strategy to remain in the industry. Compared to more recent surveys
that previously showed that small farmers grew on 4.6 acres of bananas (Grossman,
1998; Nurse & Sandiford, 1995), my research has revealed that among the sample of 46
farmers, considerably more farmers grew bananas on an average of 2.6 acres. This is not
to imply that the actual size of land owned by the famer has decreased. Instead, small
farmers have reduced the area of the farm under banana production, and leaving the
additional acres fallow. There are some variations. Some farmers have planted the land
taken out of banana production with alternative root crops, while others practiced low
intensity animal husbandry.

Even larger and wealthier farmers have reported that during the period 1992 to 2009
they have systematically reduced the area of the farm under banana production—even
if they acquired additional lands. Among the 46 farmers interviewed, 13% owned more
than ten acres of land. None of these farmers had more than seven acres of land under
banana production, the average among the group being 6.1 acres. In fact, the data
suggests two scenarios. First, among the large-holders, females were more likely than
their male counterparts to leave a greater portion of their land fallow than used in banana production. Second, these large land holding farmers usually had slightly less or the same amount of land dedicated to alternative crops (approximately 2 acres) as they did to bananas (see Table 6.6).

Table 6.6: Share of land dedicated to banana and food crop cultivation by gender

<table>
<thead>
<tr>
<th></th>
<th>Male headed</th>
<th>Female Headed</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of land under Cultivation</td>
<td>82</td>
<td>72</td>
</tr>
<tr>
<td>% of land under banana cultivation</td>
<td>80</td>
<td>65</td>
</tr>
<tr>
<td>% of land under local food crops</td>
<td>26</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: 1998 figures extracted from Grossman (1998), 2009 figures authors fieldwork based on visual estimates

According to the farmers interviewed, this reduction is in response to the high costs of inputs for the farm, which have increased more than 125% from EC$88 dollars total in 1992 to over EC$200 dollars in 2009. With lower banana prices, farmers faced a dilemma where they could not afford to buy the quantity of fertilizer and other agrochemicals needed to produce industry standard bananas. In response to this, farmers have resorted to reducing the acreage under banana production in order to apply the prescribed amount of fertiliser and other agricultural inputs and yield healthier bunches of banana. This reduced acreage meant less boxed bananas, but farmers attempted to stabilise their incomes and regulate the cash returns from the farm by delegating the unused area to other purposes (e.g. alternative crops or husbandry). Farmers calculated these adjustments so that even with the reduced acreage the farm provides enough income to meet the basic cash needs of the household.
6.4.2.4 Labour availability as a constraint to farm size

There were farmers who indicated that the reduction in farm size was also in response to the availability of workers. Interviews pointed out that the availability of labour could also set the maximum size limit on an economically viable banana farm in St Vincent. As indicated earlier, even though large-scale farmers were able to overcome daunting institutional and cultural factors to permanently procure land from neighbours who have abandoned production, they still remained hard pressed to find sufficient farm labour to cultivate the additional land—explaining one reason why it may remain fallow. Industry managers and ministry of agriculture extension agents concur that the largest farmers (those who cultivated ten or more acres in bananas before 1993) have all either dramatically scaled back, or ceased banana production entirely as supplies of wage labour move to more lucrative sectors of the economy or become too expensive (EC$40 per day). This has been cited as a major reason for the withdrawal of professionals and other non-farming full-time workers who invested in banana production during the 1980s when absentee-owned farms could still generate a sizable profit.

In contrast, peasant farms were able to successfully reduce the acreage under production and turn meagre profits by relying more heavily on household labour than hired workers. Without this 81% of all small farmers—72% of which were female and 28% were male—mentioned they would be forced to cease production. Yet these farms too have experienced other difficulties in recent years. These include the increased cost of farm certification associated with their export arrangements with the

26 Labour is usually less problematic for male headed households because there are usually more active members to help
Windward Island Banana Development and Exporting Company (WIBDECO), and more recently GLOBAL-Good Agricultural Practices (GLOBALGAP) requirements, which usually exceeds farm revenue and puts additional pressure on peasant incomes. Hence, increasing production costs and diminishing labour supplies, have forced an increasing number of both the largest and the smallest-scale farms to drop out of banana production (Table 6.7).

Table 6.7: Number of active banana growers in St Vincent over the period 1993-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Active Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>7543</td>
</tr>
<tr>
<td>1994</td>
<td>6139</td>
</tr>
<tr>
<td>1995</td>
<td>5991</td>
</tr>
<tr>
<td>1996</td>
<td>5665</td>
</tr>
<tr>
<td>1997</td>
<td>4670</td>
</tr>
<tr>
<td>1998</td>
<td>4152</td>
</tr>
<tr>
<td>1999</td>
<td>3696</td>
</tr>
<tr>
<td>2000</td>
<td>3623</td>
</tr>
<tr>
<td>2001</td>
<td>3360</td>
</tr>
<tr>
<td>2002</td>
<td>2673</td>
</tr>
<tr>
<td>2003</td>
<td>2309</td>
</tr>
<tr>
<td>2004</td>
<td>2099</td>
</tr>
<tr>
<td>2005</td>
<td>1737</td>
</tr>
<tr>
<td>2006</td>
<td>1651</td>
</tr>
<tr>
<td>2007</td>
<td>1151</td>
</tr>
</tbody>
</table>

Source: WIBDECO, WINBAN, Authors Fieldwork

6.5 Off Farm Employment
The unavailability of good farming land and the reduction in farm size and incomes has forced the peasantry to rely on multiple sources of income for survival such as wage labour on other banana plantations, work in the tourism industry, and remittances from family members who have emigrated to survive. Evidence from my data collection suggests that 84% indicated that their income earning strategy was a multi-occupational one; in addition to banana production, farming households held jobs in other areas, approximately half of which were waged jobs. This finding is supported by Sidney Mintz’s study of the peasantry in Windward Islands, which found that on farms less than one acre, growers must sell their labour as well as cultivate subsistence crops to survive (Mintz, 1985). In this occupational mix, work in trade jobs such as masonry, carpentry, security work and construction were the
most common, although low paid clerical work was also a part of the occupational experience for 3% of the female farmers under the age of 26. The research also revealed a distinct gender pattern that emerged with reference to multi-occupationality. More than 40% of the active male growers worked off farm, in either manual wage labour or self-employed jobs, while only approximately 4% of female farm heads did. The females who worked off farm either worked as part-time clerks, day care attendants, crossing guards or government workers. Those who did not work off farm claimed that their household duties prevented them from accepting jobs other than farm employment.

This demonstrates, a diversification of skills and livelihood adjustments across a broad spectrum of activities that incorporate income-earning activities other than farm employment. Correspondingly, it indicates a marked decline in the number of households relying exclusively on banana farming as a livelihood. In times of economic shock and slowing cash income, this additional activity has become a part of the peasant household livelihood strategy. It generates additional income that preserves the peasant’s livelihood and maintains the peasant household. It further prevents the peasant family from slipping into dire poverty if economic crisis persists. It is therefore not surprising that those respondents who had the broadest occupational mix of income generating activities reported the least effect of the crisis. If an activity or livelihood strategy fails, a combination of the others functions to supply the minimum food and cash to maintain the household. This is consistent with the idea of having a risk diversification portfolio, to minimise risk. In this case, rural actors have a portfolio of livelihood activities.
6.6 Labour Constraints and Labour Creation for Production
Banana production is very labour intensive, and hired labour is very expensive. Thus, farmers rely heavily on their social and economic capital to secure labour power to assist with the cultivation, harvesting, and packing of bananas. As describes later in this section, producers creatively recruit the assistance of unpaid household labour, relatives, friends, and hired day labour to meet their labour needs. Moreover, fluctuating demands necessitates alterations in labour procurement strategies. Thus growers must organize and manage a sufficient labour force in a fashion that differentiates them from wage labourers (Nurse & Sandiford, 1995).

The use of social capital to overcome labour shortages within the industry reflects the parallel, where peasant farmers recruit within the peasantry to circumvent problems of high labour costs and chronic labour shortages. Field observation and supporting literature indicates recruiting strategies are different across gender, age and class within the peasantry. It is not unheard of among interviewed farmers to use and compensate family labour in some very complicated payment arrangements. For example one male farmer interviewed owned a four-acre plot. To work the farm he regularly used four labourers. Two were his brothers, both of whom did not live with him, and both of whom he paid in cash. The other two were friends, one of which he paid in cash and the other was compensated in kind. In another instance, a female farmer operating a larger farm of seven acres worked with four labourers, her live-in partner who worked for no pay, two male cousins who had their own farms but helped her once a week in return for help on their farms the following days, and a friend whom she paid in cash. To
overcome labour shortages elderly banana growers adopt one of two strategies or a combination of both; they reduce the size of the holdings to a more manageable size, mainly because of their inability to obtain help or to perform the labour intensive tasks. They also tend to shift away from labour demanding crops such as bananas to subsistence crops such as plantain, and ground provisions such as yams, eddoes, or cassava that require less physical labour and input. Informal observations also revealed that female-headed households typically use their social capital in a very creative manner to secure labour. When needed, they seek male help through a series of social relationships, organisations and networks such as visiting unions, church groups or reciprocal assistance. Alternatively, in a case where both men and women in the same household have individual plots, they work together in cultivating and harvesting the bananas. Interestingly, larger households have less need for wage labours. Smaller households, in contrast, either have to rely on broader kinship networks, organisational groups or hired labour to work their farms. Grossman (1998:147) reinforces this observation. He cites David Lahmann in noting that this social capital gives the Vincentian peasant “access to those parts of the labour market that others cannot access”.

In peasant farm production, arrangements among members of the household compensate for shortfalls in the labour market, and the high price of labour by providing labour, to the banana plot free as part of their obligation to the household. It is this mix of unpaid, reciprocal and household labour, which is necessary to keep the plot financially productive in times of crisis as it materially offsets the capital and labour
scarcity of the producer. This illustrates that monetary income is not the only factor that determines living standards in rural communities.

6.7 Household Adaptations to Economic Crisis

Interviews with farmers revealed a series of adaptations within the household and on the farm made to cope with the crisis. For small farmers, the situation is critical because over the last decade, many farmers invested so much of their financial assets into the farm that their savings have been severely reduced. At the same time, household incomes have been reduced due to increasing overhead costs and decreasing prices for bananas (see Table 6.8).

Table 6.8: Real prices of Vincentian bananas per box $USD 2000-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price $USD</td>
<td>1.59</td>
<td>4.48</td>
<td>4.48</td>
<td>4.62</td>
<td>6.20</td>
<td>6.06</td>
<td>5.93</td>
<td>6.20</td>
<td>6.43</td>
<td>6.87</td>
</tr>
</tbody>
</table>

Source FAO Stat 2009

The prolonged period of high overhead costs and low box prices has forced many small farmers to change their lifestyle and consumption patterns. Among the most frequently mentioned changes were the reduction of store bought food that contributed to the family's daily diet. One female homemaker in Richland Park explained that she would "make do" with what she had and only in very rare instances would food for the daily diet come from outside the garden plot or the family farm. The data suggests this is a growing trend (Table 6.9).

---

27 See Annex Table 7
The family only bought cheap goods such as rice or pasta from stores. On the family’s premises, I witnessed the production of food and vegetables that comprised every aspect of a balanced diet—potatoes, breadfruit, corn, tomatoes, cassava, cabbages, peppers, pumpkin, bananas, yams, and avocados as well as chickens and goats were all on the premises. For farmers with large young families and low occupational mixes, the adaptations were more severe. In three such cases, farmers reported a delinquency in paying non-essential bills such as telephone, cable and in some instances electricity. In two of these households, this strategy was combined with crop intensification, plot size reduction, reduction in the amount of inputs for the farm and the portions of food per family member. Other farmers indicated that they conserve gasoline and farm inputs, and try to minimise spoilage through better fruit handling. Some farmers reported that they have liquidated assets not related to production such as animals, extra hoes, picks, wheelbarrows, and vehicles, and have ceased the purchasing of new assets. Other farmers have reported that they have sold

Table 6.9: Number (%) of households growing crop by type

<table>
<thead>
<tr>
<th>Food Crop</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tannias</td>
<td>32</td>
</tr>
<tr>
<td>Dasheen</td>
<td>36</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>23</td>
</tr>
<tr>
<td>Ochra</td>
<td>43</td>
</tr>
<tr>
<td>Peppers</td>
<td>45</td>
</tr>
<tr>
<td>Breadfruit</td>
<td>46</td>
</tr>
<tr>
<td>Plantains</td>
<td>41</td>
</tr>
<tr>
<td>Sweet Potatoes</td>
<td>19</td>
</tr>
<tr>
<td>Cassava</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Authors Fieldwork
n=46
or leased extra lands to other farmers, as retaining the land meant additional tax expenses.

Two farmers reported participating in an informal money scheme referred to in St Vincent as “pardner hand”. This is a scheme where participants—who are usually friends, pay a specified amount of money into a revolving fund every week, and bi-weekly one person will get the entire contents of the fund. These farmers looked forward to this as a supplement to their incomes, which they usually cycled in to banana production or spent on basic living expenses.

6.8 Summary
As this chapter illustrates, rural actors are proactive in their attempts to cope with the current banana crisis. At the helm of these attempts are community and informal institutions like non-wage labour exchanges, which compensate for shortages of financial capital and labour. Rural workers are drawing upon other social resources and taking advantage of informal institutional arrangements in order maintain their income and, consequently, their standard of living. Farmers employ a system of rational choices, exemplified in the adaptations undertaken by them to protect their ability to continue feeding themselves and their households. However, the data points to the fact that certain groups of farmers are doing better than others due to historical and social institutions which allow or restrict access to assets such as arable land or credit markets.

This chapter also demonstrates how global phenomena such as the liberalisation of trade, and the introduction of global governance structures such as the WTO, impact
rural actors on the micro-level. It highlights the power imbalance between global structures—which are controlled by large capital interests—and the small actors. These global structures, and the neo-liberal institutions created by them have systematically worked to the disadvantage of the rural poor by marginalising them and endangering their traditional way of life through the transformation of the economy in which the rural poor are embedded. It is this interplay between structures and agents that the SRLA has failed to acknowledge until recently. This chapter attempted to address this important criticism by looking at micro-level actors in the context of the bigger global picture, thus emphasizing importance of this contextualisation. I addressed this shortfall by demonstrating that adaptation strategies on the local level were triggered in response to structural changes (i.e. removal of tariffs and price supports) on the global level. However, because Caribbean workers have been able to use their agency to counter the effects of these structural changes it lead me to the conclusion that in the Caribbean there is little dialectic between structure and agency.
Chapter 7: Analysis Conclusion and Recommendations

In this chapter, I return to the original question posed at the beginning of this research document. What are the strategies being used by rural agricultural workers to continue making a livelihood in times of economic downturn? This can be broken down into sub-questions:

- What are the effects of economic crisis on the rural agricultural worker?
- What are the household strategies being employed by rural workers, and what are their responses to economic crisis?
- What impact have these strategies had on the rural worker during the crisis period?
- What factors determine which strategies are deployed as opposed to another?

Research Question 1: What are the effects of economic crisis on the rural agricultural worker?

The data suggests that the effects of the crisis were usually negative, and were caused by the reduction and instability of a regular income. This loss of income prevented many rural workers from meeting their usual social and financial obligations, such as cash disbursements to family members and buying food for the household. The slowing or stoppage of cash led to other spin offs in the household.

Increasing indebtedness to kinship and non-kinship networks also occurred. This occurred after rural workers accessed networks to get favours, basic food items, cash, or clothing. In most cases, giving these things was seen as reciprocal or temporary and had to be returned upon request or when the economic position of that person improved.
Loss of land and livelihood also occurred in St Vincent where some farmers were forced out of banana production by high overhead costs and rigid standardisation requirements, or left banana production due to low box prices. The low box prices and high overhead costs usually associated with banana production are the main reasons for the declining amount of banana farmers participating in the industry over the last decade. However, I offer another explanation; I put forward that the number of farmers participating in the industry is a result of an under-reported revolving door that less-serious or part-time farmers take advantage of. Farmers enter and exit the industry when conditions are favourable to them, therefore entering in years when box prices are high or when they are in need of extra income and exiting when those conditions are lost. It is true from all reported figures that more farmers are retiring, abandoning, selling or leasing their lands than the amount of farmers entering the industry. Nevertheless, one must be wary of the fact that as the banana industry continue to decline and the Vincentian economy transitions from a smallholder economy to a service economy more farmers will have dual identities in the transition period as they struggle to maintain their livelihoods.

Reduction in individual savings also occurred. This was the result of a prolonged period of unemployment, or workers' inability to adjust to the new economic situation. Workers in all three countries used their savings to preserve their existing livelihood or to maintain food security in the household. In cases where rural workers were unable or unwilling to adjust to the new economic situation the money was used to maintain their lifestyles.
There has also been a breakdown of a few households. The data shows that when male or female respondents experienced lower incomes or a declining standard of living, considerable strain was put on familial communications, especially in instances where the breadwinners were unable to fulfil their usual economic roles. In cases where the couple was married, this stress may have lead to divorce, or in cases of a live-in partner it may have resulted in separation.

Many individuals have found themselves relying on multiple sources of income to maintain themselves and their household. In all three countries, many found themselves working in multiple sectors for equal or lower pay in an attempt to maintain the integrity of the household. The peasantry is therefore being integrated into labour arrangements that include agro-proletariatism on other farms, and other estate type labour arrangements, as well as a wide range of peasant cultivation. This phenomenon gives rise to the view that the small-farmers in the Caribbean are neither peasant nor proletarian but perhaps semi-proletarian.

Question 2: What are the household strategies being employed by rural workers, and what are their response to economic crisis?

Expenditure adjustment was one of the first strategies employed by rural workers. Individuals and households reduced expenditures on food and unnecessary consumer goods. Instead of buying brand name imported foods rural folk relied on food harvested from their natural environment. These are home grown or caught food such as vegetables and fish. The data also points to a considerable amount of food substitution,
rationing, and stretching taking place. In instances where this is occurring, rural folk aim to spend less on food compared to what they did before the crisis.

In addition, some rural folk tried to cut down their expenditures on utilities like electricity and water. This may represent a moderately severe coping strategy as households rotate or delay the payment of these bills with the aim of keeping the household functional without sacrificing their food security.

The data suggests that households are trying to increase their cash supply by intensifying and expanding production by growing and selling more vegetables and cash crops. Rural folk who could afford it, resorted to petty commerce such as selling trays of goods or other types of prepared food. In some cases, this was a sole form of income but in other cases, it was supplementary to other income earning activities. In many cases, the research suggests that social and other informal networks are very important to the survival strategy of rural folk. These networks facilitate the transfer of loans, labour and various forms of other support systems that are critical for the execution of successful survival strategies of the household.

This suggests is that agriculture continues to be a safety valve for many rural folk who continue to depend on their natural capital for food and cash in the period of transition and crisis. Respondents who had access to natural capital had more options of creating an income and employment opportunities than those that did not.

By comparing income-generating activities of the households before and after the crisis, I observed two main types of households: Those that did not change their economic
activities and those that changed their economic activities. In households that did not change their activities, the main actors in these household were able continue in the same industry or find similar jobs in the same field, because they were more educated and their skills were highly transferrable. These people found it easier to transition into other jobs and usually adjusted their consumption patterns to their new income. The reduction of luxury spending was a major part of their strategy.

In contrast to their relatively educated and economically wealthy counterparts, low to medium income earning households tended to change activities. Because of the low education and skill-levels in these households, members usually relied on income generating activities with low returns. With the loss of employment, these households were forced to diversify their income earning activities away from the farm and the sugar sector to continue earning an income. It is among this group, that short-term survival strategies became coping strategies, which were then transformed into livelihoods. In some cases, small farmers became wageworkers, and in other cases waged workers became entrepreneurs. Whether they transformed into wageworkers or entrepreneurs was a matter of where the opportunity to earn an income presented itself.

Households attempted to expand their access to credit and barter by establishing and fortifying social support networks. This was the case among farmers in Trinidad and St Vincent St Kitts. The household accessed labour, food, loans, clothes and other necessities that prevented the household from going into despair. While kinship and
ethnic relations are critical to such a network, neighbours and friends were included into the access network during times of crisis. Non-kinship based networks within or outside the villages functioned as mechanisms for the poorer to gain wages, food, products, markets, loans, and membership to off-farm activity groups.

With the onset of crisis, households began to liquidate non-essential and surplus assets (such as garden tools and household items) that were accumulated in normal times. The value of these assets to the household was based upon their liquidity. In addition to consumer durables, peasant households also sold livestock. Small animals (e.g., goats and chickens) were sold first, while large livestock (e.g. cows and donkeys) were sold only in dire circumstances, or if the herd was large. If the household had the option to sell its large livestock, it did so later on as they were more valuable and fetched higher prices. Land was also an asset that was sold later because of its intrinsic value.

Rural folk also attempted to increase their financial resources by calling outstanding loans, searching for more credit, and reducing or dismissing farm wage labourers. This was the case in Trinidad and St Vincent. In cases where there was not enough money to hire paid workers, family labour and other forms of reciprocal labour sharing arrangements were utilised.

**Research Question 3: What impact have these strategies had on the rural worker during the crisis period?**

With less money available during the crisis, rural families employed strategies to ensure the food security of their households. Strategies such as crop diversification, and intensification as well as reliance on family members for food have proven essential in
providing food for the household. These crops, which were mainly ground provisions, improved the household’s food security by making food available in a situation where it would have otherwise been scarce.

With the loss or decline of the main income earning activity, a stabilised cash flow occurred in some cases where individuals of the household found multiple jobs. Households garnered money from all available sources, on-farm and off-farm employment, family members and various areas of the private sector. In some cases, people had day jobs and night jobs, or various types of short-term jobs, or a full-time job and a part-time job. There was no shortage of combination of job types that were put together to earn an income. As to whether these incomes were enough to maintain the integrity of the household, surprisingly many interviewed workers indicated that the new jobs were enough to meet or barely meet the usual financial needs of the house.

Livelihood preservation throughout the crisis was one of the main goals of the banana farmers. Farmers deployed a series of strategies to secure their means of income, even under dire economic conditions. The data suggests that farmers sometimes operated at a loss by absorbing the cost of production. Thomson (1987:84) reinforces this observation by reminding us that “most farmers will continue to sell bananas because they cannot afford to withhold their labour even if actual ‘wage’ received is less than market labour rates.”

Finding alternative employment often meant rural workers had to travel out of their community. Many rural workers who had previously spent the majority of their lives
working in and around their community found themselves in a position where they had to travel daily to other communities or the urban area to work. While it may not seem significant, it indicates the enormous pressures and push factors that were acting on rural workers to make choices about the survival of their household.

**Question 4: What factors determine which strategies are deployed as opposed to another?**

Within the peasant household, there is a great deal of rationality that goes into determining which strategies will be deployed during a crisis. However, the decision making process is also affected by power relations within the household, gender and cultural norms. The household assessed its assets and determined what strategies are available to it given its constraints. In many households, there were two strategies, which were employed before any others; the reduction of consumption and selling of labour to other sectors of the economy. These two strategies carried the least consequence, and were the most manageable by the individual or the household. In addition, depending on the objective of the household these two strategies could be altered depending on the nature of the crisis and the availability of income.

The deployment of certain strategies was a product of what assets were available to the household and what strategies were acceptable by its members. Richer households tend to have more assets available to them than poorer ones, and so and more options to sell or utilise these assets later in the crisis than poorer ones. Richer households opt to sell more of their labour to a narrower range of sectors than poorer households, which sold their labour to a broader range of sectors than the pre-crisis period. Other valuable
assets such as land determined whether the household survived through land use practices, such as farm contraction and expansion, crop intensification and mixed cropping, and the production or the sale of cash crops.

In the cases of St Kitts and Trinidad, government policy had a role to play in determining the type of strategy that the rural workers adopted. In this case, in the absence of another formal job and other available strategies heavily determined whether the workers opted to use government initiatives as short-term survival strategies. Unemployment was the largest factor, because workers who were gainfully employed at the time of the retraining courses did not participate in the courses. This indicates that although income is important to coping, time to participate in income generating activities must be available, meaning a coping household will participate in as many activities as time allows. If additional income is required, the household may choose to mobilise more labour or seek activities with higher cash returns to meet its needs.

7.1 Conclusion
The Sustainable Rural Livelihoods Approach has proved to be a good theoretical framework to assess the local level adaptations taking place in this study because it sheds light on the agency of rural workers. However, it proved weak when contextualising the way that over-arching structures affect their livelihood. This contextualisation is very important to the advancement of the SRLA because it highlights the SRLA’s weakness when addressing the power and often one-sided relationship between global institutional structures and local actor agency in the Caribbean. As my empirical research demonstrates, local level politics and power dynamics—whether they
are embedded in the household, community, cultural and gender norms or religion--can enable or prevent rural folk from pursuing meaningful livelihoods. However, because rural actors around the world are constantly responding to shocks created by structures outside their localities, SRLA must consider the important power relationships that exist between rural actors and the state, and rural actors and global institutions if it wants to understand how the insertion of developing counties into the world economy triggers reflex actions at the local level. On the national level, the state can have profound influence on livelihoods through laws that restrict or grant access to resources, or public policies that provide resources and influence market conditions, even the forms of democratisation that allow powerful social groups to appropriate the assets of the poor can impact livelihood creation or destruction. In the case of St Vincent, the profound hikes in input prices and the removal of price subsidies triggered a response for small farmers. But even the government’s reaction was in response to changes that were taking place on the global level, highlighting how global structures directly affected both national and local actors.

Despite the limitations of micro-level analysis, this thesis demonstrates that the SRLA cannot be dismissed. If one follows Bebbington’s (2004) argument we find that agency is clearly oriented towards coping, whereby actors are grappling with--and working their way through--structures via their agency. Rural workers have been finding creative ways to work through power structures on the local level to maintain and transform their lives. However, in the Caribbean, this agency has limitations. I make this observation because although Caribbean rural actors are being very creative and resourceful in their
responses to the demise of the sugar and banana sectors, the livelihood opportunities available to them are still constrained by the small size and diversity of their economies. But more importantly their opportunities are constrained by the actions of powerful global actors (e.g. Dole Chiquita and the governments of the U.S and Ecuador, and other South American banana producing nations that called for the cancellation of the Lomé agreement in the WTO). This has brought me to further conclude that in the Caribbean rural workers are engaging in a form of ‘structured agency’ which is the unfortunate result of the Caribbean’s weak geopolitical status. This weak geopolitical status and the localisation of social movements means that Caribbean workers have very little countering impact on global institutional structures because, neither mobilization by rural actors, lobbying by local governments, nor appeals by the EU has managed to enact change upon the institutions and structures that has brought change upon them. This not only signifies an imbalance in power relationships, but a weakness of the Caribbean states and the 79 sovereign states of the ACP which has been unable to lobby the WTO for trade arrangements that are more favourable to its citizenry.

Although empowering, the agency exercised by rural workers does not go very far in creating a stronger more resilient Caribbean community. Although these strategies have been able to empower the poor rural worker by providing incomes and improving the chances of household survival, these successes are limited to the micro-scale and do not contribute significantly to the overall economic health of the country. Therefore, these newly created livelihoods cannot form the foundation for a stronger more resilient Caribbean, as petty earnings alone cannot drive macro-economic improvement in the
Caribbean. Furthermore, the economies of the Caribbean do not have their own internal growth mechanisms (Levitt & L, 1995) and have traditionally been driven by the export earnings from raw commodities. Therefore, with revenue from traditional export earnings declining due to the closure, or the declines of agro-industries it is likely that with further integration into the global economy, Caribbean states and their citizenry will become more vulnerable in the long-term as foreign aid and credit markets dry up and national deficits increase.

This bleak prognosis brings the question of livelihood sustainability back to the forefront of this thesis. It is evident from the empirical data, that the rural actors are deploying coping strategies with the objective of decreasing their vulnerability to the current shocks and stresses, but long-term sustainability of these strategies must be addressed. Although these strategies provide some short-term relief in the Caribbean, they are being used in the context of a deteriorating macro-economic situation of the countries. Already, one can see that long-term changes to the economic structure is making commercial agriculture unprofitable, therefore further shifts in the terms of trade may further undermine the competitiveness of Caribbean exports. Caribbean commercial agriculture will continue to lose its competitive advantage as labour migrates to the urban areas for higher wages and certain rural livelihood options are lost in the process. Some livelihoods will to survive and some will not; for those that have a shorter life span there is a diminishing time frame for which the poor can use these strategies (i.e. borrowing, vending) successfully. In order to address the question of sustainability, the SRLA must consider livelihoods beyond simply coping in the short term and embrace the
idea that even the poorest individual looks forward to improving their economic status one way or the other. Therefore, there must be an extension of the debate about sustainability away from its myopic focus on the long-term provision of basic needs for the poor to one that embraces the view that livelihoods can be enhanced over time through livelihood transformative processes.

This study makes clear that, the choice of people’s strategies is a dynamic process in which people combine activities to meet their changing needs. As the research has demonstrated, rural household activities are not necessarily confined to agriculture or one type income earning activity, but often include a bricolage of activities in order to diversify income and meet household objectives. For instance, where households had access to land and where agricultural markets were present, rural folk gravitated to livelihood strategies based on agriculture. In other cases where households had little land but had access to human capital that could be applied to any other form of capital, households pursued livelihoods based on off-farm employment. However, in the context of the Caribbean, these opportunities are finite because smaller economies have fewer employment opportunities and more constraints than larger economies. To compensate for slowing or irregularity of incomes in one economic activity, rural workers underwent a diversification of skills and livelihood adjustments across a broader spectrum of activities that incorporated more income earning activities that were not necessary before the globalisation project. In times of economic shock and slowing of cash income, this additional activity became part of the peasant household livelihood strategy. It generated additional income that preserved peasants’ livelihoods
and maintained their lifestyles. It further prevented peasant families from slipping into poverty as economic crisis persisted. If an activity or livelihood strategy failed, a combination of the others supplied the minimum food and cash to maintain the household.

The research has also demonstrated that each coping strategy indicated different levels of severity. There was an identifiable sequencing of the non-food and food-related coping strategies, which indicate food insecurity is a managed process. However, there was also an identifiable sequence of asset disposal, indicating that asset disposal is also a managed process. While this speaks to the rationality of the household as a whole, it ignores the formal and informal institutions that exist in the household, community and society that restrict households and its members from gaining access to and utilising certain assets. The research has demonstrated that institutions within the household may prevent a household from dispatching certain members to the labour force. This sheds light on the fact that issues other than assets can prevent the rural poor from pursuing livelihoods. Even though an individual or household may have the necessary assets, issues such as racism, sexism, or cultural norms may reduce women’s ability to pursue employment despite having the education, skill or desire to do so. Hence, understanding these limitations and how coping strategies are created or constrained is a good starting point to develop and formulate systematically robust, and contextually sensitive policies, which can be reworked by, and taken advantage of by the poor and the people that aim to improve their lives.
Finally, a major influence on people’s choice of livelihood strategies is their access to capital, networks and information. There must be processes in place that facilitate their ability to use these assets to achieve positive livelihood outcomes. Access to institutional networks are also important, which take the form of social networks, family ties and social groups. They provide rural workers with information, loans, food, labour, and support needed to survive the crisis period.

7.2 Policy Recommendations
In order to support people to be more resilient to the negative effects of trends, shocks and seasonality, development policy-makers and practitioners must ensure that economic policies are designed to help protect the poor against risk. Macroeconomic stability, support for informal sector activity and better-functioning asset markets would increase the usefulness of household insurance strategies. But this has a negative side that development practitioners must be wary of, because in practice the creation of land markets has actually facilitated the landlessness of the rural poor since, during times of emergency, they oftentimes have no other choice than to sell their asset. Harvey (2003, 144), has dubbed sale of property rights into exclusive property rights accumulation by dispossession.

Therefore, the poor must be given better access to alternative economic activities and increased income-earning opportunities, which could strengthen income-based strategies. Accessible public safety nets could be a useful alternative; therefore, initiatives to develop such programs should take into account their effect on existing risk-coping strategies. Strengthening self-insurance—through group-based savings, for
example—is an alternative that remains insufficiently explored. More empirical research is needed to assess the functioning of informal risk sharing arrangements and the effect policy interventions may have on them.

To achieve these goals, Caribbean countries must obtain estimates of the vulnerability to poverty rather than of current poverty, this may require extensive research but citizens will reap tremendous benefits. Cross-sectional surveys could also yield useful insights. In particular, they could provide information on the underlying determinants of risk-reducing strategies—physical, human, and social capital. They could also provide information on the risks faced by households and the opportunities they have for currently dealing with those risks. Qualitative studies alone could provide useful insights, but incorporating qualitative research into large quantitative household surveys is likely to yield a deeper understanding of changes in welfare and vulnerability and to better inform policy design.
Bibliography


Isakson, R. (2010, July 5). Interviews with Dr. Ryan Isakson. (V. Lake, Interviewer)


165


Annex

Figure 1 Diagram showing asset pentagon
Figure 2. Caribbean trade relations with the Rest of the World

Table 1 showing percentage contribution of selected agricultural activity to Kittitian economy from 2000 – 2008 to GDP in constant prices

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>4.5</td>
<td>4.92</td>
<td>5.59</td>
<td>4.96</td>
<td>5.16</td>
<td>4.78</td>
<td>3.73</td>
<td>3.93</td>
<td>3.66</td>
</tr>
<tr>
<td>Crops</td>
<td>2.77</td>
<td>2.92</td>
<td>3.37</td>
<td>2.85</td>
<td>2.73</td>
<td>2.24</td>
<td>1.2</td>
<td>1.26</td>
<td>1.25</td>
</tr>
<tr>
<td>Sugar Cane</td>
<td>1.87</td>
<td>2.07</td>
<td>2.23</td>
<td>1.68</td>
<td>1.57</td>
<td>1.26</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0.9</td>
<td>0.84</td>
<td>1.13</td>
<td>1.17</td>
<td>1.16</td>
<td>0.99</td>
<td>1.2</td>
<td>1.26</td>
<td>1.25</td>
</tr>
<tr>
<td>Livestock</td>
<td>0.35</td>
<td>0.49</td>
<td>0.59</td>
<td>0.61</td>
<td>0.63</td>
<td>0.61</td>
<td>0.59</td>
<td>0.63</td>
<td>0.57</td>
</tr>
<tr>
<td>Forestry</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.09</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.8</td>
<td>0.08</td>
</tr>
<tr>
<td>Fishing</td>
<td>1.29</td>
<td>1.43</td>
<td>1.55</td>
<td>1.4</td>
<td>1.72</td>
<td>1.85</td>
<td>1.87</td>
<td>1.96</td>
<td>1.76</td>
</tr>
</tbody>
</table>

Source: Eastern Caribbean Central Bank
Table 2 Training courses offered by Caroni 1974 LTD

<table>
<thead>
<tr>
<th>Course</th>
<th>September 30 2004</th>
<th>December 31 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Offered</td>
<td>No. Completed</td>
</tr>
<tr>
<td><strong>Technical Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Condition and Refrigeration</td>
<td>72</td>
<td>30</td>
</tr>
<tr>
<td>Auto Electrical</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>Automatic Transmission</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Engine Management Systems</td>
<td>42</td>
<td>23</td>
</tr>
<tr>
<td>Building Construction Technology</td>
<td>133</td>
<td>75</td>
</tr>
<tr>
<td>Carbon Steel Welding</td>
<td>201</td>
<td>71</td>
</tr>
<tr>
<td>Pipe Fitting/Fabrication</td>
<td>80</td>
<td>34</td>
</tr>
<tr>
<td>Industrial Maintenance</td>
<td>92</td>
<td>64</td>
</tr>
<tr>
<td>Construction Electrical</td>
<td>40</td>
<td>21</td>
</tr>
<tr>
<td>Occupational Safety and Health</td>
<td>49</td>
<td>30</td>
</tr>
<tr>
<td>Small Engine repairs</td>
<td>80</td>
<td>63</td>
</tr>
<tr>
<td>Programmable Logic Control</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Safety and Health Administration</td>
<td>129</td>
<td>94</td>
</tr>
<tr>
<td>Tile Laying</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Miscellaneous Courses</td>
<td>116</td>
<td>41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1117</td>
<td>608</td>
</tr>
<tr>
<td><strong>Agricultural Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable production</td>
<td>159</td>
<td>156</td>
</tr>
<tr>
<td>Cocoa and Coffee Production</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Small Stock Ruminants</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>Livestock (Large Animals)</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Agri-Business</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>64</td>
<td>30</td>
</tr>
<tr>
<td>Budding and Grafting</td>
<td>78</td>
<td>76</td>
</tr>
<tr>
<td>Pest/Diseases</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>Poultry</td>
<td>109</td>
<td>106</td>
</tr>
<tr>
<td>Pig Farming</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Tropical Fruits</td>
<td>44</td>
<td>41</td>
</tr>
<tr>
<td>Organic Agricultural Conference</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Organic Argicultural Course</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Rabbit production</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>Computer Literacy</td>
<td>329</td>
<td>329</td>
</tr>
<tr>
<td>Legume Production</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Banana and Plantain Production</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>Grow Box and Seedling Production</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Peppers, Herbs and Spices</td>
<td>81</td>
<td>75</td>
</tr>
<tr>
<td>Pineapple, Paw Paw and Citrus</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1419</td>
<td>1358</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>2536</td>
<td>1966</td>
</tr>
</tbody>
</table>
### Table 3 showing results of job search of Caroni ex-workers by employment section

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Male</th>
<th>Female</th>
<th>Found Employment</th>
<th>Length of time between jobs (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Field/labourer</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Machine Operator</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Welding/Machine Shop</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Author's Fieldwork

### Table 4 showing highest level of educational attainment by section of interviewed SSMC workers

<table>
<thead>
<tr>
<th>Section</th>
<th>Primary</th>
<th>Secondary</th>
<th>Technical</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Workers</td>
<td>15</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>Manufacturing Staff</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>9</td>
<td>10</td>
<td>3</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Authors Fieldwork
<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current account</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goods and services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>-107.4</td>
<td>-129.6</td>
<td>-116.1</td>
<td>-88.9</td>
<td>-113.9</td>
<td>-111.6</td>
</tr>
<tr>
<td>Imports</td>
<td>-111.6</td>
<td>-117.2</td>
<td>-118.6</td>
<td>-102.2</td>
<td>-110.3</td>
<td>-135.1</td>
</tr>
<tr>
<td>Repair on goods</td>
<td>-113.9</td>
<td>-118.7</td>
<td>-121.0</td>
<td>-106.3</td>
<td>-135.1</td>
<td>-166.8</td>
</tr>
<tr>
<td>Goods procured in ports by carriers</td>
<td>43.4</td>
<td>58.9</td>
<td>54.6</td>
<td>54.5</td>
<td>50.1</td>
<td>51.4</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>22.7</td>
<td>11.6</td>
<td>27.7</td>
<td>54.3</td>
<td>60.0</td>
<td>45.1</td>
</tr>
<tr>
<td>Travel</td>
<td>-19.4</td>
<td>-21.9</td>
<td>-23.0</td>
<td>-23.2</td>
<td>-27.9</td>
<td>-30.1</td>
</tr>
<tr>
<td>Insurance services</td>
<td>53.8</td>
<td>49.6</td>
<td>67.2</td>
<td>93.0</td>
<td>104.5</td>
<td>104.4</td>
</tr>
<tr>
<td>Other business services</td>
<td>-6.3</td>
<td>-7.3</td>
<td>-7.5</td>
<td>-6.7</td>
<td>-8.7</td>
<td>-10.0</td>
</tr>
<tr>
<td>Government services</td>
<td>-0.1</td>
<td>-1.1</td>
<td>-1.6</td>
<td>-0.4</td>
<td>0.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>Income</td>
<td>-34.6</td>
<td>-38.1</td>
<td>-43.7</td>
<td>-38.9</td>
<td>-33.5</td>
<td>-33.3</td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>-2.7</td>
<td>-2.7</td>
<td>-3.3</td>
<td>-2.9</td>
<td>-2.2</td>
<td>-2.5</td>
</tr>
<tr>
<td>Investment income</td>
<td>-31.9</td>
<td>-35.3</td>
<td>-40.4</td>
<td>-36.0</td>
<td>-31.3</td>
<td>-30.9</td>
</tr>
<tr>
<td>Current transfers</td>
<td>16.1</td>
<td>16.4</td>
<td>18.6</td>
<td>18.2</td>
<td>20.6</td>
<td>20.1</td>
</tr>
<tr>
<td>General government</td>
<td>-1.2</td>
<td>-0.4</td>
<td>-0.4</td>
<td>-1.3</td>
<td>-1.0</td>
<td>-1.4</td>
</tr>
<tr>
<td>Other sectors</td>
<td>17.2</td>
<td>16.9</td>
<td>19.0</td>
<td>19.6</td>
<td>21.6</td>
<td>21.5</td>
</tr>
<tr>
<td><strong>Capital and financial account</strong></td>
<td>119.0</td>
<td>135.9</td>
<td>115.1</td>
<td>82.2</td>
<td>76.9</td>
<td>144.8</td>
</tr>
<tr>
<td>Capital account</td>
<td>10.9</td>
<td>14.6</td>
<td>5.4</td>
<td>5.4</td>
<td>14.7</td>
<td>12.9</td>
</tr>
<tr>
<td>Capital transfers</td>
<td>10.9</td>
<td>14.4</td>
<td>5.2</td>
<td>5.4</td>
<td>14.7</td>
<td>12.9</td>
</tr>
<tr>
<td>Financial account</td>
<td>108.1</td>
<td>123.3</td>
<td>109.8</td>
<td>76.8</td>
<td>62.2</td>
<td>131.9</td>
</tr>
<tr>
<td>Direct investment</td>
<td>88.1</td>
<td>79.8</td>
<td>75.6</td>
<td>46.1</td>
<td>85.5</td>
<td>199.7</td>
</tr>
<tr>
<td>Portfolio investment</td>
<td>42.7</td>
<td>30.4</td>
<td>48.0</td>
<td>49.0</td>
<td>15.0</td>
<td>-15.1</td>
</tr>
<tr>
<td>Other investments</td>
<td>-22.7</td>
<td>11.2</td>
<td>-13.9</td>
<td>40.5</td>
<td>-8.3</td>
<td>-52.7</td>
</tr>
<tr>
<td>Public sector long term</td>
<td>-20.5</td>
<td>16.5</td>
<td>2.2</td>
<td>-0.8</td>
<td>-10.1</td>
<td>-1.7</td>
</tr>
<tr>
<td>Commercial banks</td>
<td>-10.0</td>
<td>-19.2</td>
<td>-33.3</td>
<td>56.3</td>
<td>-40.0</td>
<td>-68.3</td>
</tr>
<tr>
<td>Other assets</td>
<td>-7.7</td>
<td>3.0</td>
<td>-6.1</td>
<td>-22.4</td>
<td>-12.5</td>
<td>-14.0</td>
</tr>
<tr>
<td>Other liabilities(^a)</td>
<td>0.2</td>
<td>11.0</td>
<td>23.2</td>
<td>7.4</td>
<td>54.3</td>
<td>31.3</td>
</tr>
<tr>
<td><strong>Overall balance</strong></td>
<td>11.6</td>
<td>8.6</td>
<td>-1.0</td>
<td>13.6</td>
<td>-6.7</td>
<td>17.1</td>
</tr>
<tr>
<td>Financing</td>
<td>-11.6</td>
<td>-8.6</td>
<td>1.0</td>
<td>-13.6</td>
<td>6.7</td>
<td>-17.1</td>
</tr>
<tr>
<td>Change in government foreign assets</td>
<td>0.1</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>-0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Change in imputed reserves</td>
<td>-11.7</td>
<td>-8.9</td>
<td>1.0</td>
<td>-13.7</td>
<td>6.9</td>
<td>-17.1</td>
</tr>
<tr>
<td>Memorandum</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>-31.3</td>
<td>-13.4</td>
<td>-11.9</td>
<td>-6.4</td>
<td>-7.2</td>
<td>-9.9</td>
</tr>
<tr>
<td>Estimated visitor expenditure (ECS million)</td>
<td>167.0</td>
<td>57.1</td>
<td>75.4</td>
<td>102.6</td>
<td>114.5</td>
<td>116.3</td>
</tr>
<tr>
<td>Outstanding external public debt (% of GDP)</td>
<td>62.6</td>
<td>75.5</td>
<td>87.1</td>
<td>79.1</td>
<td>67.4</td>
<td>..</td>
</tr>
</tbody>
</table>

Source: Eastern Caribbean Central Bank
Table 6 showing breakdown of SSMC Employees as at end of 2001

| Status of Employee | Age | Agriculture | | Manufacturing | | Staff | | Total | | Total |
|--------------------|-----|-------------|----------------|----------------|----------------|----------------|----------------|
|                    |     | M | F | Total | M | F | Total | M | F | Total | M | F | Total |
| Personal           | 0-45| 199 | 108 | 307 | 190 | 21 | 211 | 29 | 33 | 62 | 418 | 162 | 580 |
| Seasonal           | 0-45| 413 | 0 | 413 | 213 | 26 | 239 | 0 | 0 | 0 | 626 | 26 | 652 |
| Sub-Total          |     | 612 | 108 | 720 | 403 | 47 | 450 | 29 | 33 | 62 | 1044 | 188 | 1232 |
| Personal and Seasonal| 45+| 258 | 138 | 394 | 183 | 19 | 202 | 48 | 4 | 52 | 487 | 161 | 648 |
| Total              |     | 868 | 246 | 1114 | 586 | 66 | 652 | 77 | 37 | 114 | 1531 | 349 | 1880 |
| Grand Total        |     | 868 | 246 | 1114 | 586 | 66 | 652 | 77 | 37 | 114 | 1531 | 349 | 1880 |

Source SSMC

Table 7 showing price per box of Vincentian bananas in $USD

<table>
<thead>
<tr>
<th>Year</th>
<th>Price USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>4.24</td>
</tr>
<tr>
<td>1992</td>
<td>4.27</td>
</tr>
<tr>
<td>1993</td>
<td>4.25</td>
</tr>
<tr>
<td>1994</td>
<td>4.74</td>
</tr>
<tr>
<td>1995</td>
<td>4.59</td>
</tr>
<tr>
<td>1996</td>
<td>4.44</td>
</tr>
<tr>
<td>1997</td>
<td>4.44</td>
</tr>
<tr>
<td>1998</td>
<td>4.62</td>
</tr>
<tr>
<td>1999</td>
<td>4.92</td>
</tr>
<tr>
<td>2000</td>
<td>1.59</td>
</tr>
<tr>
<td>2001</td>
<td>4.48</td>
</tr>
<tr>
<td>2002</td>
<td>4.48</td>
</tr>
<tr>
<td>2003</td>
<td>4.62</td>
</tr>
<tr>
<td>2004</td>
<td>6.20</td>
</tr>
<tr>
<td>2005</td>
<td>6.06</td>
</tr>
<tr>
<td>2006</td>
<td>5.93</td>
</tr>
<tr>
<td>2007</td>
<td>6.20</td>
</tr>
</tbody>
</table>

174
Research Ethics Board Certificate Notice

The Saint Mary's University Research Ethics Board has issued an REB certificate related to this thesis. The certificate number is: 09-113.

A copy of the certificate is on file at:
Saint Mary's University, Archives
Patrick Power Library
Halifax, NS
B3H 3C3

Email: archives@smu.ca
Phone: 902-420-5508
Fax: 902-420-5561

For more information on the issuing of REB certificates, you can contact the Research Ethics Board at 902-420-5728/ ethics@smu.ca.