

**THE ABILITY AND WILLINGNESS TO PAY  
FOR LOW-COST HOUSING :**

*Household*  
**~~THE EXPERIENCES OF LOW-INCOME HOUSEHOLDS~~  
SETTLEMENT IN  
IN THE FAUX AU CHAUD, CASTRIES, ST LUCIA.**

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fulfilment of the requirement for the  
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by

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TO: GERALD, ENDISON AND RAESHELLE

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## ABSTRACT

This research integrates the elements of affordability, household socio-demographic change and housing improvement in understanding how low-income households establish the ability and willingness to pay for low-cost housing at any conjuncture.

In order to do this the researcher firstly examined how the concept of **affordability** has been applied since 1974, to the design and production of low-cost housing in Developing Countries and the associated issues involved. It is established from existing literature that housing programmes based on this concept have had limited success in providing housing access for the majority of low income households below the 40th income percentile. The problem appears to relate to the inability to establish levels of housing affordability as a consequence of the invalidity of assumptions and the definitional, measurement and operational inadequacies as gleaned from existing literature. Further, it is the view of this research that this inability is also due to the failure of housing programme designers to take cognizance of the impact of the social and demographic attributes in the establishment of the ability and willingness to pay for housing at specific conjuncture. These issues have led to the apparent non-correspondence between the housing solutions developed based on the concept and the households' ability and willingness to pay for them. The challenge remains as that of 1) finding appropriate housing supply responses to match the varying levels of the ability and willingness to pay which are thought to exist among these households and 2) determining how low-income households establish their ability and willingness to pay for housing. For this research the latter area of this challenge which is the concern of this research, must be determine if the former is to be resolved. This is done by examining the housing experiences of households to determine when and how they actually establish the ability and willingness to pay. This research therefore employed a **user-determined** approach among a casestudy population of urban, low-income squatter households in Castries, St Lucia. From this study, it is hoped that guiding principles might be derived to inform the design of low-cost housing programmes.

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## INTRODUCTION

### 1.0 BACKGROUND

This research is aimed at synthesising the elements of affordability, household socio-demographic change and housing improvement in low-income housing in developing countries. For this research, one of the major problems facing producers and policy makers of low-cost housing in developing countries today is precisely how to determine the affordability of housing for low income households, in order that such housing may be designed and produced at an affordable level. This problem is related to the inability to establish levels of affordability among these households precisely because of the definitional, measurement and operational inadequacies relating to the components that describe the concept in its practical determination.

The concept of affordability in housing is used to describe the relationship between the type of housing consumed and the ability and willingness to pay<sup>1</sup> for that housing. It is not a new concept. Prior to the 1970's, when it was introduced into the design of low-cost housing solutions in developing countries, it had been used to assess the ability of households to pay housing costs. Then, it was standard practice for housing designers to accept that a household could only pay 20-25% of its wage income for housing. In this standard practice income and cost were defined rigidly and there was little questioning of the relationship between them, (Lee,M. 1985).

#### **i) The Old and New Perspectives of Affordability**

As it happened, prior to the 1970's, affordability as it rigidly linked income to cost, ensured housing access largely for middle and upper income households. The majority

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<sup>1</sup> . In this research the term "affordability" means the "ability and willingness to pay". At times the terms "ability to pay" and "willingness to pay" will be discussed as separate perspectives of the concept of "affordability".



below the 60th income percentile could not afford housing because of its high cost. This old perspective dealt exclusively with the ability to pay housing cost.

In the 1970's however, largely due to the efforts of international agencies such as the World Bank, the concept was applied to the design of low cost housing projects for low income households. The definition of the concept, as used in the related project appraisal reports for example, is that "a certain level of urban services is affordable if the amount of income a beneficiary household is willing and able to pay for shelter related expenses is sufficient to cover the monthly cost of the services" (Keare,D and Jimenez, E.1983, p.6). In this manner of defining affordability, the ability to pay is linked to the new dimension of willingness to pay. It is with this new definition of affordability that this research is concerned.

In its application to low-cost housing, the ability to pay describes the amount of income, usually the wage income of the household head, that the household is able to devote to the repayment of housing cost. This amount of income should be more than or equal to that cost. Income is not seen as a constraint since it should be possible in theory to find a housing solution to match any household's level of income, providing that reductions in standards are possible. In the old perspective the willingness to pay for housing is presumed to exist. The willingness to pay perspective of the concept has not been examined or given attention in existing literature dealing with the application of the concept in low cost housing in developing countries. However, literature dealing mainly with housing provision in the North American context has defined this willingness to pay. According to Morris and Winter, "the source of the consumer's willingness to pay for a given type of dwelling is the perception of the extent to which important needs will be fulfilled by such a purchase." (Morris and Winter, 1978 p.128). The willingness to pay for housing is therefore an expression derived from the concept of affordability and which appears to be significant. The significance of this has also been noted by Malpezzi *etal* who claim that although a knowledge of the relationship between the amount of housing consumed and income is useful, policy makers will want to know what poor people are willing to pay for more housing (Malpezzi, M. *etal* 1982). This is to ensure that programmes are designed at such levels that people will be both able and willing to pay for them.

## **1.1 The Main Differences Between These Two Perspectives of Affordability**

As was noted in section 1.0, one of the main differences between the previous and current perspectives of affordability is that in the latter, the willingness to pay aspect has been added to the conceptual definition. In the latter too, there has been a change in focus, at least at the theoretical level, with a concern for ensuring that the supply solutions are tailored to the levels of income. In the latter, for example, income in itself is not seen as a constraint to housing access. The reason relates to the manner of theorizing. For example, in its elaboration of low cost solutions over the last decade and a half, the World Bank has claimed that the problems of the shelter sector do not lie on the side of effective demand, which is need backed by ability to pay, but rather consumption of shelter is low, because the price is high (World Bank, 1980). For the World Bank the high price of housing is the result of the failure of the supply system in the sense that supply constraints raise the cost of the product. These supply constraints relate to the high price of labour, building materials, scarcity of developable land and institutional inefficiencies (Linn, J. 1983). In recognition of these constraints in respect of the current conventional housing provisions, the response of the World Bank, for example, has been to find housing supply solutions to meet the levels of income of low income households. The recommendation has been to cut the cost of provision of housing and related services by reducing the standards of housing constructed for these households, to affordable levels.

In the new perspective, affordability of housing solution then, represents a supply innovation that tends to identify governments' supply actions to fit households ability and willingness to pay for the housing provided. It is felt that if the supply constraints could be removed, housing could be devised to match the effective demand of the population which is presumed to exist.

## **1.2 The New Strategies and their Outcomes**

The strategies that were devised based on the concept and which have become synonymous with low cost housing policies and programmes consist mainly of site and

services schemes, core unit schemes and upgrading of urban infrastructural services. These programmes were designed to enable and encourage low income households to improve their housing through self financing and/or self-construction (World Bank, 1975). These programmes were viewed as "progressive development", implying that the necessary improvements to the housing option devised could be made at a speed determined by the levels of income and the preferences of the household (Linn, J. *ibid*).

These programmes have had sponsorship from international and regional agencies, among them the World Bank, USAID, The Asian Development Bank and Caribbean Development Bank, to name a few. Between 1972 and 1984, for example, the World Bank as one of the main agencies sponsoring these housing programmes, supported 103 urban projects in 47 countries totalling US\$ 3.4 billion, or roughly 3% of total bank lending (Domijelj, S. 1988). According to Williams, D., between 1972-82, 370,000 sites and service plots were provided which benefited 7 million people, while 2 million people benefited from the upgrading component. (Williams, D. 1984, p 178). Given the magnitude of the shelter problems of the poor in these countries this effort, though commendable, was limited and its impact in reaching the majority of low-income households in need is questionable. Generally, those below the 40th income percentile have been left out of these low-cost solutions as shown by evaluation reports sponsored by the World Bank and other independent researchers (World Bank, 1983b; Bamberger, M. et. al. 1982; Keare, D and Parris, S. 1983; Bamberger, M. and Deneke, A. 1983; Mayo, S. and Gross, S. 1985). The reasons given for the limited success have been varied. Some claimed that it is due to the varying perception of needs by implementing agencies and users, inadequate project development or a preference for informal development on the part of households (Cheema, G. 1986).

### **1.3 The Problem**

It is the view of this research that this limited access is the result of the inability to establish levels of affordability among low income households. This problem is a two-fold one. Firstly, the problem relates to the lack of identification of the apparently large variation in affordability levels which must exist if income no longer appears to be a constraint to access. This problem stems from housing designers not knowing how

these households establish these levels of affordability in order that this may serve as a guiding principle in the housing design process to prevent high levels of subsidy and to ensure that there is a match between what households are able and willing to pay for and what is provided.

Secondly, it relates to the inappropriateness of and inability to match those supply solutions to what the households are able and willing to pay for. For this aspect of the problem the challenge still remains as that of finding appropriate supply responses to match the effective demands of households below the 40th income percentile, since it appears that it is the supply solutions and not income, in theory, which are the constraints.

This research is concerned with the first aspect of the problem rather than the second, i.e the difficulty of establishing the levels of affordability. It is felt that without a knowledge of this first aspect the second cannot be resolved. If it is not known how much people are able and willing to pay, how can solutions be devised to match them?. The challenge here is to determine how these levels of affordability are established. This challenge appears more appropriate when consideration is given to the recent call by international financial institutions that governments should encourage private sector initiatives in the formal and informal provision of shelter in developing countries.(Vienna Conference on Shelter and Urban Developments 1987). It appears that when the levels of affordability are known and can be established, the appropriate solutions can be developed; the state may be able to find an opportunity to withdraw from direct involvement in shelter provision; state subsidies could be removed and the actual provisioning could then become the function of the private sector. If the private sector is to take responsibility for the provision of shelter, then it is necessary that the ability and willingness to pay for housing among households can be determined adequately. The overall picture that is currently revealed is that in the utilization of the concept there appears to be a gap between the theory and practical application of it. This is due to the absence of clearly defined concepts of cost and income to be used, the associated assumptions, and the absence of an understanding of household dynamics relating to the willingness to pay perspective.

It seems that the difficulty in establishing levels of ability and willingness to pay for housing relates to six areas of challenge to the concept and which can be linked to the theoretical and practical levels. At the theoretical levels these are 1) the absence of a clear conceptual definition of the income and cost components; 2) the implicit and explicit assumptions associated with the concept; 3) the absence of an understanding of the housing dynamics of low-income households as far as the usage of its resources in its survival strategy; 4) the emphasis on the ability to pay while ignoring the influence of the willingness to pay perspective of the concept in the determination of affordability. These factors are outlined in sub-section 1.3.1 subsequently. At the practical level, these factors are, 1) the difficulty of measuring the components of cost and income that define the concept and the use of inappropriate data bases to assess them and 2) the discriminatory aspects of the eligibility criteria on which housing access is based. These factors are briefly outlined in sub-section 1.3.2 below.

It is the view of this research that in order to understand how households establish the ability and willingness to pay for housing, that affordability must be linked to the household's socio-demographic changes and its preferred housing improvement preferences at specific conjuncture. It is this view that justify the areas of challenge presented below.

### **1.3.1 The Challenge At The Theoretical Level**

The first area of challenge relates to the fact that the concepts of income and cost to be used are not specified. Numerous definitions have been employed with varying outcomes for household participation in projects. It has never been clearly stated what types of costs, i.e. whether direct project cost, cost of project and cost to be incurred for purchase of labour and material by households or fully amortised cost to name a few, to include in determining affordability. As for the income component, it is never clear what concept of income is to be used, e.g whether 'total income' from all possible sources, 'wage income' of household head, 'income transfers' etc. No consideration is given to the existence and role of other resources. These issues together with the problems associated with a reliance on the single criterion of income to determine affordability have in the view of this researcher, rendered the present method of determining housing affordability inadequate.

The second area relates to the implicit and explicit assumptions contained in the definitional and operational perspective of the concept and the components that describe it. These assumptions will be examined in the existing literature and from the observations of this research. From the perspective of existing literature, these assumptions are 1) that households can only afford to pay 20-25% of income for housing; 2) that the household's wealth status can be equated to its level of cash income alone; 3) that households do not have pre-project assets and do not have the propensity to acquire them and 4) that interhousehold and intrahousehold labour and time resources are flexibly available and accessible to the household in the incremental development of the housing product.

The third area of challenge relates to the absence of an understanding of the housing dynamics of low-income households as far as the usage of its resources are concerned in establishing the ability and willingness to pay for housing at specific conjunctures. This research considers that this challenge relates to three issues that have not been considered in current literature dealing with the concept.

The first issue relates to the implicit consideration in housing projects that low-income households are unified entities whose members centralize resources for the household's welfare while ignoring their own self-interests. As such, there is the implication that consensus prevails in the household's decision making process. This researcher is of the view that households comprise contending individuals and that the resources they control must be negotiated for. It cannot be assumed that the resources they control will go toward housing strategies for the common good, or that household resources are centralized. This view arises directly from a review of literature that deals specifically with household economics. The findings from this literature will be presented in a subsequent chapter to support the claim of this research that there is a need to understand how resources are controlled and negotiated for in households' resource allocation structure so as to understand how the ability to pay and the willingness to pay for housing is established in resource terms.

The second issue relates to the impact of household composition, and inter-household relations in the household's housing strategies. The impact of these social and demographic variables have not been considered in current affordability determination largely because the emphasis has been on economic and quantitative considerations largely relating to the factors of cost and income. For this research, the experiences of households and the impact of their human interrelationships are expected to influence housing affordability decisions, as will their resource capacity to pay. Their subjective preferences and reactions to items necessary for their social welfare will also influence their economic behaviour. As such, these influences should not be discounted in the determination of housing affordability at any conjuncture.

The third issue relates to the need to understand what is the acceptable minimum standard of housing that households are able and willing to pay for at a specific conjuncture given possible resource constraint in achieving the socially acceptable standard they desire to achieve<sup>2</sup>. It is the view of this researcher, based on evidence from the incremental building process that takes place in low-income settlements of developing countries, that there are preferred standards that describe the household's acceptable minimum quantity of housing at specific conjunctures throughout the housing development process. As such, the ability and willingness to pay for housing as a consequence of formal intervention might be predicated on this. Based on this incremental building tradition, this researcher assumes that there is a staged process in the development of the housing product, with each stage describing an acceptable minimum standard in which a specific housing attribute or combination of attributes are preferred. The methodology of analysing the housing development process in stages has been able to establish the standard of housing preferred at specific stages of housing completed and that desired for the future. It must be noted here that it is recognised that housing consumption changes do not necessarily lead to an improvement in standards. For example, a household could be forced to change its housing consumption adversely, such that instead of an improvement there is a downward adjustment in consumption to a lower standard than that which obtained previously. This will also have implications for the establishment of the ability and willingness to pay. This research was concerned however, with the

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<sup>2</sup>. The concept of "socially acceptable standard" is influenced by the work of Morris, E and Winter, M. and Ramirez, R. et al. 1991. In this research it has been adapted and modified conceptually as will be outlined in Chapter 3.

situation in which improvements are made to the level of consumption over time for households in owner occupancy tenure in a squatter settlement. It therefore considered only the positive aspects of the willingness and ability to pay in respect of improvements.

The fourth area of challenge at the theoretical level relates to the mechanical way in which the ability to pay and the willingness to pay are determined, with the willingness to pay aspect being ignored. This issue appears to relate partly to the rigid relationship which is assumed between cost and income which seem to emphasise the ability to pay aspect to the virtual exclusion of the willingness to pay perspective. The willingness to pay is interpreted mechanically and takes on an economic characteristic. The current emphasis on the income factor to determine affordability is questionable for the willingness to pay implies the influence of sociological, cultural and behavioural factors which give rise to subjective preferences and reactions to housing. As a consequence, in the determination of housing affordability there is an apparent need to incorporate these household's subjective preferences and reactions that will give rise to the ultimate expression of the affordability of housing at any conjuncture. An understanding of this willingness to pay perspective can only be adequately derived from its determination at the level of the household before it can be transformed, together with the ability to pay, into any monetary quantity. It is therefore the view of this researcher that changing social and demographic characteristics will interact with existing dwelling attributes and give rise to residential dissatisfaction. Similarly, adverse standards in dwelling attributes in terms of quantity, quality, availability and type of access, will also impact the social and demographic attributes of the household and result in residential dissatisfaction. When dissatisfaction occurs the household will be willing to pay for housing to remove the source of this dissatisfaction. The extent to which this will be possible will depend on the limitations and possibilities presented by the evolution of the household's domestic economy in respect of the availability and accessibility of resources of that economy to make the changes.

### **1.3.2 The Challenge at the Practical Level**

There are two areas of challenge at this level. The first relates to the manner in which the income and cost components of the concept are measured and the difficulties which are



associated with certain assumptions underlying the practical elaboration of housing solutions. These constraints include the unavailability and unreliability of data on income, characteristics of the population being planned for, and which as a consequence must be extrapolated from information pertaining to other groups where available. Where records are kept they are often unreliable and contain measurement inaccuracies in respect of the components of cost and income on which to make affordability assessments. (Keare and Jimenez, 1983.). This leads to a non-correspondence between what is provided and the household's ability and willingness to pay. This research will provide a definition of income and cost that could be realistically obtained from reality.

Secondly, the eligibility criteria by which access to housing solutions are determined conspire to discriminate against certain household types. Such criteria pertain to the need for household head, assumed to be male, to have regular incomes which are often found in formal sector employment conditions. In addition households should have a certain level of income corresponding to proportions of the minimum wage. This means that households with low or no regular source of income and those not conforming to the male-headed structures, are frequently discriminated against.

#### **1.4 Main Research Question and Proposition**

This research sought answers to the main question viz: "**How is the ability and willingness to pay established in resource terms so as to describe the affordability of housing of low-income households at a specific conjuncture?**". The secondary questions arising from this are 1) is there a preference structure for specific housing attributes among low-income households that determines the willingness to pay at a specific conjuncture?. If so, what is the pattern in the preference for such attributes?; 2) what socio-demographic changes in the household will influence the willingness to pay for housing?; 3) how does the availability and distribution of household' resources influence the ability and willingness to pay for housing?; 4) how and which resources will be mobilized and used to establish the ability to pay?. **The main proposition states that: For low income households, the ability and willingness to pay for housing, at any conjuncture, can be established when the household is considered as a resource system. The household will be able and willing to pay for housing from its resource**

capacity when that housing is congruent to the acceptable minimum standard preferred at a specific juncture to remove residential dissatisfaction felt with the existing level of housing consumption; when either its current social, demographic or dwelling attributes result in residential dissatisfaction; and when the household is able to mobilize and use available resources to pay for such housing. The related sub-hypotheses in respect of the main question and proposition are presented in Chapter 3.

This research is exploratory as it attempts to synthesise the elements of affordability, household socio-demographic change and housing improvement at specific juncture in understanding the housing payment decisions of low-income households. It attempts to do so through a framework that views the household as a resource system and the housing development process as a staged process in which four distinct stages are identified. It is the view that the housing payment decisions at these specific stages, is the outcome of the interactive influence of four processes. These stages and processes will be briefly described below. In order to understand the housing payment decisions of households, a user-determined approach was employed in the analysis, in which the proposed stages of housing improvement were treated as methodological units of analysis.

### **1.5 Research Focus and Conceptual Foundations**

In order to find answers to the main and related secondary questions and test the proposition outlined in section 1.4, the housing development experiences of selected households of the **Faux au Chaud** squatter settlement of the city of Castries, St. Lucia were described and analysed. The purpose of this empirical exercise was to derive the common patterns in the affordability decisions of low-income households in respect of how the ability to pay and the willingness to pay are established and changed, and the conditions giving rise to that change. This was done in order to provide an understanding of the mechanisms of housing affordability before the result can be transformed into any monetary quantity that describes that affordability. In order to carry out this task, this research focuses on four areas of enquiry.

Firstly, it examines household as resource systems, with a specific payment schedule for the resources of the system. All available household resources are considered as relevant for defining the possibilities and limitations for establishing the ability and willingness to pay for housing. Secondly, it sought to determine how the ability to pay is established in terms of the capacity to mobilize and use available and accessible resources. Thirdly, it determines the conditions giving rise to the establishment of the willingness to pay in respect of the interaction between socio-demographic and housing attributes. Fourthly, it examines how the congruency of intervention measures might impact the preference for specific attributes and so influences both the ability to pay and the willingness to pay. These areas of focus were elucidated through four proposed stages of housing improvement and four processes of enquiry. These four processes are related to the four secondary questions outlined above. The processes examined are 1) The changing housing improvement preferences. This process describes the improvement changes in the standards of preferred housing attributes over time. The standard refers to improvements in quality, quantity and type of access of dwelling attributes such as indoor space, material, services and facilities. It also refers to land occupancy status. By access to dwelling is meant, off-site, on-site internal or external of the structure. 2) The impact of the changing socio-demographic characteristics. 3) The development of the resource capacity. This process describes the improvement in the availability and accessibility of intrahousehold and interhousehold resource capacity. However, resources can be perceived to be available but in reality might not be available for housing payments when required. This is because in this research the household is viewed as comprising contending individuals who control certain resources. The resources might be controlled by interhousehold sources. These resources might have to be negotiated for or they might be limited in capacity to meet the required payments and so have to be accumulated prior to use. These are the reasons giving rise to an examination of the next process. 4) The mobilization and the use of resources. This process describes why, how and which resources are mobilized and used for housing payments at specific conjuncture.

Though these processes will be explained in great detail in Chapter 3, it is important to justify their selection here. The multifaceted phenomenon called "housing" can be studied by various disciplines including biology, sociology, economics, architecture and behavioural psychology, to name a few. Consequently the concept of affordability as it

relates to housing can also be studied in like manner. To date the subject of affordability in low-cost housing in developing countries has been studied mostly by economists and housing planners with an economics orientation as can be determined from the existing literature on the subject. This present research is located at the interface of these disciplines and it is situated at the level of the household where all factors such as economic, social, cultural and behavioural, or political, that influence human existence, can be mapped and assessed.

Given that "housing" is a multidisciplinary phenomenon, many processes arising from these influencing factors can be devised to study it. However, due to resource limitations, this researcher has undertaken to use the four processes of enquiry mentioned above to understand and analyse the establishment of affordability among low income households. They are designed to take account of the potential interplay of these various factors in respect of housing as an item in the household survival strategy. This is because these processes, by their very nature, allow for a range of possible responses from the household. By not aligning itself to any particular discipline this research is able to solicit from the household the variable influence of the factors in the establishment of the ability and willingness to pay for housing at specific conjunctures as outlined by the household.

Though these four processes are expected to take place in the context of the housing development process among low income households, they could not be directly observable, empirically, in this research given its limited time frame. Rather, they have been determined through a process of accounting and historical reconstruction as told by the households themselves, as their past experiences are traced and their responses in respect of the future housing improvement preferences are accounted for. It will therefore be the manifested features of the processes which will be the evidence of their interactive influences.

## 1.6 Method of Enquiry, Analysis and Data Presentation

### 1.6.1 Method of Enquiry

This researcher proposes that low income households develop their housing through a staged process in which the four processes outlined above, will interact to give rise to the establishment of the ability and willingness to pay for the housing improvement desired at that specific stage. The household is expected to pass through four distinct stages of housing improvement in the housing development process. In this research the four stages of improvement therefore, become the fields or units of analysis which provide a methodological framework for examining housing payment decisions at specific conjunctures. Each stage will be defined by a specific housing improvement preference. For this researcher the housing development process will begin with a first stage described as the stage of **initial settlement**, in which the main concern is for a single room timber dwelling to provide shelter for the family as it seeks to establish its independence and socio-economic viability. The second stage is that of **service incorporation** in which the household improves the availability of services. The third stage is that of **functional diversification** which will be characterised by the improvement in quality, quantity and functional specification of internal and external space use. The incorporation of the kitchen facility is expected to facilitate this functional specification of space. In the fourth stage i.e. the stage of **consolidated development** the preferences will be for a combination of housing attributes but the stage will be defined by the further specification of space use with the internalization of kitchen and toilet facilities and the complete wall material change from timber to reinforced concrete. In this stage land tenure security will also be a preferred improvement attribute.

The research employed a mix of data collection procedures which were largely qualitative in nature. The reasons for the selection of these research methods will be outlined in Chapter 3. A household scanning survey was conducted to elicit primary socio-economic data from the community studied as this was not available at the time of the research. This survey also facilitated the selection of households for in-depth analysis. Then there was the application of semi-structured interviews which incorporated the use of scenarios for determining the past and future housing affordability decisions and the

mapping of levels of resource availability and accessibility. Secondary data were derived from a review of housing policy documents, reports, maps and charts from the Central Planning Unit (CPU), the Housing and Urban Development Corporation (UDC) of St Lucia, the Ministry of Finance, the St Lucia Development Bank and the St Lucia Mortgage and Finance Company. Interviews were conducted with key personnel in these institutions to verify and update published secondary data and to determine new information.

### **1.6.2 Data Analysis and Presentation**

The use of computers in data analysis was limited to the first stage of the research in which the basic socio-economic data relating to the scanning survey were analysed to provide information on the community and for the selection of the households for in-depth analysis. The selection criteria are outlined in chapter 3. The information from the semi-structured interviews were recorded for each case study household with respect to the four processes of enquiry and for each stage of housing improvement completed or desired. Thereafter the common patterns and frequency of responses among the cases were documented and tabulated where appropriate. It was the frequency of responses which formed the basis for the analytical discussions of the chapters. Since the research was largely qualitative it was necessary to use verbatim reporting to substantiate issues and/or clarify findings.

The research findings are presented for each stage of the housing development process completed and for the future improvements selected in Chapters 5-8. Chapter 5 presents the findings for improvements found to be characteristic of the first. Chapter 6 presents the findings of improvements found to be typical of the second and third stages, while Chapters 7 and 8 are a presentation of the findings for the future improvements selected by the case study families. In this presentation the findings of each case household are first presented. This is followed by a summary of the findings in relation to each process and its influence in the establishment of the ability and willingness to pay for the specific stage. Finally, there is a summary discussion and implication of the findings. Here the extent to which proposed hypotheses are supported are outlined. The conclusion of the chapter follows from this.

## **1.7 Empirical Context**

The **Faux-au-Chaud** squatter settlement was chosen for empirical analysis. The community was selected because it is a squatter settlement on lands owned by the government and vested in the Port Authority. It is an area in which families have settled free from government harassment, and have developed their housing over more than 15 years i.e. ever since the area had been reclaimed from the foreshore area of Castries Harbour. In addition, they have enjoyed an unofficial recognition of their occupancy with the government's installation of public standpipes, laundry, toilet, bath and garbage collection facilities. Utility companies have also installed individual water, electricity and telephone services to the area despite the illegality of land tenure. Over the last few years there has been talk of the Port Authority requiring the land for port expansion. Yet the people continue to develop their housing, putting up in some instances, the more permanent reinforced concrete structures that will lead to a great loss of investment should there be relocation. In the face of this the Port Authority appears helpless to do anything and the Government has taken a hands-off approach to the matter. Consequently, this situation had a certain appeal for this researcher to see the extent to which these households would be prepared to consider future housing improvement outside of the area and how this would influence the establishment of the ability and willingness to pay for such housing.

Since this researcher wished to examine the housing payment experiences from the historical perspective it was necessary to select owner-occupiers rather than renters since renters might actually be expending rather than investing to increase the value and standard of their shelter.

## **1.8 Principal Finding**

This research has been largely exploratory. Firstly, because it sought to examine through the housing development experiences of low income households, as no other has done before, the factors involved in the establishment of the ability and willingness to pay for

housing, through the integration of the elements of affordability, socio-demographic change and housing improvement preferences. Secondly it has also been exploratory in the sense that it has considered the overall resource capacity rather than the income resource solely, in the determination of the ability and willingness to pay for housing. Further it has sought to examine the ability and willingness to pay for housing by considering the household as a resource system and seen from the level of the household. In using this **user-determined approach** of allowing the household to decide within its resource capacity there has been no preconceived assumptions made about these households that might prejudice the outcomes of affordability determination. The ability and willingness to pay that has been shown especially for future housing improvements have been determined from their own understanding of their socio-economic and socio-demographic circumstances.

The research has not only attempted to show how households established their ability and willingness to pay for past and future housing improvements but also when they can be expected to be able and willing to pay based on the conditions giving rise to the improvement decisions which describe the ability and willingness to pay. Further, it specifically revealed how the willingness to pay as derived from these conditions was expressed and will be expressed in resource terms despite the proportion of income that this cost represents. In so doing this research has been able to confirm the view that households do not think in terms of percentages of income when making housing expenditure and investment decisions but rather they think in terms of their overall resource capacity and ability to mobilize the resources of others where their own capacity prove to be limited. What is of significance is that they are able to pay the required amounts and still remain viable.

The findings of the empirical exercise support the central proposition outlined in sub-section 1.4. They will be presented in greater detail in the relevant subsequent chapters pertaining to the findings. **The are briefly stated here viz:**



### **i) Establishing the Ability to Pay**

The findings show that the ability to pay for low-cost housing by low-income households, can be established if the household is considered as a resource system in which the ability to pay is established from a consideration and assessment of the overall resource capacity of the household. This capacity sets the limitations and possibilities for action in respect of housing payment decisions. The affordability of housing improvement is therefore not the sole function of the level of the total cash income, but rather all monetary and non-monetary resources available to the household at the time housing payments are required. For most households the ability to pay is established mainly from intrahousehold resource capacity in their first improvement activities. In subsequent activities it is established from both intrahousehold and interhousehold resource capacity. However, in these latter improvements which became more costly and technical over time, the ability to pay was established firstly for the intrahousehold capacity and only where this capacity was inadequate was the interhousehold capacity considered. In addition, households are able to pay for housing improvement when they are able to maintain, improve, mobilize and use available monetary and non-monetary resources to pay for it without adversely affecting their socio-economic viability. The details of this process will be elucidated in the relevant chapters of the research findings.

### **ii) Establishing the Willingness to Pay**

The findings show that there are four main factors influencing the willingness to pay for housing among low income squatter households. Firstly, they show that households are willing to pay when the improvement is congruent to the acceptable minimum standard of housing preferred at a specific conjuncture to remove residential dissatisfaction. This standard is defined by the preference for a particular housing attribute or combination of attributes at a specific point in time over the housing improvement process. For this research, the concept of housing involves many aspects of the physical nature of the dwelling and related services and facilities, as well as the relationship of it with the land which it occupies. However it was found that the willingness to pay could be linked to the desire for specific improvements at specific points in time during the housing development process. The methodology of viewing these improvements in a staged

process, helped to confirm that the order of improvement preferences completed, is the outcome of the desire to remove adverse housing conditions relating to the quality, quantity and type of access to housing characteristics. The order of improvement of attributes was 1) Improvement of space to establish the household as an independent viable unit; 2) Incorporation of services i.e electricity and water or electricity solely; 3) Improvement of space through the incorporation of a kitchen or kitchen and toilet facilities and where more than one attribute were preferred at a particular point in time, there was also a priority preference among these attributes. In respect of the future improvement preferences the selection of options revealed that less than half the households show a preference for attributes characteristic of a proposed third stage while the others selected options characteristic of the fourth stage. For the first group, the main attributes preferred was land tenure security and dwelling material improvement. For the second group, the main attributes preferred were land tenure security, dwelling material and space improvement to facilitate the consolidation and specification of space use.

Secondly, the willingness to pay is the result of the changing socio-demographic characteristics of the family. These changes affect the existing housing characteristics to the extent that the resulting residential dissatisfaction was a source for establishing the willingness to pay. The main social factor was found to be to the formation of a new household as a result of social conflicts in interpersonal relationships in the original supporting household. The main demographic factors related to 1) the formation of new households as a result of overcrowding or marriage and co-habitation decisions. 2) the need for space as a result of an increase in household size.

Thirdly, households are willing to pay when they are able to maintain, improve or mobilize and use available intrahousehold and interhousehold monetary and non-monetary resources capacity to pay for the improvement.

Fourthly, the willingness to pay was the outcome of the desire to improve home-based income generating capacity through space extension for productive enterprises or petty trading activities and to accommodate the acquisition of tangible non-monetary resources consequent on improvement in the non-monetary resource base.

## 1.9 Suggested Contributions of this Research

It is suggested that this research is able to make a contribution at both the level of theory and practice, in the understanding of the concept of affordability as applied to low-cost housing project. The possible contributions at the level of theory are: Firstly, it provides a broad concept of income which is possible to be extracted from reality, and it is viewed as one of the resources to be used for establishing the ability and willingness to pay. In this concept, income is the total amount of money available from all sources and comprises the wage income, profits from productive income generating and petty trading activities, interest on savings, savings, income transfers and pensions.

It defines the concept of cost to be used by expanding it to take account of the costs of production and use in which two groups of costs will confront the household i.e.1) the regular recurrent payment for services and the new regular payment for the improvement based on the cost of all the components of production and the profit associated with the production of that housing that will face the household and 2) the additional cost to access and/or complete the improvement. For this researcher, what was important was for the household to be able to show, within its resource capacity, its ability to meet these costs and still remain socio-economically viable. It is possible that this definition and widening of the cost and income components have been able to broaden the concept of affordability. Perhaps in this way costs could become affordable providing mechanisms can be put in place to identify them and the sources from which they can be paid.

Secondly, by challenging the implicit and explicit assumptions pertaining to the application of the concept, the research has been able to show that these assumptions on the amount of income household are able to devote to housing payments are invalid and inappropriate and that what is important is that the household is able to show from its interhousehold and intrahousehold resource capacity that it is able and willing to pay the required amount and still remain a viable unit.

Thirdly, the use of other literature coming mainly from the field of household economics and social anthropology has been able to provide an understanding of the concept of 'household', not as a unified entity, but one in which members contend over resources

they control in their survival strategy and by extension their housing strategy. From this literature this researcher, might have been able to widen the understanding of how resources are mobilized and used to establish housing payment capability. It is suggested that this was facilitated by viewing the household as a resource system in which the available resources are not automatically available for housing payment as is apparently assumed in current practice.

Fourthly, it is possible that the location of this research at the interface of various disciplines means that the research findings will be of relevance to such fields as Household Economics, Social Anthropology and Social Planning. It will be of particular interest to housing planners and designers who are interested in understanding the dynamics of housing affordability from the perspective of the household which could serve as guiding principles in their efforts to find affordable solutions for low income households. More specifically housing planners and designers might find it useful as it is able to show how levels of the ability to pay and the willingness to pay are established among low-income households. It does this by outlining the factors and conditions which give rise to their establishment before any quantity in resource terms is derived to describe the affordability of the improvement at any juncture.

Finally, it is possible that this research is able to contribute to the understanding of the willingness to pay perspective of the concept is derived and its influence in affordability decisions at specific conjunctures.

At the level of practice, this research while being largely qualitative, provides a framework for the understanding, analysis and determination of how the levels of ability and willingness to pay are established by low-income households before any quantity in resource terms is derived to express that ability and willingness to pay. This research has been able to do this from a consideration of the household as a resource system. This is in contrast to the current method of affordability determination which seeks to determine how much of the wage income the household is able to devote to housing payment.

Also at the practical level, this research has been able to show the importance of a user-determined approach in the understanding and analysis of affordability. Firstly, it confirms a framework of analysis which makes no presumptions or assumptions in

respect of the household's resource capacity. The use of this approach allows for the establishment of the factors or conditions influencing the ability to pay and the willingness to pay for housing by the household itself. Secondly, this user-determined approach confirms a practical methodology capable of establishing levels of housing affordability which are congruent to households' housing payment preferences at specific conjuncture.

### **1.10 Research Limitations**

The limitations of this research are largely related to methodological decisions determined by limited resources. These limitations are as follows. Firstly, it examines only squatter low income households in owner occupancy housing tenure. This was due to the fact that the research was designed to examine households' experiences in respect of housing payment decisions in the housing improvement and development process. Whereas renters would be expected to expend resources on current housing use, it is likely that they will not make payments to increase the value and standard of a shelter which have the potential of yielding a return if sold. Secondly, it does not consider the circumstances of households making housing changes in a downward adjustment of standard. Only improvements are considered. Thirdly, while it considers improvements, these are assumed to follow a staged process as the household moves toward its ultimate housing standard desired. However this researcher recognises that a household could establish its ability and willingness to pay for a completed housing unit, in which case the payment assessment could be a once only decision. Fourthly, it does not consider low-income households in legal land tenure and in the formal housing market. The research considers the influence of four processes in the establishment of the ability and willingness to pay while recognising that other processes can be devised to do the same. This was the result of resource limitation and the researcher's view that these are the most important processes. Finally, it does not consider low-income households with no regular source of cash income. The households considered have at least one regular source of income. These areas of limitation could define future research exercises. The findings of this research cannot therefore, be generalised for all low-income households.

## **CHAPTER 2**

# **A REVIEW OF THE LITERATURE ON THE CONCEPT OF AFFORDABILITY AS APPLIED TO LOW-COST HOUSING PROJECTS FOR LOW-INCOME HOUSEHOLDS IN DEVELOPING COUNTRIES SINCE 1974**

## **2.0 BACKGROUND**

This Chapter reviews the literature on the concept of affordability, as it has been applied to the policies and programmes of low-cost housing projects for low-income households in developing countries since 1974. These projects include sites and services schemes, core unit options, upgrading of urban infrastructural services and the rationalization of land tenure in urban squatter settlements. The year 1974 is taken as the base year as it marked the real shift in emphasis in international sponsorship of development programmes in developing countries, from the economic development sectors to that of social development. It has been found however, that the available literature on the subject remain relatively limited in extent. A few evaluations of the performance of the various low cost projects based on the concept have been carried out by researchers commissioned largely by the World Bank. Literature searches conducted by this researcher in the urban studies and sociological data bases on the subject of housing affordability in developing countries have confirmed this limitation in data availability. The available information sources have been reviewed for this research and are presented here.

This literature review is presented in two parts. The first outlines the issues with respect to the use and measurement of the components that describe affordability; the assumptions on which it is based; the findings on the influence of housing characteristics on affordability and the criteria which determine access to the housing

solutions to which it has been applied. The second outlines the issues that this researcher considers of relevance for the understanding of affordability but which have not been considered in current literature on the subject. However, a review of other literature dealing with household economics have elucidated the understanding of the concept of household and the household as a dynamic system in which various strategies including its housing strategies, are pursued to ensure its socio-economic survival. This review has been relevant for understanding the housing payment decisions household make and are therefore of particular importance to the focus and raison d'être of this research.

In order to elaborate this review of literature, it is first necessary to present the concept of affordability as it has been used in housing project appraisal reports in developing countries throughout the 1970's and 1980's. The concept used has been defined as follows:- "*a certain level of urban services is affordable if the amount of income a beneficiary household is willing and able to pay for shelter related expenses is sufficient to cover the monthly cost of the services*".( Keare,D. and Jimenez,E. 1983, p.6). Symbolically, the concept can be written as:-  $a \geq c$  , where 'a' is the average propensity to consume housing (the proportion of income that the household is able and willing to spend, and where 'c' represents the cost of housing services.(Ibid).

## **PART 1**

### **2.1 ISSUES OF AFFORDABILITY AS APPLIED TO LOW COST HOUSING PROJECTS IN DEVELOPING COUNTRIES**

The issues to be presented in this section cover four perspectives. Firstly, in sub-sections 2.1.1 and 2.1.2 there are those relating to the definition and measurement of the components of the concept *i.e.* income and costs, respectively. Secondly, in sub-section 2.1.3, there are those relating to the explicit and implicit assumptions as

outlined in the elaboration of the concept and as found in the evaluations and critique of the application of the concept to low-cost housing. Thirdly, in sub-section 2.1.4, there is the issue of the determination of the ability and willingness to pay for housing attributes with respect to the impact of these attributes. Fourthly, in sub-section 2.1.5, there are those issues relating to the eligibility criteria that determine access to housing solutions developed on this concept and the concomitant assumptions on which these criteria are based. Sub-section 2.1.6 concludes the presentation of Part 1 of this review.

### **2.1.1 The Absence of a Clearly Defined Concept of Income and Related Measurement Issues.**

According to the definition of affordability give in sub-section 2.0, household income is one of the important parameters in the determination of households' ability and willingness to pay for housing. There are a variety of incomes which can be described, depending on the sources from which they are derived, their permanency and their frequency of receipt. Some of these incomes, to name a few, are wage or labour income which is the income earned through the expenditure of time and labour in the performance of a specific work task; income transfer, which is the wage income from one individual which is allocated to another to supplement the recipient's income; pensions which are incomes received after retirement from work; primary income, which is the earnings of the head of the household and secondary income which is the earnings from other household members. However, there has been no clear conceptual definition of the income to be used for the determination of affordability. Consequently, various definitions ranging from the earned income of household head to total income from all sources have been employed in various projects with varying outcomes for households' affordability. (Malpezzi,S.et al, 1985; Keare and Jimenez, *ibid*).



It is claimed that the reason for this variation in the types of incomes used, is that income is difficult to define and measure. According to Keare and Jimenez, many definitions were employed in various projects because data estimating income in the majority of developing countries are generally unreliable and there are practical methodological difficulties in making assessment of it due to the different element that make up total income (Ibid). This view is also supported by Lee (1985). In the first generation (1970-80's) of World Bank sponsored housing projects, for example, the regular wage income of the household head, assumed to be male, was used. The use of this income discriminated against certain women headed households and households with no regular income. (Moser, C. 1985 and Moser,C and Chant,S. 1987). The use of wage income also indicated a developed country bias in the tendency to think that this income was permanent, more stable and as a result a more appropriate measure. For Lee this narrow definition of income and the regulation that households must have more than a minimum demonstrated income in order to participate in housing, meant that some categories of low-income households would be excluded from projects. For him it is of concern that housing programmes are increasingly being designed so as to exclude households from the lowest levels of income because of the need to ensure cost recovery.(Ibid).

Based on the World Bank/IDRC sponsored evaluation studies of the first generation of projects, Bamberger *M. et al* (1982), found that affordability of housing ("a") varied with the definition of income use, *i.e.* whether earned income of head of household; earned income of all household members; rents and pensions or all sources of income including income transfers.

Keare and Jimenez for example, have examined the panel data for El Salvador, FUNDASAL sites and services project over a four year period and also found that the value of affordability 'a' changed greatly with the definition of income used and have suggested that total income might be a better measure to use. However they have not indicated exactly what that total income should comprise. Evaluation

reports have shown that families used other sources of income than the wage income of household head to make housing payments. It has been shown for example that income transfers were very important in housing affordability as evaluation reports revealed for El Salvador and Philippines projects. It has been found also that this source of income was significant to female headed households who also showed a greater propensity to consume housing than other types of households. These findings have been revealed by Keare, D. and Parris, S. (1982); Keare and Jimenez, (Ibid); Bamberger, M. and Harth-Deneke, A. (1982).

In the El Salvador, FUNDASAL project, income transfer represented 20% of household income on average. For female-headed households it was much larger than for male headed households being about 40% or more. (Bamberger and Harth-Deneke, Ibid.). It was estimated also that the majority of beneficiaries came from the 50th to the 60th percentile income range. Recurrent transfers were found to supplement about 1/3 of the families in the project. (Keare D. Parris S. Ibid). In Tondo, Manila, according to Keare and Parris, 43% of the population was below the 33rd percentile of the income distribution and they received income transfers amounting to 50% of their income (Ibid).

Also of particular importance is the potential income from subletting as cited by Dix, G. (1983); Tym, R. (1984); Lee, M. (Ibid) and Martin, R (1975). It is obvious that these supplementary incomes could improve affordability. Dix claims that they are important to the main incomes that are inadequate or insecure. For him, the fact that many families earn income from both the formal and informal economies is significant for the planning of shelter projects for low-income household as more possibilities exist for deriving income flows. However, because of the unreliability of incomes among these households housing authorities and banks do not consider the incomes earned in the informal sector in their assessment of the household's ability to pay for housing. As such the rent paying and loan repayment capacities of households in this sector is underestimated. He claims also that the programme

tendency of basing assessment of affordability on the earned income of household head, takes no account of the potential income available from other earning household members working in the formal and informal economy. He sees this as ..."*an impediment to housing and it does not take account of the informal sector where households individually or in co-operatives can invest their own money and labour into development as time and opportunity allows.*" ( *Ibid*, p.4).

Interestingly, Renaud, has shown that in developing countries, housing investments by formal governments structures comprise only 10% of total investment fund in housing. The remaining 90% comes from the formal and informal private sector initiatives, showing the significance of the financial resource of the private sector. ( Renaud, 1985). This confirms Dix' view of the potential resources available from the informal economy.

Lee argues however, that household income originates from many sources that are difficult to quantify and which vary according to circumstances operating at the time. He claims that even if it were possible to identify and determine total income of households, there are situations in which it might not be possible to do so since "*an existing household such as when applying for an allocation in a housing project is often different in composition from the household which will actually take up the allocation*" (Ibid 1985, p.134). For him this is because of the fluidity of the concept of 'household'.

For their part, Keare and Jimenez claim that even if it were accepted that total income was the better concept and measure, there would still be important measurement issues relating to the accuracy of determining all income sources for all persons in the household (Ibid). For Tym, there are not only issues of measurement accuracies but the validity of the assumptions made with regards to the calculation of income. He claims that the true income of households is difficult to determine since families underestimate it through fear of being considered too wealthy for

housing programmes or overestimates it in an effort to improve the possibilities for gaining access to these programmes. (Ibid). For Lee it is also difficult to record incomes and where such records are available, they do not usually represent employment information for household in the informal sector from which the majority of low-income households earn their living. (Ibid). Tym also points out that... *"whilst records may be available for of the earnings of the principal income-earners in regular employment, they normally will not be available with any degree of accuracy or reliability for the supplementary incomes earned by wives, children, or grand-parents, or if the principal earner is self-employed."* (Ibid, p.211).

In addition to the above measurement difficulties Lee, for his part, claims that income surveys are always...*"complex with problems of definition, framing of questions that can solicit sensible answers, reluctance of respondents to give accurate information and lack of knowledge or respondents of how much money they actually earn especially in the informal sector."* Lee (Ibid, p.133). He claims also that... *"it is next to impossible to enumerate with precision anything approaching total income by household whether this be that of household head, other wage earners or non-labour income."* (Ibid, p.133). However for him, while expenditure surveys can give more precise indication of income, they are expensive to undertake.(Ibid).

Some of the problems in getting accurate income data are also related to researchers' inadequacies in the choice of surveying and sampling techniques and ways of verifying the data to ensure accuracy of the income information (Keare and Jimenez, (Ibid); Dix, (ibid); Lee, (ibid). Due to the unavailability of data, there has been a tendency to rely on data from socio-economic surveys which used different definitions of income and different levels of aggregation. This makes comparison in findings difficult and extrapolations inappropriate. (Keare and Jimenez, Ibid).

The above discourse shows that there is an obvious need to define clearly the concept of income to be used and that different incomes will impact affordability differently. Total income from all sources appears to be the better measure to use. However, there is a need to use the appropriate survey technique to determine the precise measure of this income for it to be useful in establishing levels affordability for low cost housing.

### **2.1.2 The Absence of a Clear Conceptual Definition Of Housing Cost, Its Measurement and Related Assumptions.**

One of the fundamental questions in the estimation of affordability is what definition of housing cost to use. The fact that the concept of cost has not been specified could partially explain the high level of subsidy found in the evaluation of the first generation of World Bank sponsored project between 1974-82. This will be examined in sub-section 2.1.3 2) to be presented subsequently. The cost of housing, could include one, or a combination, of the following costs as described by Keare and Jimenez. (Ibid). Firstly, there is the direct project cost given as C1, which comprises the payment for the attributes provided such as land, services, core unit etc. It does not include any credit component. Secondly, there is cost C2 which comprises the cost to purchase material and labour by the household to complete their house, this is in conditions in which progressive development of the housing product is required. C2 does not include any credit component either. Researchers have argued for the inclusion of these C2, additional costs that households will incur to bring the housing up to habitable standard where applicable, to be part of the affordability calculation. They claim that, the standard at which many housing options are given requires the beneficiary to improve on the housing product during the time of occupation. In these progressive development housing strategies families are expected to complete the unit at their own expense according to their own plans, time-frame and expenditure capabilities. However, these additional costs are not included because according to Bamberger et. al. the justification for linking housing repayments only to the cost of

the product given, is that households are not obliged to make additional payments. Yet the state at which these housing options are given requires that these additional costs are incurred to make the product habitable to the minimum acceptable level. (Ibid, 1982). But *Keare and Jimenez claim, that these costs might be difficult to include because of their variability in respect of household preferences. (Ibid). However for researchers like Bamberger, et. al., there is a need to consider how households will be able to sustain participation after the initial access to the housing product, as part of the determination of affordability, if affordability problems are to be avoided later. (Ibid). These views are corroborated by Tym who claims that... "provision should be made in the affordable budget if it is anticipated that at some date in the future, household will need or be expected to add to the initial superstructure. For unless the household income can be raised commensurately, commitments at a later date will be net addition to present borrowing burden". (ibid, p.216).*

Burgess indicates that the additional costs involved can add to the financial burden of the household. According to him, state self-help project represent a great increase in housing cost when compared with the system of financing used in the artisanal form of housing process. (Burgess,R.1977). Additionally, Burgess claims that the fact that cost are increased relative to what they could be in the artisanal construction process, means that the income to meet these costs must be biased upwards, thereby restricting access for those at lowest level of incomes. (Ibid).

Thirdly, according to Keare and Jimenez, there is also total cost which is  $C1 + C2$  and is termed  $C3$ . Fourthly, there is also true cost which comprises  $C1$  costs and includes credit schemes, which is fully amortized in constant monthly payments and given as  $C4$ . Finally,  $C5$ , project cost, which is similar to  $C4$  but in which the credit scheme does not fully amortize all costs. Keare and Jimenez claim that the most appropriate cost to use would be  $C4$ . However,  $C5$  reflects the practical realities in which housing designers operate in the real world. (Ibid, 1983). For this researcher,

the implication of this claim is that in the context of developing countries the delivery of housing by the public sector might require that certain components of project cost will of necessity require that they be subsidized or excluded from the overall assessment of project cost. The type of cost to be used will have implication for the extent to which the project will be affordable to households. For example a project which considers C1 or C2 costs only, might be affordable to more households in the lowest levels of income, than one which comprises C4 costs. It is never clear in the projects sponsored which type(s) of cost to use. Other issues of cost relate to the need to incorporate recurrent expenditure for services as cited by Lee, (Ibid). Families are required to meet the costs of service payments as well as all other costs associated with bringing the house to the acceptable minimum standard.

The above discourse shows that the type of cost needs to be clearly defined and that other costs, apart from those currently used to determine affordability, should form part of the calculation. For this research there is an issue not covered in the literature reviewed and it is, that in none of the costs described is consideration given to cost inclusive of the developer's profit. This which would describe the market price rather than the cost of the housing. This might relate to the fact that these programmes are developed by the public sector which only considers builders profit as part of their cost. However, if the formal private sector is to take on the responsibility of providing housing for low-income households, consideration must be given to the incorporation of developer's profit in the cost of the project. In fact where the informal private sector builders now produce housing for low-income households their profit are included in the cost of the product. This researcher considers that in exploring the households' responses to future housing improvement, the profit aspect of the cost of housing should form part of the affordability calculation.

This sub-section on the issue of cost shows clearly that there is a need to provide a clear conceptual definition of cost to be used in affordability calculations.

### **2.1.3 Issues in Respect of the Assumptions of Affordability and the Progressive Housing Development Model to which it is Linked.**

#### **1) Assumption Regarding Effective Demand and Income**

The World Bank, for example, claims that the problems of the shelter sector do not lie on the side of effective demand, which is need backed by ability to pay. Rather, consumption of shelter is low because the price is high (World Bank 1975). Wegelin, also confirms that the housing problems of low-income people are related to questions of supply. For the World Bank and other sponsorship agencies, the aim has been to remove the supply constraints which impede access to housing for low-income households. Therefore, the recommendation has been to adjust the quality and quantity of housing and related services by reducing standards to affordable levels. Affordability of solution then, represents a supply innovation that tends to identify governments' supply actions to fit households' ability and willingness to pay. Theoretically in this manner of conceptualizing, basic minimum shelter implies an elastic concept. Theoretically, income cannot be seen as a constraint providing the adjustment can be made on the supply side to match the level of income (Sethuraman,S. 1987). Interestingly in practice this is what occurs in the low-income informal housing market without state intervention (Ramirez, R. 1983).

In practice, the <sup>formal</sup> supply responses, largely in the form of sites and services, core units and infrastructure upgrading, have not been generally accessible to many low-income households as revealed by evaluation reports. (Keare, D. and Parris, S. Ibid ; Bamberger, M. *et al* Ibid; Mayo, S and Gross, D. 1987; Domicelj,S. 1988). These reports revealed that although the housing solutions based on the concept of affordability were supposed to provide access to households between the 20th - 70th percentile income for sites and services and down to the 10th percentile income for community infrastructural upgrading, the majority of households who actually



benefitted came from the 40th - 80th percentile income levels. (Keare, D and Parris, S. Ibid). According to Domicelj, the reasons for the lack of success in reaching the larger percentage of the poor are varied but there may have been different perceptions of needs by agencies and users, poor projects development or a preference for informal services. For him... *"access is endemically restricted for the acutely disadvantaged. Affordability is affected not only by the availability of funds but also by the behavioral patterns in the propensity to pay by different income groups"*. (Ibid, p.8). He claims further, that this is a matter which is still of concern to housing developers.

For Burgess, these projects remain outside the "effective demand of the lowest income groups" and for him like the claim made by Lee (Ibid 1985), Burns (1983) and others cited earlier, the problem appears, to be related to the emphasis on and the rigid adherence to the level of income in determining affordability. According to him...*"the rigid enforcement of income thresholds for entry, the insistence on initial down payments, backed by penalties on failure that can include expulsion, all conspire to exclude the lowest income groups from access to the projects and prevent the finely-tuned relationships between income availability and incremental construction that occur in the shanty towns"*. (ibid,1977, p78).

The evidence shows that while in theory basic minimum shelter is viewed as an elastic concept as standards could be reduced to match the level of income, in practice this does not happen. There is therefore a gap between theory and practical application. The explanation for this gap can be linked to the need to understand the influence of the willingness to pay aspect of the concept. This research agrees with Domicelj (Ibid), when he stated that affordability is also influenced by the behavioural patterns in the propensity to pay by different income groups. It seems that this is the fundamental aspect that describes the "willingness to pay" perspective of the concept that has not incorporated in affordability calculations nor examined in the literature and which provides a challenge to the above assumption. The questions

that are raised are whether households at these levels of income want to pay for these solutions at any point in time, given the need to spend on other items for household survival; whether the housing solution consequent on formal state intervention is congruent to the socially acceptable minimum standard the household prefers, finds acceptable and is willing and able to pay for within the existing level of income. They might be able to pay but are not willing to pay. There is obviously a need to understand the subjective element of affordability which describes the "willingness to pay" quite apart from the "ability to pay" since the level of income is not seen as an issue. These aspects will be explored in detail in Part 2.

## **2) Assumption on the Percentage of Income Households will Devote to Housing**

Estimates of affordability have been based on the assumption that project costs can be linked to regular monthly payments by beneficiary households, who can only afford to invest a relatively low proportion of their income (often about 20%) in housing (Bamberger, M. *et al*, Ibid). The average of 20% income has been used following Grimes (1976) study on the economics of low-income housing in developing countries. In this study Grimes found that families spent between 11-30% of income on housing. This seemed to have been corroborated by the findings for developed countries where it had been estimated that the average family spends 20-25% of income on housing. Consequently a range of 20-25% of income for housing expenditure became a rule of thumb in affordability calculations in developing countries. (Keare, D. and Jimenez,E. Ibid).

For Morris and Winter<sup>4</sup> however, there are expenditure norms that determine that families behave differently depending on socio-economic status. These housing

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<sup>4</sup> Morris and Winter's (1978) study was of housing in the North American context. However the findings remain relevant for this research as will become clear in Chapter 3.

expenditure norms prescribe how much the household should spend. Using the 25% of income assumption, they claim that these norms set maximum and minimum amounts for housing expenditure, such that if a household spends more than 25% of its income on housing it would have what they describe as a positive expenditure deficit. But if the household's expenditure was less than 25% of income, it would have what they describe as a negative expenditure deficit. (Morris and Winter, 1978). But for Morris and Winter, people do not consider percentages of income when deciding housing expenditure rather, "they think in terms of recent increases or decreases in income, their expectations of future incomes, the cost of a potential new residence in comparison to that of their present residence and their current level of satisfaction". (Ibid p.135).

According to Mayo and Gross, despite this 20-25% assumption the rate assumed was variable among projects in developing countries. Between 1974-1982, 74% of the projects fell in the assumed category, 12% below and 8% above. (Ibid,1987). Linn, also found that the assumption of affordability in these projects ranged as low as 7% for a project in Egypt and 50% in a Colombian project. (Linn,J. 1983).

Mayo and Gross also revealed that the limitations in the available data on which to base affordability calculations meant that many appraisal reports used national averages of levels of housing expenditure to compute affordability. This would not always correspond to the economic characteristics of the majority of the low-income population comprising the informal sector being planned for. (Ibid 1987). As a consequence of limited information and the use of an arbitrary assumption in respect of the percentage of income households would be able and willing to pay for housing, projects have scarcely ever been affordable to those they were designed for. Such projects could only be affordable if high levels subsidies were included or if the projects were marketed to higher income groups (ibid). According to Mayo and Gross, the above findings have implications for household participation and perhaps explain why the levels of subsidies in projects sponsored by the World Bank

between 1974-84 have been so high (i.e. 80-90% of project cost in low income countries where 20-25 affordability assumption was used), despite the objective of reducing subsidies. Significantly, they found that if no subsidy was involved these projects would have been affordable to the most affluent households i.e. those in the 80th income percentile or above. The need for such high levels of subsidy have been predicated on the fact that the precise measure of affordability of the beneficiary population was not determined accurately.(Ibid).

Housing project evaluations and housing research in developing countries in the late 1970's and early 1980's have also confirmed the variability in the amount of income spent on housing thereby invalidating this 20-25% of income housing expenditure assumption (Bamberger M. *et al* (ibid); Keare, D and Parris, S.(Ibid); Mayo, 1985; Malpezzi, S. *et al*, (Ibid). Research conducted into housing demand in sixteen cities of eight developing countries (*ie.* Colombia, Egypt, Jamaica, El Salvador, India, Korea, Ghana and the Philippines), in respect of 65 sites and services projects financed by the World Bank between 1972-84, revealed that the actual proportion spent on housing was often lower than the traditionally assumed range of 20-25% of income. In addition, the level of expenditure varied not only with income but other factors (Mayo, S. (Ibid); Malpezzi et al, (Ibid). As a result Mayo claims that ..."*there is no single rule of thumb for estimating what household in different cities and at different income level will spend for housing*" (Ibid 1985 p 4). On the other hand, he claims that..."*without a good notion of how much households normally are willing and able to spend on shelter and how effective demand varies among households and housing markets, project planning and housing policies will be risky and subject to failures. But if regularities in demand patterns can be established, housing projects can be more accurately tailored to people's willingness to pay*" (Ibid).

Jorgensen, working in Kenya, found that the 25% assumption of income expenditure assumption in housing for all income levels was not borne out in his investigations. According to him 25% may be close as an average but a different pattern emerges

when one looks particularly at the lowest income groups. Among these groups the proportion spent on housing was found to approach 40% for the poorest families under free market conditions and then declines with rising incomes to stabilize at 10% of income. According to Jorgensen, this trend was confirmed " *by what households quoted as their willingness to pay for housing better than their present dwelling, even if they are at present paying less*". For, according to him " *owner-occupiers will conform to this pattern even if they are at present paying virtually nothing for their dwelling, because they have a clear understanding of the potential income from subletting.*" ( Jorgensen, N. 1978, p.76). Bamberger, M. *et al* found that in El Salvador FUNDASAL, low-cost housing project, families were paying as much as 40% on an average which was more than twice the assumed rate (Ibid, 1982). The main evidence is that poor families pay a higher percentage of income for housing than better off households.

Further evidence of the inappropriateness of using affordability assumptions of the proportion of income households will be able and willing to pay for housing is contained in works coming from such writers as Chana,T. (1984); Jere (1984); Nimpuno (1983); Mangizas, M. (1984). According to Chana, in the Phase I Dandora Sites and Services project it was assumed that beneficiary households would be willing to pay 20% of their incomes on housing services. This meant a payment of K.sh 280 per month of a required monthly income of K.sh 1400. This income level could not be afforded by 50% of the population of Nairobi. However, on implementation " *it was found that over 50% of the allottees were paying over 30% of their incomes for housing as compared with the expected figure of 25%*" (Ibid 1984 p.31). The high rate of affordability however, was due mainly to supplementary incomes obtained from subletting in which rents ranged K.sh 150-200 per month while the monthly mortgage repayment was K.sh 72-86 per month.(Ibid).

For his part, Mutizwa Mangizas, in his work in Zimbabwe, examined the affordability assumptions made in the post-independence, urban low-cost shelter policies and found

that there was an upward trend in affordability assumptions in respect of the form of proposed housing options offered. He found that for the aided self-help core housing it was assumed that affordability was 27.5%. Yet, 16% of Harare's low-income households could not afford any of the available housing options; 16% could afford the four-room core housing while 68% fell between those two extremes. From his empirical investigations Mangizas concluded that the 27.5% used in Zimbabwe's housing affordability calculations "*overestimates the financial resources available for housing in low-income families.*" By changing the housing affordability assumption among low-income families in Harare to 17.6% of income as derived from a household budget survey, and which represented the average monthly patterns of expenditure for 1976-78, his analysis showed that 42% of the low-income population could not afford any of the housing option offered; 36% could only afford a serviced plot without a wet core, 5% could afford one-room core unit and only 7% could afford a four room core which was the minimum specified by the government policy. For him, these results support the view that most public housing cater to households above the 20th national urban income percentile for cost recovery reasons.(Mangizas, M. 1982)

The findings in the literature show that the variability in the proportion of income households will spend on housing is so large, that to use or assume any fixed proportion of income to indicate affordability would be extremely unreliable to the extent that it becomes useless or invalid. The 20-25% income expenditure assumption used in low-cost projects designed on the basis of the concept is therefore invalidated. This research takes the view that it is not the proportion of income that household can and will devote that is relevant to the determination of housing affordability. Rather, what is important is that they are able to show how they will be able to pay for housing, despite the percentage of the income that the cost of housing improvement represents.

### 3) Assumptions Regarding the Monetary Resources of the Household

The emphasis on wage income, i.e. salary and wages, in calculating affordability contains an implicit assumption that the financial resources of the household are equated with its income. The possibility of the existence of other sources of income and wealth, are largely ignored by the financial designers of housing projects. The literature has shown that many households have wealth and other sources of income, for example, savings, jewellery and income from subletting of rooms, which can be utilized for housing payments (UN 1977; Lee, M.1985; Renaud, B. 1985). Lee found,that the assumption regarding the financial resources of the household is not consistent with the objective of low cost affordable housing projects of encouraging the mobilization of financial resources of among the poor as inputs into their housing development (Ibid). It has been evidenced by the projects sponsored by the World Bank over the last decade for example, that households are spending more than monetary labour-income might suggest (Lee, Ibid; Bamberger, M. *et al* 1982; Keare,D and Parris, S. 1983; Keare, D. and Jimenez, E.1983). According to Cohen... "This has led to the conclusion that income is frequently a poor proxy for wealth and that expectations in housing investment may often underestimate the willingness of low-income household to invest in housing". (Cohen, M.1983, p.94).

Lee claims further that it is probable that by linking affordability to labour-income, many households with other financial resources may have been prevented from paying as much as they would want to pay through the possibilities of incorporating these wealth sources (Ibid). For his part, Tym also claims that income is a poor measure of wealth. For him... *"To establish just what level of cost for new and improved shelter could be supported by households requires a considerable understanding and insight into the lifestyles of the target group, their total earnings, security of the principal and secondary income, their savings and their capacity to save and the importance expressed as a proportion of total income they attach to new and improved housing"* (Ibid 1984,p.211).

On the other hand, Lee argues that the main problem in the design of housing project is that designers and authorities, and not the individual beneficiary households continue to make judgement on the household's ability to pay. (Ibid, 1985). However, he finds that there are main drawbacks to this kind of approach. This leads him to claim that... "*the lack of financial sophistication of would be participants in a project and the consequent concern by financiers that the soundness of the project can easily be jeopardised if there is no check on the ability of each individual participants to repay costs.*" (Ibid, p.140). Moreover it introduces an element of risk which he claims... "*must be countered on one hand by some form of monetary guarantee and on the other by a readiness on the part of administrator to enforce regulations so that households who do not comply... may be appropriately penalised*". (Ibid).

This section confirms the need to consider the overall monetary resource base of the household rather than just its labour-income. For this research then, it will not be the percentage of labour-income that will be important, but rather the demonstrable ability of the household to incorporate available monetary resources and still remain viable after the decision is made to pay for housing whatever the percentage of cash income that turns out to be. However for this research, non-monetary resources will also be considered as part of the wealth status of the household that can be used to meet housing payments.

#### **4) Assumption on the Willingness and Ability of Household to Supply Intrahousehold and Interhousehold Labour Time For Auto-construction.**

In this research the terms interhousehold and intrahousehold labour will be used to indicate human resources for both auto-construction labour and time by the household itself and mutual labour time from friends and relatives of other households. This section refers however to the auto-construction process in which the household builds its house and manages the associated construction activity. There are two issues in respect of this as gleaned from existing literature. These relate to the fact



that low income households might not have the time and skill to undertake auto-construction nor the preference for the usage of this type of labour.

Low-cost housing based on the concept of affordability is linked to the progressive development model. This allows the design of flexible housing supply solutions which can give households a wide range of choice as to the timing, method of construction and sources of labour input in the completion of the housing product (World Bank 1975; Keare, D and Jimenez, E. (Ibid 1983). Affordability of these solutions assumes implicitly that households will want to expend interhousehold and intrahousehold time, labour and other resources over a given period. The literature shows however, that this is generally a false assumption because of the opportunity costs involved. It was found that low-income households do not have that great deal of time available and many employed labour rather than use autoconstruction or mutual help. According to the UNCHS, for example, the employment of low-income groups is characterised by long working hours and unstable and irregular jobs. Therefore, many households cannot find the time to construct their own homes.(Ibid, 1984). In fact many households are employed in informal sector activities or are actively seeking employment. Consequently, there might not be that much labour time available for housing construction as it involves an opportunity cost between the need to generate an income and the use of that time and labour in the construction of their own homes. According to the World Bank, 40-80% families in their first generation of projects hired labour to construct their houses. (World Bank, 1983). For this reason subsequent projects sponsored by the Bank included a construction loan (Keare, D and Parris, S, 1983; Bamberger, M. *et al*, 1982). In a 1981 survey in Tanzania, of the fifty-six housing units in a squatter upgrading area only nine units were constructed with auto-construction. (Rodell 1984).

With respect to labour preference, Jorgensen in his study of low-income families in Kenya found that 40% of the households in his survey area preferred the city council to build their homes, 41% preferred a private contractor, 9% preferred auto-

construction, 5% preferred mutual help and 5% indicated that they did not know. He also found that auto-construction constituted about 10% of housing costs on the average. Of those willing and able to afford time, these indicated that they could only spend 10-20 hours per week. (Ibid, 1976). Similarly, in the Dandora project in Kenya, building groups consisting of participants were developed to provide mutual help assistance in housing construction. However it was found that households were more prepared to spend time on their own house than those of others. Many participants did not honour the obligatory time schedule for mutual help assistance. The same situation prevailed in the building groups in Bangkok (UNCHS 1984). It was also found that the building groups themselves hired sub-contracted labour to complete the units, (Chana Ibid 1984), which questions this implicit auto-construction assumption.

This section shows that auto-construction is not favoured by low income households because of the lack of skill and unavailability of time. This issue of auto-construction continues however because many projects still continue to assume that there is abundant free labour time available to be incorporated into the auto-construction process. For this research it is important to know the conditions in which households will be willing to use auto-construction in establishing the ability and willingness to pay for housing.

#### **5) Assumption on the Willingness of Households to Make Monetary Contributions Toward Housing**

One of the objectives of making housing affordable is the need to encourage the mobilization of financial resources of the household (Lee, M. 1985). However, the idea that households will be willing and able to invest with any regularity or invest at all in housing has been questioned by writers such as Peattie, L.(1985); Tym, R. (1984) and UNCHS (1984). As Peattie indicates, people might not want to pay money for a particular kind of housing if there are other possibilities on which to spend their income which are more attractive.(Ibid). Therefore, to assume that they

will be willing and able to pay for housing without understanding the perceived importance of it to them, even where overcrowding and poor living conditions might suggest a need, is clearly erroneous. Morris and Winter for example, indicate that households give weightings to items of household expenditure and investment. There is therefore a need to understand the priority preference for housing within this schedule as it will imply the willingness to pay for it. (Ibid,1978). In support, a UNCHS report claimed that households are willing to pay if they receive what they want and if such housing meet at least some of their most urgent needs and priorities. It is therefore necessary that they are involved in the planning of housing programmes so that what households want is what is provided thereby ensuring that they will want to spend their money on the product.(Ibid, 1984).

This section shows that it is important that the place of housing in the household's expenditure and investment preference schedule is known as the ability and willingness to pay will be predicated on this. This is an aspect which is considered by this research.

This concludes the presentation of the assumptions.

#### **2.1.4 Housing Characteristics and Affordability.**

The literature has shown that the ability and willingness to pay for housing might be predicated on the preferences and trade-offs that households are prepared to make. For example, the World Bank as early as 1975 recognized the need to understand the trade-offs that the poor make in respect of their accommodation type, proximity to employment opportunities, utilization of self-help, mutual help and paid labour in the construction of their houses. In its 1975 paper on *Housing*, the World Bank indicated that..."*families usually have at least notional choice between relatively roomy and good-quality shelter at locations with poor and costly access to income earning opportunities, and very cramped conditions in locations with good access*".(ibid 1975,p.20). The Bank recognises however,that the "*data required for making such*

*decisions are not readily available". (Ibid, 1975).* But while recognizing the necessity of understanding these trade-offs and the constraint posed by lack of data, the Bank's main concern in its sponsorship of low cost housing projects based on the concept of affordability, has been to relate housing cost to the proportion of income households are able and willing to pay. The importance of considering the trade-offs in understanding the willingness to pay perspective of affordability in housing, are stressed by other researchers. This is so since the trade-offs households are prepared to make might actually relate to their housing preferences which will ultimately have implications for the ability and willingness to pay for. According to Follain et. al., very little is known about household preferences for attributes such as space, adequacy of style, location with respect to access to work or about trade-offs between land and dwelling or between internal space and the quality of the dwelling. (Follain et. al., 1982).

For Morris and Winter, the household's consumption decisions reflect the effort to achieve certain norms as set by the family, community and culture. These norms are the preferred state, the goals or limits to be achieved. In respect of family norms a housing preference is the type of housing a family wishes to consume given current conditions relative to other housing consumption possibilities (Ibid 1978). For these researchers, a family has a housing problem when a housing condition deviates perceptibly from the cultural, community and family norms recognised for space, tenure and structure type quality, expenditure and neighbourhood characteristics. Further, the *"measure of the desirability or quality of a dwelling involves the subjective reaction of people to the attributes of the unit"*.(Ibid, 1978 p.126). Therefore, the definition and measurement of the quality of housing requires *"a knowledge of the objective attributes that contribute to quality through the subjective reaction of families to these attributes"* (Ibid, 1978 p.126).

Morris and Winter found, from their North American study, that most families are willing to pay extra for a dwelling if they can own it, if it is detached, contains the

correct but not necessarily a great deal of space and is in the right location. However, because of the variability in family norms their subjective reactions to these housing attributes will be variable. The extent to which families will react positively to the attributes of the dwelling can therefore be measured by how much they are willing to pay for housing with the specific combination of attributes they perceive in the housing. Therefore, willingness to pay for housing with a specific combination of attributes depend on how highly the household value the combined characteristics of the unit. They claim also that the source of the *"willingness to pay for a given type of dwelling is the perception of the extent to which important needs will be filled by the purchase"* (Ibid p.126). This view has been corroborated by UNCHS when it reported of sites and service schemes that beneficiaries will only be willing to pay if they receive housing that meets their most urgent needs and priorities. (Ibid, 1984).

Follain, J. and Jimenez, E., cited the issue of trade-offs among housing attributes as being important to the decision to pay for housing. They claim that the cost and benefit of housing will depend on the components in the housing package. For them, it is therefore essential to know how beneficiaries or intended beneficiaries are willing to trade-off these components one for another. For them, knowledge of these preferences will allow housing projects to be designed in congruence with the preference of beneficiaries. They claim, also, that the various components that go to make up the housing package in respect of land and characteristics of services warrant intense investigation in respect of the extent to which they influence the ability and willingness to pay for housing.(Follain and Jimenez, 1985). In support of these views, Mayo claims that...*"if information is available on the trade-offs made by households among different elements of the housing infrastructure bundle (eg. relative preferences for size and quality of structure, proximity of community facilities and type of infrastructure etc.) it might be possible to design a package of shelter and infrastructure characteristics for which households are willing to spend a good deal more than they normally do but costing no more to provide than shelter they already occupy"* (Ibid 1985 p.72). Mayo feels, however, that... *"more empirical research into*

*the nature of such trade-off and their implications for project design could be of great benefit in improving project design and housing sector strategies." (Ibid 1985 p.72).*

The following are research findings relating to the willingness to pay for space and land tenure security.

### **1) Willingness to Pay for Space in Low-cost Housing**

Follain et al, have examined housing crowding and willingness to pay for additional space in Korea. The aim of their research was to evaluate households' willingness to pay in the sense of an extra amount of income, for additional space. They found that in Korea, households would have been willing to pay an additional 28% of the rental rate of a room for an additional 3.3 sq.m. of space. This amount would not cover the cost of the space provided. They concluded that in such conditions it would be impractical to construct larger units that households would not be willing and able to pay for. Follain et.al., stated that the government would have to make up the gap and as far as the World Bank is concerned for example, this is the very reason why it insists that projects be designed to be affordable or with little or no subsidy. However, to do this it is imperative that the assessment of affordability be properly executed such that what households want and are willing to pay for in terms of housing attributes is what housing project designers actually provide They indicated also that it is important to know how these attributes are weighted since attributes such as access to piped water, electricity, improved public services and sanitation could be as valuable as additional space. Further, overcrowding in settlements does not mean that people will be willing to pay more for extra space, even where incomes are high and there's the apparent ability to pay. (Follain et al,1982).

## 2) Security of Land Tenure and the Willingness to Pay in Low-cost Housing

It has been shown in the literature that security of tenure through ownership is a strong determinant of housing investment and consumption after access. Jimenez, for example, has corroborated the importance of tenure security in his analysis of the Tondo upgrading project in Manila. Here he found that after only three months the overall housing quality had increased by 30% to 40%. He has noted however that while his data base does not allow him to ascribe all the increase to the effect of tenure...*"the changes certainly seem dramatic especially to other estimates of changes in average values of housing in both developed and developing countries"*. (Jimenez, 1983 p.75). For Jimenez the conclusion is that...*"a significant portion of the changes... must be project-induced"* (Ibid).

Jimenez also found that the sudden increase in housing improvement after Tondo upgrading project was an indication of households financial ability to respond to certain incentives as...*"they appear to be able to generate enough resources to make substantial investments even in the absence of formal and effective mortgage market... the riskiness of investments in the dwellings was lowered by the provision of tenure, and this was apparently a sufficient incentive"* ((Ibid, p.81-82).

Though it can be shown that there is a positive correlation between security of tenure and housing investment, for Doebele the critical element in land tenure security may not be so much the legality associated with owning, but rather the recipient's perception of his security in relation to the investment he is contemplating. (Doebele, 1978). Further, as Cooke explains, in such instances tenure security is perceived when infrastructure is provided and not necessarily as a consequence of household's having a legal document stating ownership to property He indicated that for example, that in a sites and service scheme in Malawi the lack of legal document indicating legal ownership did not prevent households from investing in housing. (Cooke, 1984). This finding has also been corroborated by Ward, in his research in squatter housing

in Mexico,(Ward,1989) and Ramirez, et.al., in their work in Caracas, Venezuela. (Ramirez, et.al., 1991).

Jimenez also found that the level of housing investment as a consequence of tenure security might relate to household economics and demography. He found that in Davao city, Philippines, higher income groups were willing to pay more for tenure security than poorer ones. Also that larger households were willing to pay less for security of tenure than smaller households in one analysis in which income was held constant. This he explained was due to the fact that where income was held constant it would imply that larger households would mean lower income available for housing payment, therefore the ability to pay would be lower.

The arguments in this section show that it is important that the housing preferences and trade-offs among attributes be considered in determining the ability and willingness to pay in terms of their standard type and quantity. For this research, the terms norms, preferences, and trade-offs among housing attributes suggest acceptability and desirability and in respect of trade-offs, compromise in the standard of housing to be consumed. Trade-offs imply resource limitations to effect the desirable attributes and/or exigencies in conditions of specific attribute which will give rise to a change in the order and/or type of the attribute demanded. These terms therefore insinuate the need to determine 1) what standard is socially acceptable; 2) what standard expresses the acceptable minimum at any conjuncture and 3) where compromises are to be made with respect to trade-offs among attributes that describe that acceptable minimum standard, what conditions will give rise to these changes in preferences.

The evidence of the studies outlined above show that households might be willing to pay for housing attributes which are congruent to their preferences. What these studies fail to do is to indicate why and the conditions in which households can be expected to be willing to pay for housing attributes. This is because they relate



mainly to a process of descriptive accounting rather than an analytical expose that seeks to understand and explain these occurrences. They do not provide an understanding of how trade-offs among attributes or combination of attributes are decided, to the extent that the standard of attribute acceptable will describe the acceptable minimum standard at any conjuncture. This might be due to these aspects not being the objectives of these studies. For this research these aspects are necessary to explore as they will influence the establishment of affordability.

### **2.1.5 Eligibility Criteria and Related Issues**

Another important issue in affordability relates to the theoretical assumption implicit in the eligibility criteria to which it is linked. Theoretically, while affordability by definition does not discriminate against household types based on income, the literature shows that the implicit assumptions of the eligibility criteria to which it is linked in practice are biased against certain household types, for example, women headed households, (Moser,C. 1987; Chant, S. 1984; Nimpuno 1983; Peake, L. 1987). The evidence has shown that women are more likely to be willing to pay for housing than men because of the importance of housing to them in child and family welfare. (Moser,C.Ibid ; Chant, S. Ibid; Keare, D. and Jimenez, E. 1983). Yet the eligibility criteria for access to the majority of housing programmes in developing countries, where on the average women constitute 30% of the heads of household, are biased against them (Moser, Ibid). The bias arises from the implicit assumptions that households comprise the nuclear family which is seen as the cultural norm for society; that household decisions are made by a central figure seen as the head of the household and that there is consensus among household members with the decision of the head (Moser,C. Ibid; Clark,M. 1984; Peake, L. Ibid). In the majority of these projects the selection process stipulates that the participants should be the head of the household assumed to be male. This is because, according to Chant, households are often defined based on the assumption that husbands are normally head of household. Women where they appear to be the head, are usually described

in relation to the absence of the male adult figure. For example, defacto women-head is defined by the temporary but long absence of the husband and de jure women-head by the absence of an adult male. (Ibid 1984).

For Clark these definitions do not identify the economic functions that define the head of the household irrespective of gender. For her it is important that such definitions take account of the kinship network in the households economic activities. This is so since the household's economic affairs may be determined by kin living outside of the dwelling unit. *A male adult could be present and not be the main provider or manager of household activities.* (Clark, M. 1984). This tendency to assume a male head will be further examined in section 2.4. below, when the management and centralization of household resources is being discussed.

For Bruce (1989), the tendency to view the male head of household as the main organiser of household's resource distribution underestimates the contribution of women and children and is generally the result of survey biases. According to her this is implicit in the survey methodologies and census definitions. Women's work is thought of as domestic while a male head of household even where engaged in subsistence production is considered part of the labour force. Non-wage family workers and women are seldom considered part of the labour force unless engaged in commercial activities (Bruce, 1989). For Folbre, the tendency to undervalue women's earnings results in this source of income not being considered important to household production and consumption decisions. She claims that the head of household income and his welfare is taken as a proxy for the well-being of all other members of the household (Ibid, 1986 p.980).

Many housing programmes designed on the concept of affordability also stipulate that households should show proof of regular, stable incomes, usually the wage income of household head and that they must demonstrate a specific income level. These requirements proved difficult to fulfil for households with irregular incomes and in

particular women-headed households that fall into this category (Nimpuno, 1983; Moser and Chant, 1985). Writing specifically on the effect of the eligibility criteria on women, Moser and Chant have indicated that the income required in these low cost projects where the emphasis is on earned income and gross income, pose a difficulty for women. They claim that there is a need to consider income transfers and the per capita income within household in the assessment of the ability to pay. With respect to the willingness to pay, they have indicated that this aspect of the concept of affordability might be dependant on gender differences as supported by case studies from Queretaro, Mexico and Solando in Quito, Equador. In the first case, women-headed households and male-headed households with earning spouses often allocated proportionally, more of their disposable income toward housing consolidation than those household with a single male earner. In the latter case women-headed households were prepared to pay higher levels of costs, to afford the cost of hired labour, in order to save on construction time involved in the auto-construct their own dwelling. (Ibid, 1985).

This section shows that the eligibility criteria for access to housing projects, regarding the level of income and its regularity and the assumption of the structure of households conspire to discriminate against certain households. The question is why should there be the need for these criteria if affordability implies that the standard of housing can be designed to match the level of income?.

#### **2.1.6 CONCLUSION OF PART 1.**

The preceding Part 1 points out the issues found in existing literature reviewed with respect to the determination of affordability, as applied to low cost housing in developing countries since 1974. They show that 1) There is a need for a clear conceptual definition of the components of income and cost to be used in calculating affordability; 2) That these components require to be appropriately defined and measured; 3) That income in theory is not a constraint to housing access as a solution

can be found to match the level of income providing standards can be reduced to what households are willing and able to pay for. However, the emphasis on the ability to pay a proportion of income, to the virtual exclusion of understanding the willingness to pay aspect therefore the impact of this aspect require to be elucidated ; 4) That there is a large variation in the proportion of income households will spend on housing to the extent that the 20-25% income expenditure assumption is invalidated; 5) That income is a poor proxy for wealth and that the monetary resources of the household should not be equated to available earned labour income solely; 6) That to assume that households have an abundance of time and the skill to engage in auto-construction is erroneous because of the unavailability of skill and labour time; 7) That the ability and willingness to pay for housing require to be linked to the preferences for housing attributes that describe the acceptable standard; 8) That trade-offs households might be required to make in respect of housing attributes might influence the ability and willingness to pay; 9) That the assumptions contained in the eligibility criteria for access to the housing developed from the application of this concept, conspire to discriminate against certain household types *eg.* women headed households; 10) That income might not be the only factor influencing affordability but that this ability and willingness to pay could also be a function of social and demographic factors as well which have not been fully accounted for in existing literature reviewed.

The critical issues and findings coming from existing literature leads this researcher to conclude that the main problem with the application of the concept of affordability to low-cost housing so far is the inability to establish levels of affordability among low income households. The outcome is that there has generally been a non-correspondence between the housing supply solutions developed on the concept so far and the ability and willingness to pay for these solutions among low income households. However these findings only outline part of the problem. It is the view of this research, that this inability also relates to the absence of an understanding of the social and demographic characteristics of households. The establishment of the

ability and willingness to pay for housing might be predicated on these social and demographic attributes. This researcher considers that the influence of these attributes are relevant to elucidate and they actually set the framework and emphasis of this research. The emphasis on the ability to pay can perhaps be explained by the fact that existing literature is coming largely from the economics discipline even while the concept as defined implies the influence of social, demographic and behavioural perspectives. Consequently, the willingness to pay is interpreted mechanically and takes on an economic characteristic. As a consequence, in the practical determination of housing affordability there is an apparent need to incorporate an understanding of the social and demographic aspects as they will influence the willingness to pay at any conjuncture. The emphasis on the ability to pay to the exclusion of the willingness to pay perspective is therefore questionable and explains why there is an inability to establish levels of affordability among low income households.

The following section provides a critique of the concept of affordability by this researcher, from this latter perspective of the inability to establish levels of affordability. This is to provide a further justification for the call for a re-examination of the methodological application of concept as employed in the current low-cost housing programmes in developing countries.

## **Part 2**

### **2.2 A Critique of Issues of Affordability not Examined in Current Literature on the Concept.**

This researcher finds that there are certain issues of affordability not covered in current literature on the concept which are relevant to elucidate. In support of these issues other literature dealing with household economics and social anthropology have been consulted to support this critique. These issues relate to the implicit assumptions contained in the definition of affordability in respect of the concept, social and

demographic characteristics of the household as a unit of analysis; the impact of these social and demographic characteristics on the ability and willingness to pay and the need to account for the influence of the housing preferences and standard on the ability and willingness to pay. The section argues and provides evidence for the incorporation of these social and demographic considerations in the establishment of the ability and willingness to pay for housing among low-income households.

### **2.2.1 The Social and Demographic Perspectives.**

There are two aspects to these social and demographic perspectives that have not been covered in the current literature dealing with affordability and which are relevant to this research. The first relates to the implicit assumption that low-income households are unified entities whose members centralize resources for the households welfare while subsuming their own self-interests. The second relates to the impact of household composition, headship structure and inter-household relations in its survival strategies, and by extension its housing strategies.

#### **1) Assumptions of a Unified Household Model**

There are two aspects to this issue. These are that consensus obtains among household members in respect of the daily decisions pertaining to its survival strategies and that its resources are centralized prior to their use in these strategies.

##### **a) Assumption Regarding Consensus In Consumption Decisions**

There is an implicit assumption in the definition of the concept that the household comprises a unified entity. As such there is the implication that consensus obtains in its housing strategies. This research takes the view that household comprises competing and conflicting individuals and that the resources they control must be negotiated for. It cannot be assumed that the resources they control will go toward

housing strategies automatically for the common good or that household resources are centralized at all. This view is influenced directly by literature that deals specifically with household economics. ( Bruce, 1989; Folbre, 1986; Whitehead, 1981 and Harris, 1981). The findings of this literature are relevant to an understanding of the household's social, economic and demographic relations that impinge on its decision to consume housing and other items of household survival. They are presented here to support the claim of this research that there is a need to understand how resources are controlled and negotiated for in the establishment of the ability and willingness to pay for housing.

The implication of viewing the household as a unified unit disregards the internal inequalities and conflicts that often prevents it from acting in unity. (Bruce, *ibid*). This view of the household as a unified entity is generally the economists' way of understanding and analysing them. (Bruce *Ibid*; Folbre, *Ibid*; Whitehead, *Ibid*). It is presumed that household members all act in the interest of the household to the extent that they will be willing to contribute the resources they control toward household survival and further, that the household decision to consume items is derived through consensus and through the initiative of a main decision maker who controls its resources. (Harris 1981). According to Bruce, theories that ignore the inequalities and conflicts are inadequate because they fail to acknowledge the negotiation that take place over the assets and resources of the household. She claims also that they ignore the tensions between generations and partners over the life-cycle, and the conflicts over the use of income. (Bruce, *Ibid*).

The literature consistently shows, that there is generally tension in the household over the use of income and other resources. This arises partly out of the lack of information on the earnings of male bread winner and partly out of the inadequacy in reporting of women's income by women themselves because their earnings are so irregular (Chant and Ward 1987; Moser, 1987; Whitehead 1981; Bruce, 1989). If there is tension in households over the allocation of money for example, it cannot be

assumed that these resources will be made available for housing or other forms of investments without conflicts and negotiation. Further, there are allocation priorities in respect of the income resource. *eg.* women who are concerned with the welfare of the family will allocate their income toward the welfare of children *eg.* nutrition and daily subsistence (Bruce, Ibid). Men on the other hand tend to withhold some of their income for personal use (Whitehead Ibid; Bruce, Ibid) but they make higher contribution to the household when women are earning the most and do not increase in times of stress. (Bruce, Ibid). Bruce concludes that to understand the determinants of economic change it is important to understand individual income flows within households. (Bruce, Ibid).

Bruce sees the adherence to the view of the household as a unified unit, as a convenient policy tool since it is more simple to view the household as behaving as a unit and prescribe policy to match rather than to consider the separate economic behaviour of all its adult members. She claims that to assume household unity is *"analytically simpler and avoids the issue of internal distribution of resource which could prove difficult for the development of mechanisms to deliver specific benefit to individual members"* ( Bruce, Ibid, p.980).

Following from the above, it is the view of this research that policy makers and designers of housing programmes should seek to understand the needs of all adult members of the household and the effect of this on the household's ability to afford housing and pursue its housing goals. It is important that the household is viewed as a system of conflicts and inequalities in the determination of housing affordability especially as the conflicts and inequalities might relate to the distribution and management of resources needed for housing payment. There is a need to know how agreement in housing payment decision is achieved among competing household members and whether instead of consensus there is an established system of resource distribution in which certain household members are given the responsibility of allocating resources toward specific items of household consumption. There is a need



to know the conditions in which household members will be prepared to contribute the resources they control toward housing expenditure, that will describe the ability and willingness to pay at specific conjuncture. The literature evidence of inequalities and conflicts in households confirms the view of this researcher, that in the elaboration of policies and programmes housing designers must take cognizance of household dynamics and allow the determination of the ability and willingness to pay for housing by the households themselves. They will have a better perception of the extent to which negotiation over resource use is possible how their household composition and structure will influence their ability and willingness to pay for housing. This consideration is of particular significance when one considers the alternative forms that household structure takes on in developing countries being not necessarily typical of the nuclear type or consisting of kinship relations. For example, many households take on non-nuclear forms as a survival strategy. (Chant, 1984). It cannot be expected that individual members of these households with or without kinship relations, will be prepared to contribute the resources they control toward the improvement of housing. For it is possible that particular members might be saving for their own separate accommodation. Further, the composition of these alternative household structures do not always comprise members who are related by blood or law but often consist of unrelated members who might be in their present housing arrangement awaiting the time when they would have sufficient resources to form their own separate household. Can it be assumed that all members of such a household will be willing to contribute the resources they manage and control toward the current housing if it is considered as a temporary condition for them?

The above discourse points to the need for a system to address the needs of individual household members rather than to assume household unity of purpose. This research addresses this issue.

## **b) Assumption On the Centralization and Management of Household Resources**

It is often assumed that household members pool resources. The pooling of resources implies centralization and then reallocation and presupposes a centre from which the redistribution takes place (Harris, 1981). For her, this view offers no explanation for the multiplicity of forms of household allocation even though it is clear "that the economic relations within households do not always take the form of centralization of resources followed by distribution by the head." (Ibid p.56). It has been indicated in the previous section that it is often assumed that household income in the form of money, would more likely be pooled and distributed by a single authority.(ibid). However, recent studies of household income have shown that the origin of money is often taken into account in how it is spent and that there is a considerable variation in how different portions of household income is allocated (Brennan and Moss, 1987; Whitehead, 1981; Bruce, 1989). Bruce claims, for example, that in varying cultural settings women allocate the whole of their earned labour and other incomes to meeting basic human needs of the household. (Ibid). Whitehead points out studies of households in England in which husbands and wives earned an income and in which it was found that there is a separation in expenditure. Wife's income is spent on items such as consumer durables, holidays and clothing for the family while husbands income was spent on rent, heating, food, etc. (Ibid).

The implicit assumption that households members pool resources for re-allocation on items of household expenditure appears an invalid assumption given the evidence on inequalities and conflicts within households as shown above. There is clearly a need to understand the dominant form of household resource allocation and to confirm from this whether it can be assumed that low-income households will centralize the resources controlled by individual members for allocation to housing as specific item of household expenditure. There is a need to know who is responsible for housing expenditure within the household, whether or not they centralize resources prior to

housing payments and whether this is a common feature among low-income households if it is.

Writers such as Wallman, view the household as a fluid concept, a resource system into which and out of which resources, including human resources, flow suggesting a certain dynamism. (Wallman,1986). For this researcher, housing programmes and policies should seek to understand this dynamism. If the household is viewed as unbounded and fluid, it is expected that the potential of its resource base for housing investment and expenditure will be greater. However this cannot be taken for granted. This is an important consideration since in the elaboration of affordable housing solutions it is expected that households will be willing and able to co-opt intrahousehold and interhousehold monetary and non-monetary resources for housing construction and payment. The implication of this is that it is expected that the flow of resources between and within households will have to be negotiated for. Following from this, therefore, it is important to know the extent to which households will be able to co-opt the interhousehold and intrahousehold resources that might be needed for establishing its ability and willingness to pay for housing. In order to know this the household must be seen as an unbounded unit.

Another issue is that it cannot be taken for granted that the head of the household is responsible for the management of household resources or that such a person makes all the decisions pertaining to their use. For Harris, however, the concept of household head is not illusory because in many instances it does actually involve real control of resources. For her, what is required is for the nature and extent of control to be determined and specified. (Ibid, 1981). This is why Wallman recommends the identification of kin-mobilizer and resource keepers, implying that individuals within households have specialized tasks. The assumed male head might not be designated the one who is responsible for household resources but might be the one who mobilize kin members around particular issues affecting the household. For Wallman, this identification of individual responsibility is possible if the household is viewed

as a resource system. By viewing the household as a resource system the formal legal head is not necessarily the manager of all its resources. Other members take on the responsibility of allocation and management of specific resources. She sees this specification of responsibility as partly a matter of household structure and partly one of personality or individual preference (Ibid 1986).

## **2) Household Composition, Headship Structure and Inter-household Relations**

The impact of these social and demographic variables have not been considered in current affordability determination largely because the emphasis has been based on economic and quantitative considerations. This research is of the view that these socio-demographic variables are highly influential in shaping economic behaviour toward housing and as such they cannot be discounted.

Household composition, headship structure and interpersonal relationship appear to be significant in understanding the ability and willingness to pay for housing. Chant (1984) and Chant and Ward (1987) have shown that household composition and structure are significant in housing consolidation and expenditure patterns among low-income households. Though they were not examining housing affordability among these households, their findings have relevance to the claim of this research, that affordability determination should show on awareness of the influence of these social and demographic variables.

The significance of women in household housing consumption decision for example, has been evidenced in the literature (Mayo, 1985; Moser, 1987). Mayo found that female heads spend more on housing than male heads all other things being equal. (Ibid). This finding is significant in the context of housing project analysis for developing countries where in the majority of low-income urban communities a large number of the households are headed by females. Often project planning does not

take cognizance of this factor. Moser has also pointed out the significance of understanding household structure and composition in the design of housing programmes.(Ibid). Like Chant (Ibid 1984) she has shown the importance of women in housing and settlement development reiterating that women are more concerned about the provision of housing services precisely because they are responsible for household welfare and are consequently...*"more aware than men of the need for infrastructure and service and are more committed to the success of a project that improves living conditions."* (Ibid,1987,p.12). She also claims that...*"with the inadequate provision by the state of housing and basic services, it is woman who not only suffer most, but also are forced to take responsibility for allocating limited basic resources to ensure the survival of their households"*. (Ibid, 1987 p.13). Despite this evidence the needs of women, to whom housing appears more important, are left out of housing programmes as a consequence of designers' assumptions and lack of understanding of household consumption dynamics. Implicit in the recognition of the importance of housing to women is the idea that it is expected that women would be more willing to pay for housing services because of the primacy of housing in household welfare for which they are responsible. For Moser then...*"examination of the assumptions that underlie government and international agency housing policy shows why it is necessary to distinguish housing needs not only on the basis of income now commonly accepted, but on the basis of gender, by which is meant recognition and understanding of the different needs of women and men in low-income communities"* (Ibid, 1987 p.12).

In addition, Graham has shown that households often separate the control and management of money on gender lines.(Graham,1987). According to Graham...*"the control of money is more likely to be a male rather than a female domain. It involves making key decisions about how much money individuals within the family will have and on what items of expenditure they will take responsibility for."* (Ibid, p.62). On the other hand, he states that the management of money is more of a female's responsibility which involves the implementation of the financial decisions

made by the individuals who control the money. This responsibility involves the organization of the budget, payments of bills and... *"finding ways of economising when income and expenditure are out of line"* (Ibid). Moser claims that ...*"because women accept primary responsibility for household budgeting, the financing of housing and repayment of loans is often also their responsibility. While men often agree to the loan conditions wives have to balance household budget to pay this back"*. (Ibid, 1987, p.20). She found further that *although "investment in housing may be linked to potentially disposable income within the household, women do not usually control this."* (Ibid, 1985, p.20). Of significance, she noted that in certain households committed to auto-construct their dwellings to a certain standard in a given time, that this could have adverse impact on other aspects of household finance *i.e.* as she explained...*"if housing finance is made available at the expense of domestic budget, women may end up cutting back on food and working much harder in the home to compensate for the drop in resources to save money."* (Ibid, 1985, p.20).

The preceding sections show that the household comprising contending individual and that it cannot be assumed that the resources they controlled will be made available for the overall good of the household in its survival strategy and by extension its housing strategy. They show also that household monetary resources are managed and controlled differently in different households. Consideration of these patterns of money and other resources management and control relative to household structure and composition might be significant if the ability and willingness to pay for housing as an item of housing expenditure is to be determined.

### 2.3 CONCLUSION

From the discourse outlined in this chapter this research concludes that the problem in the design of low-cost housing is the inability to establish levels of the ability and willingness to pay for such housing by low-income households. This is so as to ensure that these households will have access to such housing. This inability stems partly from the definitional, measurement and operational inadequacies in respect of

the components that describe the concept of affordability, the implicit and explicit assumption relating to these components and the eligibility criteria that determine access to housing designed on the basis of this concept. This inability is also attributed to the absence of an understanding of the willingness to pay perspective of the concept as it relates to the social, demographic and behavioural phenomena concerning the household. This problem therefore forms the *raison d'être* for this research as it seeks to find answers to what still remains an outstanding question i.e. " how is this ability and willingness to pay established in resource terms so as to describe the affordability of housing at a specific conjuncture?". This is the question that this research poses for empirical investigation. The answer to this question can only be derived if affordability is determined from the perspective of the user household in a qualitative assessment of its housing experiences before any quantity of resources representing the ability and willingness to pay can be derived. It will be preoccupation of this research to investigate the extent to which the ability to pay and the willingness to pay for housing can be established for low-income households based on the exploration of the definition, understanding and examination of the activities and factors that lead to this ability and willingness to pay for housing.

In order to do this it is important that the household be the focus of research and analysis as it has the best perception of its needs preferences and priorities for housing. It is the level where all the factors that influence payment decisions can be adequately observed. The research proposes a comprehensive approach that will integrate all factors in a methodology that will derive understanding of the establishment of the ability and willingness to pay for housing throughout the stages completed and for the future improvements desired. For this research no presumptions or assumptions are made in respect of the central question posed above. The theoretical framework for this research will be presented in the chapter that follows.

## CHAPTER 3

### THE THEORETICAL PROPOSITIONS AND RESEARCH METHODOLOGY

#### 3.0 BACKGROUND

This Chapter is presented in three parts. The first restates the main question and proposition of the research as a whole; outlines the processes of enquiry and justifies their selection; outlines briefly the framework of analysis showing the relationship between the four processes previously mentioned and the proposed stages of improvement in housing development and finally defines specific concepts as they are used in the research. The second defines the stages and processes; states the main questions and related hypotheses as they apply to those processes and details a conceptual framework which integrates the processes and the proposed stages in respect of the establishment of the ability and willingness to pay for specific stages. The third section presents the research methodology.

#### PART 1

##### 3.1.1 MAIN QUESTION AND PROPOSITION

As outlined in Chapter 1, sub-section 1.4, the main question of this research asks "**How is the ability and willingness to pay established in resource terms so as to describe the affordability of housing of low-income households at specific conjunctures?**"

The main proposition states that: **For low income households, the ability and willingness to pay for housing at any conjuncture, can be established when the household is considered as a resource system. The household will be able and willing to pay for housing from its resource capacity when that housing is**



**congruent to the socially acceptable standard or the acceptable minimum standard preferred at specific conjunctures, to remove residential dissatisfaction felt with the existing level of housing consumption; when either its current or changing socio-demographic attributes result in residential dissatisfaction; and when the household is able to mobilize and use available resources to pay for such housing.** The secondary questions and related hypotheses will be outlined in Part 2.

As it was said in Chapter 1, the concept of affordability in housing can be studied through many disciplines such as economics, sociology, behavioural psychology, anthropology, architecture and planning. Each will have its own theoretical constructs to examine and analyse housing affordability, with varying outcomes. To date it has been studied largely by economists and housing experts with an economic orientation and as such there is a tendency in current literature to emphasise the economic aspects of the concept. For this researcher, economic behaviour is conditioned by human actors and, consequently, their social, cultural and behavioural characteristics will influence the economic domain of their lives. This research is therefore located at the interface of all these disciplines, neither emphasising one or the other but recognising their interrelatedness when it comes to the study of housing affordability. In order to avoid biases and assumptions, a user-oriented approach is proposed in seeking answers to the central question posed. This orientation therefore makes it of necessity a largely qualitative study. Where monetary quantities of income and costs are considered they are included purely for demonstrative purposes and not for any economic or quantitative determination. The reason is that this researcher is interested in understanding how low-income households establish their ability and willingness to pay for housing as will be gleaned through their housing development experiences as told by them. The emphasis then, is on determining the factors and conditions which influence the establishment of levels of housing affordability before they are transformed into any monetary quantity. The ultimate objective is to derive the common patterns in terms of these factors and conditions which could form the basis for any future work on the quantitative determination of affordability.

As was outlined in Chapter 1, sub-section 1.5, the housing development experience of squatter low-income households, is expected to follow four distinct stages in the realization of the socially acceptable standard of housing. Each stage is distinguished by the main dwelling attribute preferred which describes the household's acceptable minimum standard for the specific stage. In realising each stage of improvement four processes are expected to operate, giving rise to the establishment of the ability and willingness to pay for the housing improvement at that stage. These processes examined are 1) the changing housing improvement preferences in the willingness to pay; 2) the impact of changing socio-demographic characteristics in the willingness to pay; 3) the development of the resource capacity in the ability and willingness to pay and 4) the mobilization and the use of resources in the ability to pay.

The multidisciplinary nature of housing means that many processes arising from these disciplines can be devised to study it. However, due to resource limitations, this study has undertaken to use the five processes mentioned above. They by their nature are designed to take account of the potential interplay of the various factors influencing housing payment decisions since they will allow for a range of possible responses from the household. They are also chosen because this researcher thinks they are the most important to be considered in that they are sufficient to take account of the social, demographic, economic and architectural influences on the establishment of the ability and willingness to pay for housing improvements. The aim of studying these four processes is to determine their relative influence in housing payment decisions at specific instances in the housing development process. The stage of improvement is therefore the analytical framework within which the interactive influence of each process will be viewed in understanding how affordability of housing is established.

### **3.1.2 CONCEPTUAL DEFINITIONS**

Because of the nature of the subject being studied and its location at the interface of various disciplines there appears to be no established conceptual framework adequate

enough to examine and analyse the empirical exercise associated with this research. Consequently, a framework is proposed based on the knowledge gained from existing literature reviewed on the concept of affordability and the housing development characteristics among low-income households in developing countries. In order to elaborate the framework and propositions associated to the processes outlined in subsection 3.1.1. above, it is first necessary to explain certain concepts as they will be used in this research.

### **3.1.2.1 Household as a Concept**

For this research the household is defined as a resource system following Wallman (1986). It is also one in which at least two members are kin-related and in which individuals contend over the use of the resources of the system. The definition of the household as a system of at least two members are related by blood is to give the system a degree of stability and continuity. The view of the household as a resource system of contending individuals makes possible the identification of resource control, distribution and use in the establishment of the ability and willingness to pay for housing. The mobilization and use of these resources is expected to reflect the value placed on them by the household, with respect to tasks for which they are demanded.

### **3.1.2.2 The Conceptualization of Resources**

For this research resources are the means by which the household will be able to pay for housing improvement. They establish the wealth status of the household by setting the limits and possibilities for the improvement. These resources are both monetary and non-monetary and are expected to come from and be controlled by sources within and outside of the household. The use of these resources might depend on intrahousehold and interhousehold inter-relationships and they might have to be negotiated for.

## **a) Monetary Resources**

The monetary resources considered of relevance are incomes and cash loans. The income concept requires definition. This research proposes a broad definition of the income which gives it a certain fluidity. It is the sum of all monetary resources excepting the cash loan that is available and/ or can be mobilized for housing payment from intrahousehold and interhousehold sources. Based on the frequency of receipt, these sources comprising this total income can be classified into regular income receipts  $i(r)$  and the special receipts  $i(s)$ , which will facilitate payments only at the instance of the improvement. It is expected that the portion of the total income that will be used for housing payments will depend on its frequency of receipt and its amount. Seven categories comprise this total income. Firstly, there is the intrahousehold labour income from primary and secondary earners. This income refers to the net amount of money received as payment for work done outside the household and it represents part or the whole of the receipt of intrahousehold sources. For the household this income the combined regular and new contribution from all earning household members. Secondly, there are the regular, occasional, new and increased income transfers received from relatives and friends. Thirdly, there are the savings and interest on savings. Savings will be of two sources i.e.the formal banking source which will yield interest,and the community based saving system in which no interest is earned. Fourthly, there is the pension. Fifthly, there is the profit from productive enterprises such as tailoring cake making etc and the profit from petty trading activities such as shopkeeping. Sixthly, there is the rental of property such as room sublet and the rental of equipment. Finally, there is the money earned from the sale of tangible non-monetary resources such as land, building, animals and jewellery. The seven categories identified when added together will describe the total household income available for housing payment at a particular conjuncture. The conceptualization of income in this manner means that it is derived from interhousehold and intrahousehold sources.

## **b) Non-monetary Resources**

The Non-monetary resources are of two types. Firstly, there are the tangible non-monetary resources which, for the purpose of this research, are land, house, building materials, animals, furniture, jewellery and consumer durables such as cars. Secondly, there are the labour time resources of individuals which are referred to as the labour resource and are defined below. The concept of labour as a non-monetary resource in this research refers to the free labour of individual members of the household and from friends and relatives outside. These individuals are expected to perform housing improvement tasks in auto-construction activities from which benefits such as labour cost savings will be derived by the receiving household. The use of labour time for auto-construction represents payment for the improvement activity.

### **3.1.2.3 The Concept of Housing**

This researcher is aware that housing is a complex phenomenon which involves not only a physical entity but many processes associated to the development of that entity. However, for this research housing refers to the physical attributes of the structure; the related services and facilities; the land on which they are located, in addition to physical alterations, maintenance and repair processes associated to the physical characteristics. The services and ancillary facilities considered in this research are water and electricity and toilet and kitchen, respectively. It should be noted that this conceptualization of housing applies equally to conventional and non-conventional housing. Housing then, means 1) a complete dwelling with all services and ancillary facilities included before occupancy; 2) any payment for security of land tenure through ownership, whether in-situ or through relocation; 3) sites and services plot or surveyed plot schemes, upgraded plot resulting from infrastructure improvement and land tenure rationalization, core unit development; 4) any residential improvements that the household will make to the existing physical characteristics of the dwelling and the land on which it is located. These are inclusive of internal dwelling space and materials additions and alterations; increases in plot size;

incorporation of housing services and ancillary facilities such as water, electricity, kitchen and toilet facilities whether internal or external; and repairs and maintenance of the dwelling attributes.

#### **3.1.2.4 Housing Improvement**

This research is concerned only with the housing improvement process. Housing improvements are the changes in housing attributes which will improve standards and be manifested by any of the housing described in section 3.1.2.1 above.

#### **3.1.2.5 Socially Acceptable Standard**

The development of this concept and the one that follows, is influenced largely by writings of Morris and Winter (1978) and Ramirez, et al.(1991), cited previously in Chapter 2. Their concepts are modified in this research by integrating the ideas of these researchers with the evidence from the building tradition of low-income households in developing countries. Consequently, this researcher views that the housing improvements that the low-income household will make throughout its housing development process, is based on a staged process toward a norm or standard of housing, which is prescribed by society. The norm prescribes the type of housing which the household should achieve and it is one which most people will want. As such it describes the socially acceptable standard. The ability of the household to achieve this housing norm will be a function<sup>of</sup> the limitations and possibilities of its resource capacity. The achievement of the socially acceptable standard might not be possible as a once only investment and as such households will accept lower standards determined by their resource constraints. These standards are what Morris and Winter (Ibid) describe as preferences or relaxed norms. This research describes these preferences as the household's acceptable minimum standards, a concept to be defined subsequently.

The socially acceptable standard is expected to be specific to the national social and cultural context. Consequently for this research the national, context of St Lucia will

be used to define this norm which is owner occupancy tenure in which both the land and the dwelling therein is owned by the occupant. The house desired is a two bedroom concrete dwelling with a living/dining area, internal water and electricity service and internal kitchen and toilet areas. This is the standard most household aspire to achieve and view as acceptable. This conceptualization is based on researcher's familiarity with and knowledge of the housing in St Lucia.

### **3.1.2.6 Acceptable Minimum Standard**

Before defining the way this concept will be used in this research it is first necessary to outline its importance in understanding housing payment decisions. This section argues that, 1) there is a need to consider what the preferences and acceptability for housing attributes are if housing solutions are to be designed in congruence so that what households perceive to be acceptable and are able and willing to pay for is what is provided; 2) there is need to know why, when and how households will be willing to make these changes in the acceptable minimum standard of attributes preferred at specific conjuncture.

The fact that affordability, as it is linked to the reduction in housing standard, implies that basic minimum shelter is an elastic concept, must mean also that the acceptable minimum standard becomes a non-issue if household will be willing to pay for the standard of housing provided. What appears to be lacking and is important here is the need to determine what is the acceptable minimum standard or housing norm that represent this demand which is assumed to exist and whether there is a specific preference structure for this standard of housing throughout the household's housing development history. This question is based on evidence from the incremental building process that takes place in low-income settlements of developing countries. There appears to be a staged process in which housing size and quality improves with time. This raises the question of whether this process might not be indicative of one in which there is an acceptable minimum standard of housing preferred at specific conjunctures as the household moves towards its ultimate housing standard. If this is the case, it might be indicative of levels of affordability which can be linked to the

acceptable minimum standard required at specific point in time in the housing development process. This will have implication for policies and programmes which seek to improve housing conditions but which do not take cognizance of the housing preference of households at the specific conjuncture. For example, can it be expected that the household which is in a stage in which it requires to change the material quality and permanency, will want to pay for increased indoor space? or if it requires land tenure security through ownership that it will want to pay for increased indoor space?.

There is an interrelatedness between the acceptable minimum standard of housing and the prioritized preference for the housing attributes that describe that standard at specific conjuncture. The household might be willing and able to pay for housing at specific conjuncture if it is of a standard that is preferred and acceptable. The prioritized preference structure for attributes could therefore determine the acceptability of the standard of housing consequent on intervention. Such housing must therefore meet at least the minimum standard preferred.

The extent to which the improvement contemplated or offered to the household on intervention is desirable might depend on their subjective reactions to the attributes of the housing improvement package in respect of it meeting at least the acceptable minimum standard of housing at the particular conjuncture. It is the view of this research that the above perspective on household preferences must be considered in the determination of the ability and willingness to pay for housing. Based on the incremental building tradition that takes place in low income communities, this researcher therefore takes the view that low-income households have an acceptable minimum standard of shelter for specific conjunctures<sup>of</sup> the housing development process which will be defined by the preference for specific attributes or combination of attributes. Each stage of the improvement process will therefore describe the acceptable minimum standard for that specific stage. To the extent that housing affordability can be linked to this preference structure means that the conventional perspectives on affordability will be called into question. For, if the establishment



of affordability relates to this preference structure, then knowledge of it requires some exploration before policies and programmes are elaborated.

This researcher also recognises that there might be circumstances in which a household might need to compromise on the acceptable minimum standard of housing it is willing and able to pay for at a particular point in time. It might need to make trade-offs between the attribute or combination of attributes it prefers because of the exigencies which have developed in existing dwelling conditions or it might need to respond to formal intervention measures which might make the trade-off a necessity.

For this research then, the acceptable minimum standard refers to the housing attribute or combination of attributes that the household prefers, is satisfied with, will accept and is able and willing to pay for at a specific conjuncture, given the constraints posed by its resource capacity. It is expected that the household will have a preference for specific attribute or combination of attributes that describe the acceptable minimum standards throughout the different stages of housing development. This standard then, is the minimum threshold below which the household will not be willing to pay because it is not desirable and acceptable to the household.

### **3.1.2.7 Housing Payments**

In this research the term housing payments refer to two types of resource allocation. Firstly, it refers to housing investments in which amount of monetary and non-monetary resources are allocated to realise housing improvement that will increase housing standard, the potential sale price of the dwelling and yield a return if the housing is sold. These payments will give rise to physical changes in the quality and quantity of the dwelling and related housing services and facilities. These payments will include such costs as regular repayments for cash and building materials loans that facilitated the improvement, the installation of services and routine repairs and maintenance to ensure that the dwelling is kept in an acceptable condition which will enhance its potential sale price.

Secondly, it refers to housing expenditure in which amounts of monetary and non-monetary resources are allocated for the use of housing services that will not yield a return or improve the physical standard of the dwelling. In this research it includes recurrent service payment for water, electricity and waste disposal. These two types of housing payments are subsequently detailed further when housing costs are conceptualized in sub-section 3.2.9.1.

### **3.1.2.8 The Concept of Affordability**

In this research the affordability relationship is given as  $a \geq c$ , where "a" is the ability and willingness of the household to allocate a certain amount of monetary and non-monetary resources to pay for housing and "c" the cost of that housing. The concept of income and other resources have been outlined in sub-section 3.1.2.2 above. But what exactly comprises "a" and "c"?

### **3.1.2.9 The Components of Cost (c).**

For this research cost of housing at specific instances means the price of all the components of production  $c(n)$  and use  $c(r)$  of the housing, that will confront the household. The cost of production therefore, includes 1) the prices of the following components, i.e. land, service infrastructure, building materials, transport of goods, labour and technical services, connection fees for utility services; 2) The associated regular mortgage repayment charges as a result of improvement initiated by formal intervention; required down payment where necessary; repayment amount for loans; 3) the profit associated with the improvement where the improvement is initiated by formal intervention. This includes developers' and builders' profit. The components of production themselves would have already included profit in their purchase price. The costs associated to  $c(n)$  can be grouped into two groups. Firstly, there are those which will form part of regular repayments such as those associated with material and cash loans and mortgage repayments for the housing given if not initiated by the household. These are termed  $c(n)1$  costs. Secondly, there are those which are associated with all other costs of production outlined above and are termed  $c(n)2$ .

Cost  $c(n)$  therefore comprises  $c(n)1 + c(n)2$  costs. These costs are housing investment payments. In this research, cost of use  $c(r)$  refers only to the recurrent payment for housing services even though it is recognised that there are other use costs associated with housing. This cost  $c(r)$  is housing expenditure payments.

For this research, cost  $(c)$ , of housing then, is the total cost of all the elements associated to  $c(n) + c(r)$ . Cost of housing at any conjuncture can now be defined as the composite cost of production of the new housing, the existing costs associated with past investment still being repaid and the existing cost of use involved in recurrent service payments.

It is expected that the cost or combination of costs which the household will face will be dependent on the nature of the technical requirement of the improvement. The total cost of these components will require the household to create and/or mobilize new amounts of resources to establish the ability and willingness to pay at specific conjuncture. The types of costs the household will face will also depend on whether it initiates the improvement itself or the improvement is initiated by public intervention and the characteristics of the improvement. In household initiated improvements some costs such as developers and builders profits will be avoided.

### **3.2.9.2 What is Affordability, "a"?**

Affordability describes the ability and willingness to pay for a housing attribute or combination of attribute which will define the acceptable minimum standard of housing at specific instances throughout the housing development process. Therefore it is important that the two perspectives of the concept are described as they will be used in this research.

#### **a) Ability to Pay**

In this research the ability to pay is the capability of the household to allocate monetary and non-monetary resources from its resource capacity to pay for housing.

This will be dependent on the limitations and possibilities for action, set by development of the resource capacity as it relates to the availability and accessibility of resources. The ability to pay will therefore be dependent on the extent to which available resources can be mobilized and used to pay for housing at particular conjuncture. It will be established from either the intrahousehold capacity or the interhousehold and intrahousehold capacity depending on the level of cost involve, the extent of the resources are available at that point in time for housing payment. It is expected that the tangible non-monetary resources on the one hand, could be translated into monetary forms to make housing payments. On the other hand, non-monetary resources such as intrahousehold and interhousehold labour time associated to auto-construction, can be utilized as a form of payment. The specific details relating to the establishment of the ability to pay are outlined in Part 3.2, subsequently. The ability to pay will depend on 1) the development of the resource capacity and 2) the mobilization and use available resources for housing payment at the specific conjuncture the payment is required.

**b) Willingness to Pay**

The willingness to pay is the desirability for a housing improvement attribute or combination of attributes which is the outcome of the reaction of the household to 1) the changing housing improvement preferences; 2) the impact of the existing and changing socio-demographic characteristics; 3) the ability to mobilize and use available resources to meet housing improvement payments. The measure of this desirability in terms of the extent to which the household will react positively to the improvement, can be seen by how much resources it is able and willing to allocate towards its payment. The details of the factors expected to influence the willingness to pay are outlined in Part 3.2, subsequently.

Symbolically then, the affordability relationship at any improvement conjuncture can be written viz:-  $a \geq c(r) + c(n)$  where  $a$  is the amount of resources the household will be willing and able to pay;  $c(r)$  the amount of recurrent housing service payments the household is already facing, and  $c(n)$  the new cost of the improvement. Costs  $c(r)$

+  $c(n)$  will therefore be the total cost  $c$  the household will be confronted with at the specific instance in which the improvement is considered.

## **PART 2**

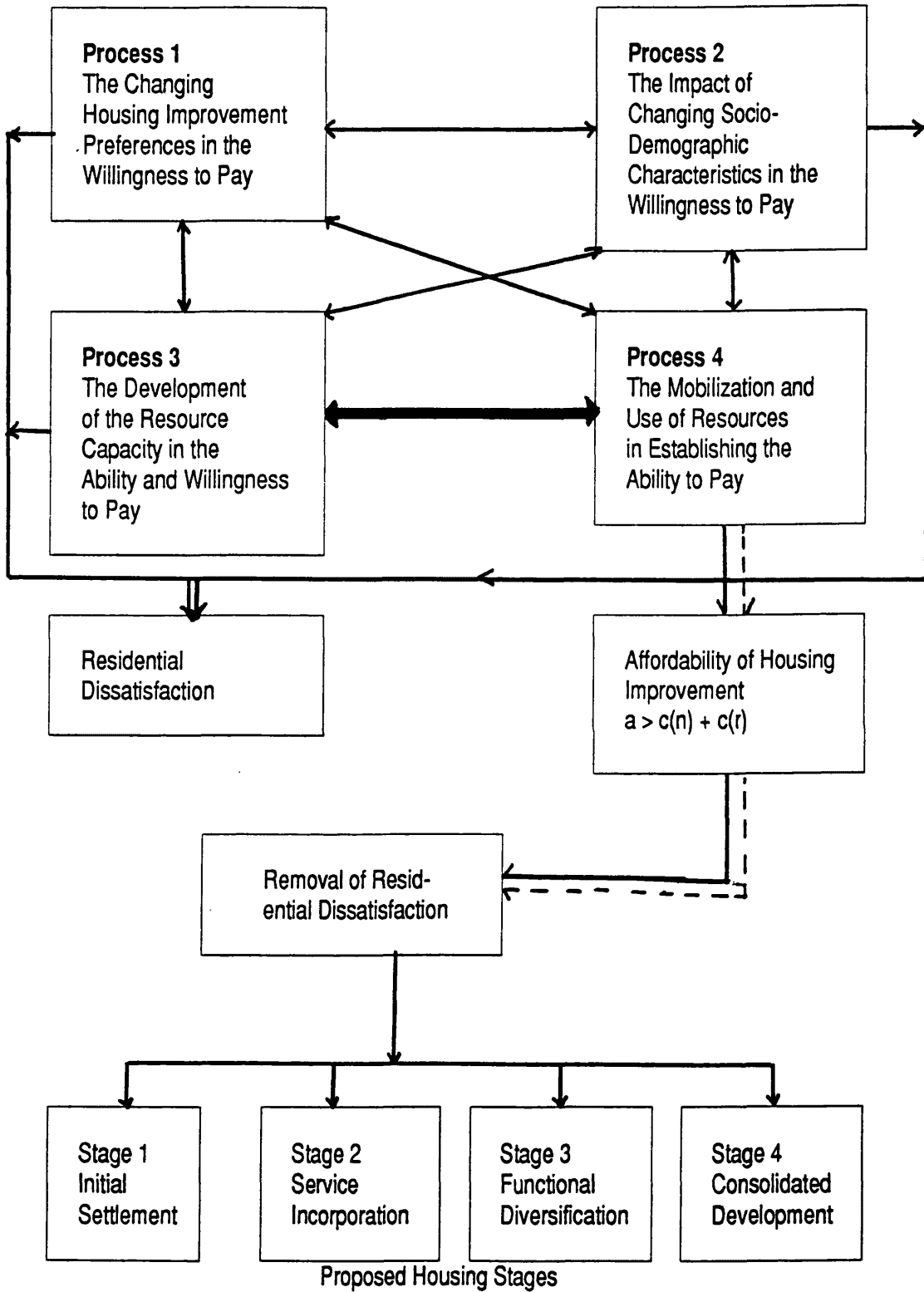
### **3.2 THE CONCEPTUAL FRAMEWORK FOR UNDERSTANDING THE ESTABLISHMENT OF THE ABILITY AND WILLINGNESS TO PAY FOR HOUSING**

Figure 1 shows the integration of the four processes of enquiry outlined at the beginning of this chapter, with the establishment of the ability and willingness to pay for housing in specific stages of the housing development process. This framework is presented in two parts. First, it outlines the expected stages of housing development and the relationship of the processes to these stages. Secondly, it shows, the proposed interaction of the processes and their expected relative influence in the establishment of the ability and willingness to pay for housing in each stage of the housing development process. Before the elaboration of this framework, it is first necessary to define the proposed stages, and process as they will be understood in the framework.

#### **3.2.1 THE PROPOSED STAGES OF HOUSING IMPROVEMENT IN THE HOUSING DEVELOPMENT PROCESS.**

For the purpose of this research, it will be considered that low-income squatter households develop their housing based on what appears to be a staged process. These conjunctures would be good reference points of analysis. Consequently, the conceptualization of stages is an analytical tool devised by this researcher to understand the housing development process and it is influenced by her knowledge of the low-cost housing processes that take place in low income squatter communities in developing countries. These stages are therefore to be understood in this context. In the housing development process it is proposed that specific housing attributes or combinations of attributes are preferred at specific conjunctures which define

Figure 1 : Establishing the Ability and Willingness to Pay for Housing



- Interaction Processes . . . . .  $\longleftrightarrow$
- Residential Dissatisfaction . . . . .  $\Rightarrow$
- Removal of Residential Dissatisfaction (Affordability of Improvement) . . . . .  $\dashrightarrow$
- Very strong interaction expected . . . . .  $\Rightarrow$

particular stages. Each advancing stage describes a higher standard in the development of the housing toward the socially acceptable minimum standard which in this research context is the ownership of a single family, two bedroom concrete dwelling with separate toilet and kitchen areas attached and ownership of the plot it occupies. This socially acceptable minimum standard is determined from the researcher's familiarity with the housing conditions and preferences in the research context. Each stage will therefore represent the acceptable minimum standard of housing preferred for the allocation of resources in that instance. It should be noted that a stage in the housing improvement process will be defined by the type of improvement preferred and by the time when the household begins to implement the improvement to the time when it commences another improvement preference characteristic of the subsequent stage. It is therefore expected that there will be instances in which more than one improvement will occur in a particular stage. However, what makes the change between stages is that the characteristic improvement preference must be initiated. The acceptable minimum standard of shelter that defines each stage is the combined attributes of the previous improvement stage and the new improvement preferences to be incorporated in the specific stage.

This researcher proposes that low-income squatter households pass through four distinct stages in their housing development process. The establishment of the ability and willingness to pay and consequently the movement of the household through these stages will depend on the interactive influence, within and between the stages, of the four processes to be outlined in sub-section 3.2.1.

According to Figure 1, the first stage, described as **initial settlement** is characterised by an acceptable minimum standard of dwelling in which the housing improvement preference for space in the form of a <sup>one</sup> room timber dwelling, with no services or facilities. The second stage described as **service incorporation**, is defined a preference for improvement in the type of access to electricity and/or water service. The acceptable minimum standard is a one room timber dwelling with both or one of these services and no facilities. Land occupation is still illegal. In the third stage of **functional diversification**, the acceptable minimum standard of shelter is a two

room dwelling with specified and separate areas for specific uses, made possible by improvement in the living space attribute through the incorporation of a concrete internal or external kitchen extension. Dwelling wall material change from timber to concrete commences in this stage and is indicative of the improvement in land tenure security. Access to toilet is still from public convenience. Stage four is described as the stage of **consolidated development** it is characterised by ownership of property comprising a two bedroom concrete dwelling with living/dining area and internal kitchen and toilet areas, in-house electricity and water services and ownership of the plot the dwelling occupies. This housing describes the achievement of the socially acceptable minimum standard. The details of these stages are presented in sub-section 3.2.3.

### **3.2.2 THE PROCESSES**

In the sub-section that follows, each process is defined and the main questions and the related sub-hypotheses are outlined. This is then followed by a presentation of how the hypotheses will appear in the proposed stages of the housing development process. The term process as it will be used in this research refers to the means by which the willingness and ability to pay will be examined. The processes are not directly observable, rather their operation will be manifested in certain characteristics at specific junctures in the housing development process. These characteristics will be expressed by the household through the historical reconstruction of their housing improvement experiences and their responses to future improvement scenarios.

In this research the concern is to determine the positive influence of the processes on the ability and willingness to pay and consequently only those features of the process which will cause households to be willing to pay in the sense of wanting to allocate resources for improvements, are considered. The processes are expected to influence either the ability to pay or the willingness to pay or both together. It is not expected that all processes will have equal influence or be relevant for all improvements, or that they will all interact with each other at all junctures of the housing development process.



## **a) PROCESS 1 : The Changing Housing Improvement Preferences In The Willingness to Pay**

This process describes the changes in the development standard of housing improvement attributes and the preference for these attributes over the time. The changes referred to involve improvement in the quality, quantity and type of access as the housing development process advances. It therefore accounts for the changing preference for housing attributes in the establishment of the willingness to pay for housing improvement. Each stage is recognised by the preference for a specific attribute or combination of attributes. This preference and the past improvement achieved in the previous stage, together define the acceptable minimum standard of the dwelling for that particular stage. The housing attributes that are considered in this research are indoor space, water and electricity services, toilet and kitchen facilities, material quality of walls and land tenure security. Housing improvement preferences is the outcome of the interaction between the family's changing socio-demographic attributes and its existing housing attributes at specific conjunctures. This interaction is expected to result in residential dissatisfaction which is removed when the family is able to allocate resources for the improvement which will re-establish residential satisfaction. The ability to realise the improvement preference is therefore a function of the developing resource capacity and the ability to mobilize and use the available resources for housing improvement payment.

These changing improvement preferences will describe the acceptable minimum standard of dwelling the family is willing to pay for at specific conjunctures of the housing development process.

The main question of this process asks 1) What housing improvement preference is desired at specific conjunctures?. It is expected that:- a) In the first stage space in the form of a one room dwelling will be preferred; b) For the second improvement households will be willing to pay for on-site electricity or electricity and water services; c) For the third improvement it is expected that households will be willing to pay for increased dwelling space, facilitated by the incorporation of a kitchen

facility in order to specify the functional use of overall living space; d) For the fourth improvement households will be willing to pay for increased space to consolidate the functional and physical separation of internal space use, improved in dwelling wall material quality from timber to concrete and land tenure security through ownership.

With respect the above expectations the following changes will be manifested in the preference for housing attributes at specific conjunctures:-

### **i) Indoor Space**

Indoor space is small in the first stage when the concern is for shelter to establish an independent and viable unit. Therefore in the first stage, the household will be willing to pay for a one room dwelling. In the second stage the concern is for service improvement. There is no concern for space improvement. In the third and fourth stages space quantity and quality will improve with the functional specification and use of it as ancillary facilities such as kitchen and toilet are added. In the third stage the amount of space will improve with the incorporation of an internal or external kitchen extension. The quality of space will improve with the specification or partitioning of areas of the dwelling for specific uses. In the fourth stage the quality and quantity of space will be further improved and differentiated by the internalization of a kitchen facility if it was not yet become part of the main structure and the internalization of toilet facility.

### **ii) Electricity and Water Services.**

The improvement in water and electricity services relate to the type of access and will be developed over three stages. In this research by availability and type of access is meant whether by public off-site or private on-site provision or inside the dwelling. In the first stage these service will be off-site and available from public conveniences. In second stage, the preference is expected to be for in-door electricity and on-site water service. In the third stage water service will be inside the dwelling.

### **iii) Kitchen and Toilet Facilities**

Kitchen and toilet facilities will be non-existent in the first and second stages. Cooking will take place outdoors or inside the dwelling. Toilet facilities will be available from public off-site convenience. A kitchen extension will be the attribute preferred in the third stage. Where outdoor space exist a pit latrine will also be included in this stage. In the fourth stage an internalized flush toilet will be the preferred improvement.

### **iv) Improvement in Material Quality.**

The improvement in material quality relate to the improvement in type and durability of the walls. This researcher recognises that all components of the dwelling could be improved by improvement in material quality. However, it seems from the trends in low-income building tradition that wall material quality is the component most likely to change. Other components are repaired and maintained. Consequently it is proposed that in the first and second stages the material of the dwelling is the cheap, and temporary timber. The process of material quality improvement will begin in the third stage with the construction of space extension from the more durable and expensive reinforce concrete in which steel rods are used to reinforce foundations and footings of the structure. The process of material improvement will continue with this type of material in the fourth stage such that the completed dwelling in this stage will be one of reinforce concrete. There will be no concern for roof material change except to facilitate repairs and renovations and this is expected to occur at any time over the housing development process.

### **v) Land Tenure Security**

In this research security of tenure relates to the lessening of the risk of eviction over time and ownership of plot. In this process land tenure security through ownership is the ultimate standard preferred. This with ownership of the dwelling will give rise to ownership of property. However it is expected that as the household becomes more

established that there will be increased security of tenure with the reduction in the fear of eviction. This reduction in the fear of eviction will be facilitated by formal intervention in the community through infrastructure and service provision. The provision of access paths, public conveniences such as public stand pipes, toilet and bath facilities, electricity and garbage facilities will give a de facto recognition of the existence of the community. It is expected that the security of tenure without ownership will improve in the second stage and be manifested in the incorporation of services. In the third stage it will be manifested in the commencement of material quality change from the temporary timber to the more durable and permanent concrete. Security through ownership of plot will not be a preoccupation until the fourth stage when the dwelling has undergone substantial improvement. The ability to get land tenure security through ownership will depend on formal intervention.

#### **b) PROCESS 2 : The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay**

The socio-demographic characteristics are grouped together in one process since they are expected to interact in some instances to influence the willingness to pay. Since this research views household as a system of contending individuals, it is expected that there will be conflicts in interpersonal relationships which could cause stress in the living environment such that decisions have to be made to remove it. The decision might necessitate the relocation of individuals from the supporting household. It is also expected that there will be social conflicts in household relationships over the use of resources in its housing strategies as well as over the availability and use of existing housing attributes. It is also expected that positive changes in social status might cause the household to want to pay for improved housing to reflect that status. It is expected that the interaction between the changing socio-demographic attributes and the existing housing characteristics will result in housing dissatisfaction. The changes in demographic attribute of relevance here are positive changes in size not necessarily from natural increase and the growth and maturity of individuals. The decision to remove the residential dissatisfaction will be the outcome of the

household's assessment of its existing resource capacity and its ability to mobilize and use available resources at the conjuncture to pay for the improvement preference required to re-establish residential satisfaction.

The main question of this process asks 1) When will interpersonal relationships in the household influence the willingness to pay?. 2) When and which socio-demographic changes will give rise to residential dissatisfaction and the willingness to pay for housing?. It is expected that 1) interpersonal conflict will give rise to a willingness to pay for housing when that housing is required for shelter of a new household arising from such conflicts. 2) the change in social status caused by marriage or cohabitation decisions will give rise to the willingness to pay for housing; 3) any change in demographic characteristics which will result either in conflicts between household members or inconvenience and discomfort among members over the use of existing housing attributes, will give rise to the willingness to pay; 4) any social discomfort and discontent felt over the absence, poor quality and quantity of any housing attribute will give rise to the willingness to pay for housing to remove the dissatisfaction.

Expectations 1), 2) 3) and 4) will be relevant in the first stage when the household requires to establish a dwelling for shelter to establish its independence and socio-economic viability. Hypotheses 3) and 4), will be relevant for the second, third and fourth stages of the housing development process as the household becomes a more stable and viable unit or if it decides at any time to change its demographic structure and composition for economic reasons as a survival strategy.

### **c) PROCESS 3 : THE DEVELOPMENT OF THE RESOURCE CAPACITY AND THE ABILITY AND WILLINGNESS TO PAY**

This process describes the development of the monetary and non-monetary resource capacity that will facilitate the establishment of the ability and the willingness to pay. It is proposed that this resource capacity will improve over time and over the housing development process. The extent to which the household is able to widen and

improve its resource capacity will therefore depend on its composition, innovativeness, length of residency and its importance in the community. With respect to the improvement in monetary resource capacity, this will result from a variety of activities such as, 1) improvement in the number of intrahousehold income earners consequent on either the growth and maturity of household members and/or increase in the household size through the incorporation of individuals (not children), which could be a socio-economic survival strategy. These would provide new and increased secondary income support and 2) improvement in the interhousehold contacts who could provide new and increases in income transfers. The innovativeness of the household will cause it to seek out new income generating activities to improve its socio-economic viability. It will do this through ventures such as 1) the incorporation of income generating productive and petty trading activities such the subletting of rooms, shop-keeping, cake making, hair dressing and tailoring and 2) the accumulation savings and tangible non-monetary resources such as land and animals which is made possible by improved sources and amount of available income. With respect to the intrahousehold and interhousehold labour contacts, this is expected to improve with the composition of the household, length of residency and /or the extent to which the household is known in the area. However, as the potential numbers improve it might be difficult to use them as resources in housing improvement because they might not have the time to allocate to housing improvement because of other demands on labour time. Labour as a resource will tend to disappear over time. It is expected that household resources will increase over the housing development process.

The main question that this process ask: 1) How is the resource capacity improved over time?. 2) How is it manifested at each conjuncture of housing improvement?. It is expected that 1) The resource capacity will be improved over time through the incorporation of new income earners providing new and improved secondary income support; new and improved sources of income transfers; the accumulation of monetary and tangible non-monetary resources; the incorporation of new income generating activities and the expansion of intrahousehold and interhousehold labour time contacts. 2) It is expected that a) in the first stage the resource capacity will be

limited to the intrahousehold wage income of the primary earner, accumulated savings and auto-construction labour time of intrahousehold and interhousehold contacts; b) by the time of the second improvement the capacity will be improved by new and increased secondary income support and income transfers which will increase the monetary saving propensity and capacity, and increased labour time resources; c) By the third and fourth stages the sources will be improved to include the accumulation of tangible non-monetary resources, improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity.

Once the decision is made to remove the residential dissatisfaction felt and the improvement preference is identified, the household will assess its existing resource capacity to meet the cost of the improvement. The ability to realise the improvement preference will depend on the existing resource capacity as it sets the limitations and possibilities for action. Consequently, it is not automatic that the household will be able to meet housing cost from the existing resources capacity. This therefore leads to the Process 4, which is the mobilization and use of resources at specific conjuncture to facilitate housing payments.

#### **d) PROCESS 4 : THE MOBILIZATION AND USE OF RESOURCES IN ESTABLISHING THE ABILITY TO PAY.**

Unlike the other processes which are evolutionary, this one is specific to the conjuncture the improvement is being contemplated. It describes the actual pattern in the mobilization and use of resources for establishing the ability to pay at specific conjuncture. For this process the level of the cost i.e.  $c(n) + c(r)$  of housing and the regularity of repayment are expected to influence which resources and how these resources are mobilized and used. This is because the household is viewed as a system of contending individuals who control the different resources of the system, this process describes the extent to which negotiation and how decisions are made over the use of resources for housing payments. Further, as some resources are controlled by outside sources, this process also takes account of the manner in which such resources are negotiated for and how and when they can be used. It is expected

that the resource capacity will expand over the housing development process and that as housing costs increase with more advance technical requirement and improved standard, that the resources required to meet these payments will also be substantial and the skills required to meet required standards will be more technical. The available auto-construction labour might not have the time and skill necessary to perform the required tasks.

It is expected that the cost of housing will increase with increasing standards and technical requirement as the housing improvement process advances. The type of improvement preferred at specific conjuncture will therefore influence the level of cost to be faced. The sources that will be mobilized will depend on this cost, its components and the regularity of repayments. However, the resources required to meet housing payments might not be available when or in the quantity required or available at all, because of the competitive demands on their use for other activities by the individuals controlling them and on household interpersonal relationships and co-operation at the time the resources are required. This means that the resources perceived to be available might not be available when required, in the amount needed to meet the costs involved and the regularity of repayment that might be necessary. There might also be the need for negotiation between intrahousehold and interhousehold contacts. Increasingly, over the housing development process households will have to negotiate for the use of the expected increasing independence of maturing individuals controlling these resources. Earlier in this chapter the types of costs that could confront the household were specified. It was shown that  $c(n)$  combines all regular fixed repayment amounts associated with the cost of production termed  $c(n)1$ , and all other costs associated to the cost of production but which are once only payments which are termed  $c(n)2$ . Costs  $c(r)$  were also described the recurrent payments for use of housing, and represented the payment for services used.

The main questions of this process ask: 1) How will resources be mobilized and manifested in the improvement?; 2) Which resources will be used to establish the ability to pay?. It is expected that 1) With the widening of the intrahousehold and



interhousehold resource base and sources over time, the ability to pay will be established from a process of negotiation which will reflect the demographic structure and interpersonal relations at the time of the improvement. The outcome of this is that a) In the first stage there will be no negotiation over the use of resources because of few adults and earners. The head of the household will decide on housing payment; b) For all other improvements the household will negotiate among intrahousehold members and interhousehold contacts for the use of resources. 2) The resources that will be used will depend on type of cost and which resource will be made available. As such a) For the first improvement the ability to pay will be established from the intrahousehold capacity in which the accumulated savings and auto-construction labour will be used; b) The second improvement will be facilitated from intrahousehold and interhousehold capacity through the use of new and increased secondary income and income transfers and the use of auto-construction; c) For the third and fourth improvements, the intrahousehold and interhousehold monetary and tangible non-monetary resource capacity will be used but with a greater reliance on the intrahousehold capacity. Intrahousehold and interhousehold labour time will not be available because of the lack of time for auto-construction. 3) Regular repayments associated with  $c(n)1$  and  $c(r)$  costs will be established from the existing and new regular sources that are negotiated. The additional costs  $c(n)2$ , will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to.

### **3.2.3 INTEGRATION OF STAGES AND PROCESSES IN THE ESTABLISHMENT OF THE ABILITY AND WILLINGNESS TO PAY**

The establishment of the ability and willingness to pay for housing at specific conjunctures in the housing development process will depend on the interactive influence of the processes. Their relative influences as manifested in the hypotheses will either give rise to the ability to pay or the willingness to pay or both together.

Figure 1, therefore, represents the conceptual framework that integrates the stages and processes that will allow the understanding of how the ability and willingness to pay are established for specific improvements at specific conjunctures in the housing development process.

#### **a) STAGE 1 : INITIAL SETTLEMENT**

The improvement activity in this stage is the construction of a one room timber structure. The establishment of this structure defines the acceptable minimum standard of shelter for this stage. Access to space for shelter is the only pre-occupation of the household. This stage is characterised by illegal occupation of land, dwelling material quality which is cheap, temporary and is manifested by the use of timber and galvanize sheets. On-site water, electricity, toilet and kitchen facilities are non-existent. Access to these services and facilities is from public stand-pipe and alternative lighting source. Cooking takes place in the yard or in the dwelling and access to toilet facilities is facilitated from off-site public conveniences. The main concern in this stage is for space to shelter the household in order to establish its independence and viability. The preference for this attribute is the result of the desire to remove the residential stress created by the interaction between the existing and/or changing socio-demographic characteristics and existing housing attributes in the original supporting household. This residential dissatisfaction will arise either from inadequate indoor space and resultant overcrowding, due to increase in household size or from the social conflicts in interpersonal relationships in the supporting households, or from change in socio-demographic status as a result of marriage and co-habitation decisions which will render the existing housing conditions inadequate for social comfort.

The low standard of the desired shelter is result of the limitation in the resource capacity. This is the reason the dwelling is small, of the cheap timber and galvanize sheeting and why the family will opt for the squatting form of tenure. The resource capacity in this stage will be limited to the intrahousehold wage income of the primary earner, accumulated savings and auto-construction labour time of

intrahousehold and interhousehold contacts. Consequently, it is not expected that in the mobilization and use of resources for housing payments, that there will be any need for negotiation over resource use. The primary wage earner will make all housing payment decisions. As the family is young there will be few intrahousehold members to provide labour for auto-construction. This will be limited to the head of the household and spouse, if one exists. Where the existing level of monetary resource cannot meet the cost of the housing, a decision will be made to accumulate savings and/or building materials to facilitate payments. For the first improvement then, the ability to pay will be limited to meeting c(n) costs will be established from the intrahousehold accumulated savings, building materials and auto-construction labour, over which there will be no negotiation among household members.

The willingness to pay for this basic one room timber dwelling as the most preferred attribute is therefore the outcome of one or a combination of the following desires 1) to form a new household as a consequence of marriage, cohabitation decision, or conflict in interpersonal relationship; 2) to form new household in order to remove social conflicts arising from overcrowding in original kinship household; 3) of an established household to remove residential dissatisfaction over the inadequacy of existing quantity and quality of space caused by an increase in household size.

The ability to pay will be established from the intrahousehold capacity through consensus without negotiation and conflict over resource use. The wage income of the primary wage earner who is the sole earner and the head of the household will be used, in addition to the accumulated savings and building materials and the use of auto-construction labour.

## **b) STAGE 2 : SERVICE INCORPORATION**

The improvement activity characterising this stage is improvement in the availability and type of access to services. This stage is therefore be defined by an acceptable minimum standard of shelter which is a one room timber dwelling which incorporates electricity or electricity and water services on-site. The concern for the incorporation

of these services is to make the dwelling more functional and self-contained. Kitchen and toilet facilities and material quality will be as for the first stage. Where either water or electricity is not included access is the same as in the first stage. Tenure security will improve in this stage.

It will be the inconvenience and social discomfort felt among family members regarding the absence and/or type of access of these services, rather than any change in the demographic characteristics <sup>which</sup> will impact the willingness to pay for service improvement for improvement in their availability and type of access. The willingness to pay for on-site electricity or electricity and water services will also be related to the increased security of tenure household feel as a consequence of the states de facto recognition of the community as basic water and electricity service infrastructure are put in.

By the time of the second improvement the resource capacity will be improved by new and increased secondary income support and income transfers which will increase the monetary saving propensity and capacity of the household; the growth and maturity in intrahousehold labour resources and improved numbers of interhousehold labour contacts and new tangible non-monetary resources made possible from an improved monetary capacity. The second improvement will be facilitated from intrahousehold and interhousehold capacity through the use of existing and new and increased secondary income and income transfers and non-monetary resources which must be negotiated for. Consensus will be achieved through the negotiations over resource use because of the desire on the part of all household members to remove the associated discomfort felt over the absence of the services. The development of the resource capacity will make it possible to pay for the desired attribute. The ability to mobilize the resource support from interhousehold and interhousehold contacts will depend on the state of household co-operation with these contacts at the time of housing payment decisions. Where there are conflicts contacts will not be willing to contribute resources. In the case of intrahousehold contacts, they are not expected to contribute resources unless there is a desire among them to remove the residential stress they also feel.

Though the availability of intrahousehold and interhousehold , auto-construction labour is expected to improve with new interhousehold contacts and increase in household size, growth and increasing maturity of household members, this source of labour will not be important in this stage. This is because of the technical requirement of the installation of these services.

The hypotheses state that the willingness to pay for this improvement is the outcome of the 1) desire to remove the social discomfort and inconvenience felt by the absence of private on-site or internal electricity and water services; 2) the increased security of tenure felt by households. The ability to pay will be established from 1) the intrahousehold and interhousehold monetary resource capacity through accumulated savings, negotiated new and improved secondary income support and income transfers; 2) the costs associated with  $c(r)$  will be paid from the regular new and improved secondary income support and income transfers that can be negotiated for from the intrahousehold and interhousehold capacity. Costs associated to  $c(n)$ , will be met from existing intrahousehold accumulated savings and new secondary income support and transfers that can be negotiated; 3) resources will be mobilized through negotiation but without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort they feel.

### **c) STAGE 3 : FUNCTIONAL DIVERSIFICATION**

This stage is characterised by improvement in the quality, quantity and functional specification of the use of internal and external space and kitchen facility. The incorporation of a kitchen is the space improvement defining this stage. Consequently, the acceptable minimum standard of shelter is a two-room timber and concrete dwelling with electricity or electricity and water services and a kitchen facility. The kitchen facility is either external and separate from the main dwelling or constructed as part of the main dwelling. The extension in space allows for space improvement and partitioning in respect of . uses of the building. There are therefore, clear sleeping, living/dining and cooking areas. The process of material improvement begins in this stage with the use of the more permanent and durable reinforced concrete in the extended section of the building. There is greater security of tenure

which is manifested in the use of more permanent building materials. Toilet facility is the off-site public convenience.

In this stage there will be an interaction between all four processes. The existing and changing socio-demographic characteristics will impact the housing characteristics and visa versa. There will also be an interaction between the development of these characteristics as real labour and housing resources, the improvement standard preferred and the available resources to realise this preference. The preference in itself will be required to improve the housing as a resource.

Consequently, in this stage it is expected that existing and/or changing socio-demographic characteristics associated with increased household size and/or growth and maturity of the family members will render the existing indoor space and functional use of that space inadequate. This is expected to give rise to social conflict among members over the use of that space. The use of the limited space for sleeping, living/dining and cooking activities means that indoor space will need to be differentiated. The inadequacy in the existing quality in respect of material durability, the small quantity of space and the absence specifically, of the kitchen facility will also impact the family's welfare to the extent that residential dissatisfaction will occur. The ability to satisfy the desire for differentiation in space use through the incorporation of the kitchen facility, will be enhanced by the improvement in the existing resource capacity. However, it is also the increase in the labour resource capacity of the household through changes in the demographic attributes such as household size and the growth and maturity of individuals, which itself will cause the residential stress in the use of space and facilities. But the this improvement in the labour capacity will also mean that more monetary resources are available where such labour is in employment. The development of the house as a resource will lag behind the development of the labour resource housed in that dwelling. Consequently, the household will be willing to improve the quantity of indoor space, dwelling material quality attribute and functional specification of space use to improve the standard of the housing as a resource. This in itself is enhanced by the increased

security of tenure the household feels, to the extent that the family will want to increase housing investment to improve the value of the housing resource.

The ability of the household to realise the improvement preference will be a function of the level of its resource capacity and the ability to mobilize the required resources from the interhousehold and intrahousehold contacts controlling them. Though the household is expected to negotiate for the use of these resources there will be consensus on the use of monetary and tangible resources but not in terms labour for auto-construction activities. This is due to the unavailability of time among the labour resource contacts.

The hypotheses state that: the willingness to pay is the outcome of the desire to 1) improve the amount and specify the use of space by including the kitchen improvement preference; 2) remove residential discomfort arising from overcrowding of the limited space due to increase in household size; 3) to improve material quality by incorporating more durable material for the extended space.

The ability to pay will be facilitated from 1) improved intrahousehold <sup>resource capacity</sup> made possible by more than one earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers; 2) the mobilization and use through the process of negotiation, of any combination of the following sources arising from the negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. These sources will be used to meet  $c(n)$  and  $c(r)$  payments; 3) regular repayments associated with  $c(n)1$  and  $c(r)$  costs will be established from the existing and new regular sources that are negotiated. The additional costs  $c(n)2$ , will be met from any combination of, the reorganization of intrahousehold spending and saving

pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to; 4) resources will be mobilized through negotiation but without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort they feel.

#### **d) STAGE 4 : CONSOLIDATED DEVELOPMENT**

The improvement preferences that define this stage are a complete change in wall material quality from timber to reinforced concrete, the incorporation of an internal toilet facility and a kitchen facility if this was not internalized in the third stage and the purchase of house plot. In this stage the major concern will be the attainment of land tenure security and ownership of a concrete dwelling to give rights to property. The standard of shelter that defines this stage is therefore the ownership of property which combines a two bedroom concrete dwelling with separate living/dining, kitchen and toilet areas and ownership of the plot which it occupies. The dwelling is self-contained with all services internalized and internal space is differentiated based on use. When these improvements have been realised the household has achieved the socially acceptable minimum standard of housing.

For this stage it is expected that all four processes will interact to give rise to the ability and willingness to pay in a similar manner as outlined for stage three. However the preoccupation at this stage is to get security of tenure through ownership of the plot to protect the level of resource investment already incorporated in the housing. The perceived security of tenure is substantially improved and is manifested in the desire to completely change the wall material quality and further functional separation of dwelling function through space improvement and the internalization of improved kitchen and toilet facilities. The ability to get tenure security through plot ownership will be a function of community activity and the intervention of the state.



The household will begin to negotiate with other residents for community action to get plot ownership through state intervention.

The willingness to pay for these improvements is the outcome of 1) the desire to increase space for consolidating and internalising the functional use of the dwelling; 2) the desire to improve the quality of space, material, kitchen and toilet facilities; 3) the desire to improve the type of access to services and ancillary facilities by internalizing water, electricity, kitchen and toilet facilities; 4) the desire for land tenure security through plot ownership and 5) improved availability of resources to realise these desires.

The ability to pay is established from 1) improved intrahousehold sources made possible by more than one earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers; 2) the mobilization and use through the process of negotiation, of any combination of the following sources arising from the negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. These sources will be used to meet  $c(n)$  and  $c(r)$  payments; 3) regular repayments associated with  $c(n)1$  and  $c(r)$  costs will be established from the existing and new regular sources that are negotiated. The additional costs  $c(n)2$ , will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to; 4) resources will be mobilized through negotiation but without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort they feel.

### 3.2.4 CONCLUSION

The above framework is justified on the grounds that it offers an opportunity to view the household as a resource system which is capable of organizing and mobilizing relevant resources towards its housing consumption goals. It offers a broader perspective on housing affordability decisions, *ie.* not limiting the understanding and exploration of those decisions to the narrow influence of the proportion of the cash income as now obtains in current analysis but rather to see the influences of the resource or wealth position of the household in its housing payment decisions whatever the amount of resources this turns out to be when expressed in resource terms.

The theoretical propositions outlined above are expected to reveal the common patterns among low-income squatter households in the research context, in respect of the establishment of levels of affordability and the conditions in which it can be expected they will be able and willing to pay for housing. If the research findings are to be of relevance at the level of policy elaboration, these commonalities must be established. This is of particular relevance because of the claim often made that low-income households are heterogenous. If there are common patterns, these need also to be formalized in order to form the basis of any quantitative determination of affordability at the level of policy and programme formulation.

For the empirical investigations pertaining to this research, a methodology of enquiry was employed which allowed for an understanding of when and how low income households establish levels of affordability for housing throughout their housing development process. This methodology is described in the section that follows.

## PART 3

### 3.3 RESEARCH METHODOLOGY

In order to find answers to the main questions posed and to find evidence to support the main propositions, the empirical investigation associated with this research was carried out in the Faux au Chaud squatter settlement in the city of Castries, St. Lucia, between the months of April and August, 1990. Since the investigation warranted a qualitative, in-depth study of the establishment of housing affordability among low income households, it was envisaged that a small number of households would be appropriate study population given time and limitation of financial resources.

A mixture of data collection procedures were employed in which primary data was collected through the use of a scanning survey and semi-structured interviews. In these interviews future improvement scenarios were presented<sup>5</sup>. Secondary information was gleaned from housing study documents of the Housing and Urban Development Corporation and the Central Planning Unit, *eg.* maps, charts and reports. Special interviews were conducted with certain officials in the formal public sector housing construction and finance institutions.

The researcher was interested in examining and analysing the experiences of households in establishing their ability and the willingness to pay for housing at specific juncture in their housing development process rather than in the statistical analysis of affordability of housing among low-income households. To understand the experiences of households and the processes involved in their housing improvement decisions, the research would of necessity involve largely qualitative methods. The best qualitative method was found to be the case study based on semi-structured interviews. An ordinary survey alone would not have allowed for the indepth exploration of the housing experiences which the research sought. Participant

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<sup>5</sup> Details of these housing improvement scenarios are presented in Appendix 6

observation would be valid for studying housing processes in the present but would not be adequate for the past and the future. Further it would require lengthy periods of observation of the processes which was outside the scope of this research. Since the research required to establish the past housing experiences, these could only be reconstructed from interviews. However, the experiences of households could result in the establishment of common patterns or processes which could be presented as aggregate conclusion with respect to the case study population as a whole within the specific context. The conclusions drawn, however, cannot be generalized for similar cases elsewhere unless similar research is done in varied contexts and similar common patterns and processes were discovered. The findings of this research are therefore related to the research context.

In order to study these household experiences this researcher decided to use a selected number of cases. The research objectives, in the views of this researcher, could only be adequately handled by and gleaned from a manageable sample of case study households. Manageability here is conditioned by the resource capacity of the researcher. In this case twenty families was the expected number that this researcher could manage given available resources. These households were chosen because they fit the selection criteria.

### **3.3.1 THE FIELDWORK**

#### **3.3.1.1 Stage 1**

The fieldwork was conducted in two stages. In the first stage there was the review of existing housing documents and the execution of a scanning survey covering 100% of households in the Faux au Chaud area. The second stage was the semi-structured interviews conducted with a case study group of sixteen households. The selection criteria will be outlined in sub-section 3.3.1.1, 2) ii).

## **1) Review of National Housing Policies and Programmes**

A review of the existing documents on housing policies and plans was undertaken during this first stage to establish the official policies toward housing for low-income households and concomitant programmes to effect them. Such information was obtained from the following government departments: the Central Planning Unit, Central Housing Authority, Urban Development Corporation and Ministry of Finance. Information was also obtained from the St Lucia Development Bank. The information gleaned was relevant for the preparation of the background chapter on the existing constraints facing low-income households in getting access to the housing product, for providing a general understanding of the issues of housing in St Lucia. The information obtained also provided the basis for the design of future housing improvement scenarios which were presented to case study households, to ensure that they would be as realistic and reflective of existing standards of housing provision, costs and repayment terms. It became necessary to interview a number of officials of these departments to supplement, verify and update information contained in existing documents.

## **2) The Scanning Survey**

This survey was necessary to establish basic socio-economic data on the study community which was non-existent at the time of the research and to facilitate the selection of the cases for indepth investigation. The selection of these cases was based on special criteria and was determined from certain questions included in the scanning survey. In the Faux-au-Chaud area a hundred and forty housing units were identified of which twenty were occupied by more than one household. The total number of households identified was one hundred and eighty. Only one hundred and ten households responded to the survey.

### **i) Training of Research Assistants and Pilot Testing**

Two field work assistants were trained to assist in the scanning survey. The training emphasised the objective of the survey, and strategies for collecting the required information. The validity and interpretability of the questions were pilot tested with two households by the researcher, which allowed for the amendment of questions necessary to facilitate greater clarity in the main exercise. The pilot showed that the scanning survey could be conducted in approximately ten minutes with each household. The main exercise was completed in one week. Appendix 4 outlines the questionnaire pertaining to this survey.

### **ii) Criteria for Selection of Case Study Population.**

For the detailed case study interviews a sample size of 25 households were selected based on the following criteria:-

#### **a) Income and Number of Earners**

In St. Lucia, there is no official classification of low-income households based on levels of income. Unofficially, those earning less than the per capita GDP (1987) of EC\$1,200 approximately per month are considered low income households. The St. Lucia Development Bank uses EC\$1,200 in their housing affordability assessments. Since there is no official range for defining the low-income group in St. Lucia, the methodology suggested by Mumtaz, B. (1990) was used to determine the upper limit of income for this group. The methodology recommends the use of half the GNP per capita, multiply by the average household size for defining low-income earners. That figure should be doubled for defining the upper limit. Accordingly, households were selected if they were earning incomes less than EC\$1,600 per month. This then, for the purpose of this research, was the description of low-income households. Households of both a single earner and multiple earners were selected.

**b) Length of Residency**

Households were selected if they have been residing in the community for five (5) years or more to ensure that the selected households had all achieved at least the second stage of housing improvement in their housing development process.

**c) Demographic Factors**

The households were selected to account for the following age ranges of heads of households i.e. > 61 years; 31-60 years and < 30 years, to ensure that all life cycle stages were accounted for. Families were selected to represent the three groups of headship structures i.e. male-headed, joint-headed and female-headed households and representing. They were also selected to represent the nuclear, single parent, extended family and single person households. The purpose of these demographic sub-categories was to ensure that the variations found in the community were represented by the group.

**d) Tenure and Building Characteristics**

Home ownership was important since the aim of the research is to determine housing payment decisions throughout the housing development process as they reflect the ability and willingness to pay for housing. Consequently, only households in owner occupancy tenure were selected as they would have been making housing investment payments  $c(n)$  and housing expenditure payments  $c(r)$ , to increase the value of housing which could yield a return through sale and for the use of that housing, respectively. Households were selected if they were either in the process of building, showed signs of recent improvement, <sup>were</sup> in the process of improving or planning improvements in the near future. These strategies were indicative of their aspirations and preferences and as such are indicative of its potential desire to pay for housing.

### **iii) The Selection Process: Sorting and Selection of Sample**

The data from the scanning survey was sorted by computer to find the households that would fit the prescribed criteria. The sorting process revealed 25 households fitting the selection criteria. Of these 25 only 17 indicated their willingness to participate. The indepth case study was done with 16 of these households as the 17th was unable to be part of the exercise as a consequence of illness and hospitalization of the wife. The basic socio-economic data on the community were analysed with the assistance of computer graphics and basic statistics. This information helped to provide an understanding of the socio-economic context of the cases and to situate the community in terms of the national context. The information derived is presented in Chapter 4.

#### **3.3.1.2 Stage 2 : Case study Investigations**

##### **1) Semi-structured Interviews : The structured Section**

The investigation among these sixteen cases was derived from semi-structured interviews designed to enable descriptive accounting and analysis of the their housing experiences as told by them. These interviews also allowed for the presentation of housing improvement scenarios designed to determine how they would establish their ability and willingness to pay for the housing improvement they most desired for the future. These exercises were also used to map with the households their perceived availability and accessibility of resources that could be used for future housing payments related to the scenarios.

Appendix 5 outlines the questions of the semi-structured interview including the open-ended questions asked in respect of the four processes to guide the discussions. The structured section of the questionnaire contained questions relating to the current housing conditions of the families, in respect of three main areas. Firstly, the composition and structure of the household. Since the household is viewed as a resource system, this data indicated the extent of the intrahousehold labour time



resources available, the ages and number of earners. Secondly, the monthly income, expenditure and saving patterns were determined. The purpose of this section was to identify the level of income, the sources and the regularity of the sources and how they are used. Information on income indicated the amount of monetary resource which were available from which to make housing payments. Thirdly, the physical characteristics, level of housing services, use of dwelling and value of the squatter dwelling as a resource was determined. This allowed the determination of the level of investment undertaken to date, the quality of the housing and the value of the squatter dwelling as was estimated by households and separately by this researcher.

The open-ended questions of the interviews related to the four processes of enquiry and associated hypotheses and were designed to discover the factors and conditions giving rise to the ability and willingness to pay for past and future improvements. These processes will be presented below. It was originally intended that this stage would take a maximum of four visits with each household. In fact it lasted for more than four visits for each household because of unexpected eventualities largely related to the households' organisation of their daily activities. It was not always possible to meet households with all members present and sometimes appointments were made but other household activities took precedence over the interview.

This historical reconstruction of past housing improvements and the responses to future improvement scenarios were determined from open-ended guide questions. The objective of the scenarios was to establish the ability and willingness to pay for future housing in which current levels income were assumed to be constant. Since the research is largely qualitative and depend on historical reconstruction to a large extent, future improvement scenarios were presented to validate and substantiate patterns found in the historical reconstruction of experiences which are susceptible to memory loss. As it is also presumed that households will pass through stages in the housing development process the possibility existed at the onset that not all households might have completed all the stages. Scenarios therefore, allowed the researcher to get a first hand knowledge of how the households would establish the

ability and willingness to pay for the future improvement preferences they desire given their present social, demographic, dwelling and resource characteristics.

It was assumed that given the length of residency criterion for selecting cases, that households would have completed at least housing improvements typical of the first and second stages based on the proposed model of housing development. The scenarios were therefore designed based on the improvements characteristics of a third and fourth stage but with variable standards for indoor space. The improvements related to 1) a sites and service plot of minimum size 2500 sq.ft and on-site water and electricity services. 2) a 100 sq.ft concrete core-unit house with on-site water and electricity services, located on a 2500 sq.ft plot and 3) a one, two or three bedroom self-contained concrete dwelling on a 2500 sq.ft plot.

The scenarios were **pilot tested** with one household to determine their feasibility prior to large scale application. This pilot test revealed that it was necessary to keep scenarios simple with respect to the level of detail by using few alternatives with respect to housing options and standards, rates of interests and repayment periods. Consequently Appendix 5 represents the final scenarios. Appendix 5 also outlines the guide to the interview schedule including the main questions asked in respect of the four processes of enquiry to guide the discussions.

The open-ended guide questions related to the four processes of enquiry and the related secondary questions and hypotheses outlined in Part 2 of this chapter. The questions relating to each process were asked of each housing improvement identified. It was found that all households had completed two stages of improvements based on the expectations of the proposed stages and were either planning a third, had work in progress for a third stage or had recently completed a third stage. No household was found to be in a fourth stage. All indicated future housing improvement preferences which reflected the housing attributes that would be expected for a third or fourth stage. On the basis of these future preferences housing improvement scenarios were presented to solicit households' responses for future improvements.

## **2) Semi-structured Interviews : The Open-ended Section Related to The Processes of Enquiry**

### **a) Process 1 : Changing Housing Improvement Preferences in the Willingness to Pay**

This aspect of the research provided information on the past, current and future housing expenditure and investment preferences to identify their impact on the household's willingness to pay for housing throughout its housing development history and currently. The aim was to establish what and why specific housing attributes were preferred throughout housing improvements completed and to determine the future preference for attributes. The future preferences were important in understanding and analysing the responses to the future housing improvement scenarios by providing a basis for understanding how the preferences would change and the trade-offs that the household would make when presented with possibilities to improve housing conditions. This data allowed for the determination of the acceptable minimum standard households preferred throughout the improvements completed and those desired for the future.

### **b) Process 2 : The Impact of Existing and Changing Socio-demographic Characteristics on the Willingness to Pay**

It was the preoccupation of this aspect to the impact of existing and changing socio-demographic conditions which gave rise to the willingness to pay for past housing improvements and those which would cause the household to pay for desired future housing improvements. In addition, the impact of adverse housing condition relating to the availability, quality and quantity and their effects on the socio-demographic attributes and ultimately on the willingness to pay for housing was also determined.

### **c) Process 3: The Development of the Resource Capacity in the Ability and Willingness to Pay for Housing.**

It was important to determine not only the wealth status of the household but also to determine who controls and manages specific resource and how decisions are made with respect to housing improvement payments. This area of the research identified the wealth position of the household in respect of resources available to households and their perceived accessibility. The value of the housing as a resource as developed to date was determined by households and compared with the professional estimate of the individual value of those dwellings. It determined the pattern of household resource allocation and identify household members that were responsible for the specific allocations. The existing levels of resources that could be used for future housing payments were identified based on a mapping process.

#### **i) Method of Identifying Existing Intrahousehold and Interhousehold Resource Availability**

The strategy of mapping resources is an adaptation of a methodology used by Wallman *et al* (1980), in a survey of the impact of ethnicity on relationships in Battersea, London. The strategy was modified to suit the context and aims of the proposed research. The strategy differs from that of Wallman *et al* (1980) in that instead of mapping only affective distances in household relationship with people within and outside of the household, the dimension of mapping the households perception on the availability, distribution and source of specific resource types that can be utilized for housing, was added.

The mapping of resource networks identified what households perceived as the distribution and sources of resources available from intrahousehold members and interhousehold contacts. Households were asked to locate within concentric rings on a card, for each resource type i.e. labour, money and other tangible non-monetary resources, their availability for housing payment and source in respect of kinship and non-kinship relationships. The household was placed at the centre of these ringed

relationships. The mapping of resources within the frame indicated clearly the extent to which the particular resource could be made available for housing expenditure and investment payments. The location of a particular resource indicated how readily available it was, *eg.* the closer to the centre the more readily available it is.

The households were told that the maps were about locating people according to how they feel these people will help in the provision of monetary, labour and other resources in their housing improvement process in the future. A map of resource contacts was prepared for each household. The end effect was a map showing the location of persons or keepers of specific resources who could make these available to household for housing should the need arise. Later the results were compared with the level of resources the household indicated that it could really mobilize to determine the extent to which current constraint to the use of these resource contacts influence the actual numbers they were able to mobilize.

Appendix 7 contains a sample of the network diagrams presented to households and the instructions for filling them out. These diagrams were filled by the household with the help of the researcher, who answered queries and gave explanations when sought and in certain situations helped to fill them out with the household.

A **composite map** of all resources and their sources indicated for all households the extent to which resources are available for housing investment among case study households. These maps gave a visual picture of current and future availability of resources as perceived by the household. They served to validate information obtained on questions about the sources of housing finance and the building and labour process. It was essential to have good contact with the household before presenting them with the network maps.

#### **d) Process 4 : The Mobilization and Use of Resources in the Establishment of the Ability to Pay**

Having established the conditions in which households moved in the past and would move in the future, to higher levels of housing payments, this aspect of the research established how the ability to pay have been expressed in the past and will be expressed in resource terms in future housing payments. The aim was to show which monetary resources were used, when and why they were used to establish both c(n) and c(r) payments.

In respect of the housing allocation and payment decisions, this process identified who was responsible for this expenditure and investment item within households. Further, it determined how housing improvement decisions have been arrived at throughout the housing improvement history of the household in relation to resource distribution and patterns of management and the extent of the influence of this on the ability to pay for housing.

In respect of the future improvements the level of mobilization with respect to the sources for the future improvements were compared with the affective maps of households to determine the degree of correspondence of the two.

#### **i) The Mobilization and use of Intrahousehold and Interhousehold Labour**

This section determined the method of building construction favoured by households and their reasons for this preference. The types and sources of labour used in the past and will use for housing construction in the future, were identified. The process examined how and why the household as a resource system mobilized the resources required for housing payments.

In respect of the future improvements, the level of interhousehold and intrahousehold labour resource to be mobilized and used determined. The results were compared with the perceived level of the specific resource mapped by the household, to determine

possible variations and the reasons for this. From the scenarios the ability of households to use and the reasons for the use of intrahousehold and interhousehold labour and time resources in its future housing improvement activities were established.

## **ii) The Mobilization and Use of Intrahousehold and Interhousehold Monetary and Tangible Non-monetary Resources in Establishing the Ability to Pay**

This section established the types of housing improvements costs which confronted households in their past activities, the sources of finance used by the household, how they were mobilized and the related constraints faced.

For future housing payments, the level of mobilization was compared with the affective networks maps of the household to determine the correspondence between perceived availability of contacts and actual level of contacts households are able to mobilize. This served to show the importance of these contacts in housing improvement.

### **3.4.1.3 Data Recording, Analysis and Presentation**

Information were recorded with the use of a tape recorder where households allowed this and through the use of note taking. In the early stages of the interviews some households were reluctant to allow tape recorded conversation and only allowed it in the latter stages after they had gained confidence in the researcher. A few did not allow it at all.

From the outset, the data was regularly checked. Data from interviews were checked and re-checked to ensure that questions were understood and that answers are realistic. This was done after every visit to the sample household. Tape recorded data were reviewed and written up early to allow for reinforcement before any

memory lapse and also to allow for follow up actions where further clarification was needed.

There then followed a much more detailed data analysis. This step followed directly the preliminary checking to ensure that survey information remained fresh in the mind. The description and discussions on the findings of this research are presented in the chapters that follow. The findings are discussed, analysed and presented based on the stages of housing improvement completed, and in progress at the time of the research and for future improvement preferences, based on the processes as they operate to give rise to the establishment of the ability and willingness to pay.

In the analysis and presentation of data, the information obtained for each process of enquiry and each stage of improvement for each household was noted and the common features recorded. Verbatim reporting was used as far as possible to reinforce, authenticate and support the findings. In most cases households were grouped based on these common patterns found for analysis and discussion. In the analysis the findings were discussed in relation to the processes of enquiry, questions of enquiry and related hypotheses posed. The following chapters present the findings and discussions pertaining to this research exercise. It should be noted that Chapter 1 provided the list and content of these chapters and as such these will not be repeated here.



## **CHAPTER 4**

### **HOUSING CONDITIONS, POLICY AND ACCESS FOR LOW-INCOME HOUSEHOLDS IN ST LUCIA SINCE 1971**

#### **4.0 BACKGROUND INFORMATION ON ST. LUCIA**

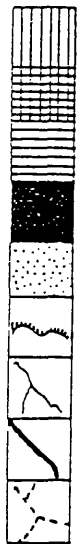
This chapter is divided into two parts. The first introduces the country context of the research with respect to the location, physical characteristics, land use, population characteristics and housing conditions. This first section also provides an historic outline of the public sector housing policies and programmes and the impact on low-income households. sector housing policies and programmes. The second section introduces the physical characteristics and basic socio-economic data on the Faux au Chaud squatter community of the city of Castries from which the households for detailed analysis were drawn. This section also concludes with a brief socio-economic description of the selected households for indepth analysis.

#### **PART 1**

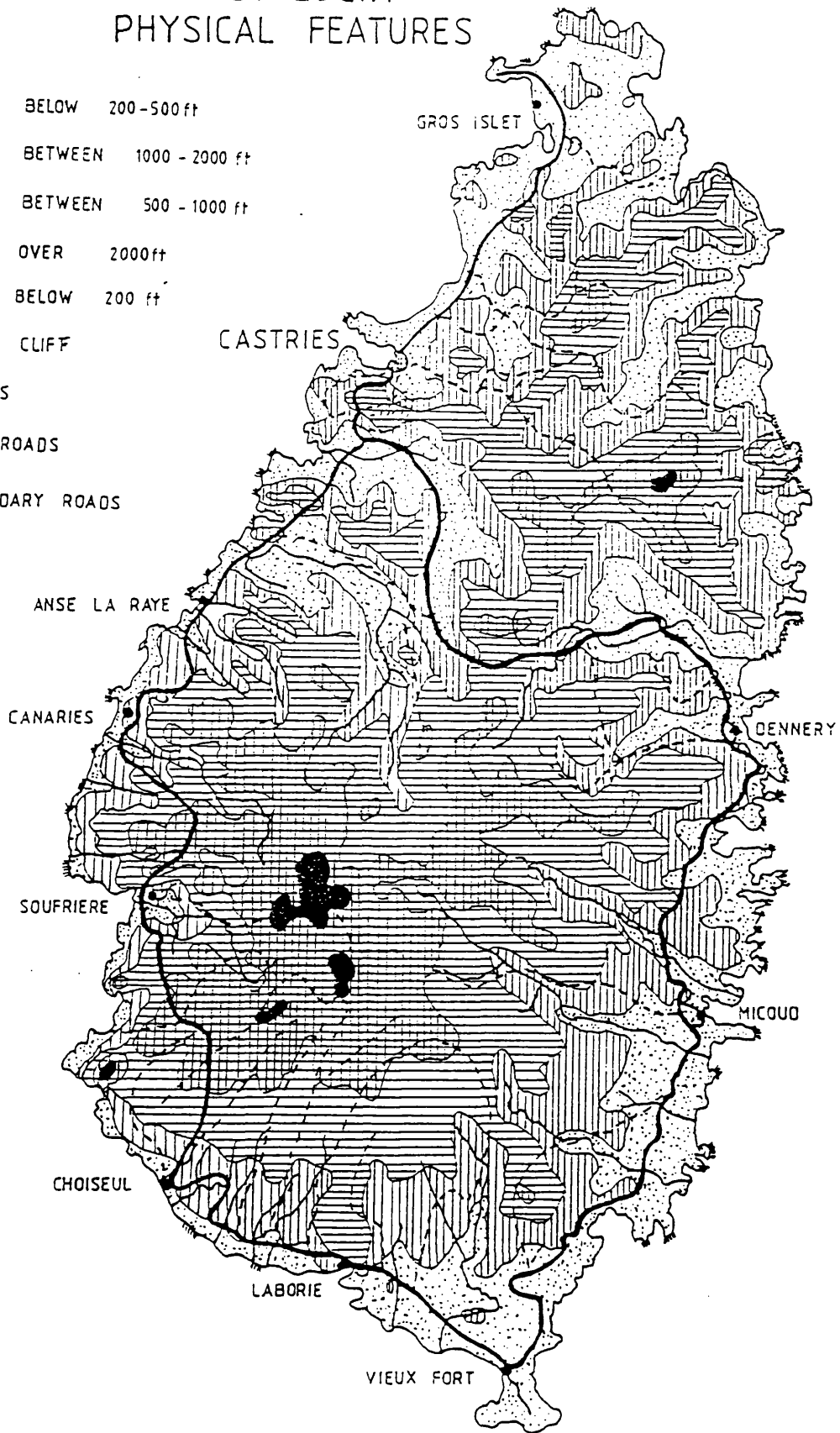
#### **4.1 PHYSICAL SETTING AND LAND USE OF ST LUCIA**

St. Lucia is a small island in the Eastern Caribbean approximating 238 sq.miles in size and with a total population of 148,183. (Economic and Social Review, 1989). It is a volcanic island with a mountainous topography. Urban and flat lands are limited to areas below 200ft and accounting for less than 10% of total land area (Figure 2). The country is divided into eight administrative regions (Figure 3), each with its main urban centre. Settlement development occurs along coastal belts or along river valleys. As can be seen from Figure 4, St Lucia is an agricultural based economy whose main export is bananas. The land use is determined mainly by the topographic characteristic of the island. Tourism and urban development occur mainly on the

# ST. LUCIA PHYSICAL FEATURES



- LAND BELOW 200-500 ft
- LAND BETWEEN 1000 - 2000 ft
- LAND BETWEEN 500 - 1000 ft
- LAND OVER 2000 ft
- LAND BELOW 200 ft
- BEACH CLIFF
- RIVERS
- MAIN ROADS
- SECONDARY ROADS



SCALE 1:150,000

coastal regions, agriculture is limited to the interior valleys of the rivers, while industrial centres are located in and around the main urban centres. The large central and mountainous region forms the watershed and forest reserve which is protected by law and on which no development is allowed. Due to land use restriction, physical limitations and existing land ownership patterns, there is a high level of competition from all land use types for the limited developable land. This, together with increasing population growth and urban poverty has led in recent years to the development of squatter settlements in the main urban areas of Vieux Fort and Castries.

The following sections examine the population growth trends and outlines the situation as far as housing conditions and levels of services are concerned. The emphasis will be placed on the City of Castries as this is the location of the research. It should be noted that most statistical information in the sections that follow are taken from the 1970 and 1980 census because the 1991 census information is not yet available. Otherwise the reference will be specified in the text. New statistical data derived from any analysis of the original census data by this researcher will also be indicated.

#### **4.2 POPULATION GROWTH TRENDS AND HOUSEHOLD FORMATION**

The 1980 census revealed that in that year, the population of St. Lucia stood at 118,961 persons with 44% of that total representing persons under 15 years of age; 50% was between 15 years and 65 years, while 6% was over 65 years. 51.9% of the population was female and 48.1% male. According to an Organization of American States (O.A.S) report, the total population in 1983 was 125,138 of which the estimated urban population was 41% (51,308). Castries the capital city accounted for 62.8% (32,272) of the total urban population. (O.A.S, 1983.). The population grew at approximately 2% per annum between 1976 and 1984 and in 1989 the total population was estimated at 148,183. This represented an increase of 23,045 or 15.6% over the 1983 estimate of the O.A.S. (St Lucia Annual Statistical Digest, 1985).

FIGURE 3

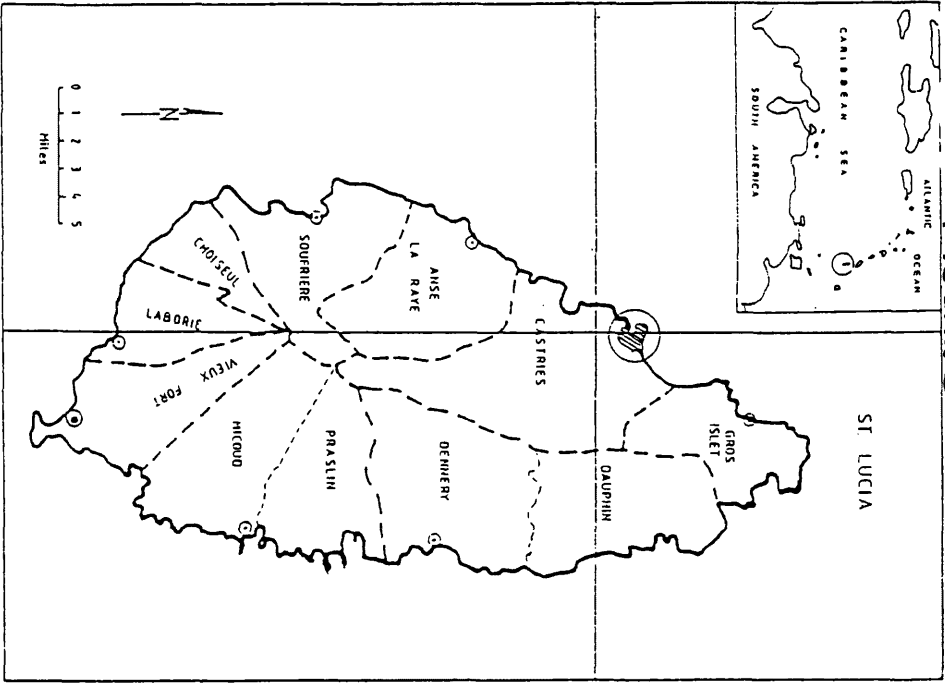
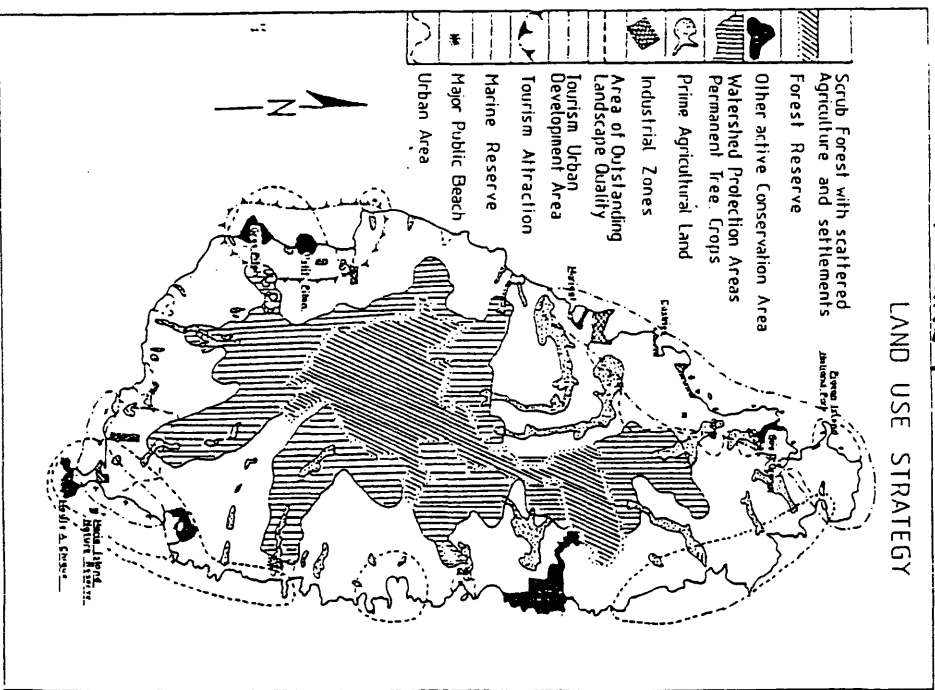


FIGURE 4



MAIN ADMINISTRATIVE AREAS  
SOURCE: CENTRAL PLANNING UNIT.

An analysis of the data on the pattern of population growth between the 1970 and 1980 censuses, by this researcher, revealed that between 1970 and 1980, there was an increase in the total number of households from 21,753 in 1970 to 24,733 in 1980. This represented an increase of 13.6% over ten years. For the Castries administrative region, the numbers of households changed from 9,210 in 1970 to 9,607 in 1980 representing a percentage change of 4.3%. A higher rate of growth of households took place in the rural areas than in the urbanized ones. The implication of such positive changes in household formation is that it is expected that in these areas there would be a greater demand for housing.

The central Castries urban area however, experienced a decline in the number of households from 1,021 in 1970 to 594 in 1980. The total number of households in the Castries suburbs declined also from 3,095 in 1970 to 2,565 in 1980. This reduction in the number of households could be attributed to the re-location of households to the Castries rural region and the adjacent administrative area of Gros Islet which have become growth areas for residential expansion over the last decade. These changes could also be explained by the general absence of dwelling units to accommodate newly formed households in the Castries region. In fact, current trends show that the central Castries urban area is continuing to lose households to the rural region or adjacent administrative region of Gros Islet. (Central Planning Unit, CPU, Report, 1987). The analysis also revealed that between 1970 and 1980 while households grew at 1.4% per annum on the average, the population was growing at a faster rate i.e. 2.0% per annum on the average, a situation which was reflected in the growth of the average household size as will be seen subsequently. This could imply that households were sharing dwellings rather than forming their own separate households in separate units and households were becoming larger as a consequence.

An examination of the distribution of households confirmed that the percentage of households with 3-4, 5-6, and 7 persons increased between 1970 and 1980. Household size between 5-6 persons account for 19% of households on the average while households greater than 7 persons accounted for 21% of households on the average.

When the average household size of five was considered as a base, the situation revealed that for 1980, 10,877 households (43.9%) consisted of five or more persons for the island as a whole. This reflected an increase of 1,390 households over the 1970 figure of 9,487 (43.6%). In 1970, 3,769 (40.9%) of all households in the Castries region consist of households in excess of five persons. By 1980 this figure had increased to 4,089 (42.5%) of all households. In fact a CPU report revealed that households were sharing rather than forming their own households. (CPU, 1983).

### **4.3 INCOME DISTRIBUTION**

It should be noted that the currency unit quoted here represent the Eastern Caribbean dollar (EC\$) and it is linked to the United States Dollar (US\$). One US\$ is Equivalent to EC\$ 2.7.

According to the 1980 census, in that year 23.4% of the employable population of over 15 years of age were earning

incomes less than EC\$ 2,000 per year or on the average EC\$ 167 per month. The distribution of income showed a that the majority of the earning population (69.8%) was receiving less than EC\$ 5,000 per year or on the average EC\$ 417 per month. Current (1989 - 90) employment and income data for the island as a whole is not yet available. However, information exists for those persons employed in the central government. According to the Economic and Social Review (ESR), in 1986, 1987 and 1988, 86%, 86.3% and 86.4% of the central government employees respectively, received monthly income of less than EC\$ 2,000. (ESR, 1989).

### **4.4 TRENDS IN HOUSING CONDITIONS**

The analysis of housing conditions revealed that in 1970, 11,893 (54%) of all households lived in dwellings of 1-2 rooms; 7,233 (33.3%) lived in 3-4 rooms; 1,584 (7.3%) lived in 5-6 rooms and 301 or 1.4% lived in more than 7 rooms. In 1980, the total number of households living in 1-2 rooms, was reduced representing 9,895 (40% of all households). Households living in 3-4 rooms increased to 9,753 (39.4%); those

living in 5-6 rooms increased to 3,192 or (12.9%) while those living in more than seven rooms represented 574 or (2.3%). These increases represented either net addition to the housing stock through the construction of new units or extensions of existing ones.

According to the 1980 census, in that year a total of 16,013 households (64.7%) owned their house. The other 8,720 (33%) of households either leased, rented privately, rented free, squatted, hire purchase or rented from Government. Of the 16,013 owning household, 1,471 or 9.2% lived in the City of Castries and its suburban environs. Islandwide, a total of 6,157 (24.9%) was in rental tenure of which 5,785 and 372 households rented from the private and public sectors respectively. In the Castries and its suburbs, there were 1,492 (6%) of the total renting households. Squatting did not appear a widespread phenomenon occurring mainly in the Castries rural area. A total of 1,687 (6.8%) of all households were living in rent free households; 116 (6.9%) were recorded for the Castries urban area.

The leasehold form of tenure did not appear a significant category representing only 277 (1.1%) of total households recorded, of which 27 (9.7%) were recorded for the Castries urban area. Approximately 435 (1.8%) of households did not state the form of housing tenure they occupy of which 145 (33%) were to be found in the Castries urban area. The above information revealed that occupancy status is characterised by high percentage of home ownership. It has been shown, in 1973, that 48% of households that owned their dwelling did not own the land on which the dwelling was, but paid a rental for its occupation. An analysis of the 1984-89 urban, property tax listings on a regional basis by this researcher, confirmed the above tendency. It revealed that for the island in this period a total of 7,523 properties were eligible for tax payment. Of this total 5,105 (67.9%) of these properties consisted of a house and land; 901 (12%) was taxable land only while 1,517 (20.1%) was taxable house only. In Castries, 38% of the taxable properties consisted of house and land, while 44.2% consisted of a moveable house only. This high incidence of moveable property in the Castries urban region can be explained by the predominant pattern of land ownership and occupancy and land availability in which households are allowed to

build moveable houses, but rent or lease the land. A high incidence of rented dwelling and/or plot could mean that the quality of the housing stock will of necessity be lower in standard since housing must be constructed of materials that can be easily dismantled and removed at short notice when the land is required by the owner. It is a common and socially acceptable practice therefore for households in these conditions to build in timber.

In 1980, 18,208 (73.6%) of the households of St Lucia lived in a timber dwelling; a total of 2,465 (10%) live in a dwelling of timber and concrete, while 16% lived in concrete dwellings. These figures revealed a high incident of timber houses. Timber is considered a temporary building material in an area prone to hurricane destruction. It also reflected the need to construct houses from materials which can be easily dismantled for reasons as explained earlier. 3070 or 12% households were living in dwellings built earlier than 1960 while 31% were dwellings built between 1979 and 1981.

According to the 1980 census St. Lucians showed a greater preference for detached dwellings. Of 24,733 households, islandwide, 20,574 (83%), occupied detached units. Flat residence accounted for 2,284 (9.2%) of all households island-wide. Multi-unit dwellings were least preferred accounting for 144 (0.6%) of total households. In the more urbanized Castries area, 52% households occupied separate units, while for the Castries suburbs the number was 79.5%. The fact that the Castries central area exhibited lower levels of separate unit occupancy could be explained by the limitation posed by land availability for the establishment of separate dwelling units. The fact that Castries central urban area reflected a greater level of flat/apartment occupancy over all other regions, could also be explained by this land space limitation. While the preference appears to be for separate dwellings, it must be noted that land ownership patterns and the limited buildable area have raised the question of the practicality of developing residential housing schemes based on the national planning standard of one house per lot.



According to the 1980 census the main form of access to water supply in the island in that year was the public stand pipe system which served 40.7% of the total households. Public piped water system into dwellings and yards were used by 17% and 15.5% of the households respectively. In the case of the Castries this system was used by 39% of all households. Private piped water supply was used by 6.3% of households both on the national and regional basis for St. Lucia. One of the reasons for the high incidence of the use of public water supply system is the result of the policy of the Government to provide public distribution systems throughout all communities to facilitate private connections and public standpipe access where private connection is not possible due to difficulty of access and/or the expense of installation. (Census, 1980).

In respect of sewage waste disposal, in 1980 10.3% and 41.1% of households either shared or used individual pit latrine systems respectively, thereby making a total of 51.4% using this system islandwide. In that year, 1.4% (shared) and 17% (not shared) of households used the water closet or flush toilet system. 21.8% of all households had no form of sewage waste disposal system. In the Castries administrative region, 27.1% of all households used the water closet system while in the central Castries urban area the water closet system was used by 59% of all households. From this it could be said that the provision of toilet facilities were inadequate.

With respect to electricity, 44.8% of all households had electricity services in 1980. In the Castries urban and suburbs areas, this was 74.8% and 56.8% respectively. The incidence of kerosene as lighting source was higher i.e. more than 50% for all other regions excepting the urbanized region of Castries.

#### **4.5 HISTORIC OUTLINE OF THE GOVERNMENT' INVOLVEMENT IN THE PUBLIC HOUSING SECTOR IN ST. LUCIA**

This presentation concentrates on the involvement of the public sector particularly for the post 1971 period since it marked the period of significant public sector

involvement in the housing sector in the island. The housing problems of St. Lucia were recognised as early as 1939 when the first housing study was conducted by the Moyne Commission (Central Planning Unit, 1983). This study resulted in the passage of the Land Acquisition Ordinance, the Town and Country Planning Ordinance and the Slum Clearance and Housing Ordinance in 1945. In 1955 the Central Housing and Planning Authority, later to be known as the Central Housing Authority, was established to undertake all aspects of housing development in the country which included slum clearance and the management of the government owned housing schemes. In 1964 the Morne Development Board and the Government Housing Loan Board were established to develop specific areas and provide housing development funds for civil servants, respectively. The Morne Development Board was given the responsibility to develop lands in the Morne area, south of the city of Castries and which were originally owned by the British War Office. They were also given the responsibility to develop thirty-eight acres of land north of the Central City area of Castries known as the San Soucis Estate, into residential lots, a shopping centre and hotel facilities and a yacht club. These two residential developments went primarily to middle and upper income households. (Ibid). In the same period, seventeen acres of land were developed at La Toc, south west of the city of Castries for higher income groups; sixty-three residential lots were developed at Lanse Road in Castries for middle income groups and other lands were developed at Massade in the northern town of Gros Islet and at La Fargue, in the south of the island for low-income households. (Ibid).

The Central Housing Authority developed government housing estates in Castries and the adjacent community of La Clery as a consequence of the 1948 fire which practically destroyed the city. A total of 317 residential and commercial units were built. These units were provided for rental tenure and are currently administered by the Central Housing Authority. (Central Housing Authority, 1990). However the period of greatest public sector involvement in the housing sector began in 1971 with the establishment of the Housing and Urban Development Corporation (UDC).

Despite the level of public involvement since 1971, the housing problems for all housing groups continue to be a major one facing the public sector. These problems are even more acute for low-income households in urban areas and they have been identified as 1) the absence of a clear housing policy to address the needs of low-income households; 2) the emphasis on formal public sector delivery institutions to provide housing that are not affordable to low-income groups; 3) the general absence of finance for low-cost housing projects and financing support for low-income households who are willing to help themselves due to the existing lending criteria of financial institutions; 4) unavailability of affordable lands, which results in squatting and the development of slum communities and 5) housing affordability as a result of high housing and land cost. (Jones, E. Report on the National Consultation on Housing, 1985).

#### **4.5.1 Housing Policy Since 1971**

Although the Government established the Urban Development and Housing Corporation (UDC) and set out its terms or reference in legislation in 1971, there has not yet been a document which outlines the Governments' policy toward housing. The 'housing policy' remains implicit and have really been gleaned from budgetary statements and from interviews by various technical missions with public and private sector housing officials. While there is no clear and legal statement of a national housing policy, there are some basic principles around which national consensus exists. According to the report on the National Consultation on the Housing, the main elements of this consensus are:- *"Housing is viewed as a basic human right and as an investment in the socio-economic development process. Extant policy is therefore to rapidly expand and upgrade national housing stock ... with priority being the improvement of the quality and quantity of housing for the poor/low-income groups"*. It is further recognised that this policy must be effected through the *"collective involvement of the public, private and co-operative sector"*.(Ibid,p.16).

The 1983 Draft Housing Sector Paper identified four housing groups for housing production and delivery described according to the following:- Firstly, there is the upper income category whose housing production and delivery process can be left entirely to the private sector. Secondly, those in the 70th to 94th percentile group that can be accommodated by the UDC and the Private Sector. These can afford housing ranging from EC\$ 25,000 - EC\$ 60,000 (1983 prices). This group can be provided through the formal conventional housing delivery process, from the joint responsibility of the UDC and the middle income private sector. Thirdly, the "*self help*" sector which represents those in the 67th to the 70th percentile group. This group cannot really afford conventional housing. The affordable house price in this group range EC\$ 15,000 to EC\$ 20,000 (1983 prices) representing options ranging from a 200 sq.ft. core unit to a 400 sq.ft. timber house. Fourthly, there is the "*upgrading and self help sector*" which comprises the majority of the households below the 67th percentile who cannot afford conventional housing and will need some form of government assistance. For the lowest income group *ie.* those below 23rd percentile it is recognized that these will have to be fully subsidized by government. (Draft Housing Sector Paper, CPU, 1983).

The Economic and Social Review (ESR) outlined that one of the primary objectives of the Government was to ensure that the expanding population is able to secure adequate housing at reasonable cost. The main aims and objectives of doing this were cited as :- "*To expand the housing units at a rate adequate to meet the needs of the expanding population.*"; "*To rehabilitate the existing improvable dwellings*"; "*To improve the housing conditions for lower income families*"; "*To increase home-ownership and reduce on rented dwellings*"; "*To establish priorities among urban and rural areas*"; "*To establish financially self-sustaining housing areas*". (ESR, 1986, p.126). It was also stated that the CPU, UDC., St. Lucia Development Bank (SLDB) and St. Lucia Mortgage and Finance Company (SMFCO) would collaborate in fulfilling the outlined aims and objectives. Interviews of this researcher with management personnel of the CPU and the UDC, revealed that while these aims and objectives were outlined and while consensus existed on these objectives, there was no clearly stated strategy for translating them into practical programmes.

Interviews of this researcher with officials of the above institutions revealed that housing programmes, as they existed then, were not articulated to an explicit and approved housing policy. Further, where written statements of policy intentions existed, these were in draft or implied forms and as such there is no linkages between them, the housing programmes of the UDC and the various mortgage and other financial institutions that sponsor housing development activities within the private and public sector.

The Draft Housing Sector Paper (1989), which will form part of the Five Year National Development Plan once this document is approved, re-confirmed the primary objectives set out in the 1986 National Economic and Social Review. However, in this paper greater emphasis has been placed on the low-income households and specific tasks assigned to the UDC to address the issues relating to access of this group to public sector housing. The UDC, under this new plan, has been specifically assigned the task of addressing the housing problems of low-income earners. (Draft Housing Sector Paper, CPU, 1989). The major objectives relating to low-income earners have been given viz:- *"To specifically target provision of housing to low-income earners."*; *"To improve credit facilities geared toward low-income buyers"*; *"To discourage squatter settlements by provision of alternative choices for housing"*. (Ibid). The specific strategies to realize these objectives are stated as: *"The revision of building standards that relate to lot size and room size with intent to keep costs within the reach of low-income earners"*; *"The development of a low cost model house specifically targeted at low-income earners"*; *"The development of a financing agency or special facility to assist in the purchase of housing by low-income earners."*; *"The introduction and implementation of housing/community upgrading programmes"*; *"The selling of lands owned by the UDC, which is presently squatted upon, to the present occupiers"*. (Ibid). The UDC is currently engaged in community upgrading programmes in low income areas as will be outlined in sub-section 4.5.2.c).

#### **4.5.2 The Programmes of the UDC Since 1971**

Three distinct phases of operation of this institution are discernable based on its programme emphasis. The first phase covers a period from 1971 to 1985. The second covers the period 1986 to 1989, while the third has been on-going since 1990. In the first two phases the Corporation developed housing programmes geared primarily toward the middle income earners through the production and delivery of conventional housing packages. In the third phase greater emphasis has been placed on middle and lower-income earners.

##### **a) Phase I: 1971 to 1985.**

According to the records of the UDC compiled by this researcher, between 1971 to 1985 the UDC built and sold 277 conventional housing units and provided 438 serviced lots to low and middle income households (Table 1). According to the Manager of the UDC, the Entrepot Housing Scheme, which was the main programme, was developed to provide housing for these income groups but was accessed mainly by middle income earners as a consequence of the unsatisfied demand for housing among this group. (Personal Interview).

##### **b) Phase II: 1986 to 1989**

The second phase was one largely of inactivity due to financial problems and inadequate staffing levels. The post- 1989 policy change came with the revitalization of the Corporation and the putting in place of a new management structure.

##### **c) Phase III: Since 1990**

The post-1989 programme emphasis is on the provision of housing programmes for middle and low-income earners. In the perception of the Corporation the low-income sector is identified as households whose regular and combined household cash income averages EC\$1,000 per month. According to the Manager of the UDC this income

Table 1: Housing and Land Development by the UDC since 1965<sup>(1)</sup>

Plan Year	Location	Area	No. of house & Lot	Total no. of lots	No. of lots sold	No. of lots unsold	Price per sq.ft. EC\$	Price of house & Lot	Range of lot size
1965	Castries	The Mome	-	192	183	9	3.00-4.00 <sup>m</sup>		10-15,000
1968	Gros Islet	Massade	-	125	-	-	.10		Various
1971	Entrepot	Phase I Phase I Phase II	25 - 49	- 67 -	-	-	- 1.50	20,000 - 25,000	3,000 - 5,000
1971		Phase III Phase IIIA Phase IV	130 - -	- - 29	-	-	- - .54	11,000 - 15,000	3,000 - 5,000
1972	Entrepot	Ravine Chabot		28			.25 1.50		3,000
1972(74)	Vieux-Fort	La Ressource		98	40	58	2.00 <sup>m</sup>		5,000
1972(78)	Castries	La Clery		27	17	10	2.00 <sup>m</sup>		2,000
1977	Vieux-Fort	La Ressource	13	-			1.25	25,000	5,000
1977	Micoud	Micoud Extension	-	98		8	1.25 <sup>m</sup>		
1978	Gros Islet	Reduit Park	60	59			2.50	48,000- 60,000	
1978/79	Dauphine	Des Baras		28	-	28	1.50 <sup>m</sup>		3,000
1982(87)	Castries	Ravine Poisson		63	-	63	1.50 <sup>m</sup>		3-8,000
1983	Dennerly	Anse Cannot		55	-	55	2.00 <sup>m</sup>		3-5,000
1984	Castries	Babonneau		27	-	27	1.50 <sup>m</sup>		4,000
1984(85)	Mon-Repas	Patience A		60	26	34	2.00 <sup>m</sup>		
1985	Gros Islet	Mon Giraud		32	29	3	2.50 <sup>m</sup>		6,000
1985	Gros Islet	Massade (Stn)		90	4		5.00 (Res.) <sup>m</sup> 16.00 (Com.) <sup>m</sup> 16.00 (water front) <sup>m</sup>		4,000 6-10,000 6-14,000
1986	Choisuel	La Fargue		23	-	23	2.00 <sup>m</sup>		4,000
1986	Castries	Ciceron Phase 1		69			2.00 <sup>m</sup>		Various
1987	Castries	Phase 2 Phase 3 Phase 4 Phase 5a		75 69 129 62	- - 87 20	- - 42 42	2.00 <sup>m</sup> 2.00 <sup>m</sup> 2.00 <sup>m</sup> 2.00 <sup>m</sup>		Various 4,000
1987	Micoud B	Extension of traimessee estate	-	42	3		2.00 <sup>m</sup>		4-8,000
1988	Gros Islet	Balata	2		2	14	1.50 <sup>m</sup>	N/A	2,500
1989	Castries	Ciceron Phase 5B	10			40	2.00 <sup>m</sup>	N/A	4,000
*	Castries	Pointe Seraphin		4 <sup>m</sup> (1 reserved)		3	100.00 (com.) <sup>m</sup>		11,000
*	Castries	Sans Souci				1 4	100.00(com.) (3) 20.00(3)		11,000
*	La Toc	Tapion		47		45 1	4.00(res.)(3) 6.00(com.)(3)		6,000
*	Castries	Bisee	22 *	22	37	22	2.00((3)		4,000

"	Castries	Entreport		50		50	3.00(3)		5,000
"	Gros Islet	Massade (North)		10(com.) 5(res.)	4(res.)		10.00(3)		3,000 8,000
"	Gros Islet	Reduit Park		113	113		3.50(3) 5.00(3)		5,000
"	Gros Islet	Reduit Park 2A	18					N/A	5,000
"	Gros Islet	Reduit Park 2B	35	42	35	7	3.50(3) 5.00	N/A	5,000
"	Cicéron	Phase 6 Phase 7		43 142	40	3	2.00(2) 2.00(2)		Various Various

Sources: Compiled from Development Plans and Statistics of the U.D.C.

- Notes:
- (1) Although the U.D.C. was established in 1971, it assumed the responsibility of previous agencies such as the Morne Development Commission and as such it acquired development projects that pre-dates its establishment.
  - (2) 1990 selling price.
  - (3) Proposed prices.
  - (4) Point Seraphin has 4 lots but one has been reserved for parking.

Com - Commercial Lot  
Res - Residential lot.



criterion is based on a housing affordability ratio of 30% or 1/3 of cash income for the current low-cost housing programmes being pursued. (Personal Interview of this Researcher, 1990). This criterion of low-income earners differs from that used by this research for whom the category is described as households earning less than EC\$ 1,600 in total monthly cash income. This was described in more detail in Chapter 3, sub-section 3.3.2.

The current programme is one that stresses a housing delivery system based on urban infrastructure upgrading, sites and service schemes for low-income households, and in the case of middle income groups, small scale programmes aimed at the production and delivery of conventional housing units. It is also the current practice to identify and acquire lands for housing, through a process of land pooling, well in advance in order to reduce the effect of land speculation, rising land prices and the concomitant effect of this on housing programme costs. The Corporation is also in the process of implementing the land subdivision proposals of the second phase of its operation which were never implemented. According to Table 1, these are shown by the number of unsold lots. Urban slum and squatter communities are upgraded by improved road infrastructure and sanitation at an average cost EC\$ 1.50 per sq.ft. The average cost of a 3,000 sq.ft. minimum sites and serviced plots provided by the UDC ranges between EC\$ 3.00 and EC\$ 4.00 per sq.ft.

#### **(i) Sites and Service Plot**

For a minimum size plot of 3,000 sq.ft. households are required to pay between 10%-20% of the cost of the plot as down-payment and they are given two years to repay the balance at an interest rate of 10%. Since the UDC does not have an adequate administrative structure in place to collect revenue, plot purchasers are encouraged to use the commercial bank facilities. Where revenues are collected, there is a penalty attached for non-payment of instalments if purchasers are in arrears for two months. When this happens, the interest rate increases to 17% on the balance of the amount to be paid. A sites and service plot of 3,000 sq.ft. at EC\$ 2.00 per

sq.ft. from the UDC would, therefore, cost EC\$ 270 per month over two years at 10% deposit and 10% annual rate of interest.

## **(ii) Upgraded Plot**

In upgrading projects, the average cost of a plot ranges between EC\$ 1.25 and EC\$ 2.00 per sq.ft. and includes the upgrading of water services, electricity installation and drainage improvement, in addition to the granting of land tenure security. The repayment terms are the same as for serviced plots. Plots in upgraded communities are usually smaller and although the absolute minimum cost of an upgraded plot is given as EC\$ 1.25 per sq.ft., the average range is between EC\$ 1.50 and EC\$ 2.00 per sq.ft. A minimum size plot of 2,500 sq.ft. at the standard repayment terms, would require a monthly repayment of EC\$ 154 at a rate of EC\$ 1.25 per sq.ft; EC\$ 169 at EC\$ 1.50 per sq.ft and EC\$ 225 at EC\$ 2.00 per sq.ft.

The UDC as the main Agency for producing public sector housing had not been able in the past to effectively screen its target population to ensure access to the groups prescribed for public sector housing development. Although the Corporation's new programmes appear to be favouring low-income earners there is a sector of that group, according to the UDC, that has been identified as being a risk sector purely on the income criterion alone. These are the households earning less than EC\$ 1,000 per month in average income. For this sector, access to affordable urban housing is a serious problem which is manifested in the burgeoning squatter settlements in and around the main urban centres of Castries and Vieux Fort. The UDC claims that it is difficult to cater for these households because of the risks involved with respect to their inability to repay development costs of housing improvement options. (Personal Interview by this Researcher, 1990).

#### **4.5.3 Public Sector And Quasi-Public Sector Financial Policies and Commitment**

Government's financial commitment is determined and analysed from the annual budgetary estimates of revenue and expenditure for the period 1972-1989, by this researcher. Table 2 shows this commitment which accounts for an average of 1.7% of the capital budget of expenditure between 1972 and 1983 and 0.3% on an average since 1984. According to Table 2, the average annual public sector direct commitment to housing between 1972-89 represented an annual average commitment of 1% of the total budgetary estimate and an average annual capital commitment of 2.8% of the total capital expenditure. (Annual Estimates of Expenditure 1972-1989). The greatest level of commitment covers the period 1976-1983 which marked the period of intense activities of the UDC. During this period the average annual commitment was 3.2%. It must be noted that the period of greatest commitment 1976-83 marked not only the period of intense activity of the UDC, but also reflected a period in which the island experience two main hurricanes, in 1979 and 1982. This level of financial commitment can be attributed to reconstruction activities after these natural disasters. In fact, if public sector financial commitment to housing is traced historically, it can be seen that any period of significant public sector intervention and commitment is linked to natural disasters such as hurricanes and fires, *eg.* the 1950 to 1955 reconstruction effort after the fire that practically destroyed the City of Castries in 1948. Between 1985 to 1989 the capital allocation was reduced as a result of the decline in the activities of public sector activities through the UDC. Incidentally, the period since 1985 has been one in which the private housing and construction sector has been most vibrant due to the growth of the economy at an average annual rate of 5.3% between 1985 and 1989. (Economic and Social Review, ESR, 1984-89).

There are three public or quasi-public financial institutions financing housing development in the island. These are the St. Lucia Development Bank (SLDB) and the St. Lucia Mortgage and Finance Corporation (SLMFC) which lend directly to individuals. The other institution is the National Insurance Scheme (NIS) which

**Table 2: Summary of St Lucia Budgetary Allocation to Housing Development 1972-1989**

Year	Recurrent Expenditure (a)	Capital Expenditure (b)	Total Budgetary Estimates (a+b)	Allocation to Housing of Total Capital (%)		Allocation to Housing of total Budgetary Estimates	
				Actual	%	Actual	%
1972/73	22,808,942	9,667,388	32,476,330	-	-	-	-
1973/74	25,498,219	19,978,797	45,477,016	345,000	1.73	345,000	0.76
1974/75	29,677,122	23,573,618	53,250,740	330,000	1.4	330,000	0.62
1975/76	32,939,048	25,478,473	58,417,521	-	-	-	-
1976/77	35,276,479	28,379,893	63,656,372	1,290,080	4.5	1,290,080	2.03
1977/78	50,192,633	34,262,298	84,454,931	2,375,000	6.9	2,375,000	2.8
1978/79	58,268,635	43,683,606	101,952,241	3,345,000	7.7 (1)	3,345,000	3.3
1979/80	72,132,884	56,105,598	128,238,482	3,345,080	6.0 (1)	3,345,080	2.6
1980/81	89,962,222	84,284,275	174,246,497	4,900,000	5.8 (1)	4,900,000	2.8
1981/82 *	113,610,158	106,947,955	220,558,113	3,101,798	2.9	3,101,797	1.4
1982/83	145,961,808	70,690,966	216,382,774	5,059,765	7.2 (2)	5,059,765	2.3
1983/84	133,334,078	59,062,758	192,396,836	500,000	0.8	500,000	0.26
1984/85	129,975,280	85,994,046	215,969,326	250,000	0.3	250,000	0.1
1985/86	136,920,896	78,335,738	215,256,634	500,000	0.6	500,000	0.2
1986/87	159,566,697	87,700,725	247,267,422	1,017,000	1.2 (3)	1,017,000	0.4
1987/88	185,652,695	98,306,864	283,959,559	1,874,000	1.9 (3)	1,874,000	0.7
1988/89	222,190,706	97,442,224	319,633,930	1,000,000	1.0 (3)	1,000,000	0.3
1989/90	252,067,090	153,846,829	405,913,919	703,280	0.4	703,280	0.2

Source: Statistics compiled from the Annual Estimates, Estimates of revenue and Expenditure 1972-1989

Notes: (1) Hurricane "Allen" and Post Hurricane Construction Period.

(2) Post Hurricane Period.

(3) Post 1986 period coincides with the involvement of the Central Planning Unit in Conway Squatter Relocation and Caren Sties and Services Development Project for relocated squatters. During this period the U.D.C. was inactive.

\* Post 1981/82 to 1989 period marks the decline of the U.D.C. as an active agency in Public Housing and Urban Development Activities.

lends funds to such institutions such as the SLMFC to provide housing loans to private individuals and enterprises.

These housing credit institutions have no ongoing policy of providing housing credit to low-income earners or to low-cost housing because of the existing lending criteria and the fact that low-income earners as a group has not been defined. Occasionally, these institutions have provided credit specifically geared toward low-income groups when the credit sources specify this requirement. In such instances however, the standard lending requirements do not vary, for example, the requirements for the provision of security for loans. Often such credit facilities set the loan ceiling and interest rates, normally lower than existing rates. However, affordability rates and the need for regularity of payments remain standard and as a consequence these loan facilities are often affordable to those low-income earners who can provide these necessary security requirement. (CPU Draft Housing Sector Paper, 1983).

**The St. Lucia Development Bank (SLDB)** was established by law in 1980. It provides housing credit as part of its loan portfolio and lends to applicants who can meet the credit requirements set out in respect of interest rates, security and collateral and affordability criteria as these relate to the borrower's level of income and repayment capacity. This is to ensure cost recovery and guard against institutional decapitalization. (Personal Interview with Bank Officials). Interest rates since 1983, peaked at 12% in 1987 but range between 9.5% and 10.5% in 1989. (ESR, 1989). The rate of interest charged depends on the source of funding. Locally derived funds are charged at an average rate of 11%; while external funds, for example, from the Caribbean Development Bank are lent at an average rate of 8-9%. Security requirements for the procurement of a housing loan range from a life insurance policy which will cover the value of the loan, land with a sale value, or any other property of value. (SLDB Annual Reports, 1983-1989). Loans are granted based on a maximum mortgage period of twenty five years and requires that the borrower deposits 20% of the value of the loan in cash or kind, *eg.* land. Loan repayments are based on affordability rate of 25%-30% income. (Ibid).

An assessment by this researcher of the current housing loan portfolio revealed that from the period 1984 to 1989 the proportion of housing funds advanced to low-income earners<sup>6</sup> decreased from 50.4% to 9.8% of total approvals and from 35.9% to 4.3% of total loan value. The only exception to this trend was in the year 1986/87, when there was an increase in total loans and value of the same over the previous year. Table 3 shows this trend and it is based on the SLDB's categorization of low-income earners as those households earning less than EC\$ 15,000 per year or less than EC\$ 1,250 per month, in combined wage income. The decline in the number and volume of loans to low-income earners was explained by Bank officials as due to the risk involved as many are not able to repay the loans. In a 1985 report<sup>7</sup> the SLDB cited the main constraints to providing funds for low-income households as being firstly, the riskiness of providing funds to this sector which had been proven by the large amount of arrears on the banks record. This, it was claimed was *"due mainly to the welfare perception which most clients have of the Bank's role and function and is particularly predominant among the lower income group"* (SLDB, Special Report, 1985,p.4). Secondly, the cost recovery rate is constrained by the long and costly litigation processes, a situation which is further aggravated by the provisions of the Rent Control Ordinance which prohibits eviction in the absence of a Court Order. (Ibid).

**The St. Lucia Mortgage and Finance Company Ltd (SMFC)** was established in 1968 and is a subsidiary of the Commonwealth Development Corporation. The Government of St. Lucia is joint owner of this Company. The Company provides housing credit for home purchases, construction and extension with a maximum loan amount set at EC\$ 250,000 in 1989. Affordability is based on 25% of income and loan security requirements take the form of insurance policies and property value to cover the loan advanced. (Economic and Social Review, 1989). Since 1989 the rate

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<sup>6</sup> For the Bank "Low-income earners" are those households for whom the combined monthly incomes of all earners are less than EC\$ 1,250 per month.

<sup>7</sup> Report prepared for presentation to the National Consultation on the Housing Sector in St. Lucia, 1985.

**Table 3: Loan Commitment to Low Income Households as a Proportion of Total Number of Loans of the St. Lucia Development Bank (SLDB): Annual Housing Loan Approvals since 1984 - approvals.**

Year	Number	Value EC\$	To Low-Income Households (\$0 - \$15,000 per annum)(1)			
			Number	%	Value	%
1984/85	105	2,740,614	48	50	983,025	36
1985/86	93	3,185,488	27	29	522,704	16
1986/87	93	3,222,536	26	28	596,663	19
1987/88	77	3,892,634	13	17	246,969	6
1988/89	66	3,076,640	12	18	298,882	10
1989/90	61	4,002,027	6	10	173,060	4

Source: Compiled from SLDB Annual Reports, 1985-1990

Note: (1) Low Income earners, according to the Bank's classification.

of interest has been set at 9% for loans advanced prior to 1984 and 11% for loans granted subsequently.

Despite these levels of financial commitment the impact on low-income households remain dubious and indeterminable. It has been indicated that there is a need to determine precisely what is meant by "*low cost housing*" in St. Lucia before consideration can be given by private and public sector institutions to funding it. (Martyr 1985)<sup>8</sup>. Martyr also cited the constraints of providing funding to low-cost housing schemes: firstly, the absence of such schemes in an organised manner with the consequence that private sector investment funds have gone largely to middle and upper income housing; secondly, there was the shortage of long term funds at a suitable interest rate to facilitate easier borrowing terms for low-income households and the associated high rates of interest meant that the income required to suit these rates had to be high. This meant that low-income households would not qualify. This restricted the lending to middle and upper income groups. (Ibid).

#### **4.5.4 The Unavailability of Affordable Lands for Housing.**

The urban land-use and housing problems have been manifested by the rapid growth of urban squatter communities and the development of slum areas over the last decade, particularly in the towns of Vieux Fort and Castries. The Report on the National Consultation on Housing cited the emergence of squatter settlements as a direct response to the increase in population growth, the growing shortage of housing and the high cost of land for housing. As a consequence these factors, the squatting activities have become rampant in the absence of effective government intervention to provide appropriate alternatives (Jones, 1985). These settlements are typified by insecure tenancies and inadequate infrastructural facilities. More significantly the illegality of tenancy discourages Banks and other lending institutions from allocating housing to households in these areas. (Ibid, 1985).

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<sup>8</sup> O Martyr is the General Manager of the St. Lucia Mortgage and Finance Company. Information contained in a report prepared for the National Consultation on the Housing Sector in St. Lucia, 1985.



In the southern town of Vieux Fort, most of the squatting takes place on lands owned by the National Development Corporation (NDC). According to a CPU report, this agency lacks the organizational structure, manpower and other resources to effectively deal with the problem of squatting on its own lands. This Agency had no clear enforceable planning powers to deal with the influx of population. Coupled with this there was an absence of a programme of housing and community development. Land for housing was provided by the NDC largely for households in the middle income group and not for low-income households (CPU Report, 1985, p.3). In the Castries area most squatting takes place on lands vested in the Port Authority.

Since 1990, the UDC has embarked on a selective programme of upgrading of squatter settlements on urban lands vested in the Corporation by the Central Government. This means that other urban squatter settlements and slums on privately owned lands are left out of upgrading improvements as there is no programme for addressing these situations.

The problems outlined above reveal that the major issue in housing access for low-income households in St. Lucia appears to relate to housing affordability. The affordability issue, has been posed differently by different researchers since 1971. There appears to be a pre-occupation in commissioned housing studies with needs and demand assessment rather than with affordability. The following section examines how this issue of affordability has been posed with reference to low-income households in the few studies that mention this issue.

#### **4.5.6 Housing Affordability Among Low Income Households**

To date, no comprehensive assessment of affordability of all housing groups exists for St. Lucia. The few studies that examine affordability are superficial in their treatment and assessment of it and they have been limited to groups for whom there is available employment and income record. These studies have been produced on short consultancy missions in which affordability assessment was prepared data obtained from a combination of interviews with personnel from the numerous housing

related enterprises (private and public) but with little real in-depth analysis through organized field survey techniques. These reports remain largely superficial, based on extrapolated data and used assumptions regarding the existing contexts that question the credibility of the information presented. As such, information pertaining to the operations of the informal sector comprising low-income households, who are the focus of this research, is scarce and where it does exist, it remains dubious.

According to Cabannes and Schonning, the involvement of Caribbean Government in housing except for Jamaica, has been very low and the evidence shows that nearly all government projects do not directly benefit the poorer 60% of the population. (Cabannes and Schonning, 1985). The major issue appears to be that of affordability. These researchers reveal that if programmes are to benefit the poorer 40-50% of the population, these must deal firstly with the unemployed and those earning less than the minimum wage. They claim also that research and in-depth analysis of this sector of the population will be necessary as very little is known of *"the mobilization of resources... social dynamics i.e. the potential resources from the traditional self-help systems... economics of the informal sector... illegal tenure of land"* (Ibid, p.9). They found that the existing housing production and delivery system is beyond the affordability of the poorer 50% of the population and the size of the unit they can afford is generally less than 200 sq feet. Consequently, this points to the need to reconsider what should constitute the *"housing product"*. For them, the important question arising from this is: *"should it be land only, serviced land, a loan, evolutionary housing or building materials?"*. (Ibid). This question highlights the outstanding issue of determining precisely what constitutes the affordability of housing among low-income households in this specific category and the need to determine precisely what it is that the households are willing and able to pay for in respect of the housing product. However it shows only part of the problem because before this question can be addressed housing programme designers must know how the ability and willingness to pay is established among these households as was indicated previously in Chapter 2.

It has been shown that St Lucia has one of the highest building costs per sq.ft. for low housing being US\$ 26.00 per sq.ft. (EC\$ 70.00 per sq.ft.) among the countries of the Caribbean and is among the countries with the lowest housing affordability (Ibid). Under present conditions the maximum size dwelling a minimum wage earner can afford in the formal housing market is less than 200 sq.ft. based on the affordability assumption that households can allocate 30% of their income to housing and a repayment of 10% interest over 20 years (Ibid).

**a) The Robotham Study, (1984)**

In his assessment of housing affordability in St. Lucia, Robotham used income distribution data of National Insurance Fund (NIF) contributors in conjunction with rental payment data from the 1982 Household Budget Survey to determine housing affordability. The use of such a data base would give results which cannot be generalized for low-income households and consequently the real situation in respect of housing affordability for low-income households, especially those in the informal sector who are generally not NIF contributors, is still unknown. The findings remain relevant however, for those NIF contributors who fall below the EC\$ 1,250 per month average income which describes the low income group as per SLDB lending criterion. Among NIF contributors the average monthly income was EC\$ 1,792 in 1984.

According to Robotham, NIF contributors below the 60th percentile of income in 1984, could only afford between EC\$ 25 to EC\$ 200 per month for the repayment of housing cost for a house between EC\$ 2,600 to EC\$ 25,900. (At 1984 prices). The lowest 40% of the NIF contributors could only afford to pay EC\$ 25-90 per month for a house costing between EC\$ 2,600 and EC\$ 11,000. When he used household survey data on reported rental payment in Castries urban area to determine housing affordability, the result differed to the estimates derived from the use of NIF data. The result indicated that households below the 60th income percentile could only afford a repayment amount of EC\$ 25-EC\$ 160 per month for a house valuing EC\$ 2,600 - EC\$ 20,700. This revealed that the households in Castries could afford less for housing than NIF contributors. Robotham concluded that this was "*due to the fact*

*that NIF contributors represent only 17% of the work force, largely in the formal sector while the Castries data reflected the presence of the considerable number of households which are in the informal sector and earn lower incomes than that NIF households" ( Ibid,p.86). He also found that in the rural areas of Castries, households below the 60th percentile could afford even less for repayments per month.i.e. between EC\$ 15 - EC\$ 130 per month for houses ranging between EC\$ 1,600 and EC\$ 16,800.*

For Robotham then, the *"most challenging problem lies in meeting the demand of the lower 40% of household" and "housing needs will not be met, as conventional housing probably cannot be afforded by households below the 60th percentile in the Castries region and 70th percentile in the rural region."* (Ibid, p.84). For him, for households below the 30th percentile and 40th percentile in the Castries and rural regions respectively ...*"even sites and services programmes will prove difficult to afford"*, (Ibid) as evidenced in the proposed La Clery sites and services project. In this project it was found at the planning stage that a two room auto-constructed house would have cost EC\$ 14,000 and could not have been afforded by 40% and 30% of the households in Castries urban and rural regions respectively (CPU Report, 1983). According to Robotham, households below the 30th and 40th income percentile in Castries and the rural regions respectively, can only be served by combinations of upgrading of infrastructure and services, both inside and outside their existing dwelling; building extensions; building repair and upgrading and regularisation of tenure. Based on 1984 prices, those between the 40th to 70th percentile...*"can only be serviced by a strategy which combines self-help with conventional construction"* which is limited to *"two room unit of 200-250 sq.ft. and costing between EC\$14,500 - EC\$17,700 when built using self help and EC\$24,000 - EC\$27,000 when built conventionally"*. (Ibid, p.89).

#### **b) Central Planning Unit Study, (1987)**

A 1987 low-cost housing proposal developed by the Central Planning Unit (CPU) outlined in Table 4, shows that the proposed options could only be afforded

**Table 4: Proposed Affordable Housing by the Central Planning Unit, 1987**

Type and Cost of Housing	Assumed affordability rate	Repayment Terms	Household's Option Affordable to:
1. An upgraded 2,500 sq ft partly serviced plot (EC\$ 7,500)	15% of income (earning EC\$ 387/month)	25 years, 8% interest (repay EC\$ 58/month)	>36th income percentile
2. A 3,000 sq ft fully serviced lot (EC\$ 13,500)	15% of income (earning EC\$ 727/month) Deposit EC\$ 5,000	25 years, 10% interest (repay EC\$ 109/month)	>54th income percentile
3. A fully serviced 25,000 sq ft lot with a core housing unit of 170sq ft (EC\$ 25,000)	25% of income (earning EC\$ 928/month)	20 years, 11% interest (repay EC\$ 232/month)	>62nd income percentile
4. A fully serviced 2,500 sq ft plot with 245 sq ft core housing (EC\$ 31,000)	25% of income (earning EC\$ 1156/month)	20 years, 11% interest (repay EC\$ 285/month)	>69th income percentile

by households between the 36th and 81st income percentiles. These proposals were based on an assumed affordability rate of 15% of income for the partially serviced and fully serviced plots and 25% of income for all other options. The households below the 36th income percentile could not have afforded even the partially serviced plot as the terms and conditions of access were based on the level of income and repayment capacity.

If there has been no change over the 1980 census findings, that 69.8% of the employable population received less than EC\$ 5,000 or EC\$ 417 per month, then it is safe to conclude that in 1987 the 69.8% households receiving less than EC\$ 417 per month could not have afforded any of those proposed housing package, at the levels of income and financial terms as outlined by the CPU study.

### **c) Cabannes Study (1985)**

For Cabannes, the monthly income of the bottom 40% of households in the Eastern Caribbean including St. Lucia was found to be difficult to assess and required more detailed study. For St. Lucia, it was found that 52% of the households had less than EC\$ 447 per month, a finding which was similar to that of the 1980 census findings. He concluded from these that a housing project designed for lower income groups while seeking housing solutions for households whose income per month was less than EC\$ 500, should focus on those earning between EC\$ 150 to EC\$ 250 per month, since the majority of households of this group fall within this range (Ibid). According to him... *"a household having an income of EC\$250 per month could afford a mortgage of about EC\$5000 as a maximum. In present conditions this approximates a house of about 62.5 sq.ft."*(Ibid, p.9) He concluded that *"the formal housing market did not offer any affordable solutions for those having less than EC\$250 per month, and that for them, building materials packages and self-help would allow them to get a home of 300 to 400 sq.ft..."* (Ibid,). Further, housing programmes for the bottom 40% of the population *"should seek housing solutions costing less than EC\$ 10,000 focusing upon those around EC\$ 5,000, but should also find appropriate ways to set up a 'housing delivery system' for such innovative*

*products.*". (Ibid, p.10). Cabannes conclusion reinforced Robothams' findings, that given the present context for housing production and delivery within the formal housing market, there was no feasible conventional housing solution for those earning below the 40th percentile of the income distribution. (Ibid).

The challenge according to these studies lies in determining specifically, the nature of housing affordability of households receiving less than EC\$417 per month and precisely what is to be the nature of the housing solution corresponding to this level of income. For this research this is only part of the problem as it is necessary, as indicated in Chapter 2, that the ability and willingness to pay be first established. From the perspective of this research these studies are deficient in their analysis of the issue of affordability because they have taken the cash income as a proxy for household wealth and judged the household's repayment capacity and capability and their willingness to pay on this. They have, in their adherence to the reliance on the level of wage income, excluded the importance of other monetary and non-monetary influences. This research claims that these are relevant for understanding the establishment of the ability and the willingness to pay for housing among low-income households as outlined in Chapter 2.

This research also takes issue with the studies since the data base used to make generalizations is inappropriate. The outcome of the use of NIF contributors income data to determine household housing affordability can only be attributed to that group. The NIF contributors represent only 17% of the labour force and they comprise formal sector employees for which income levels can be determined. The bulk for the labour force are engaged in unrecorded activities in the informal sector or are unemployed. Levels of income in this category are not recorded or known. What is the situation with respect to housing affordability among this group? Where rent payment data is used to determine affordability as Robotham used for Castries, the result is limited to rent paying households in Castries. Further, Robotham assessment is based on assumptions that households can spend 25% of their incomes on housing cost repayments. It has been shown in Chapter 2, how problematic it is to use these

arbitrary assumptions regarding the percentage of income households can afford and how inappropriate to take the level wage income as the measure of wealth.

## **PART 2**

### **4.6 LOCATION, PHYSICAL CHARACTERISTICS AND LEVEL OF INFRASTRUCTURAL DEVELOPMENT OF THE FAUX AU CHAUD AREA<sup>9</sup>**

The information for this section comes from primary data obtained from a 100% scanning survey conducted by this researcher since information on the community was non-existent. The survey was designed to allowed for the socio-economic description of the community and the selection of the case study households for indepth interview and analysis.

#### **4.6.1 Location & Physical Setting**

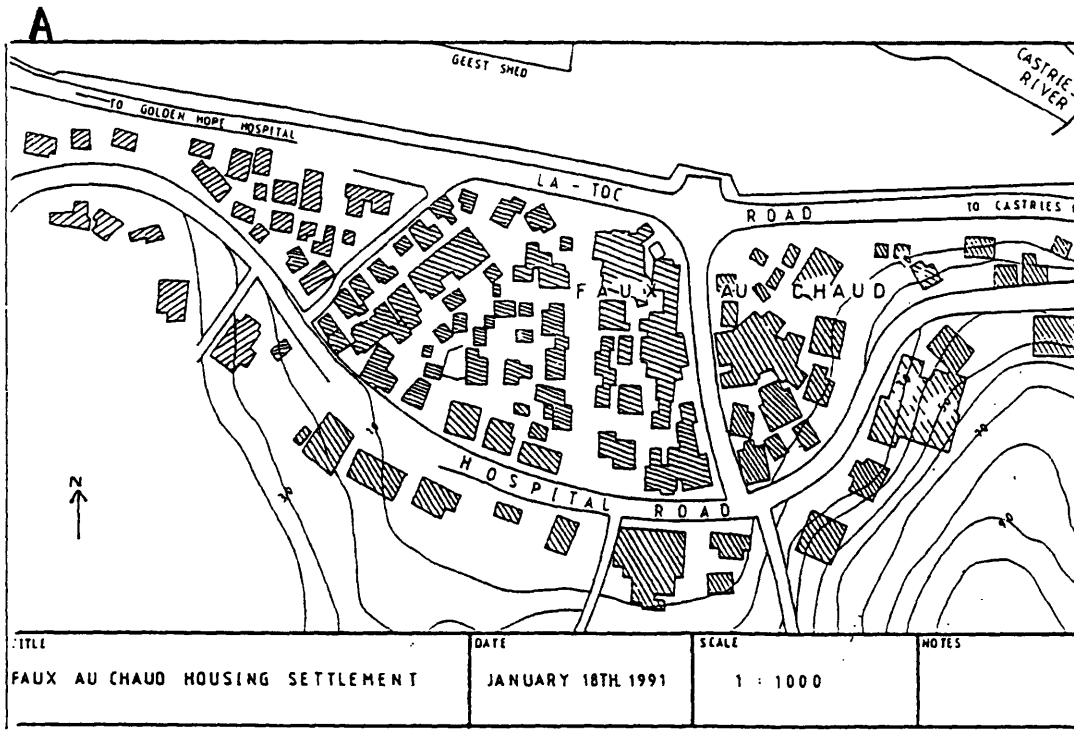
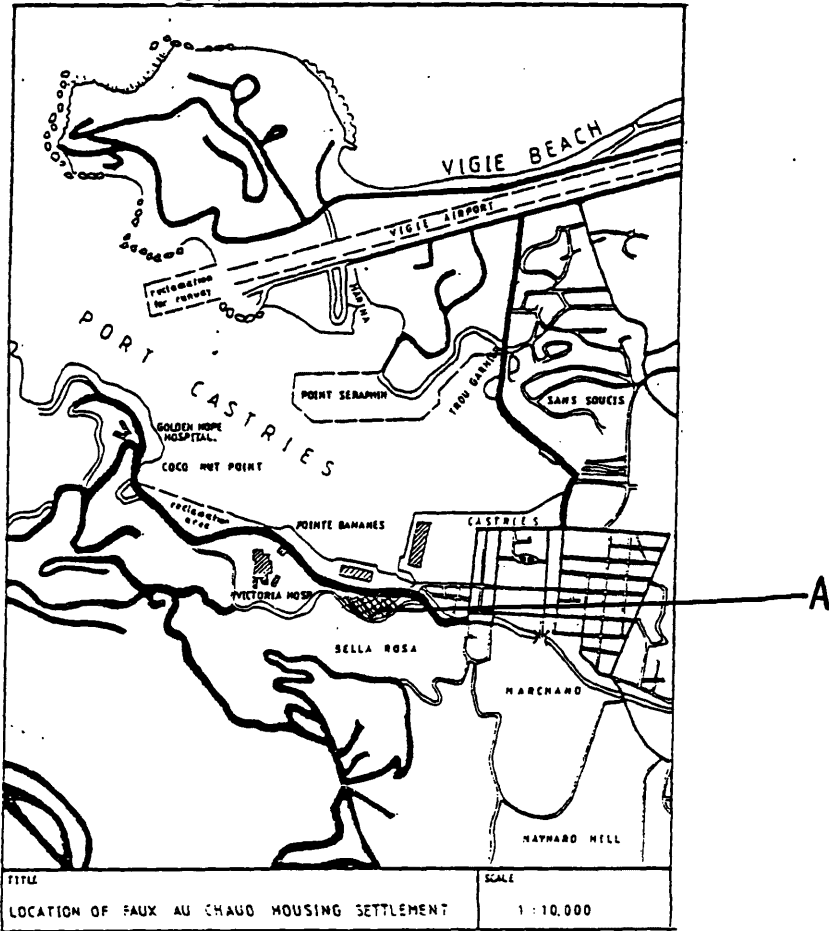
Faux-au-Chaud is a squatter settlement located on reclaimed lands on the southern side of the Port Castries, between the Hospital Road and the La Toc Highway. (Figure 5 and Plates 1-4, Appendix 2). It covers an area of approximately eight acres of land in government ownership but vested in the Port Authority. This area has been reserved for port expansion according to the Management of the Port, and sections of it had been reclaimed from the sea since 1974. Since that same year families began squatting in the area. As low-lying reclaimed land, the area is prone to flooding and exhibits poor drainage. The housing density is high and this gives the area a congested character. (Plates 5-8, Appendix 2).

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<sup>9</sup> Socio-economic characteristics of the community were derived from a household survey undertaken by the author in 1990 as there was no written information available on the community.



FIGURE 5



#### **4.6.2. Infrastructural Services**

The city administration have provided refuse disposal facilities, main access roads, main water supply pipelines and public conveniences such as laundry/bath and toilet facilities to the area's residents. There are two main standpipes in the area to serve residents without private connection but these are often non-functional due to broken taps. Utility companies providing services such as electricity, and telephone have ignored the illegal status of the community and have installed private connections to individual homes on request, even where dwellings have had no formal construction approval from the Development Control Authority. There is therefore a defacto recognition of the area as a legitimate settlement even while the Port Authority is claiming it requires the land for port expansion. Only one of the two main accesses traversing the community is motorable. Generally, access through the community is via a series of footpaths established along main drains or between houses. Drains are crossed by narrow wooden bridges constructed by residents themselves. (Plates 9-12, Appendix 2). The City Council has provided a single bin for refuse disposal. This garbage bin is often full to capacity. As a result, garbage is often indiscriminately dumped around this bin or in the open drains.(Plates 13-14, Appendix 2).

#### **4.7 POPULATION CHARACTERISTICS OF THE FAUX AU CHAUD**

One hundred and ten households responded to the scanning survey out of a total of one hundred and <sup>eighty</sup> . Their information are presented in the sections that follow.

##### **4.7.1 Households by Age and Headship Structure**

The survey revealed that 27.3% (30) of households heads were in the less than 30 years age group, 57.2% (63) of all households were found to be in the 31-60 years age group and 15.5% (17) in the over 60 age group. The following headship structure classification is used here according to households' response to the question relating

to who is the head of the household, asked in the survey. The findings show that 49.1% (54) of the households interviewed were joint-headed households, 32.7% (36) female headed and 18.2% (20) male headed. 27.2% (30) of households heads were in the age group of 30 years or less; 55.5% (61) range between 31 and 60 years while 17.3% (19) are over 61 years.

#### **4.7.2 Household Structure, Size and Composition**

44.5% (49) households were found to be nuclear households; 47.2% (52) were found to be single persons or single parent households while 8% (9) were found to be extended family households. In general households were small in size. 70% (77) of households were found to be households consisting of two children or less; 22% (24) were households of 3-4 children; 5% (6) were households of 5-6 children; 2% (2) were households of 7-8 children, while 1% (1) was a household of between 9-10 children. Of the 54 joint headed households 85% (46) were households of four children or less while 15% (8) were of more than four children. For the 36 female-headed households, 92% (33) were households of four children or less while 8% (3) were households of more than four children. For the 20 male-headed households, 65% (13) were found to be childless; 35% (7) were households of less than four children. In fact no household in this category had more than two children.

### **4.8 EMPLOYMENT STATUS OF THE FAUX AU CHAUD RESIDENTS**

#### **4.8.1 Employment Status of Household Head**

The survey revealed that of the 110 households, 55% (60) of the household heads were employed full time; 1% (1) was employed for more than six months per year; 2% (3) were employed for less than six months per year while 42% (46) of household heads were not working. Only 9% (5) of spouses were employed full time while 91% (49) were not working. Of all households interviewed 18% (20) had secondary earners.

#### **4.8.2 Employment Status And Age Of Household Head**

When the age of the household heads was correlated with the employment status of household head it was found that 70% (21) households in the less than 30 years age group are employed full time while 26.7% (8) of this group is unemployed. In the 31-60 age group, 58.1% (36) were found to be in full time employment while 38.7% (24) were found to be unemployed. In the over 60 years group, 16.7% (3) households are in full time employment while 77.7% are unemployed.

#### **4.8.3 Households by Employment Status of Heads and Headship Structure**

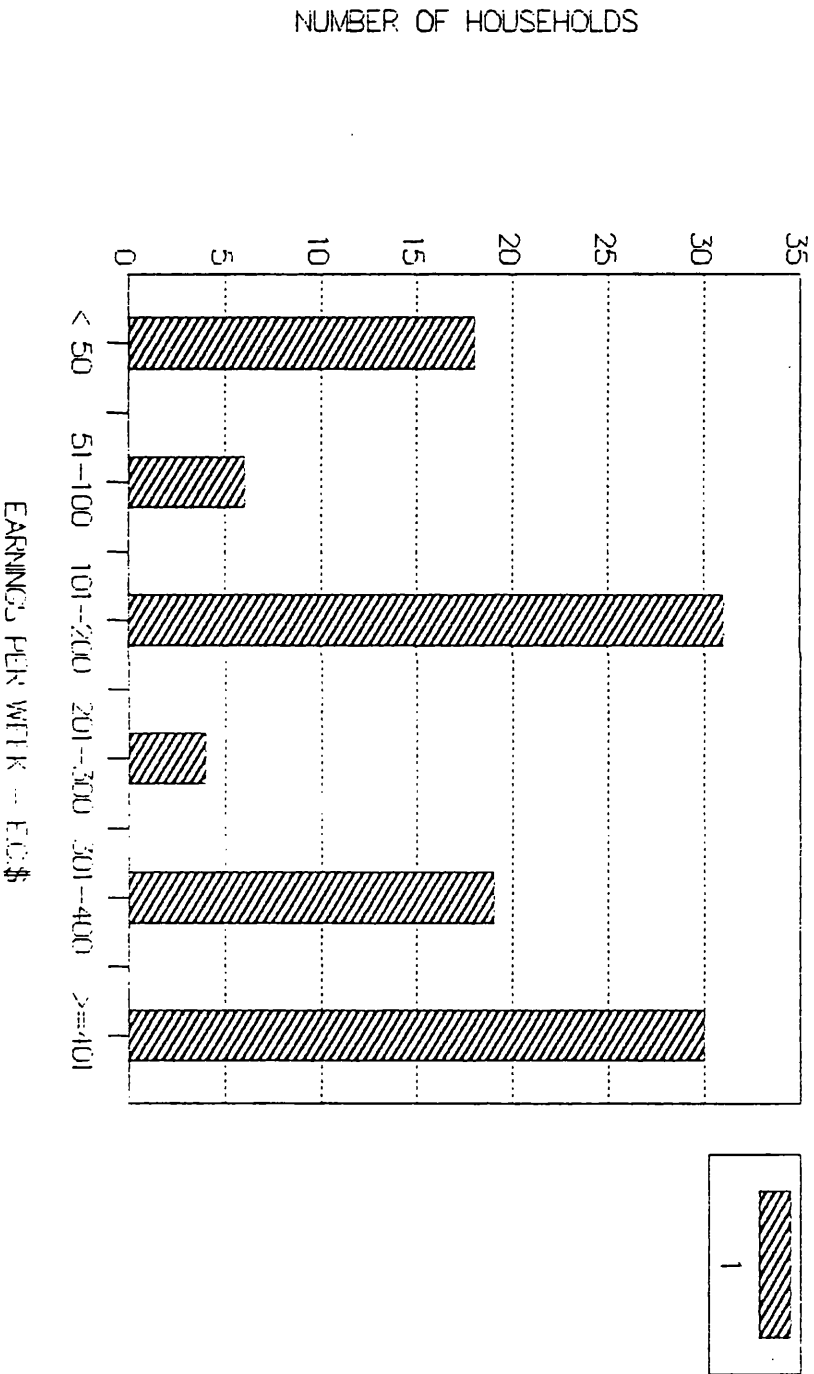
The survey has shown that 66.6% (36) of joint-headed households were employed full time while 27.7% were not working; 30.6% (11) of female-heads were employed full time while 69.4% (25) were not working and of male-heads, 65% (13) were employed full time, while 30% were not working. Female headed households exhibit the highest level of unemployment.

### **4.9 HOUSEHOLD INCOME IN THE FAUX AU CHAUD**

#### **4.9.1 Income Distribution**

Figure 6 shows the weekly income distribution among households based on categories of weekly earnings. Since there is no official categorization of the low-income households available for St Lucia, this researcher used a methodology suggested by Mumtaz, B. (1990), to define this group. The methodology resulted in the definition of low-income households as those whose combined regular wage earnings is less than EC\$ 1,600 per month on the average. It was found that 72.7% (80) of households could be defined as low-income earners based on this categorization as they were found to be earning less than EC\$ 400 per week or EC\$1,600 per month in combined regular wage incomes. If the minimum wage of EC\$ 200 (US\$74) per month or

Figure 6  
INCOME DISTRIBUTION



EC\$ 50 per week is considered, then according to the survey 16.4% (18) of all households were earning incomes equal to or less than the minimum wage.

#### **4.9.2 Households by Headship Structure and Income**

Of the (18) households who were earning less than the minimum wage of EC\$50 per week or approximately EC\$200 per month, 3.7% (2) of were joint-headed, 36.1% (13) female-headed and 15% (3) male-headed. More than 35% of both male-headed households and joint-headed households respectively, earned more than EC\$ 400 per week or EC\$ 1,600 per month. Female headed households earning more than EC\$ 400 per week accounted for 11% (4) of female headed households. Of the 27.2% (30) households receiving incomes of more than EC\$ 400 per week, 63.3% (19) comprised joint-headed households; 13.3% (4) comprised female-headed households while 23.3% (7) comprised male-headed households.

According to the survey female headed households were earning less income than any other type of household. Sixteen of female-headed households earned less than EC\$ 50 per week. In general, for the female household heads that had incomes less than EC\$ 400 per week, more than 73% (22) were not working and were receiving income transfers of less than EC\$ 200 per month. The 27% (8) of female headed households who were in full time employment were receiving more than EC\$ 200 per month.

### **4.10 HOUSING TENURE, OCCUPANCY AND HOUSING CONDITIONS IN THE FAUX AU CHAUD**

#### **4.10.1 Housing Tenure**

Three households were found to be paying a monthly rental for their plots to a neighbouring landlord who had claimed that the area they occupy is not owned by the government. The survey plan of the land show that the area occupied is part of the public owned land.

Ownership of housing predominated with 70.9% (78) of households owning their dwelling units; 23.6% (26) households were renting while 5.5% (6) did not stated their nature of their tenure. (Figure 7). Of the renting households, 52% (15) were paying rents of less than EC\$ 50 per month; 34.6% (9) were paying between EC\$ 50 and EC\$ 200 per month; while 7% (2) were found to be paying monthly rents in excess of EC\$ 350 per month. (Figure 8).

#### **4.10.2 Room Occupancy**

The survey revealed that 11% (12) households were sharing their dwelling while 89% (98) households occupied single unit dwellings which mirrored the national pattern. The survey revealed that 7% (8) of households occupied units of one room; 28% (31) households occupied 2 rooms; 8% (9) occupied units of three rooms, while 56% (62) households occupied units of more than three rooms.

#### **4.10.3 Housing Quality and Conditions**

A variety of housing quality and conditions could be seen in the area. Generally these homes are built mainly of timber but with foundations of cement blocks. The houses that are considered of poorer quality show a general state of disrepair with rotting timber and corroding galvanized roofing sheets. These houses have been produced on households own initiatives but a few have been produced many years ago by the

FIGURE 7

HOUSEHOLD OWNERSHIP STRUCTURE

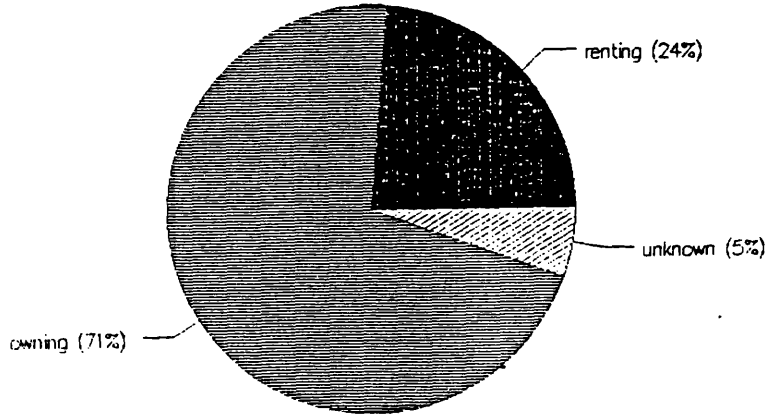
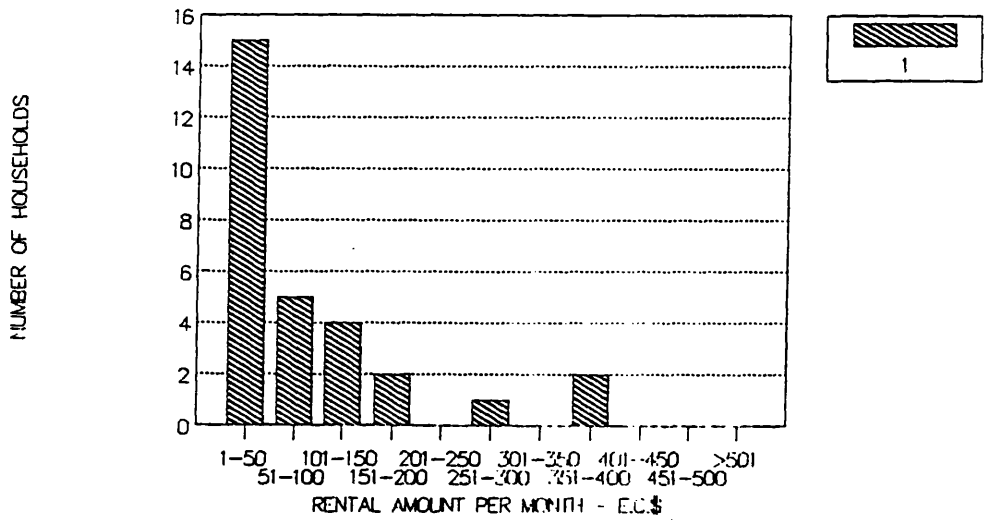


FIGURE 8

DISTRIBUTION OF RENTING HOUSEHOLDS BY  
AMOUNT OF RENT PAID PER MONTH





government as indigent housing. These had not been well maintained by the occupants. (Plates 15-24, Appendix 2).

The majority of dwelling units in the survey area were found to be constructed from timber, the cheapest building material. 93% (102) households occupied dwellings of timber construction, 6% (7) occupied dwelling units of a combination of timber and reinforced concrete works while 1% (1) was found to be occupying a unit built purely from reinforced concrete.

#### **4.10.4 Housing Improvement**

Most households 84% (96) indicated that they had not improved their housing over the past year. 13% (14) indicated that their units had undergone some improvements or were actually in the process of improvement of which 43% (6) were joint headed households; 50% (7) were female headed while 7% (1) was male headed household. The majority of households ie. 94% (103) indicated that they were planning improvement. 69% (76) of households surveyed indicated that they would like to own the plot on which they live, 24% (26) indicated that they would not like to own the plot presently occupied while 7% (8) offered no response or indicated that they did not know.

Of the renting households found in the survey, 96% (25) indicated that they are planning on owning their own house. Of those planning to own 67% wanted a dwelling unit made from reinforced concrete while, 29% showed a preference for timber construction.

When households were asked of the housing improvement most desired, less than 20% indicated any type of direct housing improvement options. The majority of households 59% (65) indicated as the most desirable improvement option, the need to improve toilet and sanitation to the dwelling. 16% (18) households indicated ownership of a house and plot as the improvement most desirable 7% (8) indicated that ownership of a house plot was the improvement most desirable while 3% (3)

indicated the need for improved water service to the building as the improvement most desirable.

#### **4.10.5 Community Problems**

When households were asked of what they saw was the most severe community problem 35% (38) indicated that they saw no problem; 19% (21) indicated problems with their neighbours; 14% (15) revealed that flooding and improper drainage was the most severe problem while 10% (11) indicated that sanitation and garbage collection was the most severe community problem. A small percentage, 5% (6) and 2% (2) of households interviewed indicated that the lack of toilet facilities and water facilities respectively.

#### **4.11 CASE STUDY HOUSEHOLDS**

In order to examine in detail households' experiences in the establishment of housing ability and the willingness to pay for housing, sixteen case study households fitting the criteria outlined in Chapter 3, were selected. The section which follows provides a description of these households in respect of their socio-economic and housing characteristics at the time of the fieldwork.

**The Edwards:**<sup>10</sup> This family is a four-person household of which two children<sup>11</sup> under the age of five years. As the spouses<sup>12</sup> both work, Mrs Edward' sister comes in to look after their baby daily. The spouses are not legally married but live in a

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<sup>10</sup> In order to ensure anonymity of case studies, the real names have been changed.

<sup>11</sup> "Children" in this research are those under the age of sixteen (16) years.

<sup>12</sup> Where households are in common-law union, the female spouse will be addressed as "Mrs" followed by the name of the male spouse or referred to as "wife". The male spouse will be referred to by his name or the term "husband" as appropriate in the context.

relationship that is described as a common-law union. Mr. Edwards is a machine technician working at a local resort while his wife works as a sales person in a local supermarket. They both work full time and earn approximately EC\$1,375 per month in total household income. The Edwards moved to the Faux-au-Chaud area in 1981. They now occupy a three room timber and concrete dwelling inclusive of electricity and water services and which they value at EC\$30,000. They pay about EC\$388 per month in housing payments of which EC\$200 is c(n)1 repayment of a housing loan taken for past housing investment improvements. Their housing quality index, HQI<sup>13</sup>, can be described as grade 4.

**The Charles’:** This is a female-headed, single parent household of eight persons. Three are children. Two of the other four are unemployed and seeking work, while the other two are still at school. Miss Charles is 45 years old and in full time self-employment, managing her small grocery shop and refreshment counter. She started her house in the area in 1979. She has a special male friend who is a regular visitor to the household and who is important in the household’s decision making process as will be shown later. Her monthly income approximates EC\$1,600 of which EC\$400 per month is spent on regular housing investment and expenditure payments. Of this EC\$200 represents c(n)1 payment for a building materials loan taken for past housing investment. The dwelling is a timber and concrete structure of more than three rooms inclusive of electricity, water and internal kitchen area, is valued her dwelling at EC\$40,000. HQI is grade 4.

**The Girard’:** Like the Charles’ household, this household is a female-headed, single parent household of five persons, four of which are children. Miss Girard moved to the area in 1980, she is 30 years old and works as a shopkeeper whose total income

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<sup>13</sup>. The **Housing Quality Index (HQI)** is a measure devised by this researcher to distinguish the quality of squatter dwellings. It is based on the soundness of the dwelling in terms of visible structural quality, level of services and facilities available, state of repair and the type of construction building material.  
The values range from 1-4 in order of increasing quality.  
1 = Very Low Quality; 2 = Low Quality;  
3 = Medium Quality; 4 = High Quality;  
5 = Very High Quality.  
(Appendix 3 outlines the details of the Methodology).

per month approximates EC\$800. She occupies a timber and concrete dwelling of more than three rooms with only electricity service which she values at EC\$20,000. Her monthly housing expenditure payments, c(r), is EC\$60. HQI is grade 3.

**The Josephs’:** This is a three person household, one of whom is a child aged six years. The Josephs’ is a common-law union. They moved into the area in 1975. Both spouses work full time, he as a labourer in a beverage bottling plant and she in a restaurant as a waitress. Their total monthly household income is about EC\$600. Mr. Joseph is 38 years old while his spouse is 30 years old. They now occupy a three room timber dwelling which has electricity service and is valued by them at EC\$15,000. Their monthly housing expenditure payment, c(r) is EC\$90. HQI is grade 3.

**The Jn Paul’:** The Jn Paul’ household is another female-headed, single parent household of ten persons, four of whom are children. There are five earning adult members of this nine member household in which the total household income per month is about EC\$700. Miss Jn Paul has a visiting special male friend who occasionally stays in the house for extended periods. Miss Jn Paul is 52 years old and works as an office messenger. One daughter is a basic school teacher, one is a domestic helper and the two elder sons are labourers. She moved to the Faux-au-Chaud in 1975 after inheriting her mother’s house in the area. The family occupies a two room timber dwelling in which there is an illegal electricity service connection and which estimated at EC\$10,000. They pay EC\$40 (c(r)), per month for water service obtain from a neighbour’s pipe and their HQI is grade 2.

**The Hippolyte’:** The Hippolyte’ are a married couple with two children. Both spouses work full time. Mr. Hippolyte works on board a tourist cruise ship while his wife works as a cashier at a local hotel. Their combined monthly household income is about EC\$1650. The couple moved to the area in 1985 after inheriting their plot from Mrs. Hippolyte’s brother who was migrating to the USA. Mr. Hippolyte is 36 years old while his spouse is 34 years old. They occupy a timber and concrete dwelling of more than three rooms with separate toilet and kitchen areas as part of

the main structure. The dwelling has electricity and water services and they have estimated it at EC\$50,000. The family pays about EC\$445 per month in housing payments of which EC\$300 is housing investment repayments associated to c(n)1 costs related to a cash loan. Their HQI is grade 4.

**The St Croix’:** The St Croix’ is a single person, female-headed household. She is 42 years old, works as a bakery sales person and moved to Faux-au-Chaud in 1980. She has a special visiting male friend who is important to her decision making process as will be shown in a subsequent section. Miss St Croix works full time. Her total monthly income is about EC\$620 and includes the monthly contribution of her special friend. Her dwelling is a two room timber structure for which she pays EC\$110 per month in housing expenditure payments (c(r)). It has only electricity service and an external timber kitchen adjacent. Her house is valued at EC\$10,000. HQI is grade 3.

**The Jn Baptiste’:** This household is a male-headed household of three persons, one of whom is a child. Mr. Jn Baptiste works full time as a prison officer while his wife is a housewife and is not seeking employment. Mr. Jn Baptiste is 46 years old. His wife did not care to disclose her age. Mr. Jn Baptiste has always lived in the Faux-au-Chaud area but on the freehold side of the Hospital Road. They moved to the squatter area of Faux-au-Chaud in 1974 after the dissolution of Mr Jn Baptiste’ first marriage. Their total monthly household income is about EC\$1,500. Their dwelling is of timber and concrete, of more than three rooms, including water and electricity service and separate toilet and kitchen areas as part of the building. The house is valued by them at EC\$25,000. EC\$70 is spent monthly on c(r) housing expenditure payments. Their HQI is grade 4.

**The King’:** The King’ is a joint-headed household of six persons, four of whom are children. Mr. King works as a full time as a stevedore. The wife is not seeking employment. The family moved to the area in 1978 and they are married. Mr. King is 34 years old and his wife is 32. They live in a timber dwelling of with more than three rooms with electricity and water service and internal kitchen and dining area.

Their monthly household income is about EC\$1,200 of which EC\$100 goes into housing payments, c(r) per month. The dwelling is valued by them at EC\$25,000. Their HQI is grade 4.

**The Williams’:** The Williams’ household comprises a married couple and two grandchildren. Mr. Williams is 58 years old while his wife is 56 years. They first moved to the Faux-au-Chaud as tenants in 1979, but bought their house in 1980. Mr. Williams works as a driver for a local petrol distributing agency while his wife works as a cleaner at a local church centre. Their total household income is about EC\$1,260 of which EC\$145 goes toward monthly housing expenditure payments, c(r). The family occupies a timber dwelling of more than three rooms inclusive of electricity and water services and a kitchen area. They have valued the dwelling at EC\$30,000 and it has an HQI of grade 3.

**The Green’:** The Green’ household comprises seven persons, of which three are children. There are four earning adult members in the household, three of whom were unemployed at the time of the survey. Mr. Green is a stevedore, his wife used to work as a domestic helper, the daughter used to work in a clothes making factory, while the son used to work as a labourer. Total household income is about EC\$800 monthly of which EC\$90 is spent on monthly housing payments, c(r). Mr. Green is 51 years old, while his wife is 48 years old. They first moved to the area in 1972. The Greens are a married couple. The family lives in a timber and concrete dwelling of more than three rooms, an H.Q.I of 4 with electricity and water service and a separate kitchen area as part of the main structure. The dwelling is valued at EC\$25,000.

**The Mason’:** This is the only single person/male-headed household. He is 24 years old and works as a timber cutter. He first established his house in the area in 1983. Mr Mason earns about EC\$700 per month as a wood cutter. He lives in a two room timber dwelling with electricity and water. He pays about EC\$36 per month in housing payments c(r). He valued his house at EC\$10,000 and his HQI is grade 3.

**The James’:** This family lives in a common-law union, with three children. They first moved to the area as tenants, but purchased their house in 1981. Mr. James works as a stevedore while his spouse works as a domestic helper. Mr. James is 29 years old. His spouse did not disclose her age. Their total monthly income is about EC\$1300 of which EC\$40 is spent on housing expenditure payments, c(r). They occupy a timber structure of three rooms with electricity service which they valued at EC\$25,000. Their HQI is grade 3.

**The Lewis’:** The Lewis’ are one of the oldest couples in the study population and theirs is a male -headed household. Mr. Lewis is 77 years old and his wife is 64 years old. There are seven persons in the household, of which four are children. The Lewis’ are married. Mr. Lewis works as a tailor and his wife as a seamstress in their home. There are two earning sons living in the household. Total monthly household income is about EC\$1,200 of which EC\$95 goes for monthly housing expenditure payments, c(r). The household first established their dwelling in the area in 1975. The family occupies a timber and concrete dwelling of more than three rooms, which they estimated at EC\$30,000. The dwelling contains electricity and water services and there is a kitchen as part of the main structure. Their HQI is grade 3.

**The Thomas’:** This is a household of eleven persons of which eight are children. It is a male- headed household. The Thomas’ are a married couple. Mr. Thomas works as a driver while his wife is a housewife, but used to work as a domestic helper. He is 65 years old. His wife did not wish to disclose her age. The Thomas’ first rented their dwelling in the area, but purchased it in 1974. The total household income is EC\$769 per month of which housing payment c(r), accounts for EC\$100. The dwelling is a timber dwelling of more than three rooms, with electricity and water services and a kitchen area as part of the main structure. They have valued their dwelling at EC\$15,000. Its HQI is grade 3.

**The Adonis’:** This is a female-headed, single parent household of six persons, of whom five are children. Miss Adonis is 30 years old and works as a copy typist and earns EC\$619 per month of which she pays EC\$40 for housing payments, c(r). She

first established her dwelling in the area in 1985. The family lives in a timber dwelling of more than three rooms, she valued at EC15,000. There is water and electricity service and an external kitchen. Her HQI is grade 3.

#### **4.12 CONCLUSION**

This chapter has provided a brief outline of the physical, socio-economic and social aspects of St Lucia and its housing problems as far as it relates to low-income households. Specifically it shows that the main problem for low-income households is that of finding affordable housing. It shows that the issue of this affordability has been posed differently by different researchers and that there is still a need to determine what the levels of affordability are for this group of the population. In this chapter the community from which the case studies have been drawn has been described in basis socio-economic terms and the cases themselves have been briefly described. The following chapters present the findings in respect of the main objective of this research.



## **CHAPTER 5**

### **THE ABILITY AND WILLINGNESS TO PAY FOR THE FIRST STAGE OF HOUSING IMPROVEMENT.**

#### **5.0 BACKGROUND**

This chapter presents the findings in two parts. Firstly, for this stage and similarly for the subsequent chapters, there is a first section which restates the theoretical framework that integrates the stage and the processes that define the expected features of the stage under consideration. The proposed hypotheses are then restated followed by the presentation of the case histories. At the end of each case there is a short summary of the characteristic pattern in the establishment of the ability and willingness to pay for that household in respect of the four processes of enquiry. A second part follows in which the researcher, firstly, establishes the common features among households in respect of the congruency of the findings with the expected features of the particular stage and the processes with respect to the ability to pay and the willingness to pay and secondly, discusses the extent to which proposed hypotheses have been supported. This is then followed by a discussion of the findings with respect to the ability and willingness to pay. This structure will give rise to some degree of repetition which is inevitable.

It should be noted that some households were reluctant to have their interviews tape recorded and as such this researcher has had to reconstruct their case histories here from notes. Where actual writing of short quotations was possible with such households, these are presented to help substantiate the presentation. Some materials were obtained from the structured section of the interviews. Therefore the presentation of cases combine the use of reported speech and direct verbatim presentation. It should be noted also that the language of the verbatim presentation is the local way of speaking english.

## **PART 1**

### **5.1 ESTABLISHING THE ABILITY AND WILLINGNESS TO PAY IN THE FIRST STAGE : INITIAL SETTLEMENT**

According to Figure 1, and Chapter 3 subsection 3.2, this stage is characterised by the construction of a one room timber structure which is the acceptable minimum standard of this stage. Access to this shelter is the only pre-occupation of the household in order to establish its independence and viability. The preference for this attribute is the result of the desire to remove the residential stress created by the interaction between the existing and/or changing socio-demographic characteristics and existing housing attributes in the original supporting household. Land tenure is illegal and dwelling material quality is cheap, temporary and is manifested by the use of timber and galvanize sheets. On-site water, electricity, toilet and kitchen facilities are non-existent and access to services is from public stand-pipe and toilet facility. Cooking takes place in the yard or in the dwelling.

The hypotheses state that the willingness to pay for this basic one room timber dwelling is the outcome of one or a combination of the following desires 1) to form a new household as a consequence of marriage, cohabitation decision, or conflict in interpersonal relationship; 2) to form new household in order to remove social conflicts arising from overcrowding in original kinship household; 3) of an established household to remove residential dissatisfaction over the inadequacy of existing quantity and quality of space caused by an increase in household size. The ability to pay will be established from the intrahousehold capacity through consensus without negotiation and conflict over resource use. The wage income of the primary wage earner who is the sole earner and the head of the household will be used, in addition to the accumulated savings and building materials and the use of auto-construction labour.

The findings show that the Girard', Green', Jn Paul' and Mason' established a dwelling with characteristics similar to the ones assumed for the first stage. All other

households first established their dwelling in the Faux au Chaud with improvement characteristics of the proposed second stage of the housing development process based on the level of service included.

### 5.1.1 THE CASES

#### The Girard'

Miss Girard, built a one room timber house in 1980 as a consequence of conflict in the original supporting household which forced her to find accommodation for herself and her children. The house was constructed over a five week period on a plot given to her by her friend who was living in the area. It was this conflict she experienced with her uncle which forced her to start her saving in order to move out of his house and into a place of her own. Part of the money was saved in a 'su-su'<sup>14</sup> and the rest was home-based. According to her it took her "*a while to save it*".

*She explained... "I used to live with my uncle up the road and we couldn't get on... always quarrel ... I had to move out to find a place for the children. The lady next door is my friend she gave me this spot, it was part of hers..."*

*She continued ... "I use to sell on Bridge Street the little money I make I use to save it up ...sometimes I put it in a 'su su' ...I had some save up when I was living with my uncle because I wanted to leave his house....My friend next door give me this spot so I could build...I was still in my uncle house when I build it and he didn't even know...If he know I am sure he would kick me out of his house...he is a wicked man...but God help us...It hard when you have children... I couldn't even build it from start to finish because the little 'su su' money wasn't enough...although I had a little*

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<sup>14</sup>. The term 'su su' is used locally to describe the informal community based saving system in which a number of persons make a regular monetary contribution to a central fund for a specified period. Each time the contribution is made one member collects the total amount. This pattern is repeated until all members have had their chance to collect the total contribution from the 'bank'. The money is collected by a treasurer who is trusted by all members.

save up in the house... I build a part and then save up some more money to finish it."

*And to build..."when I had enough money I hired a carpenter and a mason to break up the big stone... they that build it for me I had to put it on columns because of that big piece of stone on that side and also because I wanted to put up a little shop to sell things later..."* She explained that..."I couldn't even put in light because I didn't have money...but anyway it was good to have my own house ...If I had the money I would build a bigger house but at least it help me get out of that house".

About the use of relatives and friends to build , she expressed the following..."I had no one to help me build...everyone I know is in Chouisuel and it is hard for them to come to Castries for that...I didn't know many people here either so I had to pay to get things done... I wouldn't ask my uncle for help because I didn't want him to know what I was doing. As for help to pay for it I had nobody, so I have to depend on myself..".

According to Miss Girard... *"It cost me in all EC\$ 2400 to build it and I had to pay the carpenter and the mason EC\$ 400. The first set of money finish before they finish the little house...it wasn't enough to build it from start to finish because is me a lone...so I had was to save some more to finish it."* She had other help to build as she expressed..." Well the mister I was friendly with help me to get bring the boards...he didn't have money to help...anyway I did'nt want my uncle to know I was building".

For the Girard' then it was internal conflict in her uncle's household that forced her to form her own household and seek her own dwelling. This was paid for from savings accumulated as a deliberate decision because of her limited monetary resource capacity at the time the decision was made to pay for housing which would allow her to remove from the conflict she was experiencing. She was unable to mobilize available sources for auto-construction and financial assistance because of the limited

development of her monetary resource capacity, the unavailability of intrahousehold and interhousehold labour sources in close proximity and conflict in social relationships between herself and those in close proximity. As a result, hired labour was used to build. The use of auto-construction labour was limited to the transport of building materials by her special friend.

### **The Green'**

The house ownership history of this family began with the establishment of their dwelling in the Faux-a-Chaud. This plot was originally occupied by an old uncle of the Green' friend and which was by then under the friend's control since the death of his uncle. They explained that they built their two room timber dwelling because they got married and needed a home. For a short while the couple lived with Mr Green' parents but was soon offered their plot. The bucket collection system<sup>15</sup> was used for sewage waste disposal. One room of this dwelling served as a bedroom while the other was used as a dining/living room. There was no electricity and water was collected from a standpipe. After a while the family was able to get an illegal electricity connection from a neighbour's line.

The house was built with a combination of auto-construction and hired labour in 1972 at a cost of EC\$2000. Of this cost, EC\$500 (25%) was used to pay the cost of hired labour for the erection of the concrete foundation and transport of some of the building materials to the site while some of the materials were transported at no cost, to the site by Mrs Green' brother who had a van at the time. Materials were purchased at the time construction was required. The family built the foundation out of concrete because of the poor drainage in the area. They felt it was better than to use timber posts as footings which would rot easily. The building was completed in eight weeks and according to Mr Green it was because he was doing the building largely by himself "*with the help of one or two close friends on weekends*". This was

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<sup>15</sup>. The 'bucket collection system' of sewage waste disposal is one in which households collect the waste and dispose of it when the City Council's special collection trucks call between 4 a.m and 5 a.m daily.

because he was busy in his regular job and further he... *"did not have much friends in the area to help"*. The cost of the house was financed partly from a loan from Mr Green's brother which represented EC\$1000 of the total amount. The remaining amount was from savings Mr Green had accumulated previous to his marriage. At the time he was the only one working and according to him...*"although I had a little money it was not much...so I had to borrow it from my brother.."*. Mr Green explained that his brother told him he could pay this money back when he could afford it. He explained that he did not have any difficulty getting the money and he was able to pay the amount back from his income *"little by little until it was finished"*.

According to Mr Green, he would have preferred to construct the whole building himself because it was cheaper. But he did not have the skill to do everything by himself at that time. As he expressed it...

*"You see this house... I built most of it by myself... especially this part (pointed to the concrete living room section) it take me a long time but I did it... its not hard to lay the blocks... the hardest part is to bend the steel...I had to get a mason to do that... the only thing is that when you have to work, you don't get much time to do things for yourself..."*

For the Green' then, the willingness to pay for shelter in the first stage was outcome of the desire to form their own household as a consequence of their marriage. They were able to pay for it from accumulated savings and a family loan and used a combination of hired and auto-construction labour. They had to get a loan because of their monetary capacity at the time was insufficient to meet the required payments as Mr Green was the only one working. They used and preferred auto-construction labour because it was cheaper. However, the lack of skill caused them to pay for hired labour to build the concrete foundation on which the house was built. There was no negotiation over resource use and it was easy for them to get the loan.

## The Mason'

According to Mr Mason his housing history started about 1983 when at 17 years he left his mother's house to live with a friend rent-free, in a tiny one-room house in the area. According to Mr Mason...*"I can't live with my mother all my life... I am a big man, I must find a place for myself... the women like a man to have his own place.. and my mother didn't want me to take women in her house...I wanted some freedom...you know how it is."* He explained that this house was in a poor state. His friend left soon after to live with his girlfriend. It was then he decided to erect a new house in the place of the existing one which was very old and in a state of disrepair. Mr Mason's first housing improvement activity was the erection of a one-room dwelling to replace the old dwelling "*...because the old house was falling down...and it was easy to get the boards to make a new one"*

According to Mr Mason in 1983, his one-room timber dwelling cost EC\$700 of which EC\$300 was paid to a carpenter to place the roof because neither he or his friends had the skill for this. He explained that the cost of materials was low because he was able to get posts for the house from the forest where he works cutting boards. The building was financed from savings he had accumulated specifically for the purpose from sales of boards he had cut from the forest for furniture makers and other people. At the time he did not have the money to build so he had to save for it. It took him about three months to accumulate the money. He constructed the dwelling with the help of his friends but he had to hire a carpenter to lay the roof. There was no electricity or service to the building because he "*wasn't fussy 'bout that yet..*". He also had to pay EC\$60 to bring the galvanize sheets and boards from the building supply store to the site and another EC\$80 to bring the posts from the forest. The house was built in one week.

For Mr Mason then, movement to the first stage resulted from the need to form his own household as a result of him not wanting to offend his mother. His dwelling was established from a limited intrahousehold capacity through a process of savings

accumulation, the use of building materials obtained free of cost from the forest and the use his own labour and the two friends he was able to mobilize.

### **The Jn Paul'**

Miss Jn Paul's house is a two-room dwelling with a small living room and kitchen attachment. This main structure is linked to a smaller one-room unit by a narrow uncovered passageway. This smaller one-room unit is where the four teenaged children sleep while the two younger children sleep in the main structure with their mother, except on the occasions when their mother's special friend visits.

Miss Jn Paul and her children lived previously in the Pavee area of the city in a one-room dwelling. On inheriting the mother's one room timber house in the Faux au Chaud she decided to move into it because of its centrality. As she expressed it...*"when my mother died came back to live here because it closer to town and even though it not big it couldn't hold all of us...I left the big boys to sleep in the house at Pavee...I like it here because it was easy for the children to get to school and my job at the presbytery...and my biggest son live nearby. But I find that it was so small...so we said we would put a little spice on it... because of the boys....the boys don't want to stay at Pavee...they prefer to stay here where they get their cooking and washing done easy...I don't mind that but they so big and the place so small it can't hold all of us. That's why I had to put in that room there so the bigger ones could sleep there...and what make it worst was the new settee...I couldn't find place to put it...it was so cramp..."*

They built this one room timber extension themselves because they could not afford to do otherwise. It was constructed separately from the main dwelling and connected to it by an uncovered walkway and served as a bedroom for the older children.

As Miss Jn Paul explained it..*"We build it by ourself because it was cheap...and the boys could do it... The big boys get their friends to help because they wanted to get it ...they would do anything not to stay at Pavee...we build it in two sundays...I used a little 'su su' money I had it was about EC\$450...my big son next door put up the*



*rest of the money...the boys did everything...they got their friends to get the boards and everything we did not pay a cent...in all it cost about EC\$600... If I did not have that money I don't know what we would do..."*

For the Jn Paul' the use of auto-construction labour time was very important as a cost saving device. According to her... *"we always fix up the house ourselves, it costs less... you only have to provide food and drinks and that not much... the boys have some good friends who help us... they know about building."*

For toilet, laundry ,bath and water services the family used the public convenience provided in the area, while cooking was undertaken in the yard.

In the first stage of improvement at Faux au Chaud, Miss Jn Paul undertook to increase the indoor space and comfort of the dwelling she inherited from her mother. This was the outcome of the desire to improve indoor space and alleviate the overcrowding in the inherited one room dwelling. They were able to meet housing payments from accumulated savings and special income transfer from an older son. They also used auto-construction labour because it was cheap and readily available from the older sons and their friends. There was no difficulty mobilizing this labour because of the desire on the part of the helping sons to be able to live close to the mother. The inconvenience felt in terms of separation from the family influenced them to allocate their time to improving the house so they could have their housekeeping activities done by the mother.

### **The Thomas'**

According to Mr Thomas their housing history began when the couple decided to live together in a common-law relationship. When their one-room rented house in Marchand area became too small with the advent of their fifth child they decided to get alternative accommodation elsewhere. Mr Thomas was informed of a one-room timber house for rent in the Faux au Chaud. Though the house was one room, it was larger than the one the household was occupying and the rental was cheaper. Mr

Thomas explained that in his negotiation with the owner he discovered that the owner was prepared to sell the house to him so he decided to purchase it for EC\$250. The purchase of this house was financed from savings. After purchasing the property the Thomas' decided to erect a two-room timber house. They lived in the one-room dwelling while building the new house around it. They quickly completed one room so they could move into it in order to demolish the old house and effect the completion of the other room of the new house. This new house was constructed entirely by auto-construction labour, in three days at a cost of EC\$900. This money was provided from savings. Kitchen facility was non-existent so all the cooking was done outside. Water was obtained from the public standpipe. The bucket system was the form of sewage waste disposal.

For this family then, the willingness to pay for this improvements in this stage was due to the desire to improve space because of the increase in the size of the family. Housing payments were made from the intrahousehold capacity through accumulated savings and the use of auto-construction labour.

### **The Charles'**

Miss Charles lived previously in the area with her husband before moving to her present abode. Due to marital conflicts which resulted in frequent quarrels with her husband, she eventually decided to leave the matrimonial home to establish her own household in 1979. She lived with relatives for a short while, during the first stage of her house building. According to Miss Charles..*"I had to leave my husband we couldn't get along and I had to go with the children, so I got this the spot to put up the house for them It was difficult at first because the children were young."*

Miss Charles has a special male friend who helped her during this time. According to her...*" My mister helped me at the time we were good friends but not so close...He helped me a lot . He helped me with some of the money because I didn't have enough and he also build it with a few of his friends...He is a carpenter so it was easy for me. It was a good thing I had him because I don't know how I would manage...I was*

*able to build two little rooms and a living room...He was so good he also put in a little kitchen and that toilet because I couldn't see myself getting up so early to empty the waste buckets..."*

And about the financing and building she explained the following...*"You see when I decided to leave my husband I started saving every little money I got so I could get my own place. At first I thought of renting but I was able to get this spot...Nobody was living up here yet so I grab it fast...Now I have to pay rent for it because that man over there say it is his...But everyone say it is government land...even the surveyors"*.

In 1979 the Charles' two-room timber house cost EC\$1000, from which hired labour cost EC\$300 (30%). The construction was financed partly by home based savings Miss Charles had accumulated while living with her husband. The rest was provided from income transfer from her special male friend who also built the house. The construction took four weeks because the special friend was also working elsewhere at the time as a carpenter. Electricity and water services provision were also included in the overall cost. Her friend had the help of two of his workmates who were masons. Miss Charles explained that in the first stage of dwelling construction these friends were paid together with a daily paid labourer to erect the dwelling's foundation, the footings and for the installation of electricity and water services to the dwelling. All works, other than these, were done by her friend as they felt that they could save cost this way. No plans were prepared because as Miss Charles explained, the friend *"knows about building, its his job..."*

For this family the willingness to pay resulted from a desire to establish a new household due to internal conflict in the supporting household. Miss Charles was able to establish a dwelling which included water and electricity services, an external timber kitchen and a pit latrine largely due to the use of auto-construction labour provided by the special friend who had the required skills. Housing payment was also provided through accumulated savings and special income transfer. She was able to make housing payments from an adequate interhousehold and intrahousehold resource

capacity which was reflected in the standard of shelter built, being more than the basic level expected.

### **The Adonis'**

Miss Adonis' housing history in the Faux au Chaud began when she had to leave her first spouse due to constant quarrels. When she moved out of this first household she was able to find temporary shelter in the Faux au Chaud with another man with whom she had previously had a special relationship. This friend offered her a home for herself and her children and she later became his common-law wife. That union did not last long because she also had problems in her relationship with him and she was forced to find other accommodation for her children once again. While living with her second spouse she had saved enough to set up a house of her own. She was able to do this as a result of the generosity of a neighbour who offered her "*piece of her spot*". This neighbour also sheltered the family while their house was being built since they had to move quickly out of the second spouse's house. As she explained ..."*when I couldn't take it any more I as this man I know for help...he put me and the children up for a while but you know men already...nothing last for long...so I had to leave...I had just enough money to buy the boards and galvanize for the house...some of the money was a loan from Ma John and my brother lend me some*".

The two room timber house and electricity cost her EC\$4900 in 1985. Hired labour accounted for EC\$90 (2%) of the total cost and this was used to pay the cost of material transport to the site. She did not have to pay to build because as she put it ... "*because some of the people around help me especially Ma John... she really good... she asked her sons to help.*" The loan from her friend Ma John, was EC\$800 and that from her brother was EC\$1500. The rest of the money was from a small saving she had. She was able to pay back these loans by saving in a 'su su' and according to her she paid the neighbour first because the brother "*wasn't too fussy as I could pay him 'little-little' when I have it*". According to her even now she still "*has a little something for him*". The work was completed by friends and relatives

in about six weeks as they could work mostly on the weekends as they were busy at their various jobs during the weekdays. She explained that she used one of the rooms as a living and dining area but with a small bed in one corner for the two older children. The other room was used as a bedroom for herself and her three smaller children. For Miss Adonis the main reason for making housing payment was to establish her own dwelling as a consequence of conflict with her spouse in the original household. She was able to pay for the improvement by using auto-construction labour and a combination of her own accumulated saving supplemented by a loan from a relative and a friend. This was due to the limitation of her own resource capacity at the time.

For Miss Adonis then, the first improvement in this stage was the result of the desire to establish her own household. Due to limited resources she had to mobilize a loan for making housing payments. She was able to mobilize the auto-construction labour of her close friends to meet dwelling cost.

### **The Jn Baptiste'**

The Jn Baptiste' first established their dwelling in Faux au Chaud in 1974 as a consequence of new household formation resulting from marriage. For Mr Jn Baptiste however, his housing history first began with his first marriage which ended due to marital conflicts and irreconcilable differences between himself and his first spouse. During that first marriage, he used to live in the adjacent Hospital Road area as he had always done since birth. As Mr Jn Baptiste stated...*"I used to live with my first wife across the road there but that didn't work out... so I moved out... I have always lived in this area but on that side of the road..."* . It was two years prior to the common-law union with his second spouse that he moved across the road into the Faux au Chaud area to a plot which was vacant at the time. He was one of the first residents to settle on the newly reclaimed Faux au Chaud area.

Mr Jn Baptiste first established a small two bedroom and a living room timber house with electricity service. He did this with hired labour. During the first stage, an

external pit latrine was also put in and water was obtained from the public standpipe. Two years after the completion of the dwelling unit his second spouse moved in. Being a Prison Officer, Mr Jn Baptiste was earning a relatively high income and therefore he was able to build this unit with hired labour.

The construction of the dwelling and pit latrine cost about EC\$1300 in 1974. Of this amount EC\$300 (23%) went to pay hired labour. The dwelling took four weeks to be completed. According to Mr Jn Baptiste he did not pay transport cost because he gave the work to a local builder who was responsible for getting all the materials to the site. The financing of this stage was from Mr Jn Baptiste' savings. He did not seek assistance from anyone because *according to him.. "don't need it really..If I want I could get it because I know a lot of people here because I live here so long...but I prefer to pay somebody to build it..."*

For Mr Jn Baptiste then the willingness to pay for housing was due to the desire to establish his own household and dwelling as a result of marital conflict in his original house. He was able to pay from accumulated savings. He did not mobilize any resource support as his own intrahousehold capacity was sufficient at the time of the improvement decision.

### **The Joseph'**

Mr Joseph explained that their housing history began in the Faux au Chaud area about 1985. At that time Mr Joseph who had been a deck hand on board various ships trading in the Caribbean, met Mrs Joseph in Jamaica and decided to take her to St. Lucia. During his sailing days Mr Joseph was still living at his mother's house at Pavee. But having decided to establish his own household he did not want to have his new spouse living in his mother's house and for her part the new spouse did not wish to do so. Mr Joseph explained that it was his grandmother, who was living in the Faux au Chaud then, who gave him a section of her plot so that he could build a house. He first constructed a two-room house in which one room served as a bedroom and the other a living/dining area.

Mr Joseph explained that he was able to build from money he had regularly sent to his grandmother to save for him while he was working on the ship. He was able to install electricity service to the dwelling but water was obtained from the public standpipe. The kitchen facility was shared with the grandmother and this was a tiny external shed constructed of galvanized sheeting. He explained that he wanted to build a new and better kitchen as the old always flood during the rainy season. However, there was no room in the yard to do this. Mr Joseph took shore leave to erect the dwelling. He explained that the transport of building materials was undertaken by himself and his close friends and relatives.

The house was built at a cost of EC\$1500 in five weeks. The Josephs explained that the building materials were purchased entirely from home based savings Mr Joseph had accumulated specifically for the purpose over a nine-month period. The saving allocation was variable and depended on Mr Josephs level of income receipt which would increase or decrease with the amount of overtime work he did. The saving was used to purchase building materials only. Mr Josephs friends and relatives helped by giving him a "Coup de Main"<sup>16</sup> for two sundays. During the week he worked on the house himself. Material was purchased from a building material store close by and carried to the site on foot for the most part. Large boards were transported free of cost by Mr Joseph' friend who owned a pick-up van at the time. As he explained "it was simply my friends who help, they know about building"

This family was therefore willing to pay for housing because of a decision to live together in a common law union. They were able to finance housing payments from an accumulation of savings specifically allocated for the housing improvement. They were able to meet housing cost by using the help of friends and relatives.

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<sup>16</sup>. The term "**Coup de Mein** is used to describe the auto-construction building process in which friends and relatives help to build by providing free labour.

## **The Edwards'**

It was Mr Edwards' grandfather who first occupied the plot which was granted to him by the government when his house had to be relocated as a consequence of the alignment of the new La Toc Road. Mr Edwards explained that his grandfather was not given any title deed to the land and he was not aware at the time of the necessity to have legal papers to support his claim to occupancy rights to the plot. Consequently, after taking over the plot on the death of his grandfather, Mr Edwards found that a neighbouring landlord was claiming ownership of the site and was claiming a monthly rental of EC\$30 for the site. The ownership of this site he claimed was now in dispute . The Edwards discovered that the plot forms part of what is termed "queens chain" or the foreshore area of what was once a bay prior to land reclamation in the area. The Edwards have continued to pay a monthly rental for the land to this neighbouring landlord as they are threatened with eviction if they do not comply. Mr Edwards first moved into his grandfather's house but because of the dilapidated nature of it he decided to demolish it and build a new house. It was at this time also that he sought to have his girlfriend come to live with him in the area.

Mr Edwards first constructed a one-room dwelling adjacent to the old house his grandfather once occupied. He did this while living in his grandfather's house. After completion of the new dwelling, the old house was demolished to make more room available on site. During this stage he installed electricity service to the dwelling. His grandfather's old pit latrine continued to serve his household during this stage. Water was obtained from the public standpipe and stored in plastic buckets at the rear of the building.

The family used the help of friends and relatives to build but hired labour for the construction of a rubble retaining wall to prevent land slippage on his site. The house was constructed in 1981 at a cost of EC\$2000 of which EC\$500 went to pay the cost of hired labour. The construction period covered two weeks. Mr Edwards helped with the construction on evenings after his regular work hours and on weekends. The hired labour was used to set up foundation footings and the wooden frame of the



building and to put up the retaining wall. Mr Edwards' friend helped by transporting the building materials purchased to the site free of cost in his pick-up van. This stage of housing construction was financed through special accumulated savings after they decided to demolish the old house. This money was accumulated in Mr Edwards bank account, and was from his wage income. The amount allocated was not regular as it depended on other household demands. They explained that it took them about a year to get the amount needed. They could have obtained help from relatives but did not want to take such assistance.

For this family then, it was Mr Edwards inheriting his grand fathers plot that prompted the decision to form a new household and to pay for a new dwelling. This was financed from savings specially accumulated for the purpose. Monetary resources for housing payments were mobilized from intrahousehold capacity as they did not wish to seek assistance. Auto-construction labour was used in combination with hired labour to meet housing payment.

### **The St Croix'**

Miss St Croix explained that as a new migrant to Castries, she did not wish to rent a house so she first lived with her sister who was renting a house at that time. This arrangement did not work out because the sister really did not have much space to accommodate her. Miss St Croix being from the rural area of Micoud, found it difficult to travel everyday to work at a bakery in Castries, which is over 30 miles away. Further she found that all her earnings went into paying minibus fares. Consequently, she chose to live in Faux au Chaud as she could not afford rented accommodation elsewhere in the city. A friend who was living in Faux au Chaud offered her a small piece of her plot to erect a two room timber house. She used a small savings she had accumulated from working in the bakery, to erect her dwelling and to install electricity at a cost of EC\$1100 in 1980. Of this money, hired labour was EC\$600 (55%). As she was new to the city and as she did not know anyone she *"had was to get a friend from Micoud to put up the house"*. This friend was working on a house in the Marisule area at the time with another builder so it was not

difficult for him to *"help me out"*, as she explained. As she was busy in the new job she did not have the time to buy building material. It was the builder who got all the materials. The building took three weeks to be completed.

For this first improvement in this stage the willingness to pay for housing resulted from inadequate space in her sister's house. She was able to pay from household savings.

### **The Hippolyte'**

The Hippolyte' explained that their housing history started when the couple got married and needed to form their own household. At first they rented a two-room house in the City Gate area of Castries. However, in 1985 Mrs Hippolyte's brother, who was living in the Faux au Chaud area, migrated to the U.S.A. and gave her his house plot. The Hippolytes decided to move to this area and erect their own dwelling on site. They felt that they needed to find more adequate space as a result of the increase in the size of their household. For a long time they had been looking for a *"good spot to build a house"* but the price of land prevented them from buying. They felt that the offer of the plot in Faux au Chaud was good since they could build their own house.

In order to build they demolished the old structure the brother originally occupied and erected a timber house of two bedrooms and a living room with hired labour. Water, electricity and a pit latrine were also included. Kitchen and dining area was established as part of the living room. They were able to do so because Mr Hippolyte who works as a sailor was earning *"good money"* in United States currency. The foreign currency earned was very valuable on the local market as a US\$1 almost tripled the local currency. Mr Hippolyte was able to take back certain building materials such as electrical fixtures, windows and doors from his trips. To facilitate the new structure the site had to be excavated and a retaining wall constructed.

The dwelling was built at a cost of EC\$12,000 in 1985. The high cost resulted from excavation works to erect a retaining wall because the site is adjacent to the road but

lower than road level. To get to the site from the road they had to construct a set of steps into the retaining wall. The cost of labour of the works came to EC\$8,000 (67% of total cost). They actually have bills showing the cost of materials and labour that went into the construction of the house. The Hippolytes explained that the cost of labour rose because of delays which resulted in personnel changes as the work progressed. Mrs Hippolyte felt that she was cheated because her husband was away on board ship for most of the time the house was being built. She was not aware of... *"the cost of things and because I did not have the time"*. She was also bitter because one of the first builders on the job was a relative who according to her, *"eat our money and did nothing so we had to get rid of him"*. The house was financed from their accumulated savings in the bank and partly from US\$ cash in hand.

For the Hippolyte' therefore, the willingness to pay was the result of the desire to improve space due to the increase in the size of the family. They were able to meet housing payments from accumulated bank savings. They did not mobilize any assistance from their interhousehold contacts because their resource capacity was adequate and because they preferred not to.

### **The James'**

Like the Thomas', the James' housing history in the Faux au Chaud started with the household renting a house and subsequently purchasing it from the owner for EC\$500, in 1981. This was entirely out of savings Mr James had accumulated. Prior to moving to the Faux au Chaud, the James' lived in overcrowded conditions with relatives in a multi-household dwelling in the Marchand area of Castries. They explained that the constant quarrels in the household among children and adults alike forced them to seek alternative accommodation. According to Mr James...*"We used to live with Esther's mother but so many of us with the children and all... and her sisters children was there too, it was always a problem so we had to move out..."*.

They moved out after finding a three-room timber house with electricity installed, which they rented at the time for EC\$60 per month, in the Faux au Chaud area. They

did not want to rent such a big house because as Mr James explained ...*"it was only me, Esther and Shauna" but "we couldn't find anything smaller at the time and we had to move out because we couldn't take the problems any more..."* Mr James felt that it was a good thing they rented the house because the household size had since increased and further, they were lucky to be in the house while it was offered for sale. According to Mr James, the original owner had another house in the York Hill area of Castries and wanted to sell the one in Faux au Chaud to "fix up that other one".

The house was purchased for EC\$500 from saving Mr James had accumulated but not specifically for that purpose. They explained that it was a good thing that this saving was available because otherwise they might not have managed to *"buy the house when the owner offer it "as they would sell it to someone else if we did not have the money ready"*.

For the James' the willingness to pay was due to the desire to establish their own dwelling so as to leave the overcrowded conditions of the original kinship household. They were able to pay for their new dwelling from accumulated savings.

### **The King'**

According to the King', they began their housing history by first renting accommodation after they first got married. Like the Hippolytes also their housing history in the Faux au Chaud started when Mrs King inherited her mother's house and the plot. Living in a one-room rented accommodation and having children was seen as a problem for the King'. Although for a long time they wanted to find a better and bigger house for their increasing family, they were unable to find one at a rent which they could afford.

Mrs King's mother had lived on her plot in Faux au Chaud for thirty years. She died about twelve years ago leaving the house to her only daughter. The King' saw this as an excellent chance of improving their housing condition. With the little savings

they had and the help of friends and relatives they first erected a two-room house on the inherited plot. As Mrs King explained it...*"When my mother died she left me her house a spot...that was good because for long time we want to get a bigger place ...the house we had was too small but house rent was so big we couldn't do better...When we get this spot we decide to build on it so we save up the money to do it. It took us a while to save up because only the mister alone was working and the money was little...even now it still little."*

According to Mr King they did not want to move into the mother's house because it was in a terrible state of disrepair. As he explained it...*"That house was not good and it was too small...we didn't want to go spend money to repair it...we prefer to build a new one because it would cost more to repair that one...too much trouble"*. Electricity was installed on the completion of the dwelling. With the two rooms the King' were able to have their own bedroom while the children slept in the other room which was also used as a dining/living room.

The King' two-room timber house in 1978 cost EC\$1100. Hired labour accounted for EC\$200 (18%). The hired labour was used to set out the building, the frame and the roof of the house while the other work was done by the relatives and friends free of cost. They stated that the house was built in about four weeks. The dwelling was financed from savings the household had accumulated at home specifically for the purpose, after they had made the decision to move to their inherited plot in the Faux au Chaud. Variable portions of Mr King' weekly wage were saved by the spouse at home but they did not purchase their building materials until they had sufficient money and were ready to build. Because, as they explained, they had no space in the rented accommodation to store building materials and they also could not store at the inherited plot as they would have been stolen. It took the household about six months to save enough money to begin their new house. The materials were delivered to the site by Mr King' friend and workmate, free of cost.

It can be seen that for the King' the willingness to pay arose from the desire to find a larger house to accommodate their increased family size. The ability to pay was established from a gradual accumulation of savings from portions of Mr King' wage.

### **The Williams'**

The Williams' explained that their housing history involved living at several rented accommodations which they found to be too expensive at their age. Their last accommodation was not only expensive but it became small and cramped when their eldest daughter's children came to stay with them when she migrated to Canada. They finally rented a three-room house in Faux au Chaud at a cheaper rate but more spacious. As Mrs Williams expressed it...*"We used to rent house before but we getting old and don't want to live in rent place all our lives...and the last place the rent was too much...The mister don't know how long he will be at work...he will retire soon...we wanted a cheaper rent..it was along time before we get this place...we like it because it close to the hospital..."*

After renting the house for five years they entered an agreement with the owner for <sup>the</sup> purchase of this building for EC\$600.

*According to Mr Williams..."About five years ago the owner decide to sell so had was to buy it...it cost us EC\$600 but we had to buy it because we getting old and it not easy to get a place any more...we couldn't take renting and moving again...we live here too long and we like it...Well I had was to use a little money we had in the bank ...and my wife gave her 'su su' ...It was a good thing we had that money or he would sell it to some body else and we would not have any place...although we had to do a lot of repairs because that man always promise to repair it and never do it..."*

The Williams therefore established their ability to pay firstly from wage income as a regular part of housing payment c(r) and secondly, to purchase the dwelling, they used accumulated savings. They were willing to pay for this rented accommodation

because of the need for a more spacious dwelling as a result of the increase in the size of their household. Their willingness to purchase it subsequently was due to the desire to have housing tenure security through ownership as they were approaching old age.

### **The Lewis'**

According to the Lewis' their housing history started when the couple got married "*over 30 years ago*". Before the marriage the couple decided to build a small one-room timber dwelling in the rural community of Jackmel. According to Mr Lewis in order to get married a husband must first find a home for his family and so he decided to build his first house to which to take his new bride. Over the years, the couple began having children and found that this house could no longer accommodate the family. Mr Lewis during this time got a job at Port Castries as a stevedore. Because of his job, the family came to live in the Marchand Area of Castries in a rented two-room house which they occupied for a short while.

They explained that they first came to live in Faux au Chaud when Mr Lewis was given a small piece of his friend's plot to erect his dwelling. The family found that the location was convenient for Mr Lewis' work, as it was close to the Port but more importantly it gave them a chance to own their own dwelling and to get a bigger house. According to Mrs Lewis "*well... we needed a bigger place, the other house was so small and as we used to rent we didn't want to rent again this place was good because my husband just work over there..it so close...and we didn't have to be paying rent.*". The dwelling was erected through hired labour as Mr Lewis had no time to engage in auto-construction.

The Lewis' timber house comprising two bedrooms and a living room was built at a cost of EC\$3300 in 1975. Labour cost accounted for EC\$800 of the total cost. The works took four weeks. For the Lewis' the dwelling was financed by their two eldest sons from a loan they took together. At the time the sons had both just started new jobs as a teacher and a clerk respectively, so they were able to get the small loan

from a local bank. They both repaid this loan from portions of their individual incomes that they pooled to make up the repayment amount of EC\$250 per month. These sons had left home at the time but were also making a small but regular contribution to their parents household. As Mrs Lewis explained...*"we didn't have those boys we wouldn't be able to build this house...it was they who got the loan ..we wouldn't get it ...they had good, respectable jobs so it was easy for them to get it...they good boys ...always help us...we hire a carpenter to build it because nobody had time to do that...and we wanted it fast..."*

For this family then, the willingness to pay was due to the desire to find a more spacious dwelling to accommodate their increased household size and to have a convenient location with respect to its proximity to Mr Lewis' work. They were able to meet the cost of the house by a loan taken by the eldest sons. Hired labour was used because the family did not have the time to engage in auto-construction. They were able to mobilize the assistance of adult children living outside because of the limited intrahousehold monetary resources to meet the required housing costs. However their intrahousehold capacity had developed sufficiently to provide the monetary assistance required.



## PART 2

### **5.2. DISCUSSION AND IMPLICATIONS OF THE FINDINGS ON THE FIRST STAGE OF HOUSING IMPROVEMENT**

Reference in this section is made to the summary of the findings contained in Table 5.

#### **5.2.1 Process 1 : The Changing Housing Improvement Preferences in the Willingness to Pay**

In respect of Process 1, (Table 5), it was found that four households i.e.the Girard', Green', Mason ' and Jn Paul established a dwelling without services, kitchen and toilet facilities and which was typical of the proposed improvement characteristics of the first stage. The Jn Paul' and Green' built two rooms instead of the expected one room. For the Jn Paul', this was a two room timber dwelling consequent on the extension of the one room dwelling they had inherited. Access to services and facilities for these households typified the expectations of this stage. The findings for these four households therefore support the expected features of the acceptable minimum standard of dwelling for the first stage.

The findings for the other twelve households did not support the expected minimum standard of shelter for the first stage because of the quantity of space incorporated and the inclusion of varying levels and type of services and facilities. Their improvements were typical of the combined features of the proposed first and second stages.

However, the findings show that for this stage, the shelter was established as a result of the preference mainly for space as the most important attribute preferred by all households. Table 5 shows that, eleven households preferred a combination of space and electricity service improvement while four households preferred a combination

Table 5: Housing Improvement Characteristics of the First Stage

Household Name	Type of improvement	Type of Labour	Non-Monetary Sources of Housing Payment		Monetary Sources for Housing Payments										Direct Wage	
			accumulated building materials	Autocoons tuction labour	Accumulated Savings		Source of Accumulated Savings			Loans (C/n <sup>1</sup> )			Relative	Friend		
					General	Special	Secondary income support	Income transfer	Allocation from main wage earner	Sale of asset	Bank	Credit union	Relative	Friend		
Girard	1 room, timber	H				x			x							
Green	2 rooms, timber	H/H		x	x										x	
Jn Paul	2 rooms, timber	IH		x		x	x	x	x							
Mason	1 room, timber	H/H	x	x		x			x							
Charles	2 bedrooms, living room, electricity, water, pit latrine	H/H		x	x(home money)					x						
Adonis	2 rooms electricity	H/H		x	x				x					x		
Jn Baptiste	2 rooms and living room, electricity and pit latrine	H			x				x							
Joseph	2 rooms, electricity and water	IH		x		x (home money)			x							
Edwards	1 room, electricity	H/H		x		x			x							
St Croix	2 rooms, electricity	H			x			x	x							
Thomas	2 rooms, electricity	IH		x	x											
Hippolyte	3 rooms, toilet (pit) electricity and water	H	x		x(Bank)				x							
King	2 rooms, electricity	H/H		x		x			x							
James	purchased 3 room house including electricity				x				x							
Williams	purchased 3 room house including electricity, water				x				x							
Lewis	3 rooms, electricity	H						x			x(1)					
TOTAL			2	9	9	6	1	4	12	-	1	-	3	1	-	

Key: H Interhousehold/Intrahousehold Labour  
H Hired Labour  
(1) Loan taken by children

of space electricity and water service improvements. Improvement in the standard of space was directly attributed to the increase in household size among eight households. These were the Green', Girard', Hippolyte', Thomas', King', Lewis', Williams and Jn Paul'.

For this stage most households were found to be willing to pay for a timber dwelling of at least two rooms. However, the type and level of service which was incorporated and the general standard of housing reflected the state of the development of household's resource capacity and domestic economy at the time of the improvement as will be seen in the findings presented in process 3 subsequently. The above improvement preferences resulted in three groups of the acceptable minimum standard of shelter. The first group comprises six households, i.e.the Charles', Hippolytes', Lewis', Jn Baptiste', Williams' and the James', for whom the dwelling was a three room timber dwelling with either electricity or water and electricity included. The latter two households each purchased their originally rented three-room timber dwelling with electricity already installed. The Edwards', Josephs', King', Adonis' and St Croix' comprise the second group for whom the acceptable minimum standard was a one room or two room timber dwelling with electricity. The third group, comprises the Girard', Jn Paul', Green' and Mason' for whom the acceptable minimum standard of shelter was a one or two room timber dwelling without services or facilities. The improvement in the quantity of indoor space and level of services was more than the expectation for the other households.

In respect of facilities, the Edwards', Charles', Hippolyte' and King' installed separate kitchen facility, while the Hippolyte', James', Jn Baptiste', Edwards' and Charles' also built a pit latrine. These also represent variations to the expected features. All the other households had access to the public facility or the "bucket disposal system". These improvements which included services and facilities represented not only a variation in the expected features for this stage but it reflected the level of development of the resource capacity in that most households had a sufficient level of resources to develop more than the expected level of improvement. This was also due to the fact that for seven households,(Hippolyte', Lewis', Jn

Baptiste', Williams' King', and Thomas') the move was from dwelling in which they had established their independent households but in which indoor space had become inadequate due to increases in household size. This caused the willingness to pay for improvement in the quantity of indoor space in the first place. This then explains the more than expected quantity in the improvement of indoor space.

### **5.2.2 Process 2 : The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay**

Two categories of factors accounted for the establishment of the willingness to pay. For eight households, the main condition influencing the willingness to pay was the desire to form their own households. This was either the result of conflict in interpersonal social relations in the previous supporting household as was the case for the Charles', Green', Girard', Adonis' and Jn Baptiste'; cohabitation decisions as was the case for the Edward' and Josephs' or to avoid social conflicts in the original household as was the case of the Mason. For eight households the desire to improve the quantity of space was the main reason for the willingness to pay. This desire was the outcome of demographic changes in the family relating to the increase in household size which caused overcrowding and conflict in the original kinship dwelling, as was the case of the James' and St Croix'; or from an increase in the size resulting in inadequate space and discomfort in the original independent dwelling as was the case for the King', Hippolyte', Lewis', Thomas', Jn Paul' and Williams'.

These findings support the proposed hypotheses that the willingness to pay for this space improvements in the first stage will be the outcome of the desire 1) to form a new household as a consequence of marriage, cohabitation decision, or conflict in interpersonal relationship; 2) to form new household in order to remove social conflicts arising from overcrowding in original kinship household; 3) of an established household to remove residential dissatisfaction over the inadequacy of existing quantity and quality of space caused by an increase in household size.

### **5.2.3 Process 3: The Development of the Resource Capacity in the Ability and Willingness to Pay**

For all households the resource capacity was limited to the extent that in order to establish the ability to pay, monetary resource had to be accumulated in the form of savings. All had accumulated some amount of savings at the time of housing improvement decision. It has been shown that all households established the ability to pay from i(r) income sources i.e. savings specially accumulated for the purpose or diverted from general savings. With respect to this process, the findings show that all households excepting the Adonis', Lewis', Charles' Green' and Thomas' were able and willing to pay from their own intrahousehold monetary resource capacity. The households mentioned above had to supplement their intrahousehold monetary resource capacity. In the case of the Lewis', Green' and Adonis', this was facilitated from loans obtained from the interhousehold contacts. At the time only the Hippolyte, Jn Paul', Charles', Lewis' and Williams' had more than one earning member. The Lewis', Charles' and Jn Paul' were also receiving income transfers. The resource capacity of all other households was limited to the wage income of a single earner. This limitation meant that the ability to pay for housing was dependent on a process of resource accumulation i.e. mainly monetary resource, and mobilization as will be detailed further in Process 4.

The intrahousehold and interhousehold labour resource capacity was limited for all household. Most had young children at the time who could not assist, had no time, or interhousehold contact to help, or preferred hired labour. The exception was the Jn Paul', Charles', Mason', Josephs', and Thomas' who had intrahousehold and interhousehold contacts to assist. Process 4, will elucidate the mobilization and use of these labour sources in greater detail.

#### **5.2.4 Process 4 : The Mobilization and Use of Resources in Establishing the Ability to Pay**

In respect of Process 4, (Table 5), it was shown that for all households, the intrahousehold capacity was limited. In all cases additional resources had to be mobilized. However their mobilization was not difficult as the individuals owning these resources in all cases were willing to allocate them for housing payments to remove the residential dissatisfaction felt. In all cases household had to mobilize the interhousehold labour resource for auto-construction because of the unavailability of monetary resources to pay hired labour and also because they had the skill and time required. No evidence was given on the extent of negotiation over the use of resources. All households excepting the Adonis' and Green', were confronted with housing payment costs associated with c(n)2 production costs. Because of the cash loans they negotiated, they also had to repay c(n)1 costs.

##### **a) The Mobilization and Use of Intrahousehold and Interhousehold Labour and Time Resource.**

According to Table 5, during this stage the use of auto-construction labour whether solely or in combination with hired labour was a dominant feature. Even though the auto-construction capacity in terms of numbers were limited what was available was used. Ten households use auto-construction labour as a source of housing payment. Three households mobilized and used auto-construction solely for construction of the dwelling extensions. These are the Jn Paul', Josephs', Thomas'. The main reason for the use of this type of labour was given as the need to save on construction cost. The Josephs', James' and Jn Paul', also used this source because of the availability of the required technical skill among the resource contacts available to them. Four families used both auto-construction in combination with hired to construct their dwelling although the preference was for the former source. These were the Charles', Edwards', Adonis' and King'. For example, where services were included this was provided by hired labour. The incorporation of services would necessitate the payment and use of hired labour as this is an activity of the service

company supplying the service. Six preferred and used hired labour. These were the Hippolyte', Lewis', St Croix', Jn Baptiste' and Girard'. The Girard' and St Croix, preferred auto-construction labour but had no available source in close proximity and the Jn Baptiste', Hippolytes and the Lewis, because of preference for hired labour. There was no evidence of any difficulty in the mobilization process. All sources were willing to allocate their labour time.

**b) The Mobilization and Use of Monetary and Tangible Non-monetary Resources In the Establishment of the Ability to Pay.**

The improvements in this stage varied among households in respect of the types of cost they faced, the pattern of monetary resource mobilization, the length of the construction period and type of labour used. Table 5 shows the sources and types of costs households faced during this stage. The main types of costs related to the payment of hired labour and material costs. Table 5 shows that the most important source of financing housing improvement for this stage was accumulated savings as indicated by all households excepting the Lewis' whose total cost was financed from a loan. Very few households combined sources because of the limitation in the capacity.

According to the findings seven families, the Lewis', Jn Paul', St Croix', Charles', Adonis, Thomas' and Green' were able to used both their intra-household and inter-household resource capacity to provide monetary assistance in the form of income transfers and loans in this stage of the housing improvement activities. For the St Croix' and Charles' their monetary resource contacts were their special male friends who provide special income transfers for the improvements. For the Thomas' and Jn Paul', income transfers from one of adult earning children was mobilized to pay for the housing improvements. In the case of the Lewis', the children living away from home provided the money from a loan they had negotiated at the bank and which they were responsible for. The Green' and Adonis' were been able to mobilize financial assistance from friends and relations in the form of loans. All other nine

households have relied solely on the intrahousehold monetary resource capacity. This reveals the importance of the intrahousehold monetary capacity for establishing the ability to pay in this stage. For the households using this capacity solely, their housing costs were among the highest for the group. This capacity however, had to be mobilized over a period before housing payments could be made because of the limitation in the development of the existing capacity to meet the levels of cost involved. Because of the low levels of income households had to accumulate resources before making housing payments rather than take loans or resort to assistance from the interhousehold capacity.

Based on the main source of financing used, households can be classified into three groups. In the first group are eight households who established the ability to pay mainly from specially accumulated savings. These are the Greens', Josephs', Jn Paul', Edwards', King', Mason', and Girard. Except for the Jn Paul', all these households, had a single earner from whose weekly or monthly income portions were saved to facilitate housing payment, either in home-based savings, the community-based 'su-su' system or in the banking system. The length of the saving period varied and depended on the nature of the improvement in respect of the technical and materials requirement level of cost and households ability to mobilize the required amounts. The period ranged from twelve weeks in the weekly 'su-su' system of Miss Jn Paul, to over a year for the Edwards. In the 'su-su' system, the amount is standard and regular. This findings show the importance of the 'su su' system in facilitating this accumulation process.

In the second group are the James', Hippolyte', Adonis', Charles', Jn Baptiste', Williams' and St Croix who used savings they had already accumulated but not for housing purposes. Except for the St Croix' and Jn Baptiste', these households had more than one earner. Interestingly, the level of housing cost they faced were among the highest for that stage of improvement and they were with the exception of the St Croix and Adonis', among those able to pay from their intrahousehold monetary capacity. The St Croix' and Adonis' had to supplement their capacity through the use of income transfer and a cash loan respectively. For the Adonis this was due to the



urgency of getting accommodation quickly in order to move out of their temporary shelter. There was no time for accumulation resources as appears to be the trend among these families.

In the third group is the Lewis' who used a loan taken by two adult children due to the inadequacy of the family's intrahousehold capacity to meet the cost of the house planned.

The Mason' and Hippolyte' are the only households that accumulated building materials. Mr Mason was able to use free building material from the forest by virtue of his occupation as a timber cutter. The Hippolytes accumulated materials bought cheaply from overseas by virtue of Mr Hippolyte being able to purchase these in his frequent travels aboard the ship on which he was employed. These findings show the importance of the intrahousehold resource capacity, the use of auto-construction and the process of monetary resource accumulation for establishing the ability to pay in this stage.

They therefore support the hypotheses that; 1) The ability to pay will be established from the intrahousehold capacity through the use of the wage income of the primary wage earner who is the sole earner and the head of the household, in addition to the accumulated savings and building materials and the use of auto-construction labour. However the use of accumulated building materials was not well supported. 2) The ability to pay will be established from the intrahousehold capacity through consensus without negotiation and conflict over resource use. The implication of these findings is that where incomes are low, housing payments can only be established from a process of resource accumulation before payments can be made and that they are prepared to pay for a very basic dwelling due to the exigencies in the original household and or/ the limitation in their resource capacity.

## 5.2.5 CONCLUSION

The findings show that the cost, length of the construction period, monetary sources for financing housing payments and the method of mobilizing the required level of monetary resource were variable reflecting the preference in the acceptable minimum standard at that conjuncture and the level of development of and the limitations and possibilities of the resource capacity. These factors and the willingness to pay set the basis for the type of improvements and the associated levels of affordability manifested in the first stage.

In general it has been shown that for those four households who established a dwelling similar to that proposed for the first stage, the dwelling was basic, reflecting the low level of resource development. Its construction was the outcome of the desire to establish the household as an independent and viable unit.

The findings show that the acceptable minimum standard of dwelling all households were able willing to pay for was a timber structure of at least two rooms which incorporated either electricity or water and electricity services. This supports the proposition of the characteristic features that define the second stage of improvement. The resource capacity was important for these households establishing higher levels of standard than those assumed for this stage.

The implication of this is that in any formal housing intervention, these households cannot be expected to pay for housing more than the acceptable minimum standard indicated because of the low level of resource availability. Mechanisms are required that can identify individual needs and standards of housing that will match the ability and willingness to pay at specific conjunctures.

The willingness to pay was shown to be based on two groups of factors arising from the influence of the processes. Firstly, a desire to improve the quantity of dwelling space. The main demographic factor which led to this desire was the increase in household size which caused overcrowding and dissatisfaction in living space in the

original dwelling. Secondly, the willingness to pay also arose from the desire to form new households. The reason related to the development of social conflict in interpersonal relationships in the original household caused by marital problems, or overcrowding. In one case it was due to the need to avoid possible conflicts.

The implication for policy intervention of these factors that established the willingness to pay, is that intervention measures will need to take cognizance of the needs of individual members within households. The findings for those households who established the first stage as a consequence of social conflict in interpersonal relationship in the original supporting household is relevant in the support of this researcher's view that household should not be considered as a unified entity of individuals organize around a common goal i.e. the welfare of that households. The household system at specific conjuncture might be one of conflicts rather than consensus, in which individual members might be requiring to establish their own dwelling and might not want to allocate the resources they control toward housing improvement for the supporting household. This view remains valid despite the fact that the findings of other households did not provide any evidence on this issue.

With respect to the ability to pay, the findings show that 1) resource capacity was limited which meant that the main source for establishing the ability to pay in this first stage was the accumulated savings, whether it was specially accumulated for the purpose or diverted from other purposes, and from the use of auto-construction labour. Two households actually accumulated building materials to save cost. Though the findings from two household is not a strong indicator of the importance of this feature, it is important to state because it means that this is also a source for establishing the ability to pay. These findings shows that low-income households have the ability to acquire pre-housing improvement resources and the propensity to save once they know what they want to achieve. 2) The tendency to accumulate the amounts needed for payment, not only revealed resource limitation but also that the monetary resources were too small to be of resource value by themselves. This implies that where incomes are limited the amount required must first be translated into more substantive forms to be used to pay for improvements which are by their

very nature substantive in terms of cost. For instance the need for space in the form of even a rudimentary structure will require levels of material and consequently monetary and non-monetary resource outlays which cannot be supported for either existing levels of total income or from any one source that comprises that total income because they are limited nor can they be financed from other monetary sources such as loans because of the household's inability to repay these. 3) The findings show however that all households were able to move to this stage from the initial supporting household or original rented dwelling while accumulating monetary resources to make the move. This must mean that they have the capacity to acquire pre-improvement resources albeit in small amount, in order to make these payments. The implication of this for formal intervention in this stage is that such measures would need to take cognizance of the resource accumulation tendency and also try to find mechanisms which can address the needs of individual household members rather than the household as a unit. This is especially in instances where intervention might involve community upgrading. These measures will of necessity need to be congruent to the acceptable minimum standard the household is able and willing to pay for given their resource limitation. 4) There was no evidence of conflict over the mobilization and use of interhousehold and intrahousehold resources among any of the cases. This could relate to the limited labour and monetary resource capacity at the time.

The chapter that follows provides information on the findings for household improvements undertaken in the second and third stages.

## **CHAPTER 6**

### **ESTABLISHING THE ABILITY AND WILLINGNESS TO PAY FOR HOUSING IN THE SECOND AND THIRD STAGES.**

#### **6.0 BACKGROUND**

This chapter is presented in two parts. The first presents the findings for the second stage of improvements and the second presents that for the third stage.

#### **PART 1**

##### **6.1 ESTABLISHING THE ABILITY AND WILLINGNESS TO PAY IN THE SECOND STAGE : SERVICE INCORPORATION**

According to Chapter 3, sub-section 3.2, this stage is typified by an acceptable minimum standard of shelter which is a one room timber dwelling which incorporates on-site access to electricity or electricity and water services, as the improvement preference. The improvement is to make the dwelling more functional and self-contained. Kitchen and toilet facilities and material quality will be as for the first stage. Where either water or electricity is not included access is the same as in the first stage. Tenure security will improve in this stage.

The willingness to pay will be the outcome of 1) the desire of the household to remove the inconvenience and social discomfort felt among family members regarding the absence and/or type of access of these services. 2) the increased security of tenure household feel as a consequence of the states de facto recognition of the community as basic water and electricity service infrastructure are put in and the improvement in the development of the resource capacity to make the improvements possible.

The hypotheses state that: The willingness to pay for this improvement is the outcome of the desire 1) to remove the social discomfort and inconvenience felt by the absence of private on-site or internal electricity and water services. 2) the increased security of tenure felt by households. The ability to pay will be established from 1) the intrahousehold and interhousehold monetary resource capacity through accumulated savings, negotiated new and improved secondary income support and income transfers. 2) The costs associated with  $c(r)$  will be paid from the regular new and improved secondary income support and income transfers that can be negotiated for from the intrahousehold and interhousehold capacity. Costs associated to  $c(n)$ , will be met from existing intrahousehold accumulated savings and new secondary income support and transfers that can be negotiated. 3) resources will be mobilized through negotiation but without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort they feel.

### 6.1.1 THE CASES

#### The Girard'

In 1985 Miss Girard constructed one large room which was divided by a plywood partition to be used as a bedroom and part as a living room and included electricity service a shop in 1990. Cooking was and still is done in part of the living room. Water was obtained from the stand pipe and still is. For this household the second stage of housing improvement came with the growth of her children and the fact that she had to increase indoor space and privacy. She also needed to improve her income generating capacity. As she explained it...*"the children grow so fast... one room not good so I had to put another one...we had to sleep and cook in the same place...it was so crowded and anyway I wanted to put up the little shop...but I had to put in the room first...later on I build the shop..I was tired of selling on the streets ...too much trouble...and I wasn't getting much money from that"*. She used hired labour for both improvements because according to her,*"I don't have anybody to help me so I had to pay to do things"*.

She used specially accumulated savings from her sidewalk vending activity to facilitate this *improvement*. *It was built in five weeks at a cost of EC\$5000, of which EC\$3500 was material cost, and EC\$1500 was labour cost.* The savings used to finance the main extension was accumulated from a combination of 'su-su' and earnings from streetside vending activities. She explained ...*"I even save a little more because I remember what happen to me the first time when I didn't have enough to finish the house one time..I had no time to do things myself the carpenter he buy everything all I did was pay him ...that better because you don't have to worry about going to search for building materials all over the place"*.

For this household the improvements undertaken in the second stage was due to the need for more adequate indoor space to accommodate the increased family size and improvement in access to electricity service. The improvement was made possible by the improvement in intrahousehold monetary resource capacity and housing payments for the improvements were established from the accumulation of savings derived from Miss Girard' earnings from street side vending. The willingness to pay for a shop extension was itself related to the desire to improve the families monetary resource capacity. She did not mobilize any monetary and non-monetary resource assistance because these individuals were not available and because she had the intrahousehold capacity to meet the payments.

### **The St Croix'**

The second improvement undertaken in this stage by Miss St Croix, was the erection of a small timber kitchen external to the main dwelling. She explained that this was necessary because she had purchased a small "gas stove" which she could not keep outside as she used to do with the "coal stove" . At first she kept her new stove inside the house but it was not convenient for her to cook inside the small living room. As a result she constructed a small timber kitchen adjacent to her house in 1987 at a cost of EC\$600. It measured approximately 4ft x 5ft (20sq.ft.). and accommodated the stove and a small table. Since it had no flooring, she found that she had severe problems in the rainy season when the area gets flooded. When this

happens, her kitchen gets flooded and she has to place her stove onto the kitchen table to prevent it being damaged.

The kitchen was built by the same builder who built the house. Like before he was responsible for getting everything done. The cost of his labour was EC\$200 (33%). She explained that he did not charge her much because he was a friend. This improvement was financed partly from a "su su" saving (EC\$300) and partly from her wages for that month. This improvement took one week.

For the second improvement the willingness to pay was due to the need to improve indoor space as a result of the acquisition of a tangible non-monetary resource. The labour resource contacts were still unavailable, so hired labour was used. Monetary payments were made from intrahousehold savings and special income transfer she was able to mobilize from her special friend.

### **The Thomas'**

Some six months after completion of the dwelling, the household installed electricity service to the building and a small timber kitchen. The dining/living room which was also used as a sleeping area for the children, became too small because of they had purchased a new settee. As a result the Thomas' decided to incorporate a kitchen which would also serve as a dining room and living room. The original dining/living area was made into a bedroom/ living room. An additional small bed was placed in it so that they could sleep comfortably.

This kitchen was also built by auto-construction labour, took three sundays and cost EC\$500. The money was used to purchase materials for the extension and to install a water line into the yard. Like the first housing improvement this extension was financed from previous accumulated savings and auto-construction labour. Mr Thomas was by then running a taxi service with a second hand car he had purchased. He was able to erect the extension with the help of his friends, mainly on weekends. During this stage the Thomas' also installed on site water service.



For this family then, the willingness to pay for this improvements in this stage was due to the desire to improve space because of the increase in the size of the family and the desire for privacy and partly to accommodate the new furniture. Housing payments were made from the intrahousehold capacity through accumulated savings and the use of auto-construction labour.

### **The James'**

The first improvement undertaken by the household was the erection of a pit latrine. This was built at a cost of about EC\$100 from the cash income of Mr James. The cost covered material such as the concrete toilet slab, a few sheets of galvanize and a few lengths of board. No transport or labour cost was incurred as Mr James and his two mason friends built the structure over four sundays. The work included the digging of the pit which Mr James explained was the reason the work took that length of time.

### **The Williams'**

The first improvement undertaken by the Williams' after purchasing their house was the changing the rotting timber of the exterior walls of the dwelling at a cost of EC\$1375 of which EC\$500 (23%),went to pay the cost of hired labour. The remaining amount covered the cost of materials and transport of the materials to the site. The improvement was completed within three weeks. This cost was financed from Mr Williams' savings. However, they were not completely satisfied because they needed to change many of the galvanized roofing sheets and the ceiling boards which were stained by leaking roof water. A few of the floor boards needed to be repaired also because they were damaged from regular flooding of the area. The Williams were unable to undertake all the required renovations all at once because of lack of finance. As Mrs Williams expressed it... *"We wanted to repair the roof and some of the old floor boards but we didn't have any more money so we had to plan to do it later...anyway we live in it so long like that ...we didn't mind staying in it so for little longer...that man should fix it up but he never...It is only because we really*

*want the place as it so close to town and the hospital if we get sick...that's why we but it..."*

Mr Williams explained that...*"We pay a carpenter and a painter to fix up the place because we don't have the time and I cant do carpenter work...painting yes... we could get friends to help but that take time..."* and according to Mrs Williams "all these people want is to come and drink rum and waste time...and you have to provide the food ...is not a bad thing but we prefer to pay and don't have that trouble."

### **The Charles'**

According to Miss Charles, she undertook a second stage of improvement because she found that if her family was to be a viable unit she would need to establish some type of income generating activity to support her growing family as she did not want any income support from her husband. As a result she decided to erect a small shop extension and another two rooms to serve as bedrooms for her growing family which by that time consisted of three children in their early teens and four younger ones. Further, she could not be private when her special friend came visiting. She found this to be a great inconvenience.

According to Miss Charles...*"when I left my husband I needed something to help my children I didn't want any money from him... so I built the shop to help me. I got some help from my mister to do it... Well I put up the other two rooms for the children especially the big boys... as they getting bigger...I use to have them staying together but you know how it is the room was so small...it could only hold one little bed...the little ones use to sleep with me...anyway I had was to put up a place for them to sleep...and it was so cramp...Sometimes when the mister stay here he always have to send the little ones to sleep with the others and he never like that...the mister*

*he wanted to help me...he is good to me...I use to do a little "speculating"<sup>17</sup> but I had to stop because of the two younger children so I started selling 'little- little' things like biscuits and sweets and soft drinks and icicles from here"*

It was her special friend who encouraged her to build the shop.

*According to her..."He always tell me to open a little shop to help myself but i was not sure...so one day I tell him if he want me to open a shop he should help me to put it up. I was joking at first when I said that but he said yes he would help. That man really good to me..You know he help me build it He even give me money to buy things... Because of him I even get some of the material on credit at Linmore...because he always buy things there when he building for people...They know him so he get the material on credit for me..."*

For her the most important reason for increasing her housing payment at this stage was the need to provide economic security through home based income generating activity. She explained that it had to be home-based because she could not go out to work as she had small children and no one to look after them. Once again it was the help of her special friend which enabled her to proceed to this second stage of improvement. He provided her with his labour and that of his two friends who are masons to help with the erection of this second phase. Miss Charles said of her special friend..."*he good in carpentry work he made all these shelves (pointing to the shelves in the shop) and he is going to help me to put in some more for Christmas".*

The dwelling extension was constructed in 1989 at a total cost of EC\$12200. Of this sum EC\$2000 went to pay hired labour. The building was financed through a building materials loan from a local building supply store. The financing was arranged by the her special friend who was also responsible for building it. The

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<sup>17</sup> The term "speculating" is a local term used to describe the streetside or home based buying and selling of manufactured goods, mainly clothing and accessories.

family was required to pay a deposit of EC\$1200 which was provided from savings to secure the building supplies for the construction of the shop and which reduced the total cost of the material loan. Repayment of the material loan was set at EC\$200 (c(n)1), per month for approximately five years. This amount is now being paid in addition to average monthly housing services payment of EC\$200, (c(r)). The total monthly housing expenditure then is approximately EC\$400 (25%) of cash income. The EC\$2000 cost for hired labour was paid by from accumulated savings while the deposit was paid by the special friend. As Miss Charles expressed it..." *It cost a lot of money...the mister he put up the deposit for me to get the material from Linmore... He told me he pay the mason fellows EC\$2000 to build up the base... and I had was to put up the rest. It was a good thing I had a little money save up when I use to do the speculating...you know how it is when you have children you never know when they will get sick....and a don't want anything from they father...four of them not his children..At one time he want was to give me money but He is a wicked man..I want to stay far from him...Anyway I work hard to help them I had was to use that little money..."*.

This improvement took about six weeks because the special friend and his friends were in work elsewhere and could only erect the shop in the periods when they were less busy on their other jobs. Transport was not a problem as the spouse had a small pickup van. For this family then, the willingness to pay for improvements in this stage was due to the desire to increase living space as a consequence of the growth in the size of the family; the need to establish a stable income generating activity to ensure its economic welfare and in the case of the second improvement to separate the function use of space. The ability to pay was established partly by income transfers from this special friend and partly from a building materials loan and accumulated savings. The improvement facilitated the improvement in the monetary capacity of the household. Where the amount involved large monetary commitment such as in the construction of the shop the cost was financed from building material loan. The technical service provided by auto-construction labour was important for reducing cost. The identity of the spouse as a reputable builder known to the building supply

firm, was instrumental in securing the materials loan for the construction of the shop.

### **The Green'**

The second stage of housing improvement undertaken by this family was the construction of a living room extension out of reinforced concrete and included electricity service. The Green' explained that the living room was added to increase space and comfort consequent on the increase in the size of the household. As they began having children, they found that the sleeping space was inadequate even with a small bed in the living room. As a result the household decided to extend the dwelling by providing a living room which could serve as a dining room also. With this improvement, the original living/dining room was made into a bedroom for the children.

For this second stage of improvement then it was the increase in the size of household and the result that overcrowding that influenced an increase in housing expenditure for the Green'. During this stage they continued to use the public sanitary convenience. The improvement cost EC\$3500 and was build gradually by Mr Green over nine months. When asked about his ability to build it he explained that *"You get to learn things here and there...it was easy..."*.

Mr Green explained that the extension took a long time to be because it he *"had to buy material a little at a time "*. The household explained that whenever Mr Green worked overtime and there was extra money in the house it was used to stockpile material which he would use to build when he had the time. The first amounts to be expended in this stage was about EC\$2000 which was accumulated as savings over a year when it was decided that the improvement was necessary. This amount was able to finance the foundation and about half of the block work of the extension. There were several more small purchases of cement and blocks to complete the works. Each time material was purchased from extra income which could be spared. Mr Green would use this material in putting up sections of the block work. The final

amounts to be spent on the house was about EC\$300 which was used to install their own electricity. When the household was asked about the reason for building in concrete instead of timber, Mr Green explained that it lasted longer and that others in the area were doing it. Mr Green explained that they were not worried about being evicted because *government wouldn't do that...most everyone in here support the UWP, if they do that they will lose this seat*".

The Green' were planning and saving at the time of the research, for another improvement which would be an extension to the existing building to incorporate a kitchen and a small shower to be constructed from concrete. With this extension it would be necessary to include the provision of in-house water services. They claimed that it was necessary because they would like to improve the space, comfort and privacy of the existing dwelling. According to Mrs Green *"since I purchased the new refrigerator the living room has become crowded as there is no room to put anything... you have to cook, watch T.V. in the same place the children have to use here to do their school work... it's so small..."*

There was also the problem of inadequate sleeping space for the two teenage girls. As a result they had to send one of the teenage daughters to stay with friends who live nearer to her secondary school *"to make things more comfortable for her... but she comes home on weekends"*. According to Mrs Green...*"when we fix up the house we will put a small bed for Trevor and Bryan over there (pointing to a section of the living room). Joan and Louise can stay together in the little bedroom... you know how it is when they reach a certain age... they want to have their own things..."*

For this family then, the improvement preference was for increased indoor space and electricity service as a desire to remove residential dissatisfaction associated with demographic change. This was associated with inadequacy of existing space and level of service and the adverse effect of this on the household members. They also began material change by building the extension from reinforced concrete. The willingness to improve wall material quality was associated to the improved feeling of tenure

security. The ability to pay was established from accumulated savings, the periodic purchase of building materials from wage income and the use of auto-construction labour because of limited intrahousehold monetary resources. For the new improvement planned it is the acquisition of furniture and appliances as manifestations of an improvement in the resource capacity which influence the decision to extend indoor space. This acquisition of tangible non-monetary resources and the consequent inadequacy in space also had an impact on the socio-demographic attribute of the family. The result of this is that the eldest daughter has had to be sent to live elsewhere during the week.

### **The Jn Paul'**

The second stage of housing improvement occurred when Miss Jn Paul bought her new stove and refrigerator which could not be adequately accommodated in the small indoor space. As a consequence she felt it was necessary to erect another small shed onto the main structure, to serve as a kitchen. This structure measured approximately 5ft x 4ft (20 sq.ft) and required the erection of only three sides as the fourth side was part of the main dwelling. It was erected in one day by the sons, from plywood and covered with two sheets of aluminum sheeting. It cost EC\$150 which was paid directly from one of the sons' wage income. During this stage the household faced the need for electricity for the refrigerator. The problem for electricity service was solved by making an illegal connection from the house of the eldest son who lived in the same yard. As she explained ...*" You see as I buy the fridge I had was to get the electricity...and Aundre he was planning to buy a stereo set to play his music...but everything cost money these days so Robert run the electric wire from his house....this is good because we don't have to pay for it...Robert pay everything"*. During this period also the teenage children felt it was no longer attractive to be carrying buckets of water from the standpipe and since three of them were working it was decided to put water services into the yard. This proved difficult because of the closeness of the houses in the vicinity and as a result Miss Jn Paul and her household made arrangement with a neighbour who had pipe borne water into her yard, to provide them with water and they would pay her each month by sharing the

water service charges. Now they pay a flat rate of EC\$40.00 per month for water service to this neighbour. In the discussion with the household, a subtle hint of pride and the importance of self esteem could be detected in the manner in which the daughters expressed the reason for not wanting to carry buckets of water on their heads any more. According to the teacher...*"I really don't want to be carrying water anymore and there is always a problem at the pipe. The people always break off the pipe head and WASA take so long to fix it. Sometimes for days you cant get any water there because of that. We prefer to pay Ma James to get the water from her although I believe she overcharging us...but what to do?"* This appeared to relate to their status as teacher in the case of one and working independent women in the case of both.

The extension of the dwelling was built by the family with the help of friends. The 'su-su' saving that was specially accumulated for housing payments, was allocated from the household income occasionally, or in some instances from income transfer received from Miss Jn Paul' special male friend if this was available at the time the 'su-su' allocation had to be made. On other occasions it was allocated from any extra income her earning children in the house would make available. The rest of the money to meet the cost of the payment was given by the oldest son from his own wage at the time the payment was required.

For this family electricity and water services were included along with a kitchen extension. This was the result of the need for space for their refrigerator and the inconvenience felt among household members in respect of the absence of on-site services. Electricity was included to facilitate this appliance and water payments commenced because of the nuisance of the public provision. Payments were financed



from wage income and from income transfer. Like the first improvement it was financed from accumulated 'su su' savings. They were able to meet the cost through a process of monetary resource accumulation in which small portions of total household income and occasional income transfers were contributed toward the amount needed for the 'su su' allocation. It was the 'su su' which then became the main source for housing payment. The resource capacity of the household improved in this stage with more income earners and their increased wealth status was manifested in the acquisition of electrical appliances. These tangible non-monetary resources themselves, influenced the desire for improvement in indoor space to accommodate them. There was no conflict over the mobilization and use of resources as all households members were willing to co-operate to remove residential dissatisfaction.

### **The Mason'**

For the second stage of housing improvement, Mr Mason incorporated an additional room to his dwelling for use as a living/dining room and kitchen. Mr Mason explained that this building extension was necessary since he needed to buy new furniture such as a refrigerator and a stove. He found that the small bedroom he originally occupied could not accommodate the new furniture he wanted to purchase and further he wanted *"the house to look nice"*. It was during this stage that he included electricity service to the dwelling while continuing to use the public sanitary convenience. He began paying for water service also but not from his own on-site installation but through an arrangement with a neighbour wherein he is charged EC\$10 per month to obtain water from the neighbour's yard. This he explained prevented him from *"going so far to the standpipe to get water"* and further, according to him... *"the days of carrying buckets of water on me head (are) over"*. This improvement cost EC\$850, a price which included the cost of electricity installation. The extension was built by Mr Mason with the help of his two friends once again. Like the first stage of construction this stage was financed from savings specifically accumulated for the purpose because of the limited resource capacity at the time housing payment decision was made.

For Mr Mason the willingness to pay was the outcome of the desire to improve water and electricity services to remove the inconvenience and discomfort felt over their on-site unavailability and the desire to improve indoor space. The resources for payment was mobilized from intrahousehold capacity. He mobilize the help of his labour contacts for auto-construction of the extension but used hired labour for service installation because they did not have the skills to do this.

### **The Adonis'**

The second improvement in this stage came in the painting of her house and the construction of a small timber kitchen extension. She explained that this was possible because she had by then found a better job as a typist and was able to save to buy a fridge and a stove. She stated that the refrigerator could be placed in the living/dining room but there was very little space left for the stove. The household had to cook inside the house which she claimed was dangerous for the young children.

According to Miss Adonis... *"the room was too small... no place to put anything... we have to be cooking in this small space and the children have to sleep there you know... I was always afraid of what would happen if fire break out..."* She explained that she went into a "su su" saving especially to get the money to put up this kitchen. It was constructed on a Sunday by a few male friends in the area.

Miss Adonis explained that she was planning to put water service into her yard but she did not see how she could do this unless she got the connection to the pipes from her neighbour's system. She explained that she was now discussing this matter with the neighbour so that they could use one water meter and share the cost per month. She said that she felt that the Water Authority would not be able to put a pipe line for her because of where her house was *ie. it was in a congested area "with too many houses around it and you would have to use too much pipe"* According to Miss Adonis, she needed to have her own water supply because she was *"tired of carrying water from the stand pipe"*.

For the second improvement it was the need for increased indoor space to improve the safety of her young family which forced her to build a timber kitchen so she could remove the cooking activity from inside the dwelling. this was made possible by her getting a better job. She was planning improvement in her water service because of the inconvenience she felt over its absence on-site.

### **The Hippolyte'**

The second improvement undertaken by this family in the area was the erection of a concrete kitchen and dining area on the ground floor of the house which was erected on columns, in 1986. This housing extension became necessary to facilitate Mrs Hippolyte cake making and floral arranging activity. She found that the living room was not large enough for this home based enterprise. This building extension was therefore used as a kitchen, dining and income generating facility and was financed largely by Mrs Hippolyte in the absence of her husband who was on board his ship at the time. Hired labour was used as Mrs Hippolyte being on her own at the time had no one to help and *"preferred to pay to get things done."* As Mrs Hippolyte told it...*"I use to have the dining room and kitchen up here but I had to be using it to do the baking and decorating...sometimes I had so much cakes to make for people I didn't have space to move. And again I used to a little floral arranging class...the place was so small for all that...I really want to open a proper shop to do my business but I can't find place to put it up here...and places so expensive in town...Anyway I had was to build down below so I could do my backing and floral arrangement there...It made the place look better because I had plenty space for the settee and the T.V. because we eat and cook down there..."*

This extension cost EC\$2000 of which labour was EC\$900 (41%), materials was \$1000 approximately and transport was \$300 for the removal of excavated materials. Like past improvements these were financed from savings accumulated but not specifically for housing improvements. According to Mrs Hippolyte...*"It cost me in all about EC\$2000..I remember it well because I had trouble with the man I hire to move the dirt they had to excavate...He told me it would cost EC\$250 to do it and*

*then he turn round later and said it was EC\$300 he said because I didn't want any trouble I pay it...In all I pay about EC\$900 to the man who build it for me...If the mister was here at the time I wouldn't have that kind of trouble...". As far as the financing of the payments was concerned, she explained..."Well I paid that...from my savings...I wouldn't bother Albert about that...I had the money so it was not difficult".*

The willingness to pay arose out of the desire to improve the quantity and quality of living space and to separate the use of that space through the incorporation of a kitchen, and to improve home based income generating activities. The ability to pay was established from accumulated savings.

### **The King'**

The second stage of housing improvement began in 1987 as a result of the desire to provide on-site water services and an external shower for the growing family. According to Mrs King... *"we put up that shower because we had no place to bathe... the place so open...and I was tired of bathing outside late in the evenings...we had no privacy and the children growing they want some privacy...and the children since they getting big they don't want to carry water from the pipe...too much trouble...The people always spoil the pipe and sometimes for days we have no water... the children always complaining...when they have to go to school they have to get up early and bath behind the house so people will not see and you know how it is when they getting big..they need privacy... we had was to put in the pipe"* The family installed a pipe on-site and constructed an external concrete shower. The shower room of 3ft x 4ft was constructed with the help of friends and relatives but the water services was installed by the Water Authority. This improvement cost EC\$600 which was paid partly from a 'su su' saving of EC\$240 saved over six months to be used originally to buy new furniture and partly from the household income for that month. The Kings explained that after Mrs King' father told them what materials were needed and the cost, this money was taken out first from the Mr. King's wage before all other expenditure allocation. As Mrs King expressed it..*"I was saving that 'su su' money to buy a settee but I had to let it stay behind because we couldn't take the*

*water problem anymore..." Her father who is a carpenter and builder was able to provide his labour and that of a few of his friends to erect the shower facility out of cement blocks. Mr King also provided his labour. The construction was completed within a week. Materials were purchased by Mrs King' father who got his friend's van to transport them to the site without cost because as Mrs King explained her father' friends were his workmates, with whom he often shared various jobs. Since he was a builder he would often give them work when he had any house to build. Therefore they did not mind helping him. As she explained "He always help them when he get any work he would look out for them so they don't mind helping him out".*

For the King' then, the willingness to pay for this second improvement arose from the desire to remove the dissatisfaction felt over the absence of water service on-site and the inconvenience of having to use the stand pipe in which there was often no water available; the absence of a private bathing facility; and the discomfort the teenager children felt from carrying buckets of water.

### **The Lewis'**

This stage of housing improvement came when the Lewis' incorporated a small concrete kitchen unto the house and an external pit latrine in 1986. This was made possible as Mrs Lewis explained, by her three eldest working children who provided the money to build these new facilities. According to Mrs Lewis... *"We used to cook in the house but that wasn't safe because a lot of people lose their house because of that and we also got the gas stove so the children said that they would put up a little kitchen. I was glad because I believe that the house could do with some change...I really wanted to build a latrine though because I was tired of getting up early to empty the "poo"...Well when I told the children what I really wanted they decided to build the latrine too...If we had the space we would put in a better toilet...Since we know ourselves we fixed up this house two times, each time its the children who pay for it... the first time we build the house we were not living here yet our two oldest sons paid for everything. Those were cheap days not like now... the second time was*

*when we put the kitchen in was... our biggest daughter and one of our sons did that..."*

In the case of the toilet, there was very little space to put in a proper toilet. For her the toilet, through not what she would really like is better than having to go to the public convenience or dispose of the sewage waste through the bucket collection system. Like the first improvement this was built by hired labour and at a total cost of EC\$6550 in 1986. This improvement was finance partly by one of the eldest daughters who is a nurse. She like her brothers was able to secure a personal loan from a local bank to finance this housing improvement. She had by this time set up her own household in another part of Castries. Labour cost for this stage was EC\$1800 (27%). Mrs. Lewis explained that the family could not afford to pay for the cost of the improvement and that was the reason that her daughter took the loan to help them.

For this family the source of the willingness to pay for the first improvement was the desire to remove residential dissatisfaction felt over the absence of toilet and water service and the need to ensure the safety of the building against fire hazard. Housing payment was financed by increased secondary income support.

### **The Jn Baptiste'**

In 1987, the Jn Baptiste' incorporated a kitchen built from reinforced concrete and including water service at a cost of EC\$3700. Of this the cost of hired labour was EC\$1200. Like the previous construction activity the works for this stage was given to local builder who was responsible for all aspects of construction including the purchase and transport of material. This stage was also financed from Mr Jn Baptiste' accumulated savings. The improvement took six weeks to be completed. According to Mr Jn Baptiste he had this improvement put in because the old external kitchen was in a bad state and it would always get flooded in heavy rains. In addition the family had purchased a new gas stove and they did not want to put this outside.

They did not want to be cooking in the living room for long either. They felt that the time had come to put in a proper kitchen.

The source of the willingness to pay for the 'Jn Baptiste' then, was the desire to remove residential dissatisfaction felt over the inconvenience of the flooding of and dilapidated state of the old kitchen. The ability to pay was met from available accumulated saving.

### **The Joseph'**

On the death of his grandmother, Mr Joseph decided to demolish the old dilapidated one roomed timber structure she had occupied in the same yard, to erect a small external timber kitchen in the yard. It was built in one day and cost EC\$200 for materials only. Most of the cost of this improvement was financed directly from the monthly income of Mr Joseph. A small portion was also allocated from Mrs Joseph's "su su" money. Like the first stage no transport, labour or technical service costs were incurred. This improvement became necessary because of the purchase of a new stove by the household. As Mrs Joseph put it... *"I had was to put up the little kitchen is not much but I need a place for the stove and we didn't have any space in the house...we couldn't leave it in that old kitchen either...it was too bad ...when it rain you couldn't cook in it because it leak and always flood...and the galvanize too old ..."*. During this stage the Joseph' entered into an arrangement with a neighbour for the supply of pipe borne water for which they would pay a flat rate of EC\$30 per month. This, Mrs Joseph explained, was necessary so as to prevent her from carrying water from the standpipe. Further she could no longer take the crowds at the standpipe when there was a water shortage and quite often the community residents would destroy the tap so that... *"for days there would be no water and WASA is never in a hurry to repair it..."*

The Josephs were planning at the time of the research, to improve the construction material quality of the existing building and major renovations to the flooring. According to Mrs Joseph... *"As you see the floor breaking up... I want to buy a few*

*pieces of boards to repair it... every time the rain come(s) it flood over in here... last time the water was up to the chair legs... I had to put the stove on a chair... Its a good thing I came home early that day or I wouldn't have any stove left... look... (pointing to a rotting section of the floor)... you can't even walk heavy on it...we putting aside some money for that little by little because I believe that will cost us a lot..."*

For this family therefore, the source of the willingness to pay was the desire to improve the quality of their kitchen facility and to remove the inconvenience often caused by its flooding. They were also willing to pay for water service to avoid the inconvenience of transporting buckets of water which they often cannot get because of problems at the standpipe. The ability to pay was established partly from available 'su su' savings and partly from portion of income allocated from wage when the payment was required and from the use of auto-construction labour.

### **The Edwards'**

About 1985, Mr Edwards was able to get a good job as a machine technician at the Moorings Tourist Resort in Marigot Bay, some twenty miles away. With this new job he was able to make sufficient money to extend his dwelling by constructing a retaining wall and a living room. The Edwards explained that they had to construct this retaining wall because their plot was prone to land slippage and they were afraid of losing their house. Part of the retaining wall served as one wall for the living room, so that they had only to construct three other walls to make the living room extension. Because of the size of this living room the Edwards erected a low concrete partition to provide a tiny kitchen section. With the installation of on site water service, Mr Edwards also installed an external shower facility which they explained they can only use at nights and early morning because it is not enclosed.

The improvement cost EC\$9000 and was undertaken in 1988. Hired labour cost accounted for EC\$6000 (67%) of this total cost and the Edwards explained that this cost was high because of the excavation works involved and special skill required for



the construction of the rubble retaining wall. For this work the household had to take a small loan from a local bank for which they were repaying EC\$258 per month at the time of the research. They explained that they were able to get this loan because they had a little savings in the bank. With this repayment and their recurrent housing payment, this household was paying approximately EC\$388 (28%) per month in housing expenditure at the time of the research. This extension was constructed over four weeks mainly by Mr Edwards although he had become very busy "*these days especially with this new job at Marigot Bay*". He explained that before this new job he could find some time but now he works overtime some days "*and by the time you reach home, you're so tired you can't do a thing...*" He explained that he is now trying to dig a pit for his new latrine and he cannot find much time to devote to that activity.

For the Edwards' the sources of the willingness to pay for these improvements was the desire to remove the threat to the security posed by potential land slippage of their site. However the construction of the retaining wall provided an opportunity to put in a livingroom/kitchen extension as well. Housing payments were financed from a loan and the use of auto-construction labour.

## **6.1.2 DISCUSSION AND IMPLICATIONS OF THE FINDINGS FOR STAGE 2 IMPROVEMENTS**

### **6.1.2.1 Process 1 : The Impact of Changing Housing Improvement Preferences in the Willingness to Pay**

For the King', Lewis', Mason', Jn Paul' and Joseph there was improvement in the availability of water services as this was absent in the original dwelling. However, for the latter three families water was not included on-site but in closer proximity than the standpipe i.e from a neighbour' on-site supply. For this type of access they pay the owner a standard rate per month. For the Adonis', Girard', Green', Josephs',

Jn Paul' and Mason there was improvement in the availability of electricity service as they had no service before.

The Charles' Lewis', Jn Baptiste', Hippolyte' and Green' also began the process of material improvement from timber to concrete for the extended section of their dwellings. This was also a variation in the expectations of the second stage and was associated with the improved security of tenure this family felt. For the Girard', Joseph', Green' Jn Paul' and Mason' the willingness to pay for service improvement was due to the inconvenience and discomfort caused by the general absence of these facilities and/or the importance of having these services to facilitate the operations of newly acquired tangible non-monetary resources. For the Josephs' and Jn Paul' the social discomfort and inconvenience felt over the absence of on-site water service was partially alleviated by the access to a neighbours supply. This was not what they wanted but had to settle for , because of physical constraint, to providing a better access. What is seen from the findings then, is that the improvements undertaken were those that were expected in the natural progression of housing development and those that related to the exigencies in dwelling conditions. These exigencies were precipitated by the acquisition of tangible non-monetary resources requiring expansion in space or by the deterioration in the quality of attributes which posed a threat to the families welfare. This accounts for the improvement variations observed.

The extension to dwelling space was also an unexpected feature for this stage. In most cases the extension of the dwelling space and incorporation of kitchen facilities was due to the purchase of furniture and equipment which highlighted the inadequacy of existing space and highlight the impact of resource accumulation. This gave rise to the source of the willingness to pay for improvements in the quantity of space as well as the specification of the use of overall space. The purchase of these furniture and equipment implies a more substantive resource capacity than in past improvement stages. This is also implied by the level of costs households were able to support as was shown in the cases. Though more than one attributes were improved in this stage, they were in most cases not done at the same time. The time lapse in the improvement of the attributes preferred, implies either that the resource capacity to

effect all improvements in a single activity was limited or that the subsequent improvements were the result of the desire to remove the threat of adverse dwelling conditions at that particular conjuncture.

According to Table 6, the expansion of space by all households, in this stage gave rise the beginning of the process of space differentiation in respect of use. This is also an unexpected feature for this stage. This differentiation in space use was related mainly to the acquisition of tangible non-monetary resources as was the case for all households excepting the Charles', Hippolyte', King', Edwards', James', Williams', Jn Baptiste' and Girard'. For these households the space differentiation was due to 1) the desire to identify specific sleeping area for a growing family as was the case for the Charles' and Girard'; 2) improve the standard of dwelling space for the Edwards', James', King', Jn Baptiste' and Hippolyte'. 3) To improve the environmental physical quality of outdoor space. The Williams' and the Edwards' related to factor 5). These two families wanted to improve the quality of the outdoor space by improving the environmental health physical conditions of their plots. For the Williams this was the desire to the health risk posed by stagnating water after heavy rains. For the Edwards it was to protect the plot from land slippage which in tern would secure their investment.

#### **6.1.2.2 Process 2 : The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay**

The direct impact of the demographic aspect of this process in this stage is not well substantiated. It was expected however that not all the processes will have an important influence in the housing payment decision. The findings of the households who have indicated the impact of this revealed that its impact was indirect. It was the impact of the acquisition of tangible non-monetary resources which caused inadequacy in the quantity of indoor space. This inadequacy in space then impact the existing socio-demographic attributes of the family. e.g the case of the Green'. The Girard' and the Charles' were the only families whose increased household size had a direct impact on the willingness to pay.

**Table 6: Housing Improvement Characteristics of the Second Stage**

Household Name	Type of improvement	Type of Labour	Non-Monetary Sources of Housing Payment		Monetary Sources for Housing Payments											
			accumulated building materials	Autocostruction labour	material loan	Accumulated Savings		Source of Accumulated Savings			Loans (C/(n)1)			Direct Wage		
						General	Special	Secondary income support	Income transfer	Allocation from main wage earner	Sale of asset	Bank	Credit union	Relative	Friend	
Charles	2 room and shop	H/H		X	X	X			X							
Adonis	Timber kitchen and water services	H			X											
Hippolyte	2 rooms and kitchen	H			X											
St Croix	Kitchen	H			X				X							
Kings	Shower and water	H/H		X	X		X			X						
Lewis	Concrete kitchen and pit latrine	H														
James	Pit latrine	H								X						
Joseph	external kitchen, water	H		X	X					X						
Edward	Living room, kitchen	H		X												
Williams	Roof, backfilling	H			X											
Jn Baptiste	Kitchen, water	H			X											
Thomas	Timber kitchen and electricity	H		X	X											
Girard	1 room and electricity	H			X											
Green	living room extension and electricity	H		X	X											
Jn Paul	water, electricity and 1 room (kitchen)	H		X	X											
Mason	1 room, water, electricity	H/H		X	X											
Total				8	2	13	1	-	2	3	-	-	-	-	-	-

Key: H Household/Intrahousehold Labour  
H Hired Labour

### **6.1.2.3 Process 3 : The Development of the Resource Capacity in the Ability and Willingness to Pay**

In this stage, the resource capacity of all households were improved as evidenced by the resource accumulation tendency observed in respect of monetary resources and/or the acquisition of tangible non-monetary resources. Most households in this stage had more than one earning members or access and/or access to the income transfers of relatives and friends outside. The Lewis', St Croix', Jn Paul' and Charles had access to income transfers. The desire to pay for space improvement to facilitate home-based income generating activities as was the case for the Hippolyte' and Charles', support the expected tendency toward resource improvement in this stage. The acquisition of tangible, non-monetary resources such as furniture, stoves and other equipment also confirm that the resource capacity improved in this stage. Space improvement activities were therefore the result of this resource accumulate tendency. The presence of these resources shows that extra monetary resources can be made available if necessary, even if incomes are limited.

The case histories revealed that these households were able to support the apparently high levels of costs from their interhousehold and/or intrahousehold capacities and for a few to use material and cash loans. This latter ability is indicative of the capability of the resource base in this stage to support repayment of improvement costs, c(n)1. However as Process 4 will show, this capacity allowed for the type of resources mobilized and used to establish the ability to pay. Even though the capacity existed in terms of the number of earners, potential level of income and labour time available, the ability to make housing payments from this capacity depended on the level of cost of the improvement and the ability to mobilize and use these sources. Consequently, as Process 4 will show, housing payments had to be made from a process of resource accumulation.

#### **6.1.2.4 Process 4 : The Mobilization and Use of Resources in Establishing the Ability to Pay.**

All households were confronted with c(n)2 costs, excepting the Charles', Hippolyte' and Edwards' who also had to face c(n)1 related costs due to the cost of their improvement which could not be met by their existing resources. They resorted to the use of material or cash loans. However these households had the ability to repay the related regular repayments (c(n)1) by virtue of their stability of employment and level of income.

The households relying on their intrahousehold resource capacity in the previous stage also established their ability to pay for housing from this source in this stage. The exception was the Edwards', Lewis' and Hippolyte', who, because of the cost of their improvements, had to look beyond their own existing intrahousehold resources to obtain financial assistance in the form of loans. The Charles', who have used both interhousehold and intrahousehold resource capacity in the past, use these sources again but also due to the cost of her improvement she also had to seek through a materials loan made possible because of the relationship between her special friend and a building supplies store. All other households used their existing resource capacity or a combination of intrahousehold and interhousehold capacity as in the previous stage of housing improvement.

##### **a) The Mobilization and Use of Intrahousehold and Interhousehold Labour Time in the Establishing the Ability to Pay.**

The findings in Table 6 show that half the households were able to mobilize and used auto-construction labour time to pay for housing either solely or in combination with hired labour. The use of hired labour could be attributed to the nature of the improvement tasks undertaken.i.e. the emphasis on the incorporation of facilities and services necessitated the use of specialist skills not available from auto-construction labour. These households have incorporated toilet/kitchen facilities constructed from reinforced concrete works and plumbing which require special skills. Note the

improvements of the King', Charles', Hippolyte', Jn Baptiste' and Edwards'. For the Edwards' and King' the use of hired labour was the lack of the alternative in respect of availability of time. Hired labour was preferred by the seven households who had used it in the past for the same reasons as outlined in Chapter 5.

**b) The Mobilization and Use of Intrahousehold and Interhousehold Monetary and Tangible Non-monetary Resources in Establishing the Ability to Pay.**

Except for the Williams', Lewis', Jn Baptiste', Girard' and Adonis' all other families used more than one source to establish housing payment ability. Except for the Lewis' who used a cash loan as the main source for financing housing payments, the most important source of payment in this stage was the use of the intrahousehold accumulated savings. The second most important source was the use of cash loans by three families. These are the Edwards', Hippolyte', and Lewis'. In the case of the Lewis', this loan was taken by the adult earning children living outside of the household. Income transfer was used by the Charles' who also used a material loan for the improvement. The King' accumulated building materials to facilitate housing payments.

The cost of the improvement reflected the source of its financing. Where the improvements were more costly they were financed from loans and accumulated savings. Improvements that were paid for from the household's total monthly income receipt were in most cases low-cost or could be supported from income without adverse effects on its expenditure and savings allocations. There has been no real evidence on the extent of negotiation or whether there was conflict over the use of resources. What it sure is that all households were able to get access to these resources

### 6.1.3 CONCLUSION TO THE FINDINGS OF STAGE 2 IMPROVEMENTS

The findings support the proposal that in this stage improvement preference will be for services. The fact that facilities and space were also improved reflects a variation in the expected feature which has been attributed to the improvement in level of resource capacity at this stage. The incorporation of permanent material is a reflection of the increased security of tenure felt by some families. The findings show therefore, that for improvements in this stage that the willingness to pay was the outcome of the desire 1) to remove the social discomfort and inconvenience felt by the absence of private on-site or internal electricity and water services; 2) the increased security of tenure felt by households; 3) the desire to improve income generating activities; 4) the desire to improve outdoor environmental quality 5) the desire to improve internal space to facilitate the newly acquired tangible non-monetary resources.

In respect of the proposed hypotheses it can be said that the finding support the hypotheses that the willingness to pay will be the outcome of 1) the desire of the household remove the inconvenience and social discomfort felt among family members regarding the absence and/or type of access of these services. 2) the increased security of tenure household felt by households.

With respect to the ability to pay, these findings support the proposed hypotheses <sup>which</sup> state that in this stage the ability to pay will be established from 1) the intrahousehold and interhousehold monetary resource capacity through accumulated savings, negotiated new and improved secondary income support and income transfers. 2) The costs associated with  $c(r)$  will be paid from the regular new and improved secondary income support and income transfers that can be negotiated for from the intrahousehold and interhousehold capacity. Costs associated to  $c(n)$ , will be met from existing intrahousehold accumulated savings and new secondary income support and transfers that can be negotiated. 3) Resources will be mobilized through negotiation but without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort they feel. With respect to hypothesis 2 all households



faced c(n) costs only but without c(n)1 component. Hypothesis 3 is not well supported because of the lack of evidence on the extent of negotiation.

## **PART 2**

### **6.2 ESTABLISHING THE ABILITY AND WILLINGNESS TO PAY IN THE THIRD STAGE : FUNCTIONAL DIVERSIFICATION**

According to Chapter 3, sub-section 3.2, for this stage the acceptable minimum standard of shelter is a two room timber and concrete dwelling with specified and separate areas for specific uses. There will be a clear sleeping, living/dining and cooking area. This is made possible by improvement in the internal and/or external space attribute by the incorporation of a concrete kitchen. This extension allows for this partitioning of space and the commencement of the process of dwelling material change from timber to reinforced concrete. The change to the more durable concrete building material is a manifestation of the improvement in tenure security.

The willingness to pay will result from the desire to 1) improve the amount and specify the use of space by including the kitchen improvement preference; 2) remove residential discomfort arising from overcrowding of the limited space due to increase in household size; 3) to improve material quality by incorporating more durable material for the extended space.

The ability to pay will be established from 1) improved intrahousehold made possible by more than one earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. 2) the mobilization and use of resources through the process of negotiation, of any combination of the following sources arising from the

negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. These sources will be used to meet c(n) and c(r) payments; 3) regular repayments associated with c(n)1 and c(r) costs will be established from the existing and new regular sources that are negotiated. The additional costs c(n)2, will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to. 4) resources which will be mobilized through negotiation without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort household members feel.

### 6.2.1 THE CASES

Eight families undertook a third improvement stage. These were the Girard', Charles', Hippolyte', King', Lewis', Jn Baptiste', Edwards' and Williams'.

#### The Girard'

As the house is built partly on columns because of the slope of the land, Miss Girard was able to erect the shop below at a cost of EC\$2450 in 1990 and measuring approximately 12ft x 8ft (96 sq.ft). It was constructed out of concrete blocks with a sand and cement plaster finish. Miss Girard found that it was becoming too tedious to continue her sidewalk vending and so as soon as she accumulated enough money, she build the small shop extension. As she expressed it *"I had to put up the shop to help the children .It was good because I live so close to the port ...you always get customers especially on banana days when the vans park up ..and it is so close to the road ...that's why I like it ...when I use to sell on Bridge Street things were slow only make good money when the tourist boats come...With the shop I can sell drinks and*

*little little things .I have to help myself and the children because you have to say they don't have father."*

As for financing and building these improvements she explained...*"I had to save up in my 'su su' to get the money... is the little money from selling on the street that help me with the shop I have no body to help me..."*

The shop cost EC\$2450 for which materials cost was EC\$1200,labour was EC\$600 (32%) and transport was EC\$70. This improvement was undertaken in April 1990 over a period of two weeks. Like the other improvements the money was saved for the purpose. At the time of the field research she was painting up and providing a slabbed walkway over the drain leading to her newly constructed shop. This was four months after the shop was completed. This activity was costing her EC\$80 for labour and EC\$500 for materials which were paid directly from her earnings.

Like the third stage of improvement was facilitated by the improvement in intrahousehold monetary resource capacity. Housing payments were established from the accumulation of saving. The willingness to pay for a shop extension was itself related to the desire to improve the family's monetary resource capacity. Like in the previous stage, she did not mobilize any monetary and non-monetary resource assistance because of the unavailability of these sources and the adequacy of her own intrahousehold capacity.

### **The Charles'**

In 1990 Miss Charles incorporated a concrete kitchen extension as part of the main dwelling out of reinforced concrete instead of timber as characterised the main structure. The permanency of the extension is indicative of the reduced risk of eviction she felt and her need for improved indoor space, privacy and comfort. Like the first improvement in this stage it was built by the special friend with the help of his two friends who are masons. These friends had to be paid but according to Miss Charles *"They did not charge us much because they are his friends and they would*

*always help him out as he would help them...". She explained that this stage of improvement became necessary because of the need to provide an adequate place for her new stove. At the time of the research she was constructing a kitchen in which to place her new stove so that it can be removed from her living room. According to her, the main reason for this improvement was..."... because of the new stove, I could not put it outside, I need place to put it ... and it not good to be cooking inside the same place you eating and watching TV its not good especially when people come to see you". She built it out of concrete because as she put it "it last longer and you don't have to repair it all the time...although the boards cheaper but it cost you more in the long run because you have to repair it all the time..I don't like it If left to me I would change everything but you see when you don't own the land you can't do anything good...Well I built it in blocks because it better...I know it is a risk but other people doing it...I suppose if they want the land...I might lose all the money I put in it...unless they pay me for it..."*

At the time of this research the work completed inclusive of material cost was EC\$514 for cement and concrete blocks. The foundation section was already erected and part of the walls was going up. The cost of the works so far was financed by the special friend. In all housing improvements he was very important in the decisions made because as Miss Charles explained she was dependent on his financial support even though he does not live in the same house. *"Is he who will help me so I have to put him in my business..I always ask him about things first because he is helping me and if I don't have money it is He that will help"*

### **The Hippolyte'**

The Hippolyte' third improvement activity was undertaken in 1988 which was the erection of another retaining wall and a flush toilet facility which necessitated the construction of a septic tank and soak away system. There was no approval from the Public Health Authority for this sewerage disposal system. After constructing the

kitchen and dining room extension the family found that it was too close to the outdoor pit latrine for the kinds of activities that Mrs Hippolyte wanted to undertake. According to Mrs Hippolyte...*"we couldn't have people coming here and making orders for cakes and see the toilet so close... we would lose sales... we had to remove the toilet but we would put it where people would still see it... because of that we had to put in a septic tank...and it was not smelling too good...You know it was the one my brother had so it was old and full up..Anyway I couldn't take it anymore and we didn't want to dig another pit so we said we would put in the flush toilet instead..But it cost so much money...You know I have all the bill for it?...But we a public health inspector friend who help us...he made up the plan and everything.."*

Therefore for the third housing improvement the Hippolytes installed an internal water closet with a septic tank waste disposal system to improve the sanitation of the dwelling and preserve their new home based earning activity. They found, however, that to install this new facility they had to excavate sections of their sloping plot due to space constraints. They had no public health approval as required. However, the plot size fell below the 3000 sq.ft. size requirement for approval of this specific sewage disposal system. According to Mrs Hippolyte...*"we didn't even have space for the soak away...but no problem...we get it in the end..we had was to dig deep that's why it cost so much money...In all it cost EC\$13850 I have all the bills...we had to excavate again that where a lot of money go .We pay EC\$3000 in all to build it. The rest of money we use to buy material and pay the truckman...Imagine he charge EC\$250 to do it and the time before that other man charge me EC\$300"*. They were able to build it with the help of a friend who worked with the Public Health Authority and who provided guidance on the technical specification of the facility. This improvement was financed partly through a loan from the bank and partly from accumulated savings. The Hippolytes had to deposit EC\$1600 to secure this loan. This money was taken from a small account Mrs Hippolyte had in another bank. The family was paying a monthly amount of EC\$300 (c(n)1), to repay the loan in addition to the regular housing service payments of approximately EC\$145, (c(r)), per month at the time of the research. As Mrs Hippolyte expressed it...*"Well we had was to get a loan to do it because it was too much money...and we did' nt have mush in the bank*

*...they asked us to pay EC\$1600 just to get the money...and we have to pay back EC\$300 a month...every month the hotel sent it to the bank from my wages."*

Their monthly housing payment at the time of the research was approximately EC\$445 (23%) of monthly cash income as a consequence. This amount was being paid at the time of the research, from household income as a regular monthly expenditure without any adverse effect on the household as confirmed by Mrs Hippolyte when she said "we have no problem to pay that".

For the Hippolytes then, this improvement was financed from accumulated savings on the one hand and through a loan. This improvement was costly because of the technical nature of the activities involved. Mrs Hippolyte explained that they had to take a loan because of the cost of the improvement as they did not have sufficient money in the bank to pay for the cost. However they had the capacity to repay the loan because of the stability of their jobs. The willingness to pay arose out of the desire to improve quality of their toilet facilities because of the dissatisfaction felt over the threat of the original pit latrine posed to the profitable operation of the home-based cake decorating activity. The willingness to pay was also due to the desire to space to facilitate the improvement of income generating capacity which would ultimately improve their resource capacity.

### **The King'**

In 1990 the Kings built a timber living room and kitchen extension at a cost of EC\$6200. They were particularly lucky, they explained, to have had Mrs King's father who was a carpenter/builder to assist them in their housing improvement during this stage. He took charge of the activities. He decided how much material would be needed and what it would cost. He, together with a few of his carpenters and mason workmates, erected the housing extensions free of cost. Hired labour was used to install their water pipes. All other tasks were undertaken by the household with the assistance of Mrs King's father and his friends free of cost.

It was the demand for increase indoor space for comfort and privacy which prompted the King' to undertake a second housing improvement in 1990. By then the teenage children were making demands for their own personal space. According to Mrs King... *"it was not good to have the big children sleeping together... the room so small we do everything there... no place for them to study... the children need the space... we planning to extend... to put in a little living room so we can make room for the two big boys... Jean share room with them and they always quarrelling... is not right for the children to live so as you see they getting big... they want a little privacy...we do everything in the little area there...cooking... eating...and they have to do their homework there too."*

By the end of the research period the Kings had constructed this timber living room extension which would serve also as a kitchen/dining area in one corner. The original area which served as a living/dining and children's bedroom was made into a bedroom for the children. It was sub-divided by a plywood partition to separate the teenage daughter's sleeping area from the boys'. According to Mrs King...*"when we fix up the house we will put a small bed for Trevor and Bryan over there (pointing to a section of the living room). Ann and Stacy can stay together in that side... you know how it is when they reach a certain age... they want to have their own things...they always quarrelling they can't find this and they can't find that..."* By August of 1990 the King' had installed telephone service to their dwelling. They would continue to use the pit latrine system for sewage waste disposal.

The work for this improvement was being done by Mrs King' father and two of his work friends. Mr King during this time was very busy in his work at the Port so the father became responsible for all works. The cost of the improvement was EC\$6200 of which EC\$200 was transport cost for materials such as concrete blocks for the foundation and columns of the structure and the sheets of lumber and galvanize for the roof. The cost of this improvement was financed solely from savings that the household had accumulated specifically for the purpose. Not all materials were purchased at once. There were two stages of material purchased. In the first stage the concrete blocks and bags of sand was purchased from the accumulated funds

because as Mr King explained sand was getting scarce and expensive because of the Government' new policy on sand mining which was limiting the supply and causing the price of blocks to increase. According to Mr king *"we had to buy the sand and the blocks and leave them there because we don't know if we would get them when we want... right now people want sand and can't get it... (prices of) blocks going up..."* The rest of the material was purchased at the time of construction. Mr King explained that they had been accumulating the savings for this improvement for *"quite a while"* in a small bank account but that they did not want to take any loan to help because they would have to pay back too much money and *"it was better to save and then use that money to do what you want..."*. The King' stated that they did not have any saving left because of this last improvement but they would begin to save regularly again as soon as the present work was completed.

For this family then, the willingness to pay arose from the desire to improve the quantity of living space to facilitate comfort privacy and specification of functional use of space. The ability to pay was established from the 'su su' accumulated savings. The ability to pay the higher costs of the third improvement was established partly from savings specifically accumulated for the purpose and from the accumulation of building materials. In both instances however the use of auto-construction labour was used to save cost.

### **The Lewis**

In 1988 they began material renovation and repairs to the roofing of the dwelling, and the incorporation of on site water service at a cost of EC\$1070 of which labour was EC\$300. This exercise was deemed necessary as a consequence of leakages in the galvanize roof sheeting which was especially bad during the rainy season. Mrs Lewis explained that during the rainy season the household had to *"set buckets to collect the rain water falling through the holes in the roof and we didn't want the hurricane season to come and catch us with that roof or we wouldn't have a house left"*. During this phase a water installed. This was done over a two week period because as Mrs Lewis explained there was much rain for part of the first week that delayed



the works and further as it involved the roof they did not want to remove the sections that had to be changed while there was a threat of rain. This improvement was financed by a son and a daughter who were working and living in the home at the time. The amount was financed from pooled portions of their respective incomes for the period in question.

In the case of this third improvement it was the desire to improve material quality of the roof in order to a reduce leakage and avoid the hazard the poor quality roof would pose in the hurricane season. Housing payment were facilitated by a loan.

### **The Jn Baptiste'**

In 1990 their toilet extension was constructed adjacent to the newly built kitchen. It was also constructed from reinforced concrete at a cost of EC\$2850. This time the household had to pay EC\$150 of this total cost for transport of building material to the site because the local builder they hired did not have his own means of transportation. Hired labour cost EC\$800 (28%) of total cost. Like the previous stages this stage was also financed from savings. The total building time covered a period of four weeks. Mr Jn Baptiste explained that he no longer wanted to use the bucket system for sewage waste disposal as it was becoming inconvenient and *"in these times you can't afford to be still using that system...so I had to do something"*. According to him "my wife always complain about getting up early to meet the trucks...that's too much trouble...so I put in the little flush toilet...I still have to paint it up."

The source of the willingness to pay for the Jn Baptiste' then, was the desire to remove residential dissatisfaction and inconvenience caused by the absence of a toilet facility. They were therefore willing to pay for improvements the type quality of this attribute. Housing payment was established from available accumulated saving.

## **The Edwards'**

At the time of the research the family shared their bedroom with their two small children and although they would have liked to put in an additional room for the children, they were faced with the urgent need for a new toilet since the old pit latrine was full to capacity. As Mr Edwards explained... *" Right now we want to put in a little room for the children because they are growing and we can't have them sleeping with us all the time...but we need a better toilet bad, bad bad!... but the space is so small... right now we are thinking of a wall on that side so that the land wouldn't slide... that's what I had to do for this side... You see this wall (pointing to a wall of the living room) it's part of the retaining wall that I built, we just put the other sides to make a room..."*.

Mrs Edwards explained that they needed to build this new pit latrine urgently even though they do not have adequate space because according to her... *"(I) do not want to use the public toilet and I can't see myself getting up so early in the morning to get rid of "poo" when the City Council truck comes..."*. At the time of the survey Mr Edwards had begun digging the pit. No cost was incurred at that time. They explained that materials would be purchased later from household income as they *"only needed a slab and a couple of sheets of plywood"* to enclose it. For the Edwards' the source of the willingness to pay for these improvements was the desire to remove the inconvenience of the absence of a toilet facility. The work in progress at the time of the research was financed from the use of auto-construction labour

## **The Williams'**

Early in 1989 this household undertook roof material change from old and leaking galvanized sheetings to a cover with new sheeting and timber support. They also backfilled their yard with soil and gravel to improve the surface drainage condition. They explained that this was necessary because of the settlement of pools of water in the yard and under their house, when it rained heavily. This they stated was a constant source for mosquitos before they backfill the area. Material to backfill was

obtained when the adjacent open concreted drain was cleared of the gravel, sand and mud brought down from the hills after a rainy season. Mrs Williams explained that she asked the men clearing the drain for this material which they piled up on the side of her plot for her. They did not have to pay for this material, only the labour to spread it in the yard. They also changed the floor boards for almost the entire house and repainted the dwelling. The family explained that they had to change the floor board because they were decaying. Mrs Williams recalled that she almost broke her ankle once because one piece of board was so bad that it broke under her weight. This was what actually led to the urgent repairs and floor material change. As she expressed it *"one time I almost broke my foot because the board was so rotten it broke as I stepped on it and my foot went right through the floor...Can you imagine if I break my leg at my age?...We had to do something I told the mister to fix it quick!...anywhere we had to get the money from we just had to do it..."*

The improvement cost EC\$7226 and was completed within two weeks and was financed from family savings. The Williams actually has most of the bills to verify this level of cost. Of this cost, EC\$1800 was the cost of hired labour. EC\$120 was also used to pay transport cost for the building materials to the site.

For this family the sources of the willingness to pay were 1) the desire to improve the material quality of the roof and floor to improve safety of the family, 2) the desire to improve the environmental health and physical outdoor conditions of their plot. They were able to meet housing payments from accumulated savings.

## **6.2.2 DISCUSSION AND IMPLICATIONS OF THE FINDINGS**

The summary of the findings on the improvement characteristics of this stage is presented in Table 7 to which reference is made in the following sub-sections.

Table 7: Housing Improvement Characteristics of the Third Stage

Household Name	Type of Improvement	Type of Labour	Non-Monetary Sources of Housing Payment		Monetary Sources for Housing Payments										Direct Wage	
			accumulated building materials	Autocosts (wage labour)	Accumulated Savings		Source of Accumulated Savings				Loans (C(0)1)					
					General	Special	Secondary income support	Income transfer	Allocation from main wage earner	Sale of asset	Bank	Credit union	Relative	Friend		
Grand	Shop (concrete)	H			X											
Charles	Kitchen extension (concrete)	H/H		X				X								
Hippolyte	Flush toilet (concrete)	H			X						X					
King	Timber living room/kitchen extension	H	X	X	X											
Lewis	Roof material change	H	X				X									
In Baptiste	Flush toilet (concrete)	H			X											
Edwards	Pit latrine	H		X												
Williams	Floor material change and pit latrine (planned)	H			X											
TOTAL			2	3	5	-	1	1	-	-	1	-	-	-	-	-

Key: H Interhousehold/Intrahousehold Labour  
H Hired Labour

### **6.2.2.1 Process 1: The Changing Housing Improvement Preferences in the Willingness to Pay for Housing**

According to Table 7, eight households were engaged in a third improvement stage. The evidence above shows that the improvements in this stage related mainly to the incorporation kitchen or toilet facilities for five families. The exceptions are the Charles' who included a concrete shop extension; the Williams' and Lewis' who changed the quality of roof and floor material respectively. In the case of facilities improvement this also meant improvement in the dwelling space attribute.

The evidence from five of the eight cases show that these improvements led to the specification of use of dwelling space. The improvements in the quantity and functional use of space consequent on the incorporation of facilities and partitioning of internal space evident in this stage, therefore confirm expected features of the third stage of housing development. However the evidence from the Girard' show a variation from the expected feature. For this family the improvement preference for a shop to improve income generating capacity,relates to the impact of the existing level of resource development at the time. The families decision was based on the desire to improve the level of existing monetary capacity. The material improvements of the Williams' and Lewis' were also variations from the expected features. It was proposed that the process of wall material quality improvement would begin with the change from timber to concrete. For these family it represented a variation in the proposed use of concrete.Their roof material repairs were also a variation. Their improvements then, did not support the expectations of this stage. The incorporation of an internal flush toilet by the Jn Baptiste' and Hippolyte' were also an unexpected feature of this stage.

### **6.2.2.2 Process 2 : The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay**

The willingness to pay for housing in this stage was related to five factors. i.e. 1) the desire to avoid social conflicts due to overcrowding the reduction in overcrowding

2) the desire to improve personal privacy 3) the desire to improve the standard and type of access to kitchen and facilities. 4) the desire to improve income generating activities. In the case of 1) and 2) these were the result of increases in household size and increasing maturity of household members, as was the case of the King' only. They undertook space improvement because of increase in the size of their respective households and the resulted space inadequacy. All other families, excepting the Girard', desired improvements in the quality and type of access to kitchen or toilet facilities. The Girard' willingness to pay related to factor 4). The families' improvements therefore, were planned to fulfil these requirements. The incorporation of kitchen and toilet facilities necessitated the extension of dwelling space as either part of the main structure or erected separately in the yard. From discussions with all these households it appears then, that the willingness to pay an increased amount for housing was precipitate by the exigencies in the levels facilities present in the existing dwelling and their adverse impact on the households' levels of comfort and privacy.

These improvements gave rise to six categories of acceptable minimum standard of dwelling at this stage. Based on Residential functions alone, these were 1) A three room timber and concrete dwelling which incorporated internal kitchen and toilet facilities, water and electricity services. The Hippolyte' and Jn Baptiste' houses fell in this group. 2) A three room timber and concrete dwelling which incorporated internal kitchen, water and electricity services but with an external pit latrine e.g The Lewis' and Charles'. 3) A two or three room timber and concrete dwelling with electricity services as typified by the Edward' and Girard' house. 4) A two room or three room timber house with electricity and water services and with either an external or attached kitchen.e.g the Williams'. 5) A two room timber house with water and electricity services but in which specific uses are allocated to specific areas of rooms of the building rather than in separate rooms. The King' dwelling typified this group. Based on the overall use of the building there is a sixth category which is a dwelling of mixed residential and commercial uses as is typified by the Hippolyte', Charles' and Girard' dwellings. All households therefore, had at least two rooms and had began the process of functional diversification of and specification of space use. The findings therefore support the expectation that this stage of the

housing development process will be defined by an acceptable minimum standard of dwelling characterised by : a clear sleeping, living/dining and cooking area which will be made possible by improvement in the internal and/or external space attribute. The incorporation of a concrete kitchen will be the space extension which will allow for this partitioning of space and the commencement of the process of dwelling material change from timber to reinforced concrete.

#### **6.2.2.3 Process 2 : The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay.**

According to the findings all families were willing to pay to remove the social discomfort and inconvenience associated with the inadequacy in the quality of the space use and/or facilities and/or material of their dwelling. Only the King' improvement related directly to the growth and maturity of the individual family members and the social conflict of this over the use of space. In this stage then, it was the mainly there social discontent and inconvenience cause by the low standard of facilities which influenced the willingness to pay.

#### **6.2.3.3 Process 3 : The Development of the Resource Capacity in the Ability and Willingness to Pay.**

Like in the previous stage all households had developed an improved resource capacity which was limited mainly to the monetary resource capacity. There was no evidence that between the previous stage and this that there had been further improvement.

#### **6.2.2.4 Process 4 : The Mobilization and Use of Resources in Establishing the Ability to Pay.**

For these households a similar pattern in resource mobilization and use as obtained in stage 2, prevailed in this stage. The ability to pay was established from accumulated building materials as was the case of the king' and Lewis'; accumulated

savings by all households excepting the Lewis', Charles', and Edwards'; the use of auto-construction labour by the Charles', King', and Edwards; special allocation from income by the Edwards',; bank loan by the Hippolytes and income transfer by the Charles. The Charles' and Hippolyte' used more than one monetary sources.

### **6.3.5 CONCLUSION OF THE FINDING FOR STAGE THE THIRD STAGE IMPROVEMENTS**

According to chapter 3 for this stage the acceptable minimum standard of shelter will be a two room timber and concrete dwelling with specified and separate areas for specific uses. With respect to the willingness to pay, it was shown that it arose from six factors. These are in order of importance and based on the numbers of households indicating them as sources, the desire to 1) remove residential discomfort felt in respect of the absence of water services, kitchen and toilet facilities; 2) specify and functionalize the use of space through extension and partitioning; 3) remove residential discomfort arising from overcrowding of the limited space due to increase in household size; 4) remove social conflicts over limited space; 5) improve material quality by incorporating more durable material for the extended space and improve existing material through repairs and renovations; 6) to improve space to establish home-based income generating capacity that would ultimately improve the overall monetary capacity. The most important sources of the willingness to pay in respect of the number of household indicating them were 1) and 2) above. These sources and the consequent improvements they gave rise established the acceptable minimum standard of dwelling for this group of households in this stage.

The sources of the willingness to pay as outlined above support the proposed hypotheses that : The willingness to pay will result from the desire to 1) improve the amount and specify the use of space by including the kitchen improvement preference; 2) remove residential discomfort arising from overcrowding of the limited space due to increase in household size; 3) to improve material quality by incorporating more durable material for the extended space. However the finding show that these sources of the willingness to pay were more than those proposed by



the hypotheses. However, these findings confirm as for past improvement stages that the willingness to pay is a function of the interactive influence of many factors which according to the findings relate to level of resources, social, demographic and dwelling characteristics at specific conjuncture. They establish the conditions in which households will be willing to pay for housing improvements.

With respect to the ability to pay, the results further confirm, as for previous stages, that households usually consider firstly, the existing intrahousehold monetary resource capacity for establishing its ability to pay before its interhousehold capacity. The ability to pay was established through an accumulation of savings mainly. The use of special allocation from the cash income relates to very small costs such as the purchase of paints, a few pieces of lumber, etc., that would not require significant change in expenditure and savings pattern. Where the costs were larger such as for the erection of one or two rooms or the installation of toilet and kitchen facilities, these were financed from saving specially accumulated for the purpose or from existing accumulation. This implies once again that the ability to pay for housing for these households with limited incomes, must be established through a process of accumulation of portions of the limited income. The implication of this tendency, particularly in the case of the monetary resources, confirms as for previous stages, that even where incomes are low families can make portions of it available if they really want to pay for certain items and that they have the ability to acquire pre-project resources. This implies also that housing programme producers will need to take cognizance of this tendency as households might be able and willing to pay for housing improvements only if the repayments required can be tailored to the pattern of monetary resource accumulation observed among these households.

It shows also that loans relating to c(n)1 costs are not popular sources for establishing the ability to pay when households initiate their own improvements. The few who use it have the capacity to support repayment.

The findings of this stage support the proposed hypotheses that the ability to pay will be established from 1) improved intrahousehold made possible by more than one

earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. 2) the mobilization and use of resources through the process of negotiation, of any combination of the following sources arising from the negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. These sources will be used to meet  $c(n)$  and  $c(r)$  payments; 3) regular repayments associated with  $c(n)1$  and  $c(r)$  costs will be established from the existing and new regular sources that are negotiated. The additional costs  $c(n)2$ , will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to. 4) resources which will be mobilized through negotiation without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort household members feel.

However the sources used to pay for these improvements were limited to the use of accumulated savings, special allocation from income at the time of payment, in a few cases the use of cash and material loans. This could be explained by the type of resources available to the families at the time of housing payments or the cost of the improvement. It will be interesting to see the extent to which these sources will change or remain constant when future improvements involving more substantive costs are considered. This will be examined in the following two chapters.

## **CHAPTER 7**

### **ESTABLISHING THE ABILITY AND WILLINGNESS TO PAY FOR FUTURE HOUSING IMPROVEMENTS.**

#### **7.0 BACKGROUND**

This chapter is presented in two parts. The first presents the households' responses in respect of the establishment of housing affordability, based on four of the processes viz: 1) The Changing Housing Improvement Preferences in the Willingness to Pay; 2) The Changing Socio-demographic Characteristics in the Willingness to Pay; 3) The Development of the Resource Capacity in the Ability and Willingness to Pay. 4) In the subsequent chapter "The Mobilization and Use of Resources in the Ability to Pay", will be presented. The second part presents a summary discussion and implication of the findings, and indicate the extent to which the hypotheses relating to the willingness and the ability to pay have been supported.

The rationale for these future improvement scenarios have been outlined in Chapter 3, sub-section 3. From improvements completed, it was found that eight households were in a second stage and had actually completed that stage. These were the Josephs', Jn Paul', St Croix', Green', Mason', James', Thomas' and Adonis'. Eight households were in a third stage and had either completed, or had work in progress. These were the Lewis', Hippolyte', Jn Baptiste', Edwards', Girard', Charles', Williams', and King'. All households were asked to indicate their future housing improvement preferences over the next five years in respect of priority order which were compared with the improvement options selected. The comparison revealed the characteristics typifying a third and fourth stage in the proposed housing development process. In fact the selection for all households except for the Thomas' and the James', revealed the expected pattern in the progression of housing improvement. Consequently, two groups of household were identified. The first group consisted of the Edwards', Charles', Hippolyte', Lewis', King', Jn Baptiste', Williams', Thomas' and James'. The improvement selected by them would mean a fourth stage of

improvements for the Charles', Hippolytes', Lewis,King', Edwards' Williams' and Jn Baptiste'. For the James' and Thomas' this would mean a third stage of improvement. With the exception of the Girard, the second group of households selected housing improvements which would mean a third stage of housing improvements. These are the Josephs, Jn Paul', St Croix', Green', Mason', and Adonis.

It should be noted that the cases are analysed based on the conceptual framework for the third and fourth stages. This was decided by this researcher because of characteristics of the revealed housing improvement preferences of families over the next five years and the characteristic features of the improvement scenarios selected by the families. Consequently, the basis for the two groups of households were identified above.

The cases in this chapter will be presented based on these groupings. Table 8 shows the households' preferences and selected housing improvement option. It shows that except for the James' and the Thomas', households in the first group selected a core or sites and service option. All other households selected a conventional dwelling. The selection of these improvement preferences were also similar to the preferences household indicated for the next five years. They also resembled the improvement attributes characteristic of the third and fourth stages of the proposed housing development process. Appendix 6 contains sketch drawings of the conventional housing units from which the options were selected. The plans of these units are sold by the Central Planning Unit as Low-Cost housing plans. Appendix 6 also contain information on the features of the core unit and sites and service option.

The case presentations that follow are based on groupings that reflect the improvement options selected by the households and as given in Table 8.

Table 8: Housing Improvement Preference within the next 5 Years and Chosen Future Improvement Options

Type of Housing Attribute	Expenditure Priority Order by Number of Households		
	First Order	Second Order	Third Order
1. Land tenure security through ownership of existing plot	Giard, Adams, Charles, Mason, Williams, St Croix, Jn Baptiste, James	Edwards, King, Thomas, Lewis, Green, Hippolyte	Jn Paul, Joseph
Total number of households	8	6	2
2. Improvement in Construction material quality of walls and roof of dwelling	King, Lewis, Joseph	Adams, Mason, St Croix	Jn Baptiste, Charles
Total number of households	3	3	2
3. Improvement in water services		Jn Paul, Joseph, Giard	James
Total number of households	0	3	1
4. Improvement in dwelling size	Thomas, Hippolyte, Jn Paul	Charles, James, Jn Baptiste	Edwards
Total number of households	3	3	1
5. Improvement in toilet and bath facility	Edwards, Greens	Williams	Giard
Total number of households	2	1	1
	Name of Household	Current cash inc EC\$	Type of housing option
	Edwards	1375	2 bedroom
	Charles	1600	3 bedroom
	Giard	800	Care
	Joseph	600	Care
	Jn Paul	700	S & S
	Hippolyte	1650	3 bedrooms
	St Croix	620	Care
	Jn Baptiste	1500	3 bedrooms
	Kings	1200	2 bedrooms
	Williams	1260	1 bedroom
	Greens	800	Care
	Mason	700	Care
	James	1300	2 bedrooms
	Lewis	1200	2 bedrooms
	Adams	619	Care
	Thomas	1300	2 bedrooms

## **PART 1**

### **7.1 THE ABILITY AND WILLINGNESS TO PAY FOR FUTURE HOUSING IMPROVEMENTS TYPICAL OF THE THIRD STAGE : FUNCTIONAL DIVERSIFICATION**

For this stage the acceptable minimum standard of shelter is a two room timber dwelling with specified and separate areas for specific uses. There will be a clear sleeping, living/dining and cooking area. This is made possible by improvement in the internal and/or external space attribute. The incorporation of a concrete kitchen will be the space extension which will allow for this partitioning of space and the commencement of the process of dwelling material change. Tenure security will improve in this stage.

The proposed hypotheses state that the willingness to pay will result from the desire to 1) improve the amount and specify the use of space by including the kitchen improvement preference; 2) remove residential discomfort arising from overcrowding of the limited space due to increase in household size; 3) to improve material quality by incorporating more durable material for the extended space.

The ability to pay will be established from 1) improved intrahousehold made possible by more than one earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. 2) the mobilization and use of resources through the process of negotiation, of any combination of the following sources arising from the negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and

improved income transfers. These sources will be used to meet c(n) and c(r) payments; 3) regular repayments associated with c(n)1 and c(r) costs will be established from the existing and new regular sources that are negotiated. The additional costs c(n)2, will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to. 4) resources which will be mobilized through negotiation without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort household members feel.

The households selecting improvements characteristics of a third stage are the Girard', Jn Paul', St Croix', Green', Mason', Josephs' and Adonis. The selected either a non-conventional site and service plot or a core unit plot.

### **7.1.1 THE CASES**

#### **The Jn Paul'**

Miss Jn Paul chose a sites and service option to move to a higher level of housing payment which would allow the realisation of her preference for land tenure security and improvement in water service. Her priority preference for increased dwelling size would not be realised by the improvement choice, according to Table 8. The advantages and disadvantages of this option for this household were expressed by Miss Jn Paul as follows...*"The offer is not bad you know, but where would the do that? I hope it is in Castries because I don't want to live too far... but the amount you have to pay is a little high. At least if you have to move you have a place to call your own... but I would have to build a house on it...this house is a bit small for me and the children... that's why I have to be fixing up the little house I have at Pavee so that the boys could stay there... here can't hold everybody... most times the stay with their girlfriends... that's why I want to fix up the house for them.We missing a few pieces of boards to finish the house at Pavee is a small house - one room but the*

*boys could stay there. The only thing is the land doesn't belong to me... I was renting more land from the lady but since the husband dies she give a man piece to build his house. I suppose with this you will own your own piece of land... then nobody can take you off... the only thing is that we have to move from town... it will be hard for me to send the children on transport everyday to go to school... I myself would have to take transport to get to the little work. And what would I do with that house? Although is not much but you think they will pay me for it...I suppose I could use it to make this one bigger...You see this moving and moving..I don't like...Why they can't sell here for poor people?...we live here so long..."*

The idea of ownership of a house plot was a very attractive one for Miss Jn Paul who said... *"it's good... when you own nobody can tell you to move. If we own this we would put up a better place long time... the children willing to help but they say 'Mama we can't put up a good house on Government land' ... they don't want to spend much on the house at Pavee either because of that woman... she can tell us to get out anytime ...If we have to move we will have to build a new house because I don't believe we can move all of this one...some of the boards no good but we can use some...the children will have to help because I don't have money to do all that...yes..I believe I could use some of these to make the house bigger... but I really don't think I could get much out of it... the boards too old... the floor is not good and boards on that side rotting... I might only get a couple of pieces out of it..."*.

She would be willing to pay for this option provided that there was increased income contribution from earning children living at home; that they were able to salvage materials from the existing house to be re-used in the new construction; that the new housing option had a large enough plot to allow for household privacy; that it was centrally located; that they were able to mobilize auto-construction labour of friends and relatives to help in the re-building exercise; that the government provided a temporary accommodation during the re-building process; that they received increased or new income transfers; that Miss Jn Paul is able to get a better job; that substantial



cuts were made in household expenses and savings patterns; that the household can generate new income earning opportunities at the new site; that the household was able to salvage materials from the existing house for re-use on the extension of the new; that the option was centrally located; that repayment period was short, with grace period, and that no down payment was required.

For the Jn Paul', the financial requirement appeared to be their greatest dilemma in making a decision to move to this higher level of payment. According to Table 9 Appendix 1, this family's total monthly income was given as EC\$700 even with five earning members. Secondary income contribution accounted for EC\$400 of this amount. Miss Jn Paul felt, however, that they would find the money. According to her...*"EC\$112 a month is a lot of money but I know the boys will help if I can't pay it. If say a month I can't pay I know I can say Andre' I can't pay this month and he will help to pay it..."*

She felt that she would have to use her 'su su' money to assist also. For her...*"the 'su su' money can help. I pay EC\$60.00 every month... I would have to stop "throwing it" and put aside to pay the house..."*

Miss Jn Paul revealed that she would need to get increased assistance for her mister in the USA to assist in raising the down payment required for to access to the option she chose. She claimed that she knows that her children will help. The adult children at the interview also indicated that they will help because according to the elder son, Andre, *"is for our benefit too."* Miss Jn Paul also claimed that not all earning members in her household will assist because of selfishness on their part, referring specifically to the part-time live in male friend. However, if the need arose she would seek assistance for her other the friend who lives in America. According to Miss Jn Paul...*"Only my children will help me... although I have a 'mister' that is my good friend in States (USA) if I really need help he will help... he would give me the money... the 'mister' I live with now he would never give any help... I going to leave him... you know its three weeks since he give me some money... he is so mean, all he want is to come eat and go... I don't know why I put up with it... the children help. Veronica, she is good. She give me money regular. Winston and Andre don't*

give me unless I ask them for it... they prefer to spend it on running women... anyway even if they run women, I know that they will help me if I really need because it is for their benefit. I cannot manage without them..."

Miss Jn Paul would also move to this high level of payment if she was able to obtain a new job which she was in the process of seeking. According to her..."*Right now I look for another job... a better one... I only work two days a week at the Presbetry. If I could get a messenger work for the other days it would be good... then I would have some extra money to help... somebody promise me a job but I don't know if I would get it...*"

With respect to the possible cuts in expenses to facilitate housing payments Miss Jn.Paul expressed the following...

*"There is nothing I can cut down on to pay for this spot... you must pay the water bill... I have no light bill because we get current (electricity) from my big son who live next door... I spend a lot of money on food because of the boys. If they move out to Pavee, they will have to look their own... I think I will spend less on food... I don't know how much less..."* Renting out a room to help out financially was seen as a possibility but not a strong one. According to Miss Jn Paul..."*... I guess we could use some of the boards from this house to fix up the one at Pavee and rent it out... I suppose we could rent it for \$80 a month... that money could help to pay for it (new house) but where would the boys sleep? Anyway they are big already, they soon go on their own..."*

With respect to the financial terms of the option she had this to say..."*You know what good again? As you don't have to pay anything down... don't think I could afford it... I don't have any savings for that... the children would not be able to help with that. The mister... he so worthless! He would not help... he is too mean. You know I always wash his clothes, one day I had no soap, his clothes was in the pile he ask if I was not washing... I said we have no soap... he had money in his pocket and never gave it to me..."*. She said of the repayment time frame..."*I like the ten years more than the fifteen years. Why? Well fifteen years too long to be carrying a debt... even ten years is too much. Well the pay back might be less but you pay more*

*in the end... anyway I can't see myself paying money for fifteen years... by that time the children will be big already and you don't feel free ...".*

*And of the relocation grant..."I feel its a good thing. It would help me... I would use it to get some materials for the house to put up a kitchen... and a toilet because I don't want to use a public toilet... I don't know if it will be enough but it could help. No I don't believe we would pay transport cost because the boys have a friend with a van... he could help..."*

*And about the year's grace before repayment commences she had this to say..."You think they would really give us that? Well if you say they did that for Conway people then its a good thing... it would help... How? Well you see at least we have to pay at least we won't have to find so much money... and maybe I will be in a better job by then. At least it give you sometime to breathe..."*

*The Jn Pauls did not have any extra income apart from the 'su su' saving. In fact their monthly expenditure shows that they have a negative balance. According to Miss Jn Paul...*

*"Well maybe I spend a little more than I get but the mister sometimes give me more if he work overtime on the wharf... but is not always... sometimes my children give a little more you know...sometimes those little money spend on the little house at Pavee...You know it making (is) two years now I trying to fix it up... I plan to use the 'su su' money to buy some boards to fix it so the boys can stay there... I don't have money to save in bank..."*

*For Miss Jn Paul it was important to discuss the matter of housing payment with members of the household. As she expressed it..."My children have to help me run the house so they must have a say... they even want to make plans for me... whenever I have to do anything I talk to them 'bout it first and they would say "mama you can't do that because of this or that"... they helping me so I must listen to what they have to say... If I make a plan and I don't have money to do it... is they who will have to help me... and if they can't afford it... what them?... so you see they must have a say ..."*

According to Miss Jn Paul the only person who does not have a say in her household expenditure and investment plans is her special live-in friend because as she put it ... *"he is very mean... and he might say "yes" to something now and later change his mind... is me and the children alone, you see right now I don't even want to stay with him anymore... he is not good... I don't want him in my business..."*

For the Jn Paul' household their most important consideration in their willingness to move to higher levels of housing payment related to the need for improvement in their economic welfare despite the obvious needs for space and comfort among household members.

### **The Green'**

The Green' were prepared to pay for core unit for which they found the only advantages *were* the chance *"to own a piece of house plot"* and the cash loan associated with it. They were willing to pay if they were able to improve their income status either through increased secondary income contribution from their eldest son or through additional employment opportunities; that this housing option became available when the household had no hire purchase commitment; that the option was centrally located to provide easy access to school and work place and that they would not have to provide a down payment.

They would use this loan to purchase building materials since they might not be able to salvage all the materials from the existing house in order to re-erect it on a new site. Finding temporary accommodation was seen as a very serious problem since all their relatives who could assist were *"in the country"* (rural area). Further, this would also mean separating the family members during the re-building of the dwelling. Mr Green indicated that he did not like the idea of re-building since it would take up too much of his time and he did not really have the time these days to build for himself as he had done in the past. He found that it would be necessary to employ others to re-build. They felt that the size of the plot was good as they could plant their vegetables. They were especially concerned about the living room they had recently

completed which because it was erected out of concrete, could not be removed as the timber section.

They were also concerned about the small size of the core unit but claimed that if they had the money particularly if they were paid compensation or could sell the timber section of their house, then they would be able to extend it quickly. Without this money it would be difficult. They were prepared to extend the core with the material from the existing house. The family felt that the cost of the offer was a bit high. They would have to rely on the eldest working son to assist or according to Mr Green...*"Martha (wife) would have to get a job... if she can get a job and my son can give some money every month we could manage..."*. When they wanted to improve the house they always saved for it first. Consequently they would have to start saving for this. The household would not ask anyone for financial help and they know that they would not be able to get a loan from the bank. To be able to afford this option they would have to provide the funds from their own incomes.

With respect to the cash loan offered with the option they stated that they would use this to buy building materials or pay a mason and a carpenter to re-erect their present dwelling. According to Mr Green they would have to pay labour from weekly wages as they should have some extra money available but they did not know how much since according to Mr Green...*"we never really check to know much or not... because the children always asking for things. Look that one (pointing to a child in the yard), going to secondary school we have to find money to give for all of the things the school always asking for... Sometimes you leave the money there in case of emergency like one of them falling sick and you have to use it to buy other things..."* They felt that they could use the EC\$170 monthly hire purchase payment for their refrigerator to help financially since this repayment would soon be completed. They were planning, however, to use that money to get a new settee but were prepared to divert this money into housing improvement which could guarantee tenure security. They were not prepared to make any other cuts in existing expenditure and savings patterns especially in food and electricity bills. They explained that they did not spend much on food since they got most of it from relatives who come to Castries

to sell in the Market. Mrs Green also made much of the bread for them. Mr Green in particular was concerned about the value of his investment which would be lost. He claimed that his house was worth EC\$20,000 to EC\$25,000 (See Table 10 Appendix 1) and he would require compensation if they had to move. However, he felt that the government would not pay compensation. According to Mr Green... *"It would be hard to move because we spend so much money on the house already, it worth about EC\$20,000-EC\$25,000 in all... you think that they will pay us for it?... we don't mind moving this part (pointing to the timber section) but that part can't move... (pointing to the permanent concrete section..."*

He was very also concerned that if he loses his job, they would not be able to pay for the house and that the government would then take back the land. At the time of the research Mr Green was the only one working and earning only EC\$800 per month. (see Table 9, Appendix 3). They felt that the re-location grant offered with the options would be very good as they could use it to purchase new building material and pay the cost of transportation. The new building material would be required as they would not like to build the new house in timber but concrete. They felt that the grace period before repayment commences would offer the household a *"chance to settle down and rebuild"* before they started paying for the house. They felt that it would be difficult for them live in the house and build at the same time because it was so many of them but the would. They expressed disappointment over the fact that the core unit had no toilet facility for the price required and this was their most desired preference according to Table 8. However, they would use the public toilet/bath as they needed money *"for other things"* such as electricity because of their refrigerator.

For the Green', then, the single most important factor influencing the move to higher levels of housing payment was the need for the maintenance and increase in the monetary resource capacity of the household through new job opportunities and increased secondary income support.

## The Mason'

With respect to the future housing improvement Mr Mason would be willing to pay for a core unit option which could guarantee him the land tenure security and improvement in dwelling material quality he desired. It would also allow him to improve his income generating capacity. With respect to the advantages of the option, the Mason' felt that the plot size was good as "you don't have people living too close... Neighbours are too interfering". He was pleased with the plot size as he indicated that he would be able to establish his timber sales shop on-site. He was also prepared to pay more for the improvement provided that he would be able to salvage parts of his existing house for re-use in the building of his shop; that any such housing option was centrally located; that he was able to mobilize the help of his friends in the re-building exercise; that time was allowed for rebuilding before payment commenced; that he can make cuts in his current expenditure and saving schedule to allow for sufficient funds for the monthly repayment commitment; that the repayment period was short and that the new option would not require him to pay a down payment to facilitate access. He explained that he would use this outdoor space to set up his lumber shop "*to sell boards*" (timber from the forest). He found that "*these days people are making a lot of wooden furniture and many want local wood...*" He also explained that he would not extend on the core unit right away but rather he would use his money to set up the lumber shop. According to him the house could be extended later.

He explained that he had no one to help but his mother and she could only give advice. He always discusses his plans with her first because "*although she don't have money to help me she give good advice...she just don't have money to help.*" As he explained... "*I don't think I have so much left after I pay the bills all the time. I never really check it. I know I drink with my partners (friends)... sometimes my chain saw need repair... I don't know... I never really check to see how much I have left... Sometimes my mother ask me for money... I have to help...*" According to Mr Mason he wants to own his own house plot because "*women nowadays want to know a man has something*". He was concerned however at the prospect of re-building his house

since he *"hardly have time these days."* He explained that he would build a timber shop on the site.

According to Mr Mason he really wanted to set up a lumber shop which was more important than improving the size of the dwelling which could be done later *"when things get better"*. According to him, he would use his two friends to help in the rebuilding exercise as he would not have to pay them. He found that although the amount to pay for the plot *"is not so much it could be difficult having to pay while you build"*... He would try to sell boards from his site even before the lumber shop was up because that would be one way of getting money to finance the improvement process.

For Mr Mason the willingness to pay related mainly to getting land tenure security of a larger plot on which to develop his lumber shop to improve his income earning capacity.

### **The Girard'**

For this family the idea of relocation was most unwelcome. Miss Girard felt that...*"the Government could do much more for the people of the area"* if they would improve it and sell...*"the land to the people"*. She thought that all the area needed to make it better was good drainage and proper disposal of garbage. For her it would be good to stay in the area because she would not have to move away from her present customers and she could improve her shop and house. Her ambition was to set up a restaurant and bar. If she did not have to move she could go into this easily. At the moment she was unable to improve her economic status because she did not own the land and she did not want to go into that expense now in case she was forced to move.

However, she felt that the size of her plot was too small for her future plans. It was the size that caused her to build her house on columns at first, so that she would have the space underneath to build a shop. With land tenure security she could improve



and extend the shop to have a restaurant and bar. Miss Girard explained that she could have improved on her house more if she had ownership of the plot. She explained that it was a risk she took building the shop in concrete.

From the future housing improvement, she selected a core unit option which she would be willing to pay for if she received compensation for her shop; she was able to maintain her present income generating activity at the new site; she was able to sell her existing house or part thereof to provide the extra cash needed to extend her core unit and re-erect her shop; the new site was centrally located and the repayment terms were conducive *ie.* that repayment period was short, and that time was allowed before repayment commenced. Despite these conditions for increasing housing payments, the choice of this option, according to Table 8, would give her the land tenure security and improvement in water service which she desired.

She found however, that the cost "*was not bad but could be a little lower*". She was concerned about whether or not government would compensate her as the shop in concrete would have to be demolished, she explained that she spent a lot of money on it. If she would be compensated she would use this money to re-establish the shop in the new area. According to Table 10 Appendix 3, she estimated her building at EC\$20000. However, if there was no compensation she would have to use the timber from the house to set up the shop. However, she would be willing to sell the groceries from her new house until her shop was re-erected. She did not feel she would be compensated because it was a risk to build in concrete when it was not her own land. She explained that she built in concrete because some people were doing it and for years she had been hearing that government wanted the land but they had never moved to take it. Miss Girard did not believe that the government would really take the land from the people because "*they would have to find a place for everyone which they might not be able to do.*"

With respect to the building process she explained that she would not seek help herself. Further she had no relative or friends who could help. For her it would be necessary to pay a carpenter to re-build her shop as she had done before when she

set up the existing shop. She explained that she would need extra money to facilitate housing improvement as the profit from her shop was small and she had no savings apart from her 'su su'. The little money that she saved went into the shop to buy building materials and pay the carpenter. She would not be able to cut any of her existing expenses such as electricity or food bills neither would she use the small profit from the shop as she needed to put this money back into the purchase of goods for the shop. She was however confident that the shop could make money if she was able to maintain this activity at the new site. She used to sell on the sidewalk and save so she could build her own shop. Now she was just "getting back on her feet". As she expressed it...*"The only thing that worry me is if I have to rebuild the shop...Its my living....I have to have it or we suffer...and after all that money I spend!...The only way I would move is if they fore me I would lose all that money I spend to build the shop. I must have the shop or I can't manage"*

For Miss Girard, there is not much extra money available but she tried to save for the building of her shop...As she explained...*"I don't have much money left over when I pay for the things I must pay for like electricity ... I don't want them to cut it... so I pay these bills as soon as I get them... then I use the money to buy goods for my little shop... is that helping to feed me and the children...As you can see I am building the shop underneath. It's me alone... I use my 'su su' money to buy cement and blocks and pay the workmen... I don't like to put money in the bank..."*

With respect to the repayment time frame she felt that 10 years was better than 15 years because a shorter time meant that she would be able to pay for the plot quickly. She found that 15 years was a long time and she could not see herself paying a debt so long as she did not like debt. As a result she never took a loan to build any part of her house. She always saved to build "bit by bit". With respect to the cash loan offered with this option, she found that this was good but that it was too small *"because things cost money these days"*. She would use the money however to pay transport cost for household items and the boards from the house. Miss Girard found that the amount to pay every month was "a bit high" but if business improved, she

would be able to pay it back easily. She was even prepared if business improved to pay more money so she could finish paying for the house quickly. She found that a grace period would be good as she would be able to set up her shop before she starts paying. If she had to pay for the land and then build at the same time it would be difficult but if she had to do it she would because she needed to own her own plot. For her the most important reason which would influence the willingness to move to a higher level of housing payment would be an assurance of the ability to maintain economic viability through the maintenance of her present income generating activity.

### **The Adonis'**

Miss Adonis revealed a preference for a core unit option which would allow the realization of the land tenure security and material improvement she desired. However she stressed that she would only move to these higher levels of housing payments if she was forced to do so by the Government. Speaking of the cost she said...*"that house cost too much and is just one room... I would only move into that if I can't do better or if you see government force us to move..."* She was worried about her existing house if she was unable to sell it. This she valued at EC\$15000 according to Table 10, Appendix 3. She felt that she would have to sell it to be able to buy building materials to extend the core unit. She explained that she would not want to extend in timber so it would be necessary to have enough money to buy cement, blocks (bricks) and steel for improving on the core unit. She felt that if she was able to sell her existing house she would be able to have enough money also *"to set up a little shop"* on-site to *"sell on weekends to make some extra money"*. She explained that she would need financial assistance to meet the monthly payments or she would have to use her 'su su' and the little credit union money she was saving. According to her she would not mind doing this...*"because I know what am paying for is for me and my children... is me alone... the children don't have father... so I have to do something to help them. The credit union is good because if you need a quick loan you can get it... the bank have to ask you so much questions always questions... Sometimes I have a little money in hand but that just disappear most times*

*in bread...everyday I have to buy bread at least EC\$2.00. The children eat a lot of bread..."*

She explained that if she had difficulty that her male friend would help. With respect to building she found that she would have to hire a mason and carpenter, *"But these days they are so expensive..."* She found that there was little expenditure cuts that she could make to meet the monthly housing payments. She felt that she needed to pay back the cost of the new housing in a short time because she did *"not like long debt as it tended to keep you back"*. For her the relocation grant was a good idea as she could use that money to pay transport cost and her electricity reconnection. She was concerned about possible loss of her job and the effect this would have on her ability to pay. As she put it... *"the only thing that concern me is if I lose my job and can't pay... I don't mind paying for the spot because it would be my own... but I really worry about how I would pay it if I lose my job... these days nothing is safe..."*

For Miss Adonis then it would be very important that she has a job security in any movement to higher levels of housing payment.

### **The Josephs'**

For this family, the most desired improvement preference was for improvement in material quality, water service and land tenure security in that order of priority. (See Table 8). For land tenure security the really desired it in the area if this was possible. They indicated that they would be willing to increase their level of housing pay for housing outside of the Faux au Chaud area if they were forced to do so as a consequence of government intervention. As Mr Joseph expressed it...*"Me!... I don't want to move... I live here for too long... his (spouse) grandmother use to have this place so you can imagine how long... but if the Port want the land, government will not sell for us... although they sell for some people already... I don't know how true it is but a hear one or two people on Hospital Road buy their plot..."*

For future housing they chose a core unit option. While indicating that the cost was high indicated they would pay it if they had to, by cutting down on other household expenses and savings. According to him... *"The money is a bit high but if we have*

*to pay it I suppose we will... I will have some money when I finish paying for the stove... that's about EC\$100 per month... If I have to pay that amount of money now I don't think it will be easy... the only thing is to cut out the videotape rental but that's not much... we can use Millie's "su su" money... although she want it to buy furniture for Christmas..."*

This non-income pooling household was prepared pool resources for housing payment because they always do so to pay for housing. According to Mr Joseph...*"When we were putting in that small kitchen part we had was to put our money together because I wasn't earning much at the time... to see if we would have enough to pay for it..."* Mrs Joseph was prepared to allocate her 'su su' money for housing payments. According to her...*"Right now I have a little saving in the bank and I have my 'su su' ...I want to buy a new settee as you see Christmas coming... its good to save because you don't know when you or your child will fall sick...I always have a 'su su' so I can always use that money... sometimes I get tips from the restaurant you know or my mister sometimes work over time... this extra money is good... we use it most times to buy things for Janice... she always want to get little things... sometimes the school want us to pay for extra things... they (school) are always asking for things..."*

Despite the cost of the housing improvement the Josephs recognized the economic potential that the large plot offered. According to Mr Joseph...*"I think the size is good because it is bigger, you will not too many people close to you like here... Well Miss Jules over there has a big plot... they claim more land than anybody else... she use hers to put to put up that shop in front... her house is at the back... most people with big space put up shop... like the Ras (Rastafarian) up the road who sell records... even the furniture man... If you have the space you could set up business... yes I suppose I could do the same... but you must have money to do this kind of thing... that we don't have... We don't want to borrow money to do it either... Why?... who like debt?... that's a burden... as far as I see for now all I would do is extend the house... "*

For the Josephs the cash loan associated with the option, would facilitate housing access as it could be used to install water and electricity services or even to buy building materials for a kitchen extension to the core unit. As Mrs Joseph stated... *"I wouldn't use the public laundry/bath because the people don't keep it clean I want my own water connection... and my own electricity... as I said before I must have electricity because of my fridge... I hear government give the Conway people EC\$1,000 to help relocate... this is good because it would help to pay some of the cost... well that money could be used to pay to remove the things but... I prefer to use it to buy some building materials to extend the house because it too small... I suppose I could use the money to put up a little kitchen and dining area first... Is not a lot of money but it could help..these days materials cost so much money one truck of sand now cost about EC\$400 that almost half the money, blocks now to EC\$2.00 for one... but is better than nothing... "*

Having a grace period before repayment commenced and also not having to pay a deposit to ensure housing access were significant facets of the core unit option, for the Josephs because of their limited incomes and resource capability... Mr Joseph said of these features of the option... *"... it would be a good thing... (grace period) because you don't have to find money to build and at the same time pay for the house... that would be hard... if they (government) didn't give this grace, I suppose it would be hard for us to pay for the house and build... we would have to build on it (core unit) later...because I want to put it in blocks...I can't see us using boards on that house...you have to repair it too often..."*

Mr Joseph also indicated that he did not have money to pay a down payment although he has a little savings. According to him... *"I think no deposit is good because I really don't have the money for deposit... I don't think we could get money to borrow from the bank... they don't care about poor people... they ask too much questions... they want you to have a big account... I have a little savings but not much... "*

For the Josephs it was important that the repayment period was short because as Mr Joseph explained... *"I don't like debt... to pay in 10 years is better than 15 years... 15*

*years is too long... it would feel like a burden... even if you pay less, you end up paying more you know... " In order to reduce on cost the Josephs were prepared to re-use the materials from their existing house if possible. According to Mrs Joseph... "It would help if we could use some of these boards ...to put up a kitchen...I don't think we could use much of the boards as you see the floor boards rotting... look it breaking up already... we might get some (boards) that we could use... sell?... who would but these old boards?... the good ones we could use to fix up a kitchen this don't have no kitchen". (core unit).*

For the Josephs then, the major concern about moving to the highest level of housing payment was whether or not they would be able to afford the costs involved and whether or not they would be able to maintain their current job to ensure their ability to repay housing improvement costs. This concern was expressed despite the obvious advantages of the housing scenarios for the realization of their housing improvement preferences. For them the cash loan would facilitate housing access as it could be used to install water and electricity services or even to buy building materials for a kitchen extension to the core unit.

### **The St Croix'**

Miss St Croix selected a core unit option which would give her the land tenure security and improvement in dwelling material quality she sought. (See Table 8). She would have preferred however, to pay for the plot she occupied instead on condition that the drainage in the area was substantially improved and that the plot size was increased. She however, expressed reservation on the possibility that the area could be improved for residents. As Miss St Croix expressed it...*"Well if they would do that is good... the drainage here is so bad... Whenever you see we have heavy rain everywhere flooded... as for the kitchen, I have to put my stove on the table all the time... that would really be a good thing... but I don't believe they will do that... is long we living here like this... they have no plans to do anything for us... see now,I hear the Port want the land... Yes... if they will do it I would be glad... I don't mind the place it close to town...you get to own the place and you don't have to move... I*

*don't believe I can pay much as for it as I don't believe it worth a lot for this little piece of land. If they give a bigger piece, then maybe the money would be worth it..."*

The willingness to pay for this core unit was on condition that the option was large enough plot for privacy and that it was centrally located; that the repayment period was short and sufficient time was allowed prior to the commencement of repayment. She would be required to provide a down payment of 20% of total housing cost. Miss St Croix was willing to pay for this option also, provided that she could get financial assistance from her brother and her special male friend if she had difficult financing the down payment. She would be willing to meet the payments from her existing resources in the Credit Union or from her regular savings amount or that she can make some cuts in present household expenses and savings arrangements. However she felt that the regular amount to pay back per month was too high. According to her...*"I believe EC\$316 per month is too high. That means I have to put down nearly EC\$100 per week to pay it...! The only good thing is that you don't have to pay down anything, but you end up paying more per month...If I have any difficulty paying it?... Well if I can't pay it say for one month, I suppose I could borrow the money from the Credit Union... or go to my little savings... No! I would not try to get help from anywhere else... I don't want to borrow money from people. Only the brother in the States I told you about... he would help me if I need money and ask him..."* She explained that she would have to buy new building materials to extend the core unit as the materials of the present house could not be reused. According to her...

*"I don't believe I can get much boards and galvanize out of this house to use... Its leaking a lot by the time you start to move any of the boards the house will fall down... some of those boards they rotting already... I don't believe I would afford to extend on the house just yet... is me alone... the only thing is that I will have to put up a kitchen. I don't mind using the Public Toilet/bath... at least until I can put in my own... as for water right now I have to carry water so it will not be hard to do that if I have to move".*



She felt that she would have no problem getting the down payment required either from her Credit Union, or her savings at the Bank or from her special friend. According to her... *"That (the down payment) will not be a problem... the Credit Union will help. I always save a little something there because you don't know when you will have an emergency... When you have to help yourself you cannot be foolish. I don't think it's a lot of money. If I couldn't get it from the Credit Union I could get it from the Bank... I just started saving at the Bank though it is not much... But I don't have any problem because the mister would give me the money EC\$2700 is not much... Right now he is building a house in Micoud... For me? I don't believe so... he is building for himself... Anyway I believe he will help if I ask him... I always ask him when I have to fix up the house... Well you see the mister is supporting me so I can't leave him out ... I have to talk to him about anything I plan to do because it is he that will have to help me if I am in need ... "*

With respect to help in building her own house and possible cuts in current expenses Miss St Croix explained that she will not use self help but will employ a mason because as she explained... *"I don't really know anybody who will help (me) to build... people so selfish nowadays... Is better to pay your money and get things done..."*

She found that she would have difficulty meeting the regular monthly payments if she did not make cuts in her current expenditure patterns. When she was asked about where she would get the extra money needed she said... *"The money I work in the Bakery is not a lot. If I have to pay EC\$316 out of it... is a lot of money but if I have to I will... I don't believe I could cut down on anything... the only thing is that I will have to cut down on the food bill. Right now I spend a little more on food because of my mother. She is sick with stroke and cannot move around much so sometimes I take her shopping for her... I don't know how much I can down food by... If I have to pay the Credit Union and pay for the house it will be difficult for me... the only other thing I see is to use the little savings in the bank. I usually save about EC\$200... that money could be used to help pay for the house... It will be hard. I suppose if I really need money badly I have a brother in the States, he would help."*

With respect to the time frame, the relocation grant and the grace period stipulated by this housing improvement option Miss St Croix expressed the following...

*"I believe 10 years is a better time. If you have to pay for it longer you will end up paying them more I want to finish paying quick... If they will give us that (the relocation grant) it would be a great help. Why? Because I could use it to put up my kitchen. Of course this offer would be better... right now I live here only because it cheap and near to work. Not to say I mind the place... If they will give us this time (the grace period) its good. I hear that the people from Conway got one year and still some can't pay... I believe its good... Why? Well at least it give you a chance to settle down and you can save some money to help pay for it."*

For Miss St Croix it was obvious that she could afford to move to higher levels of housing payment within existing resource capacity and that she would be willing to do so. However, she was concerned that it meant depleting her savings and further that she would not be able to save regularly any more as that allocation would now be required for housing payments.

## **PART 2**

### **7.2 THE ABILITY AND WILLINGNESS TO PAY FOR FUTURE IMPROVEMENT PREFERENCES TYPICAL OF THE FOURTH STAGE IN THE HOUSING DEVELOPMENT PROCESS**

#### **STAGE 4 : CONSOLIDATED DEVELOPMENT**

According to Chapter 3, sub-section 3.2, this stage will be characterised by the improvement preference for land tenure security, complete dwelling wall material change to reinforced concrete and the internalization of toilet and kitchen facilities. Space use is further functionalized and separated physically. The acceptable minimum standard of housing is one of two room one each for sleeping and living/dining activities with separate toilet and kitchen areas attached. The security of land tenure through ownership ensures in addition to the dwelling, ownership of

property. The housing improvements selected would allow the realisation of this standard.

The proposed hypotheses state that the willingness to pay will result from 1) the desire to increase space for consolidating and internalising the functional use of the dwelling; 2) the desire to improve the quality of space, material, kitchen and toilet facilities; 3) the desire to improve the type of access to services and ancillary facilities by internalizing water, electricity, kitchen and toilet facilities; 4) the desire for land tenure security and 5) improved availability of resources to realise these desires.

The ability to pay will be established from 1) improved intrahousehold made possible by more than one earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. 2) the mobilization and use of resources through the process of negotiation, of any combination of the following sources arising from the negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. These sources will be used to meet  $c(n)$  and  $c(r)$  payments; 3) regular repayments associated with  $c(n)1$  and  $c(r)$  costs will be established from the existing and new regular sources that are negotiated. The additional costs  $c(n)2$ , will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to. 4) resources which will be mobilized through negotiation without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort household members feel.

In this group are the Lewis', King', Edwards', James', Jn Baptiste', Hippolyte', Williams', Thomas' and Charles' who selected a conventional, self-contained, concrete dwelling.

### 7.2.1 THE CASES

#### The Lewis'

When the Lewis' were presented with future housing improvement they selected a concrete two bedroom dwelling. According to Table 8, this family indicated indicated improvement priority preference for the next five years as dwelling construction quality and land tenure security in that order. In fact they had already began the process of building material change from timber to concrete for a third stage. Their selection of a three bedroom concrete dwelling would allow the realization of their desired preferences typical of the fourth stage. They were willing to pay for this dwelling provided that they received increased financial assistance from the older working children; that working children within the household increased their contribution to household income; the household was able to generate new income earning activity at the new location; that the household was able to sell or salvage materials from the existing house for reuse; that they could sell existing land owned to be able to afford the down payment required; and that the repayment period was short. They saw this option as advantageous since it offered adequate indoor and outdoor space and the potential to generate new income. According to Mrs Lewis...*"Its not bad you know but where will they build that... Castries don't have land... is out of town they have to go to get land... it wouldn't matter if its out of town... the thing I like about it is the yard space... you have plenty of room to grow vegetables... and a nice flowers garden...I love flowers but I can't grow it here... the size us good for us... soon the grandchildren will go to their parents... is me and my husband who will be by ourselves..."*

And in respect of the cost and down payment Mr Lewis expressed the following...*"The cost per month is high... we have to depend on our little savings and*

*the children... they children will help... those who are working... they will always help their parents that how we brought them up... I know I can say to any of my sons' help us pay the house' and they will help... after all when we die it will be theirs... where they expect people to get that kind of money? (ie. the down payment)"*

*Mrs Lewis reinforced Mr Lewis' opinion by saying..."...we wouldn't be able to pay for it by ourselves, we would have to ask the children to put together to get the money for that... they will always help... they good! Look now, me fixing up that part and they paying for it. Since we know ourselves, we repaired and extended this house twice, each time it's the children who pay for it..."*

According to Mrs Lewis...

*"My dear, we don't have much money... we planning to fix up the house... as you see the floorboards is rotting... the roof is leaking and the hurricane season coming on us. So we have to use all the little money now to buy materials to fix it. These days that where any extra money go to... everything so expensive. One load a sand from Dennery now cost EC\$500... now you get nothing for nothing these days...is the children who helping" The importance of the children's help and opinion are summed up in this comment by Mrs Lewis..."We depend on our children so they must be involved... you see as we planning to change the roof... we never plan without them... they will have to help pay for it so they must have a say..."*

The Lewis' also expressed reservation with respect to the possibility of cutting present levels of expenditure to facilitate access. They would face real dilemma in trying to make cuts in their housing expenses. For them any cut would mean removal of certain income flows into the household. They indicated also that their largest item of monthly expenditure was food for the grandchildren who lived with them. They could only cut their food bill if these grandchildren were returned to their respective single parents. However, the fact that these grandchildren live in the house in order to be near to school and to assist their grandparents in the home generally, meant that their parents were obligated to contribute to the Lewis' monthly household income. If these children were returned to their parents', the Lewis' felt that their monthly income would be reduced as the additional income received from the grandchildren' parents might be discontinued and they would be worst off. Not only,

would the Lewis' not receive the individual monthly child support for each of the grandchildren, but the extra amount they receive for compensation for their effort could also be discontinued.

And in respect of the cost and down payment Mr Lewis expressed the following...*"The cost per month is high... we have to depend on our little savings and the children... they children will help... those who are working... they will always help their parents that how we brought them up... I know I can say to any of my sons' help us pay the house' and they will help... after all when we die it will be theirs... where they expect people to get that kind of money? (ie. the down payment)"*

Mrs Lewis reinforced Mr Lewis' opinion by saying...*"we wouldn't be able to pay for it by ourselves, we would have to ask the children to put together to get the money for that... they will always help... they good! Look now, me fixing up that part and they paying for it. Since we know ourselves, we repaired and extended this house twice, each time it's the children who pay for it..."* Mr Lewis further confirmed the need to have this financial assistance from the children, by saying...*"No, I don't believe we would take up this offer if our children cannot help... if they don't have the money for down payment I don't believe we could take a house like that..."*

They were willing to sell their land because they were not utilizing it at the moment but they were not sure it could be sold. According to Mr Lewis ...*"We have a piece of land at Ravine Poisson at a place called "My Money", but is not good... snakes up there it only good to plant food and it (is) so far... nobody will buy that... we used to cultivate it long ago... if we could get sale for it then we could sell it to help. The children don't want to go plant food... is only three acres of land and it all in bush now... only farmers up there would buy it..."*

With respect to the sale of the existing house Mrs Lewis remarked...*"Selling this house?... ah... who would buy it?... we can't move all of it because that part is in concrete (cement and sand bricks)... we could sell the boards yes... but that would be difficult because most of them need changing... look at the flooring over there (pointing to a section of the floor with rotting boards)... its really bad... I don't*

*believe we could sell anything... the roof need changing now... its leaking and we repair it so often... we would really lose out on this house... we can't move the concrete part and so much money spend on it..."*

*Mrs Lewis expressed their concerns as follows..."...the only thing I see we can cut is food... we spend a lot on food because of my grandchildren. If we didn't have them living here, we would not spend so much money... we can't cut anything else... the little we use to buy sewing things we have to keep that because it is our livelihood... would have to send the grandchildren to their parents... the parents can't really have them now... If the parents take them it's only my husband and I and my three bigger sons... I don't know if we would still get the support from them (children) if they (grandchildren) have to leave us... they would have to pay people to look after them (the grandchildren) so it wouldn't be fair for us to expect them to give us that support still... they would probably give but not as regular as before because their children would not be with us"*

And in response to a question on the contribution from their current sewing activity, to help out, Mrs Lewis said..."*the sewing?... well that only make some money around the holiday time... outside that it's slow... people these days don't want to buy material (cloth) and ask you to sew..."* She added, speaking of potential customers..."*They prefer to go to the shops and boutiques because they get the thing quick... ready made up... although it more expensive... yet they will tell you, you are charging too much... yet they will go to she store and pick up a dress from EC\$80, EC\$100 and even EC\$120... and when you ask them to pay EC\$20 to make a dress they say its too much... We stick with it because it's the only thing we can do... I am doing this from I was a girl... my husband used to work but now he retire he also sews".* And about the possibility of opening her own dress shop she said..."*yes when I was younger I always want to open my own dress shop but you know somehow I never go to it... now? I don't believe I could go into that now... it wouldn't be good... people prefer 'ready made' things that they get from J.Q.Charles and the Guyanese... and further more I am too old to start business now... too much trouble... we living comfortable as we are... but I suppose it could work..."*

With respect to the length of the repayment period Mrs Lewis claimed that... *"the reason why I prefer 15 years to 20 years is because we old already we don't want to know that when we want to relax and enjoy life we have to be paying for a house... the 15 years better because you pay it quicker..."*

For this family then, in moving to higher levels of housing payment it would be necessary to increase secondary income support and income transfers and to be able to sell existing land and house. According to Table 10, Appendix 1, they valued this house at EC\$30,000. The dependence on the financial contribution of the children is shown in Table 9, Appendix 1, where it can be seen that secondary income support and transfers together account for 66% of the households monthly income. In addition all past improvement had been the responsibility of the earning children particularly those providing regular income transfers.

### **The King'**

The Kings strongly favoured community upgrading instead of relocation and expressed a willingness to increase the present level of housing payment to obtain security of tenure in the area. Their sentiments were summed up in the following comments by Mrs King...

*"It would be the best thing if they would fix up this area... we really prefer to buy here... You know my mother use to live here... before she died she gave me this place... we even pay tax for it... Sometime aback we ask the people at the Port to buy it and they said that they not ready to sell for us... yet still I hear that the St Juste buy their piece... they even put up that big wall house you see there... When you own you can improve the way you want... if say we had own this place we wouldn't waste time putting up that piece in board... we would use blocks<sup>18</sup> one time..."!*

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<sup>18</sup>. 'Blocks' here mean reinforced concrete works.



Mr King found that they would be able to pay whatever the cost to own their present site because of its location and because they have lived on the site for such a long time. According to Mrs King... *"It was my mother's spot it would be a pity to leave it but what to do..if we have to ...I suppose we just have to go."* The King' expressed a willingness to increase their current level of housing expenditure to pay for new and improved housing outside of the community, if they were forced to vacate their plot by the Government and providing that such housing will allow them security of land tenure through ownership and as long as the improvement option is within their repayment capacity.

For the King' the future housing improvement selected , was a one bedroom unit which would allow the realisation of the improvement in material quality and land tenure security the sought. (see Table 8). The selection of a one bedroom unit would reduce the space they occupied but they were prepared to trade-off space for land tenure security as will be seen subsequently. In fact the inadequate space was not seen as an issue as they were prepared to extend the dwelling from proceeds of sale of their existing dwelling which according to Table 10, Appendix 1, they valued at EC\$25,000. However, access would be conditional on the dwelling being centrally located; that the household were able to mobilize auto-construction labour for housing extension to reduce cost and that the repayment period was a short. Access to this one bedroom unit would also require the fulfilment of specific conditions.i.e. They would be prepared to increase housing payment if they received compensation from Government or if they were able to sell their existing house to provide extra money for the down payment required for access and that they received a large enough plot to ensure privacy and security.

For the King' the most significant reason for increasing housing payments would be related to coercion *ie.* if the household was forced to remove from the area by Government to make way for the expansion of the Port. They felt however, that it was a good offer but that the house was too small for the family and the down payment required was too much. They however saw the possibility of improving their financial status through the sale of their existing house. According to Mr King...*"I*

*suppose we could sell this house if you can get somebody to buy it... as you see we just finish putting up that piece and we want to finish painting up before Christmas. Yes if we could sell it we would use the money to help with the down payment..." Mr King felt that sale of the house was a real possibility and explained... "I suppose we could sell this house if we can get somebody to buy it... as you see we just finish putting up that piece (pointing to new section of the house)... we want to finish the painting up before Christmas... if we could sell we would use that money to help with the down payment... I believe we could get at least EC\$20,000 for it... these days people don't want to buy house like this again. You hardly see people buying house and moving it days... it not like first time... we can only pay that amount of money if we can get sale for this house..."*

They felt that they could not really make any cut in their current monthly expenditure as Mr King expressed...

*"Is a lot of money you know!... every month? I don't believe we can cut down on any thing in our expenses. The only thing is we couldn't have a savings because we would have to use it to pay for the house. We wouldn't mind not to have any savings if we paying for something of our own..."* However, the prospect of long term debt payment was not an attractive one for the Kings as Mrs King expressed strongly...*"You see this business of owing money? I don't like it... I even believe 15 years too long... but 20 years" that(s) too much!..."* Mr. King they do not have much money but they are trying to save a little although most of the extra money go into their house. As he expressed it ...*"Government might sell the land and we want to buy it the St Croix, I hear bought the piece they own... I don't know how, when government say that the land is belonging to the Port. we don't know how they get to buy it. Ma Henry further down also buy her piece but I hear because she is a strong UWP supporter, she always send birthday gift to the Prime Minister... is politics... if they selling we will buy it...these days as you see we building... all money go into building materials... and we have to pay transport to drop the materials here... sand gone up, blocks (building bricks) gone up, lumber gone up... everything gone up on poor people... Sometimes we don't have a cent left after me pay bills. Imagine just to come from Linmores to here a 'pickup' man charge us EC\$70 just*

*to drop off a few sheets of galvanize (roofing material) and some pieces of 1"x4" (lumber)... Things hard since we putting up this piece on the house... all the little money go on that..."*

*According to Mrs King..."That's why we try to save a little and sometimes because you find that the children get sick...whatever little money we have we don't mind putting it to pay for the house"*

For this family moving to higher levels of housing payment would be related mainly to a situation in which they were forced to by the government, since there greatest desire was to get tenure security in the area.

### **The James'**

The James' indicated that they would much prefer to buy the plot which they occupy. Mr James felt that the area has potential and that upgrading of the area would be good but was concerned that with his existing plot size he would not be able to accommodate his plans for construction of rental units. He stated that if he could get more land in the area it would be good to stay and develop these units on his plot, by extending his existing house. He indicated that he would still purchase his present plot if it were possible but would sell it later to be able to buy land elsewhere to develop his rental housing scheme.

For future housing improvement the James' selected a two bedroom unit. Table 8 shows that the family desired land tenure security followed by improvement in dwelling size and water service in that order of priority. The choice of this dwelling improvement would allow the James to realise their economic plans which was to increase their income earning capacity through the construction of rooms for rental. The desire for improvement in income generating activity, was the main reason for the James willingness to move from a second stage improvement to a fourth stage. They indicated their willingness to move to these higher levels of housing payment subject to the conditions that they were able to make cuts in current monthly household expenses; that they could generate new income earning activities at the

new site; that they were able to sell the existing house to provide extra finance; or salvage materials from it for re-use; that they were provided with the large enough plot to facilitate the economic plans provided with a large enough plot to facilitate the economic plans that the household have for the development of rental housing unit; that the option was certainly located; that they were able to mobilize the necessary mutual help labour of friends and relatives; that the repayment period for these option was short and that they could sell Mr. James' share of family land owned to provide the necessary financing to ensure access to this improvement option.

The main reason for the willingness to pay for such an option was that the household would be able to realize its economic development aims. According to Mr. James...*"The good thing about that (option) is that you get a piece of land and I can erect the house to put in the rooms to rent... there so small I can't do anything... it better to buy land from Government because land cost so much money now... you can but it... Government don't charge so much so it's good... I was thinking about putting up rooms for rent for a long time but here not big enough and you can't find any place near town to buy... land so expensive now... if Government can get it they will get it cheaper..."*

Mr. James was determined that he would incorporate his proposed rental units by re-erecting his existing house on his new plot. However, this would be temporary, since he would not really want to have his rental apartments in timber but in concrete. He indicated that if he were able to sell his existing house, he would use the money to erect a concrete dwelling or extend his newly acquired home to provide additional rooms for rental. This housing improvement option meant that he would be able to realize his economic development plans for his household sooner.

However they were concerned that if such a housing intervention should come at the present time that they would need to make cuts in their present household monthly expenditure and in particular their current home based savings to facilitate the initial payments. The special home based saving was being accumulated to facilitate a first

communion party for the James' first child. It is tradition among the Catholic population to have a grand feast and party for friends and relatives to celebrate the First Communion of the child. For such an event, large sums of money are spent in the provision of food, drink and entertainment which often amounts to hundreds of dollars. Some people actually save for an entire year for this event. The James' were no exception. For them this is a significant event, but they were prepared to use this special savings and even cut the amount of monthly income allocated to it to pay for new and improved housing consequent on intervention. They were very concerned about the effect this would have on the household but revealed that their close relatives would help to *"have 'something' (party) for Shauna... even though it would not be as big as we want to keep it..."*. The amount of money the James were saving per month according to Mr James was *"EC\$600 to EC\$700 in all per month..."* so that *"by December we will have enough for the first communion..."* As Mr James stated... *"These days we try to save for our Shauna's first communion... it cost money. We put aside some money when we get pay, because the first communion is in December... you have to have the party... buy the dress. It's a big thing... No,we don't put this money in the bank. We have it here... its a lot of money..these things cost money..."* According to Mrs James... *"it would be a good thing if we can get the house after we have the first communion we would always put that money into the house... when saying so if it (housing improvement) come now we would have to use that money to help, because we want to have the land... even if it mean spending a little bit on first communion..."*

For the James' therefore, the main reason for their willingness to increase their current level of housing payment for new and improved housing related to the potential such option offers for the realization of the household's economic development plans. These economic improvement plans were significant enough to cause the household to trade off an important event such as savings for the first communion celebration to ensure housing access were housing intervention to occur prior to that special event.

## The Hippolytes'

This family expressed a willingness to move to higher levels of housing payment if they were forced to as a result of formal intervention. They would be prepared to pay for a three bed-room unit. This selection according to Table 8, would allow the family to realise its housing improvement preferences for improvement in the dwelling size and land tenure security. Like the James, this choice was related specifically to their plans to improve income generating activity through home based productive enterprise, as will be confirmed subsequently. However they were willing to pay provided they were compensated for the level of investment undertaken for their present dwelling; that they would be able to engage in new income generating activities at the new site; that the household would be able to sell their existing house or the timber section of it; that the new plot was large enough to incorporate a shop for Mrs Hippolyte's planned home based enterprise; that the new housing option was centrally located and that the repayment period was short. They were very concerned about the possible loss of their investment in the present house Which they valued at EC\$50,000.(See Table 10, Appendix 1). Of this Mr Hippolyte stated...*"For me to move from here I will need to know if they (government) will pay me for my house... It cost me in all about EC\$38,000 to build it I have all my bills to show... I don't think that they will want to pay me... If they would pay me I could use the money to pay down a new home".* And if he was not compensated...*"If they will not pay for the house we will have to break it down and we already spend so much money on it... we will lose the bottom part because you can't move concrete... we will have to break it down."* They explained that they had to build that section in concrete because according to Mr Hippolyte... *"Well we build that part in concrete because we had to put a retaining wall to prevent soil from going down. We spend a lot of money on excavation... we just decided to build around the wall... we had to put in a septic tank because its better... you must build that in concrete... If they will pay us for this part we don't mind moving the top because we could use the top or even sell the boards and use the money to buy materials. If I have to move... I would have to move with this part... or I could sell it the bottom part would have to break down because its concrete..."*

Mr Hippolyte explained that they would use any compensation or profit from the sale of the existing house to pay for the new house. According to him...*"I could use the money to help pay for this new house... but people hardly want to buy used material these days..."* And about the possibility of using the material of the existing house to erect the much needed shop he said...*"Yes... I never thought of that... I could use then (building material) for the shop... I could only hope the relocation is not at Ciceron... I don't like that place... I wouldn't go there especially to be all those Conway people I don't mind being close to town anywhere else."*

While finding the money to pay the regular monthly cost did not appear an issue with the Hippolytes, they found that the down payment was "a bit too much" but would be prepared to move to this required level of expenditure because of the potential it offered the household in establishing their cake sales enterprise. According to Mr Hippolyte...*"I think the down payment is a bit too much... but if I have to pay it I will... where will I get the money from?...I have my little savings in the bank... I would never ask anybody for help... you know we were building this part (pointing to a section of the house) I got my brother-in-law to help and he spend so much time on it even though we paid him... I don't want any help from anybody... its better to pay your money to get things done... I don't think I will have a problem getting the money from the bank because I save little every month... I am not sure I would use it (savings) all to pay deposit for the house... what if the children fell sick?... I suppose if I have to move then I would use it... it is not much money though..."*

Mrs Hippolyte further explained...*"To be quite honest I am saving because I am trying to open my own business. I want to have classes to teach people cake decorating and floral arrangement. I am now learning this... I want to have a bigger place to have a shop to sell my cakes. I used to sell cakes here before but the place is so small. I don't want to work for people all my life... If I own this land I would have my business already but place is so small... If I could get somewhere better... I am looking for a better place but its hard to find... I don't want to go out of town... I like it here but it is so small... and I don't own the land..."*

According to Mrs Hippolyte her saving is made up from extra earnings. As she expressed... *"My husband is a sailor so he get good money working on the ship.*

*Sometimes I get tips at my hotel where I work. I mostly save the extra money or use it to pay for my cake decorating classes and floral arrangement classes. Sometimes I bake cakes... mostly wedding cakes for people. I want to open a shop of my own to sell cakes... I don't want to work for other people all my life..."*

For Mrs Hippolyte the establishment of her cake shop offered real possibility of earning extra income to facilitate housing payments. According to her... *"If I could put up the little shop to sell cakes and things... I want to go into cake decorating business... I want to work for myself... I am doing classes in it at the moment... it would be good because I could use the money from it to help pay for this house... you see as it is here I can't do anything I have no space... I even want to put up another floor on this house so I could have the shop... but so much trouble... they will have to move the electric pole and the lines... and too much trouble... your see as the lines (electric lines) pass over the house? I can't do anything... they (Electric Company) want us to pay to move the pole..."*

With respect to the repayment period for the option, Mrs Hippolyte explained she did not want to have to be paying for the housing option over a long period of time. According to her... *"Well I prefer to pay in 15 years rather than 20 years because 20 years too long... although it a little less per month, you end up paying more... 15 years is better... you pay it faster... I don't like debt... I can't see up paying for a house so long..."*

For the Hippolytes then, the main reason for any movement to higher levels of housing payment would be based on the possibility of any such housing improvement option providing the household with security of land tenure and the space the option would provide for them to improving then income generating potential.



## The Charles'

This family expressed a willingness to pay for a three bedroom concrete dwelling which would offer them the improvement in space they required for comfort, privacy, material quality and the security of land tenure they sought as can be seen from Table 8. For Miss Charles to move to this level of payment it would be necessary that she received increased income transfer from her special friend; that she was able to re-deploy her existing expenses and savings; was able to maintain her present income generating activity; was able to sell or re-use her existing house; that the new housing improvement option was congruent to her desire for a centrally located place to avoid excess transport cost; that she was able to mobilise the extra auto-construction labour in the reconstruction of her shop and finally that the repayment period was a short one. She indicated that she will find no difficulty getting the necessary deposit amount. According to her..."... *the deposit is o.k. My mister will help me plus I can get some money from the bank. Is a lot of money though... I don't know how much he can give me to help but I know he will help although I try to help myself. I don't want any help from anybody else... I wouldn't ask anyone else...*"

For her it was important to involve her friend because as she put it..."*My mister have to have a say... it is he that can help me... when ever I have to do something and ask him how he feel about it... I trust him... is he that helping me all the time... imagine he help me to build the shelves for the shop and look now he is helping me with the kitchen... if I want to build its he who will do it because he is a carpenter and he has his friends so I must discuss things with him...*" Miss Charles would also use her saving or some of the shop profit if she had to although the saving was ..."mostly for emergency... you never know when one of the children will fall sick... also I want to fix up the shop for Christmas... not really the piece you seen I am extending... the money for that is not from the bank... my mister he is a carpenter and he have a lot of friends who are builders they help. They give a hand you know... my mister help me..." The importance of her mister's (special male friend), financial help can be seen from Table 9, Appendix 3, where his monetary support accounted for EC\$400 of her total monthly income.

According to Miss Charles...*"Sometimes I have extra money but I think that money go into my shop to buy goods and little things for the children... sometimes they want to buy sweets and things at school... you never know where the money go...I suppose I could always get money from the shop to help...That's why anywhere I go I must have the shop...Its my only living."*

The following comment expresses her opinion on the conditions in which she would be willing to pay the new housing costs. With respect to time in terms and the length of the repayment period... *"One thing, I don't like when you have to pay so long. I think it good to pay it off quick... When you have a long time its like a burden. 15 years is better than 20 years although it cheaper..."* With respect to the cost of the unit and the need of financial and labour assistance she expressed the following...*"All that cost? I know my mister will help with some of the cost... he has a few friends who will help him... he is a carpenter... they came to help him when I was putting up the shop... he build all this (counter)... right now he is helping with the piece a putting up on that side... If I have to go and can't keep my shop I don't know how I would pay all that money every month..."* When asked whether she would try to get another job to help with the monthly cost she said... *"Another job? I don't want to work for people... I would have to have my shop..."*

She indicated that she would need to sell her existing house to help financially. This she valued at EC\$40,000, according to Table 10, Appendix 1. She was not prepared to make any cuts in her present expenses to facilitate the new housing improvement neither did she have any other asset other than her existing house to help her financially. She felt that if she did not have to pay for her stove she would have some extra money to put into housing. She was not keen on renting out a room to supplement income either. According to her...*"If I could sell this house I would... that money could come in handy to help me with the new house... I think I could get EC\$30,000 for it... people in town don't want to buy house to move it these days. I can't cut down on food... the children need the food... I spend a lot of money on food... I can't cut down on light and water bill... you must pay that... I don't know... maybe I spend too much on food eh... I can't touch the shop money...are that's to buy*

*goods to sell... maybe if I really try hard I could find the money... right now I have the stove paying for (H.P.) if I don't pay it, I suppose that money could come in handy... have nothing to sell to get any money. I have to depend on myself. If I can still have the shop I know I will have the money to pay... to live with me... you can't feel good... but if I can't do better... I suppose I would have to do it... I suppose I could rent a room for EC\$50 (per month)... these days house rent very high... it could help pay the money... I wouldn't build a room to rent... I rather build a shop..."*

For the Charles' then, quite apart from the fact that the improvement would give rise to the realization of the family housing improvement preferences, it was also important that the option should guarantee the maintenance of their economic viability. This would be the most significant factor in any housing improvement decision necessitating a move to higher levels of housing payment.

#### **The Thomas'**

The Thomas' were prepared to pay for a one bedroom concrete house which according to Table 8, would allow the realisation of their improvement preferences for dwelling size and land tenure security. This would mean for them a move from a second stage improvement status to a fourth stage. In fact this household was actually saving for a better house as will be seen below. The main reason would be if they were forced to by the government and had no other alternative. If such was the case they would pay provided that they received assistance from the government in the form of a relocation grant; that the household is able to receive an increase in income contribution from earning children in the household; that the option is centrally located; that the repayment period is short; that they were able to make cuts in current household expenditure and savings patterns and that they were able to salvage portion of the existing house for reuse or sale.

The greatest difficulty the household would face would be to find the required down payment as they find that according to Mr Thomas *"it is a lot of money to pay for a small house which will not hold everybody..."* For them it would be absolutely

necessary that the existing house is sold to provide the necessary funds to support the down payment for the new housing option. Mr Thomas felt that the older children would have to help because he is an old man who might not be able to work much longer. They would not be able to take up such a housing offer unless the children helped. According to Mr Thomas... *"We usually tell them what we thinking of doing and ask them how they feel... then if its OK then we do it... is them who have to help us. When they were little... we used to do things by we self... but now a days everybody big... they want to have a say..."*

The household felt that a few cuts could probably be made in their current monthly expenses to facilitate the monthly housing payments. They felt that they could not cut utilities or food according to Mrs Thomas most of the working children eat out at his girlfriend's or at work while most of the food at home was eaten by the younger children. She would not want them to stave. Mr Thomas explained that he has a Life Insurance Policy for which the monthly payments could not be cut as it was the only thing they had to help in old age and if he should die the children would not suffer. They could not cut the medical insurance he now pays because it was needed for sickness. They were currently in a "su su" in which the money would be used at Christmas to purchase *"things to fix up the house"*. Mr Thomas felt that this was a source of money if necessary to help pay for the house. The household explained that they would need to use bank savings to help pay for the house but was concerned that they would not be able to save in the bank any more. They did not mind using the savings allocation or not saving any more because they knew that this money would be well spent on the house. Their only worry would be if they had an emergency such as death or illness and had no money to use for such emergency if they were to re-allocate their medical insurance expense.

Mr Thomas...

*"We saving a little something to get a better house... you know we heard that the government is planning to build house for poor people at Bisee and you can go to put your name down... we have not gone yet but we will go to put our names down because the family is large. The children need some privacy... my wife wants the "su su" money for Christmas. You know you can't let Christmas come and you don't buy*

*anything for the children... that is the time when everybody want something...that money could be use for the house"*

For this family then, moving to this level of housing payment would be the consequence of a situation in which they were forced to and in which they had no alternative and this would also be conditional on significant improvement in their financial status.

### **The Williams'**

This household revealed that they would be prepared to more for housing outside the community primarily if any such improvements would grant them security of land tenure, would be centrally located and only if they were forced out of the area by the Government. For the Williams getting ownership of their present plot was very important. They felt that it would be better to buy their present plot rather than to relocate primarily because of its location and the fact that they have built already. As Mrs Williams stated...

*"That would be the best thing for us... we here already and we have the house is the land we want... we really want the land... the only thing bad with here is the flooding when you see it rain... We near the road and hospital and we don't have no transport so we don't want to live far..."*

While they expressed a desire to buy their present plot they were unhappy with its size. As Mrs Williams put it...*"Yes we would be happy to buy the land the only thing is it so small we wouldn't mind if we get a little piece again... Me,... I don't believe we would want to move we live here too long..."*

They did not mind paying a very high level of monthly payments for this tenure security. According to Mrs Williams...*"Yes we would pay as much as that EC\$566 for it per month instead of paying that money to live somewhere else...but I don't believe it would be so much... is not much land... but we want the land, we will do anything for the land..."*

With respect to future housing improvement outside the area, they indicated that they would be prepared to pay for a one bedroom concrete dwelling unit which according

to Table 8 would facilitate their most desired preference for land tenure security and improvement in their toilet facility. Apart from the main conditions outlined above there were other conditions attached. These conditions were that the improvement came at a time when Mr Williams received his pension; that they were provided with a large plot for security and privacy; that any housing repayment period would have to be short; that either Mr Williams or Mrs Williams would be able to get a better paying job or a secondary job and that they would be able to sell their existing house to afford the down payment required to ensure housing access.

Their major concern was the cost of the option. But while the option was considered costly they were prepared to meet this cost because of the importance of tenure security to them. This was to the extent that they would be prepared to make major changes in their current expenditure and savings patterns to be able to meet the required housing payments. As Mrs Williams stated of the cost... "*... is a lot of money but we can pay it as long as we have our jobs... I don't know what would happen if say one of us lose our jobs. They would come and take it back because say I can't pay of the 'Mister' can't pay for it... If we both have our jobs he can put a little and I put a little and we pay it... when you old you can't put yourself in much debt... what if one of us die(s)?... is only two of us... is not to say we have children who can really help... they looking for us to help them...*"

They were prepared to allocate portions of their non-pooled monthly incomes to pay for housing because of its importance to them in their old age. According to Mrs Williams... "*If say we have to pay for building materials as we had to do the other day he would put a little and I put a little and we pay for it...*". They claimed that in order to meet this payment they would need to allocate their housing payment amount first and foremost out of their total monthly income amount and then distribute the remaining income among all other items of household expenditure, with food being the item that they were prepared to cut down on most. The following comments outline clearly their strong feelings on the issue. According to Mrs Williams... "*... we prepare to take out the house money first because we know we have to pay it and we want the house because we want the land... we would have to try to collect something*"

*(money)... save a little something... each of us working so he has to put a little, I put a little... each of us putting half, you understand?... because we have to eat because the money he is getting is not enough... when we know we have to do it, we must..."*  
*"If we have the land we know it's ours so we have to make our duty to pay it even though we have whatever we have to pay... we must have the money... even we have to cut the food..."*

*"He eating everything, I eating everything so is no problem... when you know you have to buy something... if I have to buy a dress, I will leave the dress behind and take the land because even I have one dress, I old already... nobody will look at me and say 'only one dress she has', I will put the dress everyday and save my money for the land because I want it..."*

Even though they were prepared to make sacrifices to meet the regular housing payments, they felt that it would be difficult to raise the down payment required for access, unless this potential housing improvement came at a time when Mr Williams would be receiving his retirement pension or if they were able to sell their existing house to get the necessary finance required. Mrs Williams expressed her concerns as follows... *"The money is too much... we don't have that kind of money to pay down... we would have to get it from the bank... I don't believe that would be easy because I remember one time the 'mister' went to Scotia Bank to get a small loan when we wanted to fix the house and they didn't give him even though we had a little money there... the only thing is that if it (housing improvement) come when he get his pension money... he will retire soon... we could use part of it to pay it..."*

And Mrs Williams stated of the need to sell their existing house... *"Well this house is in good condition, we could sell it but we don't know how much we could sell it for... maybe it could go for EC\$20,000... what would I do with the money?... well keep some for when we too old to work and we could use some to pay the down payment... I don't believe we would have problems to sell it because it in good condition... we spend a lot of money fixing it up..."*

The Williams indicated that they have no one to help them meet the financial cost involved with this option. According to Mr Williams...*"We don't have anybody to help us pay it. The children... they want us to help them even though we two old people... we have to help them... look we have two of my daughters children here... she in Canada... I don't believe they can help. We will try our best to pay it... even if it means sacrifice"*. As Mrs Williams explained...*"We really don't have much money all the time to spare... sometimes after we pay our bills we hardly have enough left to see next pay day. Things so expensive nowadays... every week thing get more expensive and we don't really have anybody to help. We two old people... Sometimes you have to buy a pair of school shoes for one of the grandchildren... you know they mash up shoes so often... the parents not giving anything much for them, we have to find it (money) to give them...but we know if we have to pay for the land we will find the money fast"* The Williams did not like the idea of long term debt however, because of their age. As Mrs Williams explained... *"You see as me old already... it don't make sense to have this debt... for you paying so long..."*

The Williams then, would be willing to move to higher levels of housing payments providing they are able to maintain their or improve their current income status. While they are prepared to make changes in their current savings and expenditure patterns to meet the regular monthly payments required, they could not see how they could meet the down payment requirement unless they were able to sell the existing house, which according to Table 10, Appendix 1, they valued at EC\$30,000. Their willingness to make these expenditure changes related to their strong desire for land tenure security as they approach old age and retirement.

### **The Edwards'**

This family would be willing to move to a higher level of housing payment only if they were forced to move out of the area by the government. They would be willing to allocate that level of resources if they were paying for in situ tenure security. Mr Edwards felt that he should not have to be removed because of the physical characteristics of his plot and the length of time that it has been in his family.



According to him... ,*"What can they (government) do with it (plot) it is steep and mostly rock especially at the front there. They can't do anything with it unless they level it and road up there will collapse if they do that so it must stay the way it is... Is a long time my grandfather live here and government did give it (plot) to him when they were building the La Toc Road. They can't take back it (plot) because they take away his spot when they were building the road... they only way I would move from here is if they take the police to take us out... and they find a place to put us... "*

And according to Mrs. Edwards... *"is a long time we hearing that the Port want the land... I really don't think they will sell it to us... but it would be a good thing if they (government) do that... as you see we near the road... I don't want to move... we spend so much money already especially to build that retaining wall... who will pay us for it if we have to move... "*

Despite the strong feeling of attachment to their site, they would be willing to move if forced and pay for access to a two bedroom unit which would give them the space and tenure security and improvement in the toilet facility which they so desired, according to Table 8. Access to this option would also be conditional on them being compensated for the concrete section of their existing house; that they would be able to sell the timber section of this house and that the new house would be centrally located. However, they expressed strong views about moving to this higher level of housing payment. They emphasised that they would only move to this level if they were forced to and could not find any alternative accommodation. According to Mr Edwards... *"The only way we would move and pay that amount of money is if government come to remove us bodily... say with police we have no where else to go... that's a lot of money to pay especially when you know you have a house already... why they don't just sell the land to the people?... If we have to move and pay that kind of money it would be hard on us... it would have to be a situation where we can't do better... Is not to say we can't pay it you know... but it wouldn't be fair for them to force us out... we spend so much money on this house already..."*

What concerned the Edwards was not so much the money they had spend or even the potential cost of new housing outside the community but rather the thought of leaving

a central location and the effect this would have on their economic situation. As Mr Edwards stated... *"can you imagine if we have to pay that amount of money for somewhere far from town? We would have to pay more money to Joan to look after the baby or Janet would have to stay home... that's more expense... with all the loan, that would be too much..."*

They needed to be centrally located so that they could continue to enjoy the babysitting help that they received daily for Mrs Edwards' sister. According to Mrs Edwards... *"if we have to move far away my sister wouldn't be able to look after the baby any more... she come everyday to take care of him... she lives in Marchand so is not far... if we go far she would have to pay bus fare... right now we give her a little something (money) to help look after the baby... if she has to pay bus fare to come we would have to pay more... we can't afford that... that would mean I would have to leave my work... and what about Sharon?... we would have to find a new school for her... if is in town or near town is not bad... we wouldn't mind paying for it..."*. Mr Edwards on the other hand was concerned that if his spouse had to stay home with their baby that her earnings would be lost to the household and they would be unable to meet all their financial commitment. According to him... *"if she has to stay home to look after the baby we would not get that money she make any more... things would be hard... how would we pay the house then?... we have our loan paying... that house would have to be near town or we wouldn't take it..."*

Mrs Edwards found however that if any intervention came at a time when their loan and hire purchase payments were completed, then not being able to continue her work would not be detrimental to the household. According to her... *"You see if they (government) offer us that when we finish paying the loan paying or Courts (Furniture Store) we could use that money to pay them... we wouldn't have to worry if the place they put the house is far... even if I have to stay home we will still have enough money to help... we don't have long left to pay off the loan and Courts... that money come in good to help..."*

Despite their strong views about leaving their present site, the Edwards recognized the advantages of the housing option. As Mr Edwards stated... *"this is not bad you know... it has a good size plot and place for the children to play... and you can own it... right here we don't own the land... that's why they can do us anything... that's why we have to pay rent to them people up there... if say I really own this place I would fix it up and make the house into concrete... right now we want another room for the children but no space to put it... that's the only thing good about this house... its bigger and you get to own it... the best thing I see is for government to sell us the place so people can improve their house... it don't have much space but you can always build on columns... we don't mind paying that amount of money to stay here..."*

For the Edwards, then the main reason for any movement to a higher level of housing payment outside the Faux au Chaud area would have to be the consequence of an eviction wherein they are faced with no other alternative housing.

### **The Jn Baptiste'**

This family, was willing to increase the current level of housing payment to get a three bedroom concrete house which would guarantee tenure security but primarily so if they were forced to remove from the area by the government. This option according to Table 8, would provide the family with their desired preference for land tenure security and improvement in dwelling size and construction material quality. They were also prepared to pay provided that they could generate new income at the new location *ie.* providing Mr Jn Baptiste was able to re-establish his tailoring activity; that they were able to sell the existing house or part of it and that the repayment period was short.

In order to move to this higher level of payment they further stipulated that they would need to sell existing land asset owned to provide the down payment required; and that the option should be centrally located. The main concern with this was the cost. They found that the plot size was acceptable as there would be sufficient space

to establish a tailor's shop since Mr Jn Baptiste intended to go into this as a full time activity once he was retired. They indicated that the extra financial resources they would need would come from their savings and the sale of portion of land owned in the Gros Islet Area. The proceeds from this sale would be used for the down payment. Their major concern was that they would lose their investment in the present house unless they were compensated for the concreted kitchen and toilet section of the house which could also be used to pay the down payment. Mr Jn Baptiste explained that he could also sell the timber section of the existing building as a complete house because it was in good condition. He felt that this section could be sold for EC\$20,000. The entire house was valued at EC\$25,000. He stated, however, that any money he could get from the sale of the existing house would go into the establishment of this tailor's shop and for use in his retirement. The household was not prepared to make any major cuts in their present monthly household expenses rather, they were prepared if necessary to reduce their savings allocation. Mr Jn Baptiste, however, was prepared to cut out drinking expenses and to reduce the amount allocated to his tailoring only if it became absolutely necessary to do so. According to Mr Jn Baptiste...*"If I really need to cut down to pay for the house I guess I could cut out the drinking with the fellows... I do a little tailoring on the side and much of the extra money go into that but if I really need I could use some of this money..."* Mrs Jn Baptiste was also prepared to allocate her 'su su' money As she stated...*"my 'su su' money is to buy things for the house... right now we putting in the kitchen and a little toilet... so money have to spend for that...but if we really need to we could always use that."*

For the Jn Baptiste' however moving to higher levels of housing payment was not an issue financially. Rather, for them the greatest concern was moving out of the area. Consequently they would increase the levels of housing payment only if they were forced to do so as a result of a relocation order by the government.

Since the proposed hypotheses relating to the willingness to pay and the ability to pay as derived from the processes, are similar, for the third and fourth stages of housing improvement, the findings for both stages will be discussed together. The main difference being the greater differentiation of the functional use of space and tenure security through ownership of plot in the fourth stage. The same pattern will obtain for the subsequent chapter that deals with the mobilization and use of resources.

### **7.3.1 Process 1 : The Changing Housing Improvement Preferences in the Willingness to Pay for Future Housing Improvement**

All households have indicated their most desired housing improvement preferences within the next five years that would describe the future improvement goal. The preferences outlined in Table 8, were reflective of the proposed attributes that would be required for a third and fourth stage of housing improvement. The housing improvements selected by households from the scenarios meant for some households, congruency with some aspects of their desired physical improvements and for others it would mean making trade-offs.

It can be seen from Table 8, that as a first and second order improvement priority, land tenure security through ownership was the most important attribute preferred. This attribute was indicated by eight and six households at the first and second priority levels respectively. The second most important preferences related to improvement in the quality of dwelling material by three households at both the first and second priority levels. This was followed by the preference for an increase in indoor dwelling space, improvement in water services and toilet facility in that order. The strong desire for tenure security could be explained by the eminent threat of relocation. In fact all households lamented that the greatest impediment to their development is the fact that they did not own the land and that affected the kind of materials with which they build. Most of them feared the thought of relocation. For

the Williams', Jn Baptiste', King', Adonis' and Edwards however the most important condition attached to the move to this higher level of housing payment was if they were forcibly removed from the area by the government. For all these households excepting for the Williams', there was a strong attachment to the area because of length of residency and the nature of the plot acquisition. In the case of the Williams' the reason related to length of occupancy and the closeness of the hospital amenities for them because of their old age. For these households, the future housing improvement preferences relate to the site they presently occupy.

Some households held the thought that an increased lot size, would have a direct correlation with enhanced economic activity.e.g the Hippolyte' and James'. The James' for example, indicated that the area has potential but was concerned about the impact of the present plot size on his future economic plans. He found that upgrading of the area would be good but was concerned that with his existing plot size he would not be able to accommodate his plans for construction of rental units. He stated that if he could get more land in the area it would be good to stay and develop these units on his plot, by extending his existing house. He indicated that he would still purchase his present plot if it were possible but would sell it later to be able to buy land elsewhere to develop his rental housing scheme. Most of the household considered the Government as their landlord, but expressed little faith in the Government's ability and willingness to change the socio-economic aspects of the area for their benefit.

This doubt could be summed up by the following comment made by Mrs. Edwards...  
*"is a long time we hearing that the Port want the land... I really don't think they will sell it to us... but it would be a good thing if they (government) do that... as you see we near the road... I don't want to move... we spend so much money already especially to build that retaining wall... who will pay us for it if we have to move..."*

Miss Girard voiced the opinion of other households, when she said, *"the Government could do much more for the people of the area"*. The implication of these utterances

is that a programme of community upgrading and land tenure rationalization would be most favoured by these families.

Table 8 outlines the improvement options selected by the households. For all households option selected would allow for the realization of their future housing improvement preference with respect to either the need for land tenure security, change in material quality, improvement in dwelling/plot sizes, services and facilities or any combination of these attributes. For a few families the option would facilitate their economic plans for improving their income earning capacity through home-based productive and petty trading activities. However, for some households in particular, the size of the dwelling and plot and their potential location were not conducive to their space and locational preferences. These households were prepared however, to trade-off size of plot and dwelling and locational preferences for land tenure security. The main reason was that with land ownership other dwelling attributes can be guaranteed at a later date in the housing improvement history.

This general congruency of these options with respect to the standard of housing attributes preferred, was based on the specificity of the option selected by the individual household. The two groups are presented below based on their selected options.

#### **a) Households Who Selected Non-conventional Options**

In this group are the Girard', Jn Paul', St Croix', Green', Mason', Josephs' and Adonis, Whose selections typified the defining characteristics of a third improvement stage. For these seven households tenure security was the main advantage as all desired it. Based on improvement preferences, the Jn Paul' wanted improvement in dwelling size; the Josephs', St Croix', Mason and Adonis' desired improvement in material quality; the Girard', Josephs', Jn Paul desired improvement in their water service while the Green' wanted to improve their toilet facility. In a few instances, the proposed size of the plot was conducive to the outdoor space preferences of the particular household for, privacy for the St Croix' and Adonis'; space to cultivate

vegetables for the Green' and to incorporate income generating activities for the Girard'. However for other families the option selected would mean trade-offs among the desired attributes. For the St Croix', Adonis', Girard', Jn Paul', Green' and Joseph', there was concern about limitation in indoor space of the core dwelling they selected. With the exception of the single person household of Miss St Croix, this was due to the size of these families. However, they were all willing to trade the reduction in indoor space standard for plot ownership and adequate plot size because of the importance of land tenure security. Further they would be prepared in all cases to re-use the building materials from their existing dwelling to extend the new one. The option also offered the advantages of improvement in water services, plot size and material quality for all households.

For those households then, the findings in respect of this process support the hypotheses for the third stage that states that willingness to pay will be the outcome of 1) the desire to improve the amount and specify the use of space; 2) the desire to improve material quality by incorporating more durable material for the extended space and 3) an improved resource capacity to be able to realise the desired improvement. However, in respect of hypothesis 1) the options selected i.e.the core unit and sites and service plot would only allow the improvement of outdoor space. However if households extend their core units with their existing building materials they would be able to improve the use of space. Hypothesis 2) was supported by the choice of the concrete core unit. The extent to which hypothesis 3 is supported will be examined in Process 3 below.

#### **b) Households Who Selected a Conventional Dwelling**

Nine households selected a conventional dwelling. These were the King', Lewis', Edwards', James', Jn Baptiste', Hippolyte', Williams', Thomas' and Charles'. All selected a concrete dwelling, which they thought to be more permanent than the timber structure, and of better quality, and requiring less maintenance. This standard of dwelling was equated with the acceptable minimum standard of dwelling characteristic of the fourth stage. This type of dwelling would meet their preference



for material quality. For all households, excepting the King' and Thomas', the size of the option selected would meet the indoor space needs. The King' and Thomas' were prepared to trade-off this disadvantage for plot ownership. For the Hippolyte' and the James', the desire for improvement in dwelling size to allow the improvement in income generating capacity, would be facilitated.

The findings supported the proposed hypotheses that for the fourth stage, the willingness to pay will be the outcome of 1) the desire to increase space for consolidating and internalising the functional use of the dwelling; 2) the desire to improve the quality of space, material, kitchen and toilet facilities; 3) the desire to improve the type of access to services and ancillary facilities by internalizing water, electricity, kitchen and toilet facilities. In the case of Hypothesis 4) improved availability of resources to realise the improvement, this will be examined in Process 3 below.

### **7.3.2 Process : 2 The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay.**

The influence of this process was revealed in the responses of only four households. These were the Jn Paul', Thomas', Charles' and Edwards'. The households were willing to pay for improve dwelling size because of the size of their households. However for the Jn Paul' and Thomas' the options selected would not allow the realisation of their desire as shown in process 1 above. The evidence from these four households support the proposed hypothesis that : the willingness to pay will be the outcome of the desire to 1) the desire to remove residential discomfort arising from overcrowding of the limited space due to increase in household size.

### **7.3.3 Process 3 : The Development of the Resource Capacity in the Ability and the Willingness to Pay.**

Since this process is similar for both stages of housing improvement, they are discussed here as one. The findings show that the willingness to pay higher levels of housing costs for the selected options was, for all households, conditional on many factors. These related mainly to their monetary resource capacities and capabilities as was shown in the case histories. This shows that even where the improvement was congruent to the housing preferences, such option also had to be conducive to their resource capacity to pay because of the levels of cost involved. The ability and willingness to pay for the preferences was therefore contingent on the ability to pay as determined by the limitations and possibilities of the resource capacity.

Table 11 provides a summary of the conditions in which households would be willing to devote higher levels of housing payments. It shows ten conditions indicated by the households and which were ranked based on the number of households who indicated that particular condition. In some cases these conditions represent the aggregation of other similar conditions of the main category. The summary of the findings will be presented firstly, based on the ten main groupings and then the cases will be presented according to their specificity with respect to the most important factors influencing the particular household in its decision to move to this level of housing payment.

According to Table 11, the most significant condition as indicated by all households was the need for a conducive housing repayment terms within households' real and potential monetary resource capacity. This related to the household not having to pay a deposit to facilitate access to the option; that the repayment period should be short and that time was allowed before the household was required to repay housing cost. The second most important condition was given by all households excepting the Jn Baptiste', as the need to be able to sell existing house or land resource or re-use the existing house to facilitate the new housing provision. For the Jn Baptiste', this was

TABLE II: CONDITIONS IN WHICH HOUSEHOLDS WILL MOVE TO A HIGHER LEVEL OF HOUSING EXPENDITURE AND INVESTMENT

NAME OF HOUSEHOLD	CURRENT CASH INC. R/S	TYPE OF HOUSING OPTION	1	2	3	4	5	6	7	8	9	10
Edwarda	1375	2 bedroom	X	X			X	X	X	X	X	X
Charles	1600	3 bedroom		X			X	X	X	X	X	X
Glarad	800	Core		X			X	X	X	X	X	X
Josephs	600	Core		X			X	X	X	X	X	X
Jin Paul	700	S. A. S	X	X	X		X	X	X	X	X	X
Hippolyte	1950	3 bedrooms		X			X	X	X	X	X	X
St. Croix	620	Core		X			X	X	X	X	X	X
Jin Baptiste	1500	3 bedrooms	X	X			X	X	X	X	X	X
Kings	1200	2 bedrooms	X	X			X	X	X	X	X	X
Williams	1260	1 bedroom	X				X	X	X	X	X	X
Greens	800	Core		X			X	X	X	X	X	X
Hason	700	Core		X			X	X	X	X	X	X
James	1300	2 bedrooms		X			X	X	X	X	X	X
Louis	1200	2 bedrooms		X			X	X	X	X	X	X
Thomas	769	1 bedroom		X	X		X	X	X	X	X	X
Alonias	619	Core	X	X			X	X	X	X	X	X
TOTAL (X)			38	89	25	31	63	63	94	94	63	100

SAS: Sites and service plot option  
 Core: Core unit plot option

Key to Table II.

CONDITIONS

1. Coercion  
 If forced to and without any alternative

2. Extra household Income Transfers (Government grants or inter-household monetary assistance)  
 a) That government pay compensation  
 b) That there is relocation grant  
 c) That households receive inter-household financial help from relatives and friends (new and increased benefits)

3. Increase in intra-household Income support from household members  
 a) That earning children contribute to the employment effort or initial down payment to facilitate access  
 b) Job Security, Stability and Improvement  
 c) That household head or spouse job or secondary job opportunity  
 d) That housing option come at a time when the household received windfall income or pension  
 e) That households will have a stable job to ensure continued regular payments for the new housing option

4. Maintenance and Creation of Income Generating Activities at New Site  
 a) That household can generate new income earning activities at new location  
 b) That household would be able to reestablish income generating activities or that the relocation would not affect these activities of the household (eg. stop smoking)

5. Sale and Re-use of Existing Assets  
 a) That household is able to sell existing house or parts thereof  
 b) That household is able to sell land asset owned  
 c) That household is able to salvage materials from existing housing asset for re use

6. Congruency of Physical Locational Characteristics of Option  
 a) That plots are large enough to allow for individual privacy and household service provision  
 b) That option is centrally located  
 c) That drainage is improved substantially

7. Availability and Accessibility of Self and Mutual Help Labour and Time  
 a) That household is able to co-opt the time and labour of relatives and friends  
 b) Availability and Accessibility of Self and Mutual Help Labour and Time  
 c) That household is able to co-opt the time and labour of relatives and friends

8. Conductive Employment Terms  
 a) That employment provided is decent  
 b) That employment provided is decent

because they could meet the payments without resorting to the sale of their housing and land assets.

The third most important condition was given by fourteen households as the need to have new and/or increased income transfers, grant or compensation from the government. With respect to the grant this was a part of the option. The exceptions were the Williams' and James' who did not make any mention of this possibility.

The need to be able to maintain and/or create new income generating activities at the new site was indicated by ten households also. This desire was related to the existing home based income generating activities of these households and/or their economic development plans as was the case of the James. The exceptions were the Edwards', St Croix', King', Williams', Green' and Thomas who have regular jobs and more than one earning household member that could help with housing payments. Ten households also indicated that to move to this level of payment they would have to re-deploy their current expenditure and savings allocation. The exceptions were the Williams' who re-organise their expenditure schedule by allocating housing payment first, the Lewis' who could make no changes; the King', Hippolyte', Jn Baptiste' and Girard', who can accommodate the increased payments within existing monetary resources.

To be able to mobilize and use intrahousehold and interhousehold labour time resources was given as a condition by ten households. This source of labour would be used in the reconstruction of dwellings and the transportation of material, solely or in combination with hired labour. The exceptions were the Hippolyte's, Jn Baptiste', Lewis', St Croix', Girard' and Adonis' who showed a preference for hired labour. The preference for hired labour for the latter three households was due to the unavailability of intrahousehold and interhousehold labour.

According to Table 11, six households were willing to pay an increased amount for the new housing option if they are forced to and without any alternative. The need to be ensured of increased income support from household members were indicated

by four households i.e the Lewis', Thomas', Green', and Jn Paul' who currently depend on this income support from earning children living in the household. The need to maintain employment security, stability and improvement in income in current employment was indicated by five of households. These are the Williams', Green', Joseph', Adonis' and Jn Paul'. Six households i.e. the Edwards', Jn Baptiste', Williams', Jn Paul', and Adonis', would only move to this higher level of resource expenditure if forcibly evicted by the government and with no other alternative.

In general therefore, these conditions as expressing the ability and willingness to pay an increased amount for housing show the significance of the overall resource capacity of the household in the decision making process. The factors that would influence the ability and willingness to pay for the selected improvement varied among the households but three groups of households can be identified based on what they claim would be the most important factor influencing the ability and willingness to pay. For the eleven households identified in groups 1 and 2, this main factor related to the maintenance or improvement in monetary resource capacity.

**(i) Households By Most Important Factor(s) Influencing The Willingness to Pay and Ability to Pay for the Improvement Option.**

Three groups of households were identified based on the most important factor that would influence the willingness to pay for the selected option.

In the first group are households for whom the ability to maintain and/or increase monetary resource capacity through income transfers and secondary household income support would be crucial to the ability and willingness to pay. These households are the Lewis', Green', Thomas', Jn Paul', Josephs' and St.Croix'. For the Lewis', Thomas' Green' and Jn Paul' it was also very important that they should be able to mobilize increased secondary income support from all earning members of the household. This was due to the dependence of these households on these sources of income. According to Table 9, Appendix 1, their monthly household incomes

comprise income transfers of between 25% and 33%, and for those with secondary income support this portion of monthly income accounts for 57% and 33% for the Jn Paul' and the Lewis' respectively. The Green' and the Thomas' though they had secondary earners at the time of the research they were receiving only the head' income, all others were unemployed. In any housing improvement exercise these households would have to be able to show how they would be able to establish the payments from these sources. According to Table 9, Appendix 1, these households had developed other monetary sources in the form of bank and/or 'su su' savings which they were prepared to use for housing payment.

The second group of households are those for whom the ability and willingness to pay for housing would mean the ability to maintain and/or create income generating Activities at the new site. These are the Hippolyte', Charles', Mason', James' and Girard'. For these households the locational and physical characteristics of the option had to be congruent to their economic activities. These households had to be able to continue their house-based income earning activities or be able to introduce new ones being planned. These activities would be important in the ability to maintain the ability to pay for housing. Except for the Mason' their individual monthly incomes are among the highest for the group, ranging from EC\$1300 to EC\$1650. According to Table 9, they had all developed other monetary resources in the form of bank and/or 'su su' savings. Mr Mason' income is among the lowest but he is a single person household.

The third group comprises households for whom the ability and willingness to pay would mean re-organisation of current household expenditure and savings pattern. In this group are the Williams', Jn Baptiste', King', Adonis' and Edwards'. According to Table 9, Appendix 1, only the Edwards' and Williams have more than one earner. Except for the Adonis' who receives a monthly income of EC\$619, their individual monthly incomes are among the highest for the group, ranging from EC\$1200 to EC\$1500. Their other monetary resource include either a bank and/or 'su su' saving as can be seen from Table 9.

Except for the Lewis, James' and Jn Baptiste' who also own land the only non-tangible resource of value was their existing dwelling. The Lewis had acquired land also. According to Table 10, Appendix 1, their estimates of the value of their dwelling as a resource compares favourably with the professional estimates and perhaps explain why they were prepared to sell or re-use parts there-of.

#### 7.4 CONCLUSION

From the cases and summary evidence above show that the ability to pay will depend on the resource capacity to meet the cost of the housing improvement, has been supported. The findings show generally, that the monetary resource capacity of households is most important to the decision to increase housing payment, whether it is related to the need to translate existing tangible non-monetary resource into cash or the need to be assured of new or increased income transfers, secondary income support from household members; the stability and security of incomes; the maintenance or creation of new sources of earned income or the redeployment of household expenses and saving allocation.

The fact too, that households require the congruency of any new housing to their preference for a central location with respect to work and school as was shown previously, means that they need to secure their jobs thereby ensuring the security of their incomes and that they want to reduce or prevent any increase in expenses from transportation costs pertaining to work and school. This also confirms the need for them to be able to maintain their monetary resource capacity.

All these conditions show in general, that for this group of households, the real and/or potential monetary resource capacity rather than the current cash income status is the most important determinant of the ability and willingness to pay, an increased amount for housing above current levels of payments. They also outline the need for the stability and availability of monetary resources in the decision to move to higher levels of housing payment. It shows that in thinking about substantial and costly

housing improvements involving long term payment commitments, households do not think in terms of their current levels of intrahousehold income, rather they think in terms of overall wealth and the availability and accessibility of all available monetary and non-monetary resources that can go into housing payments. They are also prepared to translate whatever tangible non-monetary resources available into cash to facilitate the improvement or to re-use materials of the house to establish the ability to pay exercise. This is important because it not only indicates that low-income households might actually have non-monetary resources which could be allocated toward housing payment but the fact that they are tangible non-monetary resources of value would mean that to use them for new housing payment would require time for sale to realize their monetary value.

The subsequent chapter examines the actual mobilisation and use of intrahousehold and interhousehold resources in establishing the ability to pay for these housing improvements. It cannot be assumed that because resources are available and accessible, that families will be able to use them for housing payments at particular point in time. Further it cannot be expected that certain available resources will be used for housing payment.



## **CHAPTER 8**

### **PROCESS 4 : THE MOBILIZATION AND USE OF RESOURCES IN ESTABLISHING THE ABILITY TO PAY FOR FUTURE HOUSING IMPROVEMENTS**

#### **8.0 BACKGROUND**

This chapter is presented in two parts. The first provides information on the mobilization and use of monetary and non-monetary resources for the housing improvement options outlined in Chapter 7, in the actual establishment of the ability to pay for these improvements. It was stated in Chapter 7, that for eight households i.e. the Green', Mason', James', Thomas', Adonis', St Croix', Jn Paul' and Girard', the selected preference was indicative of the characteristic preference for a third stage. These households were in the second stage of housing development process. The selection of the Lewis', Jn Baptiste', Hippolyte', Charles', Edwards', Josephs', Williams' and King' was reflective of the characteristic preferences that described a fourth stage in the housing development process. These households were in their third stage according to the findings, except for the Hippolyte' and the Jn Baptiste' who had already began to show improvement characteristics of a fourth stage. It was proposed in Chapter 3 and restated in Chapter 7 that for the process of resource mobilization and use, the establishment of the ability to pay will be similar for the third and fourth stages. Consequently the findings are considered and discussed together in this chapter.

This first part also provides information on the variability of the amount of housing payments households currently pay and would be able and willing to pay for these future housing improvement preference they selected. The reason for this is to show that it is not the percentage of income that is important but rather whether the household can show how it will, within its resource capacity, be able mobilize the required amounts despite the proportion of the income resource that these payments

represent. The second part presents a summary discussion and implication of the findings.

The proposed hypotheses state that the ability to pay will be established from 1) the intrahousehold and interhousehold monetary resource capacity through accumulated savings, negotiated new and improved secondary income support and income transfers. 2) The costs associated with  $c(r)$  will be paid from the regular new and improved secondary income support and income transfers that can be negotiated for from the intrahousehold and interhousehold capacity. Costs associated to  $c(n)$ , will be met from existing intrahousehold accumulated savings and new secondary income support and transfers that can be negotiated. 3) Resources will be mobilized through negotiation but without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort they feel.

## **PART 1**

### **8.1 Households by the Main Source to be Mobilized and Used for Paying Housing Costs Related to the Future Improvement Options.**

The costs considered here are the existing regular recurrent payments,  $c(r)$ ; any regular payment from past investment,  $c(n)1$ ; the new regular payments arising from the option,  $c(n)1$  and the additional costs to facilitate access and habitability,  $c(n)2$ . This comprise all the costs that will confront the household as described in Chapter 3. Reference is made to Table 12, that outlines the sources and amounts that households are prepared to allocate toward the regular payments; Table 13, which shows the sources for financing the additional payments to ensure housing access and habitability and Figures 10 and 11, which outline the number of resource contacts perceived and those that can actually be mobilized for housing payments, respectively. These tables and figures will reveal how the households would establish the ability to pay for future housing improvements. The cases will show that these household will use a variety of monetary and non-monetary sources to establish the ability to pay these regular and additional amounts. Four groups of households have

Table 12: Proposed Sources for Financing Regular Payments (C(r)1 + c(r)) for Future Housing Improvement

Household Name	Current Housing Expenditure (EC\$)	New (*) Monthly Additional Repayment for option (EC\$)	Amount for Down payment (EC\$)	Total New Amount Available (EC\$) (**)	Amount (EC\$)		Bank (EC\$)	Contribution for Income Generating Activities	Susu (EC\$)	Special Home Based Savings (EC\$)	Hire Purchase (EC\$)(5)	Loan (EC\$) (5)	Recreation (EC\$)	Food (EC\$)
					Surplus	Shortfall								
Edward's	388	477	10,300	559	82	-	-	-	150	-	409	258(1)	-	-
Charles	400	551	11,900	400(2)	-	151	-	x	-	200(5)	200	-	-	-
Girard	60	112	-	100	-	12	-	x	100	-	-	-	-	-
Joseph	90	206	-	260	54	-	-	-	80	-	100	-	80	-
Jn Paul	40	112	-	80(2)	-	85	-	-	80	-	-	-	-	-
Hippolyte	445	551	11,900	500	-	101	300	x(6)	200	-	-	-	-	-
St Croix	110	165	1,500(4)	200	35	-	200	-	-	-	-	-	-	-
Jn Baptiste	70	551	11,900	200(3)	-	351	200	-	-	-	-	-	-	-
King	100	477	10,300	350	-	127	350	-	-	-	-	-	-	-
Williams	145	421	9,100	421(1)	-	-	-	-	-	-	-	-	-	-
Green	90	206	-	206(2-3)	-	-	-	-	-	-	170	-	-	-
Mason	36	206	-	200(3)	-	6	100	-	-	-	-	-	-	100
James	40	477	10,300	400	-	77	100	x(6)	-	300(5)	-	-	-	-
Lewis	95	477	10,300	0(2)	477	-	-	-	-	-	-	-	-	-
Thomas	100	421	9,100	200(2)	-	221	100	-	100	-	-	-	-	-
Adonis	40	206	-	110(2)	-	96	-	-	60	-	-	50	-	-

- Notes
- (1) Reorganisation of total monthly expenditure and saving pattern from which housing allocation will be the priority allocation, i.e. change in priority to pay for housing as a first priority.
  - (2) New and increased transfers/new and increased secondary income support - to make up new amount or shortfall in new amount.
  - (3) Allocation for monthly income without any cuts in monthly expenditure and savings patterns.
  - (4) Core unit requiring a downpayment of 20% of the total cost of the option.
  - (5) Amounts available for use once payments for which they are currently being used are completed.
  - (6) Potential contribution.
  - (7) New regular repayment amount arising from the housing option.
  - (\*\*) New amounts available from expenditure cuts and re-allocation of expenditure and savings.

Table 13: Proposed Sources for financing additional costs (c/n)2) of Future Improvement Options

Household name	Additional costs					Sources of financing															
	down payment	relocation and transport of existing home	purchase and transport of new materials	Re-erection, labour costs	other	savings		grant from site and service option	loan from core unit option		Loans			new and increased income transfer	new and increased secondary income support	sale of assets		Use of autocon struction labour	Potential contribution from new income generating activities	Re-use of existing materials	
				Hired	credit union	bank		loan from core unit option	material loan	cash loans	bank	relative			house	land					
Edwards	X	X		X				X			X	X			X					X	
Charles	X	X						X						X						X	
Girard		X	X	X																X	X
Joseph		X																	X		X
Jn Paul		X					X							X					X		X
Hippolyte	X			X	X(1)																X
St Croix	X	X		X		X								X							
Jn Baptiste	X	X													X	X			X'	X	
King	X	X	X													X					X
Williams	X														X						
Green		X	X											X					X		X
Mason		X			X(1)			X											X		X
James	X	X	X		X(1)			X							X				X		
Lewis	X													X					X		
Thomas	X														X				X		
Adons		X		X				X							X						
TOTAL	10	12	5	5	5	2	2	1	5	.	1	1	1	6	3	9	3	7	5	6	

Key  
 (1) Potential sources  
 (2) Only for transport

Figure 10  
Perceived availability of monetary and non-monetary resource contacts.

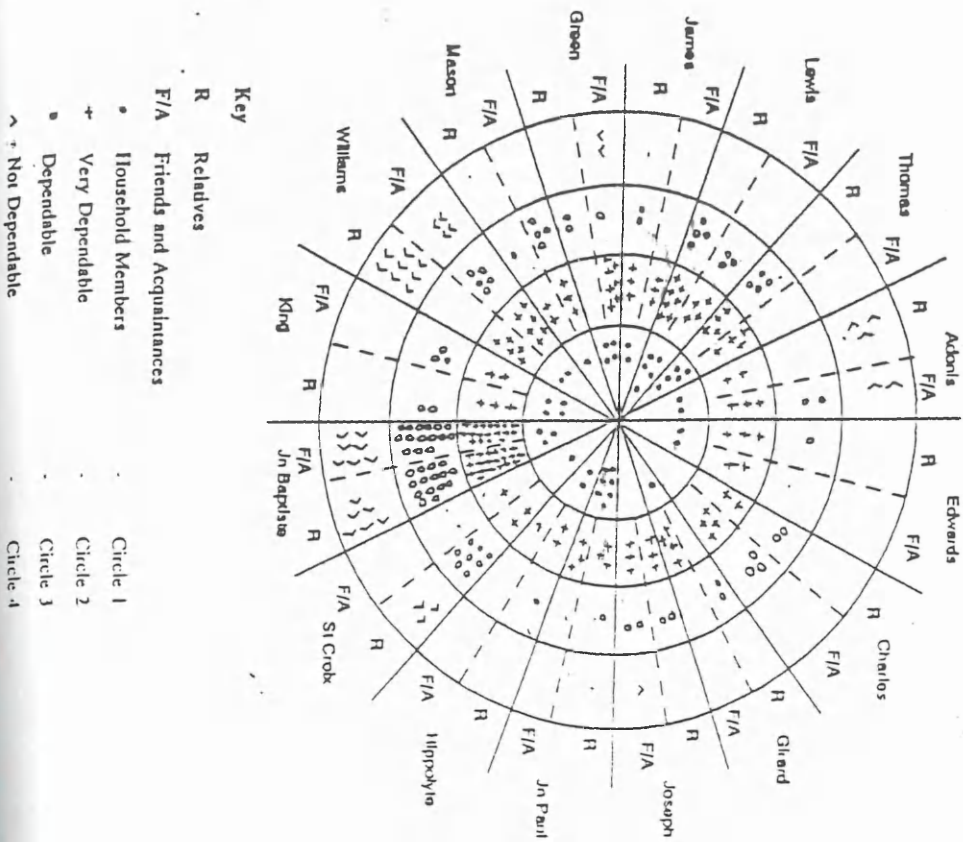
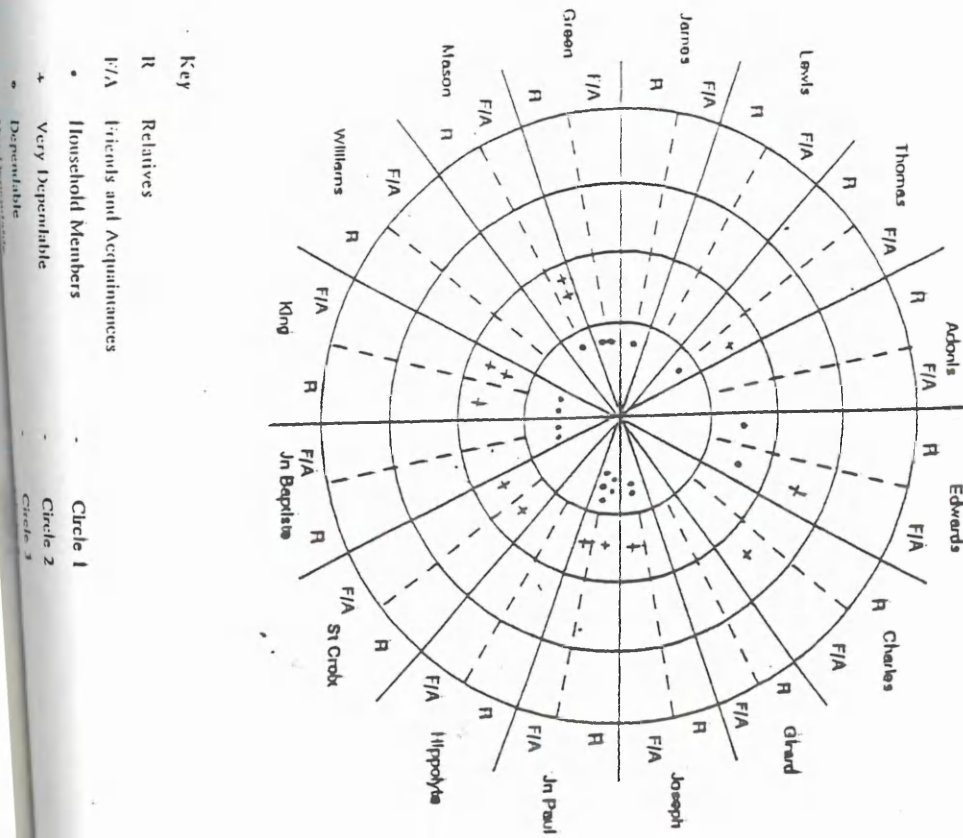


Figure 11  
The level of resource contacts households are able to mobilize for higher levels of housing payments for future housing improvement.



been identified based on the main source to be used to establish the ability to pay the regular amounts and the cases are presented accordingly.

### **8.1.1 Group 1: Households for Whom the Main Source of Financing the Regular Housing Payments Would be Provided from New and Increased Income transfers and Secondary Income Support**

In this group are the Green', Adonis', Lewis', Jn Paul' and Thomas' who are all dependent on these sources which form a large part of their total household monthly incomes. For them, these sources are important for economic survival as was seen in the case histories presented in Chapter 7.

For **The Greens'** the most desired housing improvement after the short term improvements planned, was given as the need for land tenure security of their present plot. For this improvement they were willing to increase their housing payment to EC\$296 (26%), of total cash monthly income, for a core unit option. According to Table 12, this regular amount would be provided from the reorganization of household' monthly expenditure and saving allocations. The family explained that the allocation now being made toward the hire purchase repayment of their refrigerator could be used if these housing improvements came at a time when this payment was completed. They also indicated that it would be necessary to get increased income support from their eldest son and the wife will have to find a job in order that the household would to be able to sustain the monthly amounts required.

According to Table 13, the loan arising from the core unit option, would be used to meet the additional costs of relocation such as payment of transport of housing materials to the new site and to buy building materials as needed. They explained that if they needed extra money they would be able to ask it of Mr Green's brother who lived in the USA. According to Mr Green...*"Although the money is not a lot to pay back right now we can't afford it...it would be good if say we had to pay it when we finish paying Courts for the fridge...if only Trevor still had his job. He would have*

*to get a job to help...I have a brother in the States that I know will help if I have problems paying it ...But you know is not all the time you can ask for help..."*

*Mrs Green confirmed his comment when she said... "If we didn't have to pay for the fridge we would have some money to pay...I suppose we could always find it ...is not much ..I hope to get a job soon ...if we have to move now we would always find the money even if it mean sacrifice..."*

Although they indicated a total of twelve monetary and labour resource contacts, (Figure 10), these are not important in house building. According to Figure 11, the household will not mobilize any of these contacts for any future housing improvement activities. Mr Green explained that most of these contacts "do not know much about house building" and further he preferred to do things for himself. In fact, he explained, that apart from the hired labour,for the foundation and steel work he built his house all by himself, although it took him a long time. He had no plans and neither did he get any building approval from the Authorities to construct his building. He explained that he has a fairly good idea of the cost and quantities of materials he wanted for his housing improvement because, according to him, "*you'll pick up things<sup>19</sup> here and there*". As Mr Green expressed it..."*I really don't have people to help and these days they don't want to work for free...first time it was easy but now...and anyway I prefer to do it myself even if it take me a long time...it end up being cheaper too..."*

According to Figure 11, the Greens would only be able to mobilize his own labour and his son's in any housing improvement. According to Mr Green, his wife and teenage daughter were not interested in house building and as he said "in any case that's a man's work". Although they have a fairly good network of contacts, these were not actually used in their housing construction process and neither will they be mobilized for future housing improvement activities.

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<sup>19</sup>

"things" here means information on building quantities and skills.

For this household then the ability to pay would be established from improve the income status by increased income support, reorganize current household expenditure and savings pattern to pay the regular amounts. The additional costs would have to be met from the use of auto-construction labour to save cost, new income transfer from a relative and the grant arising from the improvement option.

**Miss Adonis**, was prepared to pay EC\$246 (26%) for a core unit option. In order to finance the new, regular housing payments it would be necessary for her to allocate the amount she regularly put toward her 'su su' saving. According to Table 12 this amount, would be insufficient but she explained that the extra amounts needed would have to be obtained from he special male friend as there was nothing that she could cut down on in her present expenses. She felt that her friend would help but if he could not she would not be able to meet this new payment unless she stopped putting in the EC\$100 she regularly saves with the Credit Union. She would not want to do this unless she really had no other choice. According to her she only started saving with the credit union when she got the job as a typist. She explained that it is good to have this saving because if she was in difficulty she could "*get money to borrow easily from them*". As she expressed it..."*You see for me to pay that amount of money I would have to get my mister to help me or I could always use my 'su su' money. Is not much but it would help... I have a savings at the Credit Union...is not much ..I usually save about EC\$100 a month, when you save you don't pay much tax...the little typist work is not much but at least I can feed my children... would't want to use my little saving money...but if I have to I will especially as you see is to pay for my own place...If I have to pay all that money I don't believe I can save again...*"

For this family the additional costs for relocation of their existing house and payment of transport cost and labour would have to be met from the grant associated with the option without they would have to use credit union savings. According to Figure 11, Miss Adonis would only be able to mobilize on person from the contacts (Figure 10), to help in the re-establishment of her house because her auto-construction labour



contacts have no time as was indicated in Chapter 7. This was the reason for her choice of hired labour.

For Miss Adonis then, the regular housing payment would have to be financed from new income transfer from her special male friend and from a reallocation of saving amount. Additional cost would be met from the housing grant and income transfer, or her saving at the credit union.

The Lewis' at the time of this research, were actually stockpiling materials to facilitate repair of a section of the roof and some floor boards and material change from timber to concrete of one wall of their dwelling. The material stockpiled so far cost EC\$350 which was financed by one of the sons living in the house out of his income. Materials stockpiled so far comprised Galvanized roofing sheets, bags of sand and lengths of floor boards. Their most desired housing improvement preference was to get ownership of the plot they occupy. For tenure security they were willing to pay EC\$572 (31%) of monthly income for a two bedroom concrete dwelling if they had to be relocated. According to Table 12, in order to finance the regular monthly payments, this family would have to depend solely on increased secondary income support from children and increased and new levels of income transfers from those outside. According to Table 13, the additional costs of down payment of EC\$10,300 required for access to this dwelling would have to be financed through the sale of land they own or through the sale of their existing house. For the Lewis' then all housing payments undertaken in the past have been financed from loans taken by the adult children and from pooled cash income of working children and this will be the same for future payments. This shows a high degree of dependence of this family on these sources of income as shown in Chapter 7. As Mrs Lewis explained...*"We will get the money from the children because we do not have that amount of money and they know it ...if we have to move away from here they will not let us suffer...They always help us...If we have to get a loan they will get it because they have good jobs...and can pay it...I know that they will always put some money together to help...they are good children... With the little we make from the sewing*

*we will manage...If they would sell this spot to us the children would buy it so fast...we wouldn't have to worry..."*

According to Figure 11, the Lewis' would not mobilize any of their interhousehold help because they prefer hired labour identified in Figure 10. Mrs Lewis explained that although people were willing to help to build, they wasted too much time or they would promise to come to a 'coup de mein'<sup>20</sup> and then they would not turn up. According to her *"when you pay for the work to be done , you get it quickly"*. For this household then the level of resource contact is not to support housing improvement activities. The household members would be willing to offer their interhousehold time and labour toward future housing improvement but all adult children living in the home are working and would not have the time. According to one son *"these days people don't want to give coup de mein and most of us working and can't really find the time for that... we prefer to pay the money to fix up the house than to spend so much time on it ourselves..."* Mrs Lewis explained that if they really had to devote their own time and labour, they would all do it if it was absolutely necessary. For this family then, the level of resource contact perceived by the Lewis' in Figure 10, does not mean that these contacts are available for housing improvement, or that they will want to mobilize them for this purpose.

For any future housing improvement the ability to pay would be established from new and improved income transfers and secondary income support for the regular housing payments while any cash from the sale of land and the existing house would be used to pay additional costs in respect of down payments and relocation to the new house.

For **The Jn Paul'** the current housing service payment of EC\$40 per month was being paid by one of the daughters. The family was stockpiling building materials at the time of the research, for improving the house at Pavee so that the teenaged

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<sup>20</sup>. The term 'coup de mein' refers to the local system of self-help and mutual help building assistance given by relatives and friends. In this system the household receiving the assistance usually provides food and drink to the persons assisting in housing construction. Often reciprocity in kind is expected from the receiving household.

sons could have a more comfortable sleeping place. The total cost of material stockpiled to date was EC\$80 and financed solely from Miss Jn Paul' wage income over six months. The household was prepared to move to higher levels of housing payment for a site and service plot which would cost EC\$205 (24%) per month. The potential sources of finance would be varied. They would have to divert the regular 'su su' allocation of EC\$80 but this would mean a shortfall according to Tables 12, of EC\$85. Miss Jn Paul indicated that this amount would be provided by her children because *"it is for their benefit"*, through increased income support and increased income transfers. Miss Jn Paul indicated that she would never take a bank loan to help because they would not be able to repay this loan and find money to rebuild their house at the same time. According to her *"where would the money come from to do all that?... its too much..."* According to her... *"My dear I don't have that kind of money but my children will all give a little money each month to help...and I suppose I could use ny 'su su' money... If I get that job things would be better..."*

The Jn Paul' would use the grant from the housing option to pay relocation costs associated with the demolition, relocation and re-erection of their dwelling. According to Miss Jn Paul... *"It is a good thing you get the little money to help...EC\$1000 is not much I hear is what they give the people in Conway. Anyway it would help to pay for us to move What I would use it for?...well to pay to move the things and the house. I don't know how far it will take me but if I can get some to pay to put up back the house it would be good.If it need more money the children will have to help me as I don't have saving."*

According to Figure 11 this household would be able to mobilize only two of their labour contacts identified in Figure 10, for auto-construction and all the adult members of the house to help in the re-building activity.

For this household then, the new regular payment would be provided from diverted 'su su' saving, from new allocations from the individual cash incomes of household members and from new income transfer from the son who live outside. Additional

costs would be met from the improvement grant, monetary assistance from earning children and from the use of auto-construction labour.

The Thomas' would like to increase the size of their plot and to have ownership of it but they were willing to pay EC\$521 (55%) of income for a one bedroom concrete dwelling if they had to relocate. In order to facilitate the new level of regular housing payment, they indicated that their regular 'su su' and bank allocations would have to be used but this would be insufficient. They indicated that the shortfall would have to come from increased income support from adult children living within the household. In respect of the down payment of EC\$9,100 that would be required, Mr Thomas claimed that access would only be possible if they could sell their existing house. They would not take a loan from any source because... *"that would be too much burden"* for them. As Mr Thomas stated *"Right now we will not take any loan because we can't pay it back...and I don't like it ...when you owe money it is a burden...the children will have to help pay for it"*.

Without the children's help they would not be able to pay for this improvement.

According to Figure 11, the family would only be able to mobilize one interhousehold labour contact for any future housing improvement options, if such option should come at the current time. Mr Thomas explained that...

*"now-a-days you cannot get people to help you to build houses again for free... they will help you in other things but houses are building so expensive now-a-days... they can get money from it... any little carpenter now will get as much as EC\$70 or EC\$80 a day to build houses... they will not leave that and come to work for free... even if they your friends... these days everybody busy... is not like before... if we have to build again, we would have to pay labour... although I will always help myself..."*

For this household the ability to pay the regular repayments would be provided from the re-allocation of the 'su su' money and from increased secondary income support. The ability to pay the additional costs associated with the down payment and removal would be paid out of the sale of their existing house.

### **8.1.2 Group 2: Households For Whom the Main Source for Financing the Regular Housing Payments Would be From the Re-organization of Household Expenditure and Savings Amounts.**

In this group are the Josephs', James', Charles', Girard', Hippolyte', St Croix', Edwards' and King'.

The Joseph' indicated that they were willing to pay EC\$296 (34%) of household income for a core unit option for which the regular payments would be financed from the diverted "su su" saving allocation and recreational expense, according to Table 12. However, in moving to this level of housing payment these amounts would be insufficient unless housing improvement occurred when the Joseph' hire purchase payment for their stove was completed. However, they did not think the potential shortfall in the amount was detrimental because it was not much and if they really try hard they would find the money. They claimed that they did not have any tangible non-monetary resources to sell as they would not think of selling their television, neither would they take a loan to make up the shortfall in the amounts needed. According to Mrs Joseph, speaking of the television *"is only that little entertainment we have, we wouldn't want to sell that..."*. They would never use a bank loan either, because according to Mr Joseph, *"we never take a loan yet and I don't think that bank would consider us because we poor people, we don't have money to pay back loan..."*

According to Mr Joseph, they would use the cash loan arising from the option to pay relocation costs and to purchase new building materials to extend the unit. As he expressed it...

*"Right now that money would help to pay to re-build this house and buy some new boards ...we have a lot of rotting boards that we have to change so I believe the money could come in good. Is a good thing that they put it in the money we have to pay back...it different from if you have to go and get a loan yourself from the bank...that we wouldn't do.."*

The household would also use the help of their friend to transport their house and furniture to the new site and any new building material they would need to purchase as was indicated in Chapter 7. From Figure 11, they would only be able to get help from this friend and they would also use their own labour to rebuild their dwelling despite the level of contacts identified in Figure 10.

For this household then, the regular housing payment will be financed from cuts in saving allocation and the diversion of the amount toward housing payment. The ability to pay the additional costs would be established from the loan associated with the improvement option and the use of auto-construction labour for transport removal and the existing house and new materials and the re-building of the house.

**The James'** at the time of this research were paying EC\$40 per month for housing services which was paid from Mrs James' cash income. The James' were at the time stockpiling paints purchased from Mr James' cash income, in order to decorate their house in time for Christmas and a first Communion celebration planned for one of the children. The James' expressed a willingness to pay EC\$517 (36%) of monthly income for a two bedroom concrete dwelling. According to Table 12, the regular repayment would be financed by diverting the special savings allocation now being made for the first communion celebration if such improvements were required to be effected at this time. The regular bank allocation would have to be use for these new payments also. Without present commitments these new housing payments would come from Mr James' wage income. The problem for the James would be to provide the required down payment of EC\$10,300. They explained that they would have to sell the share of family land owned or sell their existing house to make this payment because as Mr James stated...*"I don't want to take any loan from anybody..."*. According to Mr James... *" The down payment is high and the only way I can see us getting that money is to sell the little piece of land i have ...Is not much but it would help...I was trying to save it to help with my plans but if I have to leave here I don't have a choice...Anyway it would not be a loss because if I have to move I will fix up the new place to rent out some rooms...that's what I really want to do...I suppose we*

*could sell this house...I am sure we could get a lot more than we pay for it...These days everything expensive... That money will come in handy to pay the deposit..."*.

The other additional costs associated with removal and expansion of the dwelling for rental activities will be financed from existing income and from the use of two friends that have helped the household in the past as was explained in Chapter 7. (See Table 13 and Figure 11).

For the James', the ability to pay the regular amount would be provided from existing income through the reallocation of bank savings if they had to pay at the time of the research or from the existing income without change in the expenditure and saving pattern if the option came at a time when they had no commitments such as a first communion. The contribution from rental activities would also be a potential source if the family was able to establish this activity on site. The additional costs would be met from existing income and from the use of auto-construction labour.

**The Charles'** family were willing to pay EC\$951 (43%) of monthly income for regular housing payments that would be required for a three bedroom concrete house. This new payment would be inclusive of the new housing improvement payment, the repayment of a housing loan for past improvement and recurrent service payments. To finance this amount they would need to re-order their expenditure and saving pattern first. According to Table 12, the extra amount would be allocated from regular savings amount and where there was a shortfall, the amount would be made up from shop profits or from income transfer from Miss Charles' special male friend. She explained that the amounts now being allocated to repaying hire purchase building loan could also be used if the housing improvement came at a time when this repayment was completed. As she stated..." *I don't think I will have a problem...Mr Mister will always help and I could always get money from the shop or I could use the little money I put in saving every month...is not a problem.. the only thing is the deposit ...it is a lot...the last time my mister help me with the deposit to get material from Linmore on credit...The only thing I see is if I can sell this house...I know I will*

*lose out on it because I cant sell the concrete part...If I can get it to sell I would be able to pay the deposit myself..."*

With respect to the required down payment of EC\$11,900, this amount would have to come from the sale of the existing house or from any compensation for the section of the house that cannot be relocated. She explained that with this money she would have to re-establish her shop. For financing any additional relocation cost such as transport and shop re-erection she would have to depend on the male friend but she had no doubt that he would be willing to help financially and with labour and service as he had done in the past. According to Figure 11, she would be able to mobilize his help for auto-construction in the re-building of her shop, despite the level of contacts available. (Figure 10).

To establish the ability to pay the regular costs Miss Charles would use her saving allocation, new income transfer from her male friend and profits from her shop. The additional costs associated with down payment, relocation and re-construction of her shop would be paid by from the sale of the existing house or from any potential compensation payment for lost investment.

**The Girard'** willing to pay EC\$172 (15%) of monthly income for a sites and service plot. This would represent great sacrifice in the family welfare because it would involve the dismantling and re-erecting the house which facilitated the income generating activities on which the household depends for its socio-economic survival. In order to pay the regular amounts, according to Table 12, the household would change its expenditure and savings pattern re-allocating its 'su money toward the new payments. Miss Girard explained that the amounts could also come from the shop's profit as she could not cut any other expense. She claimed that she would need to be compensated for the concrete section of her dwelling as this could not be removed. For her this compensation money would help her to re-establish her shop quickly. She would use the cash grant of the sites and service option to pay labour for re-building, transport cost and electricity reconnection. Miss Girard explained that she would not take a loan from the bank because *"you see this debt... it is a burden to*



*me and I don't like burden...".* According to Figure 11, this family will not mobilize any labour assistance because these are not available in close proximity.

For Miss Girard the regular housing payment would be financed from the cash earnings but through a change in income allocation from savings into housing and from shop profit. However to facilitate the initial access occasioned by relocation, it would be necessary to have a larger finance base which for her would mean being compensated for the section of her building which cannot be relocated or the use of the housing improvement grant.

The improvement the Hippolyte' selected would cause them to pay EC\$1046 (47%) of income for a three bed room concrete dwelling. This amount comprised recurrent service payments, recurrent repayments for past housing improvement loan and the new regular repayment. According to Table 12, this amount would be accounted for mainly through changes in household expenditure and saving allocations. They were prepared to allocate the 'su su' amount and portion of their regular bank allocation toward meeting the required regular payments. However there would be a shortfall in the amount of EC\$101 which they assured was small and that they would not have any difficulty in finding it from existing income. The required down payment of EC\$11,900 would have to be paid from a bank loan or from the sale of their existing house. It was indicated also in Chapter 7 that it would also be possible to use part of the profit from the establishment of the planned cake making and floral decorating enterprise once the family establishes this at their new site. As Mrs Hippolyte expressed it ... " *We can either get the deposit from the bank ...we have a little saving there...or we could sell this house...it is in good condition...but with all the money we spend on it I don't believe we will get back that amount if we sell it. It might be difficult to sell it because of the concrete part...we could sell this part because its out of board..."*

Mr Hippolyte however, felt that they should be compensated for the section that cannot be relocated because they had spent so much money building a retaining wall to make the site better. According to him..." *Somebody would have to pay us for the*

*amount of money we spent on this place...I don't mind moving if they will pay us for it...that money could help to pay the deposit..."*

According to Figure 11 they would not mobilize any of their labour resource contact out of preference for hired labour.

For this household then, it would be necessary that they be compensated for the level of investment that went into their present dwelling which in their estimation is now worth EC\$50,000. With this money they would hope to establish their shop. For this household then there was no difficulty in establishing the monthly repayment that would be required. What was of concern was getting the funds to ensure initial housing access *ie.* being able to sell existing housing asset or be compensated where necessary to provide the down payment requirement and or re-establish the dwelling as the case might be.

Miss St Croix was prepared to pay as much as EC\$275 (35%) of monthly income for a core unit requiring a 20% down payment of EC\$1500. In order to finance the increased regular monthly payment, she would have to reorganize her present expenditure and saving patterns. The new amounts would have to be accounted for first before all other expenditure and saving allocation even if it meant that the amounts she normally put in the bank and the credit union were reduced as she indicated in Chapter 7.

She explained that in order to provide the down payment for the core unit option, she would have to borrow the money from the credit union but she did not want to do this because she would have *"two set of money to pay every month"*. She explained that she will be able to get this money from either her special friend, or her brother in the USA, or use her saving in the bank as a last resort. As she expressed it...*"You see for me to be able to pay that amount of money I would have to take it out first from my wages before I do anything else. That way I know I will make the payments. The only thing is that I would have to stop saving...as for the deposit..I have a little money in the Credit Union that could help but I would have to borrow some more...I*

*don't know if I can stand to pay two money. If I have to pay for the house and pay back the credit union that's a lot of money...I would have to ask my mister or my brother for help because I don't want to be paying two money. At least if I get money from my brother I can pay him back when I have the money...he will not rush me for it."*

For Miss St Croix the sources exist for obtaining extra amounts of money to facilitate the down payment required from either new income transfer or from her accumulated saving in the bank. Miss St Croix explained that in moving to these higher levels of housing expenditure it would be necessary for her to discuss the proposal with her special male friend as he was very important to her as he would be the one to help her if she was in any financial difficulty. He has always been involved in her plans because he was helping to support her financially. She would be able to mobilize help from two persons to help her with removal but she would use hired labour to extend the core unit. She would use the existing material from her house to extend the core.

For this household then, regular amount to be paid per month would be financed from the reorganization of her monthly cash income allocations but the larger amount to facilitate down payment would have to be financed from accumulated savings, new income transfer or from a credit union loan if necessary.

**The Edwards'** prepared to pay EC\$865 (53%) of monthly income to meet regular housing payment for a two bedroom concrete house. This amount would include both the repayment of a loan taken for a previous improvement and the recurrent service payments. For them, according to Table 12, the regular monthly payments would have to come from a re-ordering of current expenditure and saving allocations specifically the 'su su' commitment and the allocation to the furniture hire purchase repayment once completed. The interesting perspective on this is that this household in deciding to meet new housing payments were actually looking ahead to the time in the near future when additional funds would be available to be committed to housing payments. However, they explained that if the improvements were to come when hire purchase payments were still being made, they would still pay the amounts but at a

sacrifice *ie.* through borrowing from relatives or the bank to help but more likely it would be from expenditure cut but they were not sure what items could be cut.

As far as the down payment of EC\$10,300 was concerned they would of necessity have to sell their existing house and would also need to be compensated for the cost of the retaining wall as explained in Chapter 7. It is the money from these sources that would also help the household to pay any relocation cost involved. As Mr Edward stated...*"the only thing that bother me is who will pay me for that retaining wall I built?...If i can get money for it that money could be use to pay the deposit. As for that deposit I can't see how we can pay it unless we get to sell this house. I am sure we can get some money for it. That's the only we could pay it because we can't get another loan until we pay off this one. The bank don't even want to give loan to fix up house. You know that the last time I get a loan to fix up the house I had to tell them it was to buy my stereo set? They give money for them things but to help you fix your house...no way...even though I have a little money with them. They want you to have a lot of money before they help you..." I could always tell them am buying a fridge and stove to get the money for the deposit if I can't sell the house..."*

As seen from Figure 11, they will not mobilize any labour contact to assist neither will they engage in any self help activity because of lack of time. For this family then any future housing payments could be accommodated if they came at a time when its debt burden was removed and if they were able to sell existing housing asset as in the case of access to the conventional unit, to provide the level of financial commitment required if not the ability to pay the regular amount would come with sacrifice in the expenditure pattern.

**The King'** were willing to allocate EC\$577 (36%) of total monthly income for a one bedroom concrete dwelling. To facilitate this level of housing payment they claimed that it would be necessary to reduce the amount they would normally devote to bank savings. They would not mind not being able to make this allocation if they were getting to own their plot but this would not be sufficient as can be seen from Table

12. The shortfall would necessitate the re-organization of the entire expenditure and saving pattern. They were sure however, that they would not be able to cut its food bill but they felt that they would be able to manage to make the regular payment from the household' income. The required down payment of EC\$10300 was seen as a real problem because they would not be able to take a loan to facilitate it as they could not afford to pay back a loan and pay the increased regular housing payments at the same time as indicated in Chapter 7. The only possibility was from the sale of their existing house which they valued at EC\$20000. This they felt would provide sufficient money to make the house larger and more comfortable. Without the sale of the house they would be unable to take up this option. According to Figure 11, they would be able to mobilize only three of their labour contacts to extend their dwelling. The opinion of this household have been expressed in Chapter 7.

For this family, it would be necessary to completely reorganize their expenditure and saving pattern to facilitate the regular housing payments and to meet the down payment through sale of the existing house.

### **8.1.3 Group 3: Households for Whom the Main Source of Financing the Regular Payments Would be Special Allocation From Monthly Expenditure and Saving Allocation Without Change in Allocation Pattern.**

In this group are the Jn Baptiste' and Mason'.

**The Jn Baptiste'** expressed a willingness to pay EC\$621 (16%) of income per month for a three bedroom concrete house. This regular payment would be allocated from current income without reorganization of expenditure and savings pattern. Mr Jn Baptiste explained that this would not be difficult but that housing payment would be would be accounted for first and there after all other monthly expenses. According to him...*"That money is not a problem...I know that I will have to take it out first but it will not change how we spend the money now...there is always something left after we make the payments and we buy the monthly grocery...that is no problem I have the little tailoring on the side so that will help..."*

With respect to the down payment of EC\$11,900, Mr Jn Baptiste was prepared to sell lands owned on Gros Islet to get the necessary amount. He explained that he would never take a loan as he was not interested. Alternatively, he indicated that he was also willing to sell his existing house. As He explained it..." *I have some lands in Gros Islet and I can always sell a piece to get the deposit money or I could sell this house. You know I can always sell this land to buy a better place and house but I don't want to move from here. That's why I don't do it... but If we have to move because they want the land I will always sell a piece of that land to help.*"

He explained that he would require compensation for the concreted section of his existing dwelling that could not be removed. With the compensation money he would be able to pay removal costs. For the Jn Baptiste', the ability to pay would be established from existing income and from the sale of land and house.

**Mr Mason** expressed the willingness to pay EC\$242 (28%) monthly income to obtain a core unit. The proposed level of payment would be provided from his income without reorganization of his present expenditure and saving allocation pattern. He was prepared however, to make cuts in his food which he claimed was too high and his recreational expenditure to meet the temporary additional costs associated with relocation. The loan associated with the core option would be used to establish his shop. He would save cost by cutting his own timber from the forest for use in the extension of his core unit and in the construction of his lumber sales shop. He had no doubt that his income could support the new and regular payment especially if he could put up the shop he so much desire.

It can be seen from Figure 11, that Mr mason would be able to mobilize the help of his two friends for the construction of his shop and the extension of his house as he had done in the past. For Mr Mason then, the ability to pay would be established from present levels of income. He would be prepared to cut his food and recreational expenses if necessary to meet additional costs. The ability to pay additional costs would be enhanced by the use of auto-construction labour and by free timber he can obtain from the forest.

#### **8.1.4. Group 4: Households for Whom the Main Source of Financing the Regular Payments will be Provided from a Re-Organisation and Drastic Change in Monthly Expenditure and Saving Pattern.**

The Williams', the only household in this group and at the time of the fieldwork, were planning to build a pit latrine in their yard. They had actually purchased materials valuing EC\$170 for this improvement, from Mr Williams' monthly income of the previous month. They were actually planning to hire labour to build this facility "*in the next few months*" as they explained. They indicated that the hired labour would be paid from monthly income because they did not "*think it would cost much money... and further we don't want to go into the little saving for that...*" as Mr Williams expressed.

They were willing to pay EC\$566 (36%) of their monthly income to get plot ownership elsewhere if they were forced to move, for a one bedroom concrete house but payment would be mainly conditional on their having job security and if they were forced to relocate as a consequence of eviction. The regular payment would be provided from income first by both partners allocation a share of the non-pooled incomes before any other payments are made. This was expressed most profoundly by the family in Chapter 7. According to Table 12, for the required down payment of EC\$9100 would they would need to be able to sell their existing house to be able to afford it as they did not believe they could get that amount of money to borrow from the bank. Further, they would not be able to pay the bank and provide an extra amount to meet the regular housing payments. As Mrs Williams expressed it "one time the 'mister' went to get a loan from "Scotia Bank" and even though we have a little something (money) there, they never give it (the loan) to him... they say his money too small..."

Any other additional costs related to relocation would be financed from expenditure and saving cuts. They were prepared to make sacrifices in food to get ownership of a plot for their old age and retirement as was expressed in Chapter 7. According to

Mrs Williams...*"we prepare to take out the house money first because we know we have to pay it and we want the house because we want the land..."*

The Williams would only mobilize two of their labour contacts if necessary, as can be seen from Figure 11. They would not devote their own time and labour, because they do not have the skill or the time to undertake future housing improvement activities because of the preference for hired labour. From the above it can be seen that any regular and new housing expenditure commitments would be financed from a reorganization of household expenditure and saving allocations. However any down payment would have to be financed from the potential sale of their existing house.

## **8.2 The Variability in the Proportion of Housing Expenditure as a Proportion of Total Monthly Household Income.**

The following calculations were based on housing expenditure as a proportion of the actual monthly income for demonstration purpose only. This was done to show that it is really not the proportion of income that households will be able and willing to pay but rather the demonstrable ability to meet the required costs, as they have shown in Part 1. In the 1990 survey year, six households *ie.* the Charles', Girard', Jn Paul', Williams', James' and Lewis' were engaged in housing improvements. The work involved stock piling of materials for works planned as was the case for the Lewis', James, Jn Paul' and Williams' and actual work in progress for the Charles' and Girard'. These efforts represented between EC\$53 (8%) for the Jn Paul' to EC\$465 (58%) for Miss Girard' of individual monthly income for the month in which the increased payment was incurred. For the Charles' who were paying EC\$785 (43%) of income, the amount consisted of the monthly repayment carried forward in respect of previous housing improvement loan. Except for the Jn Paul', all households were paying in that month more than 25% of income and for four of these the amount was in excess of 30% of income. For the James' and Girard' the amount was 53% and 58% respectively.



When current (1990) housing payment was considered it was found that six households were paying only recurrent housing service payments. For three, regular housing payment comprised regular housing service payments and the repayments of housing improvement loans for improvements recently completed. These households were the Edwards', Hippolyte' and Charles'. These households were able to meet their regular service payments and provide an additional regular amount, toward increased regular housing payments. The remaining seven households were engaged in ad hoc increases in housing payments as they were either purchasing and stock-piling materials for future housing improvements planned, or engaged in the planned improvement activity. For all these households, the new amounts for investment were provided from accumulated savings and from household budget allocation for the period in question.

Column A of Table 14 shows the current housing payments, for all households in the 1990 survey year. According to this table the monthly housing expenditure ranged from EC\$40 (3%) for the James' to EC\$388 (28%) of total monthly incomes for the Edwards'. Only the Edwards and the Charles' were paying 25% or more of income i.e. 28% and 25% of monthly incomes respectively. All other households were paying less than 25% of their individual monthly incomes for housing. This table shows that there is no relationship between the amount of cash income and the amount households were spending on housing. The lowest amount (3%) of income was devoted by the James' who earn EC\$1300 per month. The highest amount (28%) was paid by the Edwards' who earn EC\$1375 per month.

Columns B, of Table 14 outlines the amounts households would be able and willing to pay for housing improvement consequent on relocation. It also shows the types of housing improvement options selected by households which would express their ability and willingness to pay repayment costs inclusive of their existing recurrent housing service payments and any other housing repayment they were making at the time of the survey. These costs demonstrate the exact regular amount household would be required to pay, assuming that there would be no change in the recurrent housing service payments that households were currently paying.

**Table 14. Current and Future Housing Expenditure and Investment Payments as a Proportion of Total Monthly Household Income**

Household Name	Headship structure	Size	No. of children	No. of earners	A		B	
					Current housing service payment/month Amnt	% of inc.	Housing option chosen from scenario Amnt	% of inc.
Edwards	Joint	4	2	2	388 (1)	28	865.46	53
Charles	Female	8	3	1	400 (1)	25	951.46	43
Girard	Female	5	4	1	60	8	172.46	15
Joseph	Joint	3	1	2	90	15	296.63	34
In Paul	Female	9	4	5	40	6	205.30	24
Hippolytes	Joint	4	2	2	445 (1)	23	1046.63	47
St Croix	Female	1	-	1	110	18	275.73	35
In Baptiste	Male	3	1	2	70	4	621.63	34
Kings	Joint	6	4	1	100	8	577.46	36
Williams	Joint	4	2	2	145	12	566.46	36
Greens	Joint	7	3	4	90	11	296.63	26
Mason	Male	1	-	1	36	5	242.63	28
James	Joint	5	3	2	40	3	517.46	36
Lewis	Male	7	3	4	95	8	572.46	39
Thomas	Male	11	8	3	100	13	521.83	55
Adonis	Female	6	5	1	40	6	246.63	26

**Notes:**

A Represents the proportion of income households currently pay for housing services per month (income represents total actual cash income received).

(1) Cost includes C(n)1 and C(1)

Column B shows then, that fifteen households were willing to move to a higher level of housing payment representing more than 25% of their monthly incomes. The exception was the Girard' for whom the amount represented 15% of current monthly income, due to their small recurrent housing service payment. The amounts representing this higher level of payments ranged from EC\$172.33 (15%) for the Girard' to EC\$521.83 (55%) of income for the Thomas'. According to Column B for the King', Edwards', Jn Baptiste', Lewis', Charles', Hippolyte', James' and Williams, these options represented a self contained concrete dwelling. For all other households the improvements were non-conventional ie. sites and services plot or a core unit plot option.

### **8.3 SUMMARY DISCUSSION AND IMPLICATIONS OF FINDINGS**

It is important for this research to establish the common patterns in the establishment of the ability to pay housing costs. As such, the discussion in this section is related to Tables 12 and 13 which are indicative of those common patterns with respect to both the establishment of the regular repayments and the additional costs respectively.

#### **8.3.1 The Mobilization of Resources To Establish the Ability To Pay for Future Housing Improvement**

From the housing improvement scenarios two aspects of monetary and tangible non-monetary resource mobilization and use were determined. Firstly, the extra amount which would form part of regular housing repayment for improvement received, was determined along with the sources from which the amount would be derived. Secondly, the sources for any additional amounts that would be necessary to ensure access such as transport costs, demolition and re-erection costs, down payment etc. Some households have indicated the use of more than one source. The researcher determined separately the mobilization and use of monetary and tangible non-monetary resources and the mobilization and use of auto-construction labour.

**1) The Mobilization and Use of Monetary and Tangible Non-monetary Resources in the Establishing the Ability to Pay for Future Housing Improvement.**

**a) Proposed Sources for Financing Regular Housing Payments**

According to Table 12, the most important source for financing the extra regular amounts c(n)1, would<sup>b</sup> from the re-organization of expenditure and saving allocation priority. For this seven households were willing to allocate their 'su su' allocation while seven households were prepared to allocate their regular bank allocation. Five households were prepared to use the extra income that would be available once their current hire purchase payments were completed. This implies that there is income that could be available for housing payment. The use of the saving where it existed was therefore, the most important change within this category and that it is available is indicative of the saving propensity among these households and the potential for the acquisition of pre-housing payment monetary resources. The reasons given for these savings relate to the need to have resources available for sickness, death, old age security and for some housing improvement activities as can be seen from Table 15, Appendix 1. This is important because of the widely held view that low-income households do not have the ability to save but these households show otherwise. The use of these sources reveal the importance of the strength of intrahousehold resource capacity at this stage when the cost of housing improvement is substantive. The second most important sources were the use of new and increased income transfers. The implication of this is that in any housing intervention appropriate mechanisms would be required to take account of these sources in establishing the ability to pay. New and increased secondary income support and the contribution from profit of home based productive enterprises ,real and potential were the third most important sources given by four households respectively. The reorganization of total expenditure and saving schedule with change in the order of expenditure priority through cuts was not important, being indicated by two households. For those who could make cuts, the areas likely to be cut were food and recreation expense and they were single person households. The fact that only two households could afford to make

expenditure cut can be explained by the fact that the items of household expenses are basic items required for daily survival i.e. payment for food, water and electricity, gas for cooking etc. Table 16 in Appendix 1 shows that these basic items account for more than 50% of households' monthly expenditure for all households with food accounting for more than 30% of the monthly expenditure in all cases. The payment allocation from income without any change was indicated by two households. The fact that only two households could afford to pay from income imply the general incapacity of these incomes to meet the level of cost involve. These are households with incomes among the highest for the group.

When households were examined based on what they indicated would be the main source that they would use, it was found that four groups of households could be identified. Firstly, there were those for whom the most important source was the use of new and increased income transfers and secondary income support. For those households the interhousehold and intrahousehold monetary resource capacity would be important for establishing the ability to pay the regular amount. These were the Lewis', Charles', St Croix', Green', Adonis', and Jn Paul' for whom these sources have been important in past housing improvement payments. Except for the Charles', these households are also very dependent on these sources for their socio-economic viability. According to Table 9, Appendix 1, this source accounts for between 25 and 52% of total monthly household income for these households. Secondly, there were those for whom reorganization and use of saving allocation was the main source. All households excepting the Williams', Green' and Lewis' indicated this source. The allocation would be made from a reduction or re-allocation of bank savings and /or re-allocation of the informal 'su-su' amounts and the home-based saving. These are the households who have actually indicated that they are saving according to Table 9, Appendix 1. Thirdly, there were those for whom the main source would be the special allocation from current income without any change to the structure of expenditure and saving allocation schedule. These were the Jn Baptiste' and Mason'. Fourthly, there were those for whom housing payment would be made mainly from the reorganization and of expenditure and savings pattern and a change in the order

of priority. This would mean paying for housing as the most important priority. Only the Williams' fell in this category.

#### **b) Proposed Sources for Meeting the Additional Costs c(n)2, associated with the Improvements**

An examination of the sources for the additional payments revealed the households' awareness of the need for a level of payment commitment which was substantive and which could not be accommodated from their existing level of monthly incomes. According to Table 13, the most important source was the sale of tangible non-monetary resources.i.e. mainly the existing house or parts thereof and for a few households the sale of land. This source was indicated by eleven households, of whom three had land in addition to the house. An examination of Table 10, Appendix 1, shows that the estimated value of the squatter house by the households themselves, compares favourably with the professional appraisal of those same dwellings. The table shows that these houses can be sold in any relocation exercise to provide money to meet the additional costs that households would face. In the context of St Lucia where a market exist for second hand timber dwellings, this source of finance is a real possibility. In addition households are prepared to re-use the materials of these houses which also imply a saving in the cost of materials. The fact that these houses are built so they can be easily dismantled and re-erected and that households have indicated a willingness to do this, means also that any relocation exercise should not lead to a high level of relocation cost for them. The implication of this trend in second hand housing market of timber houses and the possibility of re-using the house, is that in any housing intervention involving relocation it might be necessary to allow time for the sale of this resource in order that households may raise the required cash to meet down payment costs and other additional pre-payments. The same can be stated for those with land or any other tangible non-monetary resources that could be used for housing payment to establish the ability to pay.

The second most important source as indicated by seven households was the use of monetary gifts in the form of new and increased income transfers and any grants arising from the option. These are the Lewis', Jn Paul', Adonis', Thomas', Charles', Green' and St. Croix'. Except for the Thomas', these are the same households who are dependent on this source. This was followed by monetary loans to be used by five households either from banks, friends and relatives, credit union or cash loans as part of the improvement option. These were the Girard', St Croix', Mason', Adonis', who would accept the loan by virtue of it being part of the housing improvement option and who have indicated that they do not want loans otherwise because they would not be able to repay them. These are also the households with the low levels of income for the group i.e. all earn less than the average income of EC\$974. The Charles', Hippolyte' and Edwards' who have used it on their own initiative in the past as their incomes can support it. Most people then, would use the loan arising from the housing improvement option rather than to initiate loans from other sources.

The other sources of payment indicated such as the potential compensation payment for lost investment was indicated by five households i.e. the Hippolyte', Jn Baptiste', Charles', Girard' and Edwards who have built part of their dwelling from reinforced concrete. They have revealed the use of such payments for meeting down payments and relocation costs. The potential use of this source for meeting housing payments is questionable, particularly as land occupation is illegal. Such possibility would have to be a decision of the political directorate.

The accumulated savings did not appear significant in the aggregate as likely sources. This appears to relate to the fact that the accumulation of savings takes a long time as was indicated in past improvements undertaken by most of these households. The fact that in the eventuality of a relocation exercise the household might need to remove as a matter of expediency and as such will not be able to accumulate resources before the event. While a few households indicated that they would require compensation for lost investment only three actually indicated the use of this source. That more have not indicated the use of this source is indicative of the fact that they knew it was a risk building on lands not owned by them. In fact a few households have

indicated this. It was found that the use of tangible non-monetary resources were not popular sources because few households had any asset other than their existing house to be incorporated and also because the monetary capacity could not support loan repayments and facilitate improvement at the same time.

What was important was the fact that to establish the ability to pay, all households were prepared to finance their improvement firstly from their own intra-household resource capacity and only where this would prove difficult would they mobilize inter-household monetary support. What is clear also, is that as the cost of housing improvement options become more substantial households tend to look beyond their own existing intrahousehold monetary and tangible resource status to the creation of additional monetary resource capacity through new and improved intrahousehold secondary income support and to the interhousehold income transfers which they can mobilize. It is also clear from the sources of payment, as was in the past, that the household income must be translated to other monetary forms such as accumulated savings or converted into tangible non-monetary resources in the form of building materials that are stockpiled before the ability to pay for housing can be established. The household income in the form in which it is received is only relevant in recurrent housing and small scale improvement payments. This also confirms that for low-income households when they think in terms of their future improvement, they appear to view it in the longer term. They also seem to realize that what they desire is more costly and cannot be achieved purely from cash income allocation. For example, the ownership of land to ensure tenure security appear a longer term goal than that of repainting the house or installing a small kitchen extension. Because of this apparent longer term costly improvements, the sources of payment chosen to are of necessity more substantial and secure and more wide ranging.e.g.sale of assets, loans and increases in secondary income support and transfers.



## 2) **The Mobilization of Intrahousehold and Interhousehold Labour for Auto-construction**

Figure 10 shows the perceived level for labour and time resources mobilization by households with respect to the ability and willingness to pay for housing. However, according to Figure 11, households would mobilise fewer inter-household labour and time resources toward housing improvement than the individual levels perceived in Figure 10. Figure 11 shows that nine households would be able to mobilize at least one very dependant relative or friend. Of this number, all eleven households would be able to mobilize at least one very dependant relative or friend. For all these households this figure did not exceed two individuals. This can partly be explained by the lack of preference for this type of labour, the unavailability of skill and time and the choice of the improvement option not requiring the use of this type of labour. The fact that choice of the option might actually obviate the need to use this source of labour implies an implicit preference among households for alternative source . This choice could also relate to the lack of skill and time in the first place.

The gap between the actual and perceived levels of household contacts and the actual numbers household would mobilize, is therefore related to various reasons. For households preferring hired labour the most important reason was given as the unavailability of time on the part of the contacts. Other reasons given were the lack of skills and the opportunity cost to the contacts in terms of time. The Green's who have used a combination of labour sources in the past, will use intrahousehold labour solely because their labour contacts do not have the time to help. The Green's and Thomas' are typical of this group. For the households using hired labour the gap is not an indicator of the inability to mobilize this type of labour but rather a matter of choice as the cases of the Hippolyte' and Jn Baptiste' show even with many contacts available.

It is important to note that with the exception of Girard' and St Croix' households, all others indicating the use of hired labour was a deliberate choice and they appeared to have the monetary resource capacity to pay for hired labour. With the exception

of these two households, the other households earn between EC\$1,200 and EC\$1,650 in total monthly income. Their houses are of relatively good quality also and they all have at least two members with stable jobs. Miss Girard and Miss St Croix have no building skills and no labour contact to help. Therefore their use of hired labour would be the result of the absence of an alternative. The preference of hired labour might also relate to the technical nature of the improvement or in unavailability of the labour time to build as indicated by the reasons given earlier in Chapter 7 and in the cases presented in this chapter.

What the findings indicate is that existing intrahousehold and inter-household labour and time networks are developed for various household survival strategies and the importance of these contacts in housing improvement strategies should not be presumed. The numbers that make up the network will not be indicative of their potential importance in establishing the ability and willingness to pay for housing for any household. For this study group few households will use them to save cost or in actual building activity because of the lack technical skill among them, time availability and the preference for other type of labour.

### **3) Implication of the Variability of the Proportion allocated to Housing Payments**

The findings presented on the variability of the proportion of income allocated to housing payment show that the amounts households were paying and were willing to pay for housing are variable. Further, these amounts were with the exception of current expenditure, in most cases, more than the current rule of thumb assumed affordability rate of 25% of income. The fact that the amounts were above the assumed rates and that the households have shown in section 1 how they would establish the ability to pay both the regular repayments and the additional costs associated, shows that they do not think in terms of housing expenditure as a proportion or percentage of income to make housing payments. Rather, they think in terms of how much they can afford to pay from their existing monetary and non-monetary resources. What is important to determine is how households will be able

to derive the amounts they say they are able and willing to pay and still remain viable units, irrespective of the percentage of income that will describe that particular amount. For the issue should not be whether they pay a particular percentage of income or not but how they will, within their resource capacity, facilitate the amount they claim they can pay with respect to what resources, their value and stability. As was shown, previously in the case histories, the move to higher levels of resource payments among households not only show higher levels than the assumed affordability rate of 25% of income, but confirm also that the household income as a resource, is but one of the resources used to establish the ability to pay. This further invalidates the emphasis in current practice of limiting the determination of housing affordability to the relationship between housing cost and wage income of the household head.

#### **4) Implications of the Findings with Respect to Current Housing Solutions Offered by the Urban Development Corporation of St Lucia**

Exactly what is the implication of these findings with respect to the view on the ability and the willingness to pay for housing among low-income households in St Lucia? It has been shown in Chapter 4 that urban low-income households in St Lucia cannot afford to pay for conventional housing unit and that the unit affordable is generally less the 200 sq.ft. Robotham (1984) found that the lowest 40% of the population could only afford to pay EC\$21 - 90 per month for a house costing EC\$2600 and EC\$11,000. The findings obtained from this case study group are that these households earning less than EC\$1600 per month in total household income are able and willing to pay more than the amount claimed by Robotham and this has been demonstrated by the findings on the mobilization and use of resources in the creation of the required housing payments for both the amounts they currently pay and for all other regular and additional payments. These same households show that they are able and willing to pay between EC\$206 and EC\$601 in additional regular housing payments for their desired improvement options. In this research all these households have demonstrated how these extra amounts will be derived. When each

individual household's recurrent housing expenditures are added to the extra amounts required for realizing the new housing improvements the various individual amounts are in excess of what Robotham (Ibid 1984) cited as the amounts low-income household in urban St Lucia can afford to pay for the housing product.

According to Table 8, for nine households the housing improvement "product" they have indicated a willingness to pay for relate to conventional provisions of one, two or three bedrooms units (at 1990 prices) and developed in minimum plot size of 2,500 sq.ft. These households are the Edwards', Charles', Hippolyte', Jn Baptiste', King', Williams', Thomas', Lewis' and James'. The price of these units reflects however a reduction in standards with respect to size and material finish and represent only a basic housing unit with basic finishes (see Appendix 6). The housing repayments required for such options excluding recurrent housing payments have been estimated at EC\$551 per month for the 3 bedroom, EC\$477 per month for the 2 bedroom and EC\$421 per month for the one bedroom unit. These units, according to Appendix 6 reflect sizes of 588 sq.ft., 484 sq.ft. and 434 sq.ft. respectively. These households, excepting the Thomas', receive monthly incomes of between EC\$1200 and EC\$1650 per month. The other households earning less than EC\$1200 per month have demonstrated a willingness to pay for sites and services and core unit options. The housing repayment for these options excluding recurrent housing payments have been calculated at EC\$206 for a 100 sq. ft core unit option without down payment of 20%, or EC\$165 with down payment; the repayment amount per month for a sites and service plot has been calculated at EC\$112 per month. These non-conventional options can be afforded as demonstrated by households ability and willingness to pay. All these households would be able to afford at least one of the current upgraded plots and sites and service plots now being developed by the UDC. As it was shown in Chapter 4, these options range between EC\$154, EC\$169 and EC\$225 per month (at EC\$1.25, EC\$1.50 or EC\$2.00 per sq.ft.) at 10% down payment, 10% interest and a repayment period of 2 years.

Since these households have their own dwellings which are largely moveable as they are constructed from timber, the possibility of relocation to a UDC serviced plot and

affording it, exists for the majority. It can also be assumed that if these households were to be granted tenure security in the upgrading of their plots, they would be willing to pay at least the minimum EC\$154 per month based on the minimum cost per sq.ft for an option by the UDC. What the findings confirm however is that for this case study group those earning less than EC\$1600 per month can only afford non-conventional housing improvement and are able and willing to pay for it based on existing resource capacity and the ability to mobilize and use that resource capacity.

## CONCLUSION

The evident variability in the proposed sources to be used, the extent of the costs of regular repayments and other additional costs and the demonstrated ability of households to meet these payments, have invalidated the affordability assumption that households can only pay 25-30% of income for housing and the emphasis in current practice of linking affordability to income rather than their resource capacity. The findings support the proposition that the ability to pay can be established if the household is considered as a resource system. Further, the evidence on the mobilization and use of resources to presented in the cases and summary above, supports the proposed hypotheses that: the ability to pay will be established from 1) improved intrahousehold made possible by more than one earning member; improved intrahousehold and interhousehold sources including the accumulation of savings and tangible non-monetary resources; the re-organization of expenditure and savings pattern; the sale of tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. 2) the mobilization and use of resources through the process of negotiation, of any combination of the following sources arising from the negotiation between household members and interhousehold contacts.i.e. the accumulation of savings and tangible non-monetary resources; improved income generating activities and/or the stable and more substantial intrahousehold wage income capacity and new and improved income transfers. These sources will be used to meet c(n) and c(r) payments; 3) regular repayments associated

with  $c(n)1$  and  $c(r)$  costs will be established from the existing and new regular sources that are negotiated. The additional costs  $c(n)2$ , will be met from any combination of, the reorganization of intrahousehold spending and saving pattern, any new and increase secondary incomes and income transfers that can be negotiated, sale of tangible non-monetary resources and available and new income generating activities, material and cash loans that the household is able to agree to. 4) resources which will be mobilized through negotiation without conflict, because of the desire on the part of intrahousehold sources to remove residential discomfort household members feel.

This ability to mobilize intrahousehold and interhousehold resources appear to relate to the development of these resources over time. These findings are in contrast to the earlier stages of improvements that households have undertaken on their own to date. These self-initiated improvements appear to be predicated mainly on the intrahousehold capacity at a time when improvement cost were lower. The evidence shows, however, that in these earlier improvement stages that the cash income was not the only monetary source of financing housing improvements but rather the overall intrahousehold monetary resource capacity considered. Monetary resources rather than non-monetary ones were used because of the unavailability of these sources. Even in the more advanced stages the acquisition of non-monetary resources has not assumed any importance except in the case of the existing dwelling. This is perhaps due to the limitation in income levels. The estimated value of the existing house as a non-monetary resource in these more advanced stages show the level of monetary resource that have been incorporated and increased in value over several years.

But whether the housing improvements are initiated by the household or not, as long as they involve long term monetary resource commitment they appear to be predicated mainly on the economic consideration, as households need to be assured that they will have the capacity to support these payments.

With respect to the need for congruency of the housing improvement to households' locational and physical preferences for housing, the findings show that there is a link between locations of housing options and employment characteristics of households. The ability and willingness to pay for housing is therefore predicated on this factor. The need for new and increased income transfers underlined the importance of income transfers in the socio-economic livelihood of some low-income households and as such it is indicative of the need for policy makers to include it in any determination of the ability and the willingness to pay for new housing projects.

This chapter has shown that households were generally willing to pay for future housing improvements which were congruent with their future improvement preferences and/or the maintenance and/or improvement in monetary resource capacity to be able to maintain housing payment. Some households were prepared to trade off their priority improvement preferences to pay for housing that would ensure security of land tenure despite the inadequacy in space and locational characteristics. With past improvements initiated by the household, the cost of housing payments could be scheduled to fit availability of resources, and so could be facilitated from intrahousehold capacity. In the case of these future improvements, by contrast, payments would be scheduled, timely and substantial. As such they would be outside the control of the household with respect to the timing of payments. The fact that more households were prepared to use their interhousehold resource capacity than in past housing improvements is the consequence of the higher costs involved in these improvement options and the recognition that existing limitations in intrahousehold capacity would not provide the level of housing resource outlay needed to pay for these improvements. These findings suggest that the interhousehold monetary resource capacity becomes important for housing payments for households only when housing costs cannot be met from intrahousehold sources. In some instances this necessitates consultation and discussion among adult earning household members and/or relatives and friends outside as was revealed by some households. Though the extent of negotiation over resource use were not substantively supported by the evidence of the findings, the available evidence from a few households remain relevant and require to be elucidated. They show that household

members tend to discuss among members or interhousehold contacts on whom they are dependent prior to housing payment. However, the discussion and negotiation that take place do not appear to be out of conflict, but appears to relate to the need to be practical, given resource constraints and distribution. For example, discussions appear to take place because of the level of economic dependence on inter-household income transfers and the significance of secondary income support sources within the household. The findings show that five households i.e. the Lewis', Jn Paul', Thomas', Charles', and St Croix indicated the need for consultation and discussion of housing payment with intrahousehold and interhousehold sources. This is due to the level of dependence of these households on the monetary contribution of these persons in the socio-economic welfare of the household. Therefore it is understandable that the level of dependence will necessitate the need for consultation in housing payment decisions. For Charles' Lewis' and St Croix' the decision to pay has to be made in consultation with their special male friends. It has been shown that for these households the contribution to household income from these friends account for 25% and 52% of total monthly income respectively. For the Lewis' the contribution from these sources account for 66% of household income. For Miss Jn Pauls household all adult earning members excepting her special live-in friend contribute to the decision making process. As she said of him in Chapter 7... "*...he is very mean...and he might say "yes" to something now and later change his mind...is me and the children alone, you see right now I don't even want to stay with him anymore...he is not good..I don't want him in my business...*" This comment implies an internal conflict within this household between the spouses. This evidence from these households show that this aspect might be an important consideration in the establishment of the ability and willingness to pay for housing and could be further explored in future research exercises.

The following chapter provides a summary conclusion of the main findings of this research in respect of the common patterns evidenced in the establishment of the ability and willingness to pay for housing among case study households which could form the basis for any quantitative determination of affordability. It also outlines the areas for future research work in this field.



## CHAPTER 9

### SUMMARY AND CONCLUDING REMARKS

#### 9.0 BACKGROUND

This research set out to find answers to the main question viz: **"how is the ability and willingness to pay established in resource terms so as to describe the affordability of housing at a specific conjuncture?"** The related secondary questions were given as 1) is there a preference for specific housing improvement attributes among low income households that determines the willingness to pay at a specific conjuncture?. If so, what is the pattern in the preference for such attributes?; 2) when and what socio-demographic changes in the household will influence the willingness to pay for housing?; 3) how does the availability and distribution of household' resources influence the ability and willingness to pay for housing?; 4) how and which resources will be mobilized and used to establish the ability to pay?. The main proposition the research sought supporting evidence for is given as: **For low income households, the ability and willingness to pay for housing at any conjuncture, can be established when the household is considered as a resource system. The household will be able and willing to pay for housing from its resource capacity when that housing is congruent to the acceptable minimum standard preferred at specific conjuncture to remove residential dissatisfaction felt with the existing level of housing consumption; when either its current social, demographic or dwelling attributes result in residential dissatisfaction; and when the household is able to mobilize and use available resources to pay for such housing.**

In order to explore these questions and find support for the main proposition, the household was assumed to be a resource system. It was proposed that the household would allocate resources for housing improvement payment based on a staged improvement process which would take the household through four main stages from a first initial settlement to a fourth stage of sustained consumption as outlined in Chapter 3.

The research was mainly qualitative and largely exploratory and was designed to find answers to the main question and proposition by exploring the housing development experiences of a selected number of households, in owner occupancy dwellings, in the urban squatter settlement of Faux au Chaud, Castries, St Lucia. It traced their past housing improvement histories and explored their future housing affordability decisions with respect to future housing improvement scenarios presented to them.

In order to find these answers to the main research question and proposition, four processes were proposed for investigation viz;- 1) The Changing Housing Improvement Preferences in the Willingness to Pay; 2) The Impact of Changing Socio-demographic Characteristics in the Willingness to Pay; 3) The Development of the Resource Capacity in the Ability and the Willingness to Pay; 4) The Mobilization and Use of Resources in Establishing the Ability to Pay.

The four processes were examined for each stage of housing improvement completed and for the future improvements selected from improvement scenarios. It should be noted here that in Chapters 5-8 the research information was presented in the form of a description and implications of the findings pertaining to each stage and the four processes giving rise to these stages of the housing development process completed and desired for the future. Consequently, this chapter will not provide a detailed conclusion relating to these chapters and their respective findings. Rather, it will briefly outline the main findings, indicate the extent to which proposed hypotheses were supported, and the implications. The areas of limitation of this research have been outlined in Chapter 1 and therefore will not be repeated here.

Chapters 2 and 3 provided, respectively, a critical review of existing literature relating to the subject of the research and the theoretical framework for situating the empirical exercise and a brief description of the research methodology. Chapter 2 shows that the issue of affordability in low-cost housing in developing countries relates to the inability to establish levels of affordability among low-income households for housing designed based on the concept of affordability. This inability stems partly from issues relating to the definition and measurement of housing cost and the income to pay that cost; partly from assumptions regarding the wealthstatus of low-income households; the eligibility

criteria for access to housing designed on the concept of affordability and partly from the absence of an understanding of the impact of socio-demographic changes in housing dynamics among low-income households as this relates to the establishment of the ability and willingness to pay for housing. Designers and producers of low-cost housing need to have an understanding of when and how low-income households are able and willing to pay for housing so that policies can be better informed and programmes appropriately tailored to the needs of such households. This then was the *raison d'être* for this research.

In Chapter 3 the theoretical propositions were presented. The concepts to be used were described and the processes of enquiry and related questions and hypotheses outlined. It was proposed that households will move through four stages of housing development viz: from an initial settlement stage, to a service incorporation stage, to a stage of functional diversification and finally to a stage of consolidated development. These stages were devised as a methodological framework for understanding the housing improvement decisions households make. It was proposed that these stages describe the acceptable minimum standard of housing at the specific conjuncture; that the ability and willingness to pay for this housing would depend on the interactive influences of the four processes operating at the level of the household which would establish the need for the improvement at any point in time and set the limitations and possibilities for action to realise it. This chapter therefore proposed that the household be viewed as a resource system in order to understand how levels of ability and willingness to pay for housing are established by low-income households.

Chapter 4 provided a description of the physical and socio-economic context of the Island of St Lucia and the Faux au Chaud case study community. It provided an overview of housing policy, programmes and access to housing among low income households since 1974, showing that these households have limited access to the current formal sector housing finance and programmes. It also shows how the issue of affordability in low cost housing has been posed in this context, revealing that low income households cannot afford any of the current housing solutions and that there is a gap between policy intent and project outcome with respect to the provision of housing solution for low income households. Finally it introduced the cases for an in-depth survey.

The remaining chapters examined the way in which case study households established and will establish their ability and willingness to pay for housing through the stages of improvements completed and for the future improvement preferences. The findings on this will be presented below for each of the processes of enquiry as these relate to either the ability to pay or the willingness to pay or both perspectives taken together. With respect to these findings it was shown that all households have completed at least two stages in the housing improvement process.

### **9.1. Process 1 : The Changing Housing Improvement Preferences in the Willingness to Pay.**

This process was linked to the secondary question viz:- "is there a preference for specific housing improvement attributes among low income households that determines the willingness to pay at specific conjuncture?. If so, what is the pattern in the preference for such attributes?". It sought to establish what was the preference for housing improvement attributes among households for housing improvements completed and desired for the future, since the research assumed a staged process in the housing development process. These preferences were outlined in Chapters 5-8. They gave rise to three groups of acceptable minimum standard of shelter in the first stage. Firstly, a basic one room timber dwelling without services and facilities ; secondly a one or two room timber dwelling with electricity or electricity and water services and thirdly, a one or two room timber dwelling with electricity or electricity and water and either a timber kitchen or pit latrine. The willingness to pay for a dwelling with more than the basic expected features was consequent on the resource capacity of the family. It was also due to the need for space improvement among households who had already established their own independent and viable unit. For these families the existing space had become too small as a consequence of changes in household demographic attributes. Space improvement to establish a dwelling or increase in the quantity consumed was the main attribute preferred. Four of the sixteen families actually confirmed the expectation of the proposed first stage as outlined in Chapter 3. This first stage was followed by improvement or incorporation of electricity or electricity and water services for the four families that passed through the features typical of the proposed first stage, thus confirming the proposed features of this second stage. However the improvement features of the other households represented a

variation in the expected preferences. These households improved the quantity and function of living space as well as toilet and/or kitchen facilities and in one instance space for improving income generating activity. These space improvements also commenced the process of functional specification of the space use, which was expected in the third stage of improvement. The major influence in the improvement of dwelling space related to the improvement in the tangible non-monetary resources through the acquisition of furniture and appliances. This highlighted the inadequacy of space which in turn adversely affected the existing socio-demographic attributes, causing residential dissatisfaction.

A third stage followed for half the families, which was dominated by the need for space improvement to specify the functional uses of the dwelling. In this stage the process of dwelling material quality change commenced. The functional specification of space and the commencement of improvement in wall material quality were expected features. However, the types of space incorporated were different from those expected. Rather than the incorporation of the kitchen, there were also toilet, living space and shop extensions. Finally, for future improvement preferences which were taken to mean the requirements for a third and fourth stage based on what the households indicated was their most desired future improvement preferences, the need for security of land tenure through plot ownership and improvement in space and material quality predominated. The willingness to pay for future improvements which might be externally initiated as evidenced in Chapter 7, was predicated on the congruency of those improvements to the attributes preferred. However, there was a willingness to pay for those improvements where they were not congruent to the priority preference order in the case where tenure security would be obtained. This trade-off was justified on the grounds that with tenure security other improvements could be provided later, but without it the improvement actions of the household were limited.

The variations observed in the expectations of the proposed first, second and third stages completed and desired for the future, imply the heterogeneity in preferences and resource capacity among low-income households. It cannot then be assumed that the acceptable minimum standard of shelter households will be willing to pay for will be similar. Since preferences are variable, standardization in features of formal intervention measures will

mean that the preferences for certain acceptable minimum standards households are willing and able to pay for will not be satisfied. The implication is that mechanisms are required to identify the preferences of households at specific conjunctures before measures are introduced so that these can be designed in congruency with households' preferences.

It can be seen therefore that based on the order of attributes required throughout the improvement stages completed and desired future improvements is indicative of the acceptable minimum standard of housing provision or housing norm at specific conjuncture. The ability to incorporate more than one improvement was a function of the capability the household's individual resource capacity. This confirms that it will be necessary that in any housing intervention, cognizance must be taken of the improvement preferences of households.

These findings in respect of the above process, support the aspect of the proposed thesis that states that " the household will be able and willing to pay for housing from its resource capacity when that housing is congruent to the acceptable minimum standard preferred at specific conjuncture to remove residential dissatisfaction felt with the existing level of housing consumption" . However, there is a need for further research in similar contexts in order to generalize these findings.

## **9.2 Process 2 : The Changing Socio-demographic Characteristics in the willingness to Pay**

This process was linked to the secondary question which asked " when and what socio-demographic changes in the household will influence the willingness to pay for housing?". In exploring this process it was shown that these low income households were willing to pay for housing as a consequence of the exigencies in existing housing conditions relating to inadequate indoor space and services level, deterioration in material quality of the dwelling and overcrowding which gave rise to residential dissatisfaction. They were also willing to pay as a consequence of the impact of adverse dwelling characteristics on household's socio-demographic wellbeing. It was also found that changes in socio-demographic status resulting from conflicts in the supporting household,

change in composition resulting in new household formation or increases in the size of the household of already established households also gave rise to the willingness to pay for housing.

In Chapter 5 it was shown that the willingness to pay in the initial movement to the first stage related mainly to two factors. These were firstly, demographic changes resulting in increases in household size, composition and structure and/or the result of new household formation initiating the need for new or large space which could not be provided in the original dwelling. Secondly, conflict over space between household members as a result of overcrowding or conflictual interpersonal relationships between members particularly spouses, within the original supporting household also gave rise to the willingness to pay for housing. In this stage the dwelling constructed or acquired was basic. However a few households are able to incorporate infrastructural services and/or ancillary facilities. The ability to incorporate services and /or ancilliary facilities appear to have been dependent on the level od development of the monetary resource capacity of the household.

In the second stage, as presented in Chapter 5, housing improvement related mainly to the incorporation of services and ancillary facilities and the increase in indoor space. It was found that the resource capacity of the household improved in this stage as exemplified by the acquisition of tangible non-monetary resources, improvement in income earning capacity. The willingness to pay for these improvements were related to this fact. In a few instances the willingness to pay for an increase in indoor space was related to its utilization for income earning activities to improve resource capacity. This confirms the resource accumulation tendency of this stage as described in the conceptual framework of Chapter 3.

For those completing a third stage, or had improvements in progress at the time of the research, the willingness to pay related to the need for the incorporation of toilet and kitchen facilities as a consequence of continued accumulation of resources and/or the exigencies of the existing housing conditions which precipitated the need to incorporate these facilities.

All households indicated a willingness to pay for future housing improvements which would facilitate firstly the security of land tenure. This was followed by the need for increase in indoor space either in situ through upgrading or elsewhere. However, this willingness to pay was conditional on other factors. These other factors related mainly to the ability to maintain, improve and in a few cases create the monetary resource capacity to sustain the ability to pay both the regular amounts,  $(c(n)1) + c(r)$ , and the additional expenditure and investment amounts,  $(c(n)2)$ , that might be required. A few households have shown that they would be willing to pay for these future housing improvements only if they are forced to do so by the state or if they would be compensated for the level of investment undertaken on their dwellings to date. These latter factors show the social significance and attachment to the area and also the importance of the dwelling as a resource.

The implication of these findings on Processes 1 and 2, for housing policy and program elaboration is that given the level of housing development, any intervention measure will of necessity need to take cognizance of the level of development and the current improvement preferences i.e., the stage of improvement attained and the preference structure for attributes desired appears to be indicative of the nature of the improvement they will be willing to pay for at the time of intervention. This is to ensure that measures reflect what the household is willing to pay for at the specific conjuncture. e.g they cannot be expected to pay for a new core unit if what they want is financial assistance to improve the existing material quality or level of services of their dwelling. In the present context of this research all households indicated that their current improvement preference is to obtain land tenure security in situ, implying that a measure aimed at community upgrading and land tenure rationalization would be acceptable to them. However, as Chapter 7 revealed, some of these same households will not want to be relocated as a consequence of these same measures, given the level of housing development achieved. This is so unless they are compensated for the level of investment they have put into their dwelling which they might lose in a relocation exercise.

Further, the findings in respect of Process 1 and the initial stage of improvement specifically show that formal policies and programmes would of necessity need to be addressed to earning adult household members rather than household as a unifying entity



since there might be individual within who might be wishing to form their own households. These same individuals will not want to contribute toward housing payment for the supporting household if they are saving for their own housing or are desiring to move out of the existing one. The individuals in a household experiencing conflicts in interpersonal relationships might not be willing to pay for housing improvement in that household but might be willing to pay for it to establish a separate dwelling.

The findings support the aspect of the proposed thesis which states that the household will be able and willing to pay "when either its current socio-demographic or housing attributes result in residential dissatisfaction"

### **9.3 Process 3 : The Development of the Resource Capacity in the Ability to Pay and Willingness to Pay for Housing.**

This process is linked to the question " how does the availability and distribution of household' resources influence the ability and willingness to pay for housing?". The findings show that the resource capacity improved over the housing improvement stages completed at the time of this research. With respect to the monetary capacity, this was facilitated by the accumulation of savings, increase in the number of earners in some instances and for a few families, improvement in home-based income generating activities. The evidence in the saving propensity among households revealed that even where incomes are low, households can save if there is a real need to do this. It also shows that the potential exist for the pre-housing improvement resource accumulation. This potential was confirmed by the acquisition of tangible non-monetary resources in the form of furniture and appliances by many families.

The extent of the development of the level of labour time contact over the past stages of improvement was not determined. However, at the time of the research, households had developed these contacts as seen from Figure 10. In general, the numbers and types of resources among families have been limited to the interhousehold and intrahousehold labour time, the savings, and wage income of intrahousehold sources, the income transfers for a few households , in a few instances land resources and the existing

dwelling which is the main non-monetary resource of value for all families, as can be seen from Table 10, Appendix 1.

#### **9.4 Process 4 : The Mobilization and use of Resources in Establishing the Ability to Pay**

This process was linked to the question, "how and which resources will be mobilized and used to establish the ability to pay?". The findings remain unclear in respect of the extent of conflict and level of negotiation over the use of resources controlled by individuals in the resource system in past improvements. This is in contrast to the assumption of this research. However, the evidence from the discussions of future improvements indicated that there is consensus in housing decisions. This would seem to suggest that perhaps housing is one of those expenditure and investment items around which otherwise conflicting household members will unite in the interest of the overall good of the household. This level of co-operation and claim appear in contradiction to the claim made earlier in respect of Process 2 above as they relate to the initial improvement stage. Here it is claimed that policies need to be addressed to individuals rather than the household as a unit as a consequence of conflicts in original supporting household. This claim is valid for the first stage. However, the explanation for the change in subsequent improvement stages could lie in the composition of these households subsequent to the initial improvement stage. The majority of these households comprised female heads with young children and single person households. This does not explain the level of consensus among those households with more than one adult member. What is not known is whether in these households, the consenting adult earning or non-earning members present at the time of the interviews, were responding positively about their desire to co-operate because they were in the presence of all family members. This is indicative of the limitation of the present research because it addressed all household members available for the interview, together, rather than separately. This was the consequence of monetary and time resource limitations. It is therefore necessary that future research addresses individual household members to support or refute the claim made in respect of Process 2 above.

### **a) The Mobilization and Use of Labour Time in Auto-construction.**

The extent to which intrahousehold and interhousehold labour time will influence the ability to pay is dependent on the technical requirement of the improvement task as this relates to the stage of housing improvement being contemplated. Therefore, in the initial stage when the dwelling required is a basic structure, households were more willing to use this source of labour to support the ability to pay, because of the perceived cost to be saved from the use of this type of labour at a time when their own resource capacity was limited to do otherwise.

Most households have used and will use auto-construction labour in combination with hired labour or use hired labour solely. The few households using auto-construction solely in housing improvement strategies have done so mainly because of very low levels of income. By implication, this means that the ability to pay for the improvement for those households, was predicated on their ability to mobilize and use this source of labour resources to assist in the payment of improvement cost. Hired labour was preferred for the more technical aspects of the improvement and it was also found that there was a relationship between the use of hired labour and the advances in the stages of housing improvements. This implies that the sole use of the auto-construction labour should not be presumed for all housing improvement instances. It all depends on the technical nature of the improvement.

The evidence of the impact of the ability to mobilize and use available auto-construction labour in the establishment of the ability to pay shows therefore that 1) Only a few households were willing to pay if they could use these labour sources to reduce cost. These households were actually those with the lowest levels of income among the group. 2) Most households were able to pay for the use of hired labour solely or in combination with auto-construction labour. This was the result of either the unavailability of technical skills among the auto-construction labour contacts; the preference for hired labour; the unavailability of time to engage in auto-construction or the technical demands of the improvement exercise as the housing improvement process advances.

The implication of the findings for policy and programme elaboration is that it cannot be taken for granted that the household will be able to mobilize and use intrahousehold and interhousehold labour resources in its housing strategies.

**b) Mobilization and Use of Monetary and Tangible Non-monetary Resources in Establishing the Ability to Pay.**

The findings show that low-income households have monetary and tangible non-monetary resources that will be incorporated into housing improvement payments but this will depend on the level of cost of the improvement contemplated. *ie.* where investments are larger than current monetary resources can support, the household will be prepared to sell existing assets to facilitate increased housing payments, thereby ensuring the ability to pay. The type and cost of housing improvement contemplated will also determine the sources of monetary resources used for the particular housing expenditure and investment. The cost of the housing improvement and the regularity of repayments required will therefore determine whether the household will establish its ability to pay from its current cash income receipt or from an assessment of and allocation from its overall resource capacity. This resource capacity will include all monetary and non-monetary tangible resources at its disposal. *ie.* Recurrent housing service payments and small scale low-cost improvements will be allocated from total household income rather than specific wage income sources within the household. Larger, more costly improvements which may or may not require down-payments, and requiring more secure, long term financial commitments such as will be financed from savings, loans and sale of tangible assets or any combination of these. The ability to pay these costs is established firstly from the household's intrahousehold capacity and then from the interhousehold capacity if its own capacity is limited.

To facilitate the ability to pay, for larger costs, the monthly cash income resource is not used in the form in which it is received. Small amounts of it must first be translated into other monetary resources or tangible non-monetary resources to be used for housing payments such as accumulated savings and building materials. This is due to the limited nature of the cash income resource.

The specific findings were outlined in chapters 5-9. These chapters identified which monetary resources are used, when and how they are used, within specific stages of the improvement process. These chapters show specifically that the ability to pay for housing depend on household's ability to mobilize and use available interhousehold and intrahousehold resources for new housing payments. The level of the cost of the housing improvement will determine the type of monetary resource mobilized and the use of the sources. For those households dependent on income transfers and secondary income support, they should be able to increase the amounts coming from these sources. Where the housing expenditure and investment was substantive in terms of cost the accumulated savings whether specially accumulated for the purpose or diverted from other purposes was the preferred source. This was confirmed by past improvements initiated by the households and by the additional amounts of expenditure and investment they will require to make for future housing improvements. With respect to these amounts, the few households owning land resources were prepared to translate them into monetary resources to pay for housing. However, no household was willing to sell their furniture and appliances to pay for housing and neither did they use these sources to pay for housing in the past. All households were willing to sell their existing dwelling or parts thereof to pay for housing consequent on intervention involving relocation. Those with structures in permanent material indicated that they would be willing to pay for new housing consequent on relocation if they were compensated for the loss of their investment. Loans, though used by some households were not important sources for financing the additional housing payments because of the low levels of incomes to repay there costs. However, a few households were able to borrow against a limited income, which, though insufficient to support out of cash income payments due to the level of improvement cost involved, were capable of servicing a debt repayment. In respect of the interhousehold monetary resource network as a source of monetary assistance, few households will mobilize this source. This implies either the perceived poverty of these sources or the consequence of a deliberate choice or lack of choice. It can be stated that in general the network of inter-household contacts are not important as monetary sources in households' housing improvement strategies.

Where necessary, for the regular payments (c(n)1) that might be required, the household were prepared to reorder its intrahousehold monetary resource allocation pattern in order

to establish the ability to pay irrespective of the percentage of income that the amount represented. As the future housing improvements show, where the household is required to make regular housing payments, the amounts required meant that the majority of cases would have to re-order their current pattern of monetary resource, particularly the income resource allocation to meet these payments. The allocation to saving and recreation and in a few instances food, appeared to be the main areas in which household were prepared to make and could make adjustments and still remain viable. These expenditure cuts show that the proportion of the cash income to be allocated to regular housing payments (c(n)1), plus recurrent service payments, (c(r)), would be well above the assumed affordability rate of 25-30% of individual monthly average household incomes. That there were few items of current expenditure that could be cut, shows that for this group, the items required for social survival were limited. Current expenditure was limited to basic necessities. Very little extra income exists after scheduled allocations including the savings, to facilitate luxury and leisure expenditure. The research was not able to determine the consequence if households did not have these sources to be reallocated since all households could make changes in their household expenditure and saving structure.

In conclusion, the significance of these findings lies in the fact that they confirm that it is important to consider the overall wealth or resource capacity of the household in both monetary and non-monetary terms in the determination of the ability and willingness to pay for new housing. It shows that households do not think only in terms of the cash incomereceipt when making housing expenditure and investment decisions. They look beyond their limited incomes and their overall intrahousehold to both their intrahousehold and interhousehold resource capacity. Where the capacity is limited they will allocate portions of income to improve it over time prior to the planned expenditure and investment; or they will sell existing tangible non-monetary resources and/or mobilize income transfers and increased secondary income support where possible to improve the monetary resource capacity. There appears also to be a correlation between the nature of the improvement in terms of the cost and the sources households will mobilize. Improvements requiring large monetary outlays appear to be made from more substantive sources such as accumulated savings or loans where the level of income can support this. What is of significance is the importance of accumulated savings for

households with limited incomes, as a main monetary source for establishing the ability to pay for improvements.

The implication of the above findings for housing policy and program design is that consideration must be given to measures which can take account of the monetary accumulation tendency among households with limited incomes. For example, intervention measures might consider repayment of housing costs on a periodic basis which would reflect the time frame which would allow the household to accumulate the required amount of monetary resources to meet housing repayment requirements. Further, where regular housing repayment is concerned, the consideration should not be placed on the proportion of income that the repayment requires but rather on determining from the household how, despite the proportion of income that the repayment represents, it will be able to make the repayment without affecting its viability. The household should be able to show this from a consideration of its resource capacity. In using this user-determined approach housing programme designers would also be able to tailor measures that meet the ability and willingness to pay for housing improvements that are acceptable and within the resource capacity of the household.

## 9.5 CONCLUSION

Unlike the discourse in existing literature dealing with the concept of affordability in low-cost housing and the current practice of emphasising the ability to pay to the virtual exclusion of the willingness to pay perspective, this research has attempted a synthesis of the factors influencing the establishment of affordability. This research has been able to do so by integrating the elements of affordability, household socio-demographic change and housing improvement preferences, while considering the household as a resource system. It examined the impact of the overall resource position rather than the sole influence of the level of wage income in the establishment of the affordability of housing improvement. In so doing the affordability of housing improvement becomes a function of the monetary and non-monetary resources the household is able to mobilize and used to establish housing payments. It is these resources which set the limitations and possibilities for making housing improvement payments. This researcher employed a **user-determined approach** which was largely qualitative and exploratory, in seeking

answers to the research questions and main proposition posed. The research has been able to solicit from the user the factors and conditions influencing the ability and willingness to pay for housing improvement at specific conjunctures.

When the ability and willingness to pay for housing is traced through the stages of the improvement process completed and desired, it was found that irrespective of the conditions giving rise to the expression of this willingness to pay, it is the ability to pay, as derived from the limitations and possibilities of the household's resource capacity which is the main factor influencing the ability and willingness to pay for the desired improvement. However, the willingness to pay for housing is firstly a function of the following four processes: 1) the changing housing improvement preference. 2) the impact of changing socio-demographic characteristics ; 3) the development of the resource capacity and 4) The congruency of the improvement to the acceptable minimum standard of housing at a specific conjuncture. The interaction between these processes will indicate residential dissatisfaction and the need for changes in the level of housing consumption to remove this dissatisfaction. Once the residential dissatisfaction is recognised, the household will assess its interhousehold and intrahousehold resource capacity to establish its ability to pay for improvements required to remove the level of dissatisfaction through the mobilization and use of available resources. The ability to pay and the willingness to pay once established will describe the level of affordability of the improvement at the specific juncture.

This findings presented in this research have provided answers to the main and secondary questions posed and supported the main proposition stated at the beginning of this chapter. However, as this research is exploratory, the findings and conclusions are not definitive in the sense that they could be used to generalize the situation for low income households in owner-occupancy tenure in squatter settlements. Rather, it is hoped that they will encourage further research in like manner so as to provide further evidence for the need to integrate the elements of affordability, socio-demographic change and housing improvement preferences in determining levels of affordability of low-cost housing improvement. The findings must be viewed in the context of the case study population and the community from which the population was drawn. Even from this



perspective any conclusion can only be drawn for households in owner occupancy housing tenure and in the specific squatter settlement of Faux au Chaud.

In order to generalize the findings for St Lucia or elsewhere, it is necessary that further research is conducted in like manner and similar findings revealed. Research is also required to elucidate the situation for households in rental tenancy within squatter settlements. These areas were outside the present research resource capacity. It is however recognized that these areas need to be examined.

## **APPENDIX 1**

### **TABLES**

Table 9: Sources and Amounts of Household's Total Average Monthly Cash Income

Household Name	No. of earners	Total Income per month EC\$	Secondary income support from other members of households EC\$		Regularly received income transfers EC\$		Spouse's Income EC\$		Heads Income EC\$		Total no. of sources
			Amount	% of inc.	Amount	% of inc.	Amount	% of inc.	Amount	% of income	
Edwards	2	1375	-	-	-	-	475	35	900	65	2
Charles	1	1600	-	-	400	25	-	-	1200	75	2
Girard	1	800	-	-	200	25	-	-	600	75	2
Joseph	2	600	-	-	-	-	200	33	400	67	2
Jn Paul	5	700	400*	57	-	-	-	-	300	43	2
Hepolyte	2	1650	-	-	-	-	650	49	1000	5	2
St Croix	1	620	-	-	320	52	-	-	300	48	2
Jn Baptiste	2	1500	-	-	-	-	-	-	1500	100	1
King	1	1200	-	-	-	-	-	-	1200	100	1
Williams	2	1260	-	-	160	13	500	40	600	47	3
Green	4	800	-	-	-	-	-	-	800	100	1
Mason	1	700	-	-	-	-	-	-	700	100	1
James	2	1300	-	-	-	-	300	23	1000	77	2
Lewis	4	1200	400	33	400	33	-	-	400	33	3
Thomas	3	769	-	-	-	-	-	-	769	100	1
Adonis	1	619	-	-	-	-	-	-	619	100	1
TOTAL			2		5		5				

\* EC\$200 from adult children residing in the household and the other EC\$200 from special male friend residing in the house.

Table 10: Housing Quality Index and Estimated Value of Squatter Dwelling

Household Name	Number of persons	Use of building (1)	Age of building	Size of building, sq. ft	Number of rooms	Housing quality index (H.Q.I)	Households' Estimate of the value of their dwelling EC\$	Professional Estimate of the value of the dwelling EC\$
Edwards	4	Residential	8	480	3	4	30,000	33,600
Charles	8	Residential/shop	11	560	>3	4	40,000	39,200
Girard	5	Residential/shop	10	312	>3	4	20,000	20,280
Joseph	3	Residential	15	270	3	3	15,000	16,200
Jn Paul	9	Residential	15	180	3	3	10,000	9,000
Hippolyte	4	Residential	5	405	>3	4	50,000	28,350
St. Croix	1	Residential	10	200	2	3	10,000	11,000
Jn Baptiste	3	Residential/shop	16	420	>3	4	25,000	31,500
King	6	Residential	12	375	>3	4	25,000	24,375
Williams	4	Residential	10	400	>3	4	30,000	26,000
Green	7	Residential	18	384	>3	4	25,000	26,800
Mason	1	Residential	7	168	2	3	10,000	10,920
James	5	Residential	8	270	3	3	25,000	17,550
Lewis	7	Residential/shop	15	500	>3	3	30,000	27,500
Thomas	11	Residential	16	320	>3	3	15,000	28,000
Adonis	6	Residential	5	400	>3	3	15,000	22,000

Notes: (1) Age of oldest section of the dwelling is taken as the age of the dwelling.

(2) Housing Quality Index H.Q.I.

1. Very Low Quality
2. Low Quality
3. Medium Quality
4. High Quality
5. Very High Quality

**Table 15: Households by Reason for Saving**

Reasons for Saving	Number and percentage of Households
1. Emergency such as sickness or death	5 (31%)
2. Home Improvement	4 (25%)
3. To buy new furniture for Christmas	2 (13%)
4. To open a shop/improve income generating activity	1 (6%)
5. To extend/improve shop	2 (13%)
6. To get a bigger or better place to live	3 (19%)
7. To buy land occupied	1 (1%)
8. To buy necessities for the Children for Christmas	2 (13%)
9. Old Age	1 (6%)

Note: Numbers do not add up to 100% because households may have more than one reason for saving.

Table 16: Total Average Monthly Household Expenditure Categories (EC\$) as Proportions of Total Monthly Income

Household Name	Total Housing Expenditure	Telephone	Gas	Food	Clothing	Educa-tion	Recrea-tion	Society	Waste Disposal (1/2)	Medical Insurance	Life Insurance	Transport	H.P.	Other Loans
Edwards	388 (28%)	-	27 (2%)	300 (22%)	100 (7%)	-	-	-	Pri	50 (4%)	-	-	409 (30%)	-
Charles	400 (25%)	-	54 (3%)	800 (50%)	-	-	-	-	Pri	-	-	-	-	-
Girard	60 (8%)	-	27 (3%)	240 (30%)	-	-	-	-	Pri	-	-	-	-	-
Josephs	80 (15%)	-	27 (5%)	200 (33%)	-	20 (3%)	80 (13%)	-	Pri	6 (1%)	-	-	100 (15%)	-
Jn Paul	40 (5%)	-	27 (4%)	560 (80%)	-	21 (3%)	-	-	Pri	-	-	42 (5%)	-	-
Hippolyte	445 (23%)	40 (2%)	54 (3%)	300 (15%)	-	24 (1%)	-	-	Sep. Tan.	-	150 (8%)	5 (3%)	-	-
St Croix	110 (18%)	40 (6%)	27 (4%)	150 (24%)	-	-	-	-	Public	-	-	-	-	-
Jn Baptiste	70 (4%)	-	27 (2%)	250 (17%)	-	-	-	-	Sep. Tan.	27 (2%)	220 (15%)	-	-	221 (15%)
Kings	100 (8%)	40 (3%)	27 (2%)	420 (35%)	-	53 (4%)	-	-	Pri	-	-	40 (3%)	-	-
Williams	145 (12%)	45 (4%)	27 (2%)	420 (33%)	-	-	-	-	10	-	-	-	-	-
Greens	90 (11%)	-	27 (3%)	130 (16%)	-	-	-	-	Pri	-	-	20 (3%)	170 (21%)	-
Mason	36 (5%)	-	27 (4%)	240 (34%)	-	-	-	-	Pri	-	-	-	3 (4%)	-
James	40 (3%)	-	27 (2%)	306 (24%)	-	-	-	-	Pri	-	-	102 (8%)	-	-
Lewis	95 (8%)	-	27 (2%)	800 (67%)	-	-	-	-	Pri	4 (3%)	-	60 (5%)	-	-
Thomas	100 (13%)	-	27 (4%)	250 (33%)	-	-	-	12 (2%)	Public	19 (2%)	79 (10%)	-	-	-
Adonis	40 (6%)	-	27 (4%)	300 (49%)	-	-	-	12 (2%)	Public	-	25 (4%)	-	-	-

(1) No payment is made for this service.  
 (2) Sep. Tan. - Septic Tank System.

**Table 17: Use and Physical Characteristics of Squatter Dwelling**

Household Name	Size	Age of Building* (Years)	Income EC\$	Use of Home	Material of Construction	Size of House sq. ft.	Size of Plot sq. ft.	Open Space Allowance		Space per Person sq. ft.	Number of Rooms Occupied
								Amt sq. ft.	%		
Edwards	4	8	1375	Residence	Timber	480	750	270	(36%)	120	3
Charles	8	11	1600	Residence/Shop	Timber/Concrete	560	720	160	(22%)	70	>3
Girard	5	10	800	Residence/Shop	Timber/Concrete	(Two Floors) 312	306	114	(37%)	77	>3
Joseph	3	15	600	Residence	Timber	270	450	180	(40%)	90	3
Jn Paul	9	15	700	Residence	Timber	290	240	60	(25%)	20	3
Hippolyte	4	5	1950	Residence/Shop	Timber/Concrete	405	544	139	(25%)	101	>3
St. Croix	1	10	620	Residence	Timber	200	330	130	(39%)	200	2
Jn Baptiste	3	16	1500	Residence/Shop	Timber/Concrete	420	1400	980	(70%)	140	>3
King	6	12	1200	Residence	Timber	375	1200	825	(69%)	63	>3
Williams	4	10	1260	Residence	Timber	400	750	350	(46%)	100	>3
Green	7	18	800	Residence	Timber/Concrete	384	624	240	(38%)	55	>3
Mason	1	7	700	Residence	Timber	168	225	57	(25%)	168	2
James	5	8	1300	residence	Timber	270	360	90	(25%)	54	3
Lewis	7	15	1200	Residence/Shop	Timber/Concrete	500	750	250	(33%)	71	>3
Thomas	11	16	769	Residence	Timber	320	450	130	(29%)	29	>3
Adonis	6	5	619	Residence	Timber	400	550	150	(27%)	66	>3

\* Age of oldest section of building is taken as a proxy for age of the building

Table 18: Households by Type and Construction Material of Building

Name	Size	Age	Age of Building* (Years)	TYPE AND QUALITY OF CONSTRUCTION				
				Walls	Roof	Floors	Windows	Doors
Edwards	4	30	8	Timber (G)	Galvanize (F.G.)	Timber (F.G.)	Glass/Alumin. (G)	Timber/Glass (G)
Charles	8	45	11	Timber & Concrete (G)	Galvanize (G)	Timber (G)	Aluminium (G)	Timber (G)
Girard	5	30	10	Timber & Concrete (G)	Galvanize (G)	Concrete Shop Timber House (G)	Glass (G)	Timber (G)
Joseph	3	30	15	Timber (F.G.)	Galvanize (F.G.)	Timber (P)	Glass (G)	Timber (F.G.)
Jn Paul	9	52	15	Timber (P)	Galvanize (P)	Timber (F.G.)	Glass (G)	Timber (F.G.)
Hippolyte	4	36	5	Timber & Concrete (G)	Galvanize (G)	Timber & Concrete (G)	Glass (G)	Timber (G)
St Croix	1	42	10	Timber (P)	Galvanize (P)	Timber (F.G.)	Timber (G)	Timber (G)
Jn Baptiste	3	46	16	Timber & Concrete (V.G.)	Galvanize (G)	Timber (G)	Glass (G)	Timber (G)
King	6	34	12	Timber (V.G.)	Galvanize (G)	Timber (G)	Glass/Alumin. (G)	Timber (G)
Williams	4	58	10	Timber (V.G.)	Galvanize (G)	Timber (G)	Aluminium (G)	Timber (G)
Green	7	51	18	Timber & Concrete (G)	Galvanize (G)	Timber (G)	Glass (G)	Timber (G)
Mason	1	24	7	Timber (F.G.)	Galvanize (F.G.)	Timber (F.G.)	Glass (G)	Timber (G)
James	5	25	8	Timber (G)	Galvanize (F.G.)	Timber (F.G.)	Aluminium (G)	Timber (G)
Lewis	7	77	15	Timber & Concrete (F.G.)	Galvanize (F.G.)	Timber (P)	Glass (G)	Timber (F.G.)
Thomas	11	65	16	Timber (F.G.)	Galvanize (F.G.)	Timber (F.G.)	Glass (G)	Timber (G)
Adonis	6	30	5	Timber (F.G.)	Galvanize (F.G.)	Timber (F.G.)	Glass (G)	Timber (G)

Quality: (V.G.) - Very Good; (G) - Good; (F.G.) - Fairly Good; (P) - Poor; (V.P.) - Very Poor.

\* Age of oldest section of building is taken as a proxy for age of the building



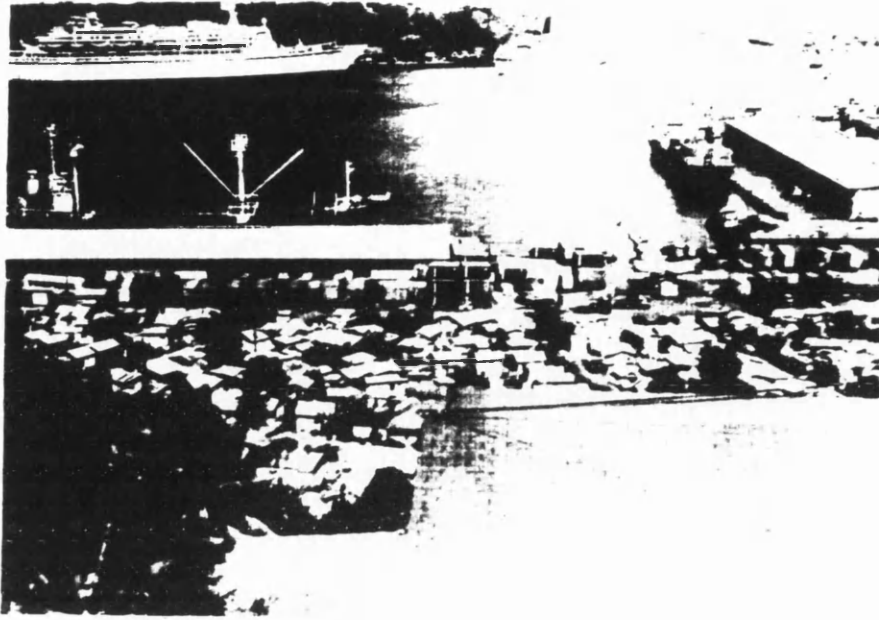
Table 19: Households by Availability and Access to Housing Services

HOUSEHOLD	HOUSEHOLD		COOKING FACILITY			WATER			ELECTRICITY		SEWAGE DISPOSAL			GARBAGE DISPOSAL		TELEPHONE	
	Size	Age	Gas	Elec	Coal	Private in House	Private in Yard	public Stand-pipe	In House	On Street	WC	Pit	Public	Private	Public	In House	Public Access
Edwards	4	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Charles	8	45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Girard	5	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Joseph	3	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Jn Paul	9	52	.	.	.	.	.	.	(1)	.	.	.	.	.	.	.	.
Hippolyte	4	36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
St. Croix	1	42	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Jn Baptiste	3	46	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
King	6	34	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Williams	4	58	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Green	7	51	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mason	1	24	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
James	5	25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lewis	7	77	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Thomas	11	65	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Adonis	6	30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Notes: (1) Illegal connection  
 (\*) Availability and access to housing services

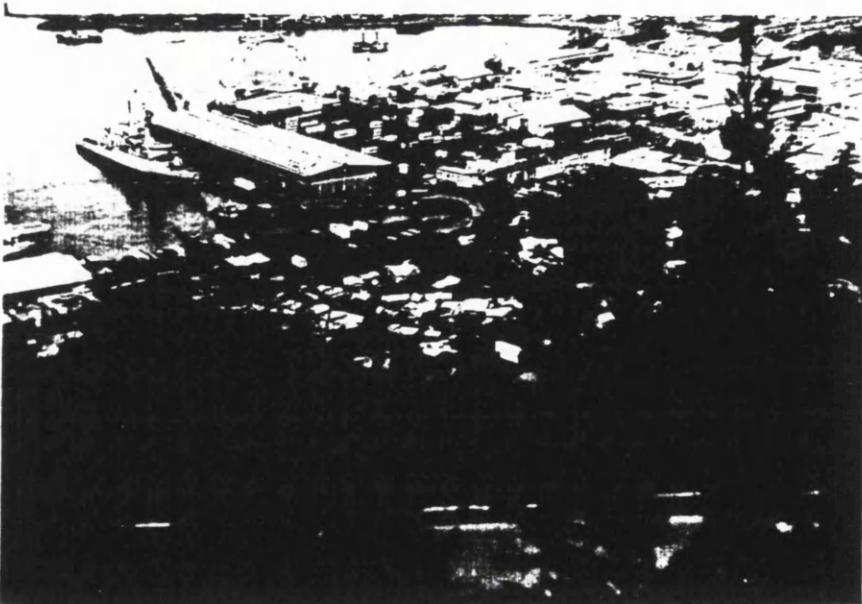
## **APPENDIX 2**

### **PHOTOGRAPHIC REPRESENTATIONS OF FAUX AU CHAUD**



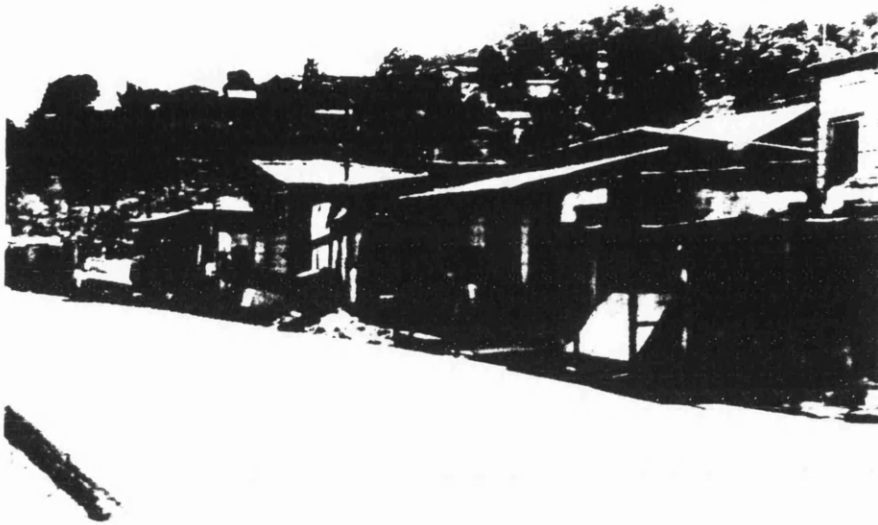
**Plate 1**

Port Castries, with Faux au Chaud settlement in the centre of the picture.



**Plate 2**

View of Port Castries and Faux au Chaud settlement from the Morne Road in the foreground of the picture.



**Plate 3**

The community has developed on reclaimed lands between two main roads. From here, the land slopes towards the East into private property areas. Note new housing extensions being erected on the road reserve.



**Plate 4**

The community is on reclaimed land in the foreground, but lies below the western sloping grounds leading to the main hospital.



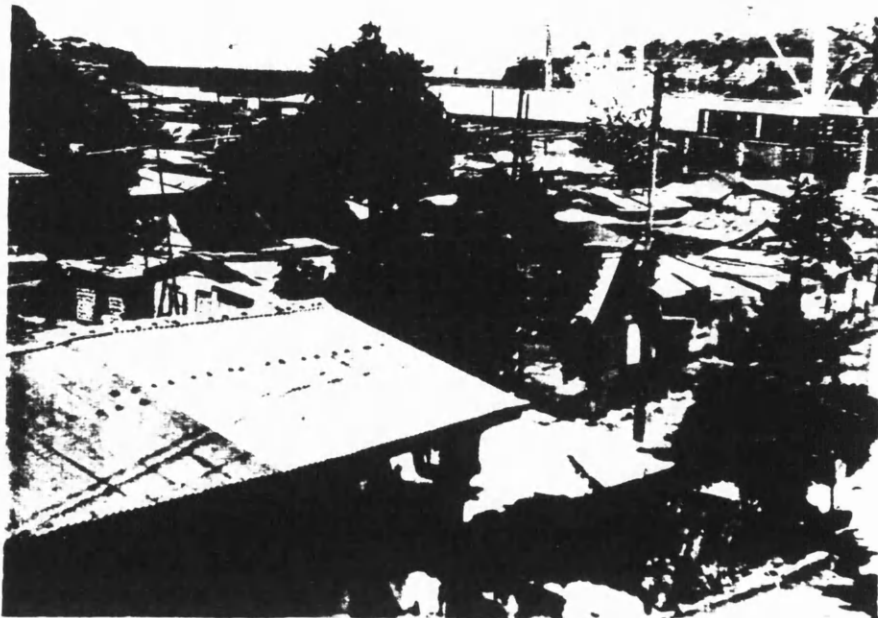
**Plate 5**  
Level of housing congestion in the Faux au Chaud area.



**Plate 6**  
Note the housing density in the squatter settlement in the foreground and centre of the picture compared with the lower density on private lands along the hill slope in the background.



Plates 7 & 8  
High level dwelling density.





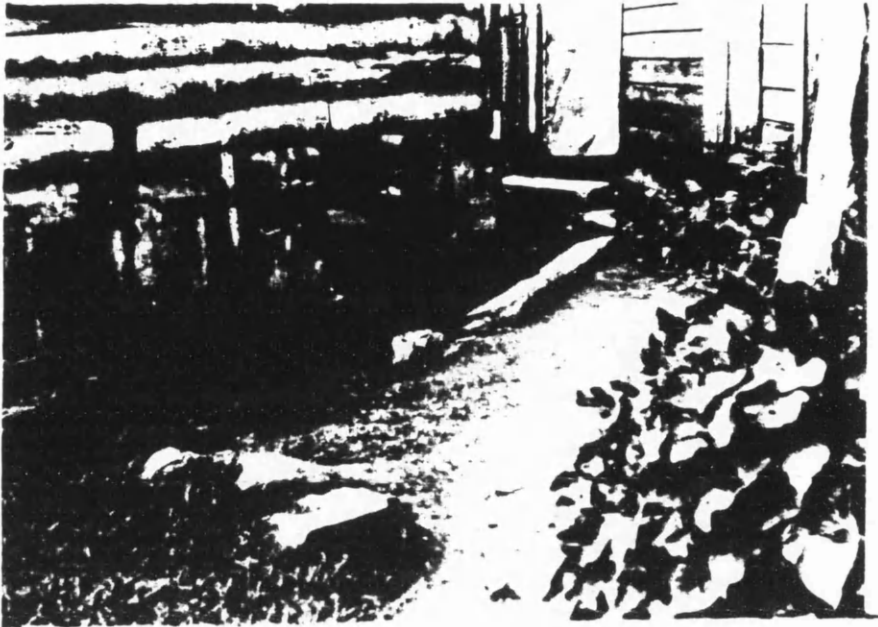
**Plate 9**

One of the few distinct pedestrian gravelled pathways through the development.



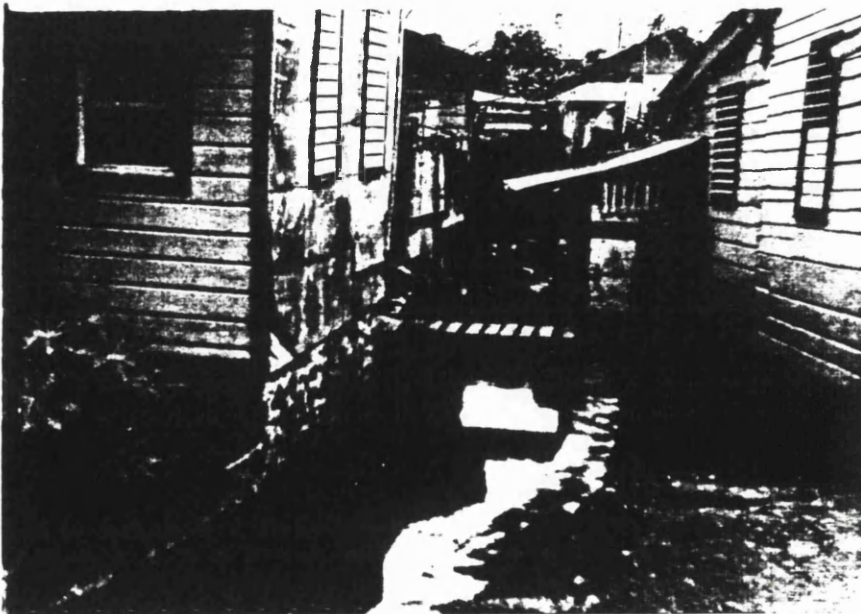
**Plate 10**

One of two motorable accesses traversing the development.



**Plate 11**

Quality of pedestrian access between dwellings. Note the open drain alongside the building on the right. The low-lying nature of the environment means that it is often waterlogged in areas, with pools of water settling under houses for several days after heavy rains.



**Plate 12**

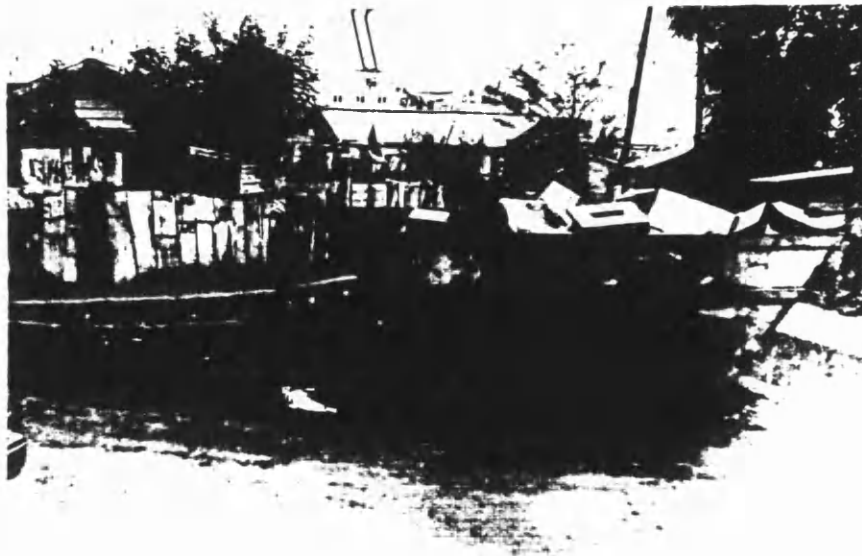
Open drains between houses. Note wooden foot bridge. Garbage is often disposed of in these drains as can be seen in the centre of the background of the picture.





**Plate 13**

The only garbage bin in the community.



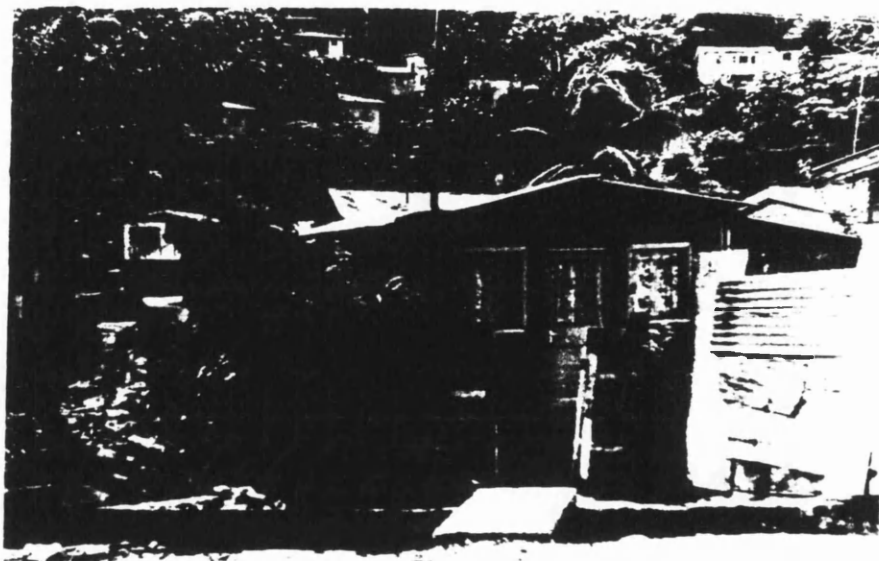
**Plate 14**

Footpaths are made alongside this main drain traversing the community. Note the garbage bin in the foreground with garbage disposed of on the ground alongside.



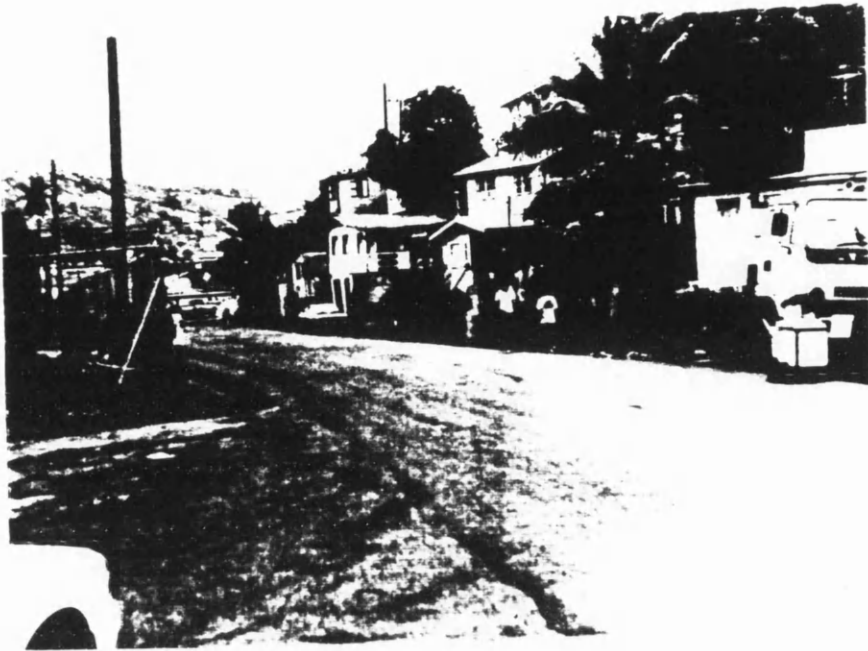
**Plate 15**

'Better Quality' dwellings with balcony. Note the concrete slab serving as foot bridge over the deep open drain along the foreground of the picture.



**Plate 16**

'Better Quality' house with the property boundary demarcated by galvanized sheets and scrapboards. Along the right of the picture is an open drain with a footpath alongside. The drain is full of garbage.



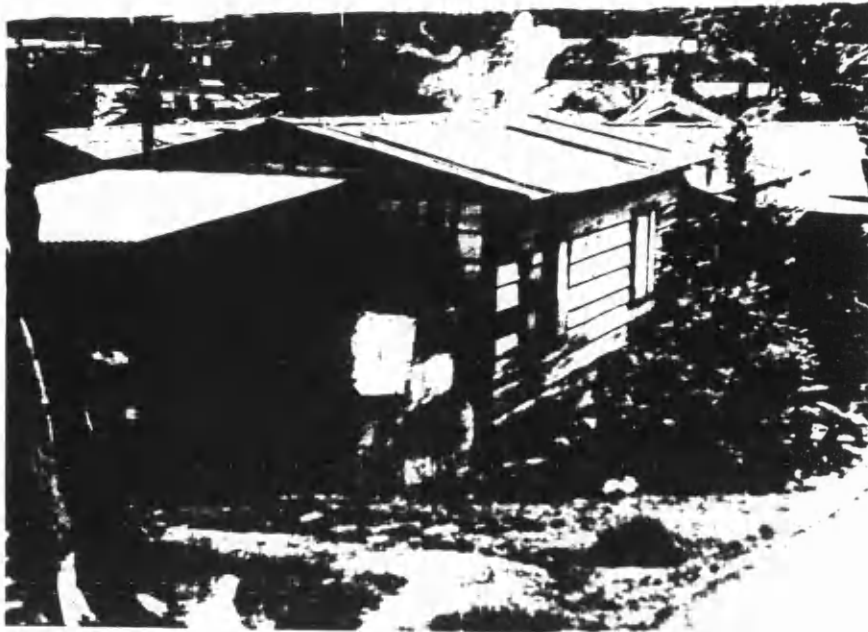
**Plate 17**

'Better Quality' dwellings alongside La Toc highway.



**Plate 18**

Two of the 'better quality' dwellings with glass and aluminium louvre window. Note: timber structures are erected on concrete foundation footings. The small extension on the house on the right is a kitchen.



**Plate 19**

Main dwelling of timber, with plywood extension which is used as a kitchen and background, in the foreground.

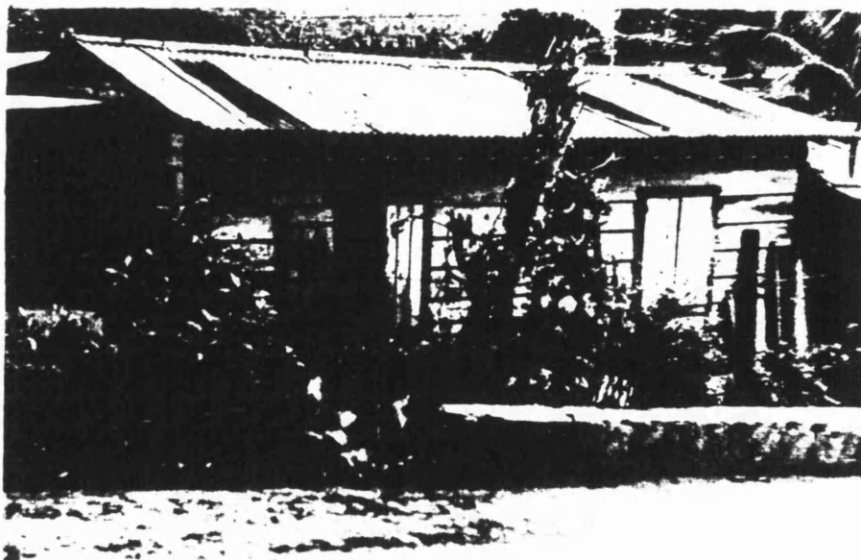


**Plate 20**

Structure of timber including windows. Roof of galvanised sheets. Timber building with extension of galvanised sheetings used as a kitchen and backyard area.



**Plate 21**  
'Poor Quality' dwellings in the Faux au Chaud community.



**Plate 22**  
Dwelling in a state of disrepair constructed from timber with concrete footing.



**Plate 23**

Dwelling with new extension from scrapboards and plywood in the foreground. Note 'better quality' housing in the background and the unpaved pedestrian accessway.



**Plate 24**

Timber dwelling in a state of disrepair. Note corroding galvanized roofing sheets. The house in the foreground was constructed on concrete footings that show signs of crumbling.

## **APPENDIX 3**

### **METHODOLOGY FOR DETERMINING HOUSING QUALITY INDEX**

## Methodology for Determining Housing Quality Index (HQI)

Based on Tables 17 to 19

This methodology is devised to distinguish the quality of the squatter dwelling. It is based on the soundness of the dwelling in terms of visible structural quality, level of services and facilities available, the state of repair and the type and construction quality of the building materials.

Points are awarded to the attributes to a maximum level of 44.

### A) Availability and Type of Access

#### 1. Cooking Facilities

Electric	3
Gas	2
Coal	1

#### 2. Water

In house	3
In yard	2
Public standpipe	1

#### 5. Sewage Disposal

Flush Toilet	3
Pit latrine	2
Public/none	1

#### 2. Electricity

In-house	2
On street	1

#### 4. Telephone

In house	2
Public	1

#### 6. Garbage Disposal

Public	2
Private (at home)	1

### B) Type and Construction Material Quality

#### 1. Walls

Very good	5
Good	4
Fairly good	3
Poor	2
Very Poor	1

#### 3. Windows

Very good	5
Good	4
Fairly good	3
Poor	2
Very Poor	1

#### 2. Roof (galvanise)

Very good	5
Good	4
Fairly good	3
Poor	2
Very Poor	

#### 4. Doors

Very good	5
Good	4
Fairly good	3
Poor	2
Very Poor	1



**5. Floor**

Very good	5
Good	4
Fairly good	3
Poor	2
Very Poor	1

**C) Overall material type (durability and performance)**

Concrete	4
Timber/Concrete	3
Timber	2
Other	1

**Maximum Score Possible = 44**

Based on this point system the HQI is ranged in value from 1 to 4 in order of increasingly better quality.

POINTS	QUALITY	HQI
>35	Very high quality	5
31-35	High quality	4
26-30	Medium quality	3
20-25	Low quality	2
<20	Very low quality	1

## **APPENDIX 4**

### **SCANNING SURVEY - FAUX AU CHAUD COMMUNITY**

**SCANNING SURVEY OF THE FAUX AU CHAUD SETTLEMENT**

Interviewer ----- Address -----  
Date ----- Household No. -----

1. Size of the Household -----
2. Age of the household head -----
3. Length of residency at present address :-
  - a) Less than one year
  - b) 1-5 years
  - c) more than 5 years
4. Place of residence before coming to present address -----
5. Composition of the household
  - a) Number of adults (including children over 16 years) -----
  - b) Number of children -----
6. Household headship structure (---appropriately)
  - a) Joint headed -----
  - b) Female headed-----
  - c) Male headed -----
7. Type of household structure (---appropriately)
  - a) Nuclear -----
  - b) Extended-----
  - c) Single parent-----
8. Occupation of :-
  - a) Head of household -----
  - b) Spouse -----
  - c) Other earners
    - i)-----
    - ii)-----
    - iii)-----
9. Nature of Employment (Write a,b,c or d)
  - a) Full time year round
  - b) More than 6 months per year
  - c) less than 6 months per year
  - d) Unemployed and seeking work
  - i) Head of household-----
  - ii) Spouse-----
  - iii) Other earners -----

10. What was your total income last week?. (--- where appropriate)

- a) Less than \$50 per week
- b) \$51-100 per week
- c) \$101-200 per week
- d) \$201-300 per week
- e) \$301-400 per week
- f) > \$401 per week

11. Do you

- a) rent
- b) own your house

12. How many rooms do you live in?.

- a) one room
- b) 2 rooms
- c) 3 rooms
- d) > 3 rooms

13. What type of material is your house built from?.

- a) timber
- b) concrete
- c) timber and concrete
- d) other

14. Is this dwelling shared by other households? a) yes b) no

15. Has there been any improvement to your house in the last year? a)yes b)no

16. Is there any improvement planned for your house? a)yes b)no

17. If the answer to 13. is 'yes' what is this improvement?

18. Is there any improvement taking place now ? If so what?

19. Would you like to own the land on which you live? a) yes b) no

For Renters :-

20. Are you planning to own your own house in the near future? a)yes b)no

21. What type of house are you planning to own in the near future?

- a) timber
- b) concrete
- c) timber and concrete
- d) other

22. how much do you pay for rent each month?. \$-----

For owners:-

23. how much would you rent this house for per month? \$-----

For all households :-

24. What do you most prefer to improve your housig conditions?

- a) to own a house plot
- b) to own a house and plot
- c) to improve the water service to the building
- d) to improve toilet and sanitation of the building
- e) to improve the size of the house
- f) to improve the kitchen and cooking facility
- g) to improve the material the house is made of

25. How much more per month would you be willing to pay to get the improvement you most desire? \$-----

26. List the problems your community face in order of the most severe problems.

## **APPENDIX 5**

### **MAIN QUESTIONS FOR SEMI-STRUCTURED INTERVIEWS IN RESPECT OF PAST AND FUTURE IMPROVEMENTS**

## HOUSE USE VALUE (QUALITY AND QUANTITY)

### DESCRIPTION OF THE HOUSE

- |     |  |  |  |
|-----|--|--|--|
| 1.  | Use of house<br>-----  | 2.   | Materials<br>-----                             |
| 3.  | Open Space<br>-----  | 4.   | Size of house<br>-----                         |
| 5.  | Size of Plot<br>-----  | 6.   | Open space<br>-----                            |
| 7.  | Number of Persons<br>-----   | 8.   | Space per person<br>-----                      |
| 9.  | Utilities:<br>Water<br>-----<br>Toilet Facilities<br>-----                                       |  | lighting<br>-----<br>Cooking Facility<br>----- |
| 10. | Type and Quality of Construction:<br>Walls<br>-----<br>Roof<br>-----<br>Windows:<br>(a) Painted  | (b) not painted                                    | (c) partly painted                             |
| 11. | Garbage Collection   |  |  |
| 12. | Distance to Public Amenities<br>Nursery School<br>Bus Stop<br>Public Laundry, bath<br>and Toilet | Primary School<br>Street Light<br>Community Centre |  |
| 13. | Attitude toward neighbourhood<br>(a) Very satisfied<br>(c) Indifferent                           | (b) Fairly satisfied<br>(c) Not satisfied          |  |
| 14. | Four best things household like about present house  |  |  |
|     | 1.   | 2.   |  |
|     | 3.   | 4.   |  |

15. Four things household do not like to about the house
1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_
16. Does the household like this house better than, less than or the same as the last one?
- (a) better than (b) less than  
 (c) same
17. How satisfied is the household with the community?
- (a) very satisfied (b) fairly satisfied  
 (c) indifferent (d) not satisfied
18. Four things the household like about the community in order of performance.
1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_
19. Does the household like community better than, less than or same as the last one?
1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_
20. Household's value of current house \$ \_\_\_\_\_
21. Household's estimate of worth of the plot of land occupied
22. How did you get this house?
- (a) purchased it used (b) purchased new  
 (c) bought land and build (d) lease/rent land and build  
 (e) inherited
23. How did you get this plot? \_\_\_\_\_
24. Did you build this house all at once or gradually?
- (a) all at once (b) gradually
25. If the house was built gradually:-
- (a) What were the stages of construction in order
- |     | Improvements | Built by | Cost (Total) |
|-----|--------------|----------|--------------|
| 1st | _____        | _____    | _____        |
| 2nd | _____        | _____    | _____        |
| 3rd | _____        | _____    | _____        |
| 4th | _____        | _____    | _____        |
| 5th | _____        | _____    | _____        |
| 6th | _____        | _____    | _____        |

26. How much did you spend on each improvement?

- | Improvement Cost |                           | Financial from (savings, loan, cash in hand, gift, other) - (specify) |
|------------------|---------------------------|---|
| 1st              | a) Material               |   |
|                  | b) Labour                 |   |
|                  | c) Transport              |   |
|                  | d) Water connection       |   |
|                  | e) Electricity connection |   |
| 2nd              | a) Material               |   |
|                  | b) Labour                 |   |
|                  | c) Transport              |   |
|                  | d) Water Connection       |   |
|                  | e) Electricity Connection |   |
| 3rd              | a) Material               |   |
|                  | b) Labour                 |   |
|                  | c) Transport              |   |
|                  | d) Water Connection       |   |
|                  | e) Electricity Connection |   |

**If the house was built all at once:**

27. How long did it take to build?

\_\_\_\_\_ days                      \_\_\_\_\_ weeks  
\_\_\_\_\_ months                    \_\_\_\_\_ year(s)

28. Did you get Planning's Permission?

- a)    yes                                      b)    no

29. How much did you pay for:

land: \_\_\_\_\_                      electricity connection: \_\_\_\_\_  
labour: \_\_\_\_\_                    building material: \_\_\_\_\_  
water connection: \_\_\_\_\_  
planning design fee: \_\_\_\_\_

30. How did you finance the construction?

Source	Amount
Cash	
Mortgage	
Loan	
Gifts	
Other (specify)	



31. If you received a loan who was it from? \_\_\_\_\_
32. What is the interest rate on the loan, if any? \_\_\_\_\_
33. What is the monthly repayment? \_\_\_\_\_
34. If you received a gift, who was it from? \_\_\_\_\_
35. Did you have to pay back this gift, how did you repay it? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

36. If you received a loan or mortgage, give information on the following:
- amount of loan/mortgage \$ \_\_\_\_\_
- how much longer do you have to pay \_\_\_\_\_
- how much is left to pay \_\_\_\_\_
- interest \_\_\_\_\_

37. Do you plan to sell this house?
- a) Yes                      b) No

If "yes", give three reasons why:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

38. How much do you spend on maintenance each year? \_\_\_\_\_

39. (a) Why did you decide to improve your house (for each improvement, if more than one, over the past year)

- OR (b) Why do you plan to improve your house at this time (if household is now planning to improve)

40. Why are the things you take into consideration in making the decision to spend for housing improvement?

41. Give two reasons why each of the things listed in question 39 is of concern to you.

Items	Reasons for Concern
-------	---------------------

42. Do you plan to move in the future?
- a) Yes                      b) No

43. If "yes", list three (3) reasons why:

44. List the four most urgent things your household needs at the present time in order of preference

45. What would you do with the additional income if your income was increased by:

- 20% (\$ \_\_\_\_\_) : \_\_\_\_\_
- 50% (\$ \_\_\_\_\_) : \_\_\_\_\_
- 100% (\$ \_\_\_\_\_) : \_\_\_\_\_

46. What would you do if your income was reduced by:
- 20% (\$ \_\_\_\_\_) : \_\_\_\_\_
- 50% (\$ \_\_\_\_\_) : \_\_\_\_\_
47. What monthly expenses would you cut first and last as a result of a reduction of income of
- 20% (\$ \_\_\_\_\_) first: \_\_\_\_\_
- last : \_\_\_\_\_
- 50% (\$ \_\_\_\_\_) first: \_\_\_\_\_
- last : \_\_\_\_\_
48. For each improvement:-
- a) Why did you first build/buy this house?
  - b) Was it the type of house/improvement you want? If yes, Why? if No, what did you want to build? Why could you not build it? Were you happy with what you build? Why?
  - c) How much did it cost? How did you pay for it?
  - d) Did you have difficulty getting the money to pay for it? If so, How did you get the money?
  - e) Did you get help to pay for it? Did everyone in the house help to pay for it? Did anyone outside help you to pay for it?
  - f) Did you build it yourself? If so why?
  - g) Did you get free help to build it ? Was it easy to get this help?
  - g) If household did not get help, Why were you not able to get free help to build it?.

**Scenarios to Establish Household's Ability and Willingness to Pay for Housing.**

The current level of affordability as derived from the household's income and expenditure schedule will be used as a basis to establish the changes in household affordability when households are presented with the scenarios of policy options.

**SCENARIO 1**

For all Households:-

**Upgrading of Services and Tenure Regularisation**

-----

Let's imagine that the government decided to upgrade your community by putting in better roads and water services. They will also survey plot to give you legal ownership of your plot. You will have to pay \$----- per month for your new plot and with what you now pay for light bill and water bill you might find yourself paying \$----- every month.

1. Is this improvement important to you. If so, why?
2. What are the good things about it that would benefit your family?
3. What are the bad things about it that will affect your family?
4. Will you still want to pay for this improvement even though there are bad things about it that will affect your family? If so why?
5. How do you feel this improvement will affect your existing dwelling?
6. What type of improvements would you plan for your house and in what order would you do these improvements?
7. When we spoke before you listed, the following as your priorities for housing improvement expenditure:-

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

This new housing offer will change the order of these expenses. i) How do you feel about this? ii) would you still pay for this new house? iii) if yes why? iv) if no why not?.

8. Will you be able to pay for your new plot from your present income? Will you have to make any changes in your present expenses to make this new payment?. If yes, how will you find the money you need to make these payments?



### **Plot Size**

1. Your present plot is \_\_\_\_\_sq ft. You are now able to own one which is bigger at 2500 sq ft. How do you feel about the size of this new plot? Is it a good or bad deal? If it is a good deal, why is it a good deal? What are people using their plot for in your area? Why do you think they are doing this? Do you think you could use your plot in the same way? If so, what activities would you choose? Why would you choose to do this?

### **Services**

-----

1. Will you use the public toilet/ laundry and bath or will you put water into your property to have your own supply?

### **Housing Payments**

2. If you will put water, on this will cost you to connect to the main about \$\_\_\_\_\_ Where will you get this money from?

3. You now have electricity, will you connect your house when you move?

4.If you will put in electricity, it will cost you \$\_\_\_\_\_to connect. Where will this money come from?

5. You will have to pay \$----- per month including the amount you now pay for light bill, water bill and so on. Can you pay this amount? Yes--- No---

6. If you cannot pay it yourself, How much of it can you pay?  
can you get help to pay the rest of it?

7. If you can get help to pay it, who will help you? How much money can you get from these people (\$ )? How will you make it up?

8. Will you have to pay back this money? If yes why do you have to pay it back and how will you pay it back?

### **Additional Costs**

You will need to demolish, relocate and transport to the new site. These are the costs you will face: Transport cost; Demolition cost; Labour cost; Building material costs; Electricity reconnection; Water connection.

Let's look at each cost and see how you will get the extra money you need.

1. Which of the costs do you think you can avoid paying by getting your friends and relatives to help you?

2. If you cannot get your friends and relatives to help you with the extra money you need, will you change your household expenses to get the extra money you need?

a) If household will make cuts:- Let's examine your expenses. Is there anything that you would wish to cut down on to get the extra money you need to pay transport, demolition and building costs?

- i) What payments will you make cuts in?
  - ii) Why will you cut these items?
  - iii) How much money will you get from these cuts (\$ )?
  - iv) What will you use this money for?
- b) If household cannot make any change in Current expenditure:-
- i) Where will you get the money from to meet these costs?
  - ii) How much do you think you can get from this source?
  - iii) Have you ever considered taking extra jobs to help you?
  - iv) How do you feel about taking an extra job to help you?

### **Existing House**

1. What will you do with the materials from your present house?

### **Building Process**

Let's look at how you will build/ rebuild.

1. Will you build/ rebuild the house yourself?
2. If you will get help to build, who will give you this help?
3. What will you do with the materials from the old house and why?
4. When will these people be able to give you this help?
5. How long do think it will take to build this house?
6. Will you have to pay these people who will help you?
7. If 'yes' to 6 above, how will you repay them?
8. If you need new materials, where will you get it from?
9. Do you and your friends have the skills to build your house? If no, who will help you in the areas that you do not have much skills in?

### **SCENARIO 3**

-----

For Households Choosing a Sites and Service Plot to Demonstrate Maximum Housing Expenditure they Will be Able and Willing to Pay.

Let's imagine that you are given a plot of 2500 sq. ft. and a loan of \$1000 to help you to resettle You can use this money to buy building materials, pay labour and transport costs.

1. What do you like about this offer?
2. What is it you do not like?
3. In what ways is it better than your present house?
4. In what ways is it worse than your present house?

5. Will you still want to pay for this improvement even though there are bad things about it that will affect your family? If so why?
6. How do you feel about the one year's grace before you can begin to repay the cost of your plot?

### Plot Size

1. Your present plot is \_\_\_\_\_sq ft. You are now able to own one which is bigger at 2500 sq ft. How do you feel about the size of this new plot? Is it a good or bad deal? If it is a good deal, why is it a good deal? What are people using their plot for in your area? Why do you think they are doing this? Do you think you could use your plot in the same way? If so, what activities would you choose? Why would you choose to do this?

### Services

-----

1. Will you use the public toilet/ laundry and bath or will you put water into your property to have your own supply?

### Housing Payments

2. If you will put water, on this will cost you to connect to the main about \$ \_\_\_\_\_. Where will you get this money from?

3. You now have electricity, will you connect your house when you move? If you will put in electricity, it will cost you \$ \_\_\_\_\_ to connect. Where will this money come from?

4. You will have to pay \$----- per month including the amount you now pay for light bill, water bill and so on. Can you pay this amount? Yes--- No---

5. If you cannot pay it yourself, How much of it can you pay?

can you get help to pay the rest of it?

6. If you can get help to pay it, who will help you? How much money can you get from these people (\$ \_\_\_\_\_)? How will you make it up?

7. Will you have to pay back this money? If yes why do you have to pay it back and how will you pay it back?

### Additional Costs

You will need to demolish, relocate and transport to the new site. These are the costs you will face: Transport cost; Demolition cost; Labour cost; Building material costs; Electricity reconnection; Water connection.

Let's look at each cost and see how you will get the extra money you need.

1. Which of the costs you think you can avoid paying by getting your friends and relatives to help you?

2. If you cannot get your friends and relatives to help you with the extra money you need, will you change your household expenses to get the extra money you need?

a) If household will make cuts:- Let's examine your expenses. Is there anything that you would wish to cut down on to get the extra money you need to pay transport, demolition and building costs?

- i) What payments will you make cuts in?
- ii) Why will you cut these items?
- iii) How much money will you get from these cuts (\$ )?
- iv) What will you use this money for?

b) If household cannot make any change in Current expenditure:-

- i) Where will you get the money from to meet these costs?
- ii) How much do you think you can get from this source?
- iii) Have you ever considered taking extra jobs to help you?
- iv) How do you feel about taking an extra job to help you?

#### **Existing House**

1. What will you do with the materials from your present house?

#### **Resettlement Grant**

1. What will you use the \$1000 resettlement grant for?

#### **Building Process**

Let's look at how you will build/ rebuild. -----

1. Will you build/ rebuild the house yourself?
2. If you will get help to build, who will give you this help?
3. What will you do with the materials from the old house and why?
4. When will these people be able to give you this help?
5. How long do think it will take to build this house?
6. Will you have to pay these people who will help you?
7. If 'yes' to 6 above, how will you repay them?
8. If you need new materials, where will you get it from?
9. Do you and your friends have the skills to build your house? If no, who will help you in the areas that you do not have much skills in?

#### **SCENARIO 4**

-----

Households Choosing a One ,Two or Three Bedroom Unit to Demonstrate the Maximum Housing Expenditure they Will be Able and Willing to Pay



1. What do you like about this offer?
2. What is it you do not like about this offer?
3. In what ways is it better than your present dwelling ?
4. In what ways is it worse thn your present dwelling?
5. Will you still want to pay for this improvement even though there are bad things about it that will affect your family? If so why?
6. When we spoke before you listed, the following as your priorities for housing improvement expenditure:-
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_
  6. \_\_\_\_\_

This new housing offer will change the order of these expenses.

- i) How do you feel about this?
- ii) would you still pay for this new house?
- iii) if yes why?
- iv) if no why not?.

7.What will you do with the materials from your present house?

**Plot Size**

1. Your present plot is \_\_\_\_\_sq ft. You are now able to own one which is bigger at 2500 sq ft. How do you feel about the size of this new plot? Is it a good or bad deal? If it is a good deal, why is it a good deal? What are people using their plot for in your area? Why do you think they are doing this? Do you think you could use your plot in the same way? If so, what activities would you choose? Why would you choose to do this?

**Housing Payments**

**a) Downpayment**

1) You will have to pay \$----- before you can move into this house. What do you think of this amount of money? Will you be able to pay it? If yes Where will you get the money for the downpayment? If not, how will you pay this money? If household will take a loan: Where will you get this loan from? How will you pay back this money and also pay for the house at the same time?

**b) Regular Monthly Payments**

1 You will have to pay \$----- per month including the amount you now pay for light bill, water bill and so on. Can you pay this amount? Yes--- No----

2. If you cannot pay it yourself, How much of it can you pay?

can you get help to pay the rest of it?

3. If you can get help to pay it, who will help you? How much money can you get from these people (\$ )? How will you make it up?

### c). Additional Costs

You will need to demolish, relocate and transport to the new site. These are the costs you will face: Transport cost; Demolition cost; Labour cost; Building material costs; Electricity reconnection; Water connection.

Let's look at each cost and see how you will get the extra money you need.

1. Which of the costs you think you can avoid paying by getting your friends and relatives to help you?

2. If you cannot get your friends and relatives to help you with the extra money you need, will you change your household expenses to get the extra money you need?

a) If household will make cuts:- Let's examine your expenses. Is there anything that you would wish to cut down on to get the extra money you need to pay transport, demolition and building costs?

i) What payments will you make cuts in?

ii) Why will you cut these items?

iii) How much money will you get from these cuts (\$ )?

iv) What will you use this money for?

b) If household cannot make any change in Current expenditure:-

i) Where will you get the money from to meet these costs?

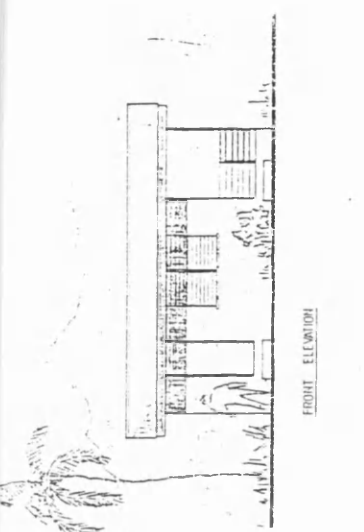
ii) How much do you think you can get from this source?

iii) Have you ever considered taking extra jobs to help you?

iv) How do you feel about taking an extra job to help you?

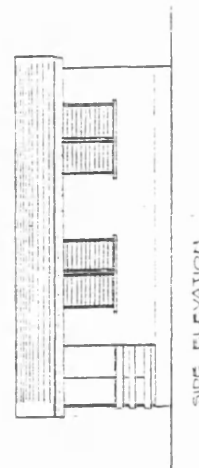
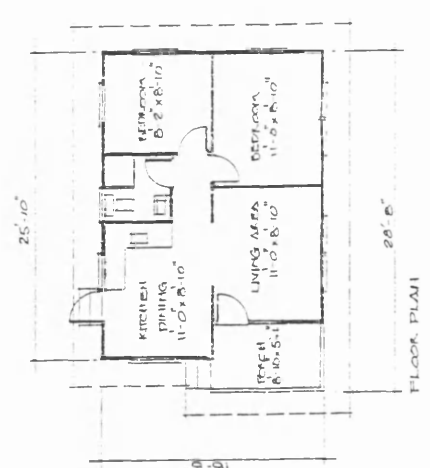
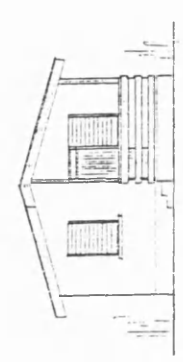
## **APPENDIX 6**

### **HOUSE TYPES FOR FUTURE HOUSING IMPROVEMENT SCENARIOS**

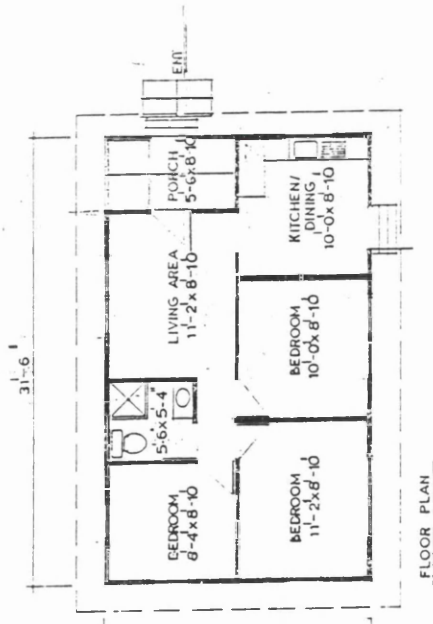


STANDARD HOUSE  
TYPE 'A' 'KILIBWI'

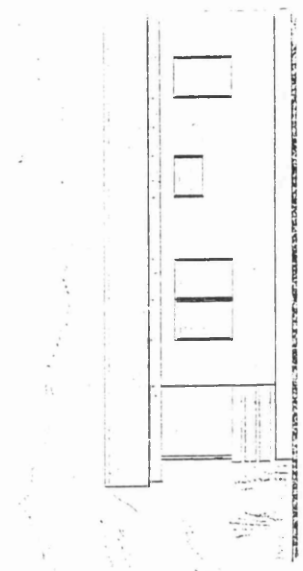
STANDARD HOUSE  
CENTRAL PLANNING UNIT



STANDARD HOUSE DESIGN  
TYPE 'F'  
CENTRAL PLANNING UNIT



FLOOR PLAN



SIDE ELEVATION

STANDARD HOUSE TYPE 'G'  
CENTRAL PLANNING UNIT

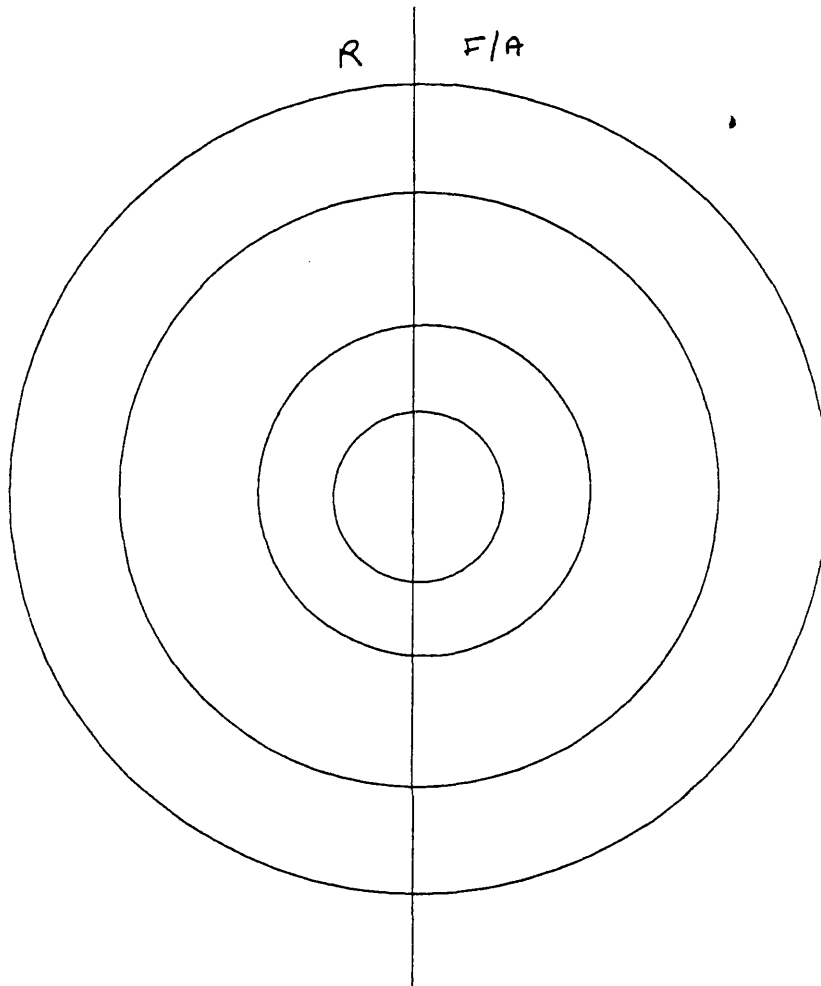
### **Future Housing Improvement Options**

1. Sites and Services Plot --- 2,500 sq foot; 15 years to repay; grant of EC\$1,000, repay EC\$ per month.
2. 100 sq foot core unit on 2,500 sq foot plot; 15 years to repay; loan of EC\$1,000; repay EC\$206 per month; or with deposit of EC\$1,500 repay EC\$165 per month.
3. Three bedroom 588 sq foot concrete dwelling; deposit EC\$11,900; repay EC\$588 per month, 15 years.
4. Two bedroom 484 sq foot concrete dwelling; deposit EC\$10,300; repay in 15 years; EC\$477 per month.
5. One bedroom 434 sq foot dwelling; deposit EC\$9,800' repay EC\$421 per month for 15 years.

## **APPENDIX 7**

### **SAMPLE OF RESOURCES NETWORK DIAGRAMS**

Figure 9  
Distribution of Household Resources



**Key**

R Relatives

F/A Friends and Acquaintances

Household Members - Circle 1

Very Dependable - Circle 2

Dependable - Circle 3

Not Dependable - Circle 4



## Sample of the Network Diagrams

### Sample

This diagram is used (1) to plot the perceived distribution of intra/inter household resources, (2) the actual number of interhousehold and intrahousehold contacts the household is able to mobilise for future housing improvements as per scenarios.

### Symbols

M                Members of the household

L                Lodger

R - Relatives

R (circle 1)    relatives who are very close and dependable, will assist the household in its time of need, expects nothing in return for assistance given.

R (circle 2)    relatives who are dependable, will help if they can afford to, might have a special relationship with one member of the household.

R (circle 3)    relatives who will help but will expect compensation in return for help given. Help must be negotiated.

FA - Friends and Acquaintances:

FA (circle 1)    very close friends of the family, very dependable, will help without hesitation.

FA (circle 2)    close friends who will help but who have a special relationship with only one member, could be a work-mate, will help if he/she can afford to.

FA (circle 3)    friends and acquaintances who cannot help or who will want to be paid for any help they might give.

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**Additional research material was gained from personal interviews with:**

1. Bank officials, St Lucia Development Bank
2. Manager, Urban Development Corporation
3. Officials of the Central Planning Unit