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# THE IMPACT OF ADEQUATE AND AFFORDABLE HOUSING ON SUSTAINABLE DEVELOPMENT: A CASE STUDY OF RWANDA

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#### **ABSTRACT**

Adequate and Affordable houses are those that are designed, built and managed as: Healthy, durable, safe and secure; Affordable for the whole spectrum of incomes; Using ecological low-energy and affordable building materials and technology; Resilient to sustain potential natural disasters and climatic impacts; Connected to decent, safe and affordable energy, water, sanitation and recycling facilities; Using energy and water most efficiently and equipped with certain on-site renewable energy generation and water recycling capabilities; Not polluting the environment and protected from external pollutions; Well connected to jobs, shops, health- and child-care, education and other services; Properly integrated into, and enhancing, the social, cultural and economic fabric of the local neighborhood and the wider urban areas; Properly run and maintained, timely renovated and retrofitted. Sustainable development is a recognized principle for economic and social activities. Sustainable development is seen as a multidimensional process that links environmental protection with economically, socially and culturally sound development. Those links are referred to as a four-dimensional approach to sustainable development, highlighting the need for a harmonious association between environmental, economic, social and cultural dimensions. The present research, taking into account Rwanda as a case study, analyzed the real impact of Affordable Housing on Sustainable Development. Using Qualitative and Quantitative Methods, the research found that Affordable and Sustainable Housing is the sure solutions through which the tensions between economic development, social welfare and equality, urban growth, housing provision, access to clean energy, good quality residential services, and environmental conditions can be alleviated. Affordable Housing is central to sustainable development.

#### **KEYWORDS**

Affordable Housing, Housing, Millennium Development Goals (MDGs), Sustainable Development, Sustainability.

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#### **INTRODUCTION**

ousing is one of basic social conditions that determine the quality of life and welfare of people and places. Where homes are located, how well designed and built, and how well they are weaved into the environmental, social, cultural and economic fabric of communities are factors that, in a very real way, influence the daily lives of people, their health, security and wellbeing, and which, given the long life of dwellings as physical structures, affect both the present and future generations. Housing is also part of the relationships between society and the environment (UN, 2012).

Housing as physical structure consists of residential buildings/ shelters, their design, material qualities, their arrangement in space, and their ecological interactions with the physical environment; Housing as social structure consists of residence- based activities, their character, social qualities, and their socio-economic interactions in space with the immediate communities and wider society. Through both of these functions, housing represents a system of social and material relationships, which is simultaneously arranged at the different spatial scales (homes, surrounding neighborhoods, settlements, that regions, countries) and which, therefore, requires a corresponding hierarchy of policy interventions.

Affordable Housing targets to achieve seven goals such as: Preserve and expand the supply of good-quality housing units; Make existing housing more affordable and more readily available; Promote racial and economic diversity in residential neighborhoods; Help households build wealth; Strengthen families; Link housing with essential supportive services; Promote balanced metropolitan growth (Katz et al., 2003).

Access to adequate and affordable housing is a current and growing problem in all countries in the World in general (Schmidt & Budinich, 2006) and in Africa in particular (Center for Affordable Housing Finance in Africa, 2014). Housing problems are largely to do with affordability: housing is expensive and incomes are too low (African Union, 2014). Faced with few other options, vast numbers of households live in inadequate housing in slums and informal settlements because they cannot access better quality housing at affordable prices. Furthermore, in many cases, they pay an inordinate share of their income for such housing, and are further impoverished as a result (UN. 2011)

Urban housing demand in Africa is largely an outcome of rapid and large-scale urbanization. The migration of rural households to urban areas in search of urban opportunities has placed, and will continue to place immense pressure on affordable land and housing (Brueckner, 2014)

The task of solving the challenge of slums through increasing affordable housing supply in Africa is not insurmountable.

In Rwanda, activities in the Urban Planning and Housing Development sub-sector are aligned with the objectives and development strategies outlined in the Strategic Framework Vision 2020, Economic Development and Poverty Reduction Strategy (EDPRS), the National Urban Housing Policy, the Urbanization Policy, the Act Governing Urban Planning and Building, the Building Control Regulation, and the Policy on Decentralization.

Four different categories of housing have been identified according to household income and financing, within new housing demand: Social Housing (12.62% of new Dwelling Units (DU), housing that needs to be totally subsidized); Affordable Housing (54.11% of new DU, housing which needs some support but that could be off-loaded to end-users through a rental or rent-to-own mechanism); Mid-Range Housing (32.80% of new DU, housing for middle-income households, with potential access to mortgage financing) and Premium Housing (0.47% of new DU, housing for higher income households that already has access to bank loans and traditional mortgage financing).

The present research aims to describe the impact of Affordable Houses on Sustainable Development in Rwanda.

#### 1. BACKGROUND OF HOUSING IN RWANDA

#### 1.1 HISTORICAL BACKGROUND OF HOUSING IN RWANDA

Historically speaking, urban development is a very recent phenomenon which was brought in Rwanda at the beginning of the 20<sup>th</sup> century when the colonizers arrived in Rwanda. Indeed, the absence of towns is partly due to scattered individual settlement in the whole country on the one hand and a decentralized economic system before the colonial period in Rwanda, peddlers moved from one hill to another selling their goods (there was no established places for trade) on the other hand.

The colonial administration did not encourage urban development in Rwanda because it was considered as a country with very little economic interests. Although the administration centers were created fifty years later during the colonial period, jobless people were not allowed to remain there. After independence, the regimes which came to power gave priority to the development of rural areas. To support this strategy, the following decisions were taken: (i) the creation of rural centers to keep the rural populations in one place; (ii) introduction of new administrative policies where citizens had to get a pass in

order to move to town, (iii) citizens were obliged to get a residence permit and a permanent employment card, (iv) regular raids to catch and send back jobless people in their respective rural communes.

During the independence in 1962, Kigali population reached 6.000 people only. from 1962 to 1984, the population and the developed area of Kigali expanded rapidly. The population grew from 6,000 people to over 150,000, and the built area expanded over 12 square kilometres, spanning outward from the commercial city centre on Nyarugenge Hill and climbing up and down the steep countryside. In 1994, Kigali counted 800,000 to 1 million of population (Kelli Rogers, 2015). The other centers also called urban centers were province headquarters. New province distribution map has allowed rural areas to join towns. The urbanization rate has increased three times between 1962 and 1972 (from 1 to 3%), it reached 5% in 1978 and approximately 9% just before the 1994 tragedy. With more than 17%, Rwanda remains the least urbanized country in Africa, behind Burundi. The average urbanization rate in Africa is a little bit above 35%.

TABLE 1: URBAN POPULATION GROWTH IN FORMER TOWNS IN RWANDA FROM 1970 TO 2002

Former towns	Year			
	1970	1978	1991	2002
Kigali	57 400	115 990	235 664	603 049
Huye	8 400	22 189	29 255	77 217
Musanze	12 500	18 942	29 286	71 511
Rubavu	6 250	12 655	22 156	67 766
Muhanga	9 359	8 531	17 490	137 334
Gicumbi	5 980	7 102	11 947	66 268
Nyamagabe	7 020	5 637	8 506	59 070
Karongi	1 670	3 045	4 393	46 640
Rwamagana	4 850	5 912	6 535	46 198
Nyanza	4 640	11 563	9 187	60 117
Ruhango	-	-	-	50 930
Kabuga	-	-	-	51 693
Nyagatare	-	-	-	8 437
Rusizi	3 540	7 201	9 693	59 070
Ngoma	3 860	9 272	13 617	44 216
Rwanda	125 460	222 727	391 194	1 372 604
Urbanization rate 1.0		4.5	5.6	16.9

Source: R. R., MINIPLAN, SNR, 1994, R.R, MINECOFIN, SNR, 2005

Although the towns were essentially public administration headquarters, the population growth increased gradually between 1994 and 2002 (during this period the urban population doubled). Currently, the population growth reaches between 4 and 6%. This can be explained by the social and economic changes which occurred after the 1994 tragedy, the towns attract people for jobs, security and various services.

#### 1.2 CURRENT SITUATION

#### 1.2.1 DISTRIBUTION OF PRIVATE HOUSEHOLDS BY TYPE OF SANITATION FACILITIES AND DISTRICT OF RESIDENCE

National Institute of Statistics of Rwanda (2012) has implemented the Fourth Rwanda Population and Housing Census (RPHC). As sanitation, the census has considered toilets. The outcome from the census can be summarized in the following table:

TABLE 2: DISTRIBUTION OF PRIVATE HOUSEHOLDS BY DISTRICT AND PROVINCE

Province/ District	Total number of private households	Total (%)	Improved sanitation facility	Unimproved sanitation facility	Not Stated
Rwanda	2,424,898	100	95.6	2.6	1.7
Kigali city	286,664	100	96	0.6	3.4
Nyarugenge district	72,280	100	96.1	0.5	3.5
Gasabo district	137,146	100	96.3	0.8	3
Kicukiro district	77,238	100	95.4	0.5	4.1
Southern Province	603800	100	95,8	3,0	1,3
Huye District	77915	100	94,2	4,1	1,7
Muhanga district	75207	100	97.5	1.2	1.3
Gisagara District	77,259	100	95.3	3.6	1.1
Kamonyi district	80 468	97,3	1,7	1,0	
Nyamagabe	74.848	100	94.4	4.3	1.3
Nyaruguru District	63,613	100	94.5	4.2	1.4
Ruhango District	76,968	100	96.3	2.4	1.3
Nyanza District	77522	100	98.7	2.7	1.1
Western Province	543,494	100	94,9	3,2	2
Rubavu	88,849	100	92,9	4,3	2,7
Rusizi District	83180	100	96.9	1.5	1.6
Karongi District	73,326	100	95,3	2,6	2,2
Ngororero district	78 963	100	93,1	5,1	1,8
Nyabihu District	65,855	100	95.1	3.3	1.7
Nyamasheke district	82,054	100	96,7	1,3	1,9
Rutsiro District	71,267	100	93,9	4,2	1,9
North Province	391,668	100	95.5	2.9	1.6
Musanze district	84,756	100	92.8	5.2	1.9
Gicumbi district	86,075	100	96.1	2.3	1.6
Burera district	73,624	100	95.7	2.7	1.6
Gakenke district	79,760	100	96.5	1.6	1.8
Rulindo district	67,453	100	96.4	2.3	1.3
Eastern Province	599272	100	96.1	2.6	1.3
Rwamagana	74,175	100	96.8	1.9	1.2
Kayonza District	80,517	100	95.7	2.8	1.5
Ngoma district	79,647	100,0	94.8	3.9	1.3
Nyagatare District	105,365	100	96.4	2.4	1.2
Bugesera District	85,369	100	96.5	2.5	1.1
Gatsibo district	96,320	100	96.3	2.4	1.3
Kirehe District	77879	100	96.4	2.3	1.2

#### 1.2.2 KIGALI CITY

According to the National Institute of Statistics of Rwanda, Kigali, the capital city of Rwanda, is the largest city, with a population of around one million. It is also the primary city, concentrating around 67% of the total urban population in the country in 2011, Kigali had a population of 1,059,000. The city has been growing very fast and its growth accelerated in the second half of the 1990's as a result of the political events in the country. Other notable towns are Muhanga (Gitarama), Huye (Butare), and Gisenyi (Rubavu), all with populations below 100,000. The urban population rose from 6% of the population in 1990, to 16.6% in 2006. By 2011, however, the proportion had dropped slightly to 19.1%. The rate of urbanization is evaluated at 4.5% per year from 2010 to 2015 ("Rwanda Demographics Profile", 2014).

#### 2. HOUSING SECTOR IN RWANDA

Access to adequate housing is considered as a right in Rwanda. This concept emanates from the Rwanda Development Plan (RDP) of 1994, which asserts that minimum housing must be provided to all. Responsibility for housing provision was delegated on the Ministry of Infrastructure (MININFRA), which in 2011 formed the Rwanda Housing Authority (RHA) to implement national housing, urbanization, construction and asset management policies. At the national level, policies are coordinated by MININFRA with the Ministry of Economy and Finance, which oversees economic planning, finance and development cooperation. General planning, policies and regulations for the City of Kigali are centralized by the City of Kigali Council which coordinates with the Rwanda Housing Authority (RHA) and, at the local level, with the District Offices. On the private sector side, main stakeholders are the providers of housing finance and private developers, as well as the construction industry, building materials industry and all professionals and services linked to the delivery of housing. Civil society participates in the housing development process in a limited, albeit gradually growing way, through numerous partners and stakeholders such as cooperatives (i.e. Goboka Cooperative, Zigama), technical NGOs such as Engineers Without Borders, microfinance lending institutions, academia such as the Kigali Institute of Technology, and donors such as the European Union Cooperation, the Dutch cooperation, the German Development Cooperation (DED), and USAID.

**PUBLIC SECTOR: Policies and Regulations** Ministry of Infrastructure (MININFRA) - Rwanda Housing Authority (RHA) Other Government Entities - Ministry of Economy and Planning - National Land Centre City of Kigali - One Stop Centre (OSC) - District Offices **PRIVATE SECTOR: Housing Delivery Housing Finance Providers Property Developers End Users** Construction Industry **Building Supplies Industry Professional Community** Land Owners **CIVIL SOCIETY: Research and Advocacy Housing Cooperatives** NGOs Kigali Institute of Technology (KIST) / Other academia **Donors** Neighborhood Associations

FIGURE 1: STAKEHOLDER MAPPING HOUSING SECTOR IN RWANDA

#### 2.1 HOUSING DEMAND

Total housing requirements in Kigali from 2012 to 2022 are projected to be 458,265 dwelling units (*DU*). These requirements could be met by maintaining part of the existing housing stock that is in good condition or upgradeable (114,197 DU) plus building of new dwellings (344,068 DU). Thus, new housing demand is estimated to be 344,068 DU between 2012 and 2022.

78% of demand for new housing concentrates in the lowest income quintile (Q1), where households earn RWF 300,000/month and less. In Q2, where households earn between RWF 300,001 and 600,000, there are 13% of the households. Q3, which has a household income of RWF 600,001 to RWF 900,000 has 5% of the population; Q4, which has a household income of RWF 900,001 to RWF 1.500,000 has 2% of the households, and Q5, which earns above RWF 1.500,001, has 1% of the households (City of Kigali, 2012).

#### 2.2 HOUSING SUPPLY

According to the report of City of Kigali (2012), the formal housing market, as it is currently operating, supplies around 1,000 DU per year, but the city will demand around 31,000 DU per year. Therefore, approximately 30,000 DU must be supplied through other mechanisms: increased formal market supply, some combination of formal pubic-private partnerships, or the informal market. The strategy mix for housing solutions will reflect a variety of different factors, and the combination of more than one solution may be required to address housing needs in Kigali. Rwanda share this situation with other countries (Malik & Wahid, 2014).

Supply of new housing could be accomplished in three general ways: Through the market, using banking and mortgage finance; Through special programs and incentives or other innovative means for reaching households that currently pay rent but do not qualify for mortgage finance (for example, rent-to-own), and Through policies for subsidizing housing provided by the government (Rwanda Housing Authority, n.d).

In the lowest income quintile (Q1), where households earn RWF 300,000/month and less, 12.62% corresponds to social housing, at the lowest end of the pyramid, and 54.11% of new demand corresponds to affordable housing. Both social and affordable housing require some government support, ranging from full subsidy to special programs and incentives.

The remaining 33.27% of housing demand can potentially be covered by market financing. This includes the highest level of Q1 (segment 3, 11.27% of the households), plus mid-range and premium housing demand in Q2 to Q5.

#### 2.3 HOUSING FINANCE IN KIGALI

Mortgage financing in Rwanda is currently accessible to households with monthly income greater than RWF 900,001 (3.8% of population in Rwanda). In 2012, 96.2 % of population with monthly income of RWF 900,000 and less had no access to housing finance.

However, there has been a clear increase in the provision of mortgage finance in Rwanda since 2004. The provision of mortgage finance has been recently estimated between RWF 64.7 and RWF 84 billion. The number of banks offering mortgage finance is also greater than a few years ago. In 2012, the main providers of mortgage finance are BCR, KCBR, BK, and BRD. A few microfinance institutions such as Zigama CSS are also actively growing their mortgage loan portfolio. BNR has taken over BHR mortgage assets (valued at RWF 8 Billion) and by issuing new loans, has doubled the value of the portfolio.

The level of financial inclusion is quite high in Kigali as national statistics show that 67.5% of the population use a savings account and therefore have access to formal financial services.

#### 2.4 RECOMMENDED HOUSING FINANCE MODALITY PER INCOME SEGMENT

#### High and middle income strata (Q2, Q3, Q4, Q5): Mortgage Finance

Mortgage finance is already available for the higher income group (people earning above RWF 900,001 per month). Assuming availability of housing units in the RWF 5 to 30 million ranges, all providers of mortgage finance have declared their willingness to go down market and to provide housing finance for lower income group (monthly income between RWF 200,000 and 900,000).

#### Lower income segments (Q1): Innovative Solutions

For monthly income segments ranging from RWF 33,100 to 200,000, mortgage finance would not be accessible through the banks: However, most people in these brackets do pay rent and therefore should be able to contribute to the cost of the DU provided to them. A rent to own solution would fit with that rental pattern. Rent to own is commonly used in many countries such as the Unites States, Canada, the Philippines or Singapore. In several countries, rent to own has been used to transfer ownership of affordable housing units to their renters.

#### Below the poverty line (lowest part of Q1): Housing Fund/Subsidy and Integration with Economic Development/Poverty Alleviation

The lowest income segments are below the poverty line and would not be able to pay any housing loan or even rent. A Housing Fund should be established to provide housing solutions for this group (UN, 2015). Special subsidy support for this group could include: Public Housing: DU remains property of the City and Nominal rent could be charged; Housing units delivered to low income people (South African model); Subsidy pays for plot, basic services and basic dwelling; Property is immediately transferred to household; Land plus basic services only; Materials voucher; Suppliers of building services voucher; Land provided to Housing Cooperatives; Technical assistance for design & construction.

#### Volume of Finance

Mortgage Finance: The total amount of housing finance needed over the 2012-2022 period for this group is projected to be RWF 996 billion (about US\$1.6 billion) or an average of RWF 91 billion per year (about US\$149 million per year).

Non Mortgage Finance: The total budget needed to build affordable housing over the period 2012-2022 was estimated by this study at RWF 623 billion (US\$1 billion). This amount can then be divided into two categories: Affordable Housing (ie. Rent to Own scheme and other approaches) where the cost should eventually be recovered through rents and transfer of property/mortgage lending: RWF 505 billion (approximately US\$ 830 million); or an average RWF 75 billion per year. Subsidized Housing for the poorest which cost would not be recovered: RWF 118 billion (approximately US\$ 193 million) or an average RWF 11 billion per year.

#### Current State of Housing Finance in Kigali

There has been a clear increase in the provision of mortgage finance in Rwanda since 2004. The provision of mortgage finance has been recently estimated between RWF 64.7 and RWF 84 billion. The number of banks offering mortgage finance is also greater than a few years ago. In 2012, the main providers of mortgage finance are BCR (I & M Bank), KCB, BK, and BRD. A few microfinance institutions such as Zigama CSS are also actively growing their mortgage loan portfolio. BNR has taken over BNR mortgage assets (valued at RWF 8 Billion) and by issuing new loans, has doubled the value of the portfolio. Due to increased competition, loans terms and conditions are also becoming more favorable for the clients: Interest rates are falling, from a reported 19% p.a. 2 years ago to a rate of 16% or even 15% p.a. in 2012. Required down payments are also lower now than 5 years ago when a 30% client's contribution was the norm. Now most banks require 10% to 20%. There is also a new initiative, the Collateral Replacement Indemnity under which clients can buy an insurance product that substitutes the down payment. Loan repayment tenure has increased: from a reported maximum of 7 years in 2006, banks now propose loans over 15 to 20 years. Some banks are also stretching the criteria used for calculating repayment capacity and consider repayment up to 50% of household income. Banks are now starting to target lower income levels. If traditionally, mortgages have been used to finance houses or building projects that had a total value above RWF 50 million, commercial banks are now financing projects or purchase of lower values; the minimum mentioned was of Rwf 5 million.

#### 3. PRINCIPLES OF ADEQUATE AND AFFORDABLE HOUSING IN RWANDA

The object of the National Urban Housing Policy is based on the following principles: (a) The Rwandan Government recognizes that housing is a basic right for its citizens as stated in international declarations such as the Istanbul Declaration of June, 1996, the Millennium Development Goals (February, 2002), and the World Summit on Sustainable Development (July-August, 2002). In this context, it aims to facilitate access to decent housing and basic infrastructure facilities for its population; (b) It recognizes the need to ensure that people have access to potable water and adequate sanitation facilities; (c) The Policy recognizes that the Ministry concerned with development of urban housing, the Ministry of Infrastructure, should operate at policy formulation level. The operations and implementation of the policies should be carried out by agencies such as the Urban Development Board; (d) It is committed to supporting the controlled development and the sustainability of human settlements both in urban and rural areas, which is economically accessible and socially integrated, where the rights of all people are recognized, particularly the rights women, children, handicapped people, and people living in poverty, the vulnerable and disadvantaged groups; (e) It recognizes the need to provide affordable shelter for people of all income groups; (f) The process of urbanization must be accomplished with due regard to the needs of the citizens while contributing to their social development, and at the same time reducing any negative environmental impacts. The process integrates environmental aspects and will be based on rational management of land resources; (g) Planned settlements are the preferred and accepted form of housing development in urban areas and urban planning must be taken as a pre-condition to any form of development; (h) It recognizes the need to upgrade or formalize informal settlement while ensuring that social norms are respected and people are not unnecessarily displaced; (i) It must be recognized that ensuring access to goods, basic services and infrastructure facilities is the most important element in determining the quality of life of the population; (j) Urbanization is regarded as a driving force for economic development. However, the process of urbanization and urban development should be planned, controlled and well directed. Urbanization increases the demand for food and promotes modernization and improvement of agricultural production which contributes directly to poverty reduction in Rwanda. The spatial planning of urban areas with clear demarcation of residential, industrial commercial and public utilization areas will safeguard the environment and cultural heritage of Rwanda; 4 (k) Investment related to urban development should not be handled solely by Government, but must be supported by the private sector, NGO's, and local communities according to their respective capacities and capabilities. Urban development must consequently be well planned in a progressive and participatory manner according to the capacities of various players in the sector. However, emphasis should be placed on the role of women in the implementation of the National Urban Housing Policy; (I) Implementing the law governing the organization of districts, urban management and development comes under the prerogatives and attributes of local communities. These must nevertheless follow and respect the directives and orientations laid down within the spirit of the National Urban Housing Policy to achieve the goals fixed at national level (MININFRA. 2008).

#### 4. STRATEGIES FOR INCREASING AVAILABILITY OF AFFORDABLE HOMES

The Ministry of Infrastructure (2008) lists different strategies taken by the Government of Rwanda in order to increase availability of Affordable House.

#### **Expand Development Opportunities**

In many communities, the high cost of land presents a major barrier to the development of affordable homes. Municipalities often control significant amounts of land, and can play a role in identifying vacant, underutilized, or surplus land that may be appropriate for residential development and transferring ownership at low or no cost to entities that agree to create affordable housing. Planners and local economic development staff can also identify opportunities to creatively adapt existing structures (such as former school buildings) to provide housing or incorporate affordable housing into new mixed-use developments.

Other strategies: Zoning residential areas to allow for higher-density development; Lowering the cost of developing affordable homes in areas well-served by public transit by reducing residential parking requirements; streamlining the processes for redeveloping vacant and abandoned homes; establishing non-profit community land or housing trust organizations to help develop affordable housing.

#### Reduce Red Tape

Strategies: Reexamining local building codes that govern the rehabilitation of old buildings and eliminating requirements that do little to improve safety but significantly increase development costs; expediting permitting and review for developers of affordable homes, or establishing one-stop permit centers to speed up the process for all applicants; establishing zoning districts that allow multifamily housing of right.

#### Capitalize on Market Activity

While growth has slowed significantly in many areas, most communities can expect to see a rebound in the coming years and would benefit from having policies in place that capture a portion of the value generated by market-rate development to support affordable homes.

#### Generate Capital

Communities can generate capital for affordable homes without raiding city coffers or diverting resources from other programs.

#### **Preserve and Recycle Resources**

Efforts to preserve affordable rental homes can be assisted by having a "preservation catalog" that inventories the existing stock of subsidized housing. Rental preservation efforts can also be strengthened through the adoption of notice and right-of-first-refusal laws that allow residents to help determine the future of their building when faced with an upcoming conversion or change in ownership, as well as robust code enforcement programs to identify rental properties at risk of deterioration.

#### 5. THE IMPACT OF ADEQUATE AND AFFORDABLE HOUSING ON SUSTAINABLE DEVELOPMENT IN RWANDA

#### 5.1 DIRECT ECONOMIC IMPACT OF CONSTRUCTION ACTIVITY

Money trickles into a community well before noticeable construction activity. Planning professionals, attorneys, engineers, architects and designers are commissioned to develop preliminary designs. Financial models are prepared and land is acquired. Redevelopment plans are presented and local businesses strategize for their position in a growing economy.

There is an increase in construction related jobs that are available to local workers, thereby increasing wages (Center for the Study of Social Policy, 2011). There are local permit fees, impact fees, utility fees, and transfer taxes. There is increased work in landscaping, trucking and transportation, and off-site improvements such as road and sidewalk work, as well as sewer and water systems infrastructure. There are also marketing, financing, and realtor costs that bring money to local coffers.

The financial impact of construction is felt by a variety of business types including lenders, title companies, appraisers, insurance agents, relocation, moving and rental companies, cable and internet providers, cleaning and window washing services, locksmiths, appliance and furniture stores, hardware stores, gutter companies and landscapers (HR&A Advisors, Inc. 2012)

#### 5.2 INDIRECT ECONOMIC IMPACT OF CONSTRUCTION ACTIVITY

In addition to the direct purchase of construction materials for the project, construction workers make purchases that affect the local economy. Workers generally live close to the construction site, and thus spend a substantial part of their wages in the local community for food, entertainment, and other services. Area businesses benefit from this increased patronage, from the sale of building supplies for the project, and from sales to the residents of the new units. The prosperity of the owners and employees of these businesses increases, allowing them to purchase more from other local ventures.

#### 5.3 LONG TERM IMPACT OF HOUSING DEVELOPMENT

Despite there are challenges on Housing Development, the positive impact of Housing Development are considerable. In fact, occupied housing increases local jobs, income, and taxes. In addition, property taxes increase because of new housing activity and the increased value of surrounding property (Bruen ,Hadjri & Meding, 2013). A household moving into a new housing situation generally spends about three-fifths of its income on goods and services sold in the local economy, causing an economic ripple that permanently increases the level of economic activity for local business owners. The list of goods and services affected include groceries, home improvement, pet food, gasoline, car repairs, beauty salons, clothing, fitness centers, and school supplies and so on.

For moderate to low-income members of the community, the opportunity to purchase a home represents the family's first opportunity to begin developing personal assets. The wealth building effect of owning a home mainly comes from tax advantages. The deductible mortgage interest and the tax-free treatment on gains when a home sells offer a "forced" savings plan. Additionally, home values rise with the rate of inflation (except after real estate "bubbles"). For most households, these gains are the most significant way wealth is built (National Association of Home Builders, 2010)

#### 5.4 SOCIAL WELFARE BENEFITS OF AFFORDABLE HOUSING

Improved quality of life and dignity of residence; Affordable access to housing; Improved health and lower incidents of illness, fatalities and material losses, better labor productivity; Better conditions for human development, employment, creativity and economic growth; Durability and low maintenance cost; Protection against natural hazards; Improved efficiency and savings on the use of energy, water and other physical resources; Better environmental protection and sanitary conditions; Contribution towards climate adaptation and mitigation; More sustainable and socially inclusive urban growth; Social cohesion and political stability (AOCDO, 2003). The evidence shows that investment in affordable housing supports multiple social objectives. This includes improvements to individual outcomes such as employability, crime, health and wellbeing, and community cohesion (Frontier Economics Ltd (2014).

#### 5.5 ECONOMIC BENEFITS OF AFFORDABLE HOUSING

#### Affordable Housing attract infrastructure improvement

New construction in rural areas is often accompanied by infrastructure improvements like paved roads, electrification, and water/sewer lines which encourage further housing development (Bunnarith, 2004) An abundance of new housing can lower the cost of living for a community, making it attractive to new residents and industries (Cohen & Wardrip, 2011).

#### Affordable Housing is linked to Job Creation and Spending

Building or renovating homes requires the services of a diverse group of persons and the products of many different industries. Initial land development activities will usually involve architects, lawyers, financiers and other consultants. As the project enters the building process, construction workers and specialized personnel like plumbers and electricians are needed. The development of rural housing creates jobs for those already living in the rural community, and encourages others to enter the community to fill the new demand in the construction-related professions (Kennedy, 1996).

In addition, housing production requires an increase in transportation and trade services that can benefit a local economy. Building materials must be produced for the construction project, and people must be hired to transport those goods from their source to the building site. (Citizens' Housing and Planning Association, 1997).

#### Affordable Housing attract improvement of socio-economic welfare

The increased pride and responsibility that the residents feel for their dwellings often result in the consumption of goods and services to complement the new home. Beginning a life in a new home is often accompanied by the purchase of new appliances, new furnishings, and moving services. Later, other improvements may be made to the home itself including the addition of decks, new rooms, and landscaping. The new residences and the later improvements can encourage others in the community to take care of their own properties and common areas, ultimately stabilizing an area socially and reducing crime rates (National Association of Home Builders, 1997). Most communicable diseases are associated with the conditions that characterize slums, and indeed, substandard housing in developed countries. Environmental factors, including housing, are estimated to account for 25% of all preventable ill-health, with diarrheal diseases and acute respiratory infections leading the list (Sheuya, Howden-Chapman, & Patel (2007).

#### Positive Fiscal Impacts for State and Local Governments

The revenues of the state, local, and federal governments can increase as the result of Affordable Housing. There is an immediate increase in governmental income from building fees, taxes on workers' wages, and taxes on the sale and transport of building materials. Increased sales taxes can also be expected as workers spend their wages and the residents purchase supplies and services for their new homes. In the long run, the local government will be able to generate revenue from property taxes and mortgage and deed transfer taxes. All these taxes add up so that even a small project can generate a great deal of government revenue. The remainder of the increased government revenue may be used to encourage more housing developments or improve services like education, and thus promote further economic development (Stolberg, 1997).

#### Ripple Effect

The economic impact of Affordable Housing creates a ripple effect that moves beyond the building-related professions to the entire local economy. Construction workers generally live close to the construction site, and thus spend a substantial part of their wages in the local community. Area businesses benefit from this increased patronage, from the sale of building supplies for the project, and from sales to the residents of the new units. The prosperity of the owners and employees of these businesses increases, allowing them to purchase more from other local ventures, and so the ripple continues and reaches more parts of the community than those directly related to construction (Emrath, (1997) & Housing Policy Department (1997).

#### Reducing Foreclosure Risks and Associated Costs

Low and moderate-income households who participate in affordable homeownership programs have a much lower risk of delinquency and foreclosure than similar buyers with prime or subprime loans.

Reducing foreclosures not only helps stabilize neighborhoods, but also yields significant savings for local governments that may otherwise have to absorb costs related to property maintenance, court and legal expenses, increased police and social services for the affected neighborhoods, and, in some cases, demolition of abandoned houses.

#### Improving Worker and Employer Attraction and Retention

A lack of affordable housing makes it more difficult – and thus more costly – to recruit and retain employees. A lack of affordable housing can put a local economy at a competitive disadvantage.

#### **Increasing the Buying Power of Residents**

Affordable rent and mortgage payments can significantly increase the residual income that households have at their disposal after meeting necessary housing costs. Low- and moderate-income households are more likely than others to spend this money on basic household needs such as food, clothing, healthcare, and transportation.

#### 5.6 AFFORDABLE HOUSING AND MILLENNIUM DEVELOPMENT GOALS

The following table consists of analysis of the impact of Affordable Housing on Millennium Development Goals.

#### TABLE 3: THE ROLE OF AFFORDABLE HOUSING ON MILLENNIUM DEVELOPMENT GOALS

MDGs Goals	Role of Affordable Housing			
Eradicate extreme poverty	Affordable Housing generates jobs.			
and hunger				
Achieve universal primary	Affordable Housing facilitates studies by providing appropriate equipment. With Affordable Housing children are less likely			
education	to miss school and perform better on standardized test. Also having a house as an asset improves homeowners' borrowing			
	capacity and so housing finance could lead to more investment in human capital.			
Promote gender equality and	Women access to jobs generated by Affordable Housing such as construction, commerce where houses are being built and			
empower women	many other services generating revenues;			
	Also a woman living in Affordable House feels comfortable and becomes able to assume responsibilities in society.			
Reduce child mortality	Good housing conditions reduce child mortality caused by inappropriate housing conditions.			
Improve maternal health	Maternal health is well entertained when the woman lives in Affordable House.			
Combat HIV/AIDS, malaria	Most communicable diseases are associated with the conditions that characterize slums. Affordable Houses are			
and other diseases	equipped with materials that fight against some kind of diseases such as diarrheal, acute respiratory infections and malaria.			
Ensure environmental	Residential activities in human settlements have direct ecological impacts on local areas in terms of air and water pollution,			
sustainability	waste and damage of natural ecosystems.			
	Affordable Housing uses appropriate materials that save environmental conditions.			
Develop a global partnership	Affordable Housing calls foreign people and companies to invest in Housing or execute houses buildings. e.g many Chinese			
for development	companies execute many construction activities in Rwanda.			

#### 6. FINDINGS

With United Nations (2012), the research found that Affordable Housing meets Four Dimensions of Sustainable Development:

#### Affordable Housing ensure Environmental Sustainability

This consists of the impacts of housing on the environment and climate change, as well as the impacts of the environment on housing itself. More specifically, there are of the relationships between housing and the environment: House building and operation require various environmental resources, such as building materials, water, energy and land; Residential activities in human settlements have direct ecological impacts on local areas in terms of air and water pollution, waste and damage of natural ecosystems; Homes and their residents are also themselves exposed to varied environmental hazards, which may emerge due to human activities (e.g. air and water pollution, lack of sanitation), due to natural factors (e.g. landslides, vector-born diseases such as malaria), or due to the combination of natural and human-made factors (e.g. climate change).

Thus, housing provides an important means for addressing local and global environmental concerns in relation to public health, energy, water and material efficiency and CO2 emission, waste production and recycling, climate adaptation and environmental hazards mitigation measures.

#### Affordable Housing ensure Social and Cultural Sustainability

Housing is critical to meeting basic human needs in shelter, but it is also important to the social development of communities and societies.

Social sustainability in housing is about creating affordable, good-quality, inclusive and diverse (mixed-tenure and mixed-income), secure and healthy dwellings, residential areas and communities, which are well-integrated into the wider socio-spatial systems of which housing is part – urban and national. Cultural sustainability takes into consideration cultural worldviews and values, norms and traditions, as well as lifestyles and behaviors of occupants, communities and society, thus supporting the dignity of communal life.

Given the significance of housing for human needs and livelihoods, the social dimension of sustainability remains the key condition – even the focal point – against which the environmental, for cultural and economic considerations must be assessed, counterbalanced and developed. However, every effort must be taken to ensure that the social dimension is integrated with the broader conditions for sustainable housing.

#### Affordable Housing and Economic Sustainability

The economic dimension of housing sustainability emerges from a variety of economic functions and implications that the housing system has, such as: Housing and related infrastructure are among the most valuable and lasting human made capital assets; Housing provides the basis for human welfare, labor productivity and mobility; Housing is an important part of household expenditures and public expenditure and if unaffordable creates numerous socio-economic problems; House building, housing services and real estate markets are among the key economic and employment activities; Housing is a platform for home-based activities and entrepreneurship; Housing is part of economic flows of natural resources and energy.

Affordable housing is a productive asset that has important contributions to national welfare and economic development. Moreover, decent affordable housing and related infrastructure are among the key factors that also make local places more attractive, inclusive and competitive and hence are the key to sustainable economic development at the local level too. Indeed, places with housing deprivation have little prospect to attract skilled workers and investments, while places with expensive housing often end up being surrounded by slums and create serious social tensions and stress and sub-optimal local economies.

#### 7. CONCLUSION

Investing in affordable housing does more than improve the quality of life for local residents – it strengthens the local economy by creating jobs and fortifying a community's tax base. Providing affordable housing also yields economic benefits to local employers by making it easier to attract and retain workers. Communities can encourage the provision of affordable housing by making use of a variety of policy tools at their disposal.

Affordable housing contributes to Sustainable Development through its capacities to: Stimulate economic growth through housing markets and homebuilding activities; Stabilize and reduce volatility of housing markets; Improve health conditions and labor productivity through better living conditions; Add to the growth of capital assets of the gross capital stock; Support regional and urban regeneration, development and growth; Contribute revenues to local, regional and national governments (eg. via taxes) and individual wealth (e.g. via housing markets); Generate employment and income through residential and building activities and their multiplier effects in other sectors; Strengthen local building industry and enterprise and promote local and traditional building materials and techniques; Provide domestic financial mobilization through housing finance institutions; Generate additional income by raising collateral for business start-ups and small firm growth as well as through home-based enterprises and renting; Housing is more than just a place to sleep; It should also be connected with economic activities as these present an important livelihood strategy for many households in developing countries.

#### 8. RECOMMENDATIONS

✓ To the Government

The government should execute the following actions: (a). To develop programs aimed at providing urban housing for a cross-section of the population; (b). To establish minimum standards in the construction of housing with respect to construction codes and provision of adequate basic facilities such as water and sanitation, access to reliable power sources, and basic social amenities within easy reach of residential areas; (c). To provide the legal and regulatory framework to encourage private sector participation in the development of urban housing vis-à-vis the development of housing estates; (d). To facilitate the development of housing stock in order to cater for increase demand for ownership and short term occupation; (e). To establish "owner-occupier" housing under affordable mortgage schemes guaranteed by employers, both public and private; (f). To develop and establish tax incentive schemes to encourage people to obtain housing loans; (g). To facilitate the access to housing finance for low and middle income people; (h). To establish guidelines on the upgrading of informal settlements and put in place legal and regulatory measures to ensure that expropriations if required are carried out in line with internationally acceptable norms; (i). To decentralize the registration of land titles to ease the acquisition of land plots.

✓ To Investors

Investors should not hesitate to invest in Affordable Housing because it is a sure source of revenues

✓ To Citizens

Citizens are encouraged to shift from ordinary housing to Affordable Housing for sustainability purpose. They are also encouraged to take loans and invest in Affordable Housing for a better economic and socio development.

#### 9. SUGGESTION FOR FURTHER STUDIES: THE COST OF NOT PROVIDING AFFORDABLE HOUSING

While there are endless studies outlining the positive economic impacts that housing developments have had all over the country, the negative consequences of not providing affordable are equally compelling. Without affordable housing, a negative ripple effect occurs in almost the exact opposite way as the positive ripple described earlier. Businesses can't attract the young, educated workforce they need to expand. Young, well-educated professionals are often forced to leave because of high housing costs. New businesses and new industry are deterred from moving to the area. The region never cashes in on all of the potential income that new housing makes possible including construction income, consumer spending and tax revenues.

Failure to provide for a balance of housing options close to jobs leads to traffic congestion and other problems that diminish quality of life. If the community workforce must travel from a house in a distant region, there is a substantial loss of consumer spending and local annual business income.

Investment in affordable housing is a solution for many of our community's challenges offering exponential dividends that pay off for decades. Today's economic conditions may represent the most compelling case yet for acting now.

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