Renewal and Upgrading System For A Sustainable Urban-Rural Housing System Development: Panacea To Accommodation, Employment And Healthcare Issues.

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Abstract: Developments in the Urban communities has become issue of great concern. Urban development has been rapid with urban centres springing up from rural communities and sometimes creating an imbalance in environmental systems with attendant consequences and advantages. The study therefore explored the urban system housing development within the context of formulating framework for development, renewal and upgrading in order to achieve sustainable development in urban and rural communities. The aim of the study was to carry out a longitudinal survey of selected areas where there is occurrence of concentration of rural-urban, urban-rural settlement within the selected study areas. Survey was conducted on some parameters as part of the calibrated questionnaire that was designed in Likert Scale 1-5 used for the study. The parameters include evaluation of existing renewal and upgrading pattern, upgrading system, renewal strategies, features of rural-urban growth, challenges of urban renewal and regenerations, influence of urban and rural upgrading system on employment availability, health challenges associated with urban-rural settlement and post occupancy study of satisfaction level of residents of urban and rural settlement housing facilities. The study engaged population of 5 different locations with 100 residents drafted from various selected locations classified as urban and rural settlement as respondents. The data was analysed using Mean Item Score, Simple percentages and regression analysis. Some of the striking contribution in this study includes: System to formulate good renewal and resuscitating, it also include resuscitating decayed component of rural setting at urban location. The study also contribute to knowledge in advocating strategies for urban and renewal strategy like compilation of plans for physical development of the area, development of identified locations, re-accommodation and resettlement of displaced settlements, re-accommodation and resettlement of displaced settlements and reconstruction of the areas devastated by development programmes. Similarly, rural and urban development would bring employment opportunity for all classes of trade either skill labour, un-skill labour and semi-skill labour. Construction activities would attract and provide fortune to different workers category there creating prosperity for all. Finally, the study developed a system framework that could be used for urban and rural settlement regeneration, revitalization, redevelopment and reconstruction. The developed framework would assist in eliminating accommodation challenges, employment problems and health care issues often associated with disparity in settlement growth when rural settlement metamorphosed into urban settlement.

Key words: Settlement, System, Sustainability, Transition.
1.0 Introduction

Modern day urbanism has led to encroachment on existing development on affected areas. Modernization of community is essential for some attendant desirable effects that come with it. Community modernization however in recent times has brought about introduction of modern houses in the midst of poor communities and traditional communities. This phenomenon has led to urban development and resuscitation. Urban development has been notably adjudged as catalyst of rural-urban metamorphosis because it is often lead to economic enlightenment and expansion. In rural-urban metamorphosis, slums are often found in the midst of modern development with no particular development pattern. Sometimes, there is a need for urgent intervention to be adopted. Some of urgent intervention that could be deployed to correct the imbalance include regeneration of rural section, restoration of destroyed structure and revitalization for setting up formal structure in such environment. It is on this note that this study explored the urban system housing development with a view to propose a framework for creating a sustainable urban-rural and rural-urban development. However there is a need to formulate adequate strategy to be able to have a successful rural urban development. Some of important parameters that could be used include: formulating adequate urban and rural developmental plan, discovering challenges and barrier to effective development and most importantly developing a robust framework that could guide in successful rural-urban and urban-rural development. Similarly, rural and urban development would bring employment opportunity for all classes of trade either skill labour, un-skill labour and semi-skill labour. Construction activities would attract and provide fortune to different workers category thereby creating prosperity for all.

1.1 Urban Renewal And Upgrading Theory

There are number of theories that underpins urban-rural and rural-urban renewal and upgrading. According to [1], some of the theories includes economic theory, behavioural theory and spatial theory among others. Spatial theory borders on allocation of space in an ergonomic ways during design and configuration stage of construction projects. The theory stipulates regulation as regards allocation of land spaces to owner and occupiers. The occupier is restricted in term of percentage allocation while the right of displaced land owners remaining on the claimed land is protected. Also, Behavioural theory delineates the scope of owner right or resident’s right. The appropriate behaviour is to allow residents of area to be upgraded or renew to have input indecision made in relation to the land. The behaviour expected should be sympathetic and apathy in nature towards displaced or those about to be displaced. The shock of the relocation by the resident should be shared under behavioural theory.

Furthermore, Economic theory that impacts micro and macro-economic aspect of communities. The micro economic theories includes the influence of forces of demand and supply, mobility of labour, price movements and factors of productivity. The macro on the other hand has to do with interplay of forces of Inflation, deflation, balance of trade, balance of payment and gross domestic operation among others. There tendency for demand for certain commodity to rise at locations where rehabilitation, reconstruction and regeneration just occurred. Also, the cost implication of rising house demands ay be daunting in scope to the extent that local resident of the displaced community on account of developmental programme may not be able to concede. Therefore, immediate need of local residents should be proactively taken into consideration while planning renewal and upgrading of a location.

1.2 Urban and rural housing development systems

Urban and rural development initiative could be viewed in two perspectives, the demand for housing vis a vis dynamics of urban space vacancy and dynamics of regeneration and revitalization. Urbanization is usually associated with space demand, and the demand sometimes could be urgent, the urgency of the demand often
necessitates evaluation of current residents at the time of initiating the urban development, for the purpose of setting up necessary framework. The framework is necessary in order to accommodate all necessary requirements and needs that would be residents oriented in term of their compensation package. In rural housing development type of space usually in demand is Commercial accommodation that is, office and business related spaces than residential accommodation. However, regeneration is the concept that is usually being used to describe emergence of civilized environment in the midst of slum and less privileged society. According to [2], in a study titled ‘Urban regeneration and crisis, described the concept of regeneration in another form, as urban renaissance, redevelopment, reconstitution of society profile, resurgence of decay spaces, urban renewal and urban revitalization. Also, [3a]described urban regeneration succinctly using 7 concepts, economics, sociological content, spatial allocation, economic orientation, environmental approach, economic approach, socio-economic content and social integration. Holistic interpretation of the concepts would undoubtedly provide an access to decoding the myth surrounding failure in developmental programme implementation in the developing world.

2.0 Review of related literatures

Some selected works that treated issues that are related to Urban renewal and regeneration were reviewed and presented in this section. Some of the issues covered in the works include urban regeneration, urban renewal, security issues involved in urban and rural upgrading among other issues addressed.

For instance, Silvia Saccomani [3b], carried out a study on Urban regeneration and crisis. The study used urban regeneration concept in developing some section of selected locations in Turin Italy. The study identified consequences that could occur on account of renewal. The study advocated greater commitment from the public administration so as to deal with attendant social exclusion and cohesion challenges.

In another related study,[4] identified significant urban features that could be used for urban renewal initiative. The study adopted questionnaire survey on 30 respondents that are building professionals. The study recommended that opinion of residents should be duly censored before embarking on any development programme in the location of residents, this would guide against developmental error of judgement which could jeopardize future related development.

Similarly, [1] conducted a research on Urban renewal and Security issues involved. The study recognize that urban renewal can bring about redevelopment, rejuvenation, revitalization and resurgence. The study recommend that packages should be in place to mitigate the attendant negative outcome of the developmental programme, they include; insurance package on account of sudden relocation, eviction pension, eviction grant and provision of social welfare fund among others.

Finally, [5] worked on Urban regeneration of deprived neighbourhood in a selected metropolitan region of Essen in Finland. The aim of the study was to bring to the fore details about conversion of deprived neighbourhood into a healthy communities. The study recommended that urban planners should focus more on supporting healthy community and sustainable communities through their policy planning and formulation.

3.0 Methodology of research

Survey was conducted on some parameters as part of the calibrated questionnaire that was designed in Likert Scale 1-5 used for the study. The parameters include evaluation of existing renewal and upgrading pattern, upgrading system, renewal strategies, features of rural-urban growth, challenges of urban renewal and regenerations, influence of urban and rural upgrading system on employment availability, health challenges associated with urban-rural settlement and post occupancy study of satisfaction level of residents of urban and rural settlement housing facilities.
The study engaged population of 5 different locations with 100 residents drafted from various selected locations classified as urban and rural settlement as respondents. The data was analysed using Mean Item Score, Simple percentages and regression analysis. The study used questionnaire survey to collate information from respondents. The collated data was examined using content analysis method by classifying the information and categorised them under appropriate headings. Data was collated on parameters that include evaluation of existing renewal and upgrading pattern, upgrading system, renewal strategies, features of rural-urban growth, challenges of urban renewal and regenerations, influence of urban and rural upgrading system on employment availability, health challenges associated with urban-rural settlement and post occupancy study of satisfaction level of residents of urban and rural settlement housing facilities. Mean Item Score was used with relative agreement index, this was used to rate the perception of respondents on parameters calibrated for respondents to answer. Finally, the parameters were collated and presented in tables and charts, while factor analysis was used to reduce the data to sizeable number that could be represented by group of seven factors. The seven factors formed the component of framework develop in this study for urban and rural regeneration and development.

3.1 Presentation of data and analysis

3.1.1 Evaluation of Existing Renewal and Upgrading Agenda,

| S/N | Existing Renewal and Upgrading Pattern | R.A.I | Rank |
|-----|----------------------------------------|------|------|
| 1   | Resuscitating Decayed Component of rural setting at urban location | 0.872 | 1 |
| 2   | Relocation of displaced residents of rural component upgraded to Urban standard | 0.872 | 1 |
| 3   | Clearing of deteriorated components of urban settlement | 0.863 | 3 |
| 4   | Remodification of obsolete structures in areas to be renewed | 0.862 | 4 |
| 5   | Compensating residents of displaced component of area under renewal and upgrading | 0.752 | 5 |
| 6   | Replacing old structures with modern structures | 0.859 | 5 |
| 7   | Removal of structures that cannot be remedied from renewal and upgrading sites. | 0.856 | 6 |

In Table 1 existing and renewal and upgrading pattern was presented, it contained issues on evaluation of existing renewal and upgrading agenda was presented. Some of the agenda of renewal and upgrading agenda include resuscitating decayed component of rural setting at urban location, relocation of displaced residents of rural component upgraded to urban standard, clearing of deteriorated components of urban settlement, remodification of obsolete structures in areas to be renewed and compensating residents of displaced component of area under renewal and upgrading.

Renewal and upgrading agenda include resuscitating decayed component of rural setting at urban location and relocation of displaced residents of rural component upgraded to urban standard were ranked 1- with RAI value of 0.872, clearing of deteriorated components of urban settlement was ranked 3- with RAI of 0.863, remodification of obsolete structures in areas to be renewed was ranked third with RAI value of 0.862 while
compensating residents of displaced component of area under renewal and upgrading with RAI value of 0.752 was ranked 5th. Relocation of residents and upgrade of a location should be priority of developmental programme of a community, also clearing of deteriorated component of a community should also be a centre of focus of a community. This would ensure continuity of developmental programme in any community.

3.1.2 Upgrading System Renewal Strategies,

Table 2  Upgrading System Renewal Strategies

| S/N | Upgrading and renewal Parameters                                                                 | R.A.I | Rank |
|-----|-----------------------------------------------------------------------------------------------|------|------|
| 1   | Compilation of plans for physical development of the area                                      | 0.875| 4    |
| 2   | Profiling and classification of features to identify urban-rural and rural-urban location      | 0.882| 2    |
| 3   | Presentation of adequate design and codes for residents relocation from area to be upgraded    | 0.881| 3    |
| 4   | Feasibility survey of economic, socioeconomic and demographic requirements of the area under upgrading and renewal | 0.887| 1    |
| 5   | Development of identified locations                                                            | 0.790| 5    |
| 6   | Reconstruction of the areas devastated by development programmes                               | 0.754| 7    |
| 7   | Re-accommodation and resettlement of displaced settlements                                     | 0.763| 6    |

In Tables 2 Upgrading systems and strategies that could be used in urban and renewal system was presented. Some of the strategies includes. Feasibility survey of economic, socioeconomic and demographic requirements of the area under upgrading and renewal, Profiling and classification of features to identify urban-rural and rural-urban location, Presentation of adequate design and codes for residents relocation from area to be upgraded, Compilation of plans for physical development of the area, Development of identified locations, Re-accommodation and resettlement of displaced settlements, Re-accommodation and resettlement of displaced settlements and Reconstruction of the areas devastated by development programmes.

Feasibility survey of economic, socio-economic and demographic requirements of the area under upgrading and renewal was ranked 1st with RAI of 0.887, Profiling and classification of features to identify urban-rural and rural-urban location was ranked with RAI of 0.882, Presentation of adequate design and codes for residents relocation from area to be upgraded with RAI 0.881 was ranked 3rd, Compilation of plans for physical development of the area with RAI value of 0.875 was ranked 4th Also, Development of identified locations was ranked 5th with RAI value of 0.790, Re-accommodation and resettlement of displaced settlements ranked 6th with RAI value of 0.763, Re-accommodation and resettlement of displaced settlements was ranked 6th with RAI value of 0.763 while Reconstruction of the areas devastated by development programmes was ranked 7th with RAI value of 0.754.
3.1.3 Features of Rural-Urban Growth

Table 3 Characteristics of Rural-Urban Growth

| S/N | Features of Rural-Urban Growth                                                                 | R.A.I | Rank |
|-----|-----------------------------------------------------------------------------------------------|------|------|
| 2   | Upgrading of slum settlements to urban standard                                                | 0.889| 1st  |
| 1   | Instituting Renewal development activities                                                     | 0.873| 2nd  |
| 3   | Afforestation of overcrowded urban settlement for air mass control and ecosystem balance      | 0.765| 3rd  |
| 4   | Revitalization of desertified and eroded locations of occupied settlements in urban-rural and rural-urban location | 0.689| 4th  |
| 6   | Reconstruction of dilapidated section of rural settlement within areas upgraded areas          | 0.667| 5th  |
| 5   | Redevelopment of components of rural-urban and urban-rural locations                          | 0.657| 6th  |
| 7   | Reinvigoration of amenities and services in slum locations of urban components to urban standards | 0.579| 7th  |

Features of Rural and urban growth was presented in Table 3. It involves items that needs to be taken into consideration while upgrading settlements, it forms the crux of items that stimulates the planning and organization of policy for upgrading and development. In Table 3 the following order was presented. Upgrading of slum settlements to urban standard was ranked as 1st with RAI value of 0.889, Instituting Renewal development activities ranked first with RAI value of 0.873, Afforestation of overcrowded urban settlement for air mass control and ecosystem balance ranked 3rd with RAI value of 0.765, while Revitalization of desertified and eroded locations of occupied settlements in urban-rural and rural-urban location with RAI value of 0.689 was ranked 4th. Similarly, Reconstruction of dilapidated section of rural settlement within areas upgraded areas was ranked 5th with RAI value of 0.667, Redevelopment of components of rural-urban and urban-rural locations was ranked 6th with RAI values of 0.657 while Reinvigoration of amenities and services in slum locations of urban components to urban standards was ranked 7th with RAI value of 0.579. The main aim of any developmental programme is to renew the environment there upgrading the environment would be a matter of priority. Also, for any government or local authority that worth its onion would take instituting renewal and developmental programme. Also, afforestation of community landscape would reduce or eliminates the erodibility effect on the landscape of community land mass. The afforestation would ensure creating balance in ecosystem component of such community [6], [7] and [8]
3.1.4 Challenges of Urban Renewal and Regeneration

Figure 1 contains challenges that could confront development that involves Urban renewal and regeneration. The challenges were evaluated and summarized in Figure 1. Economic down turn of residents at displaced locations with RAI value 0.897 was ranked 1st, Residents dislocation and displacement, Lack of adequate compensation package and insurance for displace residents, and Lack of social and welfare package to cushion the effect of eviction with RAI values 0.886 were ranked 2nd respectively in the order presented. Also, Scarcity and rise in cost of commodity with RAI value 0.873 was ranked 4th while Environmental pollution RAI 0.872 and Rise in cost and standard of living among residents with RAI 0.786 were ranked 5th respectively. Also, Protest and violence of disgruntled section of unsettled residents of the displaced locations with RAI 0.786 was ranked 6th, Tendencies for underprivileged previous land owners in displaced locations to become tenants with RAI of 0.778 ranked 7th, Marginalization and exclusion of some residents of developed location with RAI value 0.685 was ranked 8th while Noncompliance of government to action plan for resettlement and compensation plan for likely displace residents of developed location with RAI value 0.689 was ranked 9th.

3.1.5 Influence of Urban and Rural Upgrading System on Environment

Table 4 Influence of Urban and Rural Upgrading System on Environment

| S/N | Influence of Urban and Rural Upgrading System on Environment | R.A.I | Rank |
|-----|-------------------------------------------------------------|------|------|
| 1   | Tendency for resources not to be made available in natural but unnatural forms on account of urbanism | 0.889 | 1st  |
Influence of Urban and Rural Upgrading System on was presented in Table 5. The influence of urban and rural upgrading system on communities sampled was used as litmus test to the expected as regards the influence of areas upgraded in the communities. Some of the identified factors are presented with rankings using their RAI. For instance, Tendency for resources not to be made available in natural but unnatural forms on account of urbanism was ranked 1st with RAI value 0.889, Enhanced employment opportunity with RAI 0.779 was ranked 2nd, Reinvigoration of settlement structures of upgraded locations with RAI 0.768 and Disruption of ecosystem and environmental biomass and Disruption of ecosystem and environmental biomass were ranked 3rd with RAI of 0.768 respectively. Also, Tendency for erosion attack on vulnerable section of environment with RAI 0.734 was ranked 6th while Job or employment scarcity with RAI value 0.645 was ranked 7th i.e. employment availability, health challenges associated with urban-rural settlement

3.1.6 Post Occupancy Study of Satisfaction Level of Residents of Urban and Rural Settlement Housing Facilities.

![Figure 2: Parameters to measure residential satisfaction of residents of rural-urban housing.](image-url)
Figure 2 contains a presentation on the post-occupancy study of the satisfaction level of residents of urban and rural settlement housing facilities. The occupants expressed satisfaction and their dissatisfaction about the components of facilities that are built on developed spaces. Parameters were developed to capture details about the related parameters. The parameters cover design, materials, methodology, services, and landscaping of the environment. The building spaces are ergonomically designed for intended function with RAI 0.766. Eco-friendly materials were incorporated into the housing facilities design, and the design of the structures took into consideration relevant urban renewal theory with RAI 0.766. Also, regarding the service component of the building, for instance, adequacy of electrical services of the buildings with RAI value 0.764 was ranked 4th and adequacy of plumbing services component of the building was ranked 5th with RAI 0.658. There was consensus as to the adequacy of services in the constructed buildings. Similarly, internal decorations were reported to be efficient in the buildings, this factor was ranked 6th while landscape on the terrain around the buildings was ranked 7th with 0.569.

Table 5 Framework Development

| S/ N  | Factor Codes | Factor1 | Factor2 | Factor3 | Factor4 | Factor5 | Factor6 |
|------|--------------|---------|---------|---------|---------|---------|---------|
| 1    | CDCU04       | 1.000   |         |         |         |         |         |
| 2    | UPRP01       | 1.000   |         |         |         |         |         |
| 3    | UPRP02       |         | 1.000   |         |         |         |         |
| 4    | UPRP03       |         |         | 1.000   |         |         |         |
| 5    | UPRP04       |         |         |         | 1.000   |         |         |
| 6    | UPRP05       |         |         |         | 1.000   | 1.000   |         |
| 7    | UPRP06       |         |         |         | .999    | .999    | .999    |
| 8    | UPRP07       |         |         |         | .999    | .999    | .998    |
| 9    | FRUG01       | .997    | .992    |         |         |         |         |
| 10   | FRUG02       | .997    |         |         |         |         |         |
| 11   | FRUG03       |         |         | .992    | .993    |         |         |
| 12   | FRUG04       | .991    | .990    | .990    | .992    |         |         |
| 13   | FRUG05       | .993    | .998    |         |         |         |         |
| 14   | FRUG06       | .999    | .992    |         |         | .991    |         |
| 15   | FRUG07       | .992    | .999    | .989    | .992    | .997    |         |
| 16   | CDCU01       | 1.000   |         |         |         |         |         |
| 17   | FRUG01       | 1.000   |         |         |         |         |         |
| 18   | FRUG02       | 1.000   | 1.000   |         |         |         |         |
| 19   | FRUG03       | .990    | .993    | .993    | .999    | 1.000   |         |
| 20   | FRUG04       | .991    | .993    | .993    | .999    | 1.000   |         |
| 21   | FRUG05       | .990    | .990    | .989    | .995    | 1.000   |         |
| 22   | FRUG06       | .999    | .999    | .989    | .992    | .997    |         |
| 23   | FRUG07       | .993    | .990    | .989    | .992    | .997    |         |
Eighteen factors were reduced to 9 representative factors. Data reduction method was used and rotated with Varimax and the factors were selected setting parameters of upper and lower value of Eigen Value. The Eigen value of between 0 and 1 was set. The factors with Eigen values of 0.9 to 1.0 were extracted and used in modelling. The matrix of the 9 factors was presented in Table 7. While the interpretation of the codes is as presented in Table 8.

Table 6 Legend for Coded factors and their Titles.

| A. | Clearing of deteriorated components of urban settlement CDCU |
|----|----------------------------------------------------------|
| 1  | Re-modification of obsolete structures in areas to be renewed CDCU01 |
| 2  | Compensating residents of displaced component of area under renewal and upgrading CDCU02 |
| 3  | Replacing old structures with modern structures CDCU03 |
| 4  | Removal of structures that cannot be remedied from renewal and upgrading sitesCDCU04 |
| B. | Upgrading and renewal Parameters UPRP |
| 5  | Compilation of plans for physical development of the areaUPRP01 |
| 6  | Profiling and classification of features to identify urban-rural and rural-urban locationUPRP02 |
| 7  | Presentation of adequate design and codes for residents relocation from area to be upgradedUPRP03 |
| 8  | Feasibility survey of economic, socioeconomic and demographic requirements of the area under upgrading and renewalUPRP04 |
| 9  | Development of identified locations UPRP05 |
| 10 | Reconstruction of the areas devastated by development programmesUPRP06 |
| 11 | Re-accommodation and resettlement of displaced settlementsUPRP07 |
| C. | Features of Rural-Urban Growth FRUG |
| 12 | Renewal development activitiesFRUG01 |
| 13 | Upgrading of slum settlements to urban standard FRUG02 |
| 14 | Afforestation of overcrowded urban settlement for air mass control and ecosystem balance FRUG03 |
| 15 | Revitalization of desertified and eroded locations of occupied settlements in urban-rural and rural-urban location FRUG04 |
| 16 | Redevelopment of components of rural-urban and urban-rural locationsFRUG05 |
| 17 | Reconstruction of dilapidated section of rural settlement within areas upgraded areas FRUG06 |
| 18 | Reinvigoration of amenities and services in slum locations of urban components to urban standardsFRUG07 |

The Legend for that could assist in interpreting the factors generated is presented in Table 8 above. For instance CDCU04 represents removal of structures that cannot be remedied from renewal and upgrading sites represents a factor under CDCU which could be describe as Clearing of Deteriorated Components of Urban settlement CDCU. Also, UPRP represents Upgrading and renewal Parameters UPRP while UPRP1 indicates Compilation of plans for physical development of the area. Similarly, FRUG stands for Features of Rural-Urban Growth FRUG while FRUG01 represents Renewal Development activities which is a factor under Features of Rural-Urban Growth.

4.0 Summary of the Developed Framework

One of the objectives of the study was to develop a framework of application for Urban renewal and upgrading. The factors were selected based on the values of Eigen values of 9 parameters set while processing the data. Nine[9] factors emerged with Eigen values of between 0.99 and 1.00. The nine factors are summarized below, that is Factor F1 to Factor F9.

1. F1 ---- 1.000CDCU04, 0.997FRUG01, 0.997FRUG02, 0.991FRUG04, 0.999FRUG06, 0.992FRUG07.
2. F2 ---- 1.000UPRP04, 1.000UPRP05, 0.999UPRP06, 0.999UPRP07, 0.992FRUG03, 0.990FRUG04.
3. F3 ---- 1.000UPRP05, 0.999UPRP06, 0.998UPRP07, 0.993FRUG03, 0.992FRUG04, 0.991FRUG07.
4. F4 ---- 1.000FRUG01, 1.000FRUG02, 0.993FRUG04, 0.999FRUG06, 0.990FRUG07.
5. F5 ---- 1.000FRUG03, 0.999FRUG04, 0.990FRUG05, 0.989FRUG06, 0.992FRUG07.
6. F6 ---- 1.000FRUG02, 0.993FRUG04, 0.993FRUG06, 0.989FRUG07
7. F7 ---- 1.000CDCU01, 0.990FRUG03, 0.991FRUG04, 0.993FRUG07.
8. F8 ---- 1.000FRUG04, 0.990FRUG05, 0.995FRUG06, 0.997FRUG07
9. F9 ---- 1.000UPRP02, 0.990FRUG04, 0.998FRUG07

From the above Each of the factors incorporates parameters that could be adopted independently of other factors and could be combined for further effectiveness. Also, the factors could be combined with other factors for maximum possible effect, the various combinations that could be adopted is as presented in Equations 1 to 9 below.

\[
F1 = [F2+F3+F4+F5+F6+F7+F8+F9] \quad \text{Equation 1}
\]
\[
F2 = [F1+F3+F4+F5+F6+F7+F8+F9] \quad \text{Equation 2}
\]
\[
F3 = [F1+F2+F4+F5+F6+F7+F8+F9] \quad \text{Equation 3}
\]
\[
F4 = [F1+F2+F3+F5+F6+F7+F8+F9] \quad \text{Equation 4}
\]
\[
F5 = [F1+F2+F3+F4+F5+F6+F7+F8+F9] \quad \text{Equation 5}
\]
\[
F6 = [F1+F2+F3+F4+F5+F7+F8+F9] \quad \text{Equation 6}
\]
\[
F7 = [F1+F2+F3+F4+F5+F6+F8+F9] \quad \text{Equation 7}
\]
\[
F8 = [F1+F2+F3+F4+F5+F6+F7+F9] \quad \text{Equation 8}
\]
\[
F9 = [F1+F2+F3+F4+F5+F6+F7+F8] \quad \text{Equation 9}
\]

In term of application, an individual may decide to adopt Factor one, the action points when Factor F1 is picked could be described as follows:

\[
F1 = [F2+F3+F4+F5+F6+F7+F8+F9] \quad \text{Equation 1}
\]

1.000CDCU04, 0.997FRUG01, 0.997FRUG02, 0.991FRUG04, 0.999FRUG06, 0.992FRUG07.

Removal of structures that cannot be remedied from renewal and upgrading sites CDCU04; Renewal development activities FRUG01; Upgrading of slum settlements to urban standard FRUG02; Feasibility survey of economic, socioeconomic and demographic requirements of the area under upgrading and renewal UPRP04; Reconstruction of the areas devastated by development programmes UPRP06 and Reinvigoration of amenities and services in slum locations of urban components to urban standards FRUG07. Other factors F2 to F10 could be selected and describe in similar ways [9] and [10].

4.1 Recommendation and Conclusion

CONCLUSION: URBAN RENEWAL AND UPGRADING AS PANACEA TO ACCOMMODATION, EMPLOYMENT AND HEALTHCARE ISSUES.

The analysis carried out in this study has indicated the potency of Urban-rural or Rural urban development in providing civilization and poverty Vis-a-vis unemployment eradication if properly managed.
In urban regeneration, slums give way to modernized building units with accompany luxury. Most of the slums in parts of the world are always identified with certain inadequacies, e.g. lack of employment opportunities, poor medical services, scarcity of accommodation and the like. However rural upgrading enables rural community to receive face lift. Social amenities like pipe borne water, electricity supply, modern housing, and rural road upgrade are always being introduced. Upgrading will lead to people from less privileged community to flock into the upgraded areas thereby stimulating economy in the direction of more provision of accommodation and this in turn would lift up economic activities. Influx of people would also translate to more customer and more income as indicated in Table 5 of this study.

Similarly, rural and urban development would bring employment opportunity for all classes of trade either skill labour, un-skill labour and semi-skill labour. Construction activities would attract and provide fortune to different workers category there creating prosperity for all.

Moreover, there is environmental pollution that often come with urbanization, for instance upgrading often leads to balancing of the ecosystem and environmental bio mass which would tend to replenish environmental elements that have been depleted. However, urban theory tend to provide for wellbeing of residents therefore provision should be made for any developmental programme so as to ensure continuity. In the study area consulted, many health care centres, convalescence homes, maternity centres, drug dispensing centres, pharmacy and medical care centre both private and public were introduced when the communities were upgraded from slums to urban centres. Medical facilities are easily available in upgraded community as compared to those not yet engaged. This is an indication that people in those upgraded communities would have access to health care facility advantage over others.

Therefore, the study recommends adoption of workable framework in the upgrading of slums and rural components of a community into a more civilized form where all organs of environmental system would be present. For instance, a framework that could guide in policy formulation and implementation rooted in the Urban theory, System theory, regeneration theory, economic theory and spatial theory was presented in the study, it is a believe in this study study that proper application of the theory is a panacea to accommodation, employment and healthcare issues that characterizes underdeveloped community in our time.

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References

[1]. Uwadiegwu Ben (2015) Urban Renewal and Security Issues. British Journal of Environmental Sciences. Vol. 3(2). Pg. 21-23.

[2]. Saccomani, S. (2011) "Reflecting critically on Turin’s Strategic Planning Experience." https://www.researchgate.net/profile/Silvia_Saccomani/publications, 10.13140/RG.2.13185.9362/1.

[3]. Silvia Saccomani(2016a) Urban Regeneration and Crisis. EUPA Conference CityLights, Cities Beyond notwithstanding the Crisis. Torino. Italy.

[4]. Saccomani S. and Caruso N. (2016b). "Turin Metropolitan Region: From path-dependency dynamics to nowadays challenges", Balducci A., Curci F. and V. Fedeli (Ed.), Post-Metropolitan Territories: Looking for a new urbanity, London, Routledge.
[5]. Lee Grace and Chan Edwin (2016) Effective Approach to Achieve Sustainable Urban Renewal in Densely Populated Cities. 1st International CIB Endorsed PhD Graduate Conference. Ankara, Turkey.

[6]. Skodra Julita, Alexander Scmdit and Susanne Moebus (2018) Towards the Healthy Neighbourhood: Urban Regeneration of Deprived Neighbourhood in Metropolitan Regions. Universitat Duisburg Essen.

[7]. Artesio, E. (2002). "Strumenti di intervento e pratiche di rigenerazione urbana: il progetto speciale periferie di Torino", Governa, F., Saccomani and S. (Ed.), Periferie fra riqualificazione e sviluppo locale, Firenze, Alinea; 49-53.

[8]. Atkinson, R. and C. Rossignolo (2010). "Cities and the 'soft side' of Europeanization. The role of Urban networks", a. Hamedinger and A. Wolfdhardt (Ed.), The Europeanization of cities, Amsterdam, Techne Press: 197-210.

[9]. Dansero, E., A. Mela (2015). "Turin 2006’s Legacy after eight years: Theories on territorialisation in the aftermath of the Olympic Games", V. Viehoff and G. Poynter (Ed.), Mega-event Cities: Urban Legacies of Global Sports Events, London, Ashgate; 99-108.

[10]. Zhiyong Yi, Guiwen Liu, Wei Lang, Asheem Shrestha and Igor Martek (2017) Strategic Approaches to Sustainable Urban Renewal in Developing Countries: A Case Study of Shenzhen, China

[11]. Couch, C. (1990). Urban Renewal: Theory and Practice. London, Macmillan.