



IJRASET

International Journal For Research in
Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 **Issue:** VI **Month of publication:** June 2024

DOI: <https://doi.org/10.22214/ijraset.2024.56005>

www.ijraset.com

Call:  08813907089

E-mail ID: ijraset@gmail.com

The Impact of Sustainable Housing Infrastructure and Church Growth: The Unexplored Potentials and the Way Forward (Real Estate Approach)

Emenike Kingsley Chikwuado

HND, PGD. MSc., Ph.D. Real Estate and Construction Management PGD.,MPM.,Project and Facility Management, Department of Estate Management and Valuation, School of Environmental Design and Technology, Akanu-Ibiam Federal Polytechnic Uwana

Abstract: *This study is basically targeted towards examining the impact of Sustainable Housing Infrastructure and Church Growth, identifying both internalities and externalities that makes for revamping and rebranding church properties for a healthy and sustainable environment through employing modern technicalities and framework that reveals and explore latent property values imbedded in church properties (housing). The input should touché across the basic dimensions of sustainability which is environment, economy, social and cultural. These considerations will go through a process, if well harness will deliver a desired output that encompasses availability, affordability, durability and harmony. The paper relied on literature review for textual data in support of sustainable infrastructural development. The findings reveal that the church can be remodel using some technological techniques which are environmental friendly, economically accessible, socially accommodating and culturally harmonious. The paper solicits for a more committed Christian efforts and inclusive review and participation in providing sustainable housing infrastructure in the church.*

Keywords: *Sustainable, Housing, Infrastructure, church growth, Real Estate.*

I. INTRODUCTION

Housing is one of those basic social conditions that determine the quality of life and welfare of people and places as church is not left behind. 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 therefore central to sustainable development. (Aniebiebasi et al, 2018) Housing is also part of the relationships between society and the environment. On the one hand, housing construction and operation consume large amounts of natural resources (land, energy, water, and building materials), while producing waste, air and water pollution.(Masnavi, 2007; Melchert, 2005 ; Onuoha et al, 2017) On the other hand, housing itself is exposed to a variety of environmental impacts and hazards, including those associated with natural disasters and climate change. These aspects are also significant considerations for sustainable development (Karshenas, 1994). This complex web of inter-relationships between sustainability and housing is addressed by the policies for sustainable housing. These policies consider a spectrum of underlying conditions to achieve sustainability in housing development (along the four dimensions of sustainability – environmental, social, cultural and economic), such as: impacts on the environment and climate change; durability and resilience of homes; economic activities in housing and their links with the wider economy; cultural and social fabric of communities and impacts of housing on poverty alleviation, social development, and the quality of life. Although sustainable housing is often associated with wealth and affluence, it does not need to be so – genuinely sustainable houses are those that are inclusive and affordable for all (Golubchikov, 2009; Boardman, 2010). Addressing the issue of affordability is, therefore, a necessary condition for transformation towards sustainable housing. And yet affordability is not enough, because the so-called affordable homes cannot be considered sustainable if they create negative impacts on the environment or social life. The marriage of affordability with other sustainability conditions is a must. In this study, the link between sustainability and affordability is discussed in the unified notion of sustainable housing. Furthermore, while sustainable housing is often considered from a resource-saving (green) perspective, this study advocates a more comprehensive approach – viewing sustainable housing not simply as units or clusters of self-sufficient “green buildings”, but as socially-enhancing and environmentally friendly residential practices integrated into the wider urban/settlement systems (Razali et al, 2014). This approach is necessitated by the holistic perspective of sustainable development and by the very multi-faceted nature of housing.

Sustainable affordable housing in this regard may be considered as extension of the adequate shelter- for-all strategy of the Habitat Agenda (paragraph 60): Adequate shelter means more than a roof over one's head. It also means adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and reliability; adequate lighting, heating and ventilation; adequate basic infrastructure, such as water supply, sanitation and waste-management facilities; suitable environmental quality and health-related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at an affordable cost.

In any giving developed or developing economy, one of the major challenges is "housing" or "shelter" (Ihuwa, 2015). This problem is linked to the following; population (Igwe et al, 2017; Ayedun and Oluwatobi, 2011) credit facility (Eziyi et al, 2011; Olotuah, 2000) government policy (Ebenezer et al, 2016; Aniebietabasi and Eugene, 2018; Osubor, 2016). These opinions are all related dimensions pointing to factors that arouse the interest for examining sustainability (Brandon and Lombardi, 2011). However, sustainable housing infrastructure observes certain principles that produce result in all dimensions of sustainability. Hence sustainable development is defining as a behavior that "meet the needs of present without compromising the ability of future generations to meet their own needs" Brundtland (1987). Sustainable housing has the potential to produce good quality housing at a price that is affordable both in the short and long term. Thus, sustainable housing must aim at economic, social and environmental sustainability from planning to implementation phase and at the same time result in housing that is affordable, accessible and environmentally less damaging (Choguil, 1994) The National Urban Housing and Habitat Policy-2007 intends to promote sustainable development of habitat in India with a view to ensuring equitable supply of land, shelter and services at affordable prices to all sections of society (Vijai and Deep, 2012),(GOI, 2007) Notwithstanding numerous attempts, sustainable housing has remained difficult to define, yet it should be coherent to certain characteristics of sustainable development (Choguil, 2007):

- 1) Helping the poor for the purpose of preserving the environment,
- 2) The idea of self-reliant development, within natural resource constraints,
- 3) the idea of cost-effective development, meaning thereby that development should not degrade environmental quality, nor should it reduce productivity in the long run,
- 4) the issues of disease control, appropriate technologies, food security, clean water and shelter for all,
- 5) The notion that people-centred participatory initiatives are needed; human beings in other words, are the resources in the concept.

From this perspective the sustainable housing policy should incorporate three objectives (Choguil, 2007):

The first of these is that future policies must provide the basis for household improvement.

The second objective of the policies which could result in sustainable housing improvement is concerned with the empowerment of poor people. The third objective of such policies must be to psychologically give the lower segment of the urban society a feeling of self-worth.

Thus, in order to be sustainable, housing initiatives must be economically viable, socially acceptable and affordable, technically feasible and environmentally-friendly.

II. SUSTAINABLE DEVELOPMENT DIMENSIONS AND PRINCIPLES IN (SHI)

Sustainable development or sustainability as indicated in its definitions above is now classified into four dimensions namely: environmental sustainability, economic sustainability, social sustainability and Cultural Sustainability as shown in Figure 2.1 below. However, Pitts (2004) suggested in his study that the third dimension is the same as equity and therefore, the dimensions are environmental, economic, equity and cultural sustainability.

- 1) Environmental sustainability dimension: it views and approaches issues such as: ecosystem integrity, carrying capacity and biodiversity. (Olanipekun *et al*, 2014)
- 2) Economic Sustainability Dimension: it details the scope of economic growth, economic development, economic productivity, and trickle-down in the economic system. (Tibaijuka, 2009).
- 3) Social Sustainability Dimension: it evaluates in accountability the areas such as stratification identity, empowerment, accessibility, stability, and equity in the social system Emenike and Ezeudu (2020).
- 4) Cultural Sustainability Dimension: 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. UN-Habitat (2012).

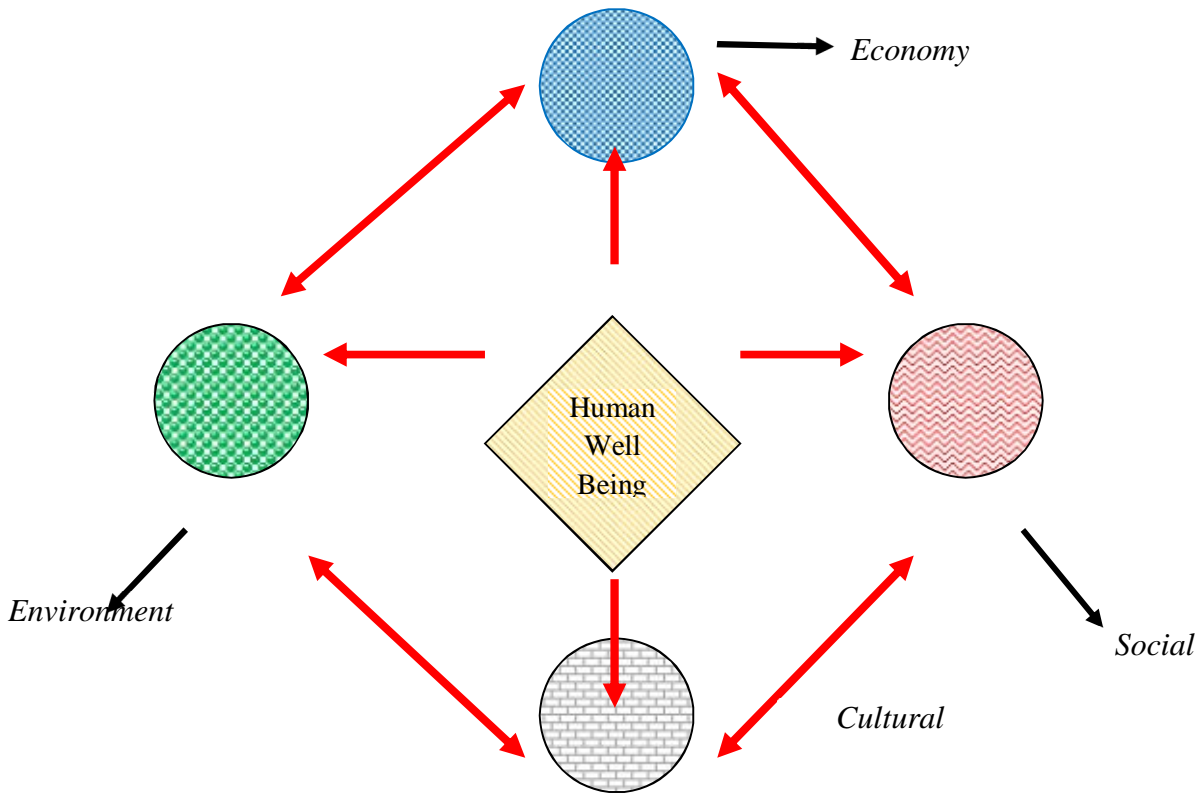


Figure 2.1 the interactions of the four dimensions with human beings at the center of intersection. Source: (UN-Habitat, 2012).

III. VITAL SUSTAINABILITY POLICY DELIVERY IN (SHI)

- 1) *Leadership and commitment*: It is the imperative that sustainable housing initiatives are backed by a clear and strong leadership and political will. (FMLHUD, 2012; Parry *et al.*, 2001).
- 2) *Institutionalizing sustainable housing*: For sustainable housing to really become a long-term and sustainable policy, it needs to be fully institutionalized in the relevant government and non-government structures and practices and become independent from changes in government. (Ayman, 2010; Fasakin, 1998).
- 3) *Multilateral collaboration*: Good governance should be underpinned by a clear vision, strategies and action plans, which need to be formulated and implemented by collaboration with multiple stakeholders, including between different levels of government and government departments, private sector, non-government organizations and local community. (Fumilayo and Adetokunbo, 2013; Ayedun and Oluwatobi, 2011).
- 4) *Community participation*: Local and end-user participation is essential for understanding community needs and preferences, as well as to learning about the local community's knowledge about climate challenges.
- 5) *Context-specific approaches*: The challenge of integrating potential competing social, cultural, economic, and environmental considerations in sustainable housing requires cooperation and integration across sectorial and administrative boundaries.
- 6) *Capacity building*: This involves educating various publics about the multiple benefits of sustainable housing and green building; developing educational programmes for various groups and job markets to acquire necessary skills; accumulating and sharing data bank of best practices; promotion of exemplary projects and case studies.
- 7) *Financial mobilization*: It is important to mobilize financial resources for the implementation of the sustainable housing policies and projects, including by engaging with public-private partnerships, the private sector, and advocacy with the government organizations.
- 8) *Indigenous low-cost materials and techniques*: Particular effort needs to identify and, if necessary, restore low-cost sustainable methods for homebuilding, which should be further combined with modern methods to deliver affordable and resilient homes.

IV. SUSTAINABLE HOUSING AIDING FRAMEWORK

The aiding framework in the context of sustainable housing infrastructure is viewed from two approaches that are framework and organizational structures both within and outside the project environment being framework of sustainable housing infrastructure. The framework its development and implementation are essential to a project sustainability's to which sustainable housing projects are not exception. Housing aiding framework is developed within the context of developing countries where its practiced as new approach, although Egypt and Rwanda is on its way to producing a modern framework for sustainability. An attempt to embrace this modern technicality has started solving housing shortage in Sweden, Dubai, and Norway; this will also help Nigeria if it's practiced in its entirety. These frameworks include the following:

- 1) Institutional Framework (Onuoha, et al 2017).
- 2) Regulation/ Legal Framework (Ogus, 2004),
- 3) Environmental Framework (Ibem and Azuh, 2011)
- 4) Technological Framework (Fonseka and Baumann, 1994).
- 5) Financial-cum-Economic Framework (Emenike, 2019).
- 6) Internal/ External and Trado-cultural Framework (Waterkeyn, 1993).
- 7) Human Resource Management Framework (PMBOK, 2016).

V. SUSTAINABLE HOUSING INFRASTRUCTURAL IDEOLOGY IN REAL ESTATE PERSPECTIVE

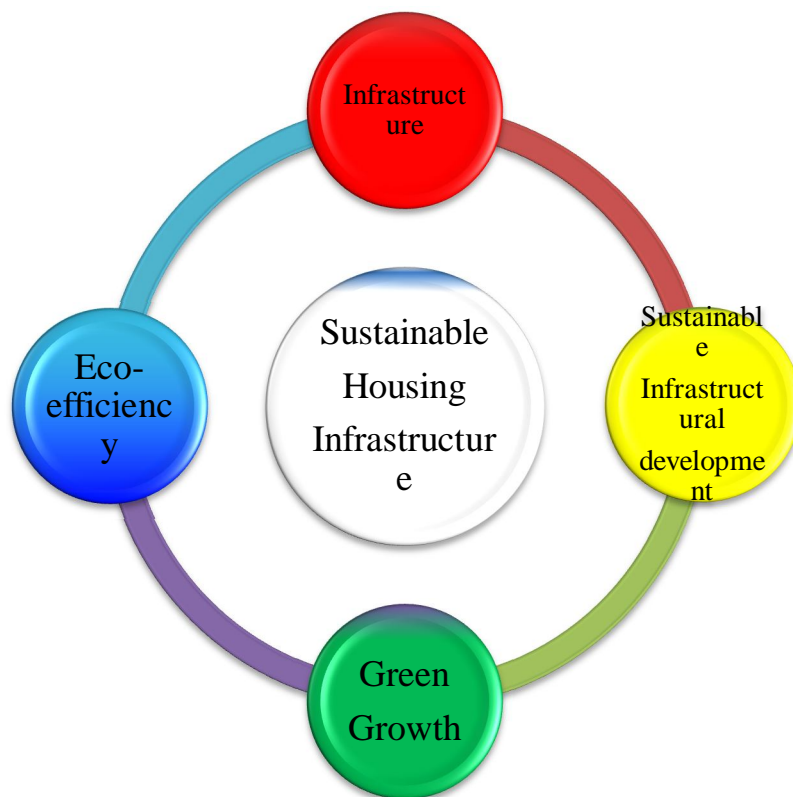


Figure 5.1 Sustainable Housing Infrastructural Ideology in Real Estate Perspective (source field survey)

VI. CONCLUSION

Church as a body is confronted with sustainable development challenges, but also has vital opportunities amidst the present situation regardless of the economy. If the opportunity exposed in this study can be employed, through innovative thinking and practice among the personality concerned, it will yield the dividend of (SHI) which is availability, affordability, durability and harmony. This is the primary purpose of sustainable housing infrastructure. Finally a sustainable church will produce sustainable Christian.

VII. APPRECIATION

I want to appreciate my supervisor, lecturers and all the authors we cited in this work of which this paper is part of my doctoral requirement. Am grateful, May GOD bless you all.

REFERENCES

- [1] Aniebietabasi, A.C., and Eugene A. (2018). Factors Affecting the Shortage and or Provision of Sustainable Affordable Housing in Developing Countries- A Case Study of Cross River State, Nigeria. *Journal of Sustainable Architecture and Civil Engineering* Vol.1, No.22, (pp.27-38) Retrieved From <http://dx.doi.org/10.5755/j01.sace.22.1.20573> 06/04/2020
- [2] Ayedun, C.A., and Oluwatobi, A.O. (2011). Issues and Challenges Militating against the Sustainability of Affordable Housing. *Business Management Dynamics*. Vol. 1, No.4, (pp.1-8) Retrieved From: www.bmdynamics.com 06/04/2020
- [3] Ayman, A. (2010). Sustainable Construction as Approach for Housing Affordability in Rural Areas in Developing Countries. Sustainable building conference Available at <http://www.sbi0mad.com>
- [4] Boardman, B. (2010). Fixing Fuel Poverty: Challenges and Solutions. London: Earthscan. www.earthscanpublishers.com
- [5] Brandon, S. and Lombardi, P. (2011). Evaluating Sustainable Development in the Built Environment. Second Edition; UK; Wiley-Blackwell Publication.
- [6] Brundtland, G.H. (1987). Our Common Future; World Commission on Environment and Development (WCED) Online Available: <http://coporate.britannica.com>
- [7] Choguill, C.L. (1994). Sustainable Housing Programs in a World of Readjustment. *Habitat International*. Vol.18, pp.1-11.
- [8] Choguill, C.L. (2007). The search for policies to support sustainable housing. *Habitat International*. pp.31:143-9.
- [9] Ebenezer, A., Ahmad, A.B., and Hassan, S.L. (2016). Major Factors Causing Housing Deficit in Ghana. (pp.139-147) [Online] Available: www.iiste.org
- [10] Emenike, K.C and Ezeudu, C.U (2020). The Impact of Sustainable Management of Commercial Properties on Investment Returns in Orlu, Imo State. *International Journal of Progressive Science and Technology*. Vol.19, No.2. (pp. 185-192).
- [11] Online Available: <http://ijpsat.ijst-journals.org>
- [12] Emenike K.C. (2019). "Alternative measure in providing real estate infrastructure in a Depress economy in Awka Anambra State", being an M.Sc thesis Submitted to School of Post Graduate Studies University of Uyo.
- [13] Eziyi, O.I., Michael, N.A., and Dominic E.A. (2011). Challenges in Public Housing Provision in Post- Independent Era in Nigeria. *International Journal of Human Sciences*. Vol.8, Issue. 2, (pp.441-443). Retrieved From <http://www.insanbilimleri.com/en> 06/04/2020
- [14] Fasakin, J.O. (1998). Cooperative Housing; The Concept, Experience and applicability to Nigeria's socioeconomic milieu'. Seminar paper presented at the University of Technology, Akure.
- [15] Federal Ministry of Lands, Housing and Urban Development (FMLHUD, 2012). National Housing and Urban Development Policies Draft. Available at: http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CD0QFjAD&url=http%3A%2F%2Fwww.socialhousingnigeria.com%2Fdocuments%2FNational%2520Housing%2520Policy%2520%2520adpoted%25202012.doc&ei=j60aVOv6BILPOLNgVg&usg=AFQjCNH_ZcPe7Qz_oCUqwHapFG4jriXAQ&bvm=bv.75097201.d.ZWU (accessed on 10/11/2013).
- [16] Fonseka, J., and Baumann, E. (1994). Evaluation of Maintenance system in Ghana. Switzerland: SKAT, Vadianstrasse 42, CH-9000 Street, Gallen. Available at: <http://www.skat.ch> (assessed on 12/05/2013).
- [17] Fumilayo, L.A., and Adetokunbo O.I. (2013). Housing Delivery in Nigeria: Repackaging For Sustainable Development. *International Journal of African and Asian Studies* Vol. 1, No.1 pp. 80-85. Available: at <http://www.ijaas.com>
- [18] GOL. (2007). National Urban Housing & Habitat Policy 2007. Available at <http://mhupa.gov.in/policies/duempa/HousingPolicy2007>.
- [19] Golubchikov, O. (2009). Green Homes: Towards Energy-Efficient Housing in the United Nations Economic Commission for Europe Region. Geneva: United Nations, Economic Commission for Europe (UNECE).
- [20] Ibem, E. O. and Azuh, D. E. (2011). Framework for Evaluating the Sustainability of Public Housing in Developing Countries; *Journal of Sustainable Development and Environmental Protection*; Vol. 1, Issue. 3, pp. 24- 39.
- [21] Igwe, P.U. Okeke, C.A., Onwurah, K.O., Nwafor, D.C., and Umeh, C.N. (2017). A Review of Housing Problems. *International Journal of Environment, Agriculture and Biotechnology*. Vol.2 Iss.6 (pp.309-3099) <http://dx.doi.org/10.2261/ijeab/2.6.40>
- [22] Ihuah, P.W. (2015). Conceptual Framework for the Sustainable Management of Social (Public) Housing Estate in the Niger Delta Region of Nigeria. A Dissertation Submitted to School of Built Environment, University of Salford. Salford, United Kingdom. (pp. 40-42) retrieved from: <http://usir.salford.ac.uk/id/eprint/3404> 06/04/2020
- [23] Karshenas, M. (1994). Environment, Technology and Employment: Towards a New Definition of Sustainable Development, *Development and Change*, 25(4): 723-756,
- [24] Masnavi, M.R. (2007). Measuring Urban Sustainability: Developing a Conceptual Framework for Bridging the Gap between Theoretical Levels and the Operational Levels. *International Journal of Environmental Research*, 1(2):188-197,
- [25] Melchert, L., (2005). The Dutch Sustainable Building Policy: A Model for Developing Countries. *Journal of Building and Environment*, 42(2): 893-901.
- [26] Ogus, A. (2004). The Importance of Legal Infrastructure For Regulation (And Deregulation) in Developing Countries. Working Paper Series Centre on Regulation and Competition, Centre on Regulation and Competition, Manchester.
- [27] Olanipekun A.O., Aje, I.O. and; Awodele, O.A. (2014). Contextualizing Sustainable Infrastructure Development in Nigeria *FUTY Journal of the Environment* Vol.8 No. 1, June (pp.80-92).
- [28] Olotuah, A.O. (2000). Housing Low-Income Civil Servants in an Emergent State Capital-the case study of Ado-Ekiti, Unpublished Ph.D. Thesis, Federal University of Technology, Akure, Nigeria.
- [29] Onuoha, I.J., Aliagha, G.U., Kalu, I.U., and Abdul Rahman, M.S. (2017). Green and Sustainable Commercial Property Demand in Malaysia and Nigeria. *Journal of Energy Technologies and Policy*, ISSN 2224-3232 (Paper) ISSN 2225-0573 (Online) Vol.7, No.9, 2017 pp. 20-32 www.iiste.org
- [30] Osubor, O. (2016). The Myth of Housing for All by the Year 2025 – A Critical Review of Housing Policies in Nigeria. *America Journal of Engineering Research*. Vol.5, ISS.11, (pp. 124-130) [Online] Available: www.ajer.org



- [31] PMBOK, (2016). A Guide to The Project Management body of knowledge Fifth Edition. Project Management Institute.
- [32] Razali, M.N., Yassim, A.M., Adnan, Y.M. and Baharom, Z.A. (2014). Green property Development by Asian Property Companies The Sustainable City IX, Vol. 1. (3)17 WIT Transactions on Ecology and The Environment. www.witpress.com, ISSN 1743-3541 (on-line) doi:10.2495/SC140271
- [33] Tibaijuka, A. K. (2009). Building Prosperity: Housing and Economic Development. London: Earthscan.
- [34] UN-Habitat, (2012). Sustainable Housing for Sustainable Cities a Policy Framework For Developing Countries www.unhabitat.org
- [35] Vijai, S.S and Deep, N.P (2012). Sustainable Housing: Balancing Environment with Urban Growth in India. Jaipur, Rajasthan.
- [36] Waterkeyn, A. (1993). Pipe Dream or Pump Dream. Waterlines. Vol. 11, No.4, pp. 19-21



10.22214/IJRASET



45.98



IMPACT FACTOR:
7.129



IMPACT FACTOR:
7.429



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24*7 Support on Whatsapp)