iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 7 **Issue:** VI **Month of publication:** June 2019

DOI: http://doi.org/10.22214/ijraset.2019.6044

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.177
Volume 7 Issue VI, June 2019- Available at www.ijraset.com

Proposal for Infrastructure Development in Village Belhe, Pune

Rupesh Auti[1] and Swati Patil[2]
[1,2]*Town and Country planning Section, Civil Engg Department, SOET Sandip University, Nashik, India*

Abstract— According to census 2011 India having 71% rural population and it is about 83.3 crore. From 6 lac villages 1.25 lac villages are backward. It mainly shows the lack of services, lack of facilities, less control of governance, and the distance from develop areas that are cities. For the development of country it is very important that start from village. Rural infrastructure development done by developing and maintaining much needed things like Healthy water supply, Solid and Liquid waste management, internal roads and connectivity, Education, Health etc. Also apart from this a sustainable development done by many more things like good governance, special laws at local level, strong economic model, multipurpose buildings like bus stand, market yard, community halls.
All this development is done by very well co ordinance of government, grampanchayat body, NGO, self-help group and people.
Keywords— backward, rural infrastructure development, multipurpose buildings, well co-ordination.

I. INTRODUCTION

Rural infrastructure development having focus of the governments in the world. So it important to make the efficient planning for infrastructure development in the villages. The important thing to study the current situation of the all available infrastructure in village, to analysing the problems facing by village. Analysis is very important to prepare the proper infrastructure development plan. Villages having very low rate of development, there are many reasons behind it like poor connectivity to cities, weak governance, less coordination between government and people. Also lack of recourses and less management of available recourses is main problem faced by people.

This backwardness condition of village can be change into develop village by taking an proper efforts in each section of infrastructure separately. In village development much needed facilities as well as some smart good worth facilities are required, which help to develop a village as a self-sustainable village. In this terms like strong economy, multipurpose buildings, multipurpose park are come. Also a people participatory works like ground water level increment, all-rounder parks, clean surroundings are include.

II. BACKGROUND

A. Infrastructures Condition in Villages of India

India has the second largest population in the world after China. But the difference is available space and government strategies and policies. In India about 71 % rural populations, they need some much needed infrastructures but due to lack of policies and lot of challenges like distance from city, geographical condition it cannot provided till today. In rural infrastructure water supply, solid waste disposal, garden and play ground, roads, education and health are highlighted first. So all the efforts should be taken on these infrastructures in villages of India.

III.STUDY AREA AND DATA SET

A. Study Area

Study area of topic is village Belhe, having seprate grampanchat and talathi office. Village Belhe is in Junnartahashil of pune district in Maharshtra, India. Which western region of Maharashtra as well as India. Location coordinate of Belhe are 19.1156° N, 74.1724° E. Village Belhe is far away from district and tahashil location and also from any high population develop area like city or urban area. So less development seen in the area, means slightly backward area. This location is fall under less rain fall zones but not any other option for occupation maximum number of people is farmers. That's why local bodies having less amount of revenue generate.

Village Name – Belhe, Tal-Junnar, Dist- Pune
State – Maharashtra
Region – Western Maharashtra
Division – Pune
Total area – 1469 hectors

©IJRASET: All Rights are Reserved

Language - Marathi
Sarapanch – RajabhauGunjal
Elevation – 619 m MSL

B. Available Infrastructures in Belhe

Table.1 Available Infrastructures

Available Infrastructures	Numbers
Collage	1
High school	2
Primary school	3
Anganwadi	5
Primary health care	1
Library	1
Water tank	2
Well	12
Hand pump	30
Solid waste disposal ground	1

C. Infrastructures Locations

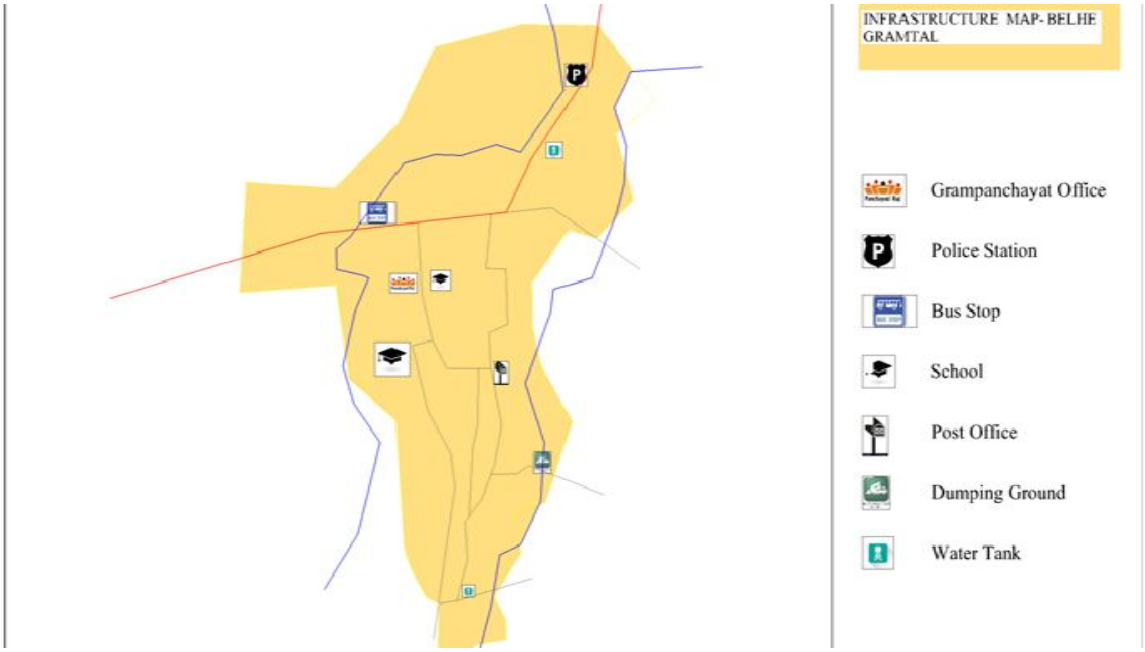


Figure 1 infrastructure location.

IV. METHODS

Methodology includes several steps with having first step to selection of area which is to be studied. Then literature reviews are done from many sources related to the topic. Frome these problems can be find out and then the objective of study can define on the based on problems. After this, data collection can be done from different section of area like gram panchayat, participatory

©IJRASET: All Rights are Reserved

rural appraisal (PRA), surveys, and GIS for village location and boundaries. This collected data analyse in next step of methodology by RADPFI guidelines, PRA, and resource mapping. From all of this data collection and analysing major focus areas can be selected for making a best proposal to the identified problems.

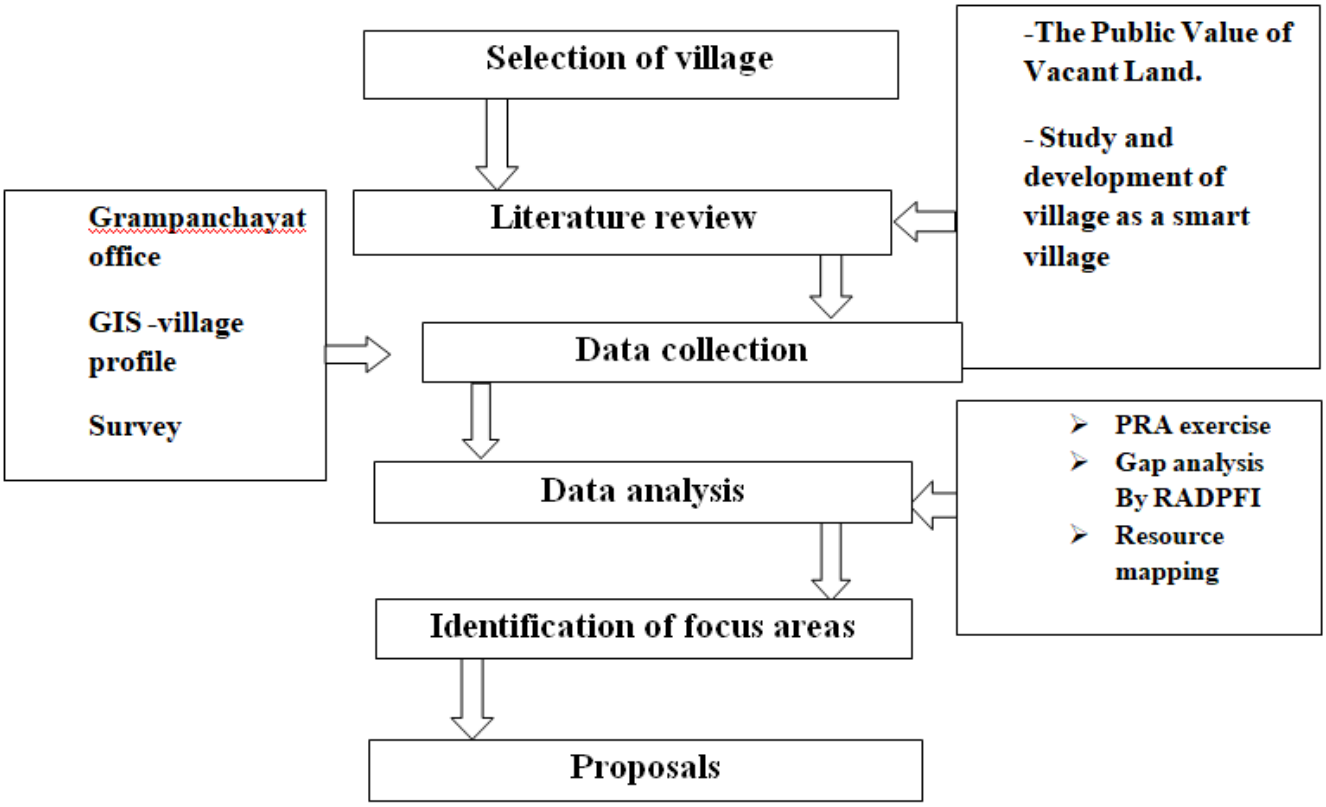


Figure 2 methodology chart.

A. Infrastructural Conditions of Belhe

Condition of Available infrastructure of village Belhe like roads, water supply line, solid waste disposal system, primary health care centre is good. But in school infrastructures like parking, garden, flag, and cycle stand are unavailable. Also in Belhe play ground, Community Park, commercial complex are unavailable.

B. Problem of related to Vacant Land or Plots

Vacant land and plots always creating problem like unhygienic conditions, collection of garbage, unused trees, smell, illegal uses and many more. Also this plots create fear for people of animals like pig and other garbage eating lives. Vacant land in residential areas are affect aesthetical view of area and directly effect on cost of other properties

V. PLANNING PROPOSALS

A. Development of Vacant Land, in Multipurpose Park

People wants a clean, free ground to full fill their need like open ground for festivals, meetings, any cultural or administrative programme, sports, open gym and lot more. And government cannot provide because of lack of open land but on other hand there are many land or plots are seen vacant under the tag of reserve or any other issue. This problems can solve by taking proper and quick design to taking charge on this land and develop this land properly for people need under government rules and regulations.

Village Belhe having a big plot of size 3500 square meter which is came in gaothan and very close to the houses of village Belhe. But in reality this plot creating lot of problems to local people. Open plot shown in photo is own by gram panchayat which is too vacant and unmaintained. Which can be developed by using all the standard and legal process for worth of village people and gram panchayat also.

©IJRASET: All Rights are Reserved

Proposal project consist of Stage, Tool room / change room, Footpath /jogging track, Safety walls, Water supply, Electricity supply, Toilet blocks, Parking.

Table 2 required funding for development for multipurpose park.

Name Of Work	**Quantity × Rate**	**Total Amount**
Open Stage	65mcum × 1000	65,000
Footpath / track (2m wide)	64.44mcum × 3300	2,06,000
Toilet block repairing	4 × 10000	40,000
Change room repairing	Approx	10,000
Safety wall	76.66 ×3000	2,30,000
Site Cleaning	Approx	10,000
Total		5,61,000. Rs

Final view of multipurpose park after completion

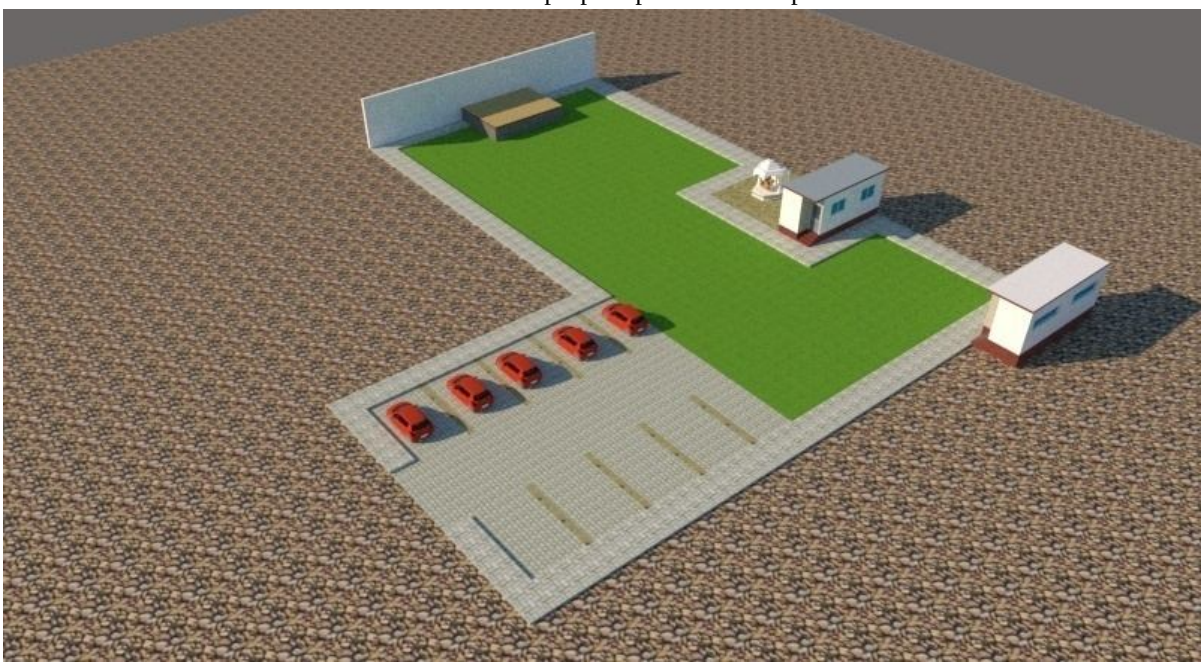


Figure 3 Final view of multipurpose park after completion

Funding will be done by under the following policy of Maharashtra government, providing basic facility to the rural area suggested by representatives.

B. Re development of School Infrastructure – Flag

A high secondary school of village Belhe name as Shree Belheswhwar Vidyamandir, Belhe. School is famous and also most oldest school in area. Having 30 classrooms, office rooms, and other required rooms, and ground. Total 1800 students studding in school. This school is too old and its infrastructure looking older as compare to today's requirement. Somupdating and provision of some new infrastructure in school.

New provision in school:

Flag, Garden, Cycle stand, Paver block.

Requirement of new flag.

©IJRASET: All Rights are Reserved

Table 3 estimation for new flag.

Sr. no	Item of work	Amount
1	Excavation	726.25
2	Soling	799.8
3	P.C.C	8302.41
4	U.C.R masonry	12395.48
5	Soil filing	153
6	Brick masonry	20272.80
7	External plaster	9385.96
8	External paint	3853.52
9	Granite stone	9606.83
10	M.S railing	649.83
Total		**66128**

Plan for new flag in school

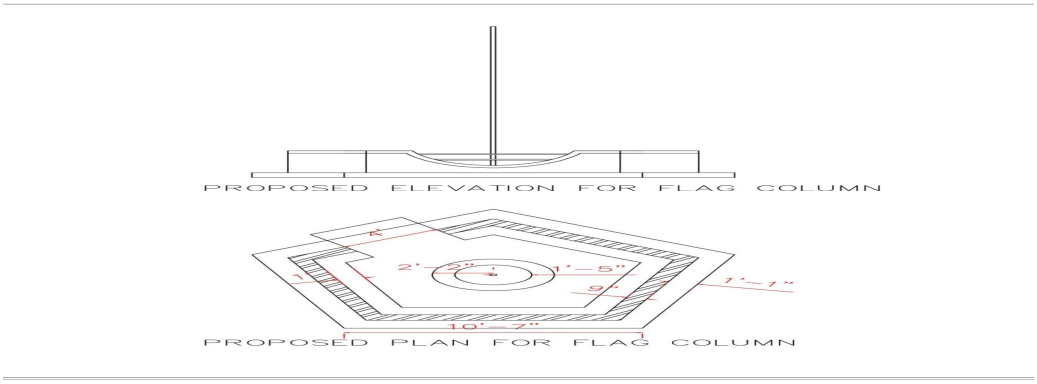
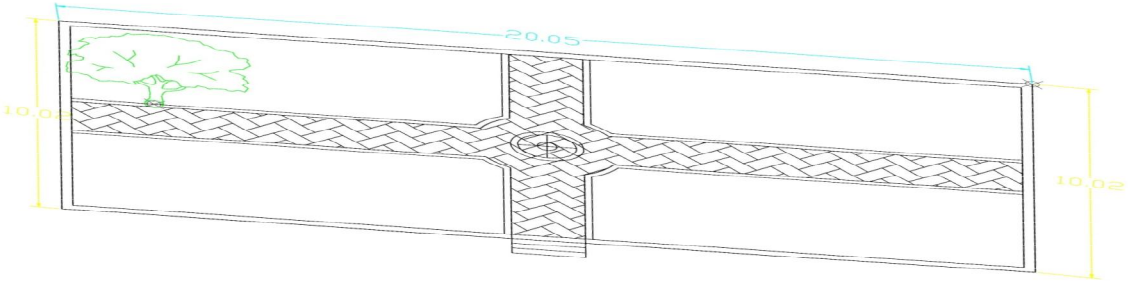


Figure 4 plan for new flag.

C. Proposal for Construction of New Garden in School

Development of new garden in shree belheshwar vidyamandir high school Belhe.
Name of work:- Construction Of Garden
Place : Belhe, Junnar , Pune
Total estimate cost for new garden in school is 204547 Rs.
Funding for this development will done under following scheme For redevelopment of school lot of scheme launched from central as well as state government one of them is Rashtriya Uchatar Shiksha Abhiyan (RUSA). Which is central government scheme.



©IJRASET: All Rights are Reserved

Figure 5 plan for new garden in school.

D. Proposal for Construction of New Cycle Stand

*D*evelopment of new cycle stand in Shree Belheshwar Vidyamandir High school Belhe.

Name of work:- Construction of cycle stand

Place : Belhe, Junnar , Pune.

Total estimated amount for construction of new cycle stand is 1568550 Rs.

Funding for this development will done under following scheme For redevelopment of school lot of scheme launched from central as well as state government one of them is Rashtriya Uchatar Shiksha Abhiyan (RUSA). Which is central government scheme.

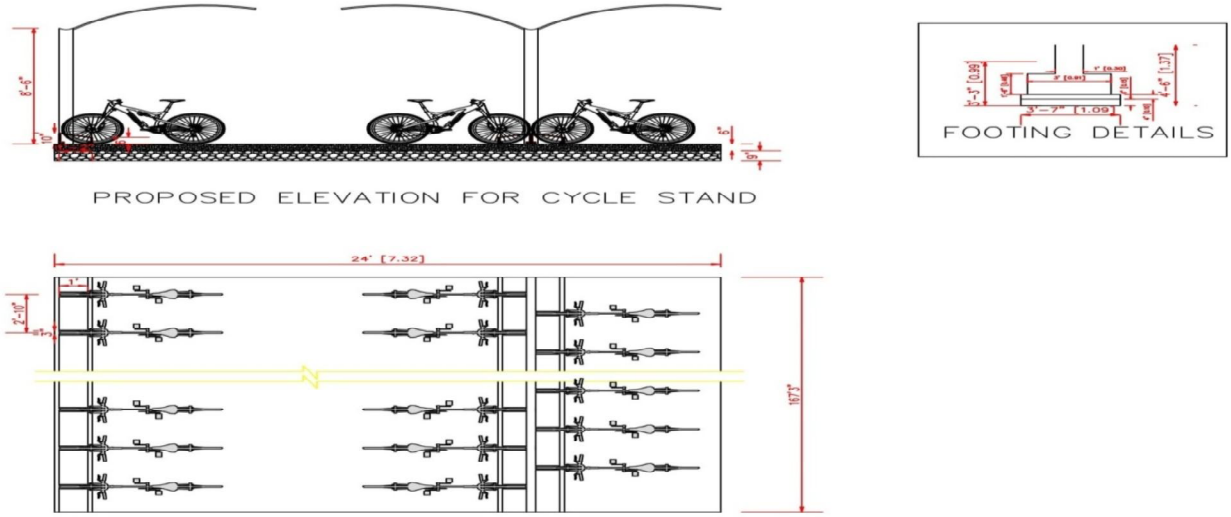


Figure 6 plan for new cycle stand

VI. CONCLUSIONS

Less availability of infrastructures in rural areas are main reason for people not interested to live in village and they get migrate towards cities for searching of best infrastructure. But because of this lot stress occur in city so it is too important for redevelopment of old infrastructures and constructing new infrastructures. And taking more efforts in development of infrastructures will control this condition.

ACKNOWLEDGMENT

I acknowledge to Grampanchayat, Belhe and panchayat samitee, Junnar and Zilha parishad Pune. For giving me a valuable data about census, infrastructures, funding system for providing necessary data.

REFERENCES

[1] Miller B. (1995). The Role of Rural Schools in Rural Community Development. ERIC Clearinghouse on Rural E ducation and Small Schools Charleston WV. [online] Available at: https://www.ericdigests.org/1996-1/rural.htm [Accessed 12 Nov. 2017].

[2] Wakerman, J., Humphreys, J., Wells, R. and Jones, J. (2009). A Systematic Review of Primary Health Care Delivery Models in Rural ad Remote Australia 1993–2006. BMCHealth Services Research, [online] 8(1), p.276. Available at: https://www.researchgate.net/publication/23711213_A_Systematic_Review_of_Prima ry_Health_Care_Delivery_Models_in_Rural_ad_Remote_Australia_1993-2006 [Accessed 3 Oct. 2017].

[3] Retnakumar, J. and Arokiasamy, P. (2003). Fertility Decline: And Falling School Enrolment. Economic and Political Weekly, [online] 38(46), pp.4827-4830. Available at: http://www.jstor.org/stable/4414269 [Accessed 14 Dec. 2017].

©IJRASET: All Rights are Reserved

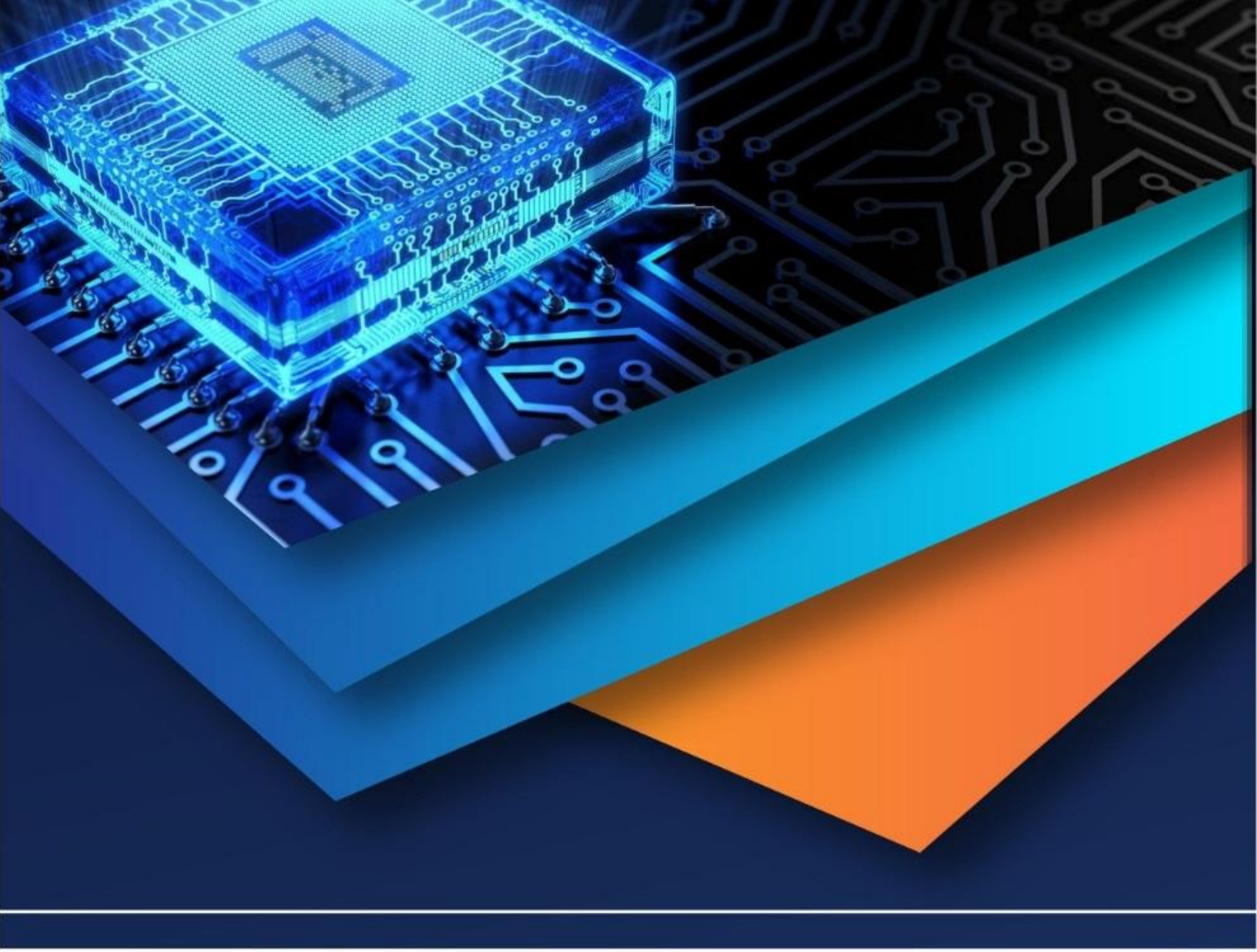
[4] School Infrastructure and Educational Outcomes: A Literature Review, with SpecialReference to Latin America. (2018). Brookings Institution Press, [online] 17(1 (Fall 2016), pp.95-130. Available at: http://www.jstor.org/stable/economia.17.1.95 [Accessed 11 Mar. 2018].

[5] SMART VILLAGES & SOCIO-ECONOMIC DEVELOPMENT OF THE NATION.(2016). International Journal of Innovative Research in Information Security (IJIRIS),[online] 3(09), pp.1-6. Available at:http://www.ijiris.com/volumes/Vol3/iss9/05.DCISSP84.pdf [Accessed 3 Oct. 2017].

[6] The Role of Rural Schools in Community Development: Policy Issues and Implications. (1995). Journal of Research in Rural Education, [online] 1(3), pp.163-172. Available at: http://jrre.vmhost.psu.edu/wp-content/uploads/2014/02/11-3_3.pdf [Accessed 7 Jan. 2018].

[7] The Rural Solution How Community Schools Can Reinvigorate Rural Education.(2010). [online] Washington: Center for American Progress, pp.9-11. Available at: http://www.ruraledu.org/user_uploads/file/The_Rural_Solution.pdf [Accessed 28 Dec. 2017].

©IJRASET: All Rights are Reserved



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)