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Special Schemes and Rural Development of Khambale Village

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Abstract-The government of India has set up the Ministry of Panchayati Raj to attain decentralized & participatory local self-government through Panchayati Raj Institutions (PRIs). Village Development Planning (Smart village) refers to the process of identifying the pressing problems in a village and finding the best ways to solve them, and in villages which have most of the basic amenities and facilities; it also means identifying the common aspirations of the residents and finding ways to achieve those. The paper gives proposal for rural development of the khambale village by Government Schemes. Khambale is a Village in Trimbak Taluka in Nashik District of Maharashtra State, India. Belonging to Khandesh and Northern Maharashtra region. It is located 38 KM towards west from District headquarters Nashik. The proposal is based on Special Schemes launched by government of India for development of rural area with involvement of all stakeholders (Gramsabha members, Sarpanch, Gramsevak & Localities). The major problems identified in Khambale are lack of education facilities, Health Center, Safe drinking water, employment.

Keywords: Education, Health center, drinking water supply, Employment.

I. INTRODUCTION

In India, migration of people from rural to urban is increased day by day. About 70% of population is living in cities, because requirements of peoples are not fulfilled in villages. There are 600000 villages out of them 125000 are backward. So it necessary to design and development of village as a smart village with urbanization and modernization peoples migrate from one place to another for different facilities such as education, employment, affinity of people towards the city. The smart village corrects providing facilities for sustainable family relationships without disturbing the lifestyle of different generation. Village is main criteria for development of nation , so develop the village in such a way that which is self- dependent in providing the services, employment & well connected to the rest of world & new technology that is SMART VILLAGE.

Vision of smart village is that modern energy access can act as catalyst of development in education, health, clean water, sanitation, and environmental sustainability. Now-a-days our government also gives strong focus on smart village. So this project is also a small step towards to make India as developed nation to the progress of village and smarten the rural development of nation at any phase is linked with technology and when it happens there is advancement in science and innovation.

The proposal for village development planning for the village of khambale. Khambale is a Village in Trimbak Taluka in Nashik District of Maharashtra State, India. Belonging to Khandesh and Northern Maharashtra region. It is located 38 KM towards west from District headquarters Nashik.

II. OBJECTIVES OF STUDY

A. To Study the Government policies & Guidelines for Infrastructure.
B. To identify issues involved in the infrastructure development.
C. To analyze existing Infrastructure of Village.
D. To prepare planning proposal for infrastructure of village.

III. NECESSITY OF THE STUDY

Necessity of proposal for Rural Development Plan for Khambale Village is to improve lifestyle of people. To develop health, education, Water supply, Solid waste management system, Public amenities.

IV. SCOPE OF WORK

A. This study dealing with Smart Village Program.
B. This study mainly focuses on Physical planning and management of Infrastructure.

V. METHODOLOGY

This research starts with identifying problem. In first step, Objective should be decided and Literature studied. This will be followed by literature review to get and understand Comparative Study of village development planning (smart village). After identifying the problems and detail literature study, for study area khambale village is selected. After selection of study area, various data are collected through local survey, various meeting with Sarpanch (elected member of village), Gramsevak (appointed by state government), Principal of primary school, local people and Grampanchayat of khambale which includes maps and drawings. Then Analysis has been done of that collected data. Based on this data analysis proposals have been prepared.

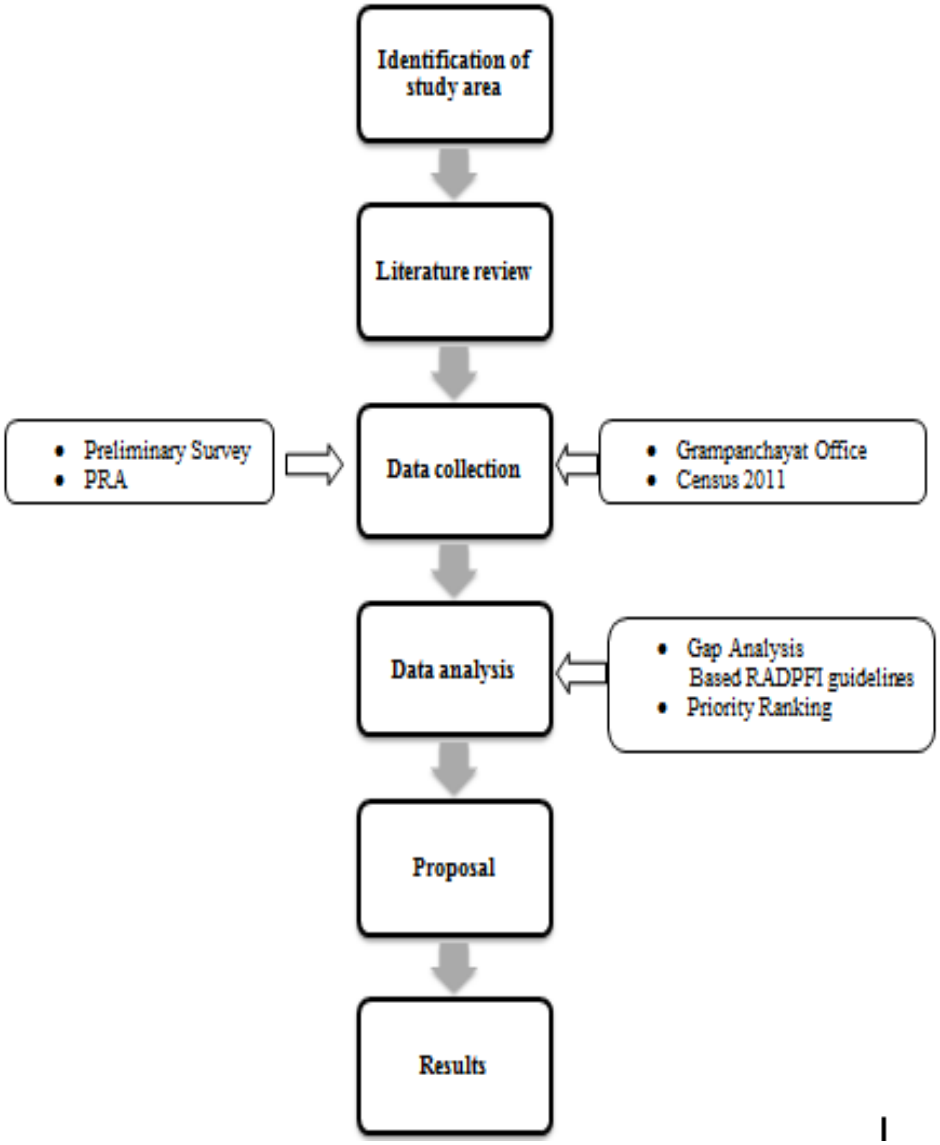

FIG.1.METHODOLOGY

VI. STUDY AREA

Khambale village is located in Trimbakeshwar tehsil of Nasik district in Maharashtra, India. It belongs to Khandesh and Northern Maharashtra region. Khambale is surrounded by Mokhanda Taluka towards south, Peth taluka towards north, Nasik taluka towards east, Jawhar Taluka towards west. According to census 2011 information the location code or village code of Khambale village is 550922.Khambale village total population is 1921 and number of houses are 344. Female population is 49.8% village literacy rate is 74.8% and female literacy rate is 34.3%.

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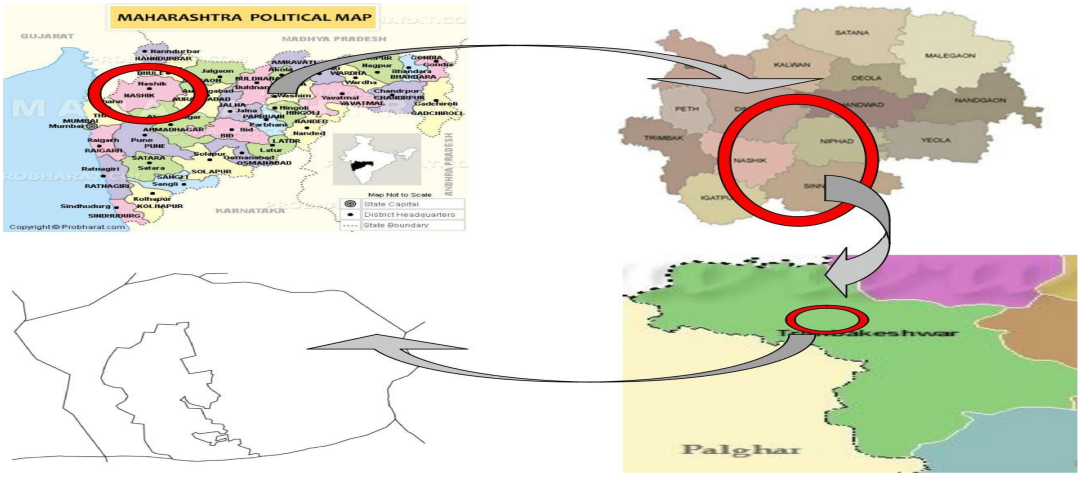

FIG.2.STUDY AREA LOCATION

VII. DATA COLLECTION AND ANALASIS

Survey and visit gives the real picture of the existing scenario of the village. For Every study data collection is the basic requirement. It is carried out through inventory data studies, field studies, personal interview of the beneficiaries etc. Without Field data, it is difficult to judge the present condition of village. The next step involves collection of data for studying the past and existing social and demographic characteristics. This is one of the important activities in the study process, which requires much time, efforts, also correct and large number of database is required. The main purpose of this chapter is to establish the study parameters for collection of data. Primary and secondary data is collected to fulfill the requirement.

Primary data – Data which is collected by carrying out site surveys, questionnaire survey, informal questioning.

Secondary data – Data which is collected from development plans, government reports, case studies, census data.

A formal meeting with Sarpanch (Shri Ramdas Gaikwad) and Gramsevak (Shri. Prashant Kanade) for taking permission regarding the work to be conducted in the village was held on 25thSep, 2018.The objective of meeting was:

To find out basic problems of village regarding sanitation, drinking water and solid waste management.

To have basic information like total households, population, area of village, current solid waste management practices used by the villagers, among the others.

Table.2.Demography of Khambale Village as per census2011

Name of village	Khambale
Taluka	Trimbak
District	Nasik
Area of village	873.25 ha
Distance from taluka	9.7km
Distance from district	24km
Z P school	1(1st to 5th)
Anganwadi	2

Census Parameter	**Census Data 2011**
Total population	1921
Total no of houses	344
Female population %	49.8% (956)
Total literacy rate %	74.8%(1437)
Female literacy rate	34.3%(658)
Scheduled tribes population %	35.3%(678)
Scheduled caste population %	8.6%(166)
Working population%	44.2%
Child(0-6) population by 2011	273
Girl child(0-6) population % by 2011	53.8%(147)

Anganwadi and Primary School:
In Khambale village total 2 Anganwadi are there. All the Anganwadi are located in village Gaonthan area.

Table.3.Facilities in Anganwadi

Facilities	Anganwadi-1	Anganwadi-2
No. of Students	45	35
100% admission for children village	Yes	Yes
100% registration of children village	Yes	Yes
Drop out ratio	0%	0%
Staff	2	2
Toilet	Yes	Yes
Drinking water	Yes	Yes
Electricity	Yes	Yes
Children play Area	No	No
Vaccination	Yes	Yes
Kitchen For Cooking	Yes	Yes
Medical Checkup	Once in month	Once in month

Table.4.Facilities in Primary school

Status of School Building	
Grade(Std)	1 to 4
Dropout ratio	……
Admission of Girls	Yes
Computer Aided Learning lab	No
No. of Computer available	3
Kitchen for Mid-day-meal	Yes
No. of Classroom	4
Separate toilets for Girls & Boys	Yes
Drinking Water Facility	Yes
land for playground	No
Medical Checkup of Students	Yes
Electricity Connection	Yes
Staff	5
In which School students go for higher Education after 4th Std.	Talegaon Village(5Km)

A. Gap Analysis

1) Anganwadi Center: According to Integrated Child Development Services (ICDS) Scheme guidelines requirement of the AWC on the basis of population factor is as shown in Table.

Table.5.ICDS Norms for Anganwadi

	Population	**Number of AWC**
Anganwadi(AWC)	400-800	1
	800-1600	2

	1600-2400	3
	>2400	In multiples of 800 one AWC
Mini AWC	150-400	1
For Tribal/Riverine/Desert, Hilly and other difficult areas/Projects	300-800	1

According to the data collected from khambale 2 Anganwadi in village. Currently number of students in Anganwadi 1, Anganwadi 2 is 45 & 35 respectively. As per current situation 3 Anganwadi for khambale village is excessive as per ICDS Guidelines. So required Anganwadi in Khambale village considered is 1 as per ICDS guidelines.

2) *Primary School:* According to Sarva Shiksha Abhiyan Guidelines minimum one Primary school should be within one Kilometer of every habitation. In Khambale village one primary school is there from standard 1st to 4th. For higher education students go to talegaon high school, it is 5km form khambale village. So the needs of primary school in khambale village form standard 1st to 8th as per requirement of villagers. According to RADPFI Guidelines One high school with primary school is required within 1 km with area 1ha.
3) *Health Center:* Requirement of the Health Facilities in rural area on the basis of population according to Indian Public Health Standards (IPHS) Guidelines.

Table.6.IPHS Guidelines

Center	**Population Norms**	
	Plain Area	Hilly/Tribal/Difficult Area
Sub-Center	5000	3000
Primary Health Center	30,000	20,000
Community Health Center	120,000	80,000

In Khambale village there is no any health center. Villagers go Vadoli village Sub center for any health issue. Vadoli is 6Km from Khambale. Primary Health Center is located in Anjaneri village distance from khambale 5km.According to RADPFI Guidelines Health Center is within 500 meters. So in Khambale village one Sub Center is required.

VIII. PLANNING PROPOSAL

A. *Proposal for Educational Infrastructure*

In rural area education is not only important to remove literacy and poverty, but also for other reasons like social, economic, cultural, political etc. Rural education not only strengthens the quality of life of community but it is also important for overall progress and development of any village. Anganwadi and Primary schools are the first and important part of India's four stage Education system.

1) *Anganwadi Center:* Total 2 Anganwadis in this village. According to the gap analysis one new Anganwadi are required in khambale village.

Individual	**Dimensions (in m)**
Class room	4.41x8.54
Kitchen	2.17x2.7
Utility Services	2.17x1.0
Store room	2.17x3
Toilet	6.54x1.75
Front otta	1.5x3.56
pathway	4.54x4.12
Boundary Wall	16.74

Total Built up area	63sqm

Table.7.Area table for Propose AWC

As per the ICDS Guidelines minimum Built up area for Anganwadi should be 600 sq. ft. which is 55.74 Sq.m. Here the built up area of new Anganwadi is 63 Sq.m which is satisfying the ICDS norms for funding under MANREGA scheme.

2) *Primary School with High School:* In India's four stage education system secondary and Higher Secondary are two very important stages for career building for any student. This stages decides the direction in which student is interested in making his/her career. As per existing situation there is no any higher secondary school in Khambale village. So students of this village go to Private schools nearby LikeTalegaon School, Brahma valley High school at Anjaneri. During informal talk with Principal of primary School, they informed that majority of students come in school are the children of farmer's & working in nearby industries in Nashik. As they come from poor background they are not able to afford the fees of these private schools for higher studies. And they also cannot afford to travel up to Nashik for higher studies so they left further studies after completion of primary education and start working in industries.

So to improve the facility of secondary education in village one new High school is proposed in khambale village. This will enhance the educational infrastructure facility in village as well as in other nearby villages too.

As per the guidelines of Rashtriya Madhyamik Shiksha Abhiyan High school should be located within the premises of 3 km form any habitat in rural area, this location satisfy this criteria. As this location is Opposite of Grampanchayat office of the village.

Proposed school is equipped with all the required facilities according to the IS: 8827-1978 "Recommendations for Basic requirement of School Buildings". All the basic facilities like Classroom, Library, Computer Lab, Toilet, Play area are provided. This high school is designed for standard 1 to 8. So the total numbers of classes required are 8 classes. Here 10 Classes are proposed, extra classes can be used in future when student will increase. According to the IS: 8827-1978 for Higher secondary school number of student places per class room is 40, so the strength of this school to place 720 students as per proposed plan.

As per IS: 8827-1978 minimum required area for classroom is 50.4 Sq.m. This proposed school also let students to focus on various activities like Art, Dance and Music along with academics. To encourage extra-curriculum activities like Art and Dance, one Dance & Music room is proposed.

B. Proposal for Health Infrastructure

Development of any village or community depends upon the health of the people. There is no health related facility available in this village. Currently there is one PHC in Anjaneri village, which is 7km from khambale village.

1) *Sub Center:* As per the gap analysis requirement of one sub center is there in khambale village. So one health center is proposed in this village. Health center work as a first contact point with community and refers patient to the PHC. Success of any nationwide health policy depends upon the functioning of sub centers providing acceptable services according to the standards to the people.

New sub-center is proposed in Centre of village area. New Sub centre is proposed according to the IPHS norms. It has all the required basic facilities like clinic, examination room, labour room, sterilization room, nurses' station etc. One ward is also in sub centre having 4 beds. This sub centre also having labour facility. Sterilization room is also attached with labour room and having attached toilet. Immunization room is at the entrance of the sub centre which will give easy access to the patient's .1.5 m wide ramp is provided on the entrance for easy access of wheel chair. In the sub centre Two Female Health worker, One Male Health Worker and one Safai Karamchari is proposed in order to provide services efficiently. This sub-centre will provide facilities like maternal and child health, family planning counseling and education, Safe abortion counseling and appropriate referral, school health services etc. It will be providing treatments to minor diseases like fever, diarrhoea, first Aid, Worm infection etc.

C. Proposal for Water ATM Machine

A water ATM is an automated water vending machine that dispenses pure drinking water. It can be installed in urban and rural localities which do not have access to clean and pure drinking water. A water vending machine works like any regular bank ATM, the only difference being that it provides water instead of money. In khambale Village there is no safe drinking water so need to provide RO plant i.e. water ATM. People generally use water ATM machine to get clean drinking water at lower price rate than bottled water. There is a huge difference between rates of bottled water and RO purified water from a water ATM machine. Bottled water is available at Rs. 20 per litre where water ATM serves 5 litres of water at less than Rs. 2. This is a huge price difference. Water ATM plant is fitted below the water overhead tank. The process is similar for Water ATM machine. There are mainly two

types of Water ATM machine. One is coin operated and other is card operated. In the coin-operated machine, you just have to insert a coin in the machine and place your jar below the tap which dispenses water. In the card operated machine you will have to recharge your card with money and then place it on the card scanner of the water ATM machine. Then you will have to select the amount of water you want to withdraw. Then the money will be deducted from your card and machine will show you available balance in your card and dispense water. It is so simple that anyone can use it. So instead of spending money on medical facilities use clean drinking water. Total population of khambale village is near 2000.Therefore providing 1 RO Plant of capacity 3000lph having cost of7.5 Lakh. This is implemented under the various scheme of department of rural development and Panchayat raj.

IX. CONCLUSION

In this study different government policies and schemes and guidelines for rural development studied. I was studied to understand the infrastructure requirement in village to identify facing problem in the village and to solve them with the help of government schemes and policies. In this paper mainly focus on to compare the government schemes for development of village. Implemented the new educational building (Anganwadi & Primary school with high school), Sub Centre.

X. ACKNOWLEDGMENT

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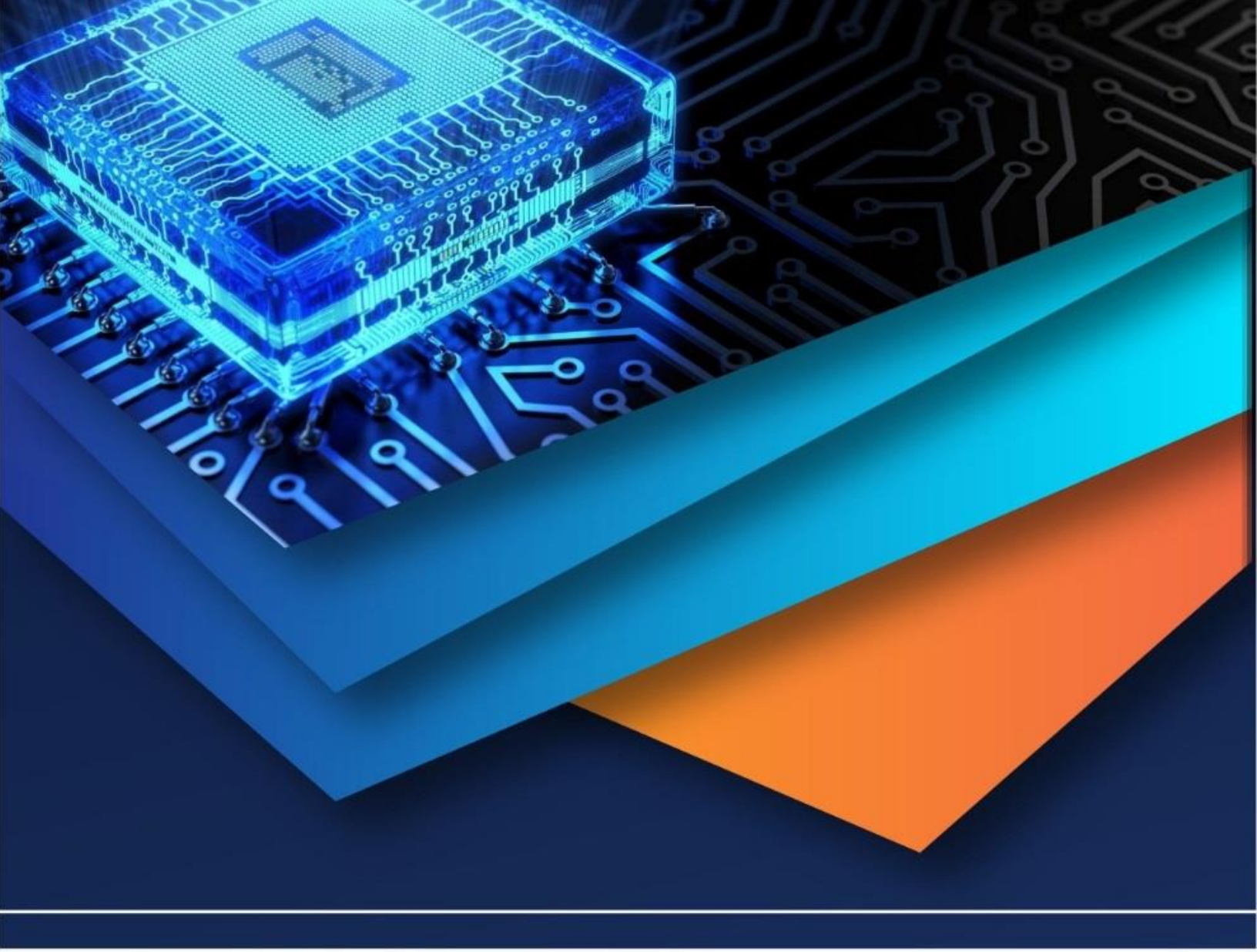
REFERENCES

[1] Kulkarni Milind. “Clean and smart village: Aspect and Alternatives. “International Journal of Research in engineering Science and technology (IJREST)-Civil engineering, ISSN-2395-6453.
[2] Somwanshi, R., Shinde Patil, U. Tule, D., Mankar, A., Ingle, N., Rajamanya, G.B.D.V. and Deshmukh, A., 2016. Study and development of village as a smart village. Int.j.Sci.Eng.Res, 7(6), pp.395-408.
[3] Ketaki Chavan, Shroti kamane, Ankita Jadhav, Pankaj Khot, Namdev Kemble, Chetan Kumar, Nikam (2018), detailed project report on smart village Kandalgaon village,NCETET-2018.
[4] Nagappa shahapur,ph.d. & Omprakash H M, Ph.D.,Rural education India: A Scenario(2016),SRJIS,ISSN2278-8808.
[5] Kanchan, S. and Varshney, S., 2015. Skill development initiatives and strategies. *Asian Journal of Management Research*, *5*(4), pp.666-672.
[6] IS: 8827-1978 “Recommendations for Basic requirement of School Buildings”.
[7] IPHS Guidelines
[8] ICDS Guidelines.



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