

ANNEXURE - VIII

**UNIVERSITY GRATS COMMISSION
BAHADUR SHAH ZAFAR NARG
NEW DELHI -110002**

**PROFORMA FOR SUBMISSION OF THE INFORMATION AT THE TIME OF
SENDING THE FINAL REPORT OF THE WORK DONE ON THE PROJECT**

1	TITLE OF THE PROJECT	“ASSESSMENT OF QUALITY OF FAMILY WELFARE SERVICES IN KARNATAKA : A CASE STUDY OF BIJAPUR DISTRICT”
2	NAME AND ADDRESS OF THE PRINCIPLE INVESTIGATOR	Dr. M.B.Bhiradi Dept of Geography B.L.D.E.A's NEW ARTS COLLEGE TIKOTA-586130 DT: VIJAYAPUR
3	NAME AND ADDRESS OF THE INSTITUTION	B.L.D.E ASSOCIATION'S NEW ARTS COLLEGE TIKOTA-586130 DIST : VIJAYAPUR KARNATAKA
4	U.G.C. APPROVAL LETTER NO and DATE	F - No 39-12/2010(SR) -23/Dec-2010
5	DATE OF IMPLEMENTATION	1-2-2011
6	TENURE OF THE PROJECT	2 year
7	TOTAL GRANT ALLOCATED	Rs.5,57,200/-
8	TOTAL GRANT RECEIVED	Rs.5,11,400/-
9	FINAL EXPENDITURE	Rs. 5,45,150/-
10	TITLE OF THE PROJECT	“ASSESSMENT OF QUALITY OF FAMILY WELFARE SERVICES IN

		KARNATAKA : A CASE STUDY OF BIJAPUR DISTRICT”
11	OBJECTIVES OF THE PROJECT	<ul style="list-style-type: none"> *To examine the infrastructure facilities in Primary health centers in each Block (taluk level). * To recognize the facilities of indoor patients, (Lab, Van) in each Block * To assess the efficiency of each PHC Center, * To assess the efficiency of each SC Center, * To suggest suitable measures for the development of service center. * To know the efficiency of each PHC center ,based on workload factor. with the help of M Glashan’s formula., * To assess the Spatial distribution of Primary Health Centre in study region.
12	WHETHER OBJECTIVES ACHIEVED : (Give Details)	<p>YES.</p> <p>The objectives of the major research project were fully achieved by enumerating the following points. The data on all the aspects relevant to the study are collected, quantified percentage technique is applied, analyzed and interpreted statically during our study period. The details are as follows</p> <ul style="list-style-type: none"> * Identification of SC,PHC and CHC with special needs should become an integral part of the micro-planning and selected surveys centers

		<ul style="list-style-type: none"> * Assessment of each identified SC, PHC and CHC needs infrastructural facilities, staff position should be carried out this assessment and recommend most appropriate placement for every SC and PHC with special needs. * As far as possible, every sub centre with basic needs of water, electricity and medical kits etc * Intensive trained per medical staff ,should be under placed in regular basis with needed support services * Special care has been taken for the indoor patients like pregnant women and new born children. * Identified out of existing infrastructure like beds, air coolers operation theaters laboratories ,medical kits recommended the shortage places * Special care taken for Infants new babies and their mother. * Identified requirements of more financial assistance for purchasing tablets, medicines ,and others based on pressure of indoor and outdoor patients * Special emphasis must be given to more distance from Sub centre to Primary Health centre.
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SUMMARY OF THE FINDINGS (in 500 Words)

Researcher observations and depth interviews through health workers and other employees of health centers in different taluka of the district. Researcher have varied experiences of health workers in delivering the family welfare services in the district .

Seventy- five health workers were interviewed, both male and female, out of which ANM 30 , Lady Health Visitors (LHVs) 30, and Health Supervisors 15 (HS) . Other employees of PHCs and SCs whenever we have inquired about them, the usual reply was that they have gone for their routine fieldwork.

Most of the ANMs reported that due to some (pulse polio, dengue, others) campaign being launched twice or three times in a year, their workload has considerably increased. Several of them grumbled that Aganwadi workers were not helping them as required because they happen to be family members of influential households of the villages. They spent more time in their own houses and never think of their responsibilities as Aganwadi workers.

An ANM visits two days in a week to the PHC for meeting with the MOICs. This leaves them virtually four days, out of which they devote one day at the sub-centre for immunization. Rest three days they reported going to the villages for immunization.

In most cases an ANM has to cover 8 to 12 villages and the distances between villages range from 3 to 12 km approximately.

As per norm an ANM is expected to serve 5000 populations, but in actuality they have to serve population more higher than this figure. It is reported by LHVs that they are expected to visit 4-5 sub centers in a week's time.

Due to retirement of male health workers and non-filling up of their posts have increased their workload apparently. But actually ANMs are mostly confined to the work of immunization and fulfilling their quota of sterilization allotted to them.

Most of them believed that follow up services in case of family planning are must for making good opinion about the health and family planning providers.

In the week, three days visit to meetings at health offices and PHC, Rest of the days they visit field for counseling the couples and motivating them for sterilization and Family planning . This gives very short duration of effective time in the winter season. Lack of regular transportation and number of rainy days were reported to be affecting the field operation.

Sub centers are usually located in remote areas and there is no timely transportation to reach there place .Transportation is the main problem in the movement of ANMs. During rainy season this becomes even acute because of muddy roads. They have to depend upon their husbands or sons for their movement.

There is a complete lack of support from the panchayat functionaries

Recently contract appointments of ANMs have also been made. The ANMs are locally known as RCH-ANMs. They have very subordinate position and are not supplied with drugs and delivery kits. They have also not received salary for several months as revealed during the interview. There is a lack of follow up services

Non-availability of lady doctors at the PHC level is a major hurdle. This is one of the reasons why women are not coming for sterilization.

Researcher have given some important Suggestions to Improve the Family Welfare services in Bijapur districts :

*There should be a well qualified lady doctor at the PHC level who should visit the sub-centre at least once in a week.

*There should be at least one RCH camp in every month at the sub-centre level.

*No local ANM should be appointed

*There is a need to improve IEC in the villages. Lots of hoardings should be pasted in the villages like pulse polio program.

There should be a provision for injectables in family planning programme.

* Help of functionaries working at village level belonging to different Govt. departments other than health and family welfare are needed for the success of family planning program.

* Routine vaccinations should be done on all working days at the sub center and door- to-door immunization should be discontinued. There must be at least one-trained Dai at every sub centre /village

* Sometimes because of the negligence of the doctors during operation, the clients are getting hostile to family planning programme.

* Compared to the pulse polio programme they are not getting support from the villagers to the family planning programme.

* There should be a provision of sufficient quantity of pills for distribution on weekly basis at the sub centre level.

*ANMs need to take permission from the husbands of the respective clients. Sometimes husbands do not allow them for operation. In such situation if male workers, motivate the husbands, it would be very helpful. But male health workers do not support them in this endeavor.

*There should be an Operation Theater for performing sterilization at every PHC.

*After sterilization proper attention should be given to the client.

*Vehicle should be made available for the client after sterilization

*There should be proper motivation similar to that of pulse polio program.

*ANMs should be given only limited area.

*Some schemes such as loan schemes should be given to the couples with 2 children

Contribution to the society (Give details)

The study indicates the following points and hence needs the urgent attention by the government and the people concerned to plan for relevant development and policies.

1. This study reveals that, there is acute shortage of basic medical facilities in rural areas culminating in their need to travel long distance for their medical needs, if distance is reduced, it will benefit the more people to get medical facilities.
2. The common man in general and the poor man in particular spend large amount of their earnings on health care for buying medicines and for hospitalizations. So, Government should start the medical stores in SC, PHC, and CHC and provide the medicine at a reasonable rate this will be helpful for people.
3. Publications of rate depicts the expenses lab test examination, tests to the population on various ailments both communicable and non-communicable diseases it is given the awareness of the above diseases for the public and reduce the expenses.
4. Sub centers and primary health centers are deprived of adequate medicines and even equipments lead in the rural people being devoid of essential medicines and diagnosis. So, provided the more budget for the purchasing the medicines it will be helpful to public health.
5. The study finds that shortage of skilled care manpower is necessary to give the better service to the public. It is urgent need of the every health center.
6. The study shows that most of the community health centers are not provided with specialty services including Trauma Centers, sophisticated clinical, pathological Labs, CT Scan Doppler, CT Scanner, Laser Radiation, Microscope and other equipments. If provide the above equipments it will be helpful for the better examination of the health of the people.

7. Also the hospitals lack of blood bank facilities and health check up packages. These facilities are required to the patients in the emergency conditions. Such facilities will reduce the expenses of the patients available at the PHC level.
8. Infrastructure is pathetically poor with respect to bed per indoor patients . if government provides more beds to the PHC it can be control of the patients.
9. The position of doctor population ratio of Karnataka state as well as study area in particular has only one Government doctors catering to the needs of above 13556 people. On an analysis dearth of doctors, it is found that most of the doctors prefer to work in private sector to get better remuneration and perks. Government is not providing competitive salaries and better facilities to the doctors, so they prefer urban area and private sector. Government should provide sufficient salaries and facilities to young doctors for the better services to the poor people and marginalized sections of the society both in rural and urban.

The need of the hour is to provide good hospital with proper infrastructure like adequate doctors, preferably with specialization , equipments and low cost medical facilities. The government needs to immediately address the ever increasing out of pocket expenses of the patients. This is all the more necessary as insurance company do not reimburse for pre-existing diseases and also exempt various ailments from the insurance reimbursement .one day expenses of some of the minor diseases above ten thousand this amount is not reimbursed by the insurance companies which require a minimum hospitalization of one day. These expenses need to be treated as out of packet expenses which are exorbitant for the poor and common man. There are several other ailments that do not come within the purview of the insurance companies for reimbursement. The government should provide medical expenditure free of cost to the poor and common man.

15	WHETHER ANY PHD ENROLLED / PRODUCED OUT OF THE PROJECT:	-----
16	NO. OF PUBLICATIONS OUT OF THE PROJECT: (PLEASE ATTACH RE-PRINTS)	<p>Enclosed</p> <p>*“Assessment of family welfare services in Karnataka” published in the Goa Geographers Goa National level Journal ISSN 0976-786-Dce-2011.</p> <p>* “Inequality of health care delivery in Karnataka” Published in under scheme of college with potential for excellence Volume No 1 ISBN -13-978-81-925461-0-0-2013</p> <p>*“Regional variation of infrastructural facilities in Karnataka Southern Economist Bangalore, ISSN 0038-4046</p> <p>*Abstracts : “ Planning for regional development through family welfare services in Karnataka A Case study of Bijapur district Published in 3rd international Geographers Congress organized by CWRDM Kozhihode T.N</p> <p>* “ Spatial differentials in health care delivery in Bijapur district of Karnataka : An appraisal</p>



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(REGISTRAR/ PRINCIPAL)

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TIKOTA-586130

Annexure -III

**UNIVERSITY GRANTS
COMMISSION BAHADUR
SHAH ZAFAR MARG NEW
DELHI – 110 002.**

**Annual/Final Report of the work done on the Major/Minor Research Project.
(Report to be submitted within 6 weeks after completion of each year)**

1	Project report No. 1 /2 /3 /Final	Final
2	UGC Reference No.	F - No 39-12/2010(SR) -23/Dec-2010
3	Period of report: from	Final
4	Title of research project	Assessment of quality of family welfare services in Karnataka : A case study of Bijapur district
5	Name of the Principal Investigator Dept. and University/College where work has progressed	Dr M.B.Bhiradi B.L.D.E.A's New arts College Tikota
6	Effective date of starting of the project	1-2-2011
7	1)Grant approved and expenditure incurred during the period of the report: (a)Total amount approved Rs (b) Total expenditure Rs. (c) Report of the work done: (Please attach a separate sheet) i)Brief objective of the project ii)Work done so far and results achieved and publications, if any, resulting from the work (Give details of the papers and names of the journals in which it has been published or accepted for publication iii)Has the progress been according to original plan of work and towards	5,57,200/- 5,45,150/- Enclosed

	<p>achieving the objective. if not, state reasons</p> <p>iv)Please indicate the difficulties, if any, experienced in implementing the project</p> <p>If project has not been completed, please indicate the approximate time by which it is likely to be completed. A summary of the work done for the period (Annual basis) may please be sent to the Commission on a separate sheet</p>	<p>Achieved as per plan of work</p> <p>No</p> <p>-----</p>
	<p>If the project has been completed, please enclose a summary of the findings of the study. Two bound copies of the final report of work done may also be sent to the Commission</p>	<p>Enclosed</p>
	<p>Any other information which would help in evaluation of work done on the project. At the completion of the project, the first report should indicate the output, such as</p> <p>(a) Manpower trained</p> <p>(b) Ph. D. awarded</p>	

	(c) Publication of results (d) other impact, if any	Two research paper and two abstract published
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SIGNATURE OF THE PRINCIPAL INVESTIGATOR

(SIGNATURE OF THE CO- INVESTIGATOR)



**REGISTRAR/ PRINCIPAL
PRINCIPAL GRADE -1
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INEQUALITY OF HEALTH CARE DELIVERY IN KARANTAKA

M. B. Bhiradi*
A. S. Kalyani**

Introduction :

An achievement of the human resources development depends on the availability and functioning of accessible infrastructural facilities. Social development can be defined as the optimum utilization of qualities and resources of the people for the balanced development of the people and of the country. It can be achieved by providing the appropriate social infrastructures that will progressively be instrumental in creating opportunities for all inhabitants on an equitable basis for their self reliance at appropriate locations. The important social infrastructures are the facilities of education, medical, drinking water, electric power supply, transport network, etc..

"Under planned economic development, infrastructure and other development institutions are being provided to rural areas to stimulate the development process and make rural life more easy and comfortable. Total services and facilities can contribute to the quality of human resources and to general standard of living in rural section. In the view of Rohdmelli "the distribution of these services and facilities is crucial not only for promoting economic growth, but also in creating social equity and improving the quality

of life". That is why provision of adequate social facilities for the rural poor has accepted as a constitutional goal

A model of social inputs has been provided by the UNICEF and the components included in it are called 'WHENEERS' denoting.

W= Water for drinking and household use

H= Health care, preventive, promotives as well as curative.

E= Education, pre-primary and primary as well as out of school education for children and women.

N= Nutrition, adequate for growth, play and work.

E= Economic activities especially for women.

E= Environmental sanitation including low cost drainage, and latrines.

R= Recreation especially for children

S= Shelter for healthy leaving.

These components are related to basic needs of rural population and considered as social inputs. However, their focus is on children and women who constitute the target group of UNICEF. The significant role of infrastructural facilities in the process of regional development has been recognized by Geographers, Economists and Planners. The pace of regional development can not be accelerated without adequate infrastructural facilities.

"Health is considered as wealth of a community which undoubtedly determines economic, social, cultural and political development of a region. Poor health leads to lowering down the productivity and earning capacity of people and deteriorates the quality and quantity of consumption and standard of living. Therefore, the provision of medical services is of a great importance in developing and utilizing human resources of an area".

* Associate Prof. Dept of Geography, New Arts College, Tikota, Bijapur.

** Lecturer, Dept of Geography, K. R. Bellad Arts-Comm. College, Mundargi, Karnataka.

Planning commission (1985) adopted three tier system of health service: Community Health centre (CHC) having an area of one lakh or more population, Primary Health centre (PHC) having 30,000 population in a plain and 20,000 population in the Tribal or hilly areas, and Primary Health Sub Centre (PHS) having 5000 population in the plains and 3000 population in the Tribal or Hilly areas. Planning commission has stated that, for the development of country's vast human resources, for the acceleration and speeding up of the total socio-economic development and attaining an improved quality of life. The primary health care should be accepted as one of the main instruments of action. In the overall health development programme emphasis should be laid on preventive aspects and organizing effective and efficient health services, which are comprehensive in nature, easily and widely available, freely accessible and generally affordable by the people. The primary health centre with immunization and auxiliary services has no doubt an essential role, but to provide adequate services, is need to more community health services and a very large number of dispensaries, both stationary and mobile. Apart from much larger programmes for family planning than at present, in many areas. Altogether, a new conception of rural health, all embracing and effective, must be put into operation. Researcher has taken as infrastructural variables viz; Medical facilities like Number of Doctors per 10,000 population and Beds in Govt Hospitals per 10,000 Population for the analysis. The fore-going paragraphs reveals spatial pattern of medical facilities in Karnataka.

Study area :

Karnataka state is located in western part of the deccan peninsular region of India and lies between 15.35' North latitudes to 18-30' North latitudes and 74-5' East longitudes to 78-35' East longitudes. The state is bounded by Maharashtra and Goa State in the North and North-West respectively, By Kerala and Tamil Nadu State in the South and by the state of Andhra Pradesh in the East while Arabian sea in the west. Total geographical area of the state is 1,91,776 Sq kms, and as per 2001 Census the state's population was 5,27,33,958. State has 14625 registered doctors and 39573 beds in Government Hospitals. For the purpose of planning the state has been divided into four administrative divisions. Viz Bangalore division consists of 51 talukas, Belgaum with 49 talukas, Mysore 44 and Gulbarga division 31 taluks (total 175 Taluks 2001 Census) Physiographically the state can be divided into following region 1) North Madan, 2) South Maida, 3) Malnad and 4) Coastal region.

Objectives:

- To assess the spatial distribution of medical facilities.
- To know the spatial variations of doctors in study region.
- To measure the bedding facilities for rural poods.
- To study the required infrastructure facilities for the development of service centers

Methodology : The study is based on the secondary information, Quantitative and Statistical method have been applied in cartographic applications, standard deviation method used to measure the spatial distribution of selected variables.

NUMBER OF DOCTORS PER 10000 POPULATION:

Karnataka has 14625 medical Doctors and this works out to be 3 doctors per 10000 population. Each doctor in Karnataka serves about 3500 population.

Spatial pattern of Doctors per 10,000 population:

which means each beds is serving for 400 people.

Spatial pattern of number of beds in Government hospitals per 10,000 population :

KARNATAKA STATE
Number of Beds in Government Hospital Per 10000 Population 2001

S. No	Index	No of Taluks
1	Very High 18 & Above Beds	10
2	High 13-17 Beds	9
3	Moderate 8-12 Beds	25
4	Low 3-7 Beds	131
5	Very Low 2.99 & Below Beds	Nil

(I) Very high range of Number of beds (18 and above per 10,000 population):

In this category 10 taluks are identified. Four taluks are found in the South western part of Karnataka, one taluk in the South eastern part of Karnataka, two taluks in Coastal region, one taluk in Western ghat and three taluks in Central part of Karnataka. Almost all the taluks of Northern Karnataka do not fall in this category.

(II) High range of Number of beds (13 to 17 per 10,000 population):

In this group 9 taluks are identified, among them, Mundagod, taluk is in the Western ghats of North western Karnataka, Chitradurga taluk in central eastern part of Karnataka, Manglore in the coastal Karnataka, one taluk i.e. Mandy in Mandy district, three taluks in Hassan district, one taluka in Kodagu district and another one taluka in Chikkamangalore district.

(III) Moderate range of Number of beds (8 to 12 per 10000 population):

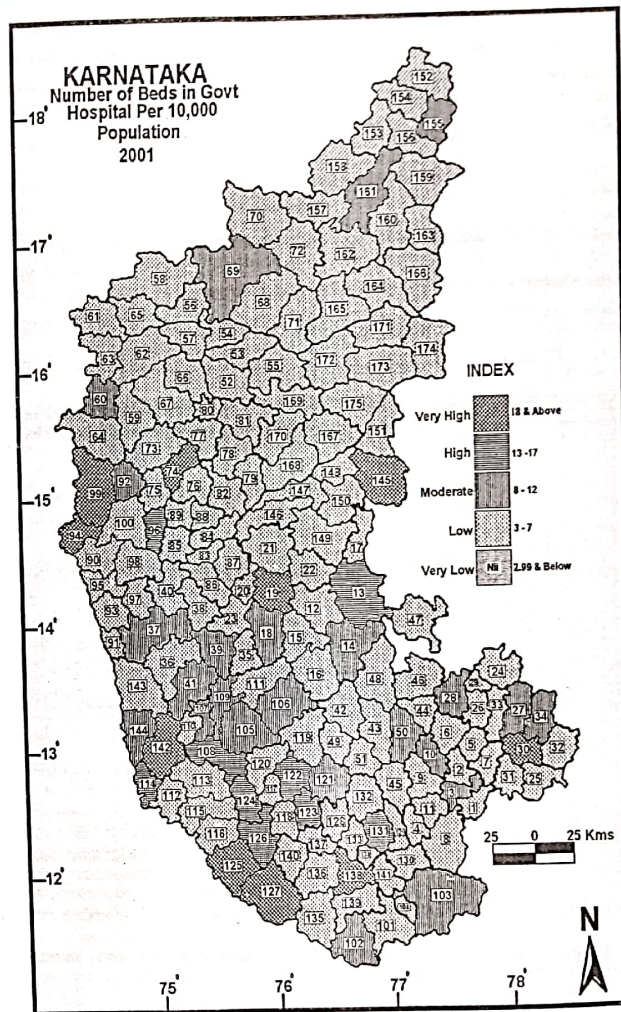
In this range, 25 taluks are identified. Out of them, five taluks are located in Northern Karnataka, while remaining 20 taluks are in South Karnataka including the coastal belt.

(IV) Low range of Number of beds (3 to 7 per 10000 population):

In this category, 131 taluks are identified. These are very well distributed over almost all over Karnataka.

The correlation analysis of number of beds in government hospitals per 10,000 population and Number of Doctors.

The correlation analysis of number of beds in government hospitals per 10,000 population with total population positive with very high significant correlation with total population ($r=0.84$), and number of doctors per 10,000 population ($r=0.88$).



Conclusion : The analysis of health care delivery system (No of Doctors and No of Beds per 10,000 Population) revealed that there is an inequality in the spatial distribution of health infrastructure in Karnataka in study period. The above factors are more concentrated in urban areas compare to rural . Low and very low range of taluks are urgent need of development in above factors. The government should focus to improve and extend the primary health care facilities to rural areas and give more incentives to doctors and all the staff of health care systems in order to bring about a balanced state of facilities .

Reference :

- 1) Mishra, O.P. (1991): "Planning for social infrastructure, A case study of tahsil Colonel Ganj, District Gonda (U.P)", *Geographical review of India*, vol.No.3 pp 31-32
- 2) Meheta and Others (1983): "An action plan for removal of unemployment in rural India", Navjevan Press Ahamadabad pp 33.
- 3) Rohdrnelli, DA (1976): "Urban functions in rural development an analysis of integrated spatial developmental policy USA" D Washington, pp.23.
- 4) Sharma. S. C. and Sharma. M. L. (1987): " Planning Strategy for Development of Social facilities". A case study of tahsil Darabganj, District Gonda (U.P.) *the Deccan Geographers Vol. No. XXV* pp 127.
- 5) Singh. B.R.K. (1994): "Planning for Educational and Health Accessibility for Human Resources Development in rural areas": A case study of a block in Magadh region, *Geographical review of India Vol.No.4* pp.21.

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ASSESSMENT OF FAMILY WELFARE SERVICES IN KARNATAKA

M. B. Bhiradi

Abstract

The provision of medical services is of great importance in developing and utilizing human resources of an area. The study is based on the secondary information, Quantitative and Statistical methods have been applied in cartographic applications, standard deviation method has been used to measure the spatial distribution of selected variables. The results show the very high significant positive correlation with total population ($r=0.86$), and number of beds in government hospitals per 10,000 population ($r=0.88$).

Introduction

"Health is considered as wealth of a community which undoubtedly determines economic, social, cultural and political development of a region. Poor health leads to lowering down the productivity and earning capacity of people and deteriorates the quality and quantity of consumption and standard of living. Therefore, the provision of medical services is of great importance in developing and utilizing human resources of an area".

Planning commission (1985) adopted three tier system of health service: Community Health centre (CHC) having an area of one lakh or more population, Primary Health centre (PHC) having 30,000 population in a plain and 20,000 population in the Tribal or hilly areas, and Primary Health Sub Centre (PHS) having 5000 population in the plains and 3000 population in the Tribal or Hilly areas. Planning commission has stated that the primary health care should be accepted as one of the main instruments of action. In the overall health care programme emphasis should be laid on preventive aspects and organizing effective and efficient health services, which are comprehensive in nature, easily and widely available, freely accessible and generally affordable by the

people. The primary health centre with immunization and auxiliary services has no doubt an essential role, but to provide adequate services, there is a need for more community health services and a very large number of dispensaries, both stationary and mobile. Apart from much larger programmes for family planning than at present, in many areas. The present research has taken the following as infrastructural variables viz; Medical facilities like Number of Doctors per 10,000 population and Beds in Govt Hospitals per 10,000 Population for the analysis. The fore-going paragraphs reveals spatial pattern of medical facilities in Karnataka.

Study area

Karnataka state is located in western part of the Deccan peninsular region of India and lies between 15.35' North latitudes to 18-30' North latitudes and 74-5' East longitudes to 78-35' East longitudes. The state is bounded by Maharashtra and Goa States in the North and North-West respectively, By Kerala and Tamil Nadu in the South and by the State of Andhra Pradesh in the East while Arabian sea in the west. Total geographical area of the state is 1,91, 776 Sq kms, and as per 2001 Census the state's population was

5,27,33,958. The state has 14625 registered doctors and 39573 beds in Government Hospitals. For the purpose of planning the state has been divided into four administrative divisions, viz. Bangalore division consists of 51 talukas, Belgaum with 49 talukas, Mysore 44 and Gulbarga division 31 taluks (total 175 Taluks 2001 Census). Physiographically the State can divided into following region 1) North Madan, 2) South Maidan, 3) Malnad and 4) Coastal region.

Objectives

- The study is carried out with the following objectives in mind
- To assess the spatial distribution of medical facilities,
- To know the spatial variations of doctors in the study region,
- To measure the bedding facilities for rural poor and
- To study the required infrastructure facilities for the development of service centers.

Methodology

The study is based on the secondary information, Quantitative and Statistical methods have been applied in cartographic applications, standard deviation method has been used to measure the spatial distribution of selected variables.

Number of Doctors per 10000 Population

Karnataka has 14625 medical Doctors and this works out to be 3 doctors per 10,000 population. Each doctor in Karnataka serves about 3500 population.

(I) Very high Number of doctors

In this category 4 taluks i.e. Hubli, Manglore, Sully and Mysore are identified. Manglore and Sully taluks are in the costal region, Mysore is in extreme South of Karnataka and Hubli is in the Northern part of Karnataka. All these taluks are highly urbanized and are economically developing.

Table 1

Karnatak State: Number of Doctors per 10000 Population 2000

S. No	Index	No of Taluks
1	Very High 6.11&Above Doct	4
2	High 4.6-6.10 Doct	14
3	Moderate 3.0-4.5 Doct	55
4	Low 1.49-2.99 Doct	55
5	Very Low 1.48&Below Doct	47

Spatial pattern of Doctors per 10,000 population

Therefore it is natural to have more number of doctors to render their services for the region.

(II) High Number doctors

In this catgory 14 taluks are identified. These taluks are scattered all over Karnataka.

(III) Moderate Number doctors

In this group, 55 taluks are identified; these are also well distributed over the entire Karnataka. In this class highly urbanized taluks like Banglore North, Banglore South are also included. This shows that the high density of urban population does not share good number of doctors for their medical treatments. In other words, doctors have enough scope to serve more number of people and thereby they can earn more from the urban population than the rural dwellers as urban dwellers are more aware of medical facilities and requirements.

(IV) Low Number of doctors

In this range 55 taluks are identified and they are well distributed over the Karnataka.

(V) Very low Number of doctors

In this group, 47 taluks are identified. Among them 23 taluks are distributed in Northern Karnataka, about 17 taluks are found in

Southern Karnataka and about 7 taluks in central part of Karnataka.

Correlation of number of Doctors per 10,000 population with Total Population & Beds

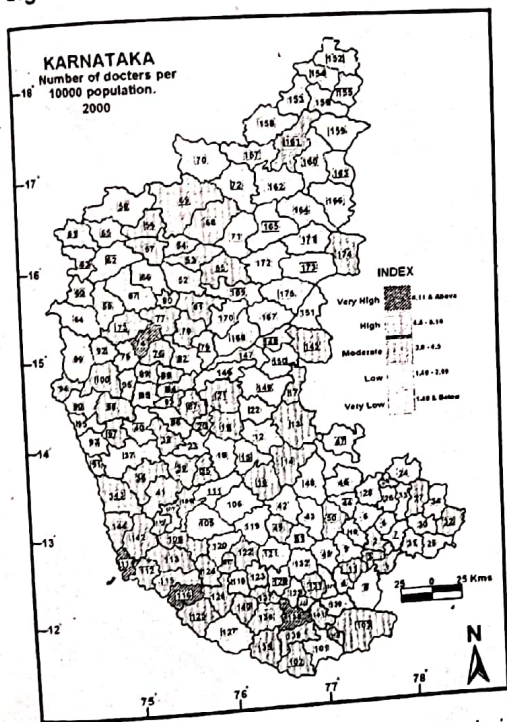
In this study an attempt is made to find out the correlation coefficient of number of doctors per 10,000 population and (table No.4 A-3). The results show the **very high significant positive** correlation with total

to get the medical treatments. Therefore only the Government hospital beds are considered here for the present study. In Karnataka about 8 beds are available from the Government hospitals for every 10000 population, which means each beds is serving for 400 people.

Spatial pattern of number of beds in Government hospitals per 10,000 population

**KARNATAK STATE
Number of Beds in Government Hospital Per 10000 Population 2001**

S. No	Index	No of Taluks
1	Very High 18 & Above Beds	10
2	High 13-17 Beds	9
3	Moderate 8-12 Beds	25
4	Low 3-7 Beds	131
5	Very Low 2.99 & Below Beds	Nil



population ($r = 0.86$), and number of beds in government hospitals per 10,000 population ($r = 0.88$).

Number of beds in Govt. hospital per 10,000 population

In Karnataka state about 39573 beds are identified in Government hospitals. The Government hospitals serve the general public who generally belong to economically weaker sections of the society. The people who are ready to afford high cost of hospitals can opt private hospitals and nursing homes

(I) Very high range of Number of beds (18 and above per 10,000 population)

In this category 10 taluks are identified. Four taluks are found in the South western part of the State, one taluk in the South eastern part of Karnataka, two taluks in Coastal region, one taluk in Westernghat and three taluks in Central part of Karnataka. The taluks of Northern Karnataka do not come under this category.

(II) High range of Number of beds (13 to 17 per 10,000 population)

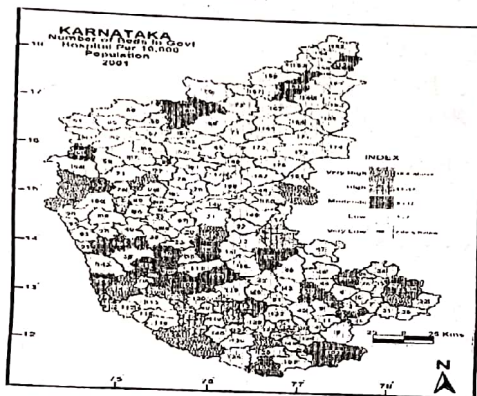
In this group 9 taluks are identified, among them, Mundagod, taluk is in the Western ghats of North western Karnataka, Chitradurga taluk in central eastern part of Karnataka, Manglore in the coastal Karnataka, one taluk i.e. Mandy in Mandy district, three taluks in Hassan district, one taluka in Kodagu district and another one taluka in Chikkamanglore district.

(III) Moderate range of Number of beds (8 to 12 per 10000 population)

In this range, 25 taluks are identified. Out of them, five taluks are located in Northern Karnataka, while remaining 20 taluks are in South Karnatak including the coastal belt..

(IV) Low range of Number of beds (3 to 7 per 10000 population)

In this category, 131 taluks are identified. These are very well distributed over almost all over Karnataka indicating deficiencies in public health services.



Correlation of No. of beds in Govt. hospitals per 10,000 population & No. of Doctors

The correlation analysis of number of beds in government hospitals per 10,000 population with total population is found **very high positive significant correlation** with total population ($r=0.84$), and number of doctors per 10,000 population ($r=0.88$).

Conclusion

The analysis of health care delivery system (No. of Doctors and No. of Beds per 10,000 Population) revealed that there is an inequality in the spatial distribution of health infrastructure in Karnataka during the study period. Taluks with low and very low index of taluks are in urgent need of development in the above factors. The government should focus to improve and extend the primary

health care facilities to rural areas and give some incentives to doctors and the other staff of health care systems to bring balanced health care facilities.

Reference

- 1) Mishra, O.P. (1991): "Planning for social infrastructure, A case study of tahsil Colonel Ganj, District Gonda (U.P)", Geographical review of India, vol.No.3 pp 31-32
- 2) Meheta and Others (1983): "An action plan for removal of unemployment in rural India", Navjevan Press Ahamadabad pp 33.
- 3) Rondinelli, DA (1976): "Urban functions in rural development an analysis of integrated spatial developmental policy USA" D Washington, pp.23.
- 4) Sharma. S. C. and Sharma. M. L. (1987): " Planning Strategy for Development of Social facilities". A case study of tahsil Darabganj, District Gonda (U.P.), The Deccan Geographers Vol. No. XXV pp 127.
- 5) Singh. B.R.K. (1994): "Planning for Educational and Health Accessibility for Human Resources Development in rural areas": A case study of a block in Magadh region, Geographical review of India Yol.No.4 pp.21.

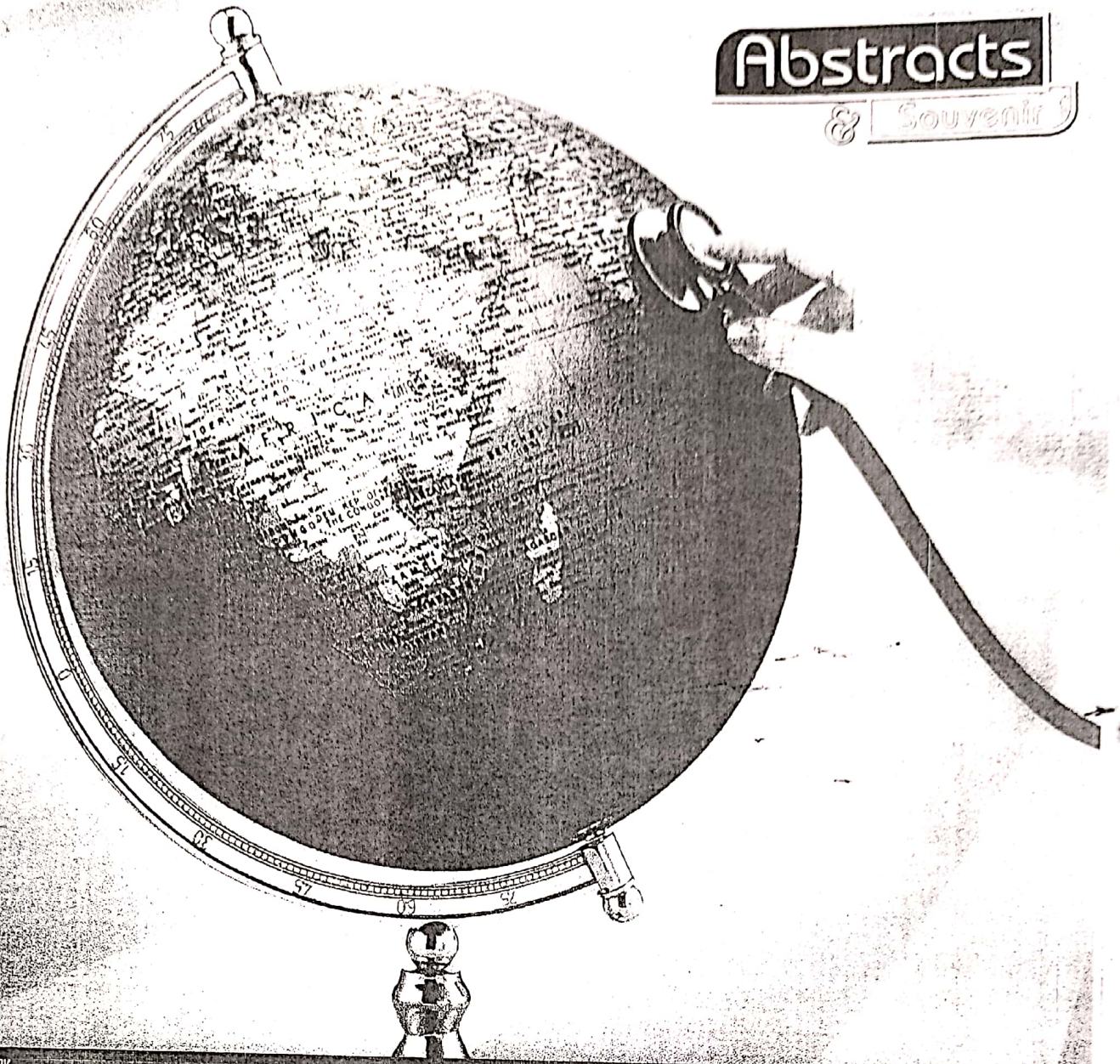
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Planning for regional development through family welfare services in Karnataka: A case study of Bijapur district

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Researcher attempt has been made to assess the quality of the service centre and spatial distribution of health care system at different levels. Primary health care is a new approach of health care, considering all the factors required for the improving health status of a population living in a region. "Health is generally defined as being a state of complete physical, mental and social well-being and not merely the absence of disease of infirmity". At present the number of hospital grew from 11174 hospitals in 1991 (57% private) to 18218. (75% private) in 2007. (Central Bureau of Healthcare Intelligence, 2007). Over all the state has a crude birth rate of 22/1000 population, crude death rate of 7.2/1000 population, Infant mortality rate of 55/1000 live births and total fertility rate (number of children born a woman during her reproductive years) of 2.2. Karnataka has slipped from the 6th place to the seventh in Human development Index and the most human development indices. Though majority of people in country still suffering from poor standard of healthcare infrastructure which has not kept up with her growing economy, yet their exists a remarkable imbalance in healthcare facilities between rural and urban areas. The ratio of doctors to population in rural areas is almost six times lower that of urban areas. Similarly, per capita expenditure on public health is also seven times lower in rural areas.

The main objective is that to know and assess the health care facilities available and their performance in the region and to measure the regional development in health of the people. The present study is based on the secondary information and field survey, field observation collected from Government records and field work, Quantitative and statistical methods, cartographic applications, standard score methods also used, and twelve variables have been selected for this study.

Accordance with field work and observation, the shortage of doctors, supervisory staff, financial crunch, beds, other infrastructural facilities are major reason for development and effective health delivery system. As per findings rural people have a complaints that, health services are inaccessible, even the most important health care facilities, the sub-centers are not functioning properly, medicines are not sufficient available, and health providers are irregular. And the health workers have a complaint that government not providing the basic facilities instead they are allotting very high targets without logistic supports. As per observation, Government focus to improve and extend the primary health care system based on ratio of area and population for effective delivery system. In order to increase access to health care for rural poor to strengthen primary health care with community participation.

Keywords: Family welfare, regional development, cartography, standard score method.

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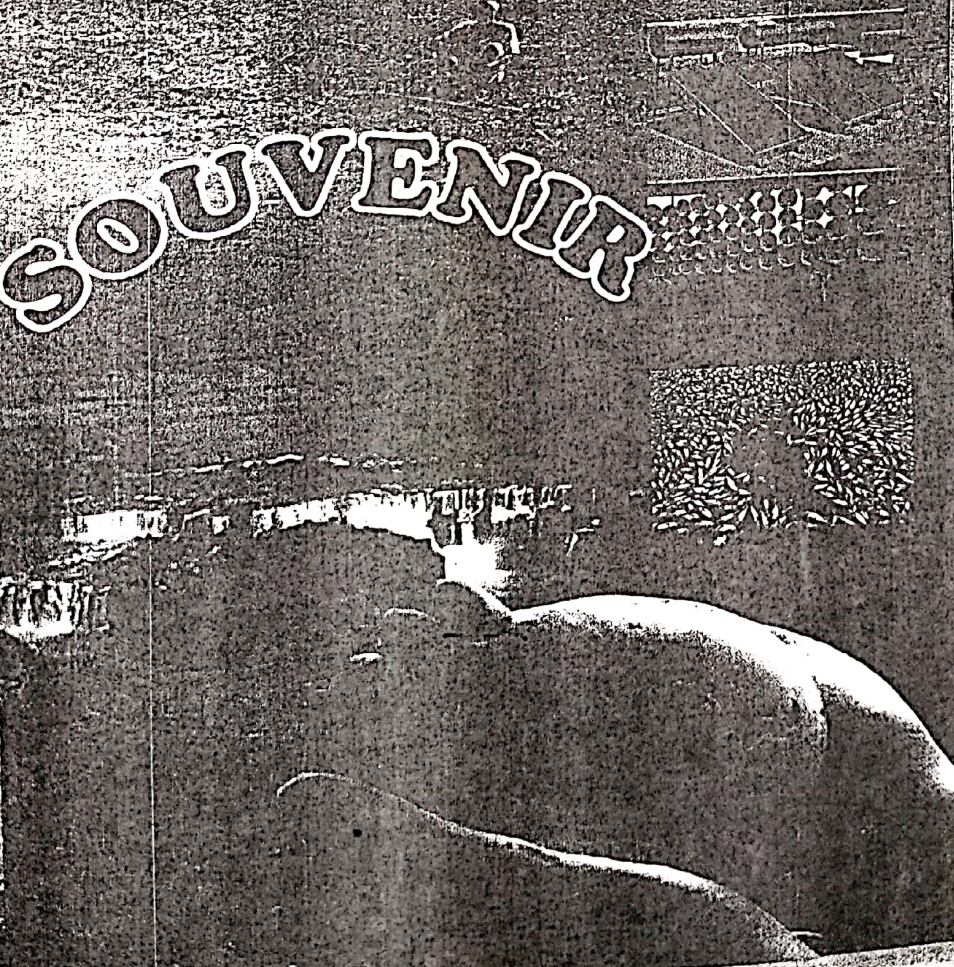
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HUMAN RESOURCE DEVELOPMENT THROUGH PRIMARY HEALTH
CARE SERVICES IN RURAL AREAS

*Dr. M.B.Bhiradi

ABSTRACT

Health is an essential input for the development of human resources and the quality of life and in turn the social and Economic development of the nation. A positive health status is defined as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.(WHO 1946)'. Health is regarded a priority for sustained development interventions both at the individual, community and national levels. Improved health is a part of total socio-Economic development and is regarded as an index of social development.

Provision of basic health care services to rural community is the primary objective of rural development. Rural health services, safe drinking water, sanitation, nutrition etc., have therefore been brought together in the form of an integral package to improve the social, economic and health conditions of the people. Therefore the primary goal of any health care delivery system is to organize the health services and optimally utilize the available resources, knowledge and technology, with a view to preventing and alleviating diseases, disabilities and suffering of the people.

The first level contact of an individual with the national health system that brings primary health care to the people's home is the primary health care system (PHC). A pyramid of health infrastructure has been established to cover the rural areas in the country as well as the state, through sub-centers, primary health center (PHC), community health centers. The primary health centers(PHC) constitute the back bone of

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the rural health care services in the state. It provides an integrated health service to the rural population. The health package of primary health care provided such inputs, which promote the well being and good health.

According to the prescribed norms, one sub centre for 5000 population, one primary health centre (PHC) for every 30,000 population, and one community health centre (CHC) for every 1,00,000 lakh population is considered it is also change in 3000, 20,000 and 80,000 in Hilly/ Tribal and Difficult areas respectively. Against these prescribed norms, it is important to examine the health infra-structural situation in the State. As far as sub-centers and PHCS are concerned, It is well within the National Norms of the people.

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Human Resource and Sustainable Development

*Dr. V. K. Sawan

ABSTRACT

Now the human resource development has become the buzzword for many organisations. All organisations are run and managed by human beings. Human beings are resourceful entities. Human resources are the most valuable intellectual assets of any organisation. The success or failure, growth and development of any organisation depends on human resources. An organisations human resource management strategy should maximize return on investment in the organisation's capital and minimize financial risk. Business transformation and change management is one of the key functions of human resource manager. Demographics, Diversity, Skills and Qualifications are three major trends in which an organisation operates. Human Resource development is a framework for the expansion of human capital within an organisation or (in new approaches) a municipality, region or nation. Human resources

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In the last 20 years, nearly 1200sq.km. of forest has disappeared under various the government's programmes and much more illegally. Many species are threatened of extinction. One of the major challenges is food security for rising population. This would cause ecological imbalance. It is therefore necessary to have at least 30 % of the land under the forest for the maintaining ecological balance. Safeguarding and protecting our environment is a prime responsibility of every individual, society and institution. Sustainable development should be at the core of any human activity if we are really concerned of the environment.

SPATIAL DIFFERENTIALS IN HEALTH CARE DELIVERY IN BIJAPUR DISTRICT OF KARNATKA : AN APPRAISAL

Dr. M.B.Bhiradi, Department of Geography, New Arts College, Tikota, Bijapur (Karnataka)

Today the quality of life is considered as one of the fundamental rights of human being. The piece of literature in human desire for health known to mankind in Rig- veda about family, healthy society and a healthy country, drives individuals and governments. Health care is influenced by number of factors, such as a adequate food, housing, basic sanitation, health styles etc. Thus health care comprises multitude of health services , provided to individuals or communities by agents of health services. There fore good health is a prime and vital indicator of the quality of life and Socio-economic development of country. It becomes an earnest need to provide health care facilities and services to all the citizens especially in rural areas . To day health care services to provide facilities to public health . Several systems of medicine came into existence namely Ayurveda, Unani, Siddha, Allopathy, Homeopathy etc. The rural health care delivery system in India comprises the hierarchy of the Community Health Centre (CHC) Primary Health Centre (PHC) and Sub Centre (SCs) to provide curative and specialized health facilities to rural population. The inequalities in the health care delivery were studied by many scholars, based on these studied and end ever is attempted in the present paper to study.the distributional pattern of health care centers and their performance in Bijapur district of Karnataka.

Being adry area , Bijapur district suffers form fever and diseases related to digestive system. The registered administrative record reports the first case of plague in Kaladagi of Bijapur in the year 1896. The official record of Bijapur 1876-77 reports that the district being a drought stricken region with on spells of rain resulted in death of nearly 69026 people due to starvation and various types of diseases. In this study data was obtained from all 54 Primary health centre and also 8 Primary health centre under IPP programme. The data have been standardized based on population (2011census) , collected from censuses records and fieldworks. Infrastructural facilities and other data analyzed March 2010. Study area has 5 Allopathic, 14 Indian system of medicine, 62 Primary health centre , 9 Community health centre and 1956 bedded facilities. And also attempt to describe the present Spatial pattern and efficiency of rural health care delivery system and to propose new locations of additional health care facilities. Growing population and growing expectation of the people , rising costs of the

medicine have produced a challenges for transforming the public health care in to accountable, accessible and affordable system of quality of services.

Key words: Health care facilities, Rural health care, Rural health care services, Quality of services, Government programmes in health care, Infrastructural facilities and Spatial organization.

STUDY OF DISASTROUS FLOOD IN KUDAR TEHSIL OF SINDHUDURG DISTRICT, MAHARASHTRA

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Rivers are powerful agent of erosion, deposition and transportation processes which are most active when the river is in flood. This flooding occurs when the capacity of the channel to carry the discharge exceeded the channel or in bankfull stage. It has to be considered that floods are the most environmentally different and destructive of all natural hazards. Inundation of surface water in terms of flood becomes disaster when it damages the property and agricultural lands. In Sindhudurg district of Maharashtra riverine and estuarine floods are the most prevalent hydro-meteorological disaster.

It has observed that, 03 persons lost their lives during the flood of 2010-2011. Approximately 123.48 hectares of paddy land surface was inundated by flood-waters during the same period and damaged standing crops in Baw, Bambuli, Pavashi and Pandur of Kudal Tehsil of Sindhudurg district. Present study also reveals that overall damage and financial losses towards settlements and other infrastructure due to flood and torrential rain in Kudal Tehsil has accounted for Rs. 4.88 crores during the year 2011. The present study also reveals that confluence of river Pithdhal - Karli and confluence of river Hatteri-Bhansal are one of the reasons for inundation of water during monsoon season. Therefore the present study attempts to understand the causes of flood and its severe impact on settlements and agricultural lands in the study area.

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