

# **CHAPTER – IV**

## **EXISTING HEALTH CARE SERVICES IN TRIPURA**

### **4.1 Present Health Care Services in Tripura**

This research work is oriented to provide an overview of the existing health care system and its utilization in India with special reference to Rural Tripura. Utilization is nothing but the satisfied demand. If at any given period of time, a part of population with a self-perceived medical problem thinks that the problem is worthy of treatment then they constitute a group with self-perceived need of care. Among those with a self-perceived need there will be some who will translate this need into the action of seeking care. Again part of those demanding will indeed obtain care. This group represents satisfied demand or utilization.

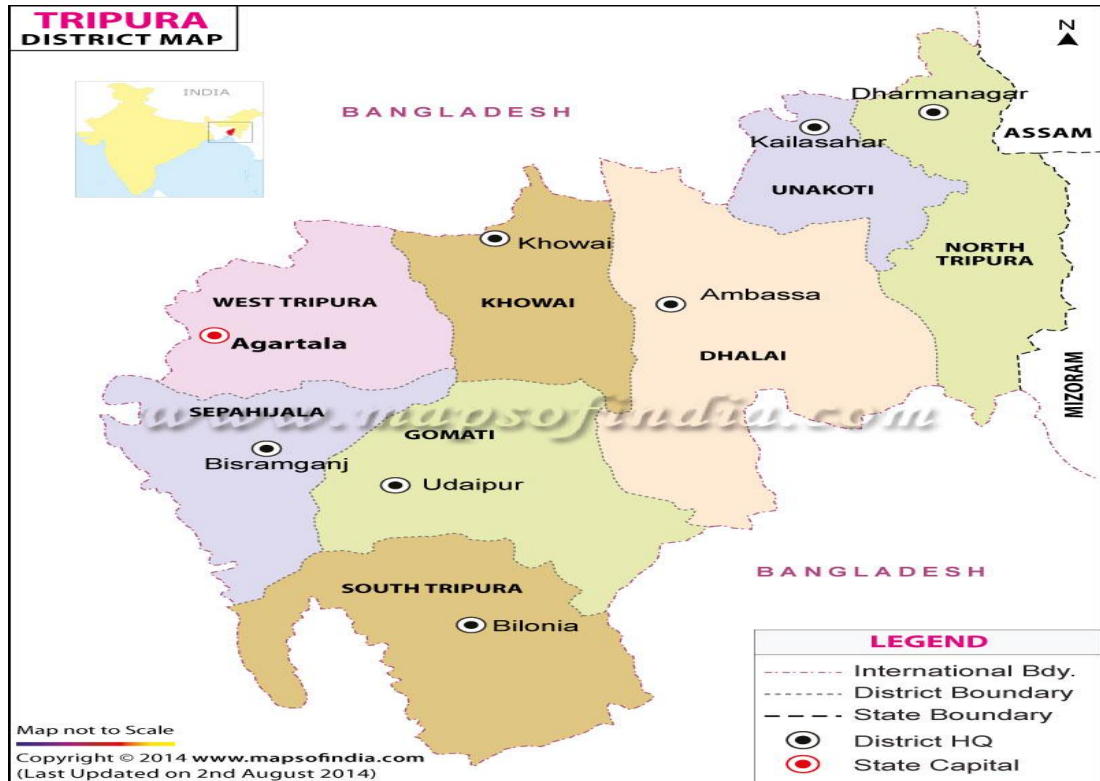
In this chapter an attempt has been made to analyse the utilization of health care facilities in rural Tripura. But before going through the relevant details it is desirable to have a brief notion about the state profile of Tripura.

## 4.2 Tripura-State Profile

### a) Location

Tripura is a hilly State in North East India, located on the extreme corner of the Indian sub -continent. It lies approximately between 22<sup>0</sup>56'N and 24<sup>0</sup>32'N northern latitudes and 91<sup>0</sup>09'E and 92<sup>0</sup>20'E eastern longitude. The State is bordered by the neighboring country Bangladesh (East Bengal) to the North, South and West and Indian State of Assam and Mizoram to the east. The length of its International border with Bangladesh is about 856 km (i.e. about 84 percent of its total border) while it has 53 km border with Assam and 109 km border with Mizoram. The total area of the state is 10,491.69 with an extreme length of 183.5km and width of 112.7 km.

Tripura in its present form as a state of the Union of India is endowed with a land area formed by a number of hill ranges interspersed with valleys and plain land. Favored by a tropical climate condition this state with hilly terrain is covered by a sizeable forest area and water bodies of different nature. Though at the time of merger with the Union of India in 1949 Tripura was inhabited largely by a population of different tribes, the partition, at the time of independence, led to large influx of non-tribal population into the state.



Map of Tripura

**b) Historical Background**

The history of Tripura is a long drawn story which dates back to time of “Mahabharata”. This great Indian epic has also mentioned about Kingdom of Tripura and its famed king Trilochana. The earlier trace of the history of the Tripura can also be found in the Ashokan pillar inscriptions. The history of Tripura points out that around the 7<sup>th</sup> century the Tripura Kings with the title of “Pha” which implies father, ruled from the Kailashar region in the North Tripura.

In the 14<sup>th</sup> century, the history of Tripura witnessed a change with the shifting of capital from Kailashar to Udaipur. By that time Tripura Kings

adopted the title of Manikya and Manikya dynasty which had an Indo – Mongolian origin ruled Tripura for around 3000 years.

In 17<sup>th</sup> century a major watershed in the history of Tripura can be witnessed Tripura when the administration of the region was handed over to Mughals with the advent of the colonial era, the British extended their control over Tripura but granted some independence to the Manikya Kings. However the Mughal period was the starting period of the process of separating the plain lands of Tripura from its hilly region. The Mughals started earning land revenue on the plain lands from the kings leaving the hilly area to be unconditionally ruled by the same kings. The process of such categorization was finally completed within the period 1729 to 1733 when plains of Tripura was totally annexed to the Bengal *subah* and it was renamed as *Chakla* Roshanabad. *Chakla* means circle of estate. (Singh (1984)

From the period onwards the dual identity of the kings of Tripura was established. Kings of Tripura enjoyed the independent status within the hill portion of the state but remained Zamindars under the Nawabs of Bengal in respect of the plains of ChaklaRoshanabad. The East India Company took over the control of that Zamindary of Chakla Roshanabad from the Nawabs of Bengal in 1765 and the independence of Hill Tripura also came under threat from several quarters from time to time. However, the dual identity of the kings of Tripura was kept unaffected by the Company and later on, by the British Government after the 'Transfer of Power' in India in 1858.

The Royal history of Tripura came to an end in the year 1947. Bir Bikram Manikya was the last ruling Manikya King of Tripura. Erstwhile princely State of Tripura merged with the Indian union after Independence on 15<sup>th</sup> October 1949. On Jan 26 1950 Tripura was accorded the state of a C category State and on November 1, 1956. Tripura was recognized as a union territory legislative and popular ministry was installed in Tripura on July 1 1963. Tripura became a fully-fledged State on the 21<sup>st</sup> January 1972.

### **c) Administrative Setup of Tripura**

For administrative purpose, the state of Tripura has earlier been divided into four districts. But in 2012 for administrative convenience the Government of Tripura has recognized the administrative units by creating four new districts, six new subdivisions, and five new blocks in order to further decentralized the administration for better and effective delivery of services and effective implementation and monitoring the developments programmes. Thus for administrative convenience the state of Tripura has now been divided into eight districts 23 subdivisions and 58 development blocks.

**Table 4.1: Administrative Setup of Tripura**

Districts	Head-quarters	Subdivisions	Development Blocks	Municipals	Population as Per Census 2011
Unakoti	<u>Kailashahar</u>	1. Kumarghat 2. Kailashahar	1. a) Kumarghat 1. b) Pecharthal 2. a) Gournagar	1. a) Kumarghat Municipal Council 2. a) Kailashahar Municipal Council	277,335
Khowai	Khowai	1. Khowai 2. Teliamura	1. a) Khowai 1. b) Tulashikhar 1. c) Padmabil 2. a) Teliamura 2. b) Kalyanpur 2. c) Mungjakami	1. a) Khowai Municipal Council 2. a) Teliamura Municipal Council	327,391
Dhalai	Ambassa	1. Kamalpur 2. Ambassa 3. Longtarai Valley 4. Gandachera	1. a) Salema 1. b) DurgaChawmuhani 2. a) Ambassa 3. a) Manu 3. b) Chawmanu 4. a) Dumburnagar 4. b) Raishyabari	1. a) Kamalpur Nagar Panchayet 2. a) Ambassa Municipal Council	377,988
North Tripura	Dharmanagar	1. Dharmanagar 2. Kanchanpur 3. Panisagar	1. a) Kadamtala 1. b) Yuvaraj nagar 2. a) Dasda 2. b) Jampuihill 2. c) Laljuri 3. a) Panisagar 3. b) Damchara	1. a) Dharmanagar Municipal Council	415,946
South Tripura	Belonia	1. Santirbazar 2. Belonia 3. Sabroom	1. a) Bakafa 1. b) Jolaibari 2. a) Hrishyamukh 2. b) Rajnagar 2. c) Bharat Chandra Nagar 3. a) Satchand 3. b) Rupaichari 3. c) Poangbari	1. a) Santirbazar Municipal Council 2. a) Belonia Municipal Council 3. a) Sabroom Nagar Panchayet	433,737
Gomati	Udaipur	1. Udaipur 2. Amarpur 3. Karbook	1. a) Matabari 1. b) Kakraban 1. c) Killa 2. a) Amarpur 2. b) Ompi 3. a) Karbook 3. b) Silachari	1. a) Udaipur Municipal Council 2. a) Amarpur Nagar Panchayet	436,868
Sipahijala	Bishramganj	1. Bishalgarh 2. Jampuijala 3. Sonamura	1. a) Bishalgarh 2. a) Jampuijala 3. a) Melaghar 3. b) Kathalia 3. c) Boxanagar	1. a) Bishalgarh Municipal Council 3. a) Sonamura Nagar Panchayet 3. b) Melaghar Municipal Council	
West Tripura	Agartala	1. Sadar 2. Mohanpur 3. Jirania	1. a) Dukli 2. a) Mohanpur 2. b) Hezamara 2. c) Lefunga 3. a) Jirania 3. b) Mandai	1. a) Agartala Municipal Corporation 3. a) Ranirbazar Municipal Council	917,534

Source: Economic Review of Tripura 2014-15

#### d) Population Trend of Tripura

The total population of Tripura is 36, 73,917 as per Census Report of India 2011. State ranks eighteenth in terms of density of population in the country. The population of Tripura has increased 4, 74,714 during the period of 2001-2011. Tripura comes second next to Assam in respect of population and population density among the North Eastern States of India. A comparative key demographic feature in 2001 and 2011 for Tripura and All India is presented in the following 4.2 table

**Table 4.2: Population Trend of Tripura as Compared to All India**

Sl No	Item	Unit	Tripura 2001 Census	India 2001 Census	Tripura 2011 Census	India 2011 Census
1	Population	in lakhs	31.99	10287	36.73	12105
2	Decadal growth rate	Percent	16	21.5	14.80	17.70
3	Density	Per sq.km	305	325	350	382
4	Sex-rate	Per'000 males	948	933	960	943
5	Literacy rate	Percent	73.2	64.8	87.2	73
6	ST population	Percent	31.1	8.2	31.8	8.6
7	SC population	Percent	17.4	16.2	17.8	16.6

*Source: Census 2011 & 2011, RGI*

Above table shows that decadal growth of population in the State during 2001-2011 was 14.8 percent. The proportion of ST population was 31.8 percent and similar proportion of SC population was 17.8 percent in 2011. The sex ratio has increased by 12 points in the State and reached to 960 in 2011 as against 948 in 2001. Literacy rate in the State has gone up from 73.2

percent in 2001 to 87.2 percent showing an increase of 14.0 percent. Density of population has increased by 45 points and reached to 350 in 2011 as against 305 in 2001.

The following 4.3 table depicts total population, sex ratio, density as well as decadal growth rate of all eight Districts in the State based on Census 2011 data.

**Table 4.3: District Wise Population of Tripura**

Districts	Male	Female	Persons	Sex ratio (females per 1000 males)	Density per sq. km.
West Tripura	4,66,152	4,52,048	9,18,200	970	974
South Tripura	2,20,162	2,10,589	4,30,751	957	281
North Tripura	2,12,650	2,04,791	4,17,441	963	289
Dhalai	1,94,544	1,83,686	3,78,230	944	158
Shepahijala	2,47,829	2,35,858	4,83,687	952	463
Khowai	1,67,401	1,60,163	3,27,564	957	326
Unokati	1,40,210	1,36,296	2,76,506	972	467
Gomati	2,25,428	2,16,110	4,41,538	959	290
Tripura	1,874,376	17,99,541	36,73,917	960	350

Source: - Census 2011, RGI, Govt of India

#### **e) Climate of Tripura**

The climate of Tripura exhibits a strong seasonal rhythm. The State is characterized by a warm and humid sub-tropical climate with five distinct seasons, namely, spring, summer, monsoon, autumn and winter. Winter starts in the month of December; it is short and followed by a brief spell of



spring. Spring starts from mid-February and continues till mid-March. Winter returns if there is rain in mid-February. Summer season starts from middle of March and reaches its peak in April-May. Pre-monsoon rain is always experienced after Jhum harvesting in the hills in March-April. Occasionally there is no significant gap between pre-monsoon and monsoon.

#### **f) Temperature**

Tripura has relatively high temperature. Occasional thunderstorms and wind velocities can be traced from the March and to mid-May which covers the summer season and the temperature of Tripura generally ranges from 15°C-34°C.

#### **g) Rainfall**

The state is a high rainfall zone with the incidence of very high concentration of rainfall (up to 450 mm per day) in the monsoon season, which lasts from June to September. The average annual rainfall in the state is 2024.4 mm (50 years average). Maximum rainfall is generally received in the months of July to September. Intermittent rainfall is received round the year, but the pattern of rainfall throughout the year is not homogenous.

#### **h) Agriculture Scenario**

Tripura is primarily an agriculture based economy. Tripura has a total cultivable land of 2, 80,000 hectares and irrigation potential of 1, 27,000 hectares. Out of the available water resources 79,000 hectares can be

brought under assured irrigation through surface water and 48,000 hectares through ground water. Total potential created up to 31st March, 2014 was 1,12,806 hectares. More than 42 percent of its population now directly depends on Agriculture and allied activities and its contribution to the GSDP has increased with new 2011-12 base in the State as per the revised methodology and additional coverage. As small and marginal farmers constitute about 96 percent of the total farmers in the State against 78 percent that of country.

The State Government gives special attention to agricultural credit and keeps on pushing the banks continuously to achieve the target of Kisan Credit Card (KCC). It is targeted that a number of 50,000 farmers will be issued KCC during 2015-16.

#### **i) State Income**

State income generally connotes Gross State Domestic Product / Net State Domestic Product. State Domestic Product is usually estimated by income originating approach; where incomes generated by the factors of production physically located within the geographical boundaries of the state are aggregated. State economy achieved annual average growth rate of 9.2% in real terms during the period of 2014-15. Per capita income reached 2,71,666.

#### **j) At current prices**

According to new base of 2011-12 with revised methodology and data base, GSDP at current prices increased from Rs.19,208.41 crore in 2011-12 to

Rs.21,663.20 crore in 2012-13 and Rs.25,592.83 crore in 2013-14 and Rs.29,666.62 crore in 2014-15 (Provisional).

On the other hand, the NSDP at current prices increased from Rs.17, 419.05 crore in 2011-12 to Rs.19, 631.14 crore in 2012-13 and Rs.23, 328.98 crore in 2013-14 and Rs.27, 484.05 crore in 2014-15 (Provisional).

**Table 4.4: GSDP and NSDP at current prices**

Year	GSDP at current prices	NSDP at current prices (Rs in crore)
2011-12	19,208.41	17,419.05
2012-13	21,663.20	19,631.14
2013-14	25,592.83	23,328.98
2014-15 (P)	29,666.62	27,484.05

Source: DES, Tripura

#### **k) At Constant Prices**

The GSDP at constant prices increased from Rs.19, 208.41 crore in 2011-12 to Rs.20, 900.48 crore in 2012-13 to Rs.22, 899.32 crore in 2013-14 and Rs.25, 175.15 crore in 2014-15 (Provisional).

The NSDP at constant prices has also increased from Rs.17, 419.05 crore in 2011-12 to Rs.18, 884.72 crore in 2012-13 to Rs.20, 703.27 crore in 2014-15 and Rs.22, 672.38 crore in (Provisional).

**Table 4.5: GSDP and NSDP at Constant Prices**

Year	GSDP at constant prices	NSDP at constant prices (Rs in crore)
2011-12	19,208.41	17,419.05
2012-13	20,900.48	18,884.72
2013-14	22,899.32	20,703.27
2014-15 (P)	25,175.15	22,672.38

Source: DES, Tripura

### **4.3 Economic Infrastructure of Tripura**

Agriculture is the primary sector of economy of Tripura. Total work force of Tripura depends substantially on agriculture and its products. Realizing this state adopts several measures to improve the agricultural sector. Modern technologies fertilizers, improved seeds and protective chemicals etc are glaring instances of this. Now a day's numerous small skill industries have emerge in the state that deal with the manufacture and production. Fisheries in Tripura also form an integral part. In 1951 the first cooperative movements in fisheries was started by Rudra Sagar Udvastu Fisherman cooperative society. Tourism industry, tea industry and natural gas industry also contributes significantly in Tripura's economy.

#### **Education**

Tripura is enriched in terms of education. The literacy rate of Tripura beats any other state of India. On 8<sup>th</sup> Sep 2013 Tripura gained first position in the realm of literacy rate, beating the state of Kerala. As per Economic review of Tripura 2014-15 the total number of educational institutes in Tripura is 4638 among which 82 schools are for girls. The State has two medical colleges, one agricultural college and one veterinary college

### **4.4 Health and Health Care Services in Tripura**

Health care service in Tripura follows universal health care system, generally run by the State government. Under constitution of India every state is entrusted with the responsibility to raise the level of nutrition and standard of living of its people and thereby improve the public health. The

government of Tripura is not an exception to this and is bound to provide better healthcare administration in the state. It recognizes that good health contributes in invaluable gains in human development. Thus from time to time Tripura government is making concerted efforts to bring positive changes in the field of health. Namely

- 1) It aims to provide adequate and qualitative preventive and curative healthcare facilities to the people of the states.
- 2) Maternal and child health related issues are also of major concern. Thus efforts are made to reduce maternal and infant mortality, which will be discussed in subsequent chapters.
- 3) To extend the benefits of healthcare to all particularly to disadvantaged group like SC/ST and OBC.
- 4) Every people must have access to quality Allopathic, Homeopathic and Ayurvedic system of medicine.
- 5) Doctors, nurses and other paramedical stuffs are to be provided with adequate training so that health care issues in the states can adequately be mated out.
- 6) Step should be taken to ensure access to primary healthcare to the people as much as possible. Medical institutions can play an important role in this regard.

As per Economic Review of Tripura 2014-15 various national health programme have been implemented in the state in addition to state sectors health programmes, this are

- i) Family Welfare, Reproductive and Child Health Programme
- ii) National Victor Borne Disease Control Programme
- iii) National Tuberculosis Control Programme
- iv) National Accrued Immune Deficiency Syndrom Control Programme
- v) National Programme for Control of Blindness and Visual Impairment
- vi) National Leprosy Eradication Programme
- vii) National Cancer Control Programme
- viii) District Mental Health Programme
- ix) Disability and Rehabilitation Progeamme
- x) Integrated Disease Surveillence Project
- xi) National Iodine Deficiency Disorder Control Programme

In addition to this contribution of National Rural Health Mission is noteworthy. NRHM is a major partner and in conjugation with the state health department has performed commendable job. It has contributed significantly in the upliftment of entire health care services in the state especially at the grass root level covering hilly area.

A brief account of the profile of Tripura and Health care Services shown in Table 4.6 Table 4.7 and Table no 4.8

**Table 4.6: Health Profile of Tripura along with all India figures: 2011**

Indicator	Tripura	India
Total Population (in crore) (Census 2011)	0.37	121.01
Decadal Growth (%) (Census 2011)	14.75	17.64
Crude Birth Rate (SRS 2011)	14.3	21.8
Crude Death Rate (SRS 2011)	5.0	7.1
Natural Growth Rate (SRS 2011)	9.4	14.7
Infant Mortality Rate (SRS 2011)	29	44
Maternal Mortality Rate (SRS 2007-09)	NA	212
Total Fertility Rate (SRS 2011)	NA	2.4
Sex Ratio (Census 2011)	961	940
Child Sex Ratio (Census 2011)	953	914
Schedule Caste population (in crore) (Census 2001)	0.056	16.6
Schedule Tribe population (in crore) (Census 2001)	0.099	8.4
Total Literacy Rate (%) (Census 2011)	87.75	74.04
Male Literacy Rate (%) (Census 2011)	92.18	82.14
Female Literacy Rate (%) (Census 2011)	83.15	65.46

Source:[http://mohfw.nic.in/NRHM/health\\_profile.html#tri](http://mohfw.nic.in/NRHM/health_profile.html#tri)

According to census of 2011, 37 lakhs peoples constitute Tripura's total populations who are scattered over 8 Districts of the states. It constitutes 0.3 percent of India's total population. The sex ratio of the State is as 961 females per thousand males, which is much higher than that of national ratio 940. The Infant Mortality Rate is 29; Comparative figures of demographic indicators are given in table above.

**Table 4.7: Health Infrastructure of Tripura (2011)**

Item	Required	In Position	Shortfall
Sub-centre	903	719	184
Primary Health Centre	135	79	56
Community Health Centre	33	12	21
Health worker (Female)/ ANM at Sub Centres & PHCs	798	1169	*
Health Worker (Male) at Sub Centres	719	543	176
Health Assistant (Female)/LHV at PHCs	79	155	*
Health Assistant (Male) at PHCs	79	140	*
Doctor at PHCs	79	119	*
Obstetricians & Gynecologists at CHCs	12	0	12
Pediatricians at CHCs	12	0	12
Total specialists at CHCs	48	0	48
Radiographers at CHCs	12	7	5
Pharmacist at PHCs & CHCs	91	92	*
Laboratory Technicians at PHCs & CHCs	91	72	19
Nursing Staff at PHCs & CHCs	163	1098	*

Source: RHS Bulletin, March 2011, M/O Health & F.W., GOI  
(\* indicates surplus)

The present status of health care infrastructure in Tripura as shown in table above table no 4.7 depicts that there is a shortfall of 184 Sub centre, 56 Primary Health Centers and existing community Health centers is lagging behind more than half of the required one. Number of male health workers is also less than that of margin level. This initial analysis depict that there is inadequacy in the health care services in Tripura. Though table 4.7 reveals that the number of doctors at PHCs, health assistant male and female,



health workers etc are more than that of what is required in rural Tripura. But our survey reveals that there is much shortage of medical personnel in rural Tripura.

**Table 4.8: Other Health Institutions in the State (2011)**

Medical College	2
District Hospitals	2
Referral Hospitals	-
City Family Welfare Centre	-
Rural Dispensaries	-
Ayurvedic Hospitals	1
Ayurvedic Dispensaries	55
Unani Hospitals	-
Unani Dispensaries	-
Homeopathic Hospitals	1
Homeopathic Dispensary	93

*Source: Ministry of Health & Family Welfare, Govt. of India*

Tripura has 154 other health institutions which include two Medical colleges, two District hospitals, one Ayurvedic hospitals, fifty five Ayurvedic dispensaries and one Homeopathic Hospital to strengthen and support health care services in the state which are shown in the table 4.8 above. Though since past few decades, country have witnessed significant investment in developing a network of health centre and deploying health personnel all over country but considerably high shortage of health personal in Tripura can be noticed leading to various types of health suffering to the people. To ensure the goal of 'Health for All' the state government has been relentlessly striving to reach out to the people with better health care services in the form of both preventive and curative measures. In this drive, special emphasis has been laid to meet the health care needs of people particularly in area dominated by

tribal population as well as the people living in backward areas. Steps have already been taken to further expand the health care intra-structure right from primary level up to state level ensuring adequate supply of medicines, human resources along with opening up of avenues for medical and paramedical education within the state.

**Table 4.9: Development of Health Care Services in Tripura during 1972-2012**

Subject	1972	1978	1998	2012
No of Medical Colleges	Nil	Nil	Nil	2
State level Hospitals	2	2	6	6
District Hospitals	2	2	2	2
Sub-Divisional Hospitals	7	8	11	11
Community/ Rural Health Centers	2	2	10	14
Primary Health Centers	22	29	73	77
Health Sub Centers (Allopathic)	103	228	539	719
Dispensaries (Homeopathic)	7	7	65	77
Dispensary (Ayurvedic)	2	2	32	36
Pharmacy College (RIPSAT)	Nil	Nil	1	1
B,Sc Nursing College	Nil	Nil	Nil	1
Paramedical Institute	Nil	Nil	Nil	1
Nursing Training Institute(GNM)	1	1	2	2
Auxiliary Nursing Training Institute	Nil	Nil	2	2
Blood Bank	1	-	5	7
Blood Storage Centers	Nil	Nil	Nil	7
Extension of Tele-medicine services to rural areas through GBP, Cancer and IGM Hospitals	Nil	Nil	Nil	17
Tele-Ophthalmology services through IGM Hospital	Nil	Nil	Nil	40
Number of Medical Officers				
1) Allopathic				731
2) Ayurvedic				53
3) Homeopathic				51
4) Dental Surgeons				39
Number of Specialist Medical Officers				
1) Allopathic				269
2) Ayurvedic	40	77	145	20
3) Homeopathic				13
4) Dental Surgeons			5	6
Number of Staff-Nurse			737	1516
Para- Medical Staff				2167

Source: Compiled on the basis of National Rural Health Mission (NRHM)'s reports and handouts dated 17/03/2015

The healthcare service in Tripura is developing significantly with each passing year. In the year 2012 two medical colleges were established. The number of state level hospitals increased from 2 to 6 but number of districts hospitals remain constant. Number of sub divisional hospitals, community or rural hospitals health centers, primary health centers, health sub centers, dispensaries, (homeopathic, ayurvedic, allopathic) all other institutions has considerably increased. Thus the effectiveness of the implementation of government initiatives in respect of health sector can precisely be noticed.

The National Rural Health Mission (NRHM) has been launched on 12.04.05 by Prime Minister of India with special focus on 18 States including Tripura. The umbrella of the NRHM and its various policies and programme are covering the entire state of Tripura. Its main aim is to provide basic and effective healthcare facilities to all section of people especially to the poor and vulnerable group at affordable rate. Its aim is to develop existing programs of health including kalaazar, blindness T.B, leprosy, malaria, and many more. It recognizes that the issues related to sanitation, hygiene, safe drinking water, nutrition as basic elements of good health and thus through its various programme it aims to provide basic facilities to the people.

The existing study is oriented to utilization of health care service in rural Tripura. Thus basic health status of the rural people must be examined. As mentioned earlier, the study is based on both primary and secondary data. Thus a sample survey has also been conducted to find out the actual efficacy of various projects and programmes launched by the government

of India and Tripura Government and to provide a brief overview of the actual scenario of existing health care system in rural Tripura

**Health Care Services in Rural Tripura:** There are three types of Government run health centre's in Tripura namely, Primary health centre's, Community health centre's and Sub centre. The health centre's are served as preventive, promotive and curative. The sample respondents have conveyed that they approach to such health institutes in times of ailment.

**Kinds of Health Services Sought:** The sample respondents prefer to go to Government run health institutes in rural area for getting different types of services. Table 4.12 reveals the kind of health services sought by the respondents.

**Table 4.10: Kind of Health Services Sought**

<b>Name of medical services</b>	<b>Number of Households respondents</b>
First Aid	243
Treatment of common diseases	298
Treatment to injuries caused by accidents	278
Basic Laboratory services	276
Provision of essential basic medicine	270
In patient ward services	267
Referral services	98
24 x 7 services	132
Surgery services (Operative)	211

*Source: Field Survey*

The above table shows that the kind of health services sought by the people of these sample villages. The listed above mentioned health services as of most importance when questioned about the requirement of different services. Thus nature of ailments in which service from health institution is taken is almost common to all.

**Different Types of Treatment:** In each primary and community health centre there are four different types of medical practioners who practice in the field of allopathic, ayurvedic, homeopathic and unani system. The respondents are also asked which system of medical treatment they generally prefer.

**Table 4.11: Types of Health Service Sought and Approached by Rural People**

Types of health service	Number of respondent households	Percentage
Allopathic	170	57
Ayurvedic	61	20
Homeopathic	47	16
Unani Medical care	22	7
Total	300	100.00

*Source: Field Survey*

Above table depicts that the highest numbers of sample respondent which stands at 57 percent prefer allopathic medical care system while the 20 percent of respondents go for Ayurvedic medical care system. 16 percent of total respondents prefer Homeopathic treatment and only 7 percent of total respondents prefer Unani Medical care system respectively.

## Gender wise Health Center Approached

Again classification has been made as per gender wise approach to this various types of health centres.

**Table 4.12: Gender wise Health Service Approached**

Allopathic		Ayurvedic		Homeopathic		Unani		Total
Male	Female	Male	Female	Male	Female	Male	Female	
101	69	35	26	20	27	8	14	
170(57%)		61(20%)		47(16%)		22(7%)		300

*Source: Field Survey*

The above table shows that the number of female respondents is much higher than that of male in case of homeopathic and unani medical care centre's. The situation is just opposite in case of allopathic and ayurvedic centre. Out of 300 respondents, 57 percent of the respondents are being treated with allopathic medicine. Whereas only 20 percent respondents are using ayurvedic, 16 percent respondents are treated with homeopathic and 7 percent respondents are treated with unani medical care respectively.

## Types of Health Service Approached According to Income Groups

The nature and type of treatment sought for to a large extent depends on the educational and economic level of the people. The following table reveals this aspect.

**Table 4.13: Types of Health Service Approached According to Income Groups**

Annual Income group	Allopathic	Ayurvedic	Homeopathic	Unani Medical care	Total
Above 1 lakh	72 (80%)	12 (13%)	6 (7%)	0	90
25001 - 99999	74 (54%)	32 (24%)	18 (13%)	10 (8%)	134
Upto 25000	24 (32%)	17 (22%)	23 (30%)	12 (16%)	76
Total	170 (57%)	61 (20%)	47 (16%)	22 (7%)	300

*Source: Field Survey*

The table 4.13 reveals that the 57 per cent respondents from all economic classes preferred allopathic centre followed by, ayurvedic (20 per cent), homeopathic (16 per cent), unani (7 per cent) respectively. Again for allopathic services 80 per cent respondents are from high income group, for ayurvedic services 24 per cent respondents are from middle income group and for homeopathic 30 per cent respondents and for unani health care service 16 per cent respondents belong to lower income group.

### Quality of Health Services Received by the Respondents

Another important aspect of this field survey is to find out the opinion of the people about the quality of different types of medical services received by them from different health institutions. Table 4.14 reveals the opinion of the respondents

**Table 4.14: Opinion of the Regarding the Quality of Health Service Received by them**

Medical services	Number of respondents	Opinion of respondents		
		Good	Average	Poor
First Aid	243	59 (24%)	150 (62%)	34(14%)
Treatment of common diseases	300	46(15%)	165(55%)	89(30%)
Treatment to injuries caused by accidents	278	39(14%)	153(55%)	86(31%)
Basic Laboratory services	300	34(11%)	134(45%)	132(44%)
Provision of essential basic medicine	300	15(5%)	173(58%)	112(37%)
In patient ward services	300	23(7%)	185(62%)	92(31%)
Referral services	198	24(12%)	87(44%)	87(44%)
24*7 services	300	43(14%)	171(57%)	86(29%)
Surgery services	300	0	118(39%)	182(61%)

Source: Field Survey

Above table shows that types of health services received by the rural people and their opinion regarding quality of services received by them. It is observed that in case of all most all types of services received; most of the respondents have viewed that the services received there from are of average quality. Interestingly, bellow 25 per cent number of respondents opined that the aforesaid services provided by the health centers are good.

### **Gender wise Allopathic Health Services Received**

Further en effort has been made to find out the opinion of people regarding each kind of treatment sought. Below table will narrate the things:

**Table 4.15: Gender Wise Allopathic Health Services Received**

Types of health centers	Good	Average	Poor	Total
Male	45(45%)	40(40%)	16(15%)	101(59%)
Female	23(33%)	34(49%)	12(18%)	69(41%)
Total	68(40%)	74(44%)	28(16%)	170(100%)

*Source: Field Survey*

Table 4.15 shows that gender wise allopathic health services received by the respondents and their opinion regarding quality of services. It is observed that 45 per cent of the male respondents have treated the process of treatment as good and 49 per cent of the female respondents have expressed that the treatment in allopathic health care centers of selected villages is of average quality.

**Table 4.16: Gender wise Ayurvedic Health Services Received**

Types of health centers	Good	Average	Poor	Total
Male	9(26%)	11(31%)	15(43%)	35(57%)
Female	7(27%)	10(38%)	9(35%)	26(43%)
Total	16(26%)	21(34%)	24(40%)	61(100%)

*Source: Field Survey*



Table 4.16 shows that gender wise Ayurvedic health services received by the respondents and their opinion regarding quality of services. It is observed that only 26 per cent of male and 27 per cent of female respondent have viewed that process of such health treatment is satisfactory one. Whereas 31 per cent of male and 38 per cent of female respondents are reported that ayurvedic service is average quality and 43 per cent of male and 35 per cent of female respondents are reported that ayurvedic health services is poor quality.

**Table 4.17: Gender wise Homeopathic Health Services Received**

Types of health centers	Good	Average	Poor	Total
Male	5(25%)	11(55%)	4(20%)	20(43%)
Female	14(52%)	9(33%)	4(15%)	27(57%)
Total	9(19%)	20(43%)	18(38%)	47(100%)

*Source: Field Survey*

Table 4.17 shows that gender wise homeopathic health services received by the respondents and their opinion regarding quality of services. It is observed that 52 per cent female and 25 per cent male respondents have viewed the treatment process in homeopathic health services as of good quality. While 33 per cent female and 55 per cent male respondents have viewed the treatment process in homeopathic health services as of average quality, the rest of 15 per cent of female and 20 per cent of male respondents have reported that the homeopathic health services is poor quality.

**Table 4.18: Gender wise Unani Medical Care Health Services Received**

Types of health centers	Good	Average	Poor	Total
Male	1(12%)	2(25%)	5(63%)	8(48%)
Female	2(14%)	2(14%)	10(72%)	14(52%)
Total	3(14%)	4(18%)	15(68%)	22(100%)

*Source: Field Survey*

Table 4.18 shows that gender wise Unani Medical care services received by the respondents and their opinion regarding quality of services. It is observed that only 7 per cent of total respondent households have used unani medical care services and out of that about 63 per cent of male sample respondents consider the system of treatment as of poor quality and 72 per cent female respondents opined it as a poor quality.

**Table 4.19: Income Group wise Opinion of Respondents Regarding Health Services Received**

Annual Income group	Good	Average	Poor	Total
Above 1 lakh	11(12%)	56(62%)	23(26%)	90(30%)
25001 - 99999	23(17%)	87(65%)	24(18%)	134(45%)
Upto 25000	14(18%)	22(29%)	40(53%)	76(25%)
Total	48(16%)	165(55%)	87(29%)	300

*Source: Field Survey*

Table 4.19 shows income group wise number of respondents received to different health care services. It is observed that 65 per cent of the sample respondents belong to the middle income group and they said that services received are of average quality. While only 12 per cent of the respondents from the high income groups have expressed that the health service received by them are good.

The medical professionals are also interrogated on certain issues so that actual position of rural health care service in public hospitals can be traced

out. For this purpose from each sample villages one public health centre is selected at a random.

**Table 4.20: Selected Eight Villages Health Services Centre**

Name of hospitals/ health centers	Actual strength of medical personnel	Existing number of medical personnel	Shortage of medical personnel
Amtali PHC	6	4	2
Melaghar Rural PHC	7	5	2
Ramkrishnapur PHC	5	3	2
Udaipur District Hospital	18	14	4
Rupaichari Rural Hospital	7	5	2
Jarulchhara PHC	8	6	2
Bhadrapalli PHC	8	5	3
Kadamtala PHC	8	6	2
Total	67	48	19

Source: Field survey

From above table it is clear that 19 number of medical personnel is short than that of actual requirements of 67. The existing number of medical professionals who practiced there has complained about the various problems faced by them while attending the patients.

**Table 4.21: List of Problems Identified with Medical Personnel**

Nature of difficulties	Number of respondents
Patient cooperation	24
Availability of medicine	24
Awareness of patients	24
Affordability of patient	24
Availability of modern equipments	24
Availability of manpower	24
Lack of a referral system	19
Medical tariff/ fees	13
Availability of laboratory	24
Lack of support from government	14

Source: Field Survey

**Table 4.22: Types of Problems Faced**

Nature of difficulties	Highest Problems	Moderate Problems	Lowest Problems	Total Number of respondents
Patient cooperation	11	8	6	24
Availability of medicine	9	11	4	24
Awareness of patients	19	4	1	24
Affordability of patient	7	9	8	24
Availability of modern equipments	15	8	1	24
Availability of manpower	20	3	1	24
Lack of a referral system	17	2	-	19
Medical tariff/fees	5	8	-	13
Availability of laboratory	12	11	1	24
Lack of support from government	9	5	-	14

*Source: Field Survey*

Above table shows the level of problems faced by the medical personnel while delivering service in rural Tripura. Most of the medical personnel replied that they have faced highest problems due to non-cooperation of patient, Type of patient illness, non-availability of medicine, non-awareness of patients, non-affordability of patient, lack of modern equipments, non-availability of manpower and non-availability of laboratory. Non-availability of modern equipment is one of the most important problems in the hospitals. Moreover, lack of trained manpower/stuff is one of the important hurdles in delivering service to the people. Again, poor

awareness of the patient has created problems for the medical personnel in the Tripura. It is also observed that lack of good quality laboratory and lack of technical person has also created hurdles in health care service industry.

**Table 4.23: Perception of Different Economic Classes Regarding Quality of Health Services Received from Public Health Institutes**

Economic class	Poor	Average	Good	Excellent	Total
High	55(61%)	30(33%)	5(6%)	0(%)	90
Middle	41(31%)	43(32%)	40(30%)	10(7%)	134
Low	7(9%)	15(20%)	29(38%)	25(33%)	76
Total	103(34%)	88(29%)	74(25%)	35(12%)	300

*Source: field survey*

From the above table it reveals that in case of public institutes, highest number of satisfied respondent belong to lower economic strata. Out of 300 respondents, 61 per cent from higher economic classes exhibited their complete dissatisfaction to the healthcare service of public institutions, by rating the quality of service rendered as poor. Some of the respondents from middle economic class are found to visit public hospitals also. About 7 per cent of them are satisfied with the healthcare service received from public institutes. The respondent from low economic classes has shown quite satisfaction from the services received from government run health institutes. Only 9 per cent of the respondents belonging to lower economic classes have rated the service quality of public hospitals as poor.

**Table 4.24: Perception of Different Economic Classes Regarding Quality of Health Services Received from Private Health Institutes**

Economic class	Poor	Average	Good	Excellent	Total
High	5(6%)	15(17%)	21(23%)	49(54%)	90
Middle	11(8%)	21(16%)	48(36%)	54(40%)	134
Low	35(46%)	25(33%)	14(18%)	2(3%)	76
Total	51(17%)	61(20%)	83(28%)	105(35%)	300

*Source: field survey*

From the above table it reveals that quality of service rendered in private health institutes is much satisfactory. The 35 per cent total sample respondents rated the treatment process of private hospitals as excellent. While 17 per cent of total respondents' exhibits their dissatisfaction about the service of private hospitals. The reason of dissatisfaction varies from one economic stratum to another. Respondents from lower economic class have complained that they often get neglected, receive less care and usually prescribe costly medicine which causes extra burden on their expenditure. Further, due to non-existence of private hospitals within nearby locality of their villages they are bound to travel at distance location to avail such facility and respondents from middle and higher economic classes have complained on the ground that the medicine which are prescribed to them most of the times remain unavailable within the locality of clinic.

## Testing of Hypotheses

To test the validity of the assumptions, viz. **Hypothesis-1:** Types of healthcare services sought in Tripura are independent of economic strata and

**Hypotheses-2:** Perception about the quality of healthcare services received differs among the economic strata. Data were collected from 300 number of sample households across the eight districts of the Tripura State.

To test (Hypothesis-1)

**Let  $H_0$ :** Types of healthcare services sought in Tripura are independent of economic strata.

**$H_1$ :** Types of healthcare services sought in Tripura are dependent of economic strata.

Chi-square test was carried out for testing the above hypothesis of Table no 4.13 data by using SPSS software and the follow results were drawn.

**Table 4.25: Chi-Square Test vis-à-vis Hypothesi-1.**

Annual Income group	Allopathic	Ayurvedic	Homeopathic	Unani Medical care	Total
Above 1 lakh	72 (51.00) [8.65]	12 (18.30) [2.17]	6 (14.10) [4.65]	0 (6.60) [6.60]	90
25001 - 99999	74 (75.93) [0.05]	32 (27.25) [0.83]	18 (20.99) [0.43]	10 (9.83) [0.00]	134
Upto 25000	24 (43.07) [8.44]	17 (15.45) [0.15]	23 (11.91) [10.34]	12 (5.57) [7.41]	76
Total	170 (57%)	61 (20%)	47 (16%)	22 (7%)	300

From the analysis, it was found that the calculated chi-square statistic is 49.7197 and the  $p$ -value is 0.00001. The result is significant at 5% level of significance. Thus the Null Hypothesis is rejected. Hence we accept H1 and to conclude that, the types of healthcare services sought in rural Tripura are dependent on the levels of income.

**To test (Hypothesis-2)**

**Let H<sub>0</sub>:** Perception about the quality of healthcare services received does not differ among the economic strata.

**H<sub>1</sub>:** Perception about the quality of healthcare services received differs among the economic strata.

Chi-square test was carried out using SPSS software and the following hypothesis of table no 4.23 data results were drawn.

**Table 4.26 Chi-Square Test vis-à-vis Hypothesis-2**

Economic class	Poor	Average	Good	Excellent	Total
High	55 (30.90) [18.80]	30 (26.40) [0.49]	5 (22.20) [13.33]	0 (10.50) [10.50]	90
Middle	41 (46.01) [0.54]	43 (39.31) [0.35]	40 (33.05) [1.46]	10(15.63) [2.03]	134
Low	7 (26.09) [13.97]	15(22.29) [2.39]	29(18.75) [5.61]	25(8.87) [29.36]	76
Total	103(34%)	88(29%)	74(25%)	35(12%)	300

From the analysis, it was found that the calculated chi-square statistic is 98.8158 and the  $p$ -value is 0.00001. The result is significant at 5% level of significance. Thus the Null Hypothesis is rejected. Hence we accept H1 and to conclude that perception about the quality of healthcare services received in rural Tripura differs among the economic strata.