



Annual Report

April 2016 - March 2017



Table of Contents

Table of Contents	1
Executive Summary	2
Introduction	3
Vision	4
Mission	4
Health:	4
Primary Health Care:	4
Primary Health Centres:	4
Consolidated Health Outcome Indicators for Karnataka:	8
Mobile Health Units	11
Projects under Corporate Social Responsibility (CSR) Initiatives	11
Innovations in Primary Health Care:	13
II. Secondary Health Care:	19
Vivekananda Eye Hospital:	19
Manasa - Mental Health Project:	19
Innovative Health Projects:	20
III. Livelihood & Sustainable Development:	24
KAMMASANDRA, KARNATAKA:	24
GOHPUR, ASSAM:	24
IV. Proposed Projects:	27
V. Financial Report:	29
VI. Donor List:	31

Executive Summary

Karuna Trust is continuously chasing the vision of providing an equitable and integrated model of health care through education and livelihoods by empowering marginalized people to be self-reliant. Starting with the management of one PHC in Karnataka in 1996, Karuna Trust manages at present 68 PHCs in six states of India.

In continuation of improving the quality of services, this year Karuna Trust have achieved ISO 9001:2008 certification of 13 PHCs in Karnataka. Believing in comprehensive health care services, Karuna Trust is providing mental health care and primary eye care in primary health centers of Karnataka. The staff of Primary Health Center is trained to identify mentally ill patients and also primary eye problems. Quality spectacles are being provided at minimum cost to the patients through the project called integration of Primary Eye Care into Primary Health Care.

Karuna Trust is grateful to all state governments, partners and stakeholders who have been kind and participative. They have been extending their continued support for the ongoing work and in implementing projects that were proposed during the beginning of the year. As always, our deep felt gratitude to the people whom we serve as they are the pivotal force and purpose behind our work.

In the upcoming years, we are looking for more technology based innovations in health. Mobile based applications have been developed for management of comprehensive primary health of the entire community. Apart from this we have also provided technical knowledge in the development of an application for live feed of partograph during labor in remote primary health care centers in rural India. We have also joined the foray of school health program, providing the much needed health screening to urban students in government schools, as prescribed by the Rastriya Bal Swasthya Karyakram (RBSK) under the National Health Mission (NHM).

The challenges and changing dynamics in the sector have made us emerge stronger and oriented us to stay connected and firmly grounded in the principles we have believed in. We immensely thank our dedicated team and march ahead with renewed vigor to better serve our community. There are diverse projects planned for the year ahead aiming at quality primary health care and livelihood and sustainable development of the people we serve.

Introduction

Karuna Trust, established in 1986 is affiliated to Vivekananda Girijana Kalyana Kendra (VGKK) located at Biligiri Rangana Hills (B R Hills) in Chamarajanagar district of Karnataka that works for tribal empowerment. The Trust was established to respond to the widespread prevalence of leprosy in Yelandur Taluk of Karnataka and has been singularly successful in addressing this problem. Drop in the prevalence of leprosy from 21.4 per 1000 population to 0.28 per 1000 spanning across 26 years is a testimony for the success of the intervention. Apart from primary healthcare, education, sustainable livelihoods, and advocacy have been the prime focus areas of Karuna Trust.

The interventions of Karuna Trust have been consistently on Public Private Partnership (PPP) model which was initially piloted in collaboration with Government of Karnataka at the Gumballi PHC in Chamarajanagar district of Karnataka in 1996 when the PHC was entrusted to Karuna Trust by the Government. Observing the manner in which Karuna Trust successful turned poorly equipped and low performing PHCs into model health centres, offering high quality and affordable primary healthcare, other State Governments have approached Karuna Trust to start similar PPP initiatives in their respective States.

Karuna Trust today reaches out to over 1.3 million people through direct management of 68 PHCs in 6 states of India, 2 Mobile Health Units, 1 Eye Hospital and 1 First Referral Unit with over 2,000 dedicated healthcare professionals serving the poor in areas where healthcare has hardly reached. In addition to the respective State Government, the Trust has collaborated with Corporates to manage Health Centres as part of their Corporate Social Responsibility (CSR) initiative. With a prime objective of 'Reaching the Unreached' to provide healthcare to the underserved and the poor in the remote areas, Karuna Trust continues to serve the community it has been serving with renewed vigor and dedication.

Vision

Our vision is for a society in which we strive to provide an equitable and integrated model of health care, education and livelihoods by empowering marginalized people to be self-reliant.

Mission

Our Mission is to develop a dedicated service minded team that enables holistic development of marginalized people, through innovative, replicable models with a passion for excellence.

Health:

Two types of health care systems - primary and secondary health care are adopted and implemented in the PHCs.

I. Primary Health Care:

A. Primary Health Centres:

Karuna Trust has been managing 68 PHCs across India in five states under the Public Private Partnership model in collaboration with the state government and corporate sector. Comprehensive Primary Health Care with innovative initiatives of integrating vision centres, mainstreaming traditional medicine, community mental health, telemedicine, emergency medical services, management of communication disorders, mobile dental care along with enabling 24x7 services with the staff headquartered at PHCs are the key differentiators in the health services offered by Karuna Trust.

List of Primary Health Centres managed by Karuna Trust:

Karnataka				
SL No.	PHC Name	Taluk	District	Population
1	Aralagudu	Sagara	Shimoga	2913
2	Anegundi	Gangavathi	Koppal	28513
3	Ashoknagar	Khanapura	Belgaum	18546
4	Begar	Shringeri	Chikkamagalur	11877
5	Castle Rock	Joida	Uttar Kannada	9823
6	Dindavara	Hiriyur	Chitradurga	17997
7	Galagihulukoppa	Kalgatgi	Dharwad	31102
8	Gumballi	Yelandur	Chamarajanagar	22860
9	Hirehal	Rona	Gadag	24016
10	Hudem	Kudligi	Bellary	45873
11	Huilgola	Gadag	Gadag	15440
12	Idagur	Gowribidanur	Chikkaballapura	11406
13	Kammasandra	Doddaballapur	Bangalore Rural	3907
14	Kannur	Bijapur	Bijapur	69503

15	Kallusadarahalli	Arsikere	Hassan	21205
16	Mallapura	Jagalur	Davanagere	29514
17	Nandikeshwara	Badami	Bagalkot	24260
18	Pattanayakanahalli	Sira	Tumkur	40268
19	Sreemangala	Virajpet	Coorg	8377
20	Sriramarangapura	Hospet	Bellary	25170
21	Sugganahalli	Magadi	Ramanagaram	15228
22	Thithimathi	Virajpet	Coorg	15088
23	Yemalur/ Urban	KR Puram	Bangalore Urban	28228
				521114

Arunachal Pradesh		
Sl No.	District name	PHC Name
1	Kurung Kumey	Sangram
2	Dibang Valley	Etalin
3	Tirap	Wakka
4	East Kameng	Bameng
5	Papum Pare	Mengio
6	Anjaw	Walong
7	Changlang	Khimiyong
8	Upper Siang	Jeying
9	Lower Dibang Valley	Anpum
10	Upper Siang Dist	Tuting
11	Tawang	Lumla
12	Papum Pare	Tarasso

Meghalaya		
SL No.	District name	PHC Name
1	East Khasi Hills	Mawlong
2	East Khasi Hills	Mawsahew
3	Ri hoi Dist	Umtraï
4	Ri hoi Dist	Warmawsaw
5	Ri hoi Dist	Jirang
6	West Khasi Hills	Aradonga
7	West Khasi Hills	Kynrud
8	West Khasi Hills	Myriaw
9	West Khasi Hills	Maweit
10	Jaintia Hills Dist	Saipung
11	Jaintia Hills Dist	Umkiang

Odisha				
SL No.	PHC Name	Taluk	District	Population
1	Baranga	Patrapur	Ganjam	24800
2	Pandiripada	Polasara	Ganjam	12644
3	Gaudagotha	Sorada	Ganjam	16609
4	Rahada	Kodala	Ganjam	28520
5	Manitara	Buguda	Ganjam	21492
				104065

List of Primary Health Centres managed by Karuna Trust under CSR Initiatives:

SL No.	PHC Name	Taluk	District	Population
1	Arogyadhama/ STRIDES	Anekal	Bengaluru	10000
2	Gottikere/ Wienerberger	Magadi	Ramanagar	4313
3	Handigoudu/ MHU (NPCIL)	Sagara	Shimoga	1855
4	Manasa Project	Mysore	Mysore	55
5	Doddakenahalli/ Urban/Vemana Trust	KR Puram	Bangalore Urban	26240
				2,06,491

List of Primary Health Centres managed by VGKK:

SL No.	PHC Name	Taluk	District	Population
1	VGKK, B R Hills Tribal Hospital	Yelandur	Chamarajanagar	2000
3	VGKK Eye Hospital	Yelandur	Chamarajanagar	85,000
				87,000

One of the key performance indicators of the services at the PHCs are the health indicators which are part of the Health Management Information System (HMIS) mandated by the National Rural Health Mission (NRHM), Government of India. These indicators signify the overall status of the health facility serving the community. The following section has the consolidated information on the health indicators in the PHCs managed by Karuna Trust both in Karnataka and other states.

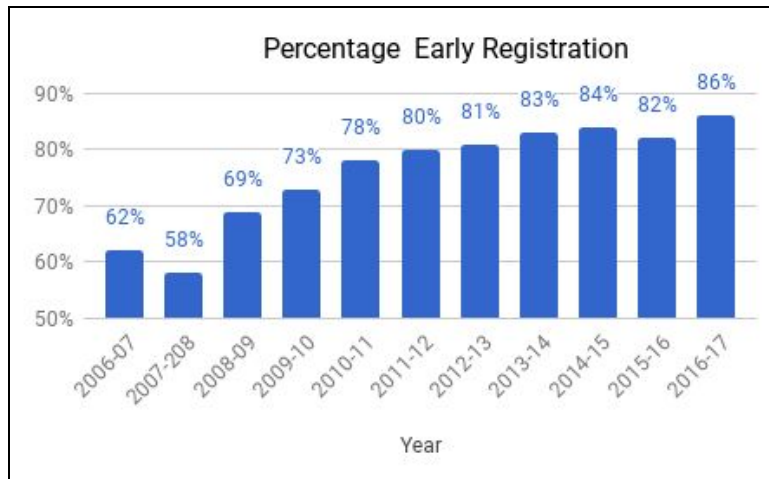
Consolidated Health Outcome Indicators for Karnataka:

Year	2006 -2007	2007 -2008	2008 -2009	2009 -2010	2010 -2011	2011 -2012	2012 -2013	2013 -2014	2014 -2015	2015 -2016	2016 -2017
Population	524688	529289	578410	553204	587986	586527	612876	596803	62447	572159	416482
No. of PHCs	25	25	28	28	28	28	30	30	30	25	17
Total registration	11828	11493	12636	13411	12817	13517	12370	12812	11982	11428	8211
Early registration	7277	6692	8736	9756	9999	10328	9756	10565	9810	9443	8777
% of Early Registration	62	58	69	73	78	80	81	83	84	82	86.18
TT Coverage	10932	10847	11436	13039	12423	14004	10679	12090	11842	11339	8221
Deliveries	8255	9489	10063	11031	10828	12190	10683	11512	11062	10395	7193
Institutional deliveries	4645	5929	7813	10234	10374	11799	10402	11276	10889	10351	7177
% of institutional deliveries	56	62	77	93	96	97	98	98	98	99	99.78
Maternal deaths	5	6	9	13	10	11	4	5	3	5	2
Live births	8349	9033	10004	10899	10676	12071	10002	11410	10951	10308	7169
Still births	93	74	167	156	133	123	128	104	49	45	30
Infant deaths	163	180	220	225	192	162	110	95	108	98	37
IMR	20	20	22	21	18	13	11	8.3	9.8	8.8	5.1
MMR	60	66	90	119	93	91	40	44	27.4	48.5	27.9

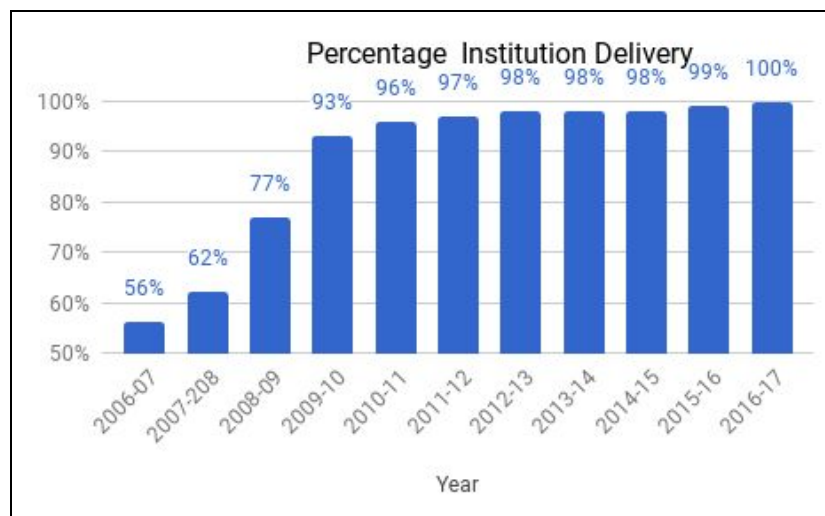
Consolidated Health Outcome Indicators for North East (Meghalaya & Arunachal Pradesh):

Year	2007 -2008	2008 -2009	2009 -2010	2010 -2011	2011 -2012	2012 -2013	2013 -2014	2014 -2015	2015 -2016	2016 -2017
Population	44669	45656	63985	65181	94430	156740	154202	144178	161403	167039
No. of PHCs	9	9	13	13	16	22	22	22	22	22
Total registration	944	1351	1560	1630	2035	2510	3794	3918	4354	4067
Early registration	206	226	447	580	911	1138	1904	2231	2506	2370
% of Early Registration	22%	17%	29%	36%	45%	45%	50%	57%	58%	58%
TT Coverage	854	1177	999	1045	1418	1857	3357	3699	4179	3841
Deliveries	489	715	738	1208	1426	1747	2502	3303	3529	3729
Institutional deliveries	127	243	248	487	714	845	1215	1473	1812	2306
% of institutional deliveries	26%	34%	34%	40%	50%	48%	49%	45%	51%	62%
Maternal deaths	NA	1	2	5	7	5	10	6	8	4
Live births	366	744	737	1149	1393	1728	2452	3303	3458	3587
Still births	NA	16	15	16	30	19	50	NA	71	78
Infant deaths	NA	14	20	28	24	31	32	73	82	93
IMR	NA	19	27	24	17	18	13	22	24	26
MMR	NA	134	271	435	503	289	408	182	231	112

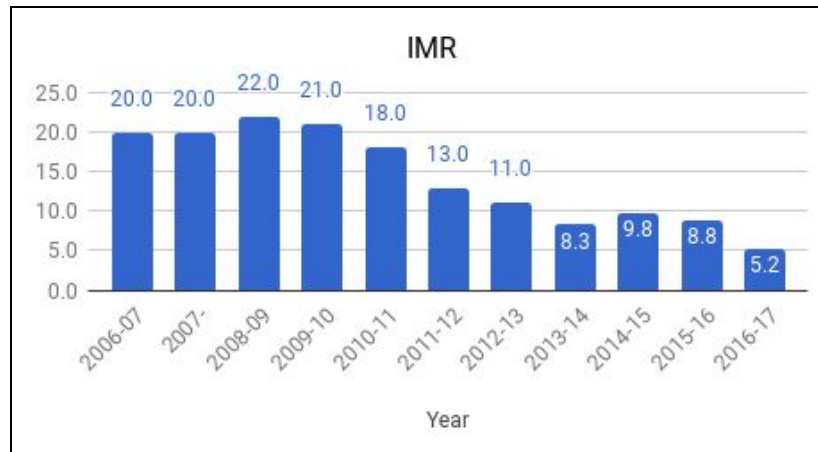
- Early Antenatal Care (ANC) Registration:** Early Ante Natal Check up registration is defined as women who have registered in the PHC within first trimester (12 weeks) of pregnancy. Percentage of ANC registration in first trimester shows early care and level of awareness in the community. There has been a steady improvement in the % of ANC Registration in the catchment area of PHCs managed by Karuna Trust.



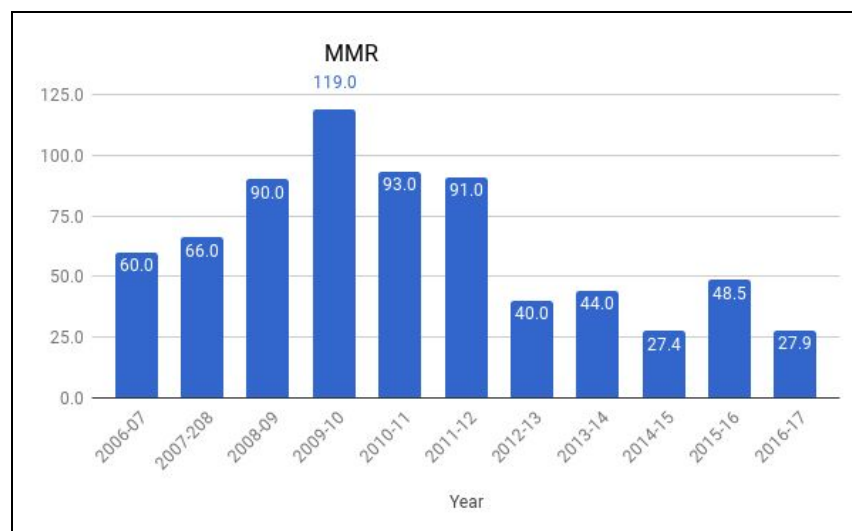
- Percentage of Institutional Delivery:** Deliveries conducted at public or private institution/ facility are considered as Institutional Deliveries, which aim at avoiding home deliveries, resulting in reduction of maternal and infant mortalities. The health workers have a key role in educating and encouraging the community for institutional deliveries. Karuna Trust has consistently achieved over 99% institutional deliveries for the past year in Karnataka.



- Infant Mortality Rate:** Infant Mortality Rate (IMR) is the number of deaths of infants per 1,000 live births under one year of age. This indicator is often used to signify the status of healthcare facility. According to SRS bulletin October 2012, IMR of rural Karnataka is 43 vis-à-vis 8.8 of Karuna Trust, which is a significant achievement.



- Maternal Mortality Rate:** Maternal Mortality Rate (MMR) is the number of female deaths per 100,000 live births from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes). MMR includes deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy for a specified year. Training and capacity building have motivated our health workers to bring down the MMR significantly in the population we serve.



B. Mobile Health Units

- Karuna Trust, in collaboration with the Health Department, Government of Karnataka under the National Health Mission runs two mobile medical unit (MMU) services catering to the underserved and remote areas of Karnataka. It reaches out to 7 gram panchayats consisting of 22 villages targeting a total population of 21, 267. The services provided under the MMU include communicable and non communicable diseases, maternal and child health, mental health, skin and parasitic infections, and oral health related issues. The MMU also conducts basic laboratory and diagnostic tests for the aforementioned health issues.

Table 1.1 : Details of Mobile Health Units, Raichur

Place	Taluk	District	Population
Maski	Lingasuru	Raichur	10476
Lingasur	Lingasur	Raichur	10791

C. Projects under Corporate Social Responsibility (CSR) Initiatives

- 1) **Health Centre at Gottikere in collaboration with Wienerberger:** Wienerberger India was established in Bangalore in 2006 with the aim to produce high quality clay building materials for the local market under the brand name POROTHERM. Under its CSR activity, Karuna Trust receives support to manage a Health Clinic at Gottikere in Kunigal Taluk, Tumkur District. It reaches out to a total population of nearly 4,000 where IEC and awareness programmes are regularly conducted about communicable diseases, breast feeding, mental illnesses and dewormation. The clinic is managed by a team consisting of a medical officer, staff nurse and a health worker.

Table 2 : Details about population served over the years

Sl No	Name of village	Total population	Male	Female
1	Bidanagere	948	492	456
2	Thopegowdana palya	391	206	185
3	Chennathimmana palya	447	199	248
4	Gottikere	728	371	357

5	Mudigiri palya	266	125	141
6	Anche palya	298	134	164
7	Kallanayakana halli	723	351	372
8	Shanbegowdana palya	88	41	47
	Total	3889	1919	1970

2) **Nutrition Project with PATH:** The project aims to empower the school children in four districts of Karnataka to practice key nutrition- and health-enhancing behaviours with reference to drinking clean water and hand-washing. Following activities were conducted in the reporting year:

- Gap Analysis of 2127 schools from six districts - Bengaluru North, Bengaluru South, Mysuru, Ballari, Hubballi and Mangaluru completed in June 2016
- Developed and health education communication materials in two Indian languages (Kannada and Urdu) in partnership with Sight and Life.
- Commissioner, Department of Public Instruction, Karnataka issued work order on 20th October, 2016 for implementation of health education in 2538 schools in Bangalore (Urban), Bellary and Dharwad
- Joint Director, Mid-Day Meal, issued permission letter on 23rd November, 2016 to start the Teacher's Training programme at the cluster/block level with two teachers from each school in Bangalore, Bellary and Dharwad districts
- Block and cluster-level Teachers Training Programme on Nutrition, Hygiene and Sanitation Education was conducted between November 2016 - January 2017

3) **School Health Programme:** Under the Rashtriya Bal-Swasthya Karyakram (RBSK), prescribed by NHM, Karuna Trust has collaborated with Cerner and has developed a comprehensive and user friendly application to help manage the program. Data is entered into the application which provides a detailed overview of the each child's health status. For general check up's the team consists of a medical doctor, a staff nurse and a overall team assistant while for dental, a dentist is part of the team. BOSCH pvt Ltd has funded this programme implementation. A total of 10114 students were screened in the program, out of a total of 164 schools. 150 children on average were screened each day by each of the eleven teams. The total time of the project was 6 months. Out of the 10114 students screened, 3416 students were observed to be suffering from some form of ailment, general or dental. Among these 1434 students were treated at the schools.

Among the 3416 cases, 433 are ENT cases, 678 Eye cases, 32 Anemia cases, 43 Cardiac cases and 35 other cases and number of Dental cases is 2230. Two fully equipped mobile health vans were provided for dental treatments. Children with dental health problems were treated at the schools. Out of 2230 cases, 756 (33.9%) were treated successfully. Ophthalmic examinations of the students was carried out; out of 678 cases a total of 358 cases (52.8 %) were treated. 217 students with visual acuity problems were provided with spectacles at the schools.

D. Innovations in Primary Health Care:

- 1) **Integration of Mental Health:** Mental health services are offered at PHCs in Karnataka managed by Karuna Trust under the aegis of PPP (Public Private Partnership). As a part of the Manasa Project, mental health care is being mainstreamed and integrated into PHCs with the objective of providing much needed access to primary mental health care for the rural community. The programme identifies and treats mentally ill people along with intensive training for PHC staff to identify the cases, do the referrals and follow up.

- 2) **Integration of Primary Dental Care:**
 - **Dental Unit at Primary Health Centre, Gumballi:** The Gumballi PHC manages a well-equipped dental care unit where a full-time trained dentist is present. Oral health awareness and health education is done by the field staff at the village level in Yelandur taluk. Basic treatment services are provided such as cavity fillings, teeth cleaning (scaling) and extraction. This year, nearly 6873 patients were examined out of which 3653 patients were treated for various oral health issues.

Table 3: Details of Dental unit, Gumballi

PHC name	Total number of patients examined	Total number of extractions done	Total number of fillings done	Total number of Scalings done	Total number of Xrays taken	Total number of Root Canal Treatments done
Gumballi Dental Unit	6873	1780	935	590	52	296

3) Information, Communication & Technology based applications:

- **Supply Chain Management at Primary Health Centres in collaboration with LOGISTIMO:** In collaboration with Logistimo, Karuna Trust has been using a software application that maintains stock inventory of medicines, surgical items, laboratory items, vaccines and hospital equipment in PHCs via a GPRS enabled mobile phone. This system provides live visibility of these medicines to Karuna Trust who can take necessary steps for the replenishment of these essential items within seven days in the PHCs once the stock of any essential item is finished or exhausted. In the past year, the usage of the application has increased at the PHC level to nearly 70% across Karnataka state. In North-east manages PHCs, due to erratic weather conditions and poor network connectivity the usage has decreased but the idea is to help improve the usage in the coming years. Two training sessions for pharmacists from respective PHCs have been conducted along with two updates in the application for ease of usage.

- **Comprehensive Primary Health care Management application in collaboration with Dell EMC² :** The Comprehensive Primary Health ICT programme aims to connect citizens, health workers, caregivers and decision-makers in a single, integrated platform and was conceptualized jointly by Karuna Trust and EMC². It enables the delivery of preventive, promotive and curative health at individual and community level by comprehensively addressing all diseases and conditions including reproductive, maternal, and adolescent and child health, school health and nutrition,



communicable and non-communicable diseases, public health and facility management. It is compliant with India's National Health Mission guidelines. This application is currently being piloted in Gumballi PHC where the entire population's health records have been digitised via this application. The Auxillary Nurse Midwives belonging to the five subcentres under Gumballi PHC have been using the application to collect information related to ante-natal care in their respective villages. The idea is to next scale up the use of this application to all PHCs managed by Karuna Trust.

- **ECHO-Bayer project on Maternal and Child Health:** Extension from Community Health Outcomes (ECHO) was a method of tele-health that was pioneered by Dr. Sanjeev Arora of University of New Mexico in Albuquerque. It follows a hub and

spoke model where the Karuna Trust head office acts as the hub to its spokes, which are in the remote areas of rural India. Regular training and knowledge sharing sessions on various topics such as cancer screen training, mental health care training, maternal and child health care as well as primary healthcare center management meetings are conducted via the Zoom software that is employed to connect the spokes to the hub. A total of 15 sessions have been conducted which includes pediatric, gynecology, health management sessions. During the specialty clinics, concerned specialists from the hub provide technical inputs to the attending participants in spokes. Apart from clinical inputs, there were a lot of case based discussions based on the clinical cases explained by the participants. All sessions were appreciated by participants in the spokes with regard to knowledge update and learning of recent advances in the particular aspects. A total of 15 PHCs from Karnataka and 1 PHC from Arunachal Pradesh, have attended the sessions. The future plan is to upscale the reach to all PHCs and initiate training or capacity building sessions for all PHC staff including community health workers.

Table 4: Details of TeleECHO sessions

Sl. No	Date	Topic	Consultant
1	16-Jun-2016	PHC Management	Mr Shivamallu & Ms Roshni
2	2-Jul-2016	Obstetrics and Gynecology Session (Basics)	Dr. Latha Venkataraman/ Dr. Shreelakshmi
3	13-Jul-2016	Paediatrics Session- Early Nutrition (upto 2 yrs)	Dr. Shubha Shripad
4	21-Jul-2016	OBGyn Session: Care in labour: Part 2	Dr. Latha Venkataraman and Dr. Shreelakshmi
5	10-Aug-2016	Pediatrics: Child rearing and safety measures	Dr. Shreepad
6	19-Aug-2016	PHC Management	Mr Shivamallu
7	20-Aug-2016	OBGyn: Early Care in Pregnancy	Dr. Indu Kumar
8	9-Sep-2016	OBGyn: Care in Labour: Part 3	Dr. Shreelakshmi and Dr. Prakruti
9	15-Sep-2016	ISO certification: An Overview	Dr. Apoorva Patil
10	24-Sep-2016	OBGyn: Care in Labor - Stage/ Part 3	Dr. Shreelakshmi & Dr. Prakruti
11	27-Sep-2016	PHC Management: ISO Standards - Infrastructure	Mr. Shivamallu

12	3-Oct-2016	Oral Care at PHCs: Dental Caries and Fluorosis	Dr. Apoorva Patil
13	10-Mar-2017	Bi-Monthly State Level Review Meeting - School Nutrition, Hygiene and Sanitation Education Project	Ms Anusha P
14	16-Mar-2017	High BP in pregnancy	Dr. Tanya Seshadri
15	27-Mar-2017	Bi-Monthly State Level Review Meeting - School Nutrition, Hygiene and Sanitation Education Project	Ms Anusha P

- **E-partograph**

- **with Blue Crimson:** In collaboration with Blue Crimson, an application has been implemented in three PHCs under Karuna Trust. This application helps staff nurses to record and relay partograph digitally and in real time, as labour occurs with the assistance of an expert in the background. So far a total of 292 cases have been recorded with the application while it has helped refer high risk cases in the past year. Due to the change in PHC management, the partograph application was shifted from Patanayakahalli to Dindavara PHC in the month of October. The staff nurses receive constant technical support to use the application from Head Office.

Table 5: Details of e-partograph registrations

SI No	PHC Name	Total No. of Cases recorded
1	Gumballi	78
2	Patanayakhalli	59
3	Kannur	124
4	Dindavara	31
Total		292

- **With Janitri and SELCO Foundation:** Karuna Trust has ventured with SELCO Foundation and Janitri to explore innovative ways where staff nurses can make decisions about delivery at PHC level through a digital partograph. A simple internet based application via which a staff nurse enters information

related to labour and gets to monitor if she needs to refer a particular delivery case or not. The application also helps monitor and keep track of post-natal care. This application is being piloted in five PHCs under Karuna Trust and the future plan is to evaluate the usage feasibility of the application and pilot it in North-East PHCs as well.

- 4) **Management of Non-communicable Diseases:** Clinics to treat hypertension, cardiovascular diseases and diabetes are held at Gumballi PHC on second & fourth Wednesday of every month. It caters to the people of Yelandur, Kollegal, Chamarajanagar, Gundlupet Taluks and Mysore rural areas. Consultation is provided by Senior Radiologist cum Physician, Dr Y.N.I.Anand who has served in the Indian Army. We have developed screening programme for NCD and have extended it to other PHCs.
- 5) **Homeopathy Clinic:** Homeopathy Clinic is run by Dr. Mahesh who visits for consultation every month. In total 840 patients were treated during the reporting year.
- 6) **Emergency Primary care programme:** In order to decrease morbidity and mortality at the PHC level by standardizing management of emergency patients through simple yet effective interventions, Karuna Trust started a specific Emergency Medical Services (EMS) in all the PHCs. A toolkit consisting of emergency drugs, surgical items, ambu bags etc is placed in room exclusively to address any medical emergencies.
- 7) **Management of communication disorders in PHC in collaboration with AIISH:** In the table below are survey details of the number of patients with communication disorders in the three outreach service centers in Mandya, Mysore District and Chamarajanagar districts identified by trained ASHAs . This is a part of the study to evaluate the process of rehabilitation and its efficacy for prevention of communication disorders in collaboration with AIISH.

Table 6: Details of survey conducted by ASHAs on communication disorders

District	Total no of villages covered	Total no of Asha workers	Total Houses surveyed	Total population surveyed	Total no of patients identified	Total no f patients with communication disorders with prevalence	%

Chamaraja nagar (Rural) Town	54	71	15713	69643	1964	2019	2.89%
		45 Angan- wadi Teachers	13606	66953	1813	1362	2.03%
Mandya (Rural) Town	66	68	17025	70907	2113	2029	2.86%
		18 Angan- wadi Teachers	5181	19964	631	627	3.14%
Mysore (Rural) Town	98	59	15082	62125	1628	1490	2.39%
		28 Angan- wadi Teachers	10832	44289	1197	886	1.95%

8) **Cancer Screening in Primary Health Care:** Cancer screening program as a component of Primary Healthcare was introduced with the help of ICPO and in collaboration with ECHO, India. The health-workers at Gumballi PHC, were trained in symptomatically screening the community for oral, breast and cervical cancer, followed by the VIA test. Men were screened only for oral cancer. The training of PHC health workers was conducted by Institute of Cytology and Preventive Oncology, Noida (ICPO), through ECHO/ Zoom technology. Field workers were trained through TeleECHO sessions with a total of 8 sessions conducted. The health workers were given a proforma by ICPO to note down the history symptoms and other medical details of the candidates they were screening in the field. This was followed by VIA and VILI tests in the PHC. After this suspected cases were screened by cancer camps held by Kidwai Institute of Cancer.

Table 7: Details of Cancer screening camp, Gumballi

Sl. No	Place	Project name	Nature of camp
1	Y.K.Mole	Cancer screening	Screening of oral Breast and cervical cancer
2	PHC Gumballi	Cancer screening	Screening of oral Breast and cervical cancer
3	Yaragamballi	Cancer screening	Screening of oral Breast and cervical cancer
4	Komaranapura	Cancer screening	Screening of oral Breast and cervical cancer

5	B.R.Hills	Cancer screening	Screening of oral Breast and cervical cancer
			TOTAL

II. Secondary Health Care:

A. Vivekananda Eye Hospital:

The Vivekananda Eye Hospital has adopted an integrated approach to eye care and it has been functioning as an independent unit in close coordination with the ANMs and other health workers at the PHC. The staff at the hospital includes a team of visiting consultants from Vittala International Institute of Ophthalmology, a resident ophthalmologist and supporting staff. Weekly eye camps are held at villages in Chamarajanagar district, Nanjangud and T Narasipura Taluks of Mysore District with the help of other government hospitals, PHCs, nurses and ANMs. For the reporting year, a total of 541 cataract surgeries have been conducted out of which 341 were female patients.

B. Manasa - Mental Health Project:

Karuna Trust is managing the Mental Health Care project, Manasa which is for the

homeless mentally ill. During the reporting period we have reintegrated 17 members out of 39 inmates from TRC and we have identified relatives of 3 inmates who are under treatment. We have rescued 40 homeless mentally ill women reintegrated 17 cured and under control with regular medication & one death.

Table 8: Details of Mental health project

Total No. of Patients admission	Total No. of Inmates Re-integrated	Total No. of Long Stay Inmates	Total No. of RVM Foundation Shifting patients	Total No. of Rejected patients
22	9	3	2	15

C. Innovative Health Projects:

a. **Scaling Up Project with the John D & Catherine T MacArthur Foundation:** In collaboration with the John D & Catherine T MacArthur Foundation, Karuna Trust has implemented the project of improving quality of maternal healthcare for marginalized women and girls through Public Private Partnership, quality assurance and ICT applications in KT health centers across the country. As a part of this project, the following activities have been completed for the reporting year:

- To strengthen health services particularly for marginalised women and adolescent girls: A training of trainers (TOT) was conducted with state managers of all states. In Karnataka, two day CPHM training was conducted for all ANMs from selected PHCs. In Northeast, two state managers trained ANMs in CPHM personally, during their visits to these PHCs. Training on CPHM was also conducted through ECHO from the Bangalore headquarters.
- Regular SNEHA clinics has been conducted in all states with regular monitoring and data collection. The format for data collection has many more parameters such as outreach programs, number participants attending SNEHA clinic, individual counseling done for selected adolescent.
- Supportive supervision has been carried out in all the states, rigorously with technical and administrative checklists regularly that were followed up during monthly review meetings of PHCs at the head office (HO) in the respective states and the report of such meeting sent to Bangalore head office (HO)
- Efficient supply-chain management of drugs: A newer version of Logistimo with robust features for inventory management, asset management and order management, in addition to ILR temperature management through a Berlinger

temperature sensor is being introduced. All this is being monitored through a dashboard with alerts being sent to PHC staff through smart phones.

- Quality control cell were established in previous year and quality control cell has conducted gap analysis in all 19 PHCs and all 19 PHCs in Karnataka are ISO certified PHCs. Now, we are in the follow up process of ISO certifying 19 PHCs in Karnataka. Regular Internal audits for all PHCs are conducted to maintain the quality care in PHCs. 8 PHCs (1 in Karnataka, 3 in Arunachal Pradesh, 3 in Meghalaya, and 2 in Odisha) are undergoing NABH accreditation.
- After the successful pilot of CPHM at Gumballi PHC, we are now scaled it up to 100 ANMs in different PHCs across 3 states.
- Monthly PHC management meetings have been conducted through ECHO.
- The e-partograph (BlueCrimson) prog for better maternal health service is introduced in 4 PHCs in Karnataka.

b. Water Quality Management: Karuna Trust and Rural Development Panchayat Raj (RDPR) continues to work on water quality management project with a prime objective to strengthen existing system of water quality management in the Government. Under PRI, chemical quality testing has been carried out. For the reporting year, following activities have been completed-

- **Pre monsoon Water Quality Testing in Chickballapur District:** In Pre monsoon total 2428 Drinking Water sources water quality tests are tested in 1921 villages of 157 GPs in six taluks using Field test kit (FTK).and also the Same samples are tested in District Water quality testing Lab Chickballapur for conformation test. Out of 2428 water samples 717 samples are Fluoride, 92 samples are Nitrate, 142 samples are Total hardness and 20 samples are iron contaminated sources. total 896 drinking water sources contaminated.

Table 9: Taluk wise details of pre monsoon water quality management

SL No	Taluk	Total No of				No.of sources tested	Number of Sources Contaminated with						Accepted	Rejected
		G. P	Villages	Sources tested by FTK	No. of sources received		F	No ₃	TH	Fe	PH	Cl		
1	Chickaballapur	23	315	432	432	432	68	19	5	14			334	98
2	Shidlaghatta	28	274	432	432	432	85	16	18	1			326	106
3	Chintamani	35	428	460	460	460	134	24	25	1			292	168
4	Gowribidanur	38	345	534	534	534	71	5	66	0			400	134

5	Bagepalli	25	435	401	401	401	304	23	28	1			70	331
6	Gudibanda	8	124	169	169	169	55	5	0	3			110	59
	Total	157	1921	2428	2428	2428	717	92	142	20			1532	896

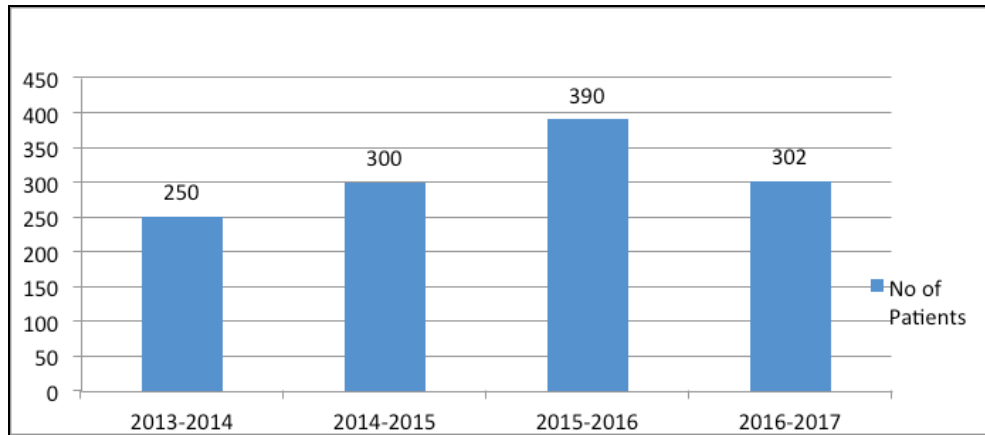
- **Post - monsoon Water Quality Testing in Chickballapur District.** In Pre monsoon total 2522 Drinking Water sources water quality tests are tested in 1933 villages of 157 GPs in Six taluks using Field test kit (FTK).and also the Same samples are tested in District Water quality testing Lab Chickballapur for conformation test. Out of 2522 water samples 973 samples are Fluoride, 141 samples are Nitrate, 100 samples are Total hardness and 25 samples are iron Contaminated sources. Total 1178 Drinking Water sources Contaminated.

Table 9.1: Taluk wise details of post- monsoon water quality management

SL No	Taluk	Total No of				No.of sources tested	Number of Sources Contaminated with						Accepted	Rejected
		G. P	Villages	Sources tested by FTK	No. of sources received		F	No ₃	TH	Fe	PH	Cl		
1	Chickaballapur	23	322	459	459	459	48	33	4	16	-	-	365	94
2	Shidlaghatta	28	274	440	440	440	92	36	15	-	-	-	306	134
3	Chintamani	35	423	472	472	472	212	50	14	2	-	-	222	250
4	Gowribidanur	38	345	579	579	579	163	15	63	2	-	-	349	230
5	Bagepalli	25	444	418	418	418	356	5	4	2	-	-	53	365
6	Gudibanda	8	125	154	154	154	102	2	-	3	-	-	49	105
	Total	157	1933	2522	2522	2522	973	141	100	25	-	-	1344	1178

- c. **Management of Handigodu syndrome at Sagar Taluk:** Karuna Trust (KT) is implementing the Handigodu Syndrome project since 2013 under sponsorship from NPCIL, Kaiga. The aim of project is to reduce the muscular skeletal pain of the Handigodu Syndrome affected people and provide them with rehabilitative measures by giving Ayurvedic treatment in Sagar Taluka of Shivmogga District, Karnataka.

Figure I: Number of patients taking treatment for Handigodu Syndrome from 2013-2017



There slight reduction in the number of patient taking treatment this year due to the new scheme launched by government Karnataka.

- d. **Vivek Medical Students Scholarship program:** This scholarship program is being sponsored by the alumni of BMC and late Dr. Iychettira Saraswaty Subbiah for students from financially disadvantaged families, irrespective of caste, creed and religion. Students are selected based on their merit, socio economic condition and other sources of scholarship, either public/private. For the reporting year, a total of 35 students were provided with scholarships, out of which 22 were from Bangalore Medical College and 12 from Mysore Medical College.
- e. **Distribution of TOMS shoes to children:** Karuna Trust in collaboration with TOMS, USA have distributed shoes for school children from ages of 2 to 16 years. The shoes are distributed in entire Chamarajnar district, Narasipura Taluk, Sugganahalli, Idaguru and P N Halli PHC area. A total of 87,744 children received shoes under this program

Table 10: Details of Toms shoes distribution

Batch Name	Stored at	PHCs covered	Quantity for Batch	Quantity for each PHC
P N Halli PHC	P N Halli PHC	P N Halli	18312	6380
		Idaguru		3217
		Dindavara		2556
		Sugganahalli		2009
		Kammasandra		303
		K S Halli		2664
		Yemluru		1183
Mallapura	Mallapura PHC	Mallapura	18432	5254

		Hudem		7034
		Aralagudu		473
		Begar		1181
		Kaiga Mallapura		4490
Anegundi	Basavanadurga Sub centre	Anegundi	13776	4776
		SRR Pura		4172
		Chandrabanda		4828
Nandikeshwara	Nandikeshwara PHC	Nandikeshwara	19464	4166
		0		0
		Herihal		3764
		Huvilgola		2192
		Ashoknagar		2296
		Castle rock		1679
		G H Koppa		5367
Kannur	Tidagundi sub centre		17760	17760
Grand Total			87744	87744

III. Livelihood & Sustainable Development:

A. KAMMASANDRA, KARNATAKA:

- 1) **Education:** Putani Gudu in collaboration with Sri Ramakrishna Paramahansa and Vivekananda Rural Development & Education Trust was taken up to focus on nutrition and education of the destitute children in Kammasandra and nearby villages. The project identifies destitute children and seeks to provide them with nutritional food, healthcare and quality education.

For the reporting year, a total of 19 children are residing and being educated. 4 new admissions were done, with 60% of the students receiving distinction and 100% pass rate.

B. GOHPUR, ASSAM:

The North East Zonal Office of Karuna Trust is located at Barangabari village under Gohpur Sub Division of Sonitpur District in Assam. The following are the activities carried out in this centre during the year 2016-2017:

- 1) Community Eye Care Programme:** Altogether 3588 patient were screened and 397 cataract cases were detected while 268 pterygium cases were reported. Only 58 cataract and 2 Pterygium cases were operated during the year.

Table 11: Details of community eye care programme

	Services	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
A	No of house visits	167	322	223	101	0	121	33	17	21	0	0	0	1005
	No of patient seen	110	345	212	89	0	233	65	28	47	0	0	0	1129
B	No of camps	4	4	6	7	2	4	2	6	0	6	0	2	43
	No of patient seen	45	111	156	216	56	75	19	244	0	244	0	27	1193
C	No of patient seen in PHC OPD clinic	75	145	221	78	78	211	118	144	34	56	77	29	1266
D	Total patient (A+B+C)	230	601	589	383	134	519	202	416	81	300	77	56	3588
E	Vision Testing done	156	357	487	355	102	334	104	297	76	112	77	29	2486
F	Cataract detected	41	86	68	62	27	29	39	49	29	26	36	5	526
G	Pterygium detected	4	6	22	23	11	7	15	16	10	2	0	0	116
I	Cataract operation done	24	32	0	0	32	16	46	14	23	7	7	7	208

- 2) Relief & Rehabilitation camps for flood victims:** During July-Aug 2016, there was three rounds of massive flood near to Karuna Trust zonal centre due to excessive rainfall for 15 days resulted deluge in many parts of Assam- affected more than 30 lakhs population of Assam in 18 districts in 20 villages affecting 50000 population in the Bakoridoloni Panchayat. Therefore, two health & rehabilitative camps were conducted at Bakori doloni village and Golcepa village on 1 Aug 2016 and 8th Aug 2016 respectively.
- 3) Coaching classes for BPL students:** In the month of Feb 2017, Karuna Trust started a five months coaching class for class X students of Gohpur area. Total 65 schools of nearby 10 schools are selected for the purpose
- 4) Vivekananda Bal Gurukul:** Karuna Trust started 2 nos of Vivekananda Bal Gurukul on 2nd January'13 at Karuna Trust, Barangabari office premises and at Joriguri Village with the help of Indian Development Foundation (IDF). Vivekananda Bal Gurukuls are for all-round development of village school children. In the year 2016-17, total 36

no. of students attended the classes in Vivekanada Bal Gurukul located in Karuna Trust Zonal Office, Barangabari. Most of the students were from BPL families of nearby villages. Out of these total 18 students belong to schedule caste (SC) of the society.

Table 12: Summary of Category of students from different class groups

Category of students enrolment	No of students in Kalyanpur Bal Gurukul	No of students in Joriguri Bal Gurukul
Class I	0	6
Class II	7	2
Class III	7	0
Class IV	16	16
Class V	6	14
TOTAL	36	38

- 5) **Tailoring and Embroidery Learning Centre:** Karuna Trust started Tailoring and Embroidery Learning Center in its Office premise, Barangabari in the month of July, 2013. The center offers a course of one year covering cutting, tailoring & embroidery for girls & women where 19 students were enrolled this year.
- 6) **Library movement:** Karuna Trust started a library in its office premises to promote the reading habit among the students community. The Baranagabari library also has many religious and spiritual books. During the year 2016-2017, more than 244 visitors came and took the books from the library from the Barangabari centre apart from the students of Bal Gurukul.
- 7) **Indigenous fruit and medicinal plant nursery:** Karuna Trust started a Nursery of Indigenous Fruit and Medicinal Plants at it office premises, Barangabari. During the year 2016-2017, more than 3000 saplings were distributed among the SHG members, individuals, students and community leaders to plant the saplings. Presently the nursery is having around 6000 saplings.
- 8) **Demonstration centre for Vermicomposting:** Considering the importance of organic farming for a healthy food production, Karuna Trust established two units of vermicomposting tank in its office premises. A day long workshop was also organized on 18th Sep 2016 by inviting 35 farmers who were taught how to make the

vermicompost. Earthworms are being sold to the interested farmers from this centre only.

- 9) **Computer Learning Centre:** Karuna Trust started a 6- 12 months computer training programme from August 2015 that includes training modules in Basics of the computer (mainly for the start-up students), DTP course and Tally course. Students from class 5 to 12 standard have taken admission for these courses. Considering the poor economic status of the students, a very nominal fee is charged from them. During the year, total 27 students took admission in various courses and 28 students could complete the course
- 10) **Free Spoken English course:** To help address the concerns related to English language speaking skills, Karuna Trust conducted a two months Spoken English course for the students of class 8 to 12 standards during the month of July and Aug 2016. Altogether 57 students took part in the course.
- 11) **Music School:** In order to revive the Indian and Assamese classical music and instruments, Karuna Trust started a music class in the office premises from January 2016. At the end of the year 2016-2017, there are 15 students in the music class.

IV. Proposed Projects:

- a) **New Primary Health Centres:** Proposals have been submitted to state governments in states of Rajasthan, Uttar Pradesh and Uttarakhand
- b) **Management of Urban Primary Health centers:** In collaboration with BOSCH Ltd and BBMP (Bruhat Bengaluru Mahanagara Palike), Karuna Trust has proposed to manage 5 Urban Primary Health center at Bengaluru south. The 5 Primary Health Centers are Adugodi dispensary, Adugodi health Center and Maternity ward and Tavarekere Health center and maternity ward. Karuna Trust has proposed to turn these non-functional maternity wards into 24x7 Urban PHC. The proposal has been submitted to BBMP, Bengaluru.
- c) **Management of School Health Program under RBSK:** KT proposed to continue its collaboration with BOSCH Ltd, for the School health program under Rashtriya Bal Swasthya Karyakrama (RBSK) in south Zone of Bengaluru. Under this program, we have proposed to cover 47000 children in 186 schools and 187 Anganawadies in south Zone of Bengaluru. 3 mobile units and 2 dental

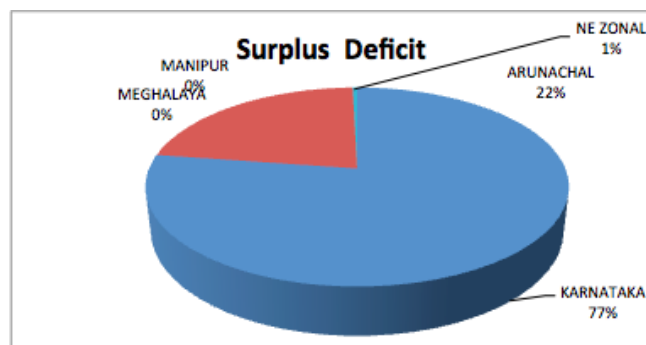
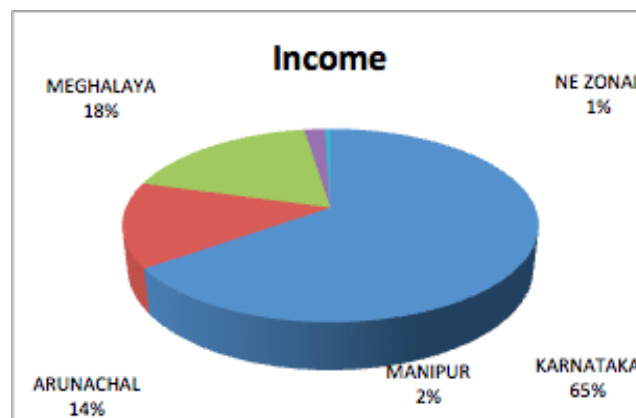
units have been proposed to Government for the management of this program along with BOSCH Foundation.

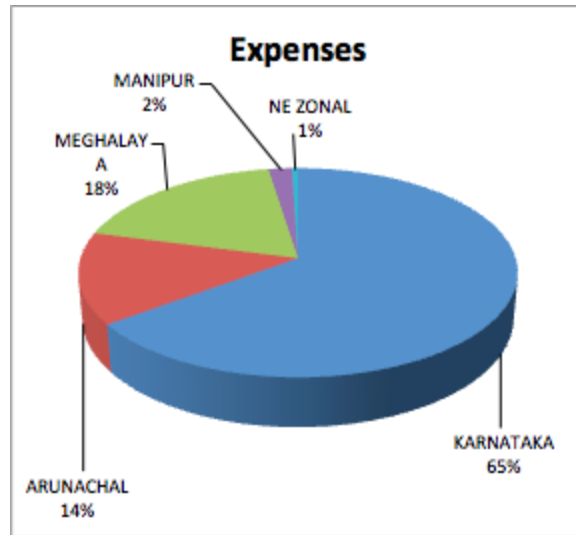
- d) Cerner Corporation: Karuna Trust will continue to work with Cerner corporation for school health program
- e) The HANS Foundation: In collaboration with the state government, we propose to adopt Khati PHC in Kapkot block, Bageshwar district, Uttarakhand.
- f) WISH (Wadhvani Initiative for Sustainable Healthcare): We have proposed to the state government and WISH for the following in Rajasthan:
 - Supportive supervision and skill training of PHCs
 - Adoption of new PHCs
 - ICT innovations in all the PHCs across the country
 - Teju health centre support
 - 10 percent support for all North-Eastern PHCs
- g) Jindal South West (JSW): Proposed to adopt Taranagar PHC along with the state government under the PPP model.
- h) Feeding the future through Fortified Rice: KT proposes to upscale its collaboration with PATH (a non profit organization), for a nutritional intervention program across states such as Rajasthan, Maharashtra
- i) Tele-ECHO: In collaboration with ECHO (Extension for Community Healthcare Outcomes), Karuna Trust has proposed to manage 14 Telehealth clinics at 14 PHCs of Karnataka. The Mission of Tele-health Project ECHO-KARUNA is to develop Tele-health facility for Karuna trust run Primary Health Centers (PHCs) for management of illnesses which need specialist care.
- j) Skills Lab: KT proposes to initiate regular training and skill building of existing cadre of PHC staff in collaboration with Motivation for Excellence.

V. Financial Report:

Abstract of the Audited Accounts for the year 2016-2017

PARTICULARS	KARNATAKA	ARUNACHAL	MEGHALAYA	MANIPUR	NE ZONAL	TOTAL
Income	19,27,94,089.28	4,23,93,334.00	5,39,30,605.08	57,69,857.50	14,76,948.00	29,63,64,833.86
Expenses	18,95,15,721.25	4,14,49,027.00	5,39,30,605.08	57,69,857.50	14,94,324.46	29,21,59,535.29
Surplus / Deficit	32,78,368.03	9,44,307.00	-	-	-17,376.46	42,05,298.57





INCOME	TOTAL	EXPENSES	TOTAL
Grant Income	27,57,46,396.37	Grant Expenses	28,59,53,364.24
Rental Income	19,82,455.00	Admin / Programme Expenses	30,54,240.42
General Donation	1,16,03,091.33	Depreciation	31,51,930.63
Interest Income	47,06,066.87	TOTAL	29,21,59,535.29
Other Receipts	23,26,824.29		
TOTAL	29,63,64,833.86		

SUMMARY: 2016-17	
INCOME in Rs	29,63,64,833.86
EXPENSES in Rs	29,21,59,535.29
SURPLUS in Rs	42,05,298.57

VI. Donor List:

1. Karuna America Foundation, Los Angeles, USA

2. Government Agencies:

- Government of Karnataka, Health & Family Welfare Department
- Government of Orissa – Department HFW & NRHM
- Government of Meghalaya – Department HFW & NRHM
- Government of Arunachal Pradesh – Department HFW & NRHM
- Bruhat Bengaluru Mahanagara Palike
- Rural Development Panchayat Raj, Karnataka
- Nuclear Power Corporation of India Limited

3. Corporate set ups:

- Wienerberger Brick Industry Pvt.Ltd., Bangalore
- TOMS USA
- BOSCH Foundation
- Strides Foundation
- Cerner Healthcare
- EMC square
- Value Labs, Hyderabad
- Logistimo Pvt Ltd

4. Other National and International Not For Profit Agencies

- India Development Foundation (IDF)
- MacArthur Foundation
- Karnataka Health Promotion Trust (KHPT)
- KRS Foundation
- American Service to India (ASTI)
- India Friends Association, USA
- Arghyam, Bangalore
- PATH
- WISH Foundation
- Rotary Club Bangalore
- ECHO India

5. **Name of Associates and Donors**

- Dr. M.L. Ramesh, USA
- GovindRao, USA
- Esra Christoffel , Berlin
- Bhaskar Modur, USA
- Dr.Belur S Sreenath, USA
- Dr. V.A. Ram, USA
- Dr. Sriram
- Dr. M. Nagaraj
- Dr. Iychettira Saraswaty Subbiah