

## **Riddhi Foundation**

### **Annual Report for the Year 2013-14**

#### **Introduction:**

Riddhi Foundation is a Non-Profit Organization registered under the West Bengal Societies Registration Act, 1961. The organization was earlier known as Riddhi Uddalak and the name has since been changed to Riddhi Foundation on 22<sup>nd</sup> July 2013. Its registered office is at IB 190, Salt Lake, Kolkata 700106 and it has a field office at Aurangabad in Maharashtra. It is working for improvement of governance, particularly through application of electronic technology from the year 2004- 05. The organization has a research wing for in depth study and analysis of various socio-economic issues and has the capacity for taking up field work and data analysis. The organization has expanded the research wing for carrying out research related to human development, particularly in the field of public health, nutrition and poverty alleviation. Riddhi Foundation is presently led by Dr. M.N.Roy, who held key positions in the government, during his career in the Indian Administrative Service (IAS) spanning over more than three decades. The organization has a team of experts in the field of governance, child development, nutrition, public health, poverty alleviation, water & sanitation etc. The organization has implemented/ in the process of implementing several projects in the said field for UN organizations like FAO & UNICEF; institutions like Institute of Health Management & Research, National Institute of Rural Development; Institute of Development Studies, Kolkata; non-government organization like the Child In Need Institute and Terre des homes and State Governments like the Government of India, Government of Kerala and Government of Tripura. Current activities of Riddhi Foundation are related to better monitoring and implementation of various government programmes in the field of drinking water & sanitation, child development, rural development, decentralized planning, surveillance and studies related to health and nutrition. The Riddhi Foundation has a team of experts in the fields mentioned above as well as ICT and GIS for making various ICT applications in governance for better monitoring of programmes in these fields. Riddhi Foundation has specialization in monitoring and evaluation of programmes in the fields mentioned above and is capable of developing complete Management Information System (MIS) using ICT. It provides one stop solution for all monitoring and evaluation requirement of government and non-government organizations. Riddhi Foundation works as a not-for-profit organization with the motto of supporting government initiatives in the fields of socio-economic development with its expertise. It has also taken up several projects free of cost for the government in the larger interest of the society. Detail of the organization is available at [www.riddhifoundation.org](http://www.riddhifoundation.org)

### **Human Resources:**

The organization has a good mix of domain experts in various fields of social development, governance and ICT applications in governance. It has a core team of experts who work on a full time basis and they are supported by consultants on various disciplines on a part time basis. People who have worked with Riddhi Foundation during the year 2013-14 on a regular basis are the following:

1. Dr. M.N.Roy, M.Tech, PhD
2. Mr T.K.Majumdar, Retired from Indian Administrative Service
3. Mr Deb Kumar Chakraborty, Retired from Indian Administrative Service
4. Mrs. Moumita Mukherjee, M.A (Economics) and recently submitted her PhD thesis
5. Miss Kamal Kumari Chakraborty, MA (Sociology)
6. Mrs Moumita Chatterjee M.Sc (Geoinformatics)
7. Miss Oindrilla Sengupta MA(Planning and Architecture)
8. Mr N. Dixit, MA, M.Phil
9. Miss Mayuri Sen M.Sc (Nutrition)
10. Mr Sourav Das M.CA

Mrs Moumita Chatterjee and Miss Oindrilla Sengupta have left the organization and Mrs Moumita Mukherjee is associated with Riddhi Foundation on a part time basis as Consultant. Apart from full time officials it is supported by a pool of experts in the field of drinking water & sanitation, poverty alleviation, public health, nutrition, local governance, livelihood development and Information Technology work for Riddhi Foundation on a part time basis as Consultants, as and when required. Riddhi Foundation has collaboration with Riddhi Management Services Pvt. Limited (RMS), which is an ISO-certified company, incorporated in 1992 in West Bengal under Indian Companies Act 1956. RMS has specialization in the field of Web based application and development of related software and decision support tools which are simple to use. Technology developed by RMS is being widely used and it was the Technical Partner of the Registrar General of India, Ministry of Home Affairs; Government of India for Census GIS India 2001 for developing a web based GIS (in WhizMap™), which encompasses the expansive database of Census of India through WhizMap™ from the State level of India to sub-district level. Riddhi Foundation gets all their ICT related works implemented in collaboration with RMS.

### **Collaboration with other organizations:**

Riddhi Foundation, as a policy, maintains a small group of core professionals and takes up assignment in collaboration with other professional organizations. At present, it has collaboration with National Institute of Rural Development (NIRD) as their technology partner for GIS based applications. It has collaboration with Institute of Development Studies, Kolkata, a reputed institute in the field of socio-economic development for taking up research works together and with Business Brio, a Kolkata based organization, which

has specialization in economic survey and analysis. Riddhi Foundation has also entered in to collaboration with Ernst & Young to work together in the field of capacity development for the Panchayats.

### **Works Completed/Taken up during the Year:**

Some of the projects taken up during the year 2012-13 were continued during the year 2013-14 and some new projects were taken up during the year 2013-14. The projects, with brief outline are mentioned below:

#### **1. Monitoring of malnutrition of children in Vaishali district, Bihar, Client- UNICEF**

UNICEF Bihar Project office entered in to a partnership with Riddhi Foundation for designing a web-based Nutrition Surveillance System (NSS) with GIS backbone to capture weight of children enrolled under ICDS in Vaishali district and to analyze the data for assessing status of malnutrition of the children. The NSS helps the ICDS project officials and their supervisors to analyse the weight of children for assessing both performance of the project functionaries and the status of nutrition of the children. The analysis is possible at various levels such as, project, sector and individual ICDS centre and helps to identify the project/sector/ICDS centres with poor performance and having higher incidence of malnourished children for taking appropriate corrective measures. The NSS also provides an excellent supervision tool for monitoring performance of field workers engaged in implementing the ICDS. The system is hosted in the server of the ICDS directorate. The project was completed during the year.

#### **2. Nutrition Surveillance System for Dhalai district, Tripura:- Client- DM, Dhalai**

The Riddhi Foundation has developed a unique Nutrition Surveillance System (NSS) with GIS backbone for monitoring implementation of ICDS in Dhalai district of Tripura. The system is web-enabled and is used for compilation of all routine reports and analysis of performances of ICDS projects up to every ICDS centre level. The system also tracks the ICDS centres, which default in sending reports on time and it becomes easy to follow up for timely submission of reports by the project office. Pre-defined queries built in to the system help anyone to easily internalize performances of various administrative units, like the project/sector or Panchayats etc. for paying due attention on units and ICDS centres which have poorer performances in comparison to similar other units. The nutrition outcome of children enrolled in the ICDS projects are presented in the forms of tables, charts, thematic maps to help locating pockets of higher incidence of malnutrition for making appropriate interventions. The supervising officer can now monitor things much better and make workers below to be accountable for failures. The project was completed during the year and the website is being used for monitoring ICDS in the district for which contract has been renewed for one more year.

#### **3. Nutrition Monitoring System for the District:- Client DM West Tripura**

Success of the NSS Dhalai project encouraged the DM West Tripura to approach Riddhi Foundation to develop one NSS for that district, which has been completed. All the standard reports required for implementation of the ICDS in that district are compiled automatically. The ICDS supervisors are relieved from compiling the reports manually and their services are now utilized for better physical supervision of delivery of services at the AWCs. Automatic compilation of the MPR makes reporting faster and more accurate and easy to retrieve for any analysis. Analysis of programme processes and outputs are done by the NSS, which helps the supervising officials in better monitoring of the programme and in providing them a scientific decision support system. The functionaries below are given feedback about failures for specific interventions. Similarly, performance may also be compiled local government (Gram Panchayat/Municipality) wise, which will make those bodies to appreciate malnutrition status in respect of their areas and will facilitate their interventions appropriately.

#### **4. Tracking of Mother Child Dyad for First 1000 Days of Life:- Client- CINI**

Child In Need Institute (CINI) is engaged in improving conditions of the children across many states of the country. The first 1000 days of life, the period within the womb till around two years after birth, is the most critical for survival and future development of the children. CINI desired to track the status of health and nutrition of every child during that period, which includes the condition of mother also from pregnancy till six weeks after delivery. Riddhi Foundation has developed a web-enabled system which captures their health and nutrition parameters and analyse the same to notify health and ICDS functionaries about services which the target group of mothers/children within respective jurisdictions failed to receive for making necessary interventions. Real time data acquisition technology has been used in capturing health conditions for analysis and sending 'Alerts' and 'Alarms' to the health functionaries for taking prompt actions. The GIS uses base map of the area showing all villages, all facilities for delivery of health & child development services for locating any child/pregnant woman within the target group and making spatial analysis. For knowing health related services & presence of risk factors on a real time basis data is captured using Android based mobile phone, which is loaded with suitable application software and the data is transmitted as voice file to the server. The voice data is transcribed in to the system and analysis of all data captured every day is done during night to notify services due and possibility of existence of any child/mother in distress by sending notification to the health worker and the supervising officers concerned. The system guides all possible preventive and corrective measures in improving health and nutrition of the child in the first 1000 days and mothers up to the PNC phase. Development of the system has been completed and the system is in use. Some more modifications are being carried out on request of the organization.

#### **5. Combating Malnutrition in Patharpratima Block:- Client- Terre des homes (Tdh)**

Terre des hommes (Tdh) in partnership with Sundarban Social Development Centre (SSDC) is currently implementing a project “Combating Malnutrition in children in disaster prone Patharpratima Block of Sundarbans in West Bengal”, in 10 Gram Panchayats (GPs) of Patharpratima Block of South 24 Parganas district. The aim of this project is to respond to the identified problem of acute malnutrition in children through improved health; health related behaviour and strengthened health service at the community level. Tdh has collaborated with Riddhi Foundation to pilot the use of mobile technology for data collection, monitoring and enhancing communication/counseling skills of the frontline workers; generating maps through GIS technology to locate the distribution of Moderately Acute Malnourished (MAM) and Severely Acute Malnourished (SAM) children and to track all children below 5 years on certain specific indicators. GIS mapping is used to generate thematic maps indicating distribution of cases of MAM and SAM children which can be useful for advocacy and to monitor change across time after making appropriate interventions. Nutrition related data of each child is captured using mobile phone on a real time basis and is fed in to the system which analyse the data and notify the field workers for follow up measures as per protocol. There are different protocols for the Low Birth Weight (LBW) babies and the SAM & MAM children. Field workers also show mothers video clips on exclusive breast feeding/kangaroo care etc for enhancing capacity at the community level. The system development is complete and is under testing. The project has been completed.

## **6. ICT based monitoring of WASH performance up to block level for entire rural Maharashtra and up to GP level for 5 districts of Maharashtra**

Riddhi Foundation was engaged by UNICEF, Maharashtra to develop an evidence-based system with application of ICT and GIS for monitoring of status of drinking water and sanitation in Maharashtra. The system was to capture data from the existing programmes and feed the same in to the ICT based system for making analysis and displaying the same in spatial format showing boundaries of districts and blocks for the entire Maharashtra and Gram Panchayat wise in five backward districts namely, Nandurbar, Chandrapur, Latur, Osmanabad and Yavatmal. The web enabled system provides for management of data pertaining to various programme parameters (evidences) in different locations, capturing and analyzing the same for guiding interventions for improvement of implementation. The result will be amenable to disaggregation up to GP level of the selected five districts for generating area specific analysis and feedback, which will be visualized in maps. Such visual display will help the implementing as well as supervising agencies to know the status and programme failures for taking appropriate corrective measures. Thus state level officials will be able to analyze district/Taluka or GP (in five districts) and district level officials will be able to do so for Taluka or GP (in five districts) for deciding on appropriate interventions. Any local government/office will also be able to compare its performance on any parameters with respect to other such areas for better internalizing the comparative status.

The reports as well as alerts related to failures is shared with the respective local governments/offices (and any superior level) by the data analysts. The system will display performance over a chosen command area (State showing district and Taluka and in pilot districts, districts showing GPs) to enable wider participation in implementation of the programme. Thus right from the Mantralaya to the Taluka Development Officer as well as all functionaries of the elected bodies at district, Taluka and GP will be able to see and analyze performances in respect of their jurisdictions in aggregated as well as disaggregated forms in the web-enabled maps. Visibility of performance by all the authorities will help to generate appropriate interventions at state, district, Taluka and GP level. In case there is problem of internet connectivity it will be possible to have desktop based monitoring for which the data has to be physically transferred from the place where such connectivity is available. Important parameters to be captured and analysed are progress of Nirmal Bharat Aviyan, progress of Nirmal Gram Puraskar, coverage of piped water supply, location of sources and sustainability, sanitary survey of sources, water quality – both chemical and bacteriological contamination and rainfall data etc. The system has been developed and tested with data.

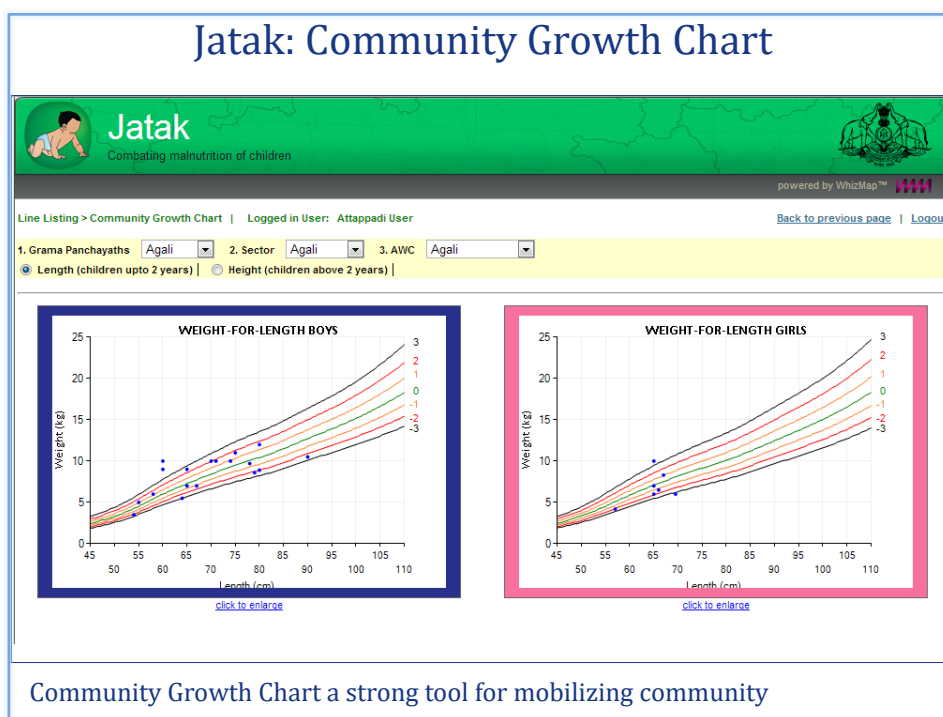
#### **7. e-Janani for Mandwih block in Tripura:- Client District Magistrate, West Tripura**

Health and nutrition of the children are strongly correlated. Delivery of various services in managing and improving health and nutrition are done by two independent set up of functionaries, namely the health workers and the ICDS workers. There is need for convergence and coordination among the two set of workers which is not so satisfactory. The district of West Tripura has adopted a life cycle approach to ensure delivery of all services during the entire life cycle and wanted to have perfect convergence of efforts by the health and ICDS workers in the process. This has been attempted by developing a common database related to health and nutrition conditions of mother and child and keeping track of services delivered to them and the approach is being piloted in one tribal Block of the district called Mandwih. A web-enabled system with GIS backbone has been developed for that purpose by Riddhi Foundation. The system captures weight of each child taken by the ICDS workers and also captures reproductive and child healthcare services delivered by the health workers on a real time basis using mobile phone. The health data is received through voice mails, which are transcribed in to the system. The system, known as e-Janani, analyses the data and notifies all services which are due to be delivered along with names of the mothers/children to the health workers through SMS and also inform what services were not delivered within time to their supervisors for ensuring proper delivery of all services. This system has been already developed and is being used.

Two policy papers one on Water Supply and the other on Sanitation for the government of Maharashtra was prepared and submitted to UNICEF as a part of the deliverables under the project.

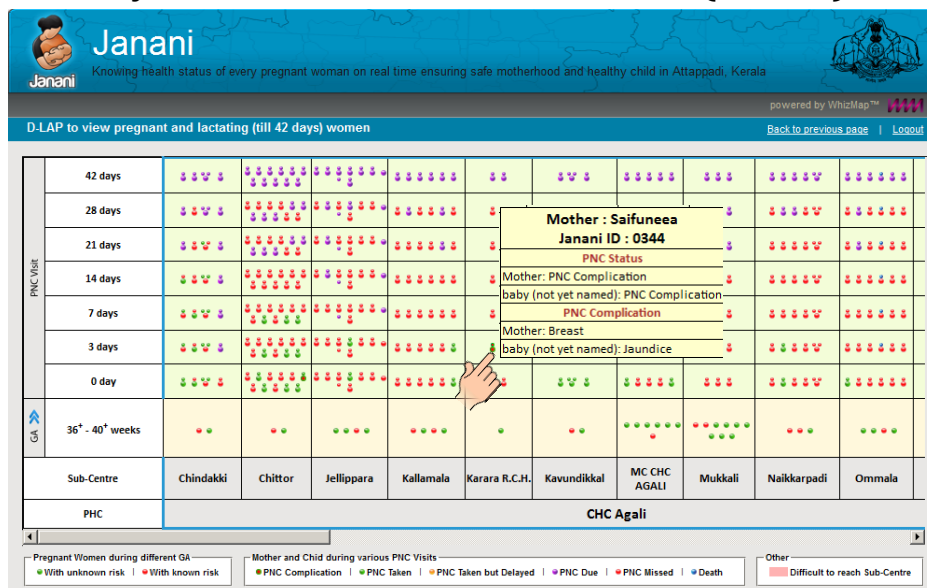
## 8. Combating child mortality, morbidity and malnutrition in Attappady Block of Kerala through evidence based monitoring using ICT

The work has been taken up in the year 2013-14 as a collaborative project among UNICEF, Govt. of Kerala, NIRD and Riddhi Foundation. Main system has been developed by the Riddhi Foundation for (i) tracking every child up to five years in Attappady, which is predominantly a tribal block through an ICT based system called Jatak and (ii) tracking every mother from pregnancy till Post Natal period for checking if they have received all due services and monitoring important health parameters for knowing risk of pregnancy and taking corrective measures through an application called Janani. Around 4,000 children and 700 mothers have been captured and their health and nutrition conditions are available on the web for monitoring. Under Jatak nutrition conditions of all the three dimensions, namely under weight, wasting and stunting are monitored for each child and SAM children are identified for specific interventions. It also has a SOS module for promptly reporting illness of children for immediate medical attention. The dashboard gives feedback on nutrition status of children individually as well as for one entire ICDS centre and the status is reflected in WHO growth chart as shown below.



Under Janani services provided to each mother is captured using mobile phone with Android OS and the data captured in voice file is transcribed and analysed for giving to field level health workers every morning to notify services due to the mothers. Feedbacks are also given to the Medical officers on risk of pregnancies of mothers and one can easily find the services at ANC and PNC stage which have been provided on time or provided with delay or have not been provided at all. That is easily seen on dashboard which reflects service delivery status of every pregnant or lactating mother, as shown below for PNC status.

## Dynamic Locator for Action Plan (D-LAP)



The system has helped in reducing mortality and morbidity of pregnant women and children and is in the process of being developed further.

### 9. Accelerating access to household sanitation in Aurangabad Division

As per 2011 census, coverage of IHHL in rural Maharashtra improved to 38% compared to 18.2% in 2001. The corresponding figures for Aurangabad were 12.5% and 20.9% respectively. GoM wanted to expedite performance of implementation of NBA within the division. UNICEF came forward to assist the state government and engaged Riddhi Foundation to develop one evidence based performance monitoring and analysis system for accelerating access to household sanitation within the division. The PCA was signed in February 2013 and preparation for developing the system was in progress by end of the year. The work entails developing an ICT based monitoring system for analysis and visualization of performances under NBA up to block level within each district. In order to visualize various performance parameters of the NBA on a spatial mode, a web-enabled system with GIS backbone has to be developed by Riddhi Foundation for anyone to access the data and view various analyses and reports. Data related to implementation of the NBA for all the blocks within Aurangabad division will be fed in to the system for making both temporal and spatial analysis of different performance parameters for knowing how those vary across districts and blocks and across time for each of those units. The monitoring system will help to better appreciate the areas of failures for taking appropriate interventions. The RF will also conduct a bottleneck analysis for understanding the reasons behind slow progress in the division so that appropriate policy measures can be taken for



removing the bottlenecks in implementation of the NBA. The dashboard of the GIS system to be developed is shown below.

**NIRMAL GIS**  
Aurangabad Division, Maharashtra

powered by WhizMap™ **WMM**

[User Guide](#)

### Thematic Map

1. Select Indicator of your choice

**A. Baseline Indicators**

% HH having Toilet     % HH not having Toilet     % Functional Toilet     % Defunct Toilet

**B. Physical Progress (NBA) Indicators**

% BPL     % APL     % Total     APL / BPL

**Estimated year for reaching 100%**

**C. Census Demographic Indicators**

Population     % SC Population     % ST Population     % Literacy Rate

**D. Status of Saturation**

% HH without toilet

2. Select Map

Division Showing Districts

Division Showing Block

--District-- showing Block

**Generate Map**

### Chart

1. Select indicator of your choice

% IHHL (Total)     % IHHL (APL)     % IHHL (BPL)     % Defunct Toilet (Baseline 2012)

2. Select Chart on achievement (in Aurangabad Division)

Division's till current month

Districts on [ ]

--District-- till current month

Blocks of --District-- on [ ]

### Improvement of Internal Governance:

Riddhi Foundation finalized its Financial Manual and Human Resource Manual and the same was accepted for carrying out activities of the organization.

### Income and Expenditure for the year 2013-14:

The Income and Expenditure statement for the year 2013-14 is given below.

RIDDHI FOUNDATION  
1B-190, Sec - III, Salt Lake,  
Kolkata - 700 196

**INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2014**

| <u>PARTICULARS</u> |  | Rs.              | p. | Rs.                 | p. | <u>PARTICULARS</u> |                                | Rs.                 | p.        |
|--------------------|--|------------------|----|---------------------|----|--------------------|--------------------------------|---------------------|-----------|
| To                 | Software Development & Maintenance Charges           | 4,479,510.00     |    |                     |    | By                 | Information & Software Service | 7,246,990.00        |           |
| "                  | Salaries, Allowances & Bonus                         |                  |    | 400,000.00          |    | "                  | Interest on Savings Deposits   |                     | 13,138.21 |
| "                  | Office Rent  |                  |    | 284,256.00          |    | "                  | Software Maintenance Fees      |                     | 24,000.00 |
| "                  | Project Running & Monitoring Expenses                |                  |    | 179,325.00          |    |                    |                                |                     |           |
| "                  | Telephone Charges                                    |                  |    | 17,703.00           |    |                    |                                |                     |           |
| "                  | Tours & Travels                                      |                  |    | 283,022.00          |    |                    |                                |                     |           |
| "                  | Professional Fees & Allowances                       |                  |    | 872,000.00          |    |                    |                                |                     |           |
| "                  | Honorarium to Secretary                              |                  |    | 84,000.00           |    |                    |                                |                     |           |
| "                  | Remuneration to Resource Person:                     | 50,000.00        |    |                     |    |                    |                                |                     |           |
| "                  | <u>Less : reimbursement received to</u>              | <u>50,000.00</u> |    |                     |    |                    |                                |                     |           |
|                    |  |                  |    |                     |    |                    |                                |                     |           |
| "                  | Training Expenses                                    |                  |    | 63,120.00           |    |                    |                                |                     |           |
| "                  | Advertisement & Publicity                            |                  |    | 1,200.00            |    |                    |                                |                     |           |
| "                  | Computer Running & Maintenance Expenses              |                  |    | 19,538.00           |    |                    |                                |                     |           |
| "                  | Broad Band & Internet Charges                        |                  |    | 11,101.00           |    |                    |                                |                     |           |
| "                  | Communication Expenses                               |                  |    | 4,120.00            |    |                    |                                |                     |           |
| "                  | Electricity Charges                                  |                  |    | 26,704.00           |    |                    |                                |                     |           |
| "                  | Conveyance Expenses                                  |                  |    | 6,597.00            |    |                    |                                |                     |           |
| "                  | Entertainment Expenses                               |                  |    | 1,421.00            |    |                    |                                |                     |           |
| "                  | Hospitality & Other Expenses for Guests              |                  |    | 14,675.00           |    |                    |                                |                     |           |
| "                  | Filing Fees & Expenses                               |                  |    | 9,609.00            |    |                    |                                |                     |           |
| "                  | Insurance Charges                                    |                  |    | 304.00              |    |                    |                                |                     |           |
| "                  | Consultancy Fees                                     |                  |    | 33,708.00           |    |                    |                                |                     |           |
| "                  | Rates & Taxes  |                  |    | 36,423.00           |    |                    |                                |                     |           |
| "                  | Legal Fees & Expenses                                |                  |    | 2,526.00            |    |                    |                                |                     |           |
| "                  | Office Expenses                                      |                  |    | 36,439.00           |    |                    |                                |                     |           |
| "                  | Meeting Expenses                                     |                  |    | 324.00              |    |                    |                                |                     |           |
| "                  | Postage & Stamps                                     |                  |    | 507.00              |    |                    |                                |                     |           |
| "                  | Printing & Stationery                                |                  |    | 15,192.00           |    |                    |                                |                     |           |
| "                  | Prior Period Adjustment                              |                  |    | 3,000.00            |    |                    |                                |                     |           |
| "                  | Rebate & Discount                                    |                  |    | 52.00               |    |                    |                                |                     |           |
| "                  | Requiment Expenses                                   |                  |    | 2,250.00            |    |                    |                                |                     |           |
| "                  | Repairs & Maintenance Expenses                       |                  |    | 2,184.00            |    |                    |                                |                     |           |
| "                  | Bank Charges & Commission                            |                  |    | 1,150.00            |    |                    |                                |                     |           |
| "                  | Accounting Charges                                   |                  |    | 6,000.00            |    |                    |                                |                     |           |
| "                  | Audit Fees   |                  |    | 33,708.00           |    |                    |                                |                     |           |
| "                  | Depreciation   |                  |    | 62,329.00           |    |                    |                                |                     |           |
| "                  | Excess of Income over Expenditures,<br>i.e., Surplus |                  |    |                     |    |                    |                                |                     |           |
|                    |  |                  |    | <u>288,131.21</u>   |    |                    |                                |                     |           |
|                    |  |                  |    | <u>7,284,128.21</u> |    |                    |                                | <u>7,284,128.21</u> |           |

Dated : Kolkata  
The 28th May, 2014

Signed in terms of our report of even date.

**OF PAN & ASSOCIATES**  
Chartered Accountants

**Proprietor**

**RIDDHI FOUNDATION**

**Secretary**

**RIDDHI FOUNDATION**

**President**