



**VIJAYVAHINI  
CHARITABLE  
FOUNDATION**

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**ANNUAL REPORT 20-21**

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# NUTRITION

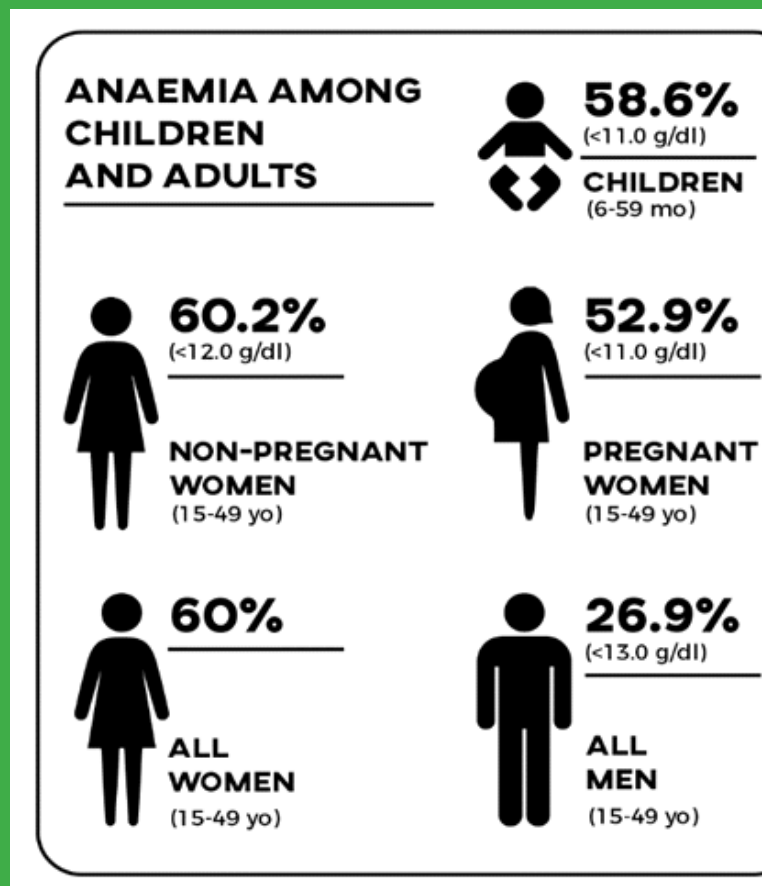
# RICE FORTIFICATION PROGRAMME

## PROBLEM STATEMENT

Deficits in vitamins and minerals has an adverse impact on health, productivity and psychological development. More than 2 million people around the world suffer from “hidden hunger” as a result of such deficits. India’s record of malnutrition is particularly deplorable with over 48% of children under five years being stunted due to chronic undernutrition. Andhra Pradesh, a coastal state in Southern India, has a very high burden of vitamin and mineral deficiencies and NFHS-5 data indicates that in Andhra Pradesh, anaemia among women of reproductive age (15 - 49) stands at an abysmal 53.7 % and 58.8 % of all women of reproductive age (15 - 49 years) were found to be suffering from anaemia. Similarly, 63.2 % of children below the age of 5 were also found to be anaemic. These statistics explains the grim situation of nutrition status of the state on ground.

Indicators of malnutrition demonstrates widespread incidence of anaemia relates to a deeper issue with iron deficiency in the population. Food fortification using micronutrient inputs for enrichment of staples is a particularly effective public health intervention against malnutrition. In this context, fortification of rice is the most cost-effective and sustainable manner of supplying micronutrients to large populations using existing public funded channels such as ICDS, MDM and PDS schemes.

Rice fortification is a cost-effective, culturally appropriate strategy to address micronutrient deficiency in countries with high per capita rice consumption. Fortification of rice makes it more nutritious by adding vitamins and minerals, many of which are lost during the milling and polishing process. Fortified rice—rice that is enriched with essential vitamins and minerals—is one of the most cost-effective ways to address micronutrient deficiencies and sustainably reach populations, rather than simply pockets of need.



**Source: Andhra Pradesh Factsheet, National Family Health Survey, 2015-16.**

Indicator	NFHS-4 (2015-16)	NFHS-5 (2019-20)
<i>Children under 5 years who are stunted (height-for-age)%</i>	31.4	31.2
<i>Children under 5 years who are wasted (weight-for-height) %</i>	17.2	16.1
<i>Children under 5 years who are underweight (weight-for-age) (%)</i>	31.9	29.6
<i>Children age 6-59 months who are anaemic (&lt;11.0 g/dl)(%)</i>	58.6	63.2
<i>Pregnant women age 15-49 years who are anaemic (&lt;11.0 g/dl) (%)</i>	52.9	53.7
<i>All women age 15-49 years who are anaemic (%)</i>	60	58.8

## VISION

The overall vision of the project is to contribute towards improving health and wellbeing of marginalized and vulnerable communities by mitigating Micro nutrient deficiency problem through consumption of fortified rice.

## ACTION PLAN

The VCF piloted the usage of fortified rice to reduce micro nutrient deficiencies including iron deficiency anaemia by leveraging state-run ICDS, MDM and Public distribution system in Krishna, Guntur and West Godavari districts in Andhra Pradesh through following objectives.

- Addressing the Micro Nutrient deficiency and improving iron stores among children and mothers through provision of fortified rice.
- Demonstrating the scalable and sustainable blending model of rice fortification initiative across the state and country.
- Bolstering the existing supply chain management system of APSCSCL by providing ample capacity building trainings.

## ACTIVITY DONE

- Produced over 36,000 MT of fortified rice which caters 60 million meals in MDM and ICDS in Krishna and West Godavari Districts of Andhra Pradesh state.
- So far on boarded 79 rice mills in five districts to accelerate the production of fortified rice in ICDS, MDM and PDS in selected districts of the state.
- Blending activity for PDS pilot in Vizianagaram completed under Kharif season. Total target of 1 lakh MT of fortified rice has been achieved.
- Capacitated frontline workers of APSCSCL in order to ensure the efficient supply chain management for the production and distribution of fortified rice.
- As part of equipping rice mills with required machinery, we have supported 10 rice mills in installing dosing machinery such as length graders storage bins to expedite and improve the production process.
- Initiated efficacy trial to capture the longitudinal impact of fortified rice. Base line assessment is completed and monitoring of the study is underway.
- Reached over 5000 people through various BCC/IEC campaigns communicating the benefits of Fortified rice

No. of districts covered	3(KRISHNA, WEST GODAVARI,VIZIANAGARAM)
No. of individuals	797302
No. of children covered	710387
No. of schools	6921
If the beneficiaries are women, please state the number of women beneficiaries	87175



### **BENEFICIARY SAYS :**

“Fortified rice was a relatively new concept for the mothers, and initially, there was a bit of scepticism and resistance from them. They expressed very little interest in consuming the product as they were unaware of its benefits,” says K Santha Kumari, an anganwadi worker from Rajiv Nagar, Krishna district. By conducting a number of awareness activities, she was able to convince them to shift from normal rice to nutrient rich fortified rice. “For the last 18 months, both children and expectant mothers have been taking fortified rice as part of their meals and looking healthy, which is a good sign,” she says.



### WAY FORWARD :

- Work with APSCSCL to fill the production gaps by equipping more rice mills and providing requisite capacity building trainings to the APSCSCL frontline workers.
- Expansion of Rice Fortification project to Guntur district and streamline the Supply Chain Management.
- VCF will spearhead the awareness activities on fortified foods with the help of several departments from Andhra Pradesh.
- Amid Corona virus outbreak, few activities got delayed and will be kickstarted once the spread of COVID 19 comes down to normal stage
- Advocacy with Government of AP to scale up the rice fortification initiative to other districts in the state.



**HEALTH**

# SWASTHA KUTUMBAKAM TELEMEDICINE

## PROBLEM STATEMENT

A major initiative of VCF in Andhra Pradesh is “Swastha Kutumbham”, for the residents of 265 villages in Krishna district. Considering the need for providing quality primary health care by piloting Hub and Spoke methodology named as, “Primary Healthcare Trough Telemedicine” project started in Nov 2017.

The Primary Health Care through Telemedicine project, under the Vijayavahini Charitable Foundation, has set up 20 Primary health Care centres across the district in a hub and spoke methodology. Spokes were set up in strategically located rural zones, to reach out to the maximum number of beneficiaries. The hub has consisted of numerous highly qualified doctors, connected via high-speed internet to the spokes for providing daily consultations. This is supported by an MMU for outreach and OPD services in the project area.

Our prime focus is to make primary health care easy, quickly accessible and cost effective by using innovative healthcare solutions to create a scalable, affordable and commercially viable health care ecosystem leveraging the technology advances to enhance the doctors reach via multiple channels like Telemedicine, email chat, SMS. The Primary Health care program is designed to use advanced tele-medicine technology and integration with many devices. The device puts people in greater control of their own health, promoting a more proactive approach to health and wellness.

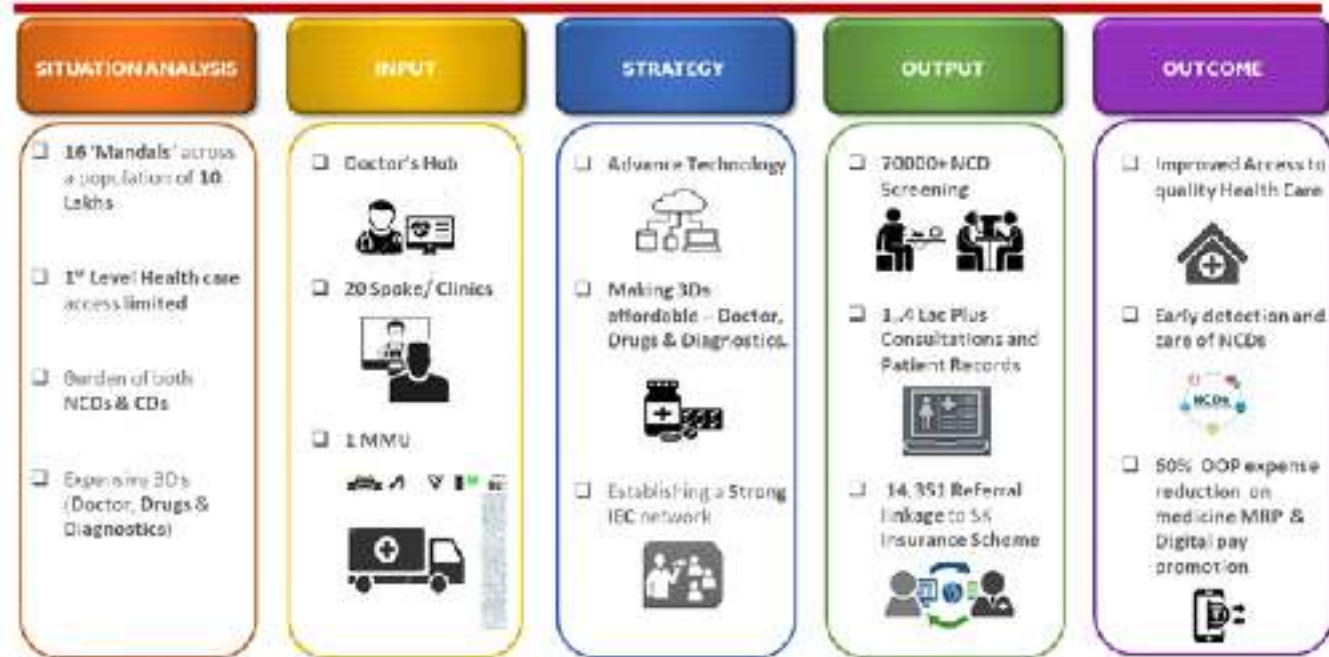
## VISION

Project aims at demonstrating a model of accessible and affordable primary health care service delivery using Tele-Medicine platforms as well as to gain expertise to provide similar services in other communities.

## ACTION PLAN

Objective of Telemedicine project is to provide Primary Health Care services in the Krishna District with special focus on screening common Non Communicable Disease (NCD) with the disease management and ophthalmic conditions.

## TELE-MEDICINE VIJAYAWADA - INFOGRAPHIC



TATA TRUSTS

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### ACTIVITY DONE IN PROJECT

- Established a state of art centralized Diagnostic Laboratory in the project area, this lab would be catering the diagnostic needs of all 20 Tele medicine units and MMU.
- Has provided consultations to 78,394 through virtual mode using Hub and spoke model.
- MMU could able to provide service to 16,716 consultations including Ophthalmic screening and Laboratory tests through portable Lab.
- Has honored 76,979 prescriptions by dispensing affordable medicine to the beneficiaries.
- Have saved more than 70% of Out of pocket expenses spent of health by the beneficiaries.
- Screened more than 70000+ beneficiaries for NCD's (Hypertension and Diabetics).
- Presented the pilot model of HUB & Spoke in International Telecon 2019. Have received appreciation both from national and international delegates for the results produced by the program 1,28,000 Consultations.
- Poster presentation of AP telemedicine in IPHACON 2020. Both the judges and participants were impressed about the model being piloted.

## ACTIVITY DONE IN 20-21:

A. Outreach		Target		Achieved as per actuals	
	For the complete project period	Current fiscal (2020-21)	For the period April 1, 2020 to March 31, 2021)	Cumulative (From the project start date till March 31, 2021)	
<i>State/s</i>	1	1	1	1	
<i>District/s</i>	1	1	1	1	
<i>Villages</i>	265	265	265	265	
<i>*Households</i>	2.35	2.35	2.35	2.35	
<i>Appropriate units (Telemedicine Units, MMU, Doctors Hub &amp; Diagnostic laboratory)</i>	20 Telemedicine Units, 1 Doctors Hub, 1 MMU & 1 Diagnostic Laboratory	20 Telemedicine Units, 1 Doctors Hub, 1 MMU & 1 Diagnostic Laboratory			
B. Outcomes		Target (for the complete project period)		Achieved as per actuals	
Key Indicators	For the complete project period	Current fiscal (2020-21)	For the period April 1, 2020 to March 31, 2021)	Cumulative (From the project start date till March 31, 2021)	
<i>Establishment of clinics</i>	20	1	0	20	
<i>No. of Cyber Consultations through TM Units</i>	241000	96000	32,342	156356	
<i>No of Live Consultation through outreach (MMU)</i>	42100	16000	0	23799	
<i>No. of Medical Camps</i>	240	80	0	169	
<i>Beneficiaries Est. Savings on prescription medication</i>	2.81 Cr	0.93 Cr	0	3 Cr	

## INAUGURATION OF TELE COUNSELLING SERVICES POST COVID LOCKDOWN

Successfully inaugurated and provided Tele counselling services in the project area during COVID 19 lockdown period. 32,342 beneficiaries have availed Tele counselling services and cleared their doubts and apprehensions on “COVID 19” along with their regular consultation.

Beneficiaries though this facility avoided the risk of visiting Hospital for their monthly check up as those were highly sensitive areas in spreading the Virus.

Capacity building activities: - Virtual Training programs to Spoke Staff & Doctors

114 Virtual training programs are conducted as a part of capacity building activities to the spoke staff including COVID 19 critical care management course developed by CMC Vellore & CIHS with the support of VCF.

All the Doctors in the program have participated and cleared COVID 19 critical care management course developed by CMC Vellore & CIHS with the support of Tata Trusts.

Dissemination of information Key Messages on COVID 19 awareness to contact database: In order to build awareness among general populations on COVID-19, TATA Trust has come-up with wide range of BCC material such as Printed material, Audio, Video messages and local prominent celebrities have also lent their messages to make more attractive and catchy messages on COVID-19. These messages with link to videos have been circulated to the beneficiaries of TATA Trust.

## SNAPSHOT OF THE PROJECT BEFORE PANDEMIC :



School Camp



OPd Camp



TRINETRA SCREENING FOR DIABETIC RETINOPATHY



## **WORLD HYPERTENSION DAY – COMMUNITY AWARENESS**



## **DIABETES DAY AWARENESS ACTIVITIES AWARENESS AT SCHOOL**





## BENEFICIARY QUOTES

Kata Narasimha reddy from gandipalli village, Kanchikacherla mandal visited Kanchikacherla clinic an year back when he injured his leg, he took medication with the support of local RMP for the injury but all the efforts went in vain as I has not cured after a month's time. One day he saw banner of Swasthkutumbam clinic at bus stand of village and he came to the clinic for health checkup. He was surprised with such a nice clinic in Kanchikacherla and humble welcome by staff followed by brief about telemedicine consultation and her basic checkup. Telehealth assistant in Swasthakutumbam clinic screened him for Diabetics and hypertension as a routine, to his surprise he was screened diabetics.

He was happy to see a MBBS doctor on the TV and shared her symptoms and complaints frankly. Advanced connected medical devices were available which captured her Pulse rate BP and Oxygen levels those were monitored by doctor at Vijayawada Hub through telemedicine platform. Doctor explained her about probable diagnosis prescriber medicines. Initially worried about cost of medicines and service charges to be paid for treatment, when he saw bill on screen of pharmacy, which was mere 85 Rs for 10 Days. He could not believe that he can actually buy medicines at the cost of two-day vegetables.

As the government announced lockdown due to "COVID 19" in the entire country and asked to step out of house only if there is an emergency, I am really worried about my monthly check up's for Diabetics, to my surprise I received call from Kanchkacherla clinic stating that tele counselling services were available and all I have to do is call them for consultation. This service from Tata Trusts has ensure that I am under continuous medication even in lockdown phase and ensured I have stayed home and safe.

# PROJECT PRAYAAS

## PROBLEM STATEMENT

Gorakhpur and Siddhartha Nagar districts in Eastern Uttar Pradesh, bordering Nepal, are endemic for Acute Encephalitis Syndrome (AES) with frequent outbreaks over the years and considerable morbidity. **Management of encephalitis cases is done mostly at the Govt. B.R.D. Medical College Hospital** which is presently the principal tertiary care referral center for the entire Gorakhpur Division.

Apart from the dearth of tertiary care services, there is **compromised accessibility to basic primary health care in the region**. Hence, early identification and prompt referral becomes difficult. Most of the cases reach the Medical College Hospital at an advanced stage. These tragic and unacceptable deaths have highlighted the dire need to strengthen the Public Health Infrastructure; mainly the primary health care system and referral care.

Considering the complexity of the problem, it has been assessed by the Govt. that multi-sectoral action is needed to combat AES in the region. The Govt. has tasked the Tata Trusts through the ongoing partnership with executing Community Based Health Promotion interventions, in this AES prone region, in two selected Blocks, to serve as 'model' demonstration Blocks for the rest of the State. Both blocks put together cover approx. 3.5 lakhs population and all 121 gram panchayats. Govt. set up health facility at CHC level but unavailability of doctor and paramedics at centre, capacity and skills of ASHAs, ANMs especially in identification of fever cases, referral and follow-up of the patients were major concerns.

Annually up to 2,000 AES cases are admitted for management at Medical College Hospital, Gorakhpur. Japanese encephalitis virus (JEV) accounted for <10% of AES cases.

One Third cases remain negative for JE, ST, Dengue (*Murhekar MV et al, 2018*)

Investigations conducted during the 2014 and 2015 outbreaks indicated *Orientia tsutsugamushi* as the etiology for 60% of AES cases with case fatality rate as 16% (*Murhekar MV et al, 2016*)

- High proportion of cases attribute to ST (*Mittal M et al, 2016*)
- Hospital based surveillance study informs that One Fifth cases had (IgM) antibodies against *Orientia tsutsugamushi*. Dengue & *Leptospira* accounted for 8% and 3% (*Thangaraj JW et al, 2017*)
- Low response to IV – Azithromycin in treating Scrub Typhus after CNS involvement. Early treatment is critical

Year	Gorakhpur		Siddharth Nagar	
	AES Cases	Deaths	AES Cases	Deaths
2017	874	121	284	41
2018	451	38	168	22
2019	271	13	95	3



## Vision

The aim of the Project is to establish a 'Model Block' to strengthen primary healthcare delivery combining an innovative community mobilization approach with early identification and prompt referral of illnesses being the keystone, and a 'Model Facility' by selective strengthening of the primary health care system through capacity building of Govt medical and paramedical staff and equipment augmentation at select sites, including and not limited to Paediatric ICUs, Encephalitis Treatment Centres.

## Action Plan

The project intends to **facilitate for the community, through their active participation, with the assistance of the ASHAs**, the following:- Health Education pertaining to prevailing health problems, Promotion of food safety and proper nutrition, supply of safe water at the domestic and community level, enhancement of basic sanitation, MCH care including Family Planning Services as and when available, facilitation of immunization against major infectious diseases, prevention and control of locally endemic diseases, appropriate treatment of common diseases & injuries

The intent of **developing 'Model Village' and 'Model Block'** within the existing system of primary health care in the designated geography of Uttar Pradesh, is to encourage replication of the same initiatives across the region, given the existing context, with existing resources being harnessed in the future.

Field action	Primary health care service delivery	Strengthen Facility based paediatric care
<p>Population based program, community based Health Promotion:</p> <ul style="list-style-type: none"> <li>• Creating awareness about AES and preventive measures in villages, including schools</li> <li>• Implement vector control measures in partnership with community and govt. departments</li> <li>• Mobilise community and govt. depts. To execute WASH related work</li> <li>• Closely work with ASHAs, ANMs and AWWs on ground</li> </ul> <p>(Key HR: Team of 25 Cluster coordinators and 2 Block Coordinators)</p>	<ul style="list-style-type: none"> <li>• Deploy equipped Mobile Medical Unit one per block to begin with</li> <li>• Clinical scope of MMU service mainly includes management of fever cases, childhood illnesses and care for pregnant women</li> <li>• Health education on MCH matters</li> <li>• Growth monitoring camps (bi-annual)</li> </ul> <p>(Key HR: MMU equipped with doctor, nurse, Lab Technician and Pharmacist)</p>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul> <p>(Partnership with Ekam Foundation for Model facility work)</p>

## Activity Done:

### Field Activities during the FY-2020-21

As AES is mainly a child health issue, the project focuses child health interventions through individual child tracking by enabling govt. frontline cadre – ASHAs. The intent is to strengthen primary health care delivery through innovative community based approaches with early identification and prompt referral of illnesses being the keystone.

### Improving immunization status:

Close to 30,000 children in the age range of 0-5 years are under direct tracking through 250 enabled ASHAs with coverage of 75% for immunization up to first year of age. Specific protection against AES due to Japanese Encephalitis (JE) is being done by giving 2 doses of JE vaccine. It is ensured that 91% children get this vaccine in the project.

### Fever tracking system:

A fever tracking system is implemented through 250 trained ASHAs. A traffic light protocol is used by the ASHAs in which every fever case in children is categorised as Green, Yellow and Red based on the assessment of signs and symptoms. Red are the critical cases which get immediate referral at higher level facilities. Green are the cases which are kept under observation at home, while yellow are the cases which are advised referral to public health facilities. The table below shows details of the fever tracking intervention and helps to understand that 297 critical cases (RED) were referred in time to save lives.

Indicators	Target	Achievements (FY 19-20)	Achievements (FY 20-21)	Cumulative
Total ASHAs trained	250	250	253	253
Total ASHAs undertaking fever tracking	250	224 (90%)	188 (75%)	224 (90%)
Total fever cases tracked by the ASHAs	Actual	15,576 (14,500)	16,580 (20,250)	32,156 (33,500)
Total GREEN cases	Actual	2,720 (18%)	6,687 (40%)	9,407 (29%)
Total YELLOW cases	Actual	12,643 (81%)	9,809 (59%)	22,452 (70%)
Total RED cases (Temp >103 Deg F and / or altered consciousness / Other signs of severity)	Actual	213 (1.3%)	84 (0.5%)	297 (0.9%)

### Primary care to children

The Mobile Medical Unit concept of the Govt of India has also been adapted to the Project for serving as an outreach activity to the community, and providing a linkage with the health care system, through a system of rotating onsite outpatient clinics and screening services. Two mobile medical units are deployed, one each at block, with specific focus on child health. Total 6,496 fever related consultations have been provided so far through equipped MMUs.

SN	Indicators ( Data period : Oct 18 to Feb 21)	Target	Achievement
1	Total consultations provided through MMUs	56,000	43,568
2	Total child health- FEVER related consultations provided through MMUs	7,000	6,496

### Prayaas Poshan Abhiyaan

Recently, a Mobile Nutrition Vehicle is deployed in the project with the aim to build capacity of Anganwadi workers to reform growth monitoring services for children 0-5 years in the region. At present 40 Anganwadi Centers are included in the initiative as a pilot initiative. Total 10 SAM cases (Severe Acute Malnutrition) were successfully referred and treated at Nutrition Rehabilitation Centers (NRCs). Total 68 severely underweight children have shown progress (Red to Yellow, Yellow to Green) in a period of one quarter.

SN	Indicators (Data period : Dec 20 to Mar 21)	Achievements
1	No. of children who have undergone growth monitoring	1,425
2	No of children in 'Green' category	1,060
3	No of children in 'Yellow' category	248
4	No of children in 'Red' category	124
5	No of SAM cases children advised referral to NRCs	27
6	No of children admitted in NRCs	14
7	No of children completed 14 days of admission at NRC	10

### Impact of lockdown on field activities & project work

The project work has been affected due to the ongoing COVID crisis. Due the lockdown that was implemented in mid-March 2020, the organization adopted the work from home policy. Regular field activities were stopped; Mobile Medical Unit services were kept on hold. Because of COVID -19 crisis field work was impacted to a great extent. Support to ASHAs and Pradhans was mainly provided through remote coordination. Based on requirements and requests from govt. functionaries, on ground support was provided.

## RESPONSE TOWARDS COVID-19 PANDEMIC IN PROJECT VILLAGES (FY 20-21)

### Community based communication campaign:

- The project has focused on BCC to provide information about precautionary measures related to hand hygiene, respiratory etiquettes and other key preventive measures. Through this initiative the project has directly reached out to 250 villages, 3 Lakh population.
- A quick survey related to knowledge and key behaviour was conducted. Based on the findings IEC material (slogans, songs) prepared in local language, collated and distributed. 7,000 pamphlets were distributed at doorsteps. 4 Folk shows were conducted (Before lockdown)
- Under the campaign, 232 ASHAs and 34 nurses were trained in March 2020 for COVID-19 and its prevention. (before the lockdown)

### Enabling ASHAs :

The 250 ASHAs were equipped with masks and sanitisers. Telephonic contacts were established and guided ASHAs to have 2.32 L home visits for counselling, coordination purpose during the period. Guided ASHAs for to do line listing of around 2100 persons with history of travel during the lockdown period.

### Instigating community action :

Built capacity of SHGs and youth groups to locally produce around 12,910 masks, make market available through Pradhans and help SHG women earn total 83,910/- INR in the process. Coordinated with youth groups to execute safety campaign for Sanitation workers, to locally produce 300 face shields which were distributed to the sanitation workers operating in villages.

### Setting up quarantine facilities :

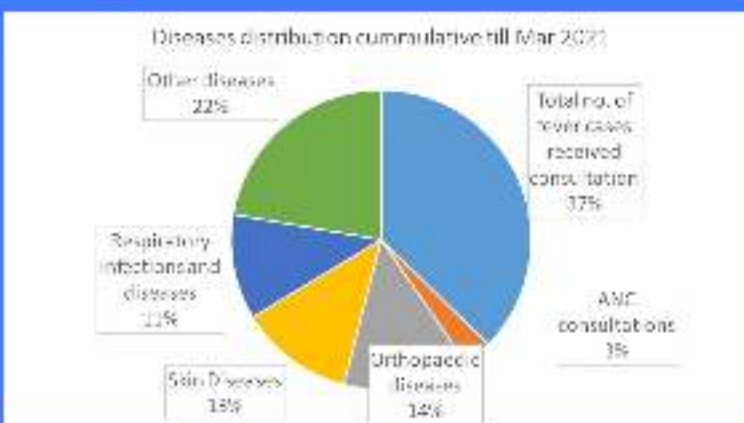
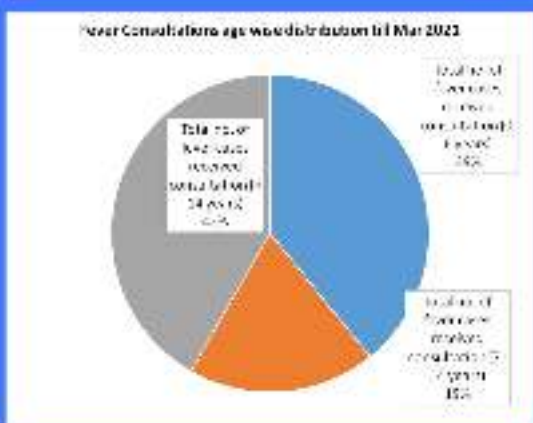
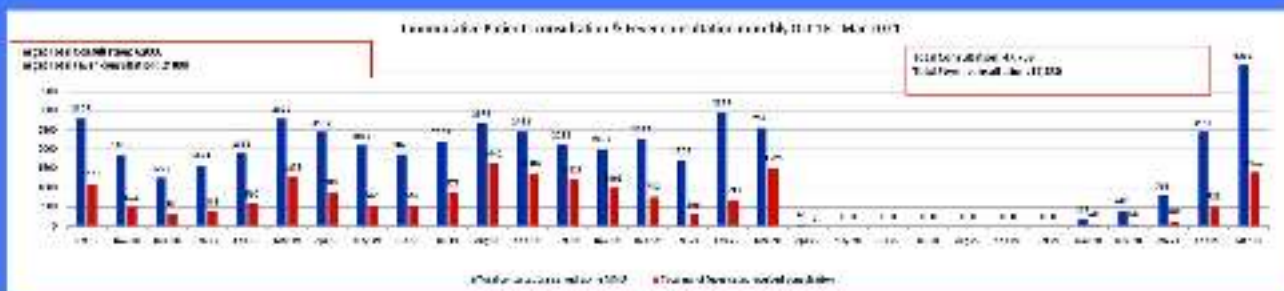
Total 4,267 contacts were made with Gram panchayat Pradhans, to understand ground level situation in villages and guided for the response towards managing COVID-19, in setting up quarantine facilities in villages, mainly in schools. Also, pradhans are encouraged to undertake larvicidal spraying. Preparedness of grampanchayats for COVID -19 related technical survey was undertaken and recommendations were given to government departments for necessary action.

### Enabling the district in fight against COVID-19:

Supported Gorakhpur district by providing 240 face shields and 200 cloth based masks.

#### Key highlights of FY 20-21

- ✓ Achievement of JE vaccination coverage up to 91 %
- ✓ Early identification and prompt referral of total 84 critically ill children – lives saved.
- ✓ Launch of nutrition initiative – Prayaas Poshan Abhiyaan through Mobile Nutrition Van – built pathways of severely undernourished children to Nutritional Rehabilitation Centres.
- ✓ Inauguration of Mobile Medical Unit services by Hon. CM- Yogi Adityanathji
- ✓ Instigate communicate based response towards COVID 19 – Included mass awareness campaigns, train youth groups and SHGs for local level production of masks and face shields



### Case Study :

Project Prayaas is Trusts’ direct implementation initiative in an encephalitis prone region of Gorakhpur, Uttar Pradesh. Encephalitis is a complex issue which needs multi-thematic interventions on ground to improve population health, nutrition, sanitation and drinking water conditions. As a result, the project has undertaken a community based health promotion approach by enabling existing government frontline cadre – ASHAs. With the aim to implement a population based program, reform of ASHA diary is proposed. ASHA diary is a tool through which an individual as well as a family centric program is implemented on in a village of 1,000 populations. MCTS – Maternal and Child Tracking System is part of the ASHA diary. Under the project 250 ASHAs have been receiving capacity building and handholding support towards maintenance of ASHA diary and undertake effective tracking of mother and children through MCTS. The effort has helped to reform close to 75% improvement in the ASHA diaries.

As a next step of MCTS, ASHAs were trained on identification of High Risk Pregnancies (HRPs) and link them for medical care. The identification is being done as per the protocols of public health system which include cases with systemic illness, cases with bad obstetric history and signs based criteria in existing pregnant status. ASHAs were re-oriented towards this to identify total 329 HRP cases in the project catchment area.

The government has declared ‘Pradhanmantri Matrutwa Vandan Yojana’ (PMVY) under which, on 9th date of every month all HRP get clinical care at block level public health facilities. On identification of HRP status, all women were individually counselled and referred to block health facilities and its tracking record is maintained, with the aim that no HRP would be missed out from a clinical care.

In addition to this, field staff members along with ASHAs are also making home visits at regular intervals to HRP cases to reiterate importance of diet, compliance with the medicine and supplements such as iron and calcium tablets.

The entire effort of effective MCTS along with HRP tracking has helped the block public health facility at Uska Bazaar win an award of “Pradhanmantri Surakshit Matrutwa Abhiyan’. The Chief Medical Superintendent of Uska. B block health facility has formally acknowledged technical support from the Trusts in achieving this award.

**Way forward :**

**Consolidation of work :**

As COVID 19 crisis has impacted work up to a great extent, focus will be on consolidation of field work. Completion of targets against original targets is reviewed, which provides understanding that close to 75 to 80% of the work is already over. Model facility related work which includes setting up two Mini-PICUs at government block level facilities will be done in FY 21-22. NCE approval will be sought from Nov 21 to Mar 22.

**Advocacy of work :**

Systematic advocacy plan is worked out for the project which involves preparation of short films, case study booklets, publications, documentation of best practices etc is involved. This work will be rolled out in FY 21-22.



Training of ASHAs on DASTAK



Distribution of Mask & Sanitizer to ASHAs



Inauguration of New MMUs for Campierganj& Jungle Kaudiya by Honourable CM



Training of ASHAs on VHIR & Fever tracking protocol

# NON-COMMUNICABLE DISEASES (NCD) PROGRAMME

## Problem statement

Three decades before, communicable diseases were the leading cause of morbidity and mortality. The rapid growth of modernization and the drastic (mostly unhealthy) life style changes led to the emergence of Non-communicable disease burden as leading public health problem which was ignored many years. Non-communicable diseases (NCDs) represent a large and growing proportion of the global burden of disease. NCDs are largely preventable, and the emergence as well as the course of many of them are driven by four big risk factors, physical inactivity, unhealthy diets, tobacco use and a harmful use of alcohol.

Among the leading non-communicable diseases, the largest disease burden or DALY rate increase from 1990 to 2016 was observed for diabetes, at 80%, and ischaemic heart disease, at 34%. NCDs cause considerable loss in potentially productive years of life. Thus, epidemiological transition of Non-Communicable Diseases namely- Ischemic Heart disease, Chronic Obstructive Pulmonary Diseases and Cerebrovascular diseases account for over 60% of total mortality and therefore has led the attention of the health programmes to focus on NCD.

In order to prevent and control major NCDs, the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was launched in 2010 with focus on strengthening infrastructure, human resource development, health promotion, early diagnosis, management and referral. One of the *recent initiatives under NPCDCS is early detection* of Diabetes, Hypertension and common Cancers in the community and treatment, guidelines are being issued to the States for initiating **“Population-based Screening of common NCDs”** utilizing the services of the Frontline-workers and Health-workers under the existing Primary Healthcare System. The program aims to screen all men and women over 30 for non-communicable diseases including hypertension, diabetes, oral, breast and cervical cancers with referrals to secondary and tertiary level Government hospitals for diagnosis, treatment and management. Govt was keen to leverage use of Technology to strengthen this effort. IT platform brings the real-time information and effective management of patient history with accuracy, retrieval facility, and respective patient details will be visible to the respective MO to handle it properly. Moreover, IT brings real-time solution and strategic information for quick program modification.



## VISION

### Theme: Technical support and IEC development

- To provide *techno managerial support* for implementing National Programme on Prevention and control of Cancer, Diabetes, Hypertension, Cardiovascular Diseases and Strokes (NPCDCS) Programme
- To ensure *effective implementation of the NCD component* under NHM and Ayushman Bharat Programme
- To facilitate in *development of relevant IEC material* for effective implementation of the programme

### Theme: Technology implementation and support

- To give overall support for technology adoption under the CPHC - NCD programme
- To undertake field monitoring, capacity building and provision of mentoring support to service delivery functionaries at different levels for ensuring Population Based screening for common NCD.

### Theme: Research and other support

- To *undertake various operational research activities* and to bring out periodic evidence based reports.
- To *support MOHFW and various other partners* on NCD related programs like STEMI and Cancer Screening and Management through TCCC
- To *support implementation of CDSS across India*

### Activity Done

- Indian govt. has been recognized at the “United Nations” for adopting technology tools i.e. ‘CPHC-NCD Application’ for Population Based Screening for non-communicable diseases. With this impact, WHO India organized an orientation session on CPHC-NCD Software in Feb ’21 with the support of Tata Trusts team for South East Asian Countries, and further the countries like Myanmar, Bhutan and Bangladesh showed keen interest to adopt and implement this application in their countries too.
- Out of total 4 Cr. (plus) enrolments done during this year, Karnataka, Maharashtra and Orissa were the top three performing States with the highest number of enrolments done. Maharashtra, Orissa and Madhya Pradesh performed well respectively in terms of all indicators including screening, referral and examination and so on.
- CPHC-ASHA Application became the game changer in Karnataka during FY 2020-21. More than 2 Cr. enrolments done only by frontline health workers like ASHAs by utilizing this application to digitize family folders and CBAC forms.
- A workshop conducted to setup State Data Centre (SDC) in 12 States including Uttar Pradesh, Maharashtra, Rajasthan, Punjab, Odisha, Madhya Pradesh, Uttarakhand, Karnataka, Chhattisgarh, Telangana, Haryana & Jharkhand in collaboration with Dell and NIC team.
- COVID relief materials (PPE Kit) handed over continuously throughout the country to State health officials, medical institutions and healthcare facilities.
- ‘20,000 units of Oxygen Concentrators’ deployed to hospitals and healthcare facilities, across 17 States in India with the support of Tata Trusts and Indian Red Cross Society, under sponsorship of “Temasek Foundation – Singapore.

## **NCD PATIENT LINE LIST FOR COVID RESPONSE**

IT TSU provided state specific NCD data in coordination with NIC. Detailed process was prepared and shared with NIC/CHI. This was particularly important since in the current COVID pandemic era, where COVID related mortality and morbidity tends to be higher amongst individuals having NCD co-morbidity.

Twelve States have already downloaded the data for required action. These include Rajasthan, Punjab, Odisha, MP, Haryana, Uttaranchal, Maharashtra, Karnataka, Uttar Pradesh, Chhattisgarh, Telangana and Jharkhand. The data shared included line list and contact details of each and every individual diagnosed with the five targeted NCDs.

## **TATA HEALTH PROFESSIONALS CAPABILITY BUILDING PROGRAM (THPCBP)**

The Tata Group (Tata Trusts, Tata Sons & Tata Companies) is supporting the Government's effort in mitigating the effects of ongoing COVID 19 pandemic in multiple areas. One such support provided by Tata Trusts, NCD Team in imparting high quality training interventions to doctors and other health professions who are at the forefront in fight against COVID 19. Tata Health Professions Capability Building Program (THPCBP), was a voluntary offering in the true spirit of TATA. The purpose and objective of this program was to build capability of healthcare professionals for COVID 19 related patient care and management through high quality training intervention in India.

As on 30th Dec, 2,340 hospitals were reached out and 9,831 personnel were trained virtually by Christian Medical College (CMC) Vellore and Care Institute of Health Sciences (CIHS) Hyderabad, under 'Tata Health Professional Capacity Building Program' on COVID management. Around 600 professionals opted to undergo the ToT module.

### **Way Forward**

- The new version roll-out is in the pipeline, notable amongst this is the PHC application which will be supported on mobile phone, this will definitely have a positive impact on adoption of the application by the medical officers and will decrease the dependency on IT infrastructure like desktop/laptop.
- The upcoming version of the dashboard will be much more interactive and will be beneficial for stakeholders at different levels to retrieve analytical reports of the program.
- Due to COVID related travel restrictions, many of the states have moved on to the online mode of training. This has also helped out to reach out to multiple users in a single session.
- As the travel restrictions get relaxed, more supportive supervision visits will be planned to support the end users.
- ANM screening has been enabled in MO Portal, going forward states/users facing difficulties in using tablet can get their screening entries done through MO portal.

PARAMETERS**	Coverage (in the fiscal year 2020-21)	Cumulative figures (Status and plan till 2021)	
		Cumulative outreach [Since year of project operationalization up to March 2021)	Cumulative Target
<i>Number and name of the State/s</i>	-	Total 29 States & UTs	All 28 States & 8 UTs
<i>No. of Districts covered</i>	-	553 Districts	-
<i>Total enrolments done at NCD Portal</i>	4,07,14,365	8.90 Cr.	
<i>Enrolments (30+)</i>	2,55,56,534	5.98 Cr.	
<i>Total no. of screenings</i>	98,27,040	2.61 Cr.	
<i>Total referrals</i>	32,25,336	8.07 Cr.	
<i>Total examined individuals</i>	11,74,577	26.48 L	
<i>Total diagnosed individuals</i>	6,32,255	12.89 L	
<i>Under treatment patients</i>	7,53,325	11.81 L	
<i>Patients Screened for Hypertension</i>	94,82,936	2.62 Cr.	
<i>Patients Screened for Diabetes</i>	94,01,946	2.59 Cr.	
<i>Patients Screened for Oral Cancer</i>	88,51,006	2.51 Cr.	
<i>Patients Screened for Breast Cancer</i>	43,07,293	1.21 Cr.	
<i>Patients Screened for Cervix Cancer</i>	18,71,181	57.66 L	
<i>No. of trainings conducted</i>	633		
<i>Total trained health personnel</i>	32,322		
<i>No. of active users on CPHC-HWC Application</i>	59,940		
<i>No. of active users at PHC Portal/ Application</i>	11,050		

## CASE STUDY

**ASHAs:** The Game Changer, for doing more than 2 Cr. Enrolments in Karnataka by utilizing CPHC-ASHA Application

### The before:

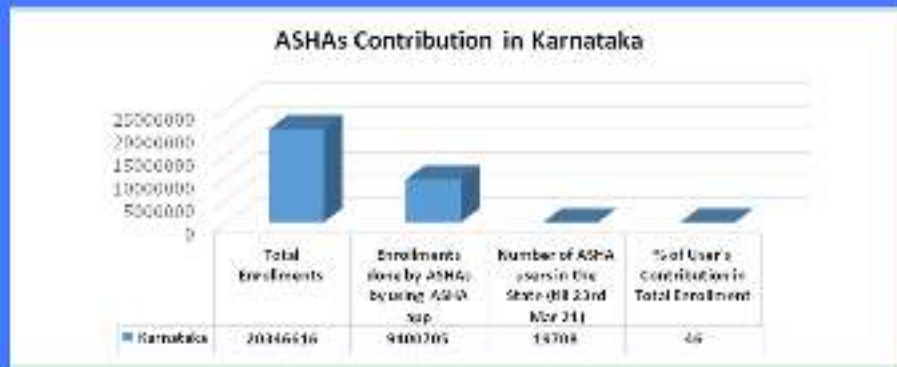
In Karnataka State, PBS was implemented in 10 Sub Centers and 3 PHC of Each Districts. But according to population it was not enrolling all the population for PBS under NPCDCS program, gradually State identified to implement the PBS across all the SHC and HWCs of all District to improve enrolment and Screening. But due to lack of tablets and ANM's workload for digitalization and survey work, performance was not improving.

In various State review meetings with district team and VCF, need of ASHA App implementation and interest towards this application, have been realized because it's a mobile based application and if enrolment can be done by ASHAs then the workload for ANMs will be decreased and she can focus more on screening part and State performance can be improved with this strategy. State has decided to utilize ASHA App for identified ASHAs who are doing survey and aware of Family folder and CBAC forms.

### The intervention

- Initially VCF and District teams planned to implement the action plan in 6 Districts, we identified few ASHAs who had smart phone (as its not procured and distributed by State so it's volunteer support from ASHA) and interested to enter in Mobile App.
- We created the User IDs for them with the help of TSU (As they are urban ASHA so RCH Id was not available, took series and created IDs for them and who had RCH Ids we have created through admin portal and make DPCs learn to create, edit options for ASHA as well).
- After completion of creation of IDs, we have trained them with Hands on Practice on production app on same day. In the same way we planned and trained 310 ASHAs in Asha app in 6 districts and started utilizing ASHA App in State till March 2020.
- After that we started training in all Districts on online platform with close coordination with District team, and first we have trained ASHA Facilitators in first phase, then with the help of these ASHA Facilitators and Taluka team, we have trained more ASHAs in the field and till date more than 21,500 ASHAs are trained in the ASHA app and 21,062 using the app in their own mobile (till 1<sup>st</sup> Apr 21).

The below graphs shows how the intervention of VCF motivated ASHAs and district officials to utilizing CPHC-ASHA Application to keep access on digital records of patients for NCDs:



## BENEFICIARY QUOTES



"I had issue with NCD app login in my mobile. With the help of DPC & NCD Team my issue was solved. Initially I was getting confused while making entries. But now I feel this app is very easy. No need to carry multiple paper copies while going to the field. With the help of our mobile, we can do our work easily.

**ASHA - Mrs. Prabitha (140226), Sub Center: Baikampady, Dakshina Kannada, Karnataka**



"Initially, working with NCD app was difficult. But after making few entries I got used to it. Before Asha App all our documentation was messed up. But This App is very systematic & all required documents are available here. Now there is no need to go through the pages of Survey books. This App has not only Health documentation but also it has other basic information. I got so much updated & also understood the importance of this app when it we implemented & started following up with the patients".

**ASHA - Dakshayini K V (102112), Sub Centre: Kyathanahalli B, Kyathanahalli PHC, Panduvapura Taluka, Distt. Mandya, Karnataka**



Manipur- CPHC-NCD Application & PHC Portal Training in the State of Manipur



Bihar -Cancer Awareness Programme in Girls High School Begusaral & Free Cancer Treatment Camp Organized Muzaffarpur



Naga land - 'Honouring Senior Citizens at Naga United HWC': Wellness activities such as NCD Screening, Pedicure and Haircutting were conducted.



Delivery of COVID Relief Materials to State Govt. of Uttar Pradesh



Uttar Pradesh - Hand hold support provided to ANMs in district Varanasi by Tata Trusts resource person to digitize Family Folders and CBAC

# ELDERLY CARE

# GERIATRICS - ELDER SPRING RESPONSE SYSTEM

## PROBLEM STATEMENT

The past decades have seen an exponential growth in the population of the country. India has over 14 crore people, who are above the age of 60 years, constituting 8.6% of the total population of the country. As per various research documents<sup>1</sup>, this number is expected to triple by 2050; which at that point, will constitute 20% of the population (more than 300 million above 60+ age). In addition to the overall increase in the number of the elderly, the number of people above 80 years has increased to about 1.1 crore. Statistics indicate that the demographic shift is going to be a huge challenge and new models of services will need to be developed to address the needs of the elderly in rural and urban settings. Elder Spring, as a programme of the VCF, emerged as an outcome of this thinking process.

Elder Spring Response System, accessible through a toll free number - 14567, has been set up to support the elderly through a single number or a single platform, in Hyderabad. This provides free information, counselling, and field services that will focus on the needs of the elderly. The intent is to address various needs of the elderly on a single platform that will make it easy for the elderly members themselves to call for guidance. The first set of services that have been rolled out include - conversing with the elderly and counselling them, providing information pertaining to elderly care, rescuing abandoned elderly, and supporting victims of abuse. In addition to providing specific information on activity centres, care givers, old age homes, products for the elderly, etc.; guiding them on legal and pension-related issues as well. The response system is being implemented by Vijayavahini Charitable Foundation (VCF), an implementation partner of Tata Trusts, in collaboration with the Welfare of Disabled and Senior Citizens Department, Government of Telangana, and is supported by the Police department of Telangana and other Government and non-government agencies. The Response System was launched on 27<sup>th</sup> March 2019 in Hyderabad City and gradually expanded to other districts of Telangana.

Based on the experience of working with Government of Telangana in setting up and running a helpline – Toll free No. 14567, Ministry of Social Justice & Empowerment has designed this plan to scale up the experience to rest of India by retaining the same number. So, the Elder Spring Response System was handed over to Telangana Social Welfare Department for Implementation in the State of Telangana along with the Connect Centre Officers and Field Officers. The management team, took up the responsibility of establishing the National Helpline for Senior Citizens (Elder Line) in all 36 States/UTs, from October 2020, based on the experience and knowledge gained from the 1.5 years' operations of Elder Spring Response System.

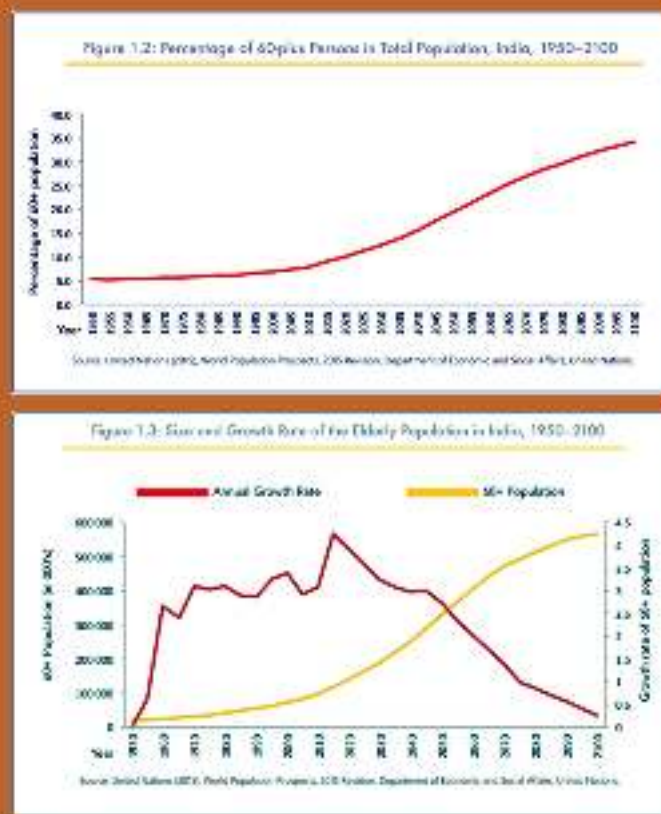
The Mission of Elder Spring Response System to reach 100 million elderly populations in India by 2025, will be achieved through Elder Line well before 2025.

The Year 2020-2021 marked a major milestone and also a huge transformation for the Project from **Elder Spring**(April 2020 to September 2020) to **Elder Line**(October 2020 to present)

## STATISTICS

India is going through a demographic shift with an increase in the number of senior citizens and increasing lifespan of senior citizens. The graph below shows the percentage of 60+ population in the Total population of the country. The share of population over the age of 60 is projected to increase from 8 percent in 2015 to 19 percent in 2050. By the end of the century, the elderly will constitute nearly 34 percent of the total population in the country.





The above figure represents the size and growth of the elderly population in India between 1950–2100. The figure shows that annual growth rate of the elderly will be over 3 percent till middle of this century indicating faster pace of growth than other age categories. Undoubtedly, therefore, relatively young India today will turn into a rapidly ageing society in the coming decades. A distinguishing feature of ageing in India is the significant interstate disparity in terms of both levels and growth of the elderly population depending upon the pace of demographic transition in these states.<sup>2</sup>

The above Situational Analysis would paint a clear picture of the need of a National Level Helpline which will be Implemented at the State Level by respective Implementing Agencies.

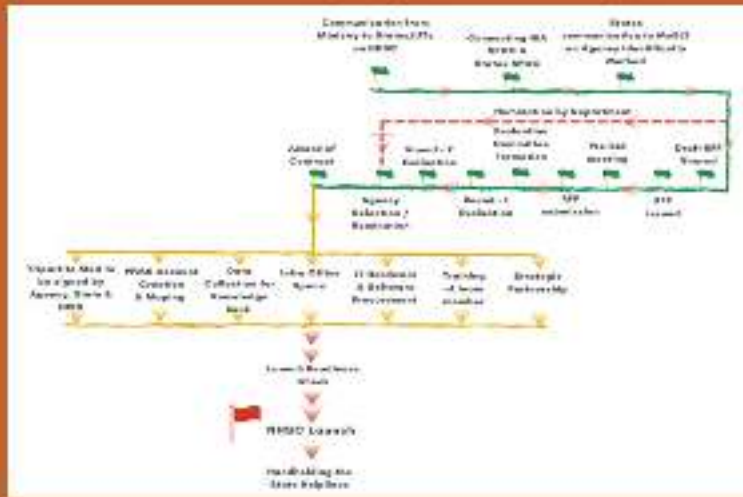
## VISION

**Elder Spring Response System Vision:** To serve the relevant needs of elderly in India (around 100 million) reliably through a “Response System for the Elderly” that synergizes Leadership, Collaboration, Innovation and Technology.

**Elder Line Vision:** To connect and engage with Senior Citizens and serve them in a compassionate manner through a National Helpline.

## ACTION PLAN

to the lives of senior citizens by creating a reliable National Helpline which acts as a platform for redressing the grievances of the senior citizens of India, by providing necessary information and intervention through a collective of highly committed partners including Government Agencies, Non-Profit Organizations, private sector and volunteers.



Primary objective is to participate in the National Implementation Agency (NIA) as a technical partner and facilitate the process of implementation of National Helpline in various states along with the MoSJE and NISD and create institutional mechanisms for sustainable implementation.

### Activity Done :

This year The Elder Spring Response system focuses on supporting elderly during Lockdown and Covid Crises by helping them with their requirements. Also from October 2020, the project was handed over to MOSJE and expanding across states being Elder line.

### Elder Spring Response System:

Elder Spring Response System was handed over to Elder line in the Month of Oct 2020. During the Lockdown team was also supporting Telangana Govt by receiving support request of PwDs across Telangana. From April 2020 to September 2020, Following are the work done by Elder Spring Response System:

Total calls received under 14567	37,371
Actionable calls	6609

Analysis of the Service wise elderly actionable calls received which was 6609.

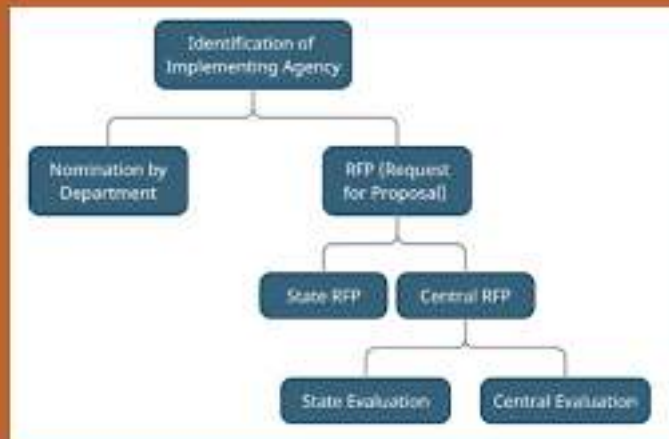
Category	List of Service and description	No of Calls Received
Information	Information calls are usually enquiries related to response system, old age homes, caregivers, day care centres, hospitals and doctors, elder care products, etc.	2134
Guidance	Guidance calls either seek legal counsel or direction for pension related issues.	1294
Emotional Support	In some cases, the caller needs reassurance and emotional support. These calls are directed to mental health professionals with experience in geriatric therapy and/or counselling.	176
Field Intervention	A substantial amount of cases require field intervention. At present, the centre offers - rescue of homeless elderly and care for abused elderly	656
Others	This category includes calls made by elderly, volunteers and others. This category also captures calls made for Covid-19 related support.	2349

## Elder Line (National Helpline for Senior Citizen):

The roadmap mentioned in action plan gives an overall picture of the tasks that are to be completed in a State for the launch of Elder Line. Following are the major tasks or milestones to be completed for launch. An explanation for each and the Status of the work is mentioned.

### Agency Identification

The most important step in launching the National Helpline for Senior Citizens in all 36 States/UTs is to identify agencies in all 36 States/UTs to implement the program. Identification of agencies is done using different approaches, which can be broadly classified into two, namely “Nomination by Department” and “RFP approach”.



**Nomination by Department:** States/UTs where the Department had nominated/referred agency to implement NHSC, comes under this category.

**RFP (Request for Proposal):** States/UTs which wanted to identify agencies through floating tender and evaluating the bidders, fall under the RFP category, which is further classified as shown in the above image as,

**State RFP:** States/UTs where the Department floats tender on its own to identify agency comes under the State RFP category

**Central RFP:** States/UTs where NISD had floated the tender centrally using e-procurement portal comes under Central RFP category

**Central RFP - State Evaluation:** State/UTs which had requested NISD to float the tender centrally and had participated in bid evaluation for selection of agencies.

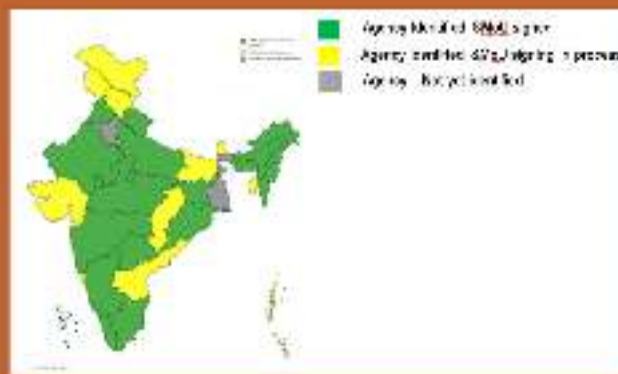
**Central RFP - Central Evaluation:** States/UTs where there was no communication/delay in communication to NISD on methodology for identification of agency. NISD has centrally floated the tender and some States/UTs had participated in the final evaluation round.

### RFP Process & Identification of Agency:

- RFP was floated in two phases based on the availability of DSC (Digital Signature Certificate) with State Representatives. In Phase-I, RFP was floated for 6 Central RFP - State Evaluation States (Assam, Bihar, Gujarat, Haryana, Rajasthan, Uttarakhand) on 25th September 2020, since these 6 States had uploaded DSC in the e-procurement portal on/before the specified date. Phase-II RFP was issued on 15th October 2020, where the remaining 5 Central RFP - State Evaluation States (Andhra Pradesh, Jammu & Kashmir, Mizoram, Punjab, Tamil Nadu) along with the 10 Central RFP - Central Evaluation States/UTs.

- All 11 Central RFP - State Evaluation States were oriented on the RFP process and evaluating the bids based on the predefined criteria. They were also asked to form an evaluation committee comprising MoU Signatory (Chairperson) and Finance Representative from State Dept.
- Round-1 Bid evaluation meeting, where the evaluation committee rates the bidders based on the information/documents that they have submitted, against the predefined criteria, was held for all 21 Central RFP States/UTs on different dates as shown in the table below.
- Based on the rating, bidders were shortlisted for Round-2 Evaluation, where shortlisted bidders had to present their implementation plan to the Evaluation Committee and were assessed against the predefined criteria.

The figure below shows the Status of Agency identification and MoU



S.No	MoU Status	No of States / UTs	States / UTs
1	Agency Identified & MoU Signed by all three entities	22	PB, CH, UK, UP, RJ, MP, MH, JH, OD, TL, KA, KL, TN, LK, PY, ML, AS, AR, NL, MN, MZ, DL
2	Agency identified & MoU signing in process	12	AN, AP, GA, GJ, CG, BH, SK, HP, JK, LD, TR, DN
3	Agency not identified	2	WB, HR

### Fund Release

Budget for all the States/UTs were prepared and shared with the Ministry. Follow-up for approval and release of funds and facilitation of training on PFMS was done.



States for which funds were released (21 States/UTs)	UP, NL, CH, OD, DL, KL, MP, MH, MZ, PY, TN, PB, RJ, UK, KA, AS, AR, MN, JH, LK, TL
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## Capacity Building

Approximately 800 people need to be trained on Helpline Operations, soft skills, and sector-specific knowledge. A breakup of the trainees is mentioned in the below table. Initially, a 17-day training schedule was prepared and executed. Helpline team members from Uttar Pradesh and Chandigarh were the first batch to get trained. Based on the learning from the entire training, the schedule was compressed into 7-day training program.

The Figure below shows the Status of training in all the 36 States/UTs



S.No	State / UT	Total Provision	Total Hired	Total Trained	% Trained
1	Assam	24	28	28	97
2	Chandigarh	7	4	4	57
3	Chhattisgarh	23	10	10	43
4	Karnataka	32	13	13	41
5	Madhya Pradesh	68	36	38	76
6	Maharashtra	45	43	43	96
7	Madhya Pradesh	18	14	14	88
8	Mizoram	15	13	13	87
9	Nagaland	18	14	14	78
10	NCT-Delhi	20	17	17	85
11	Delhi	37	30	30	81
12	Pondicherry	8	7	7	88
13	Rajasthan	25	21	21	84
14	Rajasthan	30	27	23	77
15	Tamil Nadu	37	30	32	86
16	Telangana	32	32	32	100
17	Uttar Pradesh	83	82	81	97
18	Uttarakhand	19	14	14	74

## Data Collection

A Knowledge bank containing details of the eldercare service providers and different government departments/officials in the respective States/UTs is essential for the helpline operations. Data needs to be collected by the implementing agencies in their respective States/UTs.

Once the implementing agency is finalized, an orientation session on Knowledge Bank creation & DELTA app for data collection is planned for the agency. Following which DELTA app login credentials will be shared and the process of data collection will be initiated.



The below table shows data collection orientation sessions conducted

Completed	Started	Oriented	Not Started
Delhi	Punjab	Jammu & Kashmir	Goa
Uttar Pradesh	Rajasthan	Jharkhand	Andhra Pradesh
Chandigarh	Uttarakhand	Manipur	Odisha
Telangana	Madhya Pradesh	Meghalaya	Chhattisgarh
Pondicherry	Maharashtra	Arunachal Pradesh	Gujarat
Lakshadweep	Karnataka		Dadra Nagar Haveli
Kerala		West Bengal	
Tamil Nadu		Bihar	
Assam		Sikkim	
Nagaland		Tripura	
Mizoram		Haryana	
		Himachal Pradesh	
		Ladakh	
		Andaman & Nicobar	
6	11	5	14

### Documentation:

Following are the documents that the team has prepared.

- Standard Operating Procedure
  - o Launch and Implementation
  - o Consolidation
  - o Process Charts
- Handbooks on Helpline Operations
  - o Call Officers
  - o Field Officers
  - o Working with OAH
  - o Quality
- Quality Framework
- Data Collection Templates (18 templates)
- Training Modules
- HR Policy for Elder Line Human Resource employed with the implementing agencies.

- An SOP for Stakeholders on support required was prepared.
- Elder Line Logo & Guideline preparation
- Hand Over Take Over (HOTO) sheet to sign off with agencies on handing over system, technology, training etc for launch
- PR/Communication guideline to make agencies fully aware and understand the necessary processes to be followed regarding media.
- Training Manual on Elder Line Capacity building objectives, content, timeline, ppt. etc. to help the agencies on future training/induction for new team members.

**Response system:**

**Care for abused elderly:** Total 176 calls were received during April to September 2020.

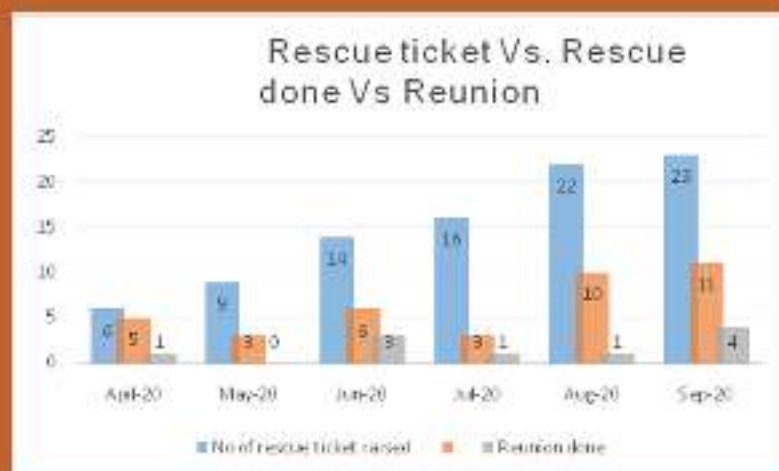
Following are the Monthwise trend of the calls.



**Support to homeless elderly:**

From total 127 calls received during April to September 2020, 90 service requests raised, 38 rescues were done and 10 reunion done.

Following are the trend of month wise ticket raised Vs. Rescue done Vs Reunion.



## CASE STUDY:

### ELDERSPRING RESPONSE SYSTEM: ( FROM JULY 2020)

There was a call from a person informing about an elderly lady lying in a bus shelter. He informed that she seemed to have an injury in her foot and suggested to shift her to an old age home. The elderly lady, aged about 76 years old belonged to Chinna Korukondi village, Kalluru Mandal, Khammam district. She had no family to look after her so she started going around begging for alms from door to door.

When the case was forwarded to the field response officer (FRO), she gathered all the details about the elderly person and learnt that she was provided shelter in Anganwadi earlier, but the biggest challenge was that others residing in that shelter were unable to tolerate her presence. This elderly person never cared to take bath and in spite of being advised to maintain basic hygiene, she did not pay heed to their words. There were days when her clothes would smell of urine, yet she never changed her clothes. Due to her unhygienic conditions it became challenging to retain her in Anganwadi.

The next set of challenge being this that none of the old age homes were willing to give shelter due to the very same reason. With no other option left, she had to be accommodated in an orphanage temporarily and later was taken for check up to a nearby clinic. Later, even the orphanage refused to give her accommodation so the FRO had to literally plead Daiva Krupa organisation to temporarily keep the elderly person. After a lot of persuasion, and after being offered extra amount a worker agreed to clean up the elderly person. Her hair was trimmed and she was given proper bath. She then appeared to be tidy and was then shifted to another old age home where they accepted to accommodate her on the condition that ANM should visit weekly once to enquire the status of the elderly person.

In this entire process, there were several challenges like – the elderly person herself being reluctant to join the old age home, convincing her about her own welfare, convincing the caller that she was not thrown in an orphanage but temporarily accommodated as the old age homes did not agree to keep the elderly person, shifting her from one place to another, getting her cleaned up and getting the check-up done and finally requesting the old age home to accommodate her etc. All this requires not just patience but complete dedication towards one's duty and kudos to the team who did not give up at any stage!





## Way Forward

- To Launch the helpline in all 36 States/UTs in different phases based on the readiness of the States/UTs, by following the roadmap shown earlier.
- To prepare Dashboard for the National Helpline for Senior Citizens and also for the States.
- To periodically assess the quality of the service delivery at all the States/UTs, by monitoring visits, random call quality check etc.
- To conduct Quarterly, Half yearly review meeting and cross learning meeting with the State Helpline Agency.
- To analyse the trend observed in the States with respect to the issues faced by the elderly and increase the scope of the helpline.
- To work towards new policies or policy changes or strengthening implementation mechanism for common issues faced by elderly.
- To do the above in a phased manner, with few states in the beginning and slowly expanding to all states.
- To support the MoSJE in hiring a National Implementation Agency to continue the work after our term and handhold them for a few months.

**EDUCATION**

# EDUCATION-BADI PARIVARTANA

## PROBLEM STATEMENT

Early Childhood Care and Education in India encapsulates the period from conception through eight years of age./ The first eight years of a child's life are critical. Since the rate of development in 0-8 years is more rapid than at any other age, significance of early years is beyond debate in today's world. Research in Neuro-science confirms the importance of the early years in a child's life particularly since 85 percent of brain development has already taken place by the time a child is six years of age. There are certain 'sensitive periods' or 'critical periods' (figure below) for development of cognitive, linguistic, social and psychomotor competencies and for sure, exposure received in early years thus defines the success of human life to a great extent. It is an indispensable foundation for lifelong development and learning, and has lasting impact on human life.

Apart from investment in teacher preparations, India struggles in the quality of early exposure given to young children in villages as compared to cities. Strengthening and expansion of the Anganwadi system, co-locating Anganwadis with primary schools and co-locating pre-schools with primary schools (where possible) are some of the measures recommended in NEP 2020. The focus on underrepresented group in ECCE is also important. Until and unless, quality childcare and preschool programs reach the farthest corners of the country, this vision of development for all seems a far-fetched dream.

The emphasis on accessible education in early years can be a turning point for adversities seen in the current Indian education system but the government of India needs to take certain measures with immediate effect for this critical Foundational Stage of a child's development. To take suggestions of NEP to the light of success, first, investment in quality educators is the need of the hour for India. Apart from working on 'what and how' of pedagogical functioning, a preschool educator needs to focus on 'why' element of teaching. A teacher needs to know the reason for singing songs and doing art and craft with young children. And therefore, a thorough curriculum for teacher training and career mapping through established institutes is required for teachers across Anganwadis and private pre-schools in India. Teacher training curriculum in India has not changed from the last 40 years. There is also mention of investing in the emotional health of preschool educators through these trainings as they are building the foundational stage of human life.

While the average student performance in Andhra Pradesh is good, the regional differences are extremely high with concentration of tribal population in the north coastal region and economically backward areas in the Rayalaseema region. To strengthen the foundations of the learning trajectory of a child and for continued learning, an emphasis on Early Childhood Education and Care (ECCE) is critical.

## VISION

Although initially titled "Badi Parivartana" and envisioned during the previous dispensation in AP, the programme is a systemic school transformation executed at the state-level with a focus on supporting DoE initiatives executed since the new regime took office. The current dispensation's focus is on elevating quality of public education through two distinct strands – a) revamping school infrastructure and b) transitioning Govt. schools to English medium

## ACTION PLAN

The project aims to improve the student learning by facilitate a meaningful engagement of students with the school infrastructure. Additionally, the key goal of the project is to capacitate schools with four components,

Equipping the school with playground, play area, play equipment, etc.,

Equipping the school with a library (vernacular and English)

Kitchen gardens

Promoting innovative child friendly, learning environment through building aids (using BaLA approach)

**BaLA** takes a child-centric approach to school infrastructure development and is inter-sectional in implementation. The approach places emphasis on involvement of the community/parents.

Expected Outcome: Child-friendly pedagogy ,Better teaching-learning in Classrooms,Improved retention amongst students, Improved learning outcomes of the children

**Playgrounds** as essential for holistic child development. Playground as an intervention idea lends itself to CSR/philanthropic giving. Sports (via playgrounds) can be crucial in developing critical SEL faculties amongst students. Expected Outcome: improved motor and physical development amongst students, attention and productivity levels amongst students and, inter-personal and communication skills.

**Library** will play an important role in enhancing the Social Emotional learnings of students, especially in the post-covid-19 era. Knowing coronavirus through storytelling and discussion for SEL Knowledge makes one feel empowered, but with the ongoing constant coronavirus updates this knowledge can be overwhelming as well. It is important for children to make sense of the current situation and feel heard and given the opportunity to get their questions answered.

Expected Outcome: Improved literacy amongst students and communication skills and, better social-emotional learning of children.

**School Kitchen gardens** are envisioned to be used mainly for learning purposes and also generate some healthy and sustainable food for the school. Teachers and students will be mobilised to take leadership for cultivation, maintenance and use of kitchen gardens to achieve expected outcomes.

Expected Outcome: Improved nutrition via MDM within schools, give children first-hand experience with nature and gardening and increase knowledge among students about the nutritional aspects of vegetables and the harmful effects of junk food.

#### Activity Done :

A process for School Infrastructure Development is already underway as part of VCF's first and second grant. A pilot intervention in 15 schools in Krishna District is planned under Badi Parivartana (2020-2021). The Trusts' intent with the project is to:

- Demonstrate how additional services to the government's foundational outfitting of schools can contribute to a child's overall well-being.
- Create model schools that can increase enrollment, retention and learning outcomes. This improved education delivery in the state, can serve as a model for reform to other states in India.
- Foster deeper engagement of parents with their child's schooling/ecosystem through concerted interventions focused at parent committee members

#### Activities Involved:

- Setting up Kitchen Garden
- Installing play infrastructure
- Set up library books and interactive wall arts

Activity	No of schools
BaLA	20
Playgrounds	20
Library	20
School Kitchen gardens	20

- Nadu Nedu selected primary schools in krishna district, Andhra Pradesh.
- Based on survey and other criteria 30 school's finalized.
- Based on the support from the schools in pandemic situation 20 schools finalised to kick start the activities.
- 15 schools in Vijayawada rural paramilitary constituency and other 5 schools in Bantumilly mandal in krishna district of Andhra Pradesh.



**WATER,  
SANITATION &  
HYGEINE**

# SAFE DRINKING WATER

## Problem statement and context of the project

India has long faced the challenge of providing safe drinking water to over 700 million people in more than 1.5 million villages. In the list of 122 countries rated on quality of portable water, India ranks a dismal 120 out of 122 nations for its water quality and 133rd out of 180 nations for its water availability. It is estimated that only 18 percent of the total rural population of 833 million have access to treated water. Scientific analysis indicates that bacterial contamination is severe in India. Traces of fluorides are present in many waters; higher concentrations are often associated with underground sources. Rural people are forced to fetch such ground water from distant places.

The ground water is contaminated by excess of fluoride in 11 out of 13 districts in Andhra Pradesh, whereas all the 13 districts have areas with excess of nitrate in them. Fluorosis is endemic in 20 out of 35 states. Fluoride levels in Andhra Pradesh vary from 0.4 mg/l to a very high level of 29 mg/l.

To address this issue, VCF has come forward to provide safe drinking water at affordable prices to Rural community in coastal area of Krishna district. The water in this area is highly saline and VCF came forward to setup community water plants in water stressed villages with an aim to provide access to safe drinking water.

## Sanitation project in Kadapa:

Poor Sanitation and Hygiene is one of the main reasons that are responsible for poverty and an unhealthy quality of life. According to World Bank, in 2013 one out of every 3 persons had no access to toilet and the annual economic loss due to lack of sanitation facilities was estimated to be \$ 260 billion. Still most of the nations, especially from Sub Saharan Africa and South Asia are struggling to address the issue of sanitation. Lack of better sanitation facilities also hampers human productivity and economic growth.

The heads of the Nations at the UN General Assembly 2015 made a commitment towards ensuring universal access to clean drinking water and sanitation facility for every person by 2030 as part of the Agenda 2030.

India's strategy on sanitation and hygiene has historically focussed on constructing individual sanitary latrines and converting dry latrines to low cost sanitary latrines for rural areas. Through the various government programs the focus has shifted from construction of toilets to bringing about behavioural changes and incentive driven missions to drive the progress of universal sanitation and hygiene.

The Swachh Bharath Mission (SBM) was launched on 2014 on the mission of attaining the status of 'Clean India' by 2nd October 2019, by when if targets were met, the nation would be

declared ODF. The Ministry of Drinking Water and Sanitation and the Ministry of Urban Development had the administrative control of the Rural and Urban areas respectively<sup>1</sup>. Rural sanitation coverage has increased from 38.70% at the start of SBM in 2014 to 63.73% as of 2017. 8.96 crores toilets have been built since inception of SBM and 5.34 lakh ODF villages and 25 ODF states/UTs have been observed.

Tata Trusts has supported the Government of Andhra Pradesh since July 2016 in meeting their sanitation goals. The sanitation project spanned 49 Mandals and 970 Gram Panchayats in Krishna district and 11 Mandals and 247 Gram Panchayats in ITDA Paderu. The project has benefitted over 1.7 lakh households in the district and supported the construction of over 1.17 lakh toilets. Implementation support was provided through multiple agencies such as VCF, CPF, MARI and other local NGOs. 21,213 IHHLs were directly constructed by Tata Trusts vs an initial target of 20,000 IHHLs.

### **Vision**

- “To provide access to safe and affordable drinking water for all”.
- This project is targeted to achieve ODF in three villages of Kadapa district which includes a total of 103 Household toilet construction across 3 villages. The project seeks to coordinate and harmonize the efforts to provide access to toilets.

### **Action plan**

The mission is to establish community drinking water plants, provide water for nominal amount and The project basically implements three major activities

1. *Situational analysis of the area (feasibility study)*- Where we can get to know the need for drinking water.

The team will identify the villages where there is no provision to the drinking water at their local community, which will be considered as major challenges for the community.

2. *Setting-up of Community based Drinking Water Plants*- Where community comes forward to contribute towards the set-up

There are two different set of plants establishments in the project, where few plants will establish at high salinity and water stressed areas and to scale up for maximum coverage, another set of plants will be established at low TDS level areas.

3. *Operational & Maintenance*- Which considers to be a crucial part where revenue generates for the plant to achieve self-sustainability.

Trained staff will be allocated for the plants to operate and monitor at community level. Continuous monitoring will be done through IOT services & Dashboard at program level.





Work done on field:

For Safe drinking water project:

Operational & Maintenance:

Constructed and maintaining the safe drinking water plants in 7 villages, and providing the safe drinking water to the beneficiaries.

IEC AND BCC Activities:

To bring awareness and capacity building among village communities and beneficiaries to use their safe drinking water.

S.No	Location	TOTAL HH's	
		Total HH's	Total HH'S reached
1	Mallampudi	545	369
2	Pallipalem	570	190
3	Kruthivennu	890	205
4	Matlam	918	628
5	Nagannacheruvu	580	159
6	Arthamuru	700	179
7	Yendapalli	660	208
8	Interu	255	124
Grand Total		5118	2062

No. of districts covered	1(Krishna)
No. of HH's	5118
No. of HH's covered	2062



## FOR KADAPA SANITATION PROJECT:

### Baseline study in the area (feasibility study):

The team had identified the villages where there is no toilets and proper sanitation, which will be considered as major challenges for the community.

<i>No. of districts covered</i>	1(Kadapa)
<i>No. of Households identified</i>	103
<i>No. of Toilet constructed</i>	83

### Case study

#### For Safe drinking water:

Responding to news reporter on the benefits of swasthaneer, a medical practitioner from Arthamuru said “I consume SWASTHANEER on daily basis and I have observed that this water helps in activating the metabolism, helps to prevent certain medical conditions like constipation, kidney stones, hypertension, boosting the energy levels, get rid of toxins, many more and I strongly recommend to take atleast 2 litres of this purified water every day”. Also, he added “Before the presence of SWASTHANEER plant, the villagers had consumed well and pond water and suffered from water borne diseases. After, VCF’s intervention in the village, beneficiaries made aware that the current drinking water practice leads to water borne diseases and it is advised to consume purified water for better health”.

### Way forward

#### Safe drinking water:

To improve the quality of life, and reduce water borne diseases of vulnerable communities in selected villages targeting 9,000 people in Krishna District, Andhra Pradesh by providing affordable and equitable access to safe drinking water via setting up of 12 water purification plants of 1000 liters per hour each, in a phase wise manner on a self-sustainable basis.

#### Kadapa Sanitation project:

1. To eradicate the system of open defecation in and around villages of Erragontla and Kamalapuram clusters of Kadapa District, Andhra Pradesh.
2. To make people aware of healthy sanitation practices by bringing behavioral changes in people through IEC/BCC/CLTS triggering activities.
3. To make each household gain access to toilets by construction and motivation.



# LIVELIHOODS

## RAYLASEEMA INITIATIVES

### Problem Statement

In Tomato production Andhra Pradesh occupies the first position in India with an area of 7.89 lakh ha and with a total production of 2,744.32 thousand metric tonnes in the year 2017-18, Andhra Pradesh shares 13.9% of all India produce and has a productivity of 25 MT per hectare. In Andhra Pradesh the top three Tomato production districts are Chittoor, Anantapur and YSR District Kadapa, contributing 85% of total Tomato production. In Chittoor tomato is cultivated in 61.57 thousand hectares producing 1.38 lakh metric tonnes. In Chittoor farmers are cultivating tomato round the year with an investment of 1-1.5 lakh rupees per acre for getting production of 20-30 MT. High cost of the production, pre and post harvesting losses due to pests and diseases and lack of pre-processing facilities and lack of supportable market prices are leading to losses to the farmers.

- The major problems involved in the tomato value chain are listed below:
- Poor quality seeds or seedlings with higher susceptibility to disease, usually due to spurious seeds or unlicensed nurseries
- Farmers facing high fluctuations in the tomato prices; besides, the varieties cultivated are not suitable for processing with the processing industry's requirements constantly varying
- Little exposure or training on good agricultural practices, modern production methods, disease management, crop management aspects, etc.
- Lack of pre-processing centers at farmers' organisation level
- Poor tomato markets and non-functioning of E-NAM facilities
- Low realisation by farmers of total value through the supply chain due to involvement of traders and commission agents.
- Lack of dissemination of information on new technologies and high cost of new technologies

## **Vision**

To disseminate new agri-technologies and comprehensively develop Tomato value chain and other major crops by engaging all the stakeholders from seed to consumers.

## **Action Plan**

To achieve the vision, the following multi-pronged strategy has been implemented:

### **1. Capacitating the FPO**

#### **Quality production:**

- Making field demonstration and creating awareness on the improved practices
- Training the farmers on Tomato Improved Package of practices
- Training to the Nursery and poly house operators

#### **FPO management:**

- Enhancing the FPO management capacities in BOD members
- Capacitating the BOD members in preparation of business plans
- Capacitating in establishment of procurement centres for procuring the produces
- Buyers and sellers meeting

### **2. Infrastructure building**

- Establishment of Nursery for providing quality seedlings
- Establishment of poly house to create awareness towards controlled farming
- Establishment of Pre-Processing structures for handling the produce in a qualitative way after harvesting
- Provision agro-logistics (Crates/pallets/rakes) for better management of pre-processing center

### **3. Agri logistic infrastructure**

- Providing the controlled temperature trucks/Reefer vans for transporting the produce to the longer distances

### **4. Marketing infrastructure**

- Upgradation of infrastructure like providing storage yard, digital scales, weighing platforms, digital display systems at market level and promoting & strengthening of e-NAM facilities

### **5. Demonstration of new technologies**

- Identification of agritechnologies and testing their suitability to the Rayalaseema region

## Activity Done

Major work done on the field is mainly in

- Received 38 lakhs funds from APFPS for capacity building programs
- Carried out quality production training to the FPO farmers in virtual and physical mode by recruiting local resource persons.
- Carried out capacity building trainings (FPO BOD roles responsibilities, Resource mobilisation and business planning) to the FPOs
- Conducted Tomato crop demonstrations (TALYA experiments) and recorded data on the performance of the crop in the production enhancement
- Identified sites for the Nurseries, poly house and PPC infrastructure building
- 10 FPOs have been registered under NCDEX platform
- Carried out Custard apple market intervention in B Kothakota mandal
- Carried out market linkage with institutional buyers such as MORE, Ninja cart.
- Introduced BAAHRTM technology by SCYARA for managing the animal menace
- Carried out demonstration on Trap crops of Groundnut crop, Paddy line sowing, TALYA trays experiments in Tomato, Bitter gourd crops and Azolla culture development for animal nutrition.

S.No	Parameter	Coverage
1	<i>No of districts covered</i>	3
2	<i>No of mandals covered</i>	10
3	<i>No of villages covered</i>	57
4	<i>No of FPOs worked with</i>	9 (existing) + 3( New)
5	<i>No of trainings</i>	306
6	<i>No of farmers covered</i>	5254
7	<i>No of PPC structures initiated</i>	3
8	<i>No of demonstrations taken up</i>	115
9	<i>Marketed sale produce</i>	98.25 L
10	<i>Volume of commodities sold in tonnes</i>	407
11	<i>No of New FPOs formed</i>	1 (2 Under registration process)

### Case study 1: Custard Apple marketing

VCF supported B. Kothakota FPO members in bringing Custard apple buyers to a common platform. Had interactions with the fruit pickers in bringing good quality of fruits and there after the market intervention continued and market linkage was created with buyers from Bangalore Anantapur, Bellary, Vijayawada and Hyderabad areas.

#### Grading is done manually at vendor location in the following way:

- Grade 1 fruits weight 200 to 250 gram around 75 fruits /crate
- Grade 2 fruits weights 150 to 200 gram around 90 fruits /crate
- Grade 3 fruits weights <150 gram more than 100 fruits /crate
- At the time of Grading 10-15% wastage was thrown out which is mainly because of plucking of very small, damaged and not in a position to ripe.

Grade 1 and Grade 2 fruits procured by whole sale buyers from Anantapur, Bellary, Vijayawada Hyderabad and Bangalore. And Grade 3 fruits are sold to local buyers and street vendor

Average income to fruit pickers per day: Rs 600 (excluding his expenses) for about 60 to 80 days per season.

#### Following is the sales data for the month of Sept-2020 :

Grade	Crates	Rate/Crate (Rs.)	Amount (Rs.)
1	102	670	68,340
2	181	540	97,740
3	118	220	25,960
<b>Total</b>			<b>1,92,040</b>

### Case study 2: Introduction of BAAHRTM animal repellent product

#### Background:

In B. Kothakota mandal 80% of the people directly or indirectly dependent on agriculture and its allied activities. The annual income of farmers is significantly influenced by the yield of the crop. However, crop damage due to wild animals (monkeys, peacocks and pigs) leads to a severe economic loss to farmers cultivating close to hillocks and groves. Farmers follow both traditional and modern measures to guard crops from wild animals like wire fences, electric fences, electronic repellents (lights, audio sounds, pipe guns etc.), natural repellents (rotten egg, garlic emulsion and castor oil) and physical monitoring.



## INTERVENTION :



To protect crop from wild animals and to reduce usage of man power, BAAHR™- an animal repellent product from SCYARA was introduced to farmers in fields where the damage is generally high to study the impact of device on wild animals. The team visited 10 villages in B.Kothakota mandal to study the fields which are nearby hillocks and groves. Details were gathered during the interactions with farmers as per questionnaire about type of wild animals that damage the crop, season of damage, types of crops grown, present method followed to protect crop etc. The team explained about BAAHR device and its functions and gathered the willingness from farmers to use the new technology in their fields and to share related data during the trial period.

Mr. C. Sidda Reddy from Thokalapalli Village, Seelamvari Gram Panchyat, B. Kothakota Mandal came forward to install device in his field as his crop is nearby hillocks and damage to Groundnut crop is up to 25% because of peacocks, deer and monkeys from pod development stage to harvest stage. The BAAHR device was installed in the field on 28<sup>th</sup> Jan, 2021 which would also cover 5 nearby farmer fields of groundnut and tomato crops.

The performance of device is weekly monitored and details are recorded. The device has functioned well from day one and has kept the peacocks and deers away from entering the fields. However, one day a troop of monkeys damaged crop in 0.1 cents of land. The farmer was in the field at that time and hence managed to safeguard field from damage. Apart from that incident, there has been no sign of damage by wild animals or birds on crop. Farmer harvested 8.4 quintals/acre on 26<sup>th</sup> Mar, 2021.

### Conclusion:

After close monitoring in installed fields and through the feedback from farmers, it is understood that the device functions well to safeguard crop from birds and wild animals except monkey which is same as the SCYARA co. had claimed. Farmer conveyed that due the use of the device he is able to harvest crop without much loss and less daily monitoring.

### Way forward:

- Capacitating the FPOs BOD skills towards self-reliance.
- Completion of PPC, poly house and Nursery infrastructure at FPO's level.
- Operation and finance Suitability at FPO PPC level.
- Capacitating the farmers for getting quality produce.
- Establishment of collection centres and market linkages.



TOMATO & LADY DEMONSTRATION PLOT  
SUTTAPALEM VILLAGE B KOTHAKOTA MANDAL, CHITTOOR DIST.



QUALITY PRODUCTION TRAINING ON TOMATO  
POP UNDER OPERATION GREENS.

## NORTH COASTAL TRIBAL INITIATIVES

### North Costal Region:

Uttara Andhra/ (also known as/ North Andhra) is a region consisting of three north Andhra districts of the/ Indian state/ of/ Andhra Pradesh.

It comprises the districts of/ Srikakulam,/ Vizianagaram/ and/ Visakhapatnam./ As of/ 2011 census of India, the region with three districts has a population of 9,338,177. Major crops grown in this region are Paddy, Black gram, Green gram, Groundnut, Sugarcane, Sesame, Pearl millet, Mesta, finger millets, Horse gram, Turmeric, Rajma, Cashew, Pepper, Niger and Chilies./ This region is home to many co-operative sugar factories, jute mills, Coffee, cashew processing industries.

### Agriculture land use and production:

	Cultivable area	Net Sown Area	Irrigated Area	Unirrigated Area
<i>Srikakulam</i>	511212 (in ha.)	347494 (in ha.)	240538 (in ha.)	121677 (in ha.)
<i>Vizianagaram</i>	405730 (in ha.)	259245 (in ha.)	155776 (in ha.)	129940 (in ha.)
<i>Visakhapatnam</i>	493594 (in ha.)	294004 (in ha.)	184302 (in ha.)	156757 (in ha.)

North costal tribal regions are the most neglected areas of Andhra Pradesh. There are many factors which have affected and have been affecting its growth. The tribal communities have been practicing traditional cultivation of subsistence crops supplemented by collection of forest materials. Destruction of forested due to commercial over-exploitation over 3 to 4 decades has decreased the productivity of the soil due to extensive soil erosion and reducing the capacity of land to rejuvenate and affecting yield/production. This has severely affected the wellbeing of the community which is dependent on agriculture.

Apart from this poor - production, post-harvest and marketing related activities have affected its growth. Interventions backed by technology are the most needed in the region. Majority of the farmers here are still practicing the traditional ways of farming which are mostly unorganised due to which there isn't any subsequent growth in the region which shows that there is a high need of educating the farmers about the best practices in farming and irrigation in this region for the farmers where the farmer can learn about the new and best practices which shall increase yield and quality of the produce eventually leading to a better price.

The next problem this area faces is of value addition. The Value chain in this area is highly fragmented with small scale players. Farmers even after the successful harvest of the crops are selling the produce at a very minimal or unsatisfactory rate/price most of the times. As the only place they can sell the produce is the local markets or the middle men. This problem arises due to very less concentration in the 'value chain development' of the crops grown in the respective areas. Therefore, there is a need for Establishment of processing, value addition capacity and supply chain of the identified crops to get a better value for the product and enhance the income of the farmer.

The Govt. is providing support and encouraging producer groups & FPOs. Most of the times the FPOs are successful when the farmers come up as a group and work for their own by best utilization of the funds. The concept of FPOs and Farmer organizations is poor & not much concentrated in these areas. Also, one of the major problems of marketing shall also be addressed through this intervention. Therefore, utilizing the FPOs in the region in improving the marketing will lead to better market linkages and better prices to the produce and growth of the farmers as well as the FPOs. Better market linkages will lead to exposure and leanings. Advantages like financial support, Basic material, and better infrastructure can be availed by the members of the FPO by best utilization of the funds.

S.No	Districts	Area In '000 hectares		Production In '000 tonnes	
		2017-18	2018-19	2017-18	2018-19
1	<i>Srikakulam</i>	344	327	1023	854
2	<i>Vizianagaram</i>	216	184	863	650
3	<i>Visakhapatnam</i>	169	155	403	321
4	<i>East Godavari</i>	446	432	2656	2684
5	<i>West Godavari</i>	499	463	3006	<b>2984</b>
6	<i>Krishna</i>	451	455	1933	<b>2052</b>
7	<i>Guntur</i>	<b>438</b>	<b>429</b>	<b>2275</b>	<b>2098</b>

From the above table we can see that the Area and production in the North costal area has decreased from 2017-18 to 2018-19. And the Area and production is low when compared to other districts of AP.

## BEEKEEPING



## **Problem statement and context of the project**

Bees are critical to the stability & persistence of many ecosystems, and therefore, must be understood & protected. Their pollination services are responsible for global bio-diversity & maintenance of human food supply. Pollinators are economically, socially and culturally important.

Bees improve the yield of 90 commercially produced crops, including most fruits, vegetables, nuts, seeds, spices as well as coffee, and fodder for livestock. Many of these foods are dietary sources of vitamins and minerals without which the risks of malnutrition might be expected to increase.

- Demonstrated of a 'proof-of-concept' of a collaborative Beekeeping model in AP
- Increased crop production by bee pollination (by 25-35%).<sup>1</sup>
- First-hand understanding for key stakeholders about the practical aspects of managing the production of Beehives, value addition, and marketing

## **Vision**

VCF in collaboration with Horticulture Department will be scaling up sustainable Beekeeping programs to improve the pollination of agriculture & Horticulture crops in potential districts of AP.

- Establishment of Centre of Excellence in Beekeeping in AP
- Developing a strategic framework for AP by studying various models & adopt best practices to further strengthen vibrant beekeeping community.

## **Action plan**

- Developed a strategic framework for AP by studying various models & adopt best practices to further strengthen vibrant beekeeping community.
- Awareness-creation and promotional activities to generate interest among SHGs, farmers, youth on beekeeping
- Developed collaboration with key-stakeholders for funding support to scale-up beekeeping activities in AP
- Initiated a strategic framework study to understand various models & adopt best practices to strengthen beekeeping.
- In the coming year, project proposals have been developed to help 5,000 farmers, SHGs, & unemployed youth. Major focus is on tribal community.
- Conducting National Level Conference in Beekeeping.

## **Work done on field.**

Beekeeping program has reached out to 2099 beneficiaries with improved pollination & additional income enhancement for the promotion of livelihoods.

- Developed a strategic framework for AP by studying various models & adopt best practices to further strengthen vibrant beekeeping community.
- Developed an analytical report of Chittoor Honey MACS & Beekeeping program in Chittoor.
- Developed Standard Operating Procedures on Beekeeping programs.
- Chittoor Honey MACS has supplied 800 kgs of honey worth 2.5 lakhs to Tirumala Tirupati Devasthanams. The working capital for the transaction was leveraged from the FPO funds.
- Developed a DPR on Beekeeping & submitted to Horticulture Department & National Bee Board.
- VCF has distributed 100kg of Nizer seeds (bee floral) to 69 beneficiaries in ITDA-Seethampeta, Srikakulam district. In the event, Shri C. Sridhar I.A.S, Project Officer, ITDA-Seethampeta & MLA from the respective constituency has participated & distributed seeds. Bee flora are plants are rich sources of pollen and nectar for bees. This floral seeds not only benefit bees but also benefit the beekeepers, community as well as ecology & biodiversity at large. The beekeepers can utilize the harvest for self-consumption directly impacting the nutritional intake of their families and can generate extra income by selling the nizer seeds. The overarching strategy is to demonstrate a proof-of-concept & submit a proposal to the National Bee Board.

### **Beekeeping Case study**

Arika Anil hails from Samarelli of Seethampeta Mandal, a tribal region where health systems are precariously weak. During his second year of Intermediate education, he faced acute health issues that limited him to bedrest for a year which led to the discontinuation of his studies. Once he was fit, he followed his father into the field and started helping him in cultivating the 2 acres of cashew field.

There he realized the root cause of all the financial struggles of his family which is the notoriously low profits that the cashew field is achieving for them, which is a bare sum of 25,000 rupees, an abysmal amount that's not enough for a family to thrive. He decided to start the cultivation of paddy which can at least feed their family and also took the role of a daily labour which could get him 300 rupees per day.

In such situation, he came across the training on beekeeping at Seethampeta through his friends which was collaboratively conducted by VCF and ITDA and saw a potential alternate livelihood source that can help his family in their journey to good health and prosperity. He attended to that training that taught him the advantages of beekeeping and also learnt the techniques involved to cultivate and produce honey.

With the help of ITDA and Horticulture department he got 3 beekeeping boxes in the month of January 2020. Daily, he observes the beekeeping boxes and clean them every 15 days. He harvests about 12 kg of honey on an average from 3 boxes in one month and sells to the local buyers at the rate of 500 rupees per kg.

Now, he gets 6000 rupees as an extra income from 3 beekeeping boxes with low investment and minimal work. He said that he is very much interested in beekeeping and he is ready to increase his beekeeping units and gets good profits.

“Beekeeping is very exciting to me. I am now determined and feeling positive to increase the beekeeping units and work hard to get good profits. I am grateful for this opportunity that helps me take a better care of my family”

### **An MBA graduate turned Beekeeper**

Mr. Kiran Kumar Bommasamudram, a young MBA graduate was looking for job opportunities after completion of his post-graduate degree. As the son of a typical Indian farmer, he was also practicing agriculture and allied activities like fisheries and poultry. He also attended beekeeping training conducted by the Government and started beekeeping with a few boxes. But, he was not happy with the low yields of honey and reduced population of honey bees.

He became a member of the Chittoor Honey Producers MACS society, which was jointly promoted by DRDA and VCF, and started attending the technical trainings. Kiran soon understood that he had not followed majority of the technical precautions and hence there was reduced population of bees, which in turn resulted in low yields of honey. He applied all the learnings from the training, took necessary precautions, and witnessed improvement in honey yield, which ultimately enhanced his income. He keeps on attending the trainings actively, and became a successful beekeeper who extracted best yield from each box. Thus, the MACS has appointed him as master trainer. As a master trainer, he further trained hundreds of women in bee keeping.

Kiran was handed over the charge of managing the nursery of bees that was jointly established by VCF and DRDA in Chittoor district. Kiran now is a recognized supplier of quality bee boxes and bee colonies to farmers. Currently he has 250 bee boxes in his bee nursery, which yield 1 ton of honey for a cycle of every 20 days. He does not have any marketing hassle even without formal branding, as honey is in great demand. He has been selling honey in his own ‘KK’ brand.

“Progressive farmers are very less interested in bee keeping as it involves issues like migration of bee boxes and pesticide sensitivity. Some farmers have taken the bee boxes just to support in pollination to increase their agricultural productivity. As is my experience, if the price is of INR 200/ kg of honey, it will just ensure break even when done on a small scale. According to Kiran, beekeeping is viable only if it is done at a scale of at least 50 boxes. The FPO requires active farmers, proper training on various aspects of bee keeping etc. for replication of bee keeping on a larger scale.” – Kiran opined when he was asked about the way forward for the FPO.

### **Way forward**

- VCF in collaboration with Horticulture Department will be scaling up sustainable Beekeeping programs to improve the pollination of agriculture & Horticulture crops in potential districts of AP
- Establishment of Centre of Excellence in Beekeeping in AP



## LAKSHADHIKARI RYTHU & MAA THOTA

### Problem Statement

The major problem for tribal development in Andhra Pradesh is “**Poor living conditions of the tribal communities**”. The tribal population has been living in isolation and a way from mainstream for a long time and depending upon forest resources for livelihood and resources. Over a period of time, as forests are depleting and changes in conditions and laws for forest protection, they have started doing agriculture for food. However, their practices are primitive and with limited access to information and exposure to the outside world they have been living in poor conditions. Their lack of access to formal credit sources has kept them in the clutches of informal sources of debt esp. for agriculture.

Hence, the following are the major reasons for the identified problem of poor living conditions of the tribal communities:

- Weak utilization of agriculture land
- Lack of diversification of livelihoods

Weak capacities of communities for holistic development of villages

## Vision

Lakshadhikari Rythu (Lakshpati Kissan) or millionaire farmer aims at diversifying farm income to afford an annual income of INR 1,20,000/- to each farmer household.

## Action Plan

“*Lakshadhikari Rythu*” is being piloted among 1200 tribal households, in three GPs of Rajavommangi Mandal, ITDA Rampachodavaram, East Godavari district, AP. These households have abundant cashew plantations with potential of diversified livelihoods. Based on the prevailing gaps with regard to livelihoods and available resources, multi-thematic interventions were planned to enhance the income levels of each household to 1.2 lakh per annum. The interventions piloted are demonstration on cashew best management, poultry vaccinations, paddy line sowing, Hydraulic-Rampump installations. Other interventions include Azolla for livestock, intercropping in cashew orchards, best Goat rearing practices, bringing underutilised trees to utilisation (Palmyrah) etc., were implemented.

## Work done on field

- IEC material was developed for spreading awareness on precautions related to COVID-19. Awareness programs were conducted in five villages
- During the COVID lockdown period and kharif season, Paddy Line sowing was scaled up in Lakshadhikari Rythu operational area over phone follow-up and had achieved successful implementation of this activity in 65.5 acres belonging to 64 farmers of 8 villages.
- A total number of 31 conoweeders were supplied to these farmers @ 1:2 ratio (One conoweeder for two farmers) for taking-up weeding operations in the line sowing plots.
- Paddy Line sowing method adopted by 64 farmers at an extent of 65.5 acres completed harvesting during the month of December. The crop cutting experiments were conducted in those plots and followed by Non Line sowing plots adjacent to those plots. For 29 acres the yield was recorded and found that the yield was higher (varied from 40 to 80kg) than the non-line sowing plots. This methodology had reduced the cost of cultivation. The seed rate used in this method was 7.5kg/acre where as in the conventional method they used to sow 30kgs. During Rabi season the farmers are planning to go with this methodology only.
- A delta survey platform was designed for the documentation of the activities taken-up in the Paddy line sowing component



- Raising of 70,000 Palmyrah sprouts by three Lakshadhikari Rythu Farmers in three villages as a pilot initiative were showing best results and during the month of January these farmers will be sent to exposure to Horticulture Research Station – Palm for the value addition to the sprouts.
- 1930 Talya Trays were installed in 64 acres in 9 villages for the newly planted Cashew saplings.
- Bio-slurry application which has been initiated in the previous year for improving the yields of cashew has been continued in 12 acres in Chinnarelangipadu village.
- Awareness meetings on cashew rejuvenation have been conducted in 4 villages viz. Appanapalem, Vanakarai, Chinnarelangipadu and Ammirekula.
- During the COVID restrictions our team had not involved in the pruning and training programme in the old Cashew orchards. But initiated the trainings to the farmers of 10 villages with 165 farmers in 165 acres as a demonstration purpose for yield improvement.
- All the farmers were supported with training and hand holding support in preparation of bio pest repellent sprays and with 2 sprayers with flower and fruit set boosting chemicals. (Potassium nitrate and Boron)
- The bio slurry application for the cashew orchards were under progress.
- Kovel foundation's Rampump was installed at Pinakota village was handed over to the farmers of that area through Kovel foundation. This pump will be in full utilization in Rabi season where they face critical irrigation issues.
- Three Rampumps were fabricated and handed over to CDR organisation. These pumps will be installed after the reduction in the flood situation and completion of the baseline survey and MOU's of the beneficiary farmers.

### **Way forward**

Develop new proposals for livelihood interventions by exploring partnerships with government and other institutions



## MAA THOTA

Tata Trusts entered into a Memorandum of Understanding (MoU) with the Andhra Pradesh Society for Elimination of Rural Poverty (AP-SERP), Government of AP, on the 20 June 2017, to enhance the livelihood opportunities and incremental incomes of SHG households in the state of Andhra Pradesh. In order to successfully deliver the objects of the MoU, Tata Trusts appointed Vijayavahini Charitable Foundation (VCF) to execute the Andhra Pradesh Rural Prosperity Mission (RPM) on their behalf as the Lead Knowledge Partner, in collaboration with SERP. Under the Rural Prosperity Mission, VCF is piloting the 'Lakshadhikari Rythu' initiative in Rajavommangi, Mandal in East Godavari district of Andhra Pradesh. Under this initiative multi-layered livelihood interventions are being implemented. In this regard, VCF converged with NABARD's – Maa Thota program in Rajavommangi mandal, to complement the ongoing activities for the benefit of tribes to achieve their dream of becoming Lakshadhikari Rythu. NABARD sanctioned the Maa Thota projects under the Tribal Development Fund (TDF) to VCF for implementation of the project in 1000 acres/ farmers in two phases. Each phase of implementation would cater to 500 acres/ farmers.

### Action Plan:

Maa Thota programme with 1000 tribal families belonging to Rajavommangi Mandal. This programme includes Cashew (63), Jafra (60), Moringa (108) and Karonda (250) saplings per acre which boosts the income of Rs.50000/- per annum after 4 years. Moreover, in this model the income begins from first year with Moringa, from second year Jafra and finally in third year all the species, thereby, farmer will be kept engaged in that plot with diversified yields in different seasons.

These plots were reinforced with the collective water resource development, soil and moisture conservation works, women development and village development activities. At the final stage of the programme the outcome will be observed as fully strengthened FPO and farmers were collaborative in marketing their produce and marching towards the formation of sustainable FPC. Objective is to generate sustainable yearlong income from the Maa Thota implemented plot to these households.

## WORK DONE ON FIELD

- The project team has been remotely extending advisory services to Maa thota Farmers and the community organizer on Plant management and monitoring plant survival.
- The work orders issued to Vendors for digging open wells and construction of water troughs were put on hold due to lockdown in 2020.
- Baseline survey Questionnaire was finalized and app developed under delta platform for conducting baseline study in the project villages. Followed by the field team was trained on the survey and modalities to be adopted. later sample surveys were conducted over phone by the team to finalize the survey questionnaire in the APP.
- Conducted awareness trainings to the farmers of 5 villages on precautionary measures on COVID-19, as per the ICAR Guidelines
- The committee members took the responsibility in following up with farmers for getting 277 consent letters (188 Phase 1 and 89 Phase 2) from the Maa Thota beneficiaries.
- Karonda was planted along the borders for the live hedge and fencing in 30 plots, followed by Jafra in 41 plots.
- Facilitated demonstration on line sowing in Paddy cultivation among 61 Maa Thota Farmers to reduce input costs & enhance 20% of yields over traditional methods. Further under Lakshadhikari Rythu initiative, distributed 31 conoweeders to the paddy cultivating Maa Thota Farmers. Demonstration of line sowing in Paddy cultivation is being integrated with the Rythu Barossa Kendra for conducting Farmer Field schools under the govt. Scheme.
- Facilitated Banking plan program of NABARD in the project villages, in the process 35 Maa thota farmers from Phase-1 and 19 farmers from Phase-2 submitted their consent and the proposed livelihood activity for availing loan under the program. Following -up with Andhra Bank (UBI) for the sanction orders.
- Mobilized farmers to carryout gap filling in their existing plots. The amount of Rs 37,120 was pooled by Village Development Committee for purchase of cashew saplings.
- 239 layouts were completed followed by Pit digging in 156 plots. In 110 acres Plantation of Core crop-1 was completed in both the Phases (Phase-1: 60 acres and Phase -2: 50 acres).
- Procurement committee was formed in the Maa Thota committees of Phase 1 &2.
- Project steering committee was formed with 6 (3+3) committee members of Phase 1 & 2, two persons from VCF, 1 person from Tata Trust, 1 Bank personnel and DDM NABARD as Chairman.

- Facilitated feasibility of Diversion Based Irrigation in Vatangi and Lododdi Panchayat by Aditi Services Odisha for WRD.
- 46 oil engines and Hosepipes were procured and provided to *Maa thota* farmer groups by the Mandal committee members (34 sets are provided to Farmer groups of Phase-I & II by the end of the quarter),
- Open-wells and Rampumps work orders are issued to vendors. and works initiated
- 5411 Individual tree guards are installed for the safety and survival of Cashew Saplings. Of these, 3774 tree guards are installed under Phase-I and 1637 tree guards under Phase-II.
- Facilitated Project Community to participate in the training organized by KVK, HRS on Nursery Management, Beekeeping.
- In collaboration with Horticulture Department facilitated the Project-Mandal Level Committees interactions with concerned officials to register the committee under MACS and future action plan on canopy management of cashew orchards.
- Facilitated an enterprising Tribal community of vattangi village for an exposure visit to Nurseries in Kadiyam. later the community member initiated raising a nursery enterprise

#### **WAY FORWARD**

- Based on the progress of WRD works, the plantation of Cashew, Jafra, Karonda and Moringa saplings in remaining Maa Thota plots
- Facilitate farmers in installing individual tree guards in their the Maa Thota plots that are pending
- Women development and Health components will be completed as per the programme plan.
- SMC works will be initiated.
- Completion of water resource development works to support critical irrigation to plantation in *Maa thota* orchards.

## PHOTOGRAPHS



## TURMERIC INITIATIVES

### Problem statement

Due to lack of awareness on best agricultural practices and lack of proper marketing facilities, market linkages, the farmers of Paderu region are being exploited by the local traders/middle men. The turmeric produced here is chemical free and has high curcumin content which has high demand in the market.



### Vision

The vision is to provide market linkages to the farmers and formation of a model FPO to sustain themselves in the Paderu region.

### Action plan

VCF is working towards the formation of a Model FPO in Paderu region, Visakhapatnam. The region is having high quality turmeric production without any direct market linkage. Along with turmeric, significant amount of black pepper, long pepper & coffee is produced here. Formation of model FPO is under process based on direct value chain creation of turmeric. The activity aims to connect the distant villages to the bigger market directly by removing layers of intermediary and create one platform to normalize price for marginal farmers.

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### **Work done on field**

- Flatbed system of cultivation is the traditional practice in Paderu region. Conducted demonstration plots in the last two seasons where the raised bed system of cultivation was promoted. Raised bed helps in higher yield as it loosens the soil and helps the rhizomes to grow. It is a labour intensive process and farmers find it as a challenge. Machinery will help to ease the process of bed preparation. Due to Covid 19 scenario the president of Paderu FPO was contacted and ensured the raised bed preparation for cultivation of Improved Varieties.
- Ensured the process of seed treatment was done with the support of FPO staff. Farmers do not have the habit of doing seed treatment. Seed treatment with Trichoderma Viridae is a recommended practice to avoid rhizome rot. The availability of Trichoderma is quite challenging. Tribal farmers are not accustomed to using this and in certain cases where government staff provide these, the farmers use them. Our teams had contacted Bio control lab in Visakhapatnam, RARS Anakapalle for the supply of bio-inputs. These are two potential centres, which supply good quality inputs. In the picture below, we can see the farmers being trained by the Agri-extension specialist of G Madugula FPO.
- Facilitated procurement and sale of 2000 Kg of Turmeric and 695 Kgs of Black pepper from 17 farmers to an exporter. As planned earlier, the procurement of the balance 48 MT of Turmeric could not happen due to the lock down.
- Organised two meeting with the BoD members of Chintapalli FPO (Virtual and Physical). Explained them the work and support being provided by VCF to FPO.
- A Survey was conducted on yield data, no. of trees, market potential, prices, and seasonal variations of Jack fruit in Paderu and Chintapalli regions. Jackfruits market is still shaping in the Paderu region, marketing channels depend upon the distance from the nearest markets. Pricing and marketing of jackfruits mainly depend upon the size of the fruit and the price ranges from 6 – 60 rupees.
- In addition to the previous survey another Jack fruit survey was conducted using delta App in Chintapalli region on Annual yield data, number of tree, seasonal variations of Jack fruits and geo tagging the trees for better understanding and finding possibilities for market linkage.
- Planned and Prepared survey Questioners on delta app. to collect the details about the availability, quality and cost of Coffee, Pepper and Rajma to fulfill the orders received from Safe harvest (77 Tons of Red Rajma, 27 Tons white Rajma) and Tata Coffee.
- A meeting was organised with FPO members, CC, FMs and Pepper & coffee farmers to explain them the questioners and the purpose of the surveys to be conducted.

- The FPO BoDs along with the DPM, APM, CCs and VCF team conducted a meeting to discuss and plan the procurement of Rajma, Coffee surveys in selected villages of Chintapalli, G.Madugula, Paderu, Peddabayalu, G.K.Veedi Mandals which helped in understanding the quantity availability, Quality, Price, and Variety of the produce.
- A training program was conducted by VCF to the newly elected BOD members on the Marketing of the produce, Quality aspects, and the step by step procedure to be followed for procurement.

#### **Way Forward:**

- Develop a comprehensive proposal for the promotion of indigenous Turmeric variety in ITDA-Paderu region

#### **Case Studies:**

Mr. Kondal Rao, a tribal farmer from K. Kodapalli villages of G. Madugula mandal, Paderu ITDA has been cultivating Turmeric in his 60 cents of land since many years. He used to cultivate locally available turmeric variety, which is harvested once in 2 years because of longer crop duration (24 months). Owing to lack of proper package of practices, the yield is very low resulting in low-income levels of the farmers in the region.

VCF along with SERP has been working on end-to-end value chain development in the Paderu ITDA region in 6 FPOs formed by SERP under the World Bank funded APRIGP. To alter the current cultivation practices, the farmers in the region were educated and trained on high yielding variety of turmeric seeds and best cultivation practices under the guidance and assistance of Indian Institute of Spices Research. IISR Pragati –ACC48 was identified as the variety suitable for the region. IISR-Pragati variety boasts the qualities of being a short duration crop (180-210 days to harvest), high yield (average yield of 38-52 tons per hectare) and stable curcumin content at 5%.

Demonstration plots were established with few progressive farmers to demonstrate the benefits of adoption of improved varieties and package of practices. IISR Pragati –ACC48 variety seeds were supplied to the shortlisted progressive farmers including Mr. Kondal Rao. Timely application of bio-inputs along with critical irrigation through drip system resulted in an average per plant yield of 350 g. He recorded an overall yield of 1.4MT from his 60 cents of land, through the adoption of high yielding and short duration Pragati variety.

The resultant increase in yield by over 40% has convinced the farmer to continue with Pragati variety in the coming season. Through the conduct of “Pragati Harvest Day” in the presence of Project Officer, ITDA, the benefits of the Pragati variety and its suitability for the region has been well acknowledged by the officials and the farming community.

#### **Cashew Value chain**

Cashew farmers experience several hardships in cashew cultivation due to variation in climate, rainfall and also due to severe insect pest incidence which finally leads to significant loss in yield. In this context. VCF – Tata Trusts launched cashew value chain development initiative in 4 districts of Andhra Pradesh Vizianagaram, Vishakhapatnam, East Godavari and Srikakulam. There are 16 FPOs formed by SERP for cashew with a total membership of close to 23,000 farmers.

## Highlights

- Collected details of different cashew varieties cultivated at Seethampeta and wrote a brief description on cashew varieties BPP5, Vengurla-4 and BPP-8.
- Collected Market Intelligence Information of RCN for the last 3 years (with an average price of the particular month).
- Developed proposal for tribal cashew growers & submitted to Horticulture Department for financial assistance through schemes & programs.
- Conducted a one-day cashew pruning techniques & technical guidance for training program for 29 farmers in ITDA-Seethampeta. In the following quarter additional training will be taken up under cashew rejuvenation.
- Discussions held with APDs of ITDA- Rampachodavaram, Parvathipuram & Seethampeta & Horticulture Department on NCDEX e Markets Ltd. membership drive for FPO's & FPC's.
- Developed concept note on cashew plant protection & training module IEC Material
- Trained 500+ cashew growers in GAPs in cashew value chain

## Action-plan for next year:

- Develop a comprehensive proposal on cashew productivity enhancement & Market linkages for FPO centric Marketing

## SHG Marketing

VCF will attempt to document all the learnings and challenges from this pilot through an in-depth SHG Enterprise Study in collaboration with Tata Institute of Social Sciences and Verace Market Research firm. Through this study we wanted to assess the challenges faced by SHGs in various spheres. As the program in India is seeing a steady growth, the issues faces by women in SHGs is diverse. Through this study we have delved deep into the various areas of dissonance that the SHGs face daily - ranging from operational issues to marketing ones. Highlighting the importance of the Make in India program, it is imperative to provide the right platform to women entrepreneurs.

- Verace Market Research in coordination with eminent professors from Tata Institute of Social Sciences built this report to paint an insightful picture of the women entrepreneurs in Rural Andhra.
- Face to Face executive interviews employing both quantitative and qualitative methodologies were carried out for the purpose of this study.



## BALANCE SHEET AS AT 31.03.2021

Amount in Rs.

Sl.No	PARTICULARS	Note No	As at 31.03.2021	As at 31.03.2020
<b>I</b>	<b><u>EQUITY AND LIABILITIES</u></b>			
<b>1</b>	<b>Funds and liabilities</b>			
	(a) Share capital	1	11,000	11,000
	(b) Reserves and surplus	2	2,898,009	3,132
<b>2</b>	<b>NON-CURRENT LIABILITIES</b>			
	<b>Other Non-Current Liabilities</b>	3		
	(a) Grants For Capital Assets		19,505,315	17,972,832
<b>3</b>	<b>CURRENT LIABILITIES</b>			
	(a) Other current liabilities	4	129,343,450	165,158,179
	(b) Short-term provisions	5	1,179,958	1,857,362
	<b>TOTAL</b>		<b>152,937,732</b>	<b>185,002,505</b>
<b>II.</b>	<b><u>ASSETS</u></b>			
	<b>NON-CURRENT ASSETS</b>			
<b>1</b>	(a) Fixed assets	6		
	Tangible Assets		16,722,181	15,543,287
	Intangible Assets		2,783,134	2,429,545
<b>2</b>	<b>CURRENT ASSETS</b>			
	(a) Cash and cash equivalents	7	126,211,725	155,566,852
	(b) Short-term loans and advances	8	6,761,192	7,220,138
	(c) Other current assets	9	459,500	4,242,683
	<b>TOTAL</b>		<b>152,937,732</b>	<b>185,002,505</b>

## INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2021

Amount in Rs.

Sl.No	Particulars	Note No	As at 31.03.2021	As at 31.03.2020
I.	<b>INCOME</b>	10		
	(a) Amount Appropriated out of Earmarked Grants	10a	169,077,511	129,477,238
	(b) Amount Amortized from Capital Grants	10b	12,120,764	2,431,623
	(c) Donations Received	10c	350,719	522
	(d) Other Income	10d	3,061,092	1,658,394
II	<b>Total Revenue</b>		<b>184,610,086</b>	<b>133,567,777</b>
III	<b>EXPENDITURE:</b>			
	(a) Program cost	11	134,806,774	111,144,066
	(b) Administrative Cost	12	34,787,671	19,988,956
	(c) Depreciation	6	12,120,764	2,431,623
	<b>Total expenses</b>		<b>181,715,209</b>	<b>133,564,645</b>
IV	<b>Excess of Income over Expenditure before exceptional and extraordinary items and tax (III-IV)</b>		<b>2,894,877</b>	<b>3,132</b>
V	Exceptional items		-	-
VI	<b>Excess of Income over Expenditure before extraordinary items and tax (V - VI)</b>		<b>2,894,877</b>	<b>3,132</b>
VII	Extraordinary Items		-	-
VIII	<b>Excess of Income over Expenditure before tax (VII- VIII)</b>		<b>2,894,877</b>	<b>3,132</b>
IX	<b>Tax expense:</b>			
	(1) Current tax		-	-
	(2) Deferred tax		-	-
X	<b>Excess of Income over Expenditure for the period (VIII-IX)</b>		<b>2,894,877</b>	<b>3,132</b>

## CASH FLOW STATEMENT FOR THE YEAR ENDED 31.03.2021

Particulars	Note No.	For the year ended 31 March, 2021 (Rs.)	For the year ended 31 March, 2020 (Rs.)
<b>A. Cash flow from operating activities</b>			
Excess of Income over Expenditure		2,894,877	3,132
<b>1. Adjustments for Non Cash Items:</b>			
Depreciation		12,120,764	2,431,623
Excess of Income over Expenditure before working capital changes		<b>15,015,641</b>	<b>2,434,755</b>
<b>2. Changes in Working Capital</b>			
		<b>(32,250,003)</b>	<b>22,340,561</b>
<b>a. Adjustments for (increase) / decrease in operating assets:</b>			
Short Term Loans and Advances		458,946	(4,273,479)
Other Current Assets		3,783,183	(3,879,902)
<b>b. Adjustments for increase / (decrease) in operating liabilities:</b>			
Other Current Liabilities		(35,814,729)	29,611,374
Provisions		(677,404)	882,568
<b>c. Cash generated from operations</b>			
		<b>(17,234,363)</b>	<b>24,775,316</b>
Income Tax Refund		-	-
<b>Net cash flow from/(used in) operating activities (A)</b>		<b>(17,234,363)</b>	<b>24,775,316</b>
<b>B. Cash flow from investing activities</b>			
Purchase of Fixed Assets		(13,653,247)	(16,716,853)
<b>Net cash flow from/(used in) investing activities (B)</b>		<b>(13,653,247)</b>	<b>(16,716,853)</b>
<b>C. Cash flow from financing activities (C)</b>			
Share Capital Received		-	-
Capex Grants Received		1,532,482	14,285,230
<b>Net increase in Cash and cash equivalents (A+B+C)</b>		<b>(29,355,127)</b>	<b>22,343,693</b>
Cash and cash equivalents at the beginning of the year		155,566,852	133,223,159
Cash and cash equivalents at the end of the year		<b>126,211,725</b>	<b>155,566,852</b>
<b>Reconciliation of Cash and cash equivalents with the Balance Sheet:</b>			
Cash and cash equivalents as per Balance Sheet		126,211,725	155,566,852
Less: Bank balances not considered as Cash and cash equivalents as defined in AS 3 Cash Flow Statements		-	-
<b>Net Cash and cash equivalents (as defined in AS 3 Cash flow statement)</b>		<b>126,211,725</b>	<b>155,566,852</b>