



**MANGALA  
GROUND WATER  
CONSULTANCY**



# INDEPENDENT SOCIAL IMPACT ASSESSMENT REPORT

FY2022-23

Cyient Environmental Interventions

14 April 2023

Prepared by:

Mangala Ground Water Consultancy

GEO Technologies

KSR EVER

Prepared for: Cyient Limited., / Cyient Foundation

S.No	Topic
1.	Objective & Limitations of the study
2.	Project Details and Demography
3.	Research Methodology
4.	Survey Details
5.	Main findings
6.	Recommendations
7.	Conclusion

### Inspection Statement on CSR Impact Assessment:

Cyient Ltd., (formerly Infotech Enterprises Ltd.,) believes in giving back to society in a measure that is proportionate to its success in business. Cyient spearheads its corporate social responsibility (CSR) initiatives through the Cyient Foundation.

Cyient Foundation (formerly Infotech Enterprises Charitable Trust) executed on March 27, 2002, at Hyderabad in the former united Andhra Pradesh by its Founder & Executive Chairman B. V. R. Mohan Reddy.

Since its inception almost 20 years ago, the Cyient Foundation has conceptualized and enabled various social initiatives, aims to facilitate access to quality education, skill development, community development and participate in projects with business-aligned social innovation, and invest in environmental development projects.

**Cyient Foundation via a request letter to conduct Social Impact Assessments (SIA) of projects / programs / activities for the FY2022-23 one the Environmental Initiatives**

With this backdrop and keeping in view the objective of Cyient to achieve long-term, holistic development of the community by working on the Environmental Development projects related to Go-Green, Green Energy and Water Conservation.

**Study Objectives:** The overall objective of the study is to evaluate the impacts created by Cyient Foundation Environmental activities.

**Specific Objectives:**

1. To understand the benefits and challenges of the Go-Green: Plantation Drives
2. To understand the benefits and challenges of the Water Conservation and Rain Water Harvesting in and around Cyient Schools, Skill Centres and Adopted Villages.
3. To understand the benefits and challenges of the Green Energy usage in the Cyient Adopted Schools
4. To identify the gaps in operationalization and implementation.

5. To recommend corrective measures to strengthen the programme and improve the programme implementation
6. Assess the social impact created and recommend for improvements if any

#### Methodology:

A qualitative approach was adopted for this study to understand field issues holistically and present them comprehensively in the report.

In terms of primary data collection, the team used the following tools

- a) Key informant interviews (KII): To access the views of the key decision makers and stake holders at the ground / local level
- b) Focus Group Discussions (FGD): To understand the beneficiaries perception on the initiative, its benefits and challenges
- c) Telephonic Interviews: To understand the views of participants, stakeholders and Community Members
- d) Survey Questionnaire & Written Questionnaire: Take the feedback from the beneficiaries like School Administration, Skill Centre Staff and Community.



#### Limitation of the study:

The current assessment study is conducted in Cyient Adopted Schools, Cyient Skill Centres and Cyient Adopted Villages

The main rationale for any evaluation exercise is to improve the effectiveness and impact of a programme by reflecting on how the programme is working or not working vis-à-vis the policy laid down. It endeavours to measure the impact in terms of stated objectives and examines the gap between the intent and

outcome of scheme or programme. Effective monitoring and evaluation of the programme/scheme is a powerful tool for tracking progress and demonstrating the relevance, performance and impact of a given project or a programme.

#### PROJECT:

<b>Community Development &amp; Environment</b>	Ensuring Environmental sustainability, ecological balance  Promoting Sanitation	Conservation of natural resources and maintaining quality of soil, air & Water
--	---	--

#### Project Need:

##### Environmental Initiatives:

Impact of using Solar Power for Cyient Schools: As a renewable source of power, solar energy has an important role in reducing greenhouse gas emissions and mitigating climate change, which is critical to protecting humans, wildlife, and ecosystems. Solar energy can also improve air quality and reduce water use from energy production.

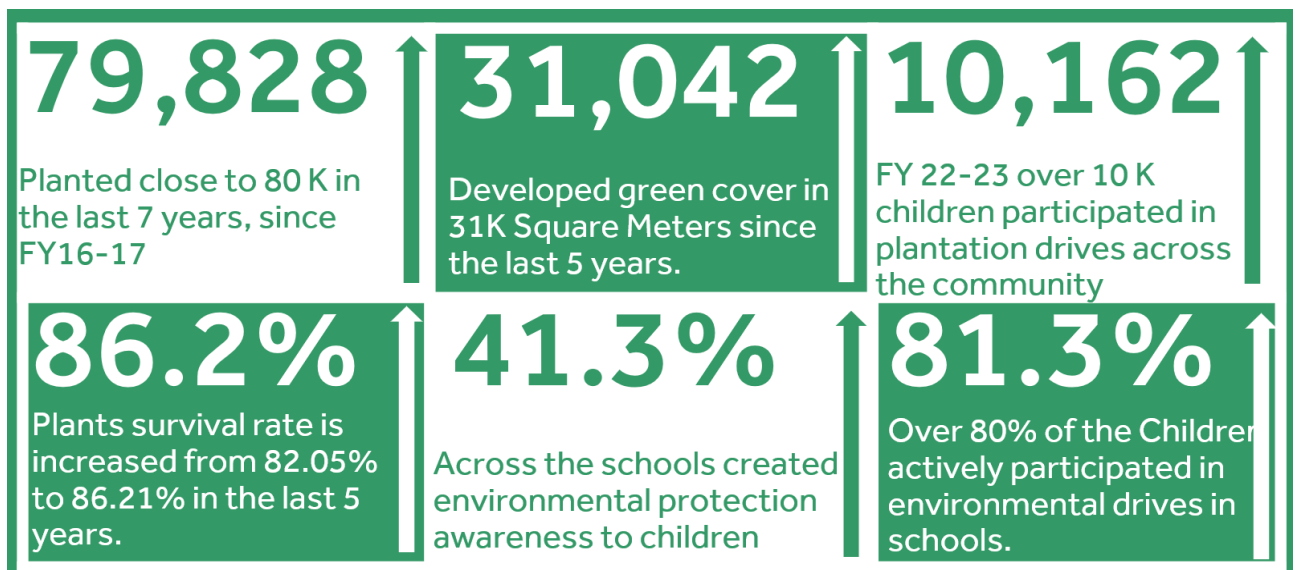
Impact of planting Trees: Tree plantation is very necessary because trees provide oxygen to the environment and make the air quality better. If more trees are planted, then the world's environment will become a safer place to live in. Tree plantation also reduces pollution, thus making the life of future generations secure.

Importance of the Rain Water Harvesting: It provides water when a drought occurs, can help mitigate flooding of low-lying areas, and reduces demand on wells which may enable groundwater levels to be sustained. Rainwater harvesting increases the availability of water during dry seasons by increasing the levels of dried borewells and wells.

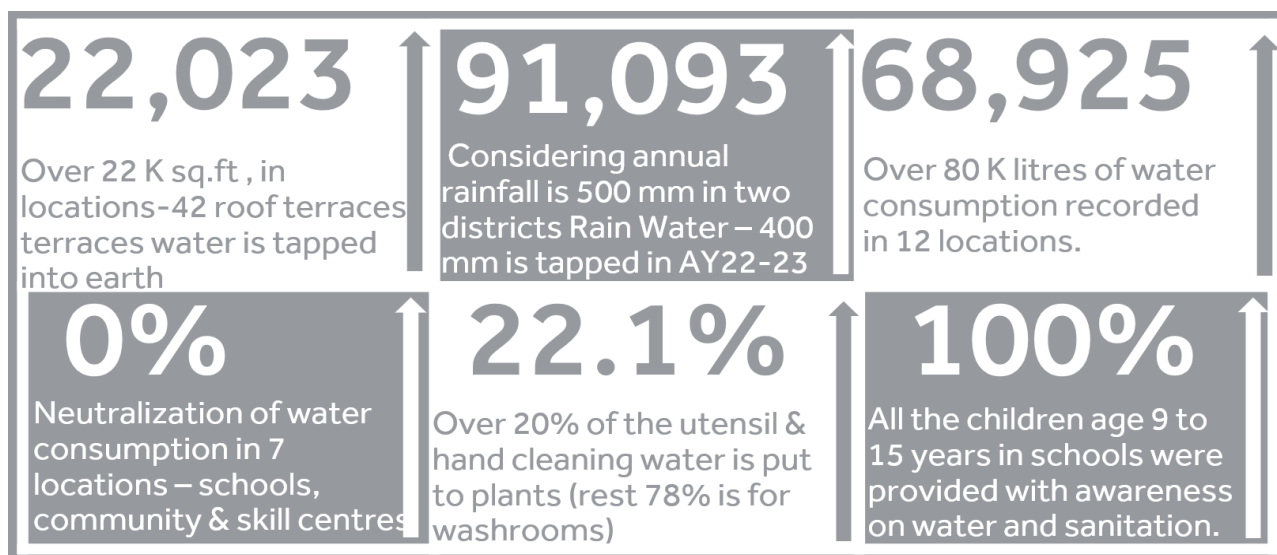
1. Planted over 79,828 samplings in the last 7 Years. (including current year : 16078 Plant samplings), with the survival rate is progressed from 82% to 86%..
2. Cumulative until FY2022-23 developed over 31,000 Square Meters of Land and promoted greenery in and around Telangana and AP. In the current year in addition to 28 K Square Meters added 3 K Square Meters.
3. Cumulative until FY2022-23 Rain Water Harvesting in 12 Locations measuring 20,012 Square Meters of Land cover and around adopted schools and village, in the current FY2-22-23
4. Received Haritha Haram award for the 7th Consecutive year from Minister for MU&AD and IT of Telangana State
5. in the FY2022-23 setup mechanism for 22, 023 square foot roof terraces rain fall water is tapped in to soil
6. In the current year 91, 093 liters of rain water harvested into soil – considering annual rainfall is 500 mm in two districts rain water – 400 mm is tapped AY22-23
7. Over 80 K liters of water consumption recorded in 12 locations of the schools, community centers and skill centers
8. In the current FY 2022-23 potential water savings of water savings are around 68,925 liters
9. 0% Net neutrality in water consumption in 7 schools' locations in community and skill centers
10. 100% of the children 9 to 15 years were provided with awareness on water and sanitation

### Project Description:

Cyient is working on the Environmental protection initiatives by planting trees every year since 2016 in and around the Cyient Adopted Schools, Community Centers, Skill Centres and in Urban Forestry Lands.



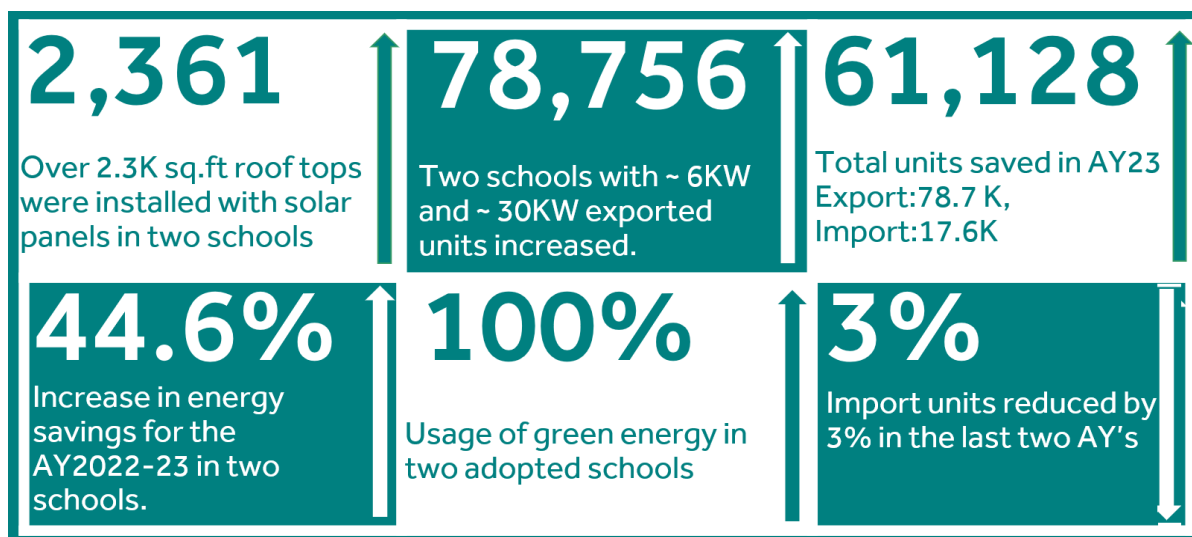
Cyient Foundation is being responsible to the Environmental Protection by participating in Rain Water Harvesting and Water Conservation initiatives in the communities where it operates. Cyient is developing Rain Water Harvesting Pits and harvesting the rain water for recharging the ground water levels. The Adopted Schools roof tops are scientifically used to tap the rain water take it to the ground through pipes and recharge the borewell pits and water harvesting pits.



- Planted over 79,828 samplings in the last 7 Years. (including current year)
- The survival rate is progressed from 82% to 86%.
- Developed over 31,000 Square Meters of Land in and around Telangana and AP.
- Received Haritha Haram award for the 7th Consecutive year from Minister for MU&AD and IT of Telangana State
- In 12 schools developed rain water conservation from schools, community, centres roof top.

Cyient Foundation installed solar panels on two of the school building roofs and started generating Green Energy and the schools energy consumption is green energy and the excess energy generated is distributed to the community needs by putting on to the state government power stations.





School Name	Location	Panels Capacity	Export Units / FY2022-23	Import Units / FY2022-23	Units Saved
MPP & ZPH Schools	Rajbhavan, Hyderabad	4 KW – 6 KW	6264	5916	348
MPP & ZPH Schools	Gachibowli, Hyderabad	25 KW – 30 KW	72492	11712	60780
<b>Total</b>			<b>78756</b>	<b>17628</b>	<b>61128</b>

The excess green energy generated is distributed to the community

Cyient Rajbhavan School is producing energy over and above the usage and is certified by IGBC with green building

The school is awarded by IGBC and received appreciation from the CII Telangana.

While the government is taking measures to overcome the water crisis, hundreds of citizens and communities across the country are doing their bit by practising Rain Water Harvesting (RWH).

On average, every school uses around 500-600 liters of water every day for drinking, cleaning and for toilets.

### Considering annual rainfall is 500 mm

Type of Buildings	No Of Rooms – Terrace	Class room size
School Building	32	25 ft X 25 ft
Community Halls	3	82 ft X 90 ft
Panchayathi Office	2	30 ft X 30 ft
Skill Centers	5	109 ft X 102 ft
Total	42	



Outcome:

<b>Environmental Initiatives</b>	<b>FY22-23</b>
<b>Water Conservation</b>	<b>Developed 41 Rain Water Harvesting pits in Adopted Schools – Tapping the rain water</b>

<b>Go-Green Initiatives</b>	<ul style="list-style-type: none"> <li>• Until date Planted 79,828 plants with 86% survival</li> <li>• This year planted over 16000 plant samplings.</li> </ul>
<b>Bio Diversity Awareness</b>	<ul style="list-style-type: none"> <li>• International Bio Diversity drives through our school children</li> <li>• 1029 High School children participated in this campaign, where the children identify species and update in an online portal.</li> </ul>
<b>Impact Created</b>	<b>Ground water levels increased by 3 to 5 Feet – Mangala Ground Water Consultancy</b>

Impact of interventions:

- Energy savings through solar energy
- Rain water harvesting helping the ground water recharge
- Plantation promotes green cover and helps the plant earth in fighting against the GHG

Conclusion:

- Seen year on year progress and suggestions and observations were implemented.



## MANGALA GROUND WATER CONSULTANCY

4-19-86, Girinagar, Opp IDPL colony, Hyderabad -500037

Cont no: 9849130986

TO,  
CYIENT FOUNDATION,  
PLOT NO.11, INFOCITY,  
MADHAPUR, HYDERABAD.

DATE:08-04-2023

SUB: WATER PERCENTAGE DEVELOPED AFTER MAKING HARVESTING PITTS IN 2021 IN SCHOOL PREMISES.

S.NO	SCHOOL & ADDRESS	YEAR 2021 WATER TABLE PERCENTAGE DOWN BY	PRESENT DAY MARCH 2023 WATER TABLE PERCENTAGE INCREASED TO	RATIO OF PERCENTAGE OF WATER DEVELOP AFTER RECHARGING
1.	UPPER PRIMARY SCHOOL, NANAKRAMGUDA, SERILINGAMPALLY MANDAL, R.R. DIST, HYDERABAD	35%	42%	7%
2.	UPPER PRIMARY SCHOOL, KHAJAGUDA, SERILINGAMPALLY MANDAL, R.R DIST, HYDERABAD	35%	40%	5%
3.	ZILLA PARISHAD HIGH SCHOOL, KHAJAGUDA, SERILINGAMPALLY MANDAL, R.R DIST, HYDERABAD	35%	41%	6%
4.	ZILLA PARISHAD HIGH SCHOOL, NEAR RLY STATION, SERILINGAMPALLY, SERILINGAMPALLY MANDAL, R.R DIST, HYDERABAD	25%	28%	3%
5.	UPPER PRIMARY SCHOOL, SHAMSHIGUDA, BALANAGAR MANDAL, MEDCHAL DIST, HYDERABAD	25%	32%	7%
6.	ZILLA PARISHAD HIGH SCHOOL, SHAMSHIGUDA, BALANAGAR MANDAL, MEDCHAL DIST, HYDERABAD	25%	32%	7%
7.	UPPER PRIMARY SCHOOL, GACHIBOWLI, SERILINGAMPALLY MANDAL, R.R DIST, HYDERABAD	45%	51%	6%
8.	ZILLA PARISHAD HIGH SCHOOL, GACHIBOWLI, SERILINGAMPALLY MANDAL, R.R DIST, HYDERABAD	25%	30%	5%

9.	UPPER PRIMARY SCHOOL, RAYADURG, DARGA, RANGAREDDY DIST, TELANGANA	25%	28%	3%
10.	ZILLA PARISHAD HIGH SCHOOL, RAYADURG, DARGA, RANGAREDDY DIST, TELANGANA	25%	29%	4%
11.	PRIMARY SCHOOL, 8 BN TGSP KONDAPUR, SERILINGAMPALLY MANDAL, R.R DIST, HYDERABAD	45%	49%	4%
12.	PRIMARY SCHOOL, KUKATPALLY, NEAR BJP OFFICE, BALANAGAR MANDAL, MEDCHAL DIST.	35%	38%	3%
13.	ZILLA PARISHAD HIGH SCHOOL, KUKATPALLY, NEAR BJP OFFICE, BALANAGAR MANDAL, MEDCHAL DIST.	35%	41%	6%
14.	ZILLA PARISHAD HIGH SCHOOL, R.P COLONY KUKATPALLY, BALANAGAR MANDAL, MEDCHAL DIST.	30%	35%	5%
15.	GOVT HIGH SCHOOL, RAJBHAVAN, SOMAJIGUDA, HYDERABAD	45%	49%	4%
16.	PRIMARY SCHOOL, RAJBHAVAN, SOMAJIGUDA, HYDERABAD	45%	51%	6%
17.	PRIMARY SCHOOL, NEAR E-SEVA, MIYAPUR, SERILINGAMPALLY MANDAL, RR DIST, HYDERABAD	35%	43%	8%
18.	ZILLA PARISHAD HIGH SCHOOL, NEAR E-SEVA, MIYAPUR, SERILINGAMPALLY MANDAL, RR DIST, HYDERABAD	30%	37%	7%
19.	ZILLA PARISHAD HIGH SCHOOL, OLD POST OFFICE ROAD, GAFOOR NAGAR, VITAL RAO NAGAR, HITECH CITY MADHAPUR, HYDERABAD	45%	53%	8%
20.	PRIMARY SCHOOL, OLD POST OFFICE ROAD, GAFOOR NAGAR, VITAL RAO NAGAR, HITECH CITY MADHAPUR, HYDERABAD	45%	52%	7%

NOTE: THIS INFORMATION OF PERCENTAGE OF WATER RECHARGE IN THE PARTICULAR AREA OR PREMISES IS GIVEN ON THE AVERAGE DROUGHTNESS OF RAINFALL BEFORE MAKING HARVESTING PITS AND WATER RAINFALL AFTER MAKING HARVESTING PITS AND THE SOIL TYPE SOIL FOUND BELOW AND THE FRACTURES IN HARD SOIL AND STONE.

THANKS AND REGARDS



MANGALA GROUND WATER CONSULTANCY