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Gas

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Foundation

Social Impact Assessment
March 2024

Adani Vidya Mandir School-Ahmedabad
Bio Gas Project-Varanasi



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A.1. Executive Summary:

ADANI TOTAL GAS LIMITED (ATGL) is engaged in providing energy solution to the nation with efficient, environment friendly, safe & cost-effective fuel. It has a vision to be a world class leader in businesses that enrich lives and contribute to nations in building infrastructure through sustainable value creation.

As part of the Adani group of companies, it has deep commitment to sustainability and corporate social responsibility initiatives. In 2023-24, as part of its CSR commitment, it had supported 2 major projects. The first being the Adani Vidya Mandir school in Ahmedabad and the other being the Bio-gas plant near Varanasi.

A social impact assessment study was conducted in March 2024 to gauge the impact and effectiveness of the project. The assessment exercise used methods like desk top reviews, site visit, interviews and group discussions with stakeholders, assessment through case studies by an experienced social impact professional.

Adani Vidya Mandir school in Ahmedabad spreads over a campus of 6.5 acres, equipped with the requisite infrastructure worthy of a modern school thus providing around 1000 students from economically weaker sections of the society, a gateway to a better future. Every year 120 new students take admission through a rigorous selection process to ensure that the most deserving from the economically backward section get admitted. The school infrastructure with state-of-the-art facilities and qualified and committed teachers ensure that every child can bloom into his/her best.

The school apart from the academic services, provide food (thrice a day), 2 sets of uniform, books, shoes, bags and ample opportunities to participate in various events and workshops with other students, both nationally and internationally. All this at no cost as it is free for all students. Had this been run commercially, the average cost per student would've been around INR 1.2 lakhs per annum per student. The total financial value of this would be approximately INR 11.48 crores. With the support of ATGL, Adani Foundation delivers this programme to ensure that students from economically weaker sections (income <INR 1.75 lakhs per annum) are provided a world class opportunity and contribute to national building in future.

The Adani Foundation in association with the Municipal Corporation in Shahanshahpur area of Varanasi has set up a state-of-the-art Varanasi Bio-Conversion Project (VBCP). The project is supported by Animal Husbandry department of Uttar Pradesh, Bharat Gas Energy Limited, and Varanasi Smart City Development.

This project is a key step towards promoting environment friendly fuels thus reiterating the value that Adani group holds towards sustainability. The project is in its early days and searching for the optimum combination of Napier grass, cow dung and press mud. The output is in the form of gas with slurry as by products.

A large number of farmers have been encouraged to cultivate Napier grass which is profitable. An expert agency BAIF was hired to suggest the best sources of Napier stems for cultivation along with providing inputs for better returns to farmers. Cow dung which mostly unutilised in the adjoining villages have now become a source of income for the farmers. The slurry which comes as a by-product has been used by many nearby farmers with encouraging results. As this is a by-product, the project had given this on request for free and now more farmers are eager to use the slurry as a manure. The gas which is produced is not only sold institutionally but also retailed through an outlet for local autorickshaws. The project is working with 250 farmers and during discussions with them it was evident that they were keenly looking at the progress of the project and waiting for it to scale up further.

The rate of return of Napier grass is much higher compared to the other crops cultivated in and around those villages but less than vegetables. But not every farmer can grow vegetables as that takes intensive effort for a span for 70-90 days. More so, most farmers allot a certain part of their land for Napier while cultivating other crops and vegetables as well. This would help them to earn an additional amount of INR 55k per farmer per year which for 250 farmers would be around INR 1.37 crores. This is at an early stage now and only few farmers are involved but the scope of benefit that the farmers can accrue is immense.

In addition to this, a farmer is already earning INR 33k extra for the cow dung (excluding all costs and post considering the opportunity cost). The cost equivalent of the slurry distributed as manure to the farmers would be around INR 1 crore every year. So, all these are social benefits which are being generated through a single bio gas plant.

While the project commercial in itself is yet to recover its costs (being early days) but it is already generating a value for the nearby farmers. The environmental benefits are a premium to this.

B.1. Project Background and Context:

Adani Total Gas Limited has always remained at the forefront of nation-building initiatives, with 'fuelling goodness' as the guiding principle. It is engaged in providing energy solution to the nation with efficient, environment friendly, safe & cost-effective fuel. It has a vision to be a world class leader in businesses that enrich lives and contribute to nations in building infrastructure through sustainable value creation.

Since 1996, the Adani Foundation, the community engagement arm of the Adani Group (it is also the implementing arm of Adani Total Gas), has remained deeply committed to making strategic social investments for sustainable outcomes throughout India. The Foundation has been active in the core areas of Education, Health, Sustainable Livelihoods, Skill Development and Community Infrastructure. Its strategies are rooted in national priorities and global Sustainable Development Goals (SDGs).

The Foundation is known for its inquisitive and innovative approach to problem-solving. It challenges the status quo and adopts new solutions that lead to sustainable impacts. By building institutions of people and focusing on sustainability, the Foundation contributes to the dignity, well-being and wealth of the communities surrounding Adani businesses and beyond. As it continues to grow and evolve, the Foundation is well-positioned to address the emerging needs of New India. It is currently operating in 5,753 villages across 19 states, positively impacting 7.3 million lives.

CSR Activities in FY 2023-24

Adani Total Gas Limited (ATGL), a joint venture of Adani & TOTAL, has spent INR 1245 lakh towards CSR activities in FY 2022-23 through the Adani Foundation. It has been utilized for: -

- i) The Adani Vidya Mandir School at Ahmedabad
- ii) The Bio Gas project at Shahanshapur near Varanasi.

It is in this context that ATGL, wanted to undertake a Social Impact Assessment of the initiatives supported in 2023-24. Metapram, a social consulting firm with deep experience in CSR related work and social impact were hired for the purpose.

B.2. Objectives:

- 1) Quick Social Impact Assessment of the CSR Programmes (2 programmes with the theme of education and sustainable livelihood).
- 2) Submission of Report post assessment with a quantitative and qualitative assessment of the impact created.

Deliverables:

- Visit both (2 nos) programmes, meet with relevant people of HSE Dept of ATGL, AF team members at Ahmedabad and locations, meet beneficiaries and reference population/stakeholders to the project.
- Compare end line with base line data to the extent available and feasible.
- Qualitative and quantitative record of the work done.
- Case stories which can motivate another locations/ for replication.
- Critical analysis on the missed opportunities and what could’ve been done better.
- Document the best practices.

B.3. Methodology:

Project	Methodology	Tools
Adani Vidya Mandir School- Ahmedabad	Desk Top Review of Documents Assessment of Case Studies Visit to Site (School) Interviews with Parents, Students and Teachers, Adani Foundation team, Team Members from Adani Total Gas Ltd. Focussed Group Discussions.	Use a combination of tools like Logic Method, Theory of Change & interviews.
Bio Gas Project at Varanasi	Desk Top Review of Documents Site Visit Group discussion Interview with farmers	

C.1. Adani Vidya Mandir School-Ahmedabad

Adani Vidyamandir School (AVMA) is a CBSE affiliated English Medium Co-educational school which started its journey in 2008. It has been accredited by National Accreditation Board for Education and Training (NABET). It offers classes from IV to XII and offers Science, Humanities and Commerce to the senior secondary students.

Value For Students

AVMA provides education to 957 students with 120 students taking admission every year. Major highlights of the school are as follows: -

- Free education for all students.
- Students with family income less than INR 1.75 lakhs per annum are eligible to apply.
- School provides Breakfast, Lunch and Evening Snacks.
- 2 sets of uniform are provided to the students.
- The students are provided with shoes and bags.
- The school has 45 full time teachers and 2 guest faculties in addition to 9 people managing the administrative work.

School Infrastructure:

Campus	Approx 6.8 acres
Classrooms	28 nos
Audio Visual Room	1 no
Seminar Hall	1 no
Activity Hall	1 no
Laboratories	1 no
Psychology Laboratory	1 no
Libraries	2 nos
Atal Tinkering Lab	1 no
Computer Labs	2 nos
Canteen Hall	1 Hall with a capacity of 500 students
Assembly	1 Hall
Classrooms	Equipped with CCTV and PA System
Cultural Space	2 Open Theatres
Garden	2 Gardens

Images of AVMA Campus & Infrastructure:



Fig 1 (above) and Fig 2 (below)- AVMA Campus Ahmedabad



Fig 3- Glimpse of the Assembly Hall at AVMA Ahmedabad



Fig 4-6: Snapshot of the various laboratories in AVMA-Ahmedabad

Student Accomplishments:

The school achieved a pass rate of 100% in the Board Examinations of CBSE in the year 2022-23 for both Class X and Class XII.

206 students had appeared for the examinations and 100% of them passed.

Analysis of Board Results -Class X, Year 2023

S. No	Indicators	No of Students	Percentage (%)
1)	Total No of Students Appeared	108	
2)	Total No of Students Passed	108	100
3)	Students received distinction	74	68.52
4)	Students passed in 1 st Division	103	95.37
5)	Highest Aggregate Number	478	95.60
6)	Average Aggregate Number	391.98	78.40
7)	Students with A in all subjects	7	6.48

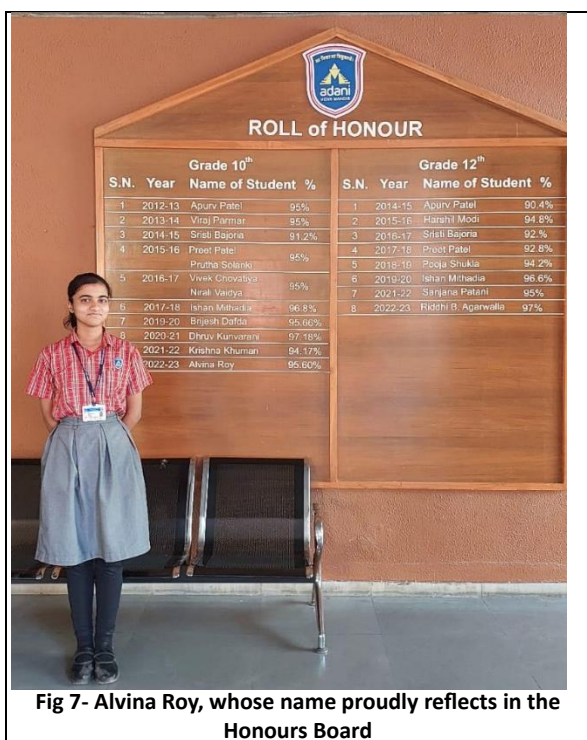
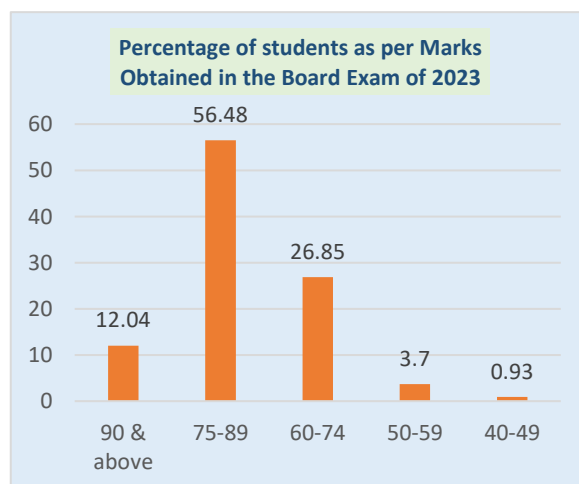


Fig 7- Alvina Roy, whose name proudly reflects in the Honours Board



As we can see from the above data, more than 95% of the children have obtained either or more than 60 percent at the end of their Class X Board Examination 2023. This has been possible due to the incessant efforts of the school teachers and others associated. The study had examined those factors also and has been discussed in the forthcoming sections.

C.2. Special Achievements:

AVMA students have showcased their talents in diverse areas. The Foreign Language Olympiad Association saw multiple distinctions achieved across various languages. The school's sports achievements include success in SGFI-District Level competitions, where students like Ms. Tanvi Antela and Ms. Marmi Jagani earned top positions. The students' artistic abilities shone through in the Rangostav competition, where they secured 27 Gold Medals, 17 Silver Medals, and 9 Bronze Medals at the National Level.

S.No.	Candidate Name	Class	Exam	Result
1	Fatima Pathan Mohammed Faruk	11	French Level - 1	Distinction
2	Nirali Parmar	12	German Level - 2	Distinction
3	Nirali Parmar	12	French Level - 1	Distinction
4	Janvi Parmar	12	French Level - 1	Distinction
5	Piya Mihir Vakil	5	French Level - 1	Distinction
6	Adrija Pal	12	French Level - 1	Distinction
7	Muskan Munnabhai Shaikh	7	French Level - 1	Distinction
8	Darshna Parsottambhai Chavda	7	French Level - 1	Distinction
9	Piyu Navneet Sompura	5	French Level - 1	Distinction
10	Khyati Panchal	5	French Level - 1	Distinction
11	Bhavanti Tejaskumar Dave	9	German Level - 1	Distinction
12	Meet Mahendra Kumar Patel	11	German Level - 1	Distinction

Book publication by Students

Name of the student	Class	Name of book
Vishwa Kadia	11 B	Emone with Emotion
Khanak Patel	10 A	Dreams- A path of Success
Jhanvi Parmar	11 C	Thoughts Of Young Minds
Leela Devkota	10 B	Life a Beautiful Mess
Vinayak Parmar	10 A	Terrors in Night

The school's commitment to fostering holistic development is evident in the success of its NCC cadets, with Cadet SGT Khevna Parmar representing Gujarat in the Republic Day Camp. AVMUN 1.0, organized by the students, showcased their ability to engage in global discussions on significant issues like World Peace.

AVMA takes pride in the accomplishments of its students beyond academics. Notable examples include **Brijesh Dafda** securing the first position in Gujarat in NEET 2022, **Khevna Parmar**, an NCC cadet, representing Gujarat in the Republic Day parade, and **Alvina Roy**, the national topper in the German Language Olympiad.

Several alumni are excelling in diverse fields, including architecture, chartered accountancy, engineering, medicine, and more. The school's commitment to nurturing well-rounded individuals is evident in the success stories of alumni like Ms. Honey Gupta, now a Research Scientist at BARC, and Ms. Khushi Contractor, working in the Cyber team of Adani Communications.

S. No	Name of the Student / Competition	Achievement
1	Brijesh Dafda, Batch 2022	Stood first in Gujarat in NEET 2022 under SC category; took admission in AIIMS, Jodhpur
2	Khevna Parmar, Class 10	Flying Cadet Sergeant (SGT) Khevna Parmar of No. 2 Gujarat Air Squadron NCC, Ahmedabad was the only Girl Cadet from Air Wing, Junior Division to represent Gujarat in this year's ceremonious Republic Day parade.
3	Greenmosphere Life Competition	Won 29 awards in Greenmosphere Life Competition in 12 categories - hosted by ATGL – 5000+ students from Ahmedabad participated.
4	Alvina Roy, Class XI	The National Topper in German Language Olympiad exam
5	PM YASASVI Scholarship 2022	18 students of class 9 and 11 from Adani Vidya Mandir, Ahmedabad received PM YASASVI Scholarship 2022, Rs.75,000/- for Class 9 and Rs, 1,25,000/- for Class 11.
6	Alvina Roy & Gitanshu Chavda, Class XI	Attending STEM Education Program in the Universities of China & Brazil, respectively. They received 100% scholarship from AFS.
7	Interaction with Hon. CM, Gujarat	Class 10 students of AVMA visited Gujarat Vidhan Sabha & interacted with Hon. Chief Minister and Education Minister on March 16, 2023
8	Amit Khokhar, AVMA Alumnus	Secured the first position in this year's NAEST (National Anveshika Experimental Skill Test)
9	Himanshu Barot, AVMA Alumnus	Selected by Metropolitan College of New York, Bronx New York University for pursuing master's in music on a scholarship of 52 Lakhs
10	Ms. Honey Gupta, AVMA Alumna (Daughter of a tea vendor)	Working as a Research Scientist in BARC
11	Siddharth Bhuva, AVMA Alumnus	Pursuing his studies at IIT, Mumbai
12	Ms Khushi Contractor (first Batch of AVMA)	A child with single mother is now working in the Cyber team of Adani Communications. She has secured the job on the basis of her own merit.
13	Bhargav Joshi	Son of an astrologer, of batch 2019 has successfully completed his B. Tech from Ganpat University and now employed with Grow EXX as Engineer with Annual Package of Rs.6 Lacs

14	Dhruv Kunvarani (2022-23)	Pursuing B.E in BITS PILANI
15	Krish Patel (2022-23)	Pursuing B.E in IIT Palakkad
16	Master Priyanshu (2022-23)	Pursuing B.E in IIT Palakkad

Awards and Recognitions:

The school's commitment to innovation, experiential learning, and social impact has garnered multiple awards.

S. No	Description	Awarded By
1	Recognized amongst the Top 10 schools of Ahmedabad	TIMES School Ranking 2022
2	Innovation in Global Collaborative Learning	NABET, QCI & Universal Mentors
3	5 Star Rating & A ++ in Experiential Learning	Centre for Educational Development, Delhi- 2022
4	Excellence in Coding, AI, Robotics & STEM Education	STEMPEDIA
5	Philanthropic School: Rank 1 in Gujarat	Education World, 2023
6	Social Impact Award: Rank 1 in Gujarat	Education World, 2023
7	AAAA rating	Careers 360, 2023
8	International Green School Award	Green Mentors presented at Cornell University, NYC on the sidelines of UN
9	Outstanding Social Service	NIIT University, 2023
10	Rank 1 in Holistic education Pan India	Education Today, 2023
11	EAT FIRST SCHOOL CERTIFICATION	FSSAI in association with Ministry of Health & Welfare
12	GS A Bronze award 2023	Global School Alliance
13	Ranked as 3 rd in Ahmedabad City and 2 nd in Ahmedabad West Zone	TIMES Schools Ranking Survey – 2023

Research Paper Publication By Students:

S. No	Topic	Published By/In
1	Effects of Alcohol Based Sanitisers on Living Cells and the Amelioration by Black Tea Extract	International Journal of All Research Education and Scientific Methods (IJARESM)
2	Techvolution: Unravelling the Impact of Technology on Human	Published in International Journal Of Creative Research Thoughts (IJCRT)

	Lifestyle and Strategies for Adaptation.	
3	Significant Climate Change, Mitigation Techniques and an Analysis of its impact on major Cities of India	Published in International Journal of Research and Analytical Reviews.
4	X-Rays in Space: Origin, Detection and Applications	Published in International Journal of All Research Education and Scientific Methods (IJARESM)
5	Efficient Method of Mechanical Footstep Power Generator	Published in International Journal of Creative Research thoughts (IJCRT)

C.3. Feedback of Parents and Stakeholders:

As an assessor, I met with several parents like Mr Ashif Maniar who is a bangle worker. This job though requires high craft does not pay well and hence the opportunity that his daughter Sunaina Maniar has got to study in AVMA, makes him emotional as he speaks with me.

Somewhat similar feelings were shared by Mr Ravindra Bais, father of Priyanshi Bais; Neha Arpit Parmar, mother of Parl Parmar or of Hiral Shah- mother of Moksha Shah.

They were not only happy with the education in the school but relieved that the transport is also being taken care of. They shared stories of how they wanted their other children to also get admission here but the rules are very strict. Deep down in their heart, it seemed that they were happy, that one of their children had got the opportunity to study in AVMA.



Fig 8-9: Parents whose wards study in AVMA; the pictures were taken during the interaction with them.

C.4. Student Guidance and Performance Monitoring Systems:

AVMA has developed an internal system to monitor student performance, adopt suitable measures to improve and then reflect and re-calibrate.

- AVMA has a written down Promotion and Grading Policy.
- It has a written Assessment Framework which considers Scholastic as well as Co-Scholastic areas.
- AVMA prepares a lesson plan for all subjects which helps in monitoring the progress of the said subject.

Students who are academically weak are provided supplementary support and then re-examined. A special committee looks into the performance of such students and teachers put in additional efforts.

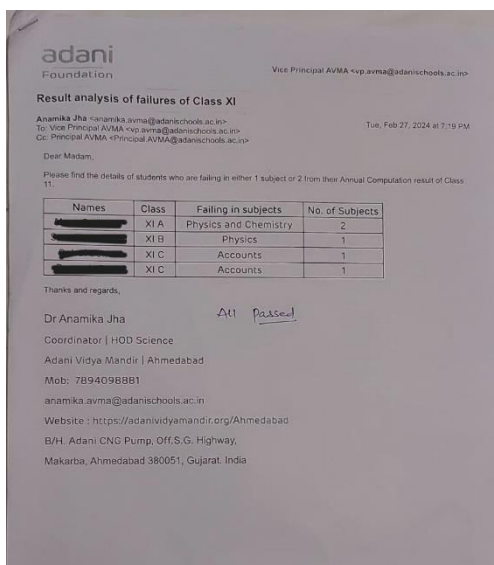


Fig 10: An internal mail highlighting the discussions on weak academic performances

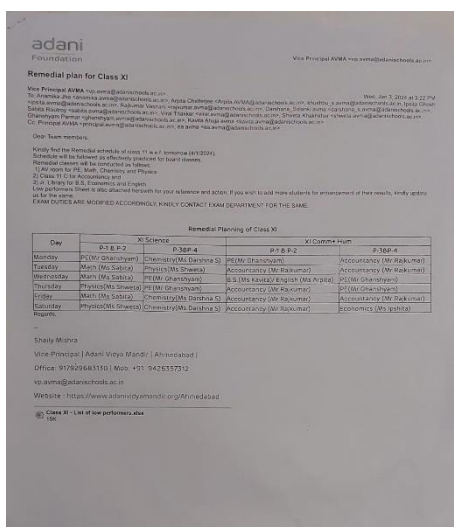


Fig 11: A snapshot on the Plan for Remedial classes targeting academically weak students

C.5. National Awards and Recognitions

S. No	Description	Awarded By
1	Recognized amongst the Top 3 schools in Ahmedabad (National Curriculum)	Times School Ranking 2023
2	Innovation in Global Collaborative Learning	NABET, QCI and Universal Mentors
3	5 Star Rating and A++ in Experiential Learning	Centre for Educational Development, Delhi-2022
4	Excellence in Coding, AI, Robotics and STEM Education	STEMPEDIA
5	Philanthropic School; Rank 1 in Gujarat	Education World, 2023
6	Social Impact Award: Rank 1 in Gujarat	Education World, 2023
7	AAAA Rating	Careers 360, 2023
8	Outstanding Social Service	NIIT University, 2023
9	Rank 1 in Holistic Education Pan India	Education Today, 2023
10	Eat First School Certification	FSSAI in association with Ministry of Health and Welfare

International Awards and Recognitions

S. No	Description	Awarded By
1	GSA Bronze Award 2023	Global School Alliance
2	International Green School Award	Green Mentors Presented at Cornell University NYC on the sidelines of the UN

D.1. Summary:**Goal:**

Provide Children from economically weaker sections, a place to learn and the space to grow.

Vision of AVMA

To be recognised as a school with a distinction, providing education to enable young children to become high achievers in chosen fields and responsible Indian citizens and to develop a global mind set that can build unique capabilities, which will transcend cultures in order to create value for self and society

Outcomes:

- Students with holistic development- academic and in extra & co curriculars.
- Students developed into true global and Indian citizens- caring for the people and environment.
- Bright and meritorious children from economically weaker sections are provided a strong platform to nurture and showcase their talents.

Outputs:

- No cost quality education provided to approx 1000 students every year with 120 new students.
- More than 50 dedicated minds (including 45 teaching staff) appointed to deliver the above.

Programmes and Activities:

- Conducting regular classes (8 periods of 40 minutes) daily for all students.
- Provide lunch, transport, uniform, books, shoes, stationery for all students across the year.
- Upkeep and maintain the infrastructure and campus which is spread over 6.5 acres comprising 28 classrooms, 7 labs, 2 libraries, a canteen with space for 500 students together.
- Promote students to participate in various internal and external workshops and seminars, sport competitions, write books, contribute to scientific journals etc.
- Training of teachers and providing them with a platform to imbibe new learnings and share their knowledge to external peers through conferences and workshops.
- Exchange Experience Programmes for students.

At a similar school in Ahmedabad the cost that each student would've had to pay would've been approx INR 1.2 lakhs p.a. For 957 students it would've come to INR 11.48 crores every year. This is a quick snap of the monetary input that the full free school has been providing for the last 12+ years.

F.1. Introduction to the Project:

Partners Associated:

The Varanasi Bio-Conversion Project (VBCP) of Gobardhan Varanasi Foundation SPV at Kanha Upvan-Shanshahpur- Varanasi- Uttar Pradesh is the official name of the project which in this document has been referred as the Bio Gas Project-Varanasi.

The two key partners to the project are: -

- i) Varanasi Nagar Nigam.
- ii) People's Response for India's Development & Empowerment (PRIDE) Confederation.

Adani Foundation is the principal coordinating agency while Adani Total Gas Ltd is the funding partner.

The cost of the Plant has been supported by ATGL while the land has been provided by the Nagar Nigam and Department of Animal Husbandry. The operational responsibility is on GVF and ATGL.

Key Highlights:

Work Initiated	September 2020
Inauguration	25 th October 2021; inaugurated by PM-Narendra Modi
Digestion Period-Bio Gas Production	15 th December 2021 to 15 th March 2022
Feedstock Capacity	90 TPD
Raw Bio Gas Production	7.5 TPD
CBG Production	3 TPD
Solid Bio Fertilizer Production	18 TPD
Liquid Bio Fertilizer Production	55 KLPD
Design Feedstock- Cow Dung: Napier Grass: Press Mud (40:30:20)	

Production Enhancement Plan:

After the initial few months, the production enhancement plan was executed in the later part of 2023 which required capital investment (supported by ATGL). Some of the technical features of this new enhancement plan are: -

- Enhanced & Dedicated Electricity Power Connection
- Reduce water requirement → reduce liquid disposal requirement → Increase feed

- Switch over to co-digestion (mix of Cow Dung + Press Mud+ Napier Grass) to boost productivity.
- Change of process → Split Hydrolysis and Methanogenesis in two digesters
- Enhance stirring → achieve much more uniformity boosting productivity
- Raise temperature → higher loading rate, higher reaction kinetics and higher yield!
- Upgradation of Raw Gas Purification System
- Slurry Management & Water Recycle
- Migrate the entire plant on SCADA platform → high degree of automation & control → high reliability



Fig 1 & 2: Glimpses of the Bio Gas Plant

F.2. Impact On Farmers:

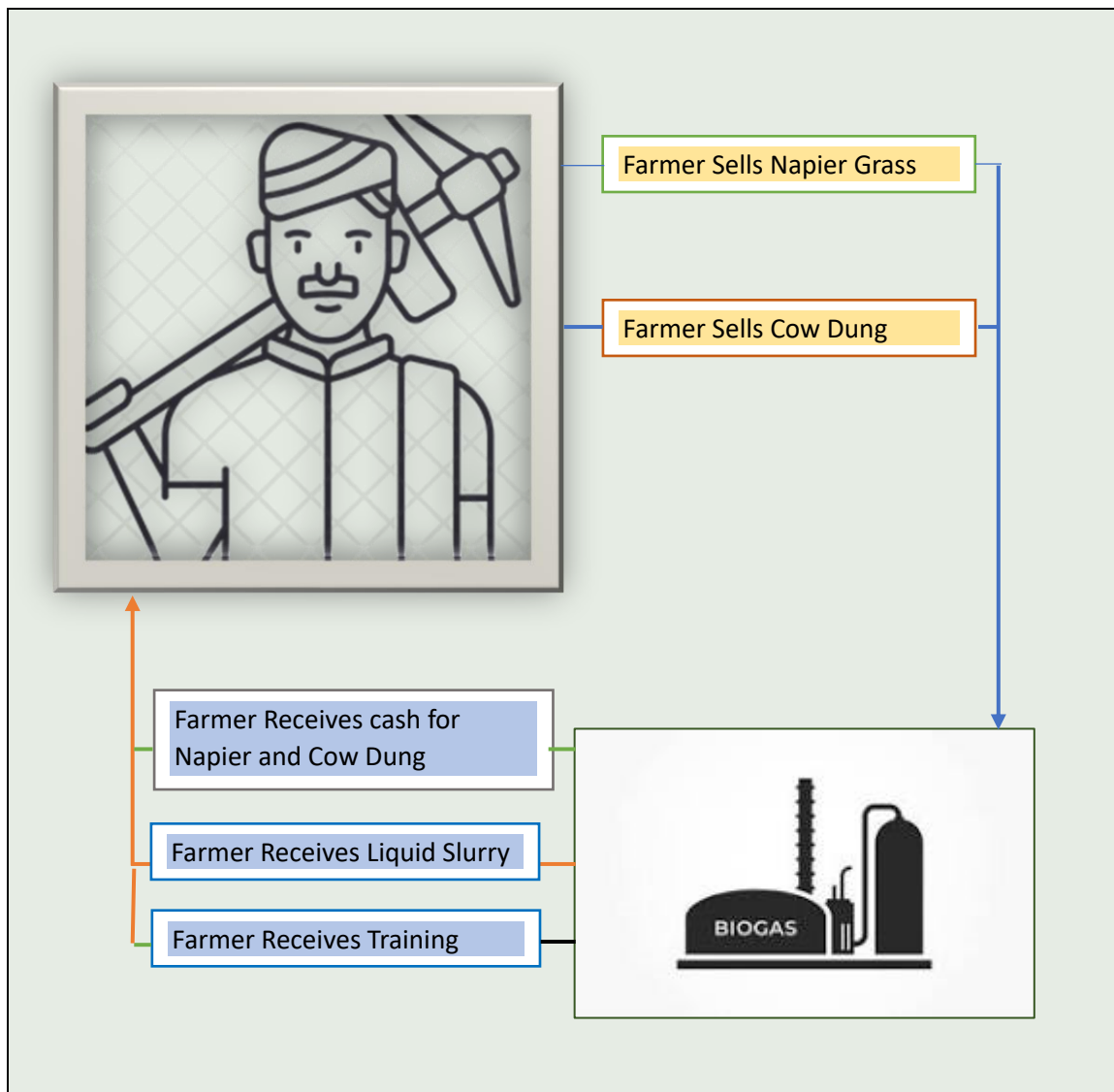


Fig 3- A figure demonstrating the farmer and his relationship with the Bio Gas Plant



Fig4-6: Glimpses of Farmers associated with the Bio Gas Plant.

Cost Benefit Analysis of a Farmer:**A: Direct Benefit**

No	Component	Description	Amount (INR)
1)	Cow Dung	@INR 0.25/kg- INR 0.45/-kg and INR 1.5k per trolley of 5 tons each. So, for 2 trolleys- the price is INR 3k/-. In 12 months- the farmer earns INR 36K. The opportunity cost for the cow dung used domestically will not be more than INR 2.4K- INR 3k. Hence net escalated return for farmer is INR 33k minimum.	33000/-
2)	Napier Grass	INR 1.5/kg rate offered to farmers. Total Price that a farmer can get for an average production of 1lakh kgs is INR 1.5 lakh. Cost of Input is INR 40K (cost of seed+ bund cost+water+fertiliser+sowing+transportation). So net income is INR 1.1 lakhs (INR 1.5 lakhs- INR 0.4 lakhs). Now, opportunity cost (if he had cultivated paddy and wheat) would be INR 50k. Therefore, incremental profit is INR 55k.	55000/-
TOTAL BENEFIT ACCRUED To FARMER			INR 88000/-

B: Indirect Benefit

No	Component	Description	Amount (INR)
1)	Slurry	100kl of slurry given at 'no cost' to farmers per day. Even at INR 1/kl, the total benefit to farmers annually would come to INR 2.7 crores (assuming 270 working days for the plant)	27000000/-

2)	Training	56 trainings conducted in 2023-24 (Till Feb 24) thus reaching out to 1630 farmers. If we assume INR 100/- as a monetary equivalent of the knowledge and information shared per farmer then the total value generated would be around INR 1.63 lakhs	163000/-
3)	Other benefits	There are other benefits from FOM and the increased availability of green fodder for the animals. These have not been evaluated here.	

Overall, it seems that the Bio Gas Plant is a boon for the local farmers. Few might argue that vegetables can give a similar return if not higher but the real fact is that not all farmers cultivate vegetables and that too in large tracts of land. It involves a shorter period but intense participation from the farmers which in many cases, the farmer struggle to provide. Thus Napier, if cultivated along with other crops or vegetables that the farmer was cultivating, can be a new prototype benefitting the environment, the animals and give the farmer a better social return on its investment.

F.3. Farmer Speak:



Benefitted from FOM used

Avinash Singh is a farmer from Shahanshahpur



Benefitted from Slurry

R.S Kushwaha is a banana farmer from Shahanshahpur



Benefitted from Napier

Bachcha Singh is a farmer from Shahanshahpur

F.4. Conclusion:

Adani Foundation is providing support for promotion & cultivation of Napier grass. It has purchased Napier Grass Stem from BAIF India & distributed 60,000 Napier grass stems amongst farmers. Currently, there is 100% growth of Napier Grass in adjoining farmlands.

GVF's requirement for allotment of land for BNH-11 Napier Grass cultivation in adjacent land of Animal Husbandry: GVF has signed agreement with Animal Husbandry department for supply of Napier grass at Rs 1.5 per kg. Animal Husbandry dept. has started cultivating Napier Grass on its 12.5 acres farmland; about 1 ton ng is collected for trail purpose.

An Agreement with Pradeep Phosphates Ltd for FOM offtake has been signed on 26^h June 2023 @Rs.4.0 per Kg. Offtake is yet to start. In a similar Agreement with Sarvodaya Compost Khad for FOM offtake in Granular form is in process. They will purchase@ Rs.6.67 per Kg. Conversion of FOM in granular form has commenced.

CBG produced is sold directly to vehicles through factory CBG Station. Balance CBG produced is sold to GAIL through mobile cascades under SATAT scheme.

It is evident that the Bio Gas plant, in spite of being in its early days has embarked on a journey which will take a few more years to see it bloom fully and cascade the benefits that it promises to unfold.

There is a lot of scope, some of which has already been explored and few will be done in the course of time. Women Self Help Groups or Cooperatives can be developed to sell FOM (post all necessary approvals) through small stalls in adjoining areas thus opening more avenues of income for farmers.

CBG is being sold directly through the outlet and women autorickshaw using the bio-gas as a fuel may be promoted.

The project is in concurrence with the provisions of Schedule VII, Section 135 of India Companies Act 2013 and also the Sustainable Development Goals (SDG 7, SDG 11 and SDG 17).

G. Annexure 1- Concurrence with Sustainable Development Goals



SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development"

Annexure 2: Images from the Field



Fig 10- The Assessor with Team Members from ATGL, AF and GVF



Fig 11- With Farmers at Shahanshapur



Fig 12 & 13- In discussion with local stakeholders