CONTRIBUTION OF DEI TO UN SUSTAINABLE DEVELOPMENT GOALS



Dayalbagh Educational Institute
(Deemed to be University)

Dayalbagh, Agra

Dayalbagh and the Concept of Better Worldliness

"Dayalbagh, at a distance from the City of Agra, is quiet and peaceful like a village and yet there is a perfect arrangement of sanitation and cleanliness as in cities. Students, scientists and devotees keep themselves peacefully engaged in their respective activities away from the turmoil of the world, and the unemployed, agriculturists and labourers get opportunities to earn their livelihood. Neither does wealth flow here, nor does anybody starve here; neither are there any big palaces and mansions here, nor are there any dilapidated huts either; neither is anyone great or big here, nor anyone small and insignificant, and if anybody here is more honored than others, it is he who works better or more than others. Dayalbagh belongs to every resident, while no resident has any kind of right to property in anything here. In this small place, Dayalbagh, where there is almost no illiterate person and where nobody leads a life of laziness and indolence, which is neither a village nor a town."

-Param Guru Huzur Mehtaji Maharaj (1956)

DEI Philosophy

DEI (Deemed to be University) follows a "lifestyle based on the trinity of:

- 1. Better Worldliness (Selfless-Service to Neighbouring Community)
- 2. Fatherhood of God and Brotherhood of Man, and
- 3. Sigma Six Q,V,A,I where V, Q and I refer respectively to ISM* (Consensus-Building via evolutionary Approach)-Valuation (e.g. AHP); Qualities (e.g. TQM); and Innovations; in Agriculture & Dairy, Renewable Energy (preferably), Women Empowerment via Evolutionary Education/Learning

 □ Living (e.g. Preaching
 □ Practicing Ultra-Transcendental-Meditation Practices {as Lacto- Vegetarians rather than Vegans (with Debatable Social Norms)} i.e. Static (Spiritual Potential Differences) to Ever-Growing Dynamic Equilibrium Interpretive Structural Modelling"
 - [XXXX Convocation, Director's Report, DEI, 2022, p1]

Dayalbagh and DEI symbolize community networks that focus on the overall well-being of people and the planet. They work in harmony to establish the vision of attaining an Eco-village status for the community, through the establishment of a Healthcare habitat with a focus on Sigma Six V-Q-I.

Ambrosial Words

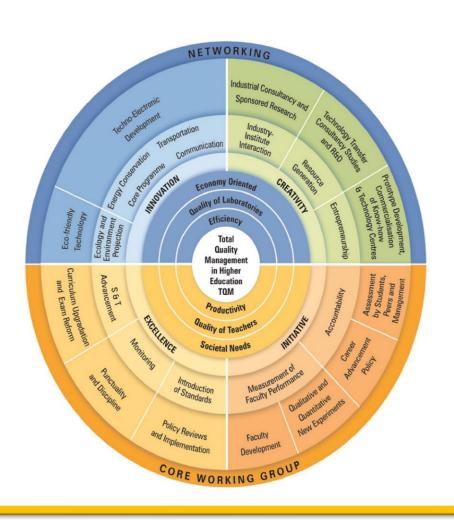
• "In the opinion of some people, we should have more money to spend to live good life. But in our lifestyle of Better Worldliness, we require to awaken our inner spiritual consciousness where there is the kingdom of our Inner True Self, rather than the rule of and authority of mind, intelligence and matter alone. This is the Dayalbagh way of life - Sigma Six Q. Sigma means that all these aspects or components have interaction amongst themselves, and the cumulative effect of all these many times more than their individual effect".

-Prof. P.S. Satsangi Sahab (2014)

DEI Education Policy- 1975

Physical, intellectual, emotional & ethical integration
Spirit of truthfulness, temperance, courage
Humility, simple living, selfless service & sacrifice
Scientific temper, training in practical science and technology
Willingness & capacity to work with one's hands
Respect for all beliefs and faiths
Creation of a spirit of "brotherhood of man" /Gender-free Cooperation

Conceptual Model of Total Quality Management (TQM) Framework of D.E.I.

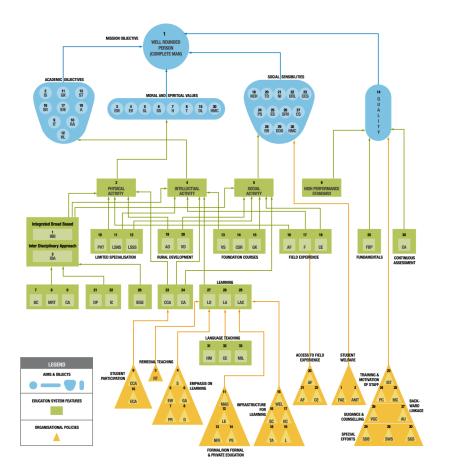


DEI's TQM approach in education involves:

- Achieving high quality
- Understanding how different segments of the educational process influence each other
- The ISM (overleaf) provides a systematic and comprehensive view of how the Aims & Objectives, Educational system and Organization of DEI are integrated in the Education Policy

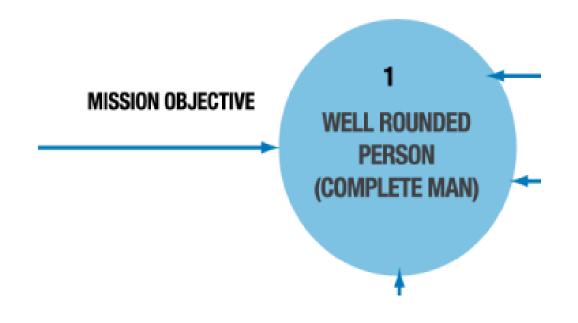
Interpretive Structural Model

Revered Prof. Prem Saran Satsangi Sahab created a detailed *Interpretive Structural Model* for the Educational System at DEI that shows how the Aims and Objectives are achieved through unique Educational System Features supported by its Organisational Policies.

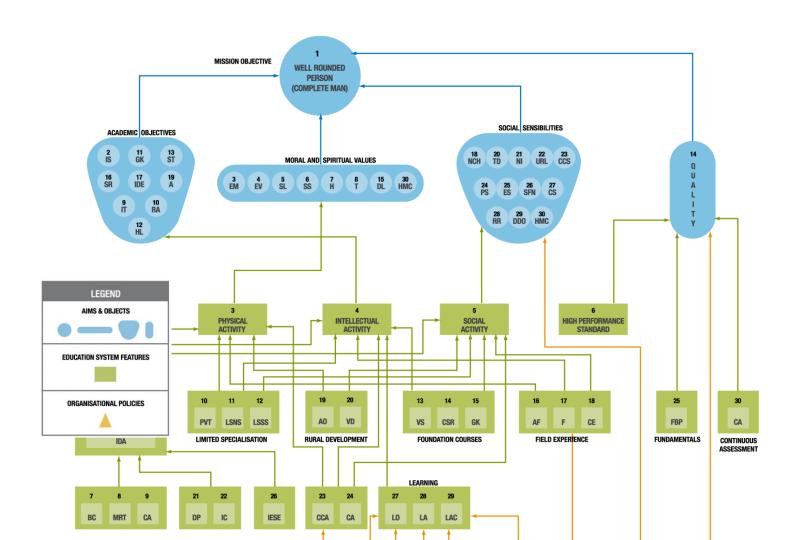


Mission Objective

The DEI Education Policy is an innovative, comprehensive, and flexible higher and technical education policy with the mission objective of evolving a complete man (total quality person) which conforms to the concept of total quality management and is geared for the transformation of India to knowledge society". а

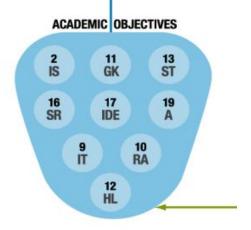


Aims and Objectives



Academic Objectives





Academic objectives include:

- 2. intellectual strength,
- 11. general knowledge,
- 13. a scientific temper,
- 16. a spirit of self-reliance,
- 17. an interdisciplinary outlook,
- 19. aptitude
- 9. independent thinking,
- 10. reasoning ability, and
- 12. a habit of life-long learning.

Moral and Spiritual Values







MORAL AND SPIRITUAL VALUES

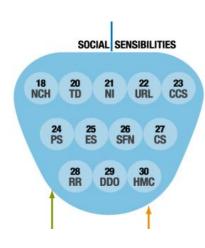
3 4 5 6 7 8 15 30 EM SL SS H T DL HMC

Moral and Spiritual Values include

- 3. emotional maturity,
- 4. ethical values,
- 5. simple-living,
- 6. selfless-service,
- 7. humility,
- 8. truthfulness,
- 15. dignity of labour, and
- 30. high moral character.

Social Sensibilities



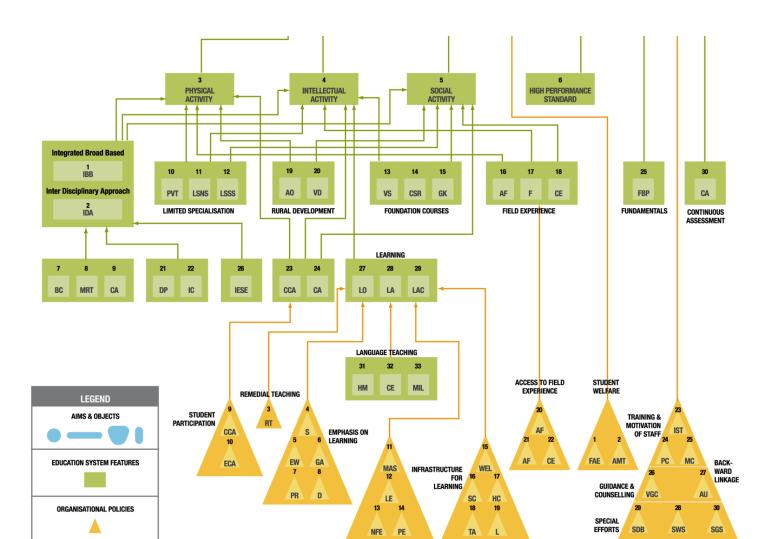


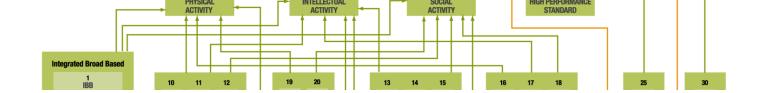
Social sensibilities include

- 18. an appreciation for our national culture and heritage,
- 20. tolerance for diversity,
- 21. national integration,
- 22. understanding of rural life,
- 23. classless and casteless society,
- 24. political system
- 25. Economic system
- 26. Social forces and needs
- 27. civic sense,
- 28. a respect for the rights of others, and
- 29. sense of duty and the need to discharge obligations.
- 30. high moral character.

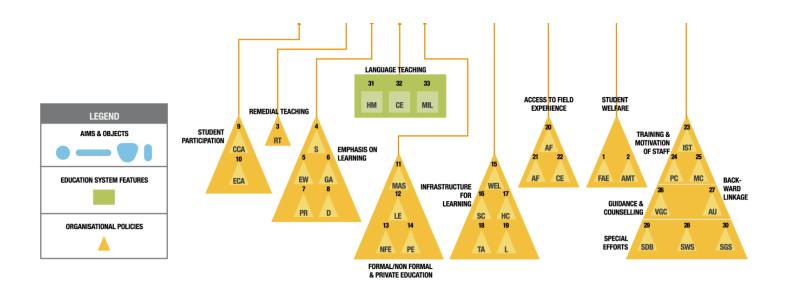


Education System Features





Organizational Policies



Synergy between DEI and the Dayalbagh way of life



In alignment with the Sustainable Development Goals, DEI practices a **Systems** Approach to Sustainability referred to as the Sigma Six Q,V,A,I Approach which weaves together six basic threads, and emphasizes the importance of research in improving the QUALITY (Q) of life.

Realizing the SDGs for All: Ensuring Inclusiveness and Equality for Every Person, Everywhere

Leaving no one behind lies in the heart of 2030 Agenda for Sustainable Development. Ensuring inclusion and equality for every individual, as well as recognizing that the dignity of the person is fundamental, and by pledging that all goals and objectives are achieved for all nations, peoples and societies.

UN Sustainable Development Goals address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, peace and justice.

Implementing Inclusivity -The 17 SDGs are grouped into 5 themes: People, Planet, Prosperity, Peace, Partnerships



CONCEPTS

Fatherhood of god and brotherhood of man

- Inclusivity, Resilience
- Equality and Equity
- Sustainability, Sharing, Sacrifice, and Service

Better worldliness

- Balanced lifestyle(Physical, Mental and Spiritual Development)
- Minimalism
- Moral, Ethical, Civic, Social Values

Sigma Six Q, V, A, I (Qualities, Values, Attributes, and Innovations)

- Women Empowerment (all opportunities and Choices including self defence)
- Quality Values- based Education
- Renewable Energy and Innovations
- Air and Water quality (WHO norms)
- Health and Human Values
- Agroecology and Precision Farming

Reaching the last, the least, the lowest, and the lost

1 NO POVERTY TATAM









Sweets

JUGGAD OUTLETS

ZERO HUNGER







2 ZERO HUNGER



- DEI Dairy and Agriculture
- Agroecology Initiatives –Anupam Upvan /Biodiversity parks /Agricultural land
- Free Nutrition Supplement to –
- i) 3 weeks to 8 years
- ii) Nursery and Primary Schools
- iii) Neighbouring Village children from 6 months to 15 years (Medical Camp)
- DEI Quantum Jugaad: Innovative, Flexible, Economical Solutions
- Vegetables sale counters
- Solar agriculture farming and greenhouse
- Department of Food and Home
 Science



Precision agriculture,
modern farming
practices, Lacto
vegetarian Diet to help
fulfil need to feed 11
billion people by 2030









GOOD HEALTH AND WELL-BEING



- Sustainable Healthcare Habitat
- Integrated Health Care System AYUSH
- DEI Medical and Rural Assistant Camp
- Free 24/7 Ambulance Service
- Lacto -Vegetarians campus
- Tree Plantation Biodiversity Parks
- Center for Yoga and Meditation
- Free Nutrition Supplement
- Sports indoor and out door games
- PT and Self Defence Training
- Core courses
- Social Service
- Continuous monitoring of children's health (Regular Health Check Ups)
- Restricted movement of private vehicles
- Regular monitoring of air and water quality (according to world standard)
- Biodiversity Parks & Green House -
- Eco-Friendly Bamboo structures- classrooms and crèche
- Misting

Air Quality





E - Vehicles

Electric Cart

Solar Hybrid Vehicle

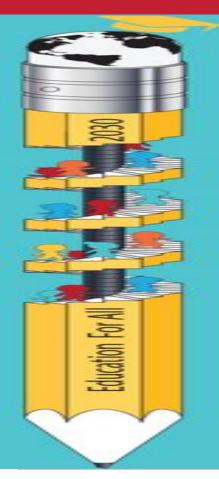


Agriculture Solar Farm DEI, IIT Roorkee, University of Tromso, Norway

Misting and Fountains used to settle air pollutants and enhance cooling

4 QUALITY EDUCATION



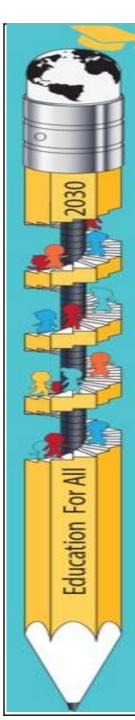


EQUAL ACCESS TO QUALITY EDUCATION

- Unique1975 DEI Education Policy
- TQM and ISM Advisory Committee on Education
- Group Discussions and Seminars
- Work Experience Courses
- Continuous Evaluation with Daily Home Assignments
- Core courses and Value Education
- Multiple Entry and Exit
- Double durations (7 years program to 4 years program)
- Horizontal Transitions
- Lateral Entry

EQUAL ACCESS TO AFFORDABLE TECHNICAL AND VOCATIONAL EDUCATION

- Education to the last, the least, the lowest, and the lost
- Earn while you learn and learn while you earn scheme
- DEI Frugal and Quantum Jugaad innovation
- MoocsKANF-BHARAT
- Connecting REZ to SEZ to international markets
- e-DEI-World Wide Web (Not for profit)
- 478±1 Information Centers
- Projects and Patents
- PMKVY (Pradhan Mantri Kaushal Vikas Yojna)
- Industry Ready B.Voc and M.Voc Courses



ELIMINATE DISCRIMINATION IN EDUCATION

- ICT-enabled education with 478±1 centres
- Co-operative Education / Field Immersion Program
- 360° transitions
- Non-denominational prayer and uniform
- Environmental Conservation & Biodiversity
- The Triumvirate of Education
- Trans-disciplinary, Multidisciplinary Courses
- Women Empowerment, Reservation for Scheduled classes
- Summer and Winter Camp
- Co-Curricular activities
- Social Relevant Projects

UNIVERSAL LITERACY AND NUMERACY

- Evolutionary superman scheme
- Camps for neighborhood population/Medical Camps
- Partnerships with other Institutions or Societies
- Atal Tinkering Lab (ATL)
- Religion and Science
- Co-op training and Internships
- Trans-disciplinary research
- Career Counselling and Global Alumni Network
- Student Exchange Program (HKU and Edinburgh)
- Village Exposure –Skill India













Experiential element in course: 7 Days Sustainability challenge



Skill Development Courses at DEI For Sustainable Future



Language Learning-A holistic Approach

- Sanskrit-chitra vithika
- Puppetry, masks, expressive stage, arena commentatorsinger or sutradhara, acrobatic feats, symbolic gestures, folk music and dance

(i-c-n-c-) TALL : A Multilingual Digital Lab cum Interdisciplinary Research Centre







- (i-c-n-c-) TALL at DEI is one such unique lab cum research centre which integrates technology, Psychology, Religious Studies, consciousness, language and literature.
- The interactive language learning lessons beautifully present the integration of language, music and visual arts.
- Adopting the Holistic approach of Systems Philosophy, the lab cum research centre includes Indian as well as foreign languages.

5 GENDER EQUALITY









- Co –Education
- Women Education with more than 67% of women enrolment
- Scientific temperament
- Self-Defence and Health Care Training
- Nano-Enterprises leading to Self-Help groups activities in Jugaad, food processing, dairy, sculpture, and painting, stitching
- Earn while you Learn and Learn while you earn schemes





6 CLEAN WATER AND SANITATION







6 CLEAN WATER AND SANITATION





Three year 8, Voc., Program: Water, Saultation and Solid Waste Management



- Recycling biomass into Organic Manure
- Water Purification
- Water Conservation
- Rainwater Harvesting
- Organic Farming
- Waste to Wealth
- Courses on Sanitation and Solid Waste Management
- Biodiversity Parks
- River Water Filtration
- Liquid waste
- E-waste Garden
- 150 CUM Bio-gas plant
- Lacto-Vegetarian rather than Veganlow water foot prints
- Sustainable Healthcare Habitat
- Dip Irrigation

7 AFFORDABLE AND CLEAN ENERGY











Renewable Energy Technologies

The Institute has a 33/11 kV sub-station within its campus for utility supply. It has a 900 kWp Solar power plant to meet its day-to-day energy demand. 13 Distributed Roof-Top Solar PV power Plants aggregating to a total of 879.2 kWp have been installed till 2021.











AFFORDABLE AND CLEAN ENERGY



- Renewable Energy
- DEI Smart Micro Grid
- Hybrid AC/DC Microgrid with Solar-Agriculture Farm
- Integration of diverse renewable energy sources
- Solar Power
- Electric Vehicle
- 150 CUM Bio-gas plant



REZ- SEZ Household Entrepreneurial model



ATMA or Apparel and Toy Making Association provides women and youth an opportunity to make soft toys.

<u>ADvNAM</u> or (Agricultural and Dairy Nano-processing of Multi Products), and AAM or the (Automation and Multi skilling garage) were other innovative experiments in this sphere. The concept of REZ to SEZ was formulated to provide global vantage access to rural entrepreneurial ventures.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE









DAYALBAGH EDUCATIONAL INSTITUTE

USIC
100kWp, 240VDC, 900Ah
40kWp, 240VDC, 700Ah
Faculty of Engineering
Faculty of Education
Faculty of Soc. Sc.

Faculty of Engineering Faculty of Education 150kWp, 360VDC, 700Ah 40kWp, 240VDC, 700Ah

0VDC, 700Ah 40kWp, 240VDC, 700Ah

Fig 1: Satellite view of the institute showing six of the seven existing plants and their coverage

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE





- Innovations in Technology have reduced the digital divide.
- Extensive Virtual Classroom Platforms
- Frugal and Quantum Jugaad Innovation
- MoocsKENE-BHARAT
- Synchronous Mode of education
- Partnerships with other Institutions or Societies
- Atal Tinkering Lab (ATL)
- Trans-disciplinary research
- DEI Smart Micro Grid
- Hybrid AC/DC Microgrid with Solar-Agricu Farm
- Techno Shanti Niketan biodiversity parks
- Biodiversity Parks and Medicinal Garden
- Electric Vehicle
- Bamboo structures
- Ramanuj Machine

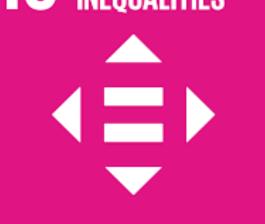




DAYALBAGH EDUCATIONAL INSTITUTE USIC 100kWp, 240VDC, 900Ah Faculty of Arts 40kWp, 240VDC, 700Ah Faculty of Engineering 150kWp, 360VDC, 700Ah Faculty of Soc. Sc. 40kWp, 240VDC, 700Ah Faculty of Soc. Sc. 40kWp, 240VDC, 700Ah

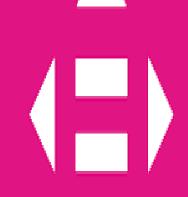


10 REDUCED INEQUALITIES





REDUCED INEQUALITIES



- Affordable & Accessible Education for All
- Non-denominational prayer and uniform
- Comparative study of Religion and Culture
- Self -Défense Training
- Trans-disciplinary, Multidisciplinary
 Courses
- Gender and Social Diversity, Women Empowerment





Sigma Six Q,V,A,I



SUSTAINABLE CITIES AND COMMUNITIES



- Water Purification and Water Conservation, Rainwater Harvesting
- Waste to Wealth
- Solar Power
- Mist Spray
- Regular Air and water quality checks
- Smart Power Management and Generation
- Paper Recycling Plant
- Responsible disposal of waste
- Composting of dry leaf fall
- Utilization of dairy products into agriculture
- Agriculture provides fodder for dairy animals and humans in a symbiotic relationship
- Sustainable building materials used
- Building design utilizes courtyards which provides natural sunlight reducing requirement of artificial light





RESPONSIBLE 2 CONSUMPTION **AND PRODUCTION**











"Dayalbagh has been an agroecological community for over a century now. Agroecology is an umbrella term that emphasizes a community — based approach to issues of sustainability, economic diversification, social values, food and nutrition, and fair trade practices. The Dayalbagh way of living appears to be an example of how these goals can most effectively be met, if the world adopts minimalism alongside these regenerative approaches rooted in Agroecology"

RESPONSIBLE CONSUMPTION AND PRODUCTION



- Rural Development and Agriculture Operation
- Circular economy
- DEI Dairy and agriculture
- Frugal and Quantum Jugaad Innovation
- Simple living in harmony with Nature and practicing economy in all activities
- Plastic free, drug free, alcohol free campus prescribing Lacto vegetarian food



Dairy Technology













University of Tromso, Norway

pollutants and enhance cooling

13 CLIMATE ACTION







- Tree Plantation in collaboration with NGOs SPHEEHA
- Smart Power Management and Generation
- Solar-Agriculture farm in our Dairy Campus
- Integration of diverse renewable energy
- Irrigation with sewage treatment plant water
- Plastic-Free Campus
- Animal Free agriculture
- Waste segregation and responsible disposal
- Climate action is Integrated into courses like
 MBA Guest Lectures by Climate Reality Leaders
- Sustainability challenges given to students to experience eco-friendly life style
- No air conditioners on campus unless required by a laboratory
- Cycling/walking in encouraged





Water conservation efforts at <u>Dayalbagh</u> and DEI

- Supply of water at fixed times
- Strong advise not to waste water
- Water conservation message is delivered through NSS social activities
- Plantation of indigenous water efficient trees
- Encouragement of research into new and innovative technologies like river water filtration, rain water harvesting and recycling of sewage water
- Roof top water harvesting and flood water harvesting facilities have been created in the residential and institutional buildings
- Recharging of old dry wells



Water from the Sewage Treatment Plant (STP) is used to irrigate parks and gardens of DEI such as the Biodiversity Park (Near Seminar Complex), Botanical Garden (Near Science Faculty), Shanti Nagar Park, Herbal Garden (within Dairy Complex), Fruit and Rose Garden (Jatropha land), Phalbagh (at Dayalbagh) and a Biodiversity Park at REI Boys Intermediate College, to name a few.

Water Treatment Plant

To recycle wastewater, Jal Nigam,
Agra, has set up a Sewage
Treatment Plant (STP) on
Dayalbagh land with an agreement
of providing 6.5 cusecs (15.89
MLD) water to Dayalbagh for
irrigation purposes.

 In terms of additional sources of water, the <u>Davalbagh</u> Educational Institute (D.E.I.) had been sanctioned a project on River Bank Filteration (RBF) by the Department of Science & Technology. The site for RBF is at Chandmari-ka-Tila (near Jatropha field), Dayalbagh close to the river Yamuna. The RBF setup has three large tanks connected one after the other, two control rooms, and solar panel room for the clean and sustainable working of the unit. The riverbank filtrate water is currently being supplied to Bahadurpur village and is expected to be supplied to DEI in the near future.

River Bank Filtration Plant

15 LIFE ON LAND

PEACE, JUSTICE AND STRONG INSTITUTIONS













PEACE, JUSTICE AND STRONG INSTITUTIONS



(a) Cultural Activities (b) Social Engagement in the Natural Environment



(c) Selfless Social Service (d) Healthcare and Self-defense Training

- Better Worldliness
- Fatherhood of God and Brotherhood of Man
- Minimalism
- Comparative study of Religion and
- National and DEI days celebrations
- National Social Service Scheme
- Complete Person
- Value Education
- Superman Scheme
- Aristocratic Democracy
- NCC/NSS/Scouting and Guidance
- Non-denominational Prayer and Uniform

17 PARTNERSHIPS FOR THE GOALS













Memoranda of Understanding & International Linkages

	National	74
	International	22
	Industry partnership	52
	Hospitals	05
	TOTAL	151











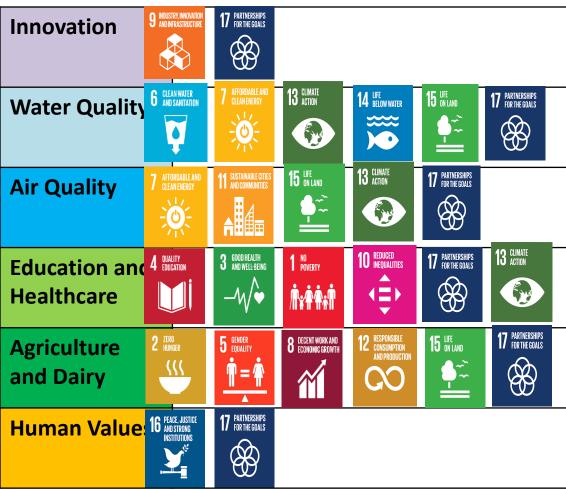
PARTNERSHIPS FOR THE GOALS



- Collaborations and MoUs, Joint workshops and Webinars
- Dayalbagh Science of Consciousness (DSC)
- School of Languages
- Partnerships with other Institutions or Societies
- Co-op training and internships
- Trans-disciplinary research
- Career Counselling and Global Alumni Network
- Student Exchange Program (HKU and Edinburgh)
- Children's Recreation
- Connecting REZ to SEZ to international markets
- Charitable societies
- Day Boarding
- Cultural Partnerships
- STP Plant :PPP

SYNERGIES BETWEEN SIGMA SIX QVA AND SDGs





Innovation @DEI



- DEI Education Policy 1975
- Advisory Committee on Education
- Flexible Student Centric System
- Dynamic Model with an Integrated Systems Approach
- Waste Nothing Lifestyle
- AIR QUALITY Monitoring & Assessment
- Mist spray
- Water conservation and Water purification
- ICT-enabled education with 479±1 centres
- 360 degrees transition
- Evolutionary superman scheme
- MoocsKENE-BHARAT
- Earn while you learn schemes
- Frugal and Quantum Jugaad innovation
- Connecting REZ to SEZ to international markets
- Student Exchange Program (HKU and Edinburgh)

Value Education Uniform

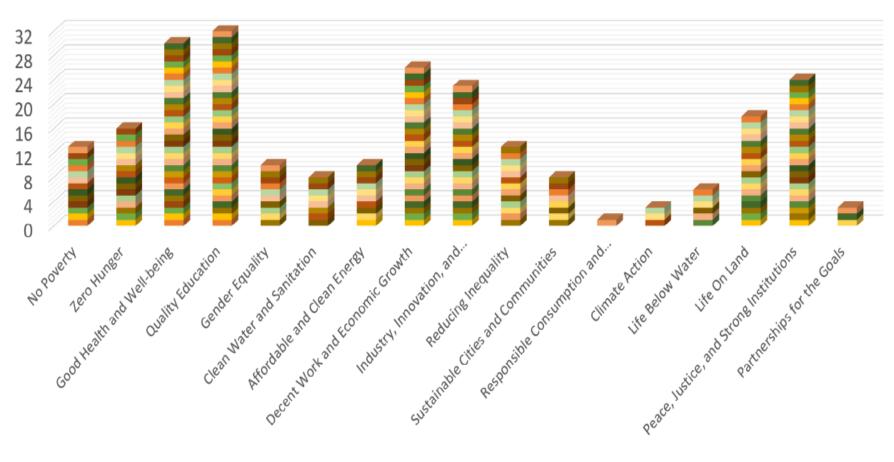
- Non-Denomination Prayer
- Rural and Tribal Empowerment
- Agriculture Operations and Dairy
- Work Experience and Core Courses
- Seminar and Group Discussion
- Environment Conscious
- Triple Sigma Six QVA Model
- The Ramanujan Machine
- Dayalbagh Science of Consciousness
- Medical Camps
- i-c-n-c TALL
- Women Empowerment through Integration of Skills with Entrepreneurship
- Environmental Conservation & Biodiversity

Contribution of DEI to UN Sustainable Development Goals

The various activities and programs implemented at Dayalbagh Educational Institute also effectively contribute to the attainment of UN sustainable development goals. Our model of education accommodates all asymmetries and biases. Equity in outcome is achieved in terms of becoming a quality global citizen, ambassador of consensus building.

Believing in frugal living with minimalism, and respecting wellbeing is natural among students. DEI system of holistic education prepares the students for life with a strong belief and adherence to healthy democratic practices, pluralism, inclusivity and service of mankind.

NUMBER OF ACTIVITIES OF DEI CONTRIBUTING TOWARDS THE UN SDGS

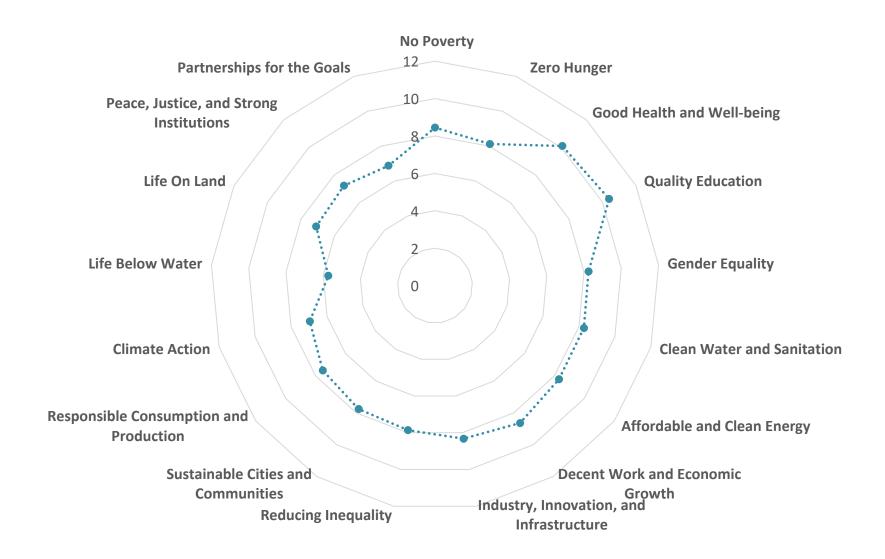


- Rural and tribal empowerment
- Free Medical and Assistance Camp
- i-c-n-c TALL
- Open Day
- Waste to Wealth Day
- Community Kitchen
- Tinkering Labs

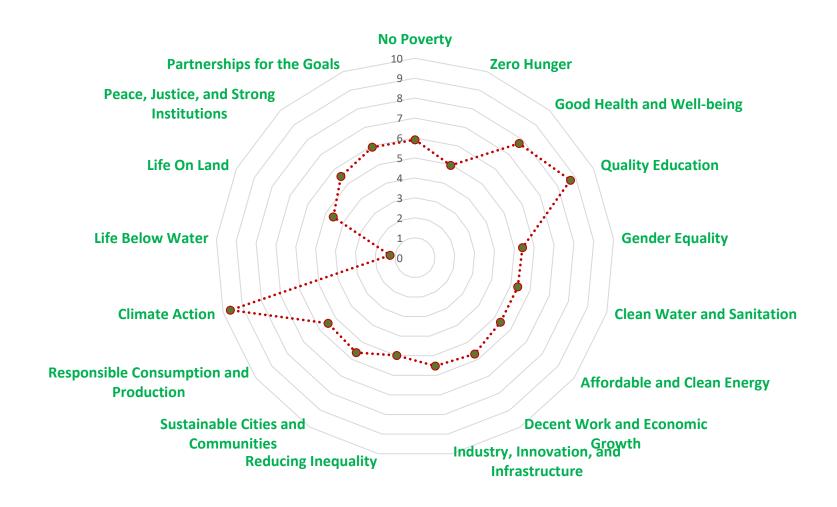
- Quantum Jugaad: Innovative, Flexible, Economical Solutions
- Evolutionary Superman Scheme
- School of Languages
- Qualities and Values Day
- Security and Surveillance
- Social Service
- Innovation and Incubation

- Agriculture Operations
- Labs on Land
- Day Boarding School
- Research Divisions
- National Days
- Earn-while-you-learn
- Consciousness Studies

CONTRIBUTION OF DEI TO UN SDGS BEFORE COVID -19



CONTRIBUTION OF DEI TO UN SDGS AFTER COVID -19



In Conclusion

Dayalbagh Educational Institute believes in peaceful coexistence, with an aim of common good on this common planet, and in living a life of dignity and higher purpose, social trust and better health, security and well-being.

Thanks