



CIN No.: U74999UR2014NPL001313

HaritaDhara Research Development and Education Foundation

(Established under Section 8 of the Indian Companies Act, 2013)

Ref. No. : HRDEF/UNGC/NB/COE2024

Dated : 22-01-2024

COMMUNICATION ON ENGAGEMENT (COE)

Period Covered by this Communication on Engagement

From: January 2022 to January 2024

To our Stakeholders:

I am pleased to confirm that HaritaDhara Research Development and Education Foundation (HRDEF) reaffirms its support to the United Nations Global Compact and its Ten Principles in the areas of Human Rights, Labour, Environment and Anti-Corruption. This is our Communication on Engagement with the United Nations Global Compact. We welcome feedback on its contents.

In this Communication on Engagement, we describe the actions that our organization has taken to support the UN Global Compact and its Principles as suggested for an organization like ours. We also commit to sharing this information with our stakeholders using our primary channels of communication.

Yours Sincerely,

Vijay Kumar

President



PROTECT PRITHVI.



HARITIMA IT.



ALANKRIT IT.

Regd. Office : 10 Vishnu Road, Near D.B.S. College, Dehradun

Phone : 0135-2710616, 9412989631, 9456550149, E-mail : info@hrdef.org, URL : www.hrdef.org

<https://web.facebook.com/HRDEFIndia> <https://twitter.com/HRDEFIndia> +91- 9412989631

HaritaDhara Research Development and Education Foundation

हरितधरा रिसर्च डेवलपमेंट एंड एजुकेशन फाउंडेशन (HRDEF)

Website: <https://www.hrdef.org>

About HRDEF

HaritaDhara Research Development and Education Foundation (HRDEF) established as non-profit social enterprise under the Companies Act 2013 as section 8 company in 2014 and in Special Consultative status with the United Nations Economic and Social Council since 2018 (UN ECOSOC). HRDEF inculcate and motivates students for science, technology, engineering, arts and design, mathematics (STEAM) for 21st Century sustainable living through intelligent interactive learning systems. HRDEF committed to establish processes aimed at educating for sustainable development (SDGs), management of environment, water, energy, waste, climate change, and transport issues through involving children, youth, and elders using ICT. HRDEF promotes natural, land resource management, sustainable agriculture, bio-diversity enrichment, and disaster management using educational inventiveness for smart cities and villages.

We conduct teachers, student's development programs for capacity building on ICT, SDGs, climate change, disasters, STEAM, and work towards Sustainability, SDGs, Green, Swachh, and Sustainable Lifestyle (LiFE). We are addressing issue of quality learning and sustainable development through ICT, hands-on activities in a curriculum based way supported by research inputs and driven by new learning paradigm based on cognitive science, neuroscience, AI, makers approach,

Why Us

As per data from various studies and our experience we witnessed that quality education and life skills (21st century skills) are ignored in mainstream education. To bridge this gap, we are providing quality skillful education, problem solving, creativity, communication, design and computing. Building capacity for citizenship, values and Sustainable Development Goals (SDGs) among school students and youth so that they will be able to tackle future challenges. We are using games, project, and hands-on approached for interactive learning. We took alternative education as drive for betterment, and counseled low-income mothers to provide education to their children especially daughters for better life under our GOAL program. We hold sessions for mothers, daughters in the slum areas about digital literacy as new avenues for future.

- Through our initiatives such as Hands-on Learning, Game based learning we are teaching learners in an interactive way to understand complex concepts.
- Through GOAL, our students, youth become motivated, equipped with self-confidence to excel in life and will be able to create sustainable future.
- To empower girls trained in our GOAL program, we started learning center in under-served community so that they teach kids from class 1 to 8 and soon able to earn livelihood.
- We organized workshops, lectures to spearhead education, climate change, SDGs, citizenship, values, STEAM, sustainability for students, teachers, and community.
- We visit to community of low-income group, schools and spreading message through workshops and talks.

- Mentoring opportunities from Experts, Youth become trainer for their community, Create more Change Makers,

Our Impact

Students, Teachers, Parents, youth, and Community members are direct impact holders, Government departments, professionals, policy makers, and businesses are indirect impacted.

Awards, Achievements, External Assessment, Evaluation, and Partnerships

- Pratt & Whitney, NAAEE Global E-STEM Excellence Award, 2022
- MoU with Samagra Shiksha, Dept. of School Education, Govt. of Uttarakhand, 2022-2025, 2019-20
- Anant Bhaskar Garg, Director got Global Teacher Excellence Award 2022 from App Inventor Foundation, USA for MIT App Inventor Training
- Meritorious Club Award (2021-22, 23) to NavUrja Sanchar, a unit of HRDEF **for VIPNET Science Clubs (Vigyan Prasar), Dept. of Science and Technology, Govt. of India**
- Er. Anant Bhaskar Garg, Director selected as Regional Mentor of Change, Uttarakhand, Niti Aayog, GoI, 2021
- Mentor for the Online Climate Reality Project Leader Training, in 2020
- Selected as not-profit partner for Online Volunteering with United Nations Volunteering (UNV)
- Accredited as organization having Special Consultative status with United Nations Economic and Social Council (UN ECOSOC) in 2018
- MoU with Department of School Education, Govt. of Uttarakhand in 2019
- Since 2016, HRDEF has been committed to the United Nations (UN) Global Compact
- Registered, verified with GuideStar India GSN Number - 6573 and Certified with Transparency key in 2018
- Gold Award (2019), Silver (2017, 2018) to NavUrja Sanchar, a unit of HRDEF **for VIPNET Science Clubs (Vigyan Prasar), Dept. of Science and Technology, Govt. of India**
- Er. Anant Bhaskar Garg, Director selected as Mentor of Change, Niti Aayog, GoI | Microsoft Innovative Educator Expert (MIEE) 2018, 2019, 2020
- Dr. Manisha Agarwal, Director got Matre Shakti Manroma Dobriyal Sharma award in 2016 for her efforts for women, girls' empowerment, and digital literacy
- Fellowship from UNESCO MGIEP for TECH 2017, 2018 for Research Work Presentation and written blogs for SDSN-Youth, Together 2030
- Member of Sustainable Development and Solutions Network -Youth (SDSN-Youth) an organization supported by United Nations
- Member of international professional bodies IUCN CEC, UNEP DHI, The Climate Reality Project, Together 2030,
- Partner of Technovation, Designathon, Global Goals Jam, TED-Ed Club, Google CS First – Global Organizations
- HundrED Ambassador 2019, Finland | Sustainability in Science Centers Fellowship, ASU, USA, 2017
- Dr. Manisha Agarwal Paper selected in NCSTC 9th National Teachers Congress, DST, GoI

- Principals Conclave on SDGs and Climate change education training with **TCPF and UNESCO, New Delhi in 2017**
- The Climate Reality Project Leaders 2015 – Trained by **Former Vice-President Al Gore, USA**
- Sustainable Smart Earth through Harita Week – Month project is building awareness and motivation among school, college students, community, professionals through organizing various activities in the April month celebrated as Earth month, and Harita week spread around the year comprising workshop, training and other events based on Education, Technology, and Sustainability.
- Workshops on Role of Cultural and Traditional Knowledge for Sustainable Development, Energy Conservation, Best Practices in Waste Management and Climate Change, Medicinal plants in our daily life, Disaster Risk Reduction
- Programs on Fun way of Learning through Hands-on, Game based approach on STEAM
- Organized various competitions for school students, and lectures to promote UN themes on Science for Environmental and Climate Literacy, Importance of Medicinal Plants in our Daily Life, Forest Fire, Climate Change, **Sustainable Development Goals (SDGs)**, Renewable energy, water, waste management, effects of climate change on biodiversity, role of engineering in sustainable development, and energy conservation. Students from Uttarakhand, U.P., H.P., M.P., Haryana, Punjab, Chhattisgarh, actively participated in various competitions.
- **Pledge drive for Green, Clean Smart Dehradun 4220 people** undertook the same
- GOAL learning Centres for alternative education and computer training programme to under-served women and children to empower them with technology
- Our workshops were replicated by our participants in their respective institutions for larger learning and impact
- Our GOAL program students earning their livelihood, enrolled in colleges, and doing jobs
- We feel very motivated that we are able to initiate some change in our community

Description of Actions

HaritaDhara Research Development and Education Foundation (HRDEF) during the past two year participated and organized several events. In events and actions supported the 10 key principles of commitment to the UN Global Compact. We are creating awareness through organizing workshops, lectures and interacting with stakeholders such as policy makers, professionals, teachers, students. We cover topics such as SDGs, Climate Change, Sustainable living-water, energy and forest management, Sustainable lifestyle, plantation drive and associated with other institutions. We partnered with UNEP-DHI for Eco Challenge for IWRM on River Basin.

We partnered with The Climate Project Foundation, Climate Reality Project, SDSN Youth, VIPNET, IUCN CEC #NatureforAll for Teachers and youth training program. We are spreading message of climate change, biodiversity, energy, water, waste, and pollution through STEAM in different schools. HRDEF GyanTree TED-Ed club and NavUrja Sanchar facilities are helping students and youth towards skills development. We impart computer training to underserved women and children to empower them with technology so that they understand present system and be part of it. Under this program, we are teaching them at their places, home for effective learning besides teaching students at our facility. Acquaint stakeholders about their rights; inform them about SDG and techniques to improve their understanding of local issues. We also ask business to actively address environmental risks and opportunities,

and have efforts underway with business in the areas of climate, water and food; focus on social dimension of corporate sustainability mainly women's empowerment, children, indigenous peoples, people with special needs through education and in implementing the SDGs.

Publications:

Published short paper and presentation in SHWID workshop during INTERACT 2023 on [Sustainable Innovations for Lifestyle, SDGs, and Greening Education](#) on 29th Aug., 2023

Published a Blog: [Advancing E-STEM in India Through Games, Challenges, and Technology](#) in June, 2023
UN HLPF Side Event 2022: <https://tinyurl.com/2y64w5sp>
2023: <https://tinyurl.com/yw3s3f6a>

App Inventor Foundation Article: [Teacher Empowers STEM Changemakers in Rural India](#) in Nov., 2022
Apps @ Google Play Store: <https://tinyurl.com/4z7s2pk7>
<https://www.hrdef.org/blog2>

Paper presentation on [Decade of Action, SDGs and Building Sustainability through Educational Games, and Hands-on Activities](#) during the 11th International Conference on Sustainable Development (IC-SD), Sep., 2023

Nov., 2023, 9th Foundation celebration

June-July, 2023: Summer Camp, Coding, Mobile app development conducted by Prayanshi, Youth Coordinator, HRDEF

25-03-2023: Design-Thon Event on Biodiversity with 22 Countries

20 Mar., 2023: UN Water Conference Side Event on Decade of Water Action, 2030 Agenda, and Sustainability implementation through Educational Games and Hands-on Activities

17-03-2023: Workshop on World Consumer Rights, Climate Action, and Sustainable Development at the Kanya Gurukul Campus,

24-28 Jan., 2023 Learning Planet Festival 2023 with UNESCO conducted events on Lifestyle for Environment Sustainability for 2030 Agenda

21-24 Jan., 2023 Exhibitor at the India International Science Festival, 2022 at Bhopal in Games and Toys event

06-01-2023: Selected for Phase II of Call for LiFE 2022 by NITI Aayog on HaritaDhara Innovations for Sustainable Lifestyle, SDGs, and Sustainability

16-11-2022: Career, Sustainability, Tinkering, Climate Action, and SDGs Workshops in Schools during Green Week
HaritaDhara Research Development and Education Foundation (HRDEF) organized its Fifteenth "Harita Week" from 08 Nov. to 16 Nov., 2022 and 8th Foundation Day. Various events, workshops, training organized during this week with an objective to popularize climate action, environment, UN SDGs, Sustainable Development, Sustainability among students, youth, and community members. HRDEF organized online workshop on "Managing a Project" in which Ms. Dipti Minda from Salesforce interacted with GOAL program students. Students showcased their skills, innovations, creativity through drama, dances, songs, role play and talked about their career aspiration what they want to become. HRDEF's objective is to enhance learners 21st Century skills, Technological skills, personality development, and knowledge on Sustainable Development. Prize distribution conducted for various activities during the year 2021-22.

Anant Bhaskar Garg, Director, HRDEF presented the Annual Report in which main points were: 1. Games, Hands-on activities, coding, AI, Maker, Design, Computing, and Project based learning are main thrust areas for our programs; 2. Free Mobile App Development Program for Girls (Technovation) from Dec. 2021 to Apr.,2022; Design thinking workshop (Design-a-thon) 3. UN STI Side event in May, 2022; Stockholm + 50 Associated event in June, 2022; 4. UN HLPF Side event on Building Back Better with Games, Hands-on Activities for Sustainability and 2030 Agenda, Exhibition in July 2022; 5. MoU with Samagra Shiksha, Dept. of School Education, Govt. of Uttarakhand for conducting Harita Innovations, 21st Century Skills, Disasters Risk Reduction (DRR), Environment Sustainability, climate action, Sustainable School in July, 2022; 6. Pratt & Whitney, NAAEE E-STEM award in Oct., 2022. Dr. Manisha conducted, coordinated these programs effectively with small quiz, questions, with various surprises for learners. Because of contributions, untiring support from Vijay, Suman, Sushma, Apoorve, Prayanshi, Parents, students, Sweetie, Roopa, Shivani, Kajal, Ruchi, and all other students made these events memorable.

24 Hours of Reality: Empowering Youth for Disasters Reduction and Sustainable Development

Uttarakhand and nearby states such as Himachal Pradesh, are Himalayan hilly region facing several climate issues such as landslides, floods, cloud bursts, and storms. Due to this, there was loss of human, animal life, damage to property, biodiversity, and surroundings. This year during monsoon season between June to Sep. we experienced several such extreme events. People were stocked because of road blocked thus tourist faced lots of problems and other extreme situations during Char Dham Yatra (Annual Pilgrimage route). HaritaDhara Research Development and Education Foundation (HRDEF) conducting various workshops, training programs with an objective to popularize climate action, disasters reduction, environment pollution, UN SDGs, and sustainable development among students, youth, and community members. Thus, HRDEF with support from Samagra Shiksha, Dept. of School Education, Govt. of Uttarakhand conducting Harita Innovations, 21st Century Skills, Disasters Risk Reduction (DRR), Environment Sustainability, climate change, Sustainable School, medicinal plants, water, waste, energy management, plastic reduction, 3R (Reduce, Reuse, Recycle), programs in schools of Dehradun and Tehri district. HRDEF using games, hands-on, problem, project-based activities for implementing these programs and better understanding by youth.

Anant Bhaskar Garg, Climate Reality Mentor, and Dr. Manisha Agarwal, Director(s), HRDEF both of them Climate Reality Leaders also visited several schools and conducted workshops on above topics. HRDEF released apps on Prevent Disasters, Youth4SDGs developed by its youth coordinator Prayanshi. Thus, youth are able to understand climate issues, willing to take small steps towards climate action with the help of HRDEF, and hope for Sustainable Future.

17-08-2022: Harita Innovations, Climate Action, Environment Sustainability Workshops in Schools during Green Week

HaritaDhara Research Development and Education Foundation (HRDEF) organized its Fourteenth “Harita Week” from 10 Aug. to 17 Aug., 2022 through conducting various workshops during the week. Various events, workshops, training organized during this week with an objective to popularize climate action, environment, UN SDGs, and sustainable development among students, youth, and community members.

Anant Bhaskar Garg and Dr. Manisha Agarwal, Directors, HRDEF visited following schools GUPS Dalanwala, GUPS Aaraghar, and GGHS Hathibadkala during this harita week, and District Education Office, New Tehri. Around 200 students and 20 teachers actively participated in these programs. HRDEF conducted Azadi Ka Amrit Mahotsav celebration on 15th Aug., 2022 in its campus in which students of its GOAL (GyanDhara) project showcased their creativity through various programs such as dance, songs, speech related to patriot theme and freedom movement. Harita innovations program mentored and guided by Shri Banshidhar Tiwari Ji, SPD, Dr. Mukul Kumar Sati ji, Shri Lalit Mohan Chamola ji, and valuable contributions from B. P. Mandoli ji, Atresh Sayana ji, M. Joshi ji, Archana Gupta ji, Neha Rawat ji, Jyoti Negi ji, Dr. Bharti Nautiyal ji, Naveen Semwal ji, S. S. Negi ji, Geeta Rana ji, Mohd. Nashir ji, Ranjana Bisht ji, Naim Fatima ji, R. S. Rawat ji, and specially support from Vijay Kumar ji, Suman Lata ji, Sushma ji, Prayanshi. Efforts from all students made these events memorable.

Teacher Excellence Award 2022 by App Inventor Foundation for MIT App Inventor Training

Students from under-served background learned about artificial intelligence (AI), computational, design thinking, and how to use Smartphone effectively for better learning, safety through sensors and apps. Anant Bhaskar Garg conducted sessions on AI in our daily life and shared his experience of working with AI and other intelligent information system. HRDEF

conducted sessions with students and their mother for learning some computational skill through playing games. Parents of GOAL program students informed about performance of their ward and very happy the way they are learning. Prayanshi talked about Sustainable Development Goals (SDGs) and students, youth role towards sustainable development. Students gave performances through dance, singing, and storytelling during techfest. Rinki and Durga taught paper crafts making and students of GyanDhara (GOAL) program celebrated eco-friendly green deepawali. Shri Vijay Kumar (Retd.) Chief Engineer delivered valedictory speech. Events are coordinated by Dr. Manisha and with efforts from Suman, Kajal, Neeraj, Vijay, Manisha, Sita, Deepak, Rohit, Danish, Sweety, and Shiyani this week was memorable.

UN High Level Political Forum on Sustainable Development (HLPF) 2022 Virtual Exhibition during 5th July to 15th July, 2022 on Building Back Better with Games, Hands-on Activities for Sustainability and 2030 Agenda having webpage with images, audios, short videos as well as PDFs and links to documents for different SDGs 4, 5, 14, 15, 17 and possible 3D VR

UN High Level Political Forum on Sustainable Development (HLPF) 2022 Side Event on 11th July, 2022 on Building Back Better with Games, Hands-on Activities for Sustainability and 2030 Agenda

10-06-2022: Harita Week for Only One Earth and Sustainable Action

HaritaDhara Research Development and Education Foundation (HRDEF) organized their 13th Harita (Green) week from 2nd June to 10 June, 2022. Today, on the occasion of the national Herbs and Spices Day, members of HaritaDhara reused old plastic bottles for growing of herbal plants such as Lemon Grass, Coriander, Mint, ajwain leaves, and pipli. Besides this, students of our GOAL program came to know about medicinal properties of spices used in our home's kitchen using medicinal plants game and interaction with Dr. Manisha, Ex. FRI researcher. HRDEF announced results of 52th UN Earth Day events conducted during the Harita month on 8th June to mark the occasion of World Ocean Day in a webinar with international participants on a theme **Only One Earth and Sustainable Action. During Harita month 1270 students from 20 schools from India, abroad participated and showcased their creativity, innovation.**

HRDEF implemented Eco-Bricks and recycle of plastic bottles, polythene, chips package to save carbon emission and released apps on Prevent Disasters, Youth4SDGs developed by Prayanshi. **HRDEF organized an associated event during the Stockholm plus 50 on 2nd June on theme Only One Earth and celebrated WED on 5th June. Members of HRDEF talked about New Education Policy, Hands-on, Project based learning.** Students of our GOAL program showed their creativity and innovation using waste plastics for water filter, sprinkler, and plant pot for restoring different ecosystems using STEAM in Designathon event. **NavUrja Sanchar, a VIPNET club of HRDEF selected under Top 100 meritorious clubs of 2021, India by Vigyan Prasar, DST, GoI.** These events are successful because of support from Principals, Teachers, Parents, Students, and HRDEF's members, A. K. Biyani, and special efforts from students.



Virtual Side Event

7th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

Building Back Better with Games, Hands-on Activities, STI for Sustainability and 2030 Agenda



4th May, 2022, Wednesday



9:00 AM – 10:00 AM (New York Time)

06:30 – 07:30 PM (New Delhi Time)



Online Event

Registration: please visit www.hrdef.org/stievent-registration

For further queries email us at info@hrdef.org



HaritaDhara Research Development and Education Foundation (HRDEF)

04-05-2022: UN STI Forum Side Event on Building Back Better with Games, Hands-on Activities, STI for Sustainability and 2030 Agenda

22-4-2022: Workshops on Only One Earth, Invest in Our Earth

Today, on the occasion of the 52th **United Nations (UN) Earth Day**, HaritaDhara Research Development and Education Foundation (HRDEF) organized several workshops, activities. HRDEF celebrating April month as Harita (Green) month for last 8 years in which this year HRDEF organized National Level Painting, Essay, Film, Quiz competitions. Main purpose of these events is to create awareness and capacity building among students for Sustainable Development, SDGs, Climate Change, and Environmental issues.

HRDEF participated in an international Design competition Designathon on 9th April in which students of our GOAL program showed their creativity and innovation using waste plastics for water filter, sprinkler, plant pot for restoring different ecosystems using STEAM.

HRDEF celebrated Dr. Amedekar Anniversary and Baishakhi through promotion of plantation of trees. NavUrja Sanchar, a VIPNET club of HRDEF selected under first 100 meritorious clubs of India. These events are successful because of efforts and support from Mrs. Premlata Bourai, Principal GGIC, Rajpur Road, Mrs. Vinita Martin, Principal, CNI Girls, Premlata Rawat, Ruchi, Anshul Gupta, Sandra Paul, Sushma, Prayanshi, and special efforts from students.

Mobile App Development Course with Technovation (Nov., 2022 - April 2023) @GGIC Lakhibagh, GGIC Rajpur Road

We are thankful to Dr. Sarita Bhatt, Principal GGIC, Lakhibagh, Mrs. Savitri Rayal, Mrs. Hemwanti Sati, Mrs. Neelam Mishra for their support. More than 150 girls participated in the course and learn about coding and App development.

Online workshops/webinars 2022-2024

Measurement of Outcomes

The Programs, projects, events, and actions taken by HaritaDhara Research Development and Education Foundation are mentioned in our actions where through capacity building programs, trainings, workshops, lectures to school students, youth, teachers, professionals, and community members created awareness on Sustainable Development Goals (SDGs), Climate Change, STEAM, Disasters Risk Reduction, corporate social responsibility, and principles of the UN Global Compact.

Advancing and promoting UN Global Compact principles among our collaborators and stakeholders focusing sustainability and in implementing the SDGs through education.