



## Memorandum of Understanding

Between



**Indian Institute of Sustainability, Gujarat University, Ahmedabad,  
Gujarat, India**

And



**DRDO-Defence Institute of High Altitude Research (DIHAR), Leh, UT  
Ladakh-194101, India**



**THIS MEMORANDUM OF UNDERSTANDING (MOU) IS EXECUTED TODAY ON 8<sup>th</sup>  
NOVEMBER BY AND BETWEEN**

**'Indian Institute of Sustainability'**, is an institution set up by Gujarat University. Gujarat University is set up under the Gujarat University Act, 1949, located at Navarangpura, Ahmedabad, Gujarat, WHEREAS the INDIAN INSTITUTE OF SUSTAINABILITY (hereinafter be referred to as 'IIS') is an institution set up by Gujarat university under the Gujarat University Act, 1949, that was established in 2021. The Indian Institute of Sustainability (IIS), which aims to be recognised as one of its kind sustainability institute, operating at the frontiers of practice, research and developing an environmentally concerned and socially responsible society. The mission of IIS is to train and educate the citizens in tune with a sustainable society and a sustainable planet by bringing best practices for air, water, soil, space, climate, forest, environment, natural resources, forestry, smart cities, agriculture, SDGs, human rights, and sustainable public policy. The Indian Institute of Sustainability promotes excellence through innovative and applied research and impacting the world through policy, practice, training and continuous engagement.

**AND**

**DRDO-Defence Institute of High Altitude Research (DIHAR)** works on cold arid agro-animal technologies, non-conventional energy, Bio-Engineering, and Engineering in trans-Himalayan region extreme climate for the development of high altitude-based life sciences and bio-engineering technologies for armed forces and civil societies. DIHAR was initially established as a Field Research laboratory (FRL) in 1962 to help the troops with green and fresh plant and animal-origin food. The laboratory works on screening and identifying medicinal and aromatic plants, indigenous livestock resources, animal sciences, horticulture, vegetable science, engineering, and greenhouse technologies for high-altitude and cold desert areas.

**WHEREAS** The Head of the two academic institutions, namely Dr. OP Chaurasia, Director of DIHAR and the Vice-Chancellor Gujrat University, namely Prof. Himanshu A Pandya, are desirous that the two universities shall work together in a wide variety of fields to achieve the lofty goals of sustainability in the sphere of environment and share experiences, research studies etc. The two universities join their hands through the medium of this MOU.

**PURPOSE & SCOPE**

This MOU is intended to build mutual cooperation between the IIS and DRDO-Defence Institute of High Altitude Research (DIHAR) so as to learn, assimilate and develop further on the core strengths, experience and institutional objectives of the respective parties in





the public interest of the advancement of training, research, studies, policy analysis, policy advice, consultancy, monitoring, evaluation, system development and technology development in issues and areas related to the development of the cooperation, cooperatives, SHG, SHG federation, FPOs, the agriculture, animal husbandry, farm livelihood, non-farm livelihood, innovation, entrepreneurship, tribal development, rural development, skill development, climate change, water resource management, Bio-waste decomposition & management, value chain development, organic supply chain, natural farming, women empowerment, sustainability, financial inclusion, policy formation, marketing linkage, development of farmers, system development, strategy, training & capacity building, human resources, food processing, SMART Farming, IT, IoT, AI, start-ups, and effluent treatment. This MoU will also help in research for enhancement of productivity of fresh vegetable and animal origin food; agro-animal disease investigation and control measures; exploitation of high altitude plant wealth for herbal products formulation; up-gradation of native livestock germplasm, semi-permafrost based conservation of elite plant germplasm; post-harvest technology for agro-horticultural crops; improvised hatching technology, nanomaterials based technology for improvement of crop & animal productivity, and extension activities to improve lab-to-land communication and allied sectors and to the holistic approach on sustainable development of communities, cooperatives and livelihood; and any area for the common interest for both the institutions.

#### **RESPONSIBILITIES UNDER THIS MOU OF BOTH PARTIES**

- a. Collaborate with each other in the advancement of systems development, technology development, innovation, entrepreneurship and action research in issues and areas related to the development of the livelihood, farm livelihood, non-farm livelihood, tribal development, climate change, water resource management, rural development, the agriculture, animal husbandry and allied activities, sustainability, waste management, organic supply chain, natural farming, financial inclusion, human resources, food processing, SMART Farming, IT, IoT, AI, start-ups, for productivity enhancement of fresh vegetable and animal origin food; agro-animal disease investigation and control measures; exploitation of high altitude plant wealth for herbal products formulation; up-gradation of native livestock germplasm, semi-permafrost based conservation of elite plant germplasm; post-harvest technology for agro-horticultural crops; improvised hatching technology, nanomaterials based technology for improvement of crop & animal productivity, and extension activities to improve lab-to-land communication and allied sectors and to the holistic approach on sustainable development.
- b. Facilitate operations of each other, connected with the advancement of training, action research, studies, consultancy, monitoring, evaluation systems development and technology development in issues and areas related to the development of the communities, agriculture, animal husbandry and allied activities, livelihood, farm livelihood, non-farm livelihood, tribal development, climate change, rural



development, sustainability, water resource management, waste management, organic supply chain, natural farming, financial inclusion, and allied sectors and to the holistic approach on sustainable development.

- c. Collaborate to organise national and international institution-building activities, training activities, research activities, studies, seminars, conferences, and workshops, which are supported by any of the party.
- d. Collaborate on exploitation of high-altitude agro-animal resources, horticulture, agriculture, and plant wealth for food and herbal product development, up-gradation of native livestock germplasm, semi-permafrost based conservation of elite plant germplasm; post-harvest technology for agro-horticultural crops; Non-conventional Energy, and any other mutually agreed areas of research.
- e. Collaborate on the matters pertaining basic research for genome sequencing for flora and fauna of Ladakh region, indigenous livestock resources, crops, and medicinal plant and start ups for locals for the indigenous products.
- f. Collaborate on training and capacity building of locals, youths, students, retired army personnel's, etc.
- g. Share experiences in the respective areas of activities areas related to the development of the livelihood, farm livelihood, non-farm livelihood, tribal development, skill development, innovation & entrepreneurship, climate change, rural development, agriculture, animal husbandry and allied activities, sustainability, waste management, organic supply chain, natural farming, financial inclusion, marketing linkage, supply chain and allied sectors and to the holistic approach on sustainable development.
- a. Support each other for collaboration with its partners in advancement of systems development, technology development, innovation, entrepreneurship and action research in issues and areas related to the development of the livelihood, farm livelihood, non-farm livelihood, tribal development, skill development, innovation & entrepreneurship, climate change, rural development, the agriculture, animal husbandry and allied activities, sustainability, waste management, organic supply chain, natural farming, financial inclusion and allied sectors and to the holistic approach on sustainable development.
- b. Support each other for the usage of facilities including those connected with the advancement of training, action research, studies, consultancy, monitoring, evaluation systems development and technology development in issues and areas





related to the development of the communities, livelihood, farm livelihood, non-farm livelihood, tribal development, skill development, innovation & entrepreneurship, climate change, rural development, the agriculture, animal husbandry and allied activities, sustainability, waste management, organic supply chain, natural farming, financial inclusion and allied sectors and to the holistic approach on sustainable development.

- c. Support each other in communication with and access for promotion of livelihood, farm-livelihood, non-farm livelihood, tribal development, women empowerment, rural development, sustainability, financial inclusion and allied sectors etc.
- d. Support each other on mutually written agreed projects/program/assignments for collaboration with external agencies, NGOs, CSR organisations, government departments, global organisations, World Bank, BMGF, FAO, ADB, GIZ, MASHAV, NABARD, NCDC, NAFED, SFAC, NCUI, APMC, Boards etc. in the advancement of training, action research, studies, policy analysis, policy advice, consultancy, monitoring, evaluation, system development and technology development in issues and areas related to the development of the SHG, SHG federation, cooperatives, the agriculture, animal husbandry and allied activities, farm livelihood, non-farm livelihood, innovation, entrepreneurship, tribal development, rural development, skill development, climate change, value chain development, organic supply chain, natural farming, women empowerment, sustainability, waste management, financial inclusion, policy formation and allied sectors and to the holistic approach on sustainable development of communities as partner.
- e. Collaborate any other issues which are linked with cooperative and enhancement of livelihood and societal benefits.
- f. Collaborate to exchange adjunct professorship to support each other to access facilities of each other.
- g. Collaborate to exchange for PhD guide and PhD co-guide for support of each other research scholar research assignments.
- h. Indian Institute of Sustainability (IIS) will recognize Faculties/Scientists of the DIHAR (DRDO) as Full Supervisor/Guide as recommended by its Director in accordance with the Indian Institute of Sustainability (IIS) or Gujarat University rules and regulations for guiding students working for the said training/degree programs/research project. The faculties/scientist of DIHAR (DRDO) will work as adjunct faculty/visiting faculty with due permission/recommendation of the competent authority from Indian Institute of Sustainability (IIS) Or Gujarat University.