

[०८] मा. प्र. संचालक, भूशास्त्र संकुल यांनी Groundwater Surveys and Development Agency (GSDA), Pune यांचेसोबत सामंजस्य करार करण्याकरिता तयार केलेला कराराचा मसूदा मान्यतेस्तव.

(टिपणी: मा. प्र. संचालक, भूशास्त्र संकुल यांनी दि. १०/०४/२०१९ रोजीच्या पत्रान्वये Groundwater Surveys and Development Agency (GSDA), Pune यांचेसोबत सामंजस्य करार करण्याकरिता सामंजस्य कराराचा मसूदा तयार केला असून, सदर करारामुळे पुण्यश्लोक अहिल्यादेवी होळकर सोलापूर विद्यापीठातील शैक्षणिक, संशोधन आणि प्रशिक्षण कार्यक्रमांचे विद्यार्थ्यांकरिता आणि अध्यापकांकरिता आयोजन करता येऊ शकेल. या करारामुळे प्रस्तुत विद्यापीठातील विद्यार्थ्यांना व संशोधन करणाऱ्या विद्यार्थ्यांना बऱ्याच प्रमाणात फायदा होणार आहे. सबब, सदर सामंजस्य कराराच्या मसूद्यास मान्यता प्रदान करावी, अशी विनंती केली आहे.

आस्थापना विभागाने मा. कुलगुरु महोदयांच्या आदेशान्वये, दि.२४/०४/२०१९ रोजीच्या अंतर्गत कार्यालयीन टिपणी अन्वये प्रस्तुत विद्यापीठातील विधी व सल्लागार विभागास सदर सामंजस्य कराराच्या मसूद्याची पडताळणी करून अभिप्राय आस्थापना विभागास पाठविण्याबाबत कळविण्यात आले होते.

यानुषंगाने मा. कायदा अधिकारी यांनी दि. २९/०४/२०१९ रोजी प्रस्तावित करारनाम्यामधील कायदेशीर बाबी तपासण्यात आलेल्या असून, पुढील कार्यवाही करण्यात यावी, असे आस्थापना विभागास कळविले आहे.

सबब, मा. प्र. संचालक, भूशास्त्र संकुल यांनी Groundwater Surveys and Development Agency (GSDA), Pune यांचेसोबत सामंजस्य करार करण्याकरिता तयार केलेला कराराचा मसूदा मान्यतेस्तव).

ठराव: मा. प्र. संचालक, भूशास्त्र संकुल यांनी Groundwater Surveys and Development Agency (GSDA), Pune यांचेसोबत सामंजस्य करार करण्याकरिता तयार केलेला कराराचा मसूद्यास दुरुस्तीसह मान्यता देण्यात आली.



MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU)
is entered into on

BY AND BETWEEN

Groundwater Surveys and Development Agency (GSDA)
a constituent organization of
Govt. of Maharashtra, India
Represented by

The Director
Having its office at Pune
(Hereinafter referred to as 'GSDA')

AND

Punyashlok Ahilyadevi Holkar Solapur University,
Solapur, Maharashtra, India

Represented by

The Vice Chancellor
Having its office at Kegaon, Solapur, Maharashtra
(Hereinafter referred to as the 'University')

1. Preamble

The collaborations between universities and other organizations is the need of the day to fulfill mutual, societal and national interests. This also helps to increase the academic standards and reduce the technology gap between academic deliberations in the universities and technological developments in the institutes and industries. The university-industry collaboration provide platform to train the students to meet the requirements of the user groups. There is an urgent need to establish close collaboration between universities and industries to provide solutions to the general problems like:

- difficulty faced by graduates in the job market,
- unsuitability of traditional courses for research, organizational and industrial purpose,
- insensitiveness or ignorance of academics about specific problems facing by organizations,
- not keeping pace with the introduction of new technologies and the scope for universities to seek new resources
- Paucity of practical training and exposures to students and teachers,
- Signify the urgent need to establish close collaboration between university, institutions and industry in research, data development, organization of research and social gatherings etc.

In addition to this the universities and institutes can collaborate ^{on} inter disciplinary and multi-specialized projects sponsored by different ^{on} funding agencies as a part of intellectual and social necessity and such other situation demands.

Therefore, Punyashlok Ahilyadevi Holkar Solapur University and School of Earth Sciences, is committed to go for MoUs with like minded organizations and institutes.



Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Punyashlok Ahilyadevi Holkar Solapur University is engaged in conducting teaching, research and training leading to the award of Post Graduate and Doctoral Degrees in the faculties of Science, Humanities, Informatics, Technologies, Health sciences and Commerce and Management.

In University the geoenvironmental and informatics scientific work is being carried out in the School of Earth Sciences in the form of MSc in Applied Geology, Geoinformatics and Environmental Science and hence takes lead in collaborative programs being taken up under this MoU.

The Applied Geology course was established in 1984 and the School of Earth Sciences of this University established in the year 2008 with the introduction of new courses like Environmental science and Geoinformatics. At present the school is engaged in conducting teaching, research and training leading to the award of Post Graduate and Doctoral Degrees in Applied Geology, Geoinformatics and Environmental Sciences. The faculty has developed expertise in Geological mapping, geophysical exploration, geochemical modeling, Geographical information systems, Environmental aspects such as pollution assessment, control technologies, land use planning, sustainable development etc. The school is equipped with instruments like GPR, Total Station, Ion Exchange analyzer, Multi signal Resistivity Meter, Advanced Microscopes, Air Quality Monitoring Instruments etc used for geophysical and geochemical exploration and surveying equipment, environmental monitoring infrastructure to cater the training needs of the students The school also possesses liaison copy of software's ARCGIS 10.0 and ERDAS 2011 along with open source GIS packages.

The course gives special emphasis on Geohydrology, groundwater exploration, management and utilization, water quality and air quality monitoring in its syllabi.

Groundwater Surveys and Development Agency (GSDA), Government of Maharashtra

Groundwater Surveys and Development Agency (GSDA) is a Government of Maharashtra organization, reputed at national level for exemplary work in the field of groundwater in Deccan Trap (Basalt). It is one of the nation's leading institutions concerned with groundwater surveys, exploration, assessment, monitoring, development, management and regulation of groundwater resources for irrigation, drinking and industrial needs. It is also concerned with training,



research and consultancy for the planning, development and management of groundwater. GSDA has authentic, voluminous and valuable historical data on groundwater resources in Deccan Trap, Metamorphic, Sedimentary and Alluvial formations for past 37 years.

Offices of GSDA

- 1 Directorate- State Level at Pune
2. Deputy Director - At Regional Level - Pune, Konkan, Nashik, Aurangabad, Amravati, Nagpur
3. Senior Geologist / Dy. Engineer Offices - District level

Mandate

Traditionally, GSDA is entrusted with the mandate of developing and disseminating technologies monitor and implement national and state policies for the scientific and sustainable development and management of groundwater resources. Importantly, GSDA conducts village wise systematic Hydrogeological investigation under various institutionally financed and housing schemes. It also collects, evaluates, interprets, processes and disseminates data on water level and water quality to the end users. It also undertakes periodic ground water assessment in order to regulate the ground water use and guide ground water developmental activities on scientific basis. GSDA also works towards ensuring sustainability of ground water resources, on a long-term basis. It acts as a custodian, for the implementation of ground water legislation, within the State of Maharashtra.

Strength

GSDA has a fully equipped and trained multi-disciplinary manpower. It has a team of 2200 professional and support staff in various fields. GSDA's manpower consists of Hydro-geologists specialized in remote sensing & GIS, chemists, cartographers, field surveyors with computer knowledge. GSDA has a separate Engineering wing and Geophysical expertise in groundwater development, management, protection and artificial recharge techniques. The data set compiled by GSDA includes groundwater and geological maps on 1:10,000 scales for 25,000 villages of Maharashtra. Digital database in forms of GIS layers are available for the entire State of Maharashtra. State-of-the-art Remote-sensing products and interpreted maps are available for most of the habited villages of the State. In addition, GSDA has got APT data to determine the aquifer parameter for 7,000 tests conducted in various rock formations of Maharashtra. A strong network of 4,000 observation wells and 1150 piezometers provides water level data that has been collected for over 32 years. Groundwater quality database is built around 70,000 samples, each analyzed for various parameters like pH, E.C.,

h.B.

EM

hardness, chloride, calcium, sodium, potassium, sulphate, nitrate and minor elements like fluoride and iron

Infrastructure

GSDA is fortunate to have the best equipment possible in the field of water resources. GSDA has a fleet of D.T.H., Rotary and in-well rigs to carry out drilling in hard rocks, alluvium and in existing dug wells respectively. Besides these, hydro-fracturing unit to rejuvenate poor yielding bore wells are stationed at the six regional headquarters of the State. GSDA's own Level II+ Chemical Lab in Pune region and Level II Chemical Lab each of the 5 divisions of Maharashtra with sophisticated instruments caters to the ever-increasing quality issues. Latest generation computers and sophisticated dedicated software is available in all 33 districts and at state level. Sophisticated geo-physical instruments, which include resistivity meter, VLF wadi, seismic unit and digital logger, are also available with GSDA

Role of GSDA

Almost 80% of the drinking water sources are groundwater dependent and majority of these sources are within the recharge and storage areas. The groundwater resource being space, time and depth specific, the sustainability of groundwater dependent drinking water sources is of utmost importance for the State. Accordingly, Government has decided to give priority to the source sustainability. Hence the role of GSDA is very important in the drinking water of the State.

Since the last 38 years, G.S.D.A. is engaged in the development and management of groundwater resources in the State through various schemes. The main aim is to provide safe and potable drinking water to the community.

2. Collaboration:

The School of Earth Sciences, Punyashlok Ahilyadevi Holkar Solapur University and GSDA have mutually agreed to collaborate with each other in the following areas.

A. Research

1. University- GSDA Joint Research Programs funded by Indian Govt, agencies viz., DST, DBT, CSIR etc,



2. Teaching, Research and Training in selected and advanced thrust areas of S & T, with special reference to Groundwater;
3. Groundwater modeling and environmental impact analysis
4. Remote Sensing, GIS and Geoinformatics in Ground water
5. Mutual use of the instruments for research purpose
6. The staff of GSDA can do their PhD using facilities of the labs under the guidance of the available staff

B. Academic & Training

1. Faculty and Staff exchange programme
2. Student Exchange Programme
3. Technology Management and Technology Transfer wherever it is possible and necessary;
4. Intellectual Property Rights;
5. Student training programs
6. Geochemical and petrochemical sample analysis
7. Allow the students in activities of the GSDA as a part of project preparation and field training.
8. Any other that can be of mutual beneficial.

C. Applications

1. Geophysical studies like gravity, magnetic, seismic, electrical, electromagnetic etc..
2. Participating in the groundwater management and utilization programs
3. To take part in the rural development and agriculture sector
4. Sustainable development of Groundwater
5. Consultancy work;
6. Assistance of students in Task Force and other field activities
7. Any other areas of mutual interest.

University and GSDA having the necessary facilities, expertise and wide experience in groundwater and allied fields has agreed to enter into a collaborative understanding with the University on the terms and conditions enumerated in this MoU.

3. Terms of collaboration:

- i. GSDA and Punyashlok Ahilyadevi Holkar Solapur University agree to enter into detailed agreements on case-to-case basis, with a



defined objective, specifying the scope of work and mutual obligations, terms and conditions, financial arrangements, Intellectual Property Rights and similar contractual obligations.

- ii. The University agrees to obtain prior permission from GSDA to state in any project proposal that the project would be carried out by using the GSDA infrastructural or intellectual facilities.
- iii. The GSDA similarly agrees to obtain prior permission from the University to state in any project proposal that the project would be carried out by using the University infrastructural or intellectual facilities.

Either party while according permission may designate authority/personnel in its own institute who can accord permission and monitor the project.
- iv. In case either party wins a consultancy project by projecting this MOU, a liability is created immediately in respect of royalty/premium due to either party. Either party shall concur with the liability to the extent of contribution to the output of the project. The exact amount of liability will be arrived at after mutual consent by both the parties based on GSDA and Punyashlok Ahilyadevi Holkar Solapur University guidelines.
- v. In general the permission may be accorded to use of equipment, facilities, manpower and other facilities available on mutual consent by both GSDA and University, with prior permission. For executing any joint projects, the scope of a project, cost estimates of the project, modalities of payment and all other related aspects would be worked out jointly by GSDA and the University through a separate agreement as per the GSDA and Punyashlok Ahilyadevi Holkar Solapur University guidelines.
- vi. Provision for registration for Ph.D. to the eligible interested employees of GSDA will be made as per the regulations of the University.
- vii. The provision will be made by GSDA to accommodate the PG and Research students of the university in the field camps and laboratories of GSDA to acquaint with the state of the art field oriented technology as per availability and convenience.
- viii. Provision will be made by GSDA to allow the University faculty and research students to share/use the data for analysis solely for research purpose as per rules.
- ix. There will be mutual academic and research interaction between the faculty of university and technical personnel of as per the need.
- x. The area of jurisdiction will be the University area.



4. Monitoring Group:

Technical and administrative liaison shall be maintained between Punyashlok Ahilyadevi Holkar Solapur University and GSDA through a Programme monitoring group to facilitate smooth running of the scientific activities. This group shall consists of,

1. Faculties of GSDA as approved by Director, GSDA.
2. Faculty of School of Earth Sciences as approved by Punyashlok Ahilyadevi Holkar Solapur University, Solapur.

5. Disclaimer:

This MoU is not intended by GSDA and the University to constitute, create, give effect to, or otherwise recognize a joint venture, agency, partnership, or formal business organization of any kind. Each party hereto shall act as an independent entity and neither shall act as an agent of either organization for other purposes. Neither party has the authority to bind the other party.

6. Non-exclusivity:

The agreement reflected by the provisions of this MoU is non-exclusive in nature and both the parties can enter into cooperative arrangements with other parties to suit their organizational needs.

7. Confidentiality:

The parties understand that in the course of their association, they shall have access to confidential information provided by the other party. Accordingly, the parties agree that such information shall be maintained in the strictest confidence and trust, except such information which is by its nature, not confidential or which is in the public domain or which the party comes to know about other than through violation of any law of legal obligation, provided that such party may be entitled to disclose such information if legally required to be disclosed to a competent authority. Failure to maintain confidentiality shall entitle the affected party to terminate the MoU.



8. Validity:

This MoU would remain valid for a period of **Five years** from the date it is signed by the parties and is renewable on mutual consent for such further period as agreed upon.

9. Term and Review:

The MoU May be reviewed at the end of one year from the date of signing of this MoU as per need of both the parties.

Either party can terminate the MoU after giving one month's notice to the other party subject to fulfillment of commitments already agreed upon.

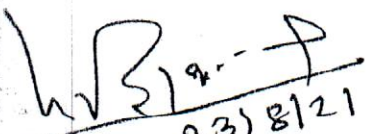
10. Amendments:

This MoU constitutes the entire understanding between the parties hereto. Except as otherwise provided herein, no addition, amendment to or modification of this MoU shall be effected unless it is in writing and signed by and on behalf of both parties by their respective authorized signatories.


11. Any dispute

Any dispute arising out of this MoU will be settled by mutual negotiations between the two parties.

In witness whereof each of the parties has caused this MoU to be executed in two originals, one has been retained by GSDA and the other by the University, on this day the ~~23rd~~ 23rd Aug 2021.


23/8/21
Director Commissioner
Groundwater Surveys &
Development Agency (GSDA)
Govt. of Maharashtra,
Shivajinagar, Pune,
Maharashtra, India

(For and on behalf of GSDA)


Registrar,
Punyashlok Ahilyadevi Holkar
Solapur University,
Solapur - 413255
Maharashtra, India
Registrar
Punyashlok Ahilyadevi Holkar
Solapur University, Solapur
(For and on behalf of PAHSUS)

