Office of the Engineer-in-Chief(Admin.Wing)
Irrigation & CAD Department Errummanzil, Hyderabad.

Endt. No. RC/ENC(AW)/EE(Admin)/ADA/AEE7/SNU/2017, Dated: 19.05.2017

Copy Communicated to all Unit & Circle Officers for information and they are requested to offer their inputs into the design and contents for the Programme with a modular structure of shorter or longer duration on Water Science and Policy, being to be introduced by the Shiv Nadar University(SNU) on or before 23.05.2017 to enable this office to submit the inputs to the Special Chief Secretary Irrigation & CAD Department, Telangana.

J. Vijaya Prakash
Engineer-in-Chief(AW)

To
All the Chief Engineers/Superintending Engineers of
Irrigation & CAD Department.
Copy to Dy, EE(Computers) with a request to place the letter in the department website.

[Signature]
for Engineer-in-Chief(A.W)
Dear Colleagues,

As you are well aware, this Ministry is committed to carrying through fundamental reforms in the water sector to bring it in line with the realities, needs and challenges of 21st century India.

Hon’ble PM has often expressed his desire that India’s leading educational institutions should contribute to fostering the kind of water education that would be in line with these realities. I am glad to learn that Shiv Nadar University (SNU) has come up with a 2-year programme on Water Science and Policy (note enclosed). The programme has a modular structure which would allow your officers to attend shorter or longer duration modules as per their needs and convenience.

On reviewing the programme at a recent meeting with Dr. Mihir Shah, Distinguished Visiting Professor at SNU and his team, I found that it is a well designed course and meets with the water sector requirements in our country. However, before they proceed, I have proposed to SNU to organise a special meeting with all the State Governments to get their inputs into the design and contents of this programme. It is extremely important that there is high level representation from your side in this meeting to enable your State to
provide specific inputs into the programme as per your requirement. The details of the meeting are as under:

Date: 26th May, 2017
Venue: India International Centre, Lodhi Estate, New Delhi.
Time: 1-5pm (lunch followed by the meeting)

Regards,

Amarjit Singh
Secretary
M/o Water Resources, RD & GR

SNU Water Program.pptx
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M.Sc. in Water Science and Policy
Shiv Nadar University

Introducing the Program

April 2017
Background

• SNU is designing a 2-year multi-disciplinary post-graduate (M.Sc.) program on Water Science and Policy
• Aims at being the first-of-its-kind globally
• Launch proposed for the academic year 2017-18 wef 1st August 2017
Points of Departure

- Few programs across the world are able to incorporate the essential multi-disciplinary character of water.
- Fewer yet are able to come up with urgent policy prescriptions for the sector, reflecting an upgraded understanding of water.
- Our program seeks to redress both.
- Aims at moving forward more science-based policy-making, while deepening an understanding of both science and policy.
Present Context

- PM has made a strong pitch for improving the quality of water education in India.
- Our program can also be seen as a response to the PM’s call for action.
- The program will have a modular structure, flexible enough to allow stakeholders from government, civil society and industry to opt for selective courses from within the program, leading to certificates/diplomas.
Regional Setting

• The programme seeks to look beyond India
• Great focus on common challenges facing the South Asian region
• We have a shared heritage and common resource systems across borders
• A paradigm shift is needed in each regional setting to resolve existing and potential conflicts
• Programme would hopefully create ambassadors of peace and transformation in South Asia
Program Outline

• Four Semesters
• 8 courses of 8 weeks each in the first 2 semesters
• 4 one month field-based courses in Semester 3
• Semester One: Basic Concepts
• Semester Two: Problems and Applications
• Semester Three: 21st Century Solutions (field-based)
• Semester Four: Dissertation
First Semester: Basic Concepts

- Water Cycle
- River Systems
- Aquifers
- Watersheds
- Lakes & Wetlands
- Ecosystem Services of Water
- Historical, Social, Institutional and Legal Dimensions
Second Semester

Problems and Applications

- Basic Facts and Issues in Water in India
- Experience of Large Dams
- Critical Role of Groundwater
- Watershed Management
- Urban and Industrial Water
- Drinking Water & Sanitation
- Flood Management
- Climate Change and SDGs
Third Semester
21st Century Solutions (field-based)

- Participatory Irrigation Management
- Participatory Groundwater Management
- Watershed Management
- Sustainable Agriculture
- Rural Drinking Water and Sanitation
- Water Quality, Nutrition and Health
Fourth Semester: Dissertation

- Dissertation is a mandatory aspect of the two-year post-graduate course
- The dissertation will be guided by one or two faculty jointly
- The dissertation must be field-based, with each student requiring to be hosted at one of the institutions that are a part of the faculty
- The subjects of Semester III are to form the basis of selecting a dissertation topic
Modular Structure

- Array of options (topics and duration) for variety of stakeholders in the water sector
- 2-year MSc in Water Science and Policy
- 1-year Advanced Diploma in Water Science and Policy (2 options; Semesters 1&2 or Semesters 2&3)
- 16-week Diploma in Water Science and Policy (3 options; Semester 1 or 2 or 3)
- 8-week Advanced Certificate in Water Science and Policy (6 options; Semester 1A or 1B or 2A or 2B or 3A or 3B)
- 4-week Certificate in Water Science and Policy (12 options; any one of 4 modules in Semesters 1 or 2 or 3)
Faculty

- UNESCO-IHE Institute for Water Education, Delft, Netherlands
- Centre for Water, Agroecology and Resilience, Coventry, UK
- DTU Nutech, Technical University of Denmark, Risø, Denmark
- ANU Crawford School of Public Policy, Canberra, Australia
- Stockholm Resilience Centre, Sweden
- Law, Environment and Development Centre, University of London
Faculty

- IIT Kanpur
- IIT Mumbai
- IIT Gandhinagar
- Indian Institute of Science, Bangalore
- National Institute of Hydrology, Roorkee
- Jawaharlal Nehru University, Delhi
- International Water Management Institute, Anand
- Water Resources Group 2030
- Central Ground Water Board
- Institute of Economic Growth, Delhi
Faculty

- Azim Premji University, Bengaluru
- Madras Institute of Development Studies, Chennai
- Indian Institute of Science Education and Research, Bhopal
- Advanced Centre for Water Development and Management, Pune
- Development Support Centre, Ahmedabad
- Samaj Pragati Sahayog, Bagli
- PRAN, Bihar
- Shrishti Eco-Research Institute, Pune
- SOPPECOM, Pune
- Shiv Nadar University
Thank You