



INTERNATIONAL CONFERENCE

On

'FOOD, WATER, ENERGY NEXUS IN ARENA OF CLIMATE CHANGE'

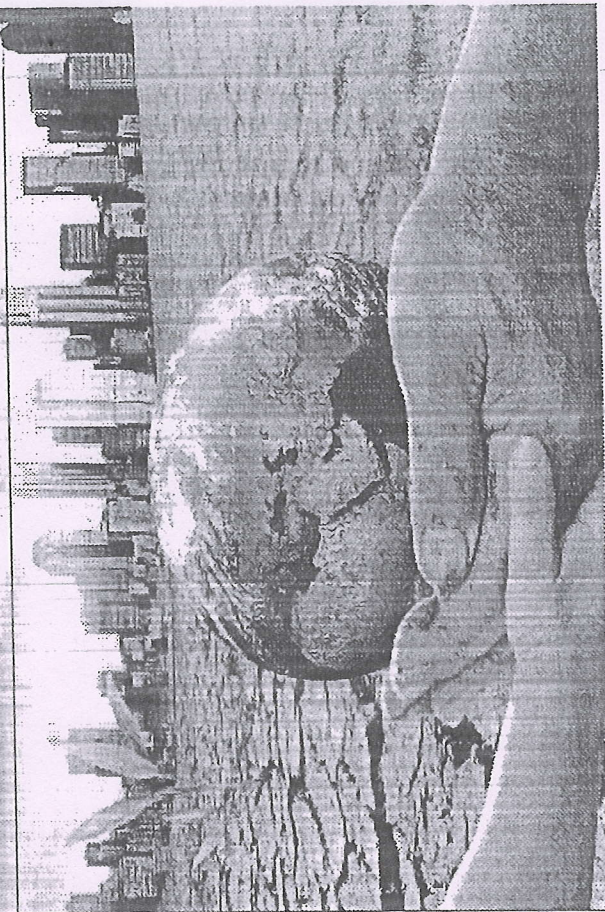
On 14-16 October 2016

at

Anand Agricultural University (AAU), Anand - Gujarat, India

in Collaboration with

**National Council for Climate Change
Sustainable Development and Public Leadership (NCCSD),
Ahmedabad, Gujarat, India**



Conference Venue

Anand Agriculture University, Anand campus, Anand 388110, Gujarat, India

Conference Secretariat

Directorate of Research & Dean P.G. Studies

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Background

The relationship between water, energy, agriculture and climate is a significant one. More and more, that relationship is falling out of balance jeopardizing food, water and energy security. Climate change is a phenomenon we can no longer deny as its effects have become increasingly evident worldwide. As the earth's temperature continues to rise, we can expect a significant impact on our fresh water supplies with the potential for devastating effects on these resources. As temperatures increase, evaporation increases, sometimes resulting in droughts.

In addition, rising temperatures are melting glacial ice at an unprecedented rate. Glaciers are an important source of freshwater worldwide, and some like those at Glacier National Park, are in danger of disappearing within the 21st century. Once these glaciers have melted away, they can't be restored. Areas that previously depended on glaciers for freshwater will then have to seek other sources.

Complicating this potential outcome is the prediction that in a warmer environment, more precipitation will occur as rain rather than snow. Although more rain than snow may seem like a plus, it could mean more frequent water shortages. When snow and ice collect on mountainsides, water is released slowly into reservoirs as it melts throughout the spring and summer. When rain falls, reservoirs fill quickly to capacity in the winter, which can also result in excess water runoff that can't be stored, because rain flows faster than melting snow. Higher levels of soil moisture and groundwater recharge are less likely to occur. Areas that rely on snowmelt as their primary freshwater source could increasingly experience water shortages, like having low water supplies by summer end.

The relationship between climate change and water doesn't end there. The systems used to treat and move public water supplies require large amounts of energy, produced mainly by burning coal, natural gas, oil and other fossil fuels. So, when we use water, we also use energy and contribute to climate change. In addition, bottled water is a small but real contributor to greenhouse gas emissions, because it takes fuel to make plastic bottles and ship them around the country (and even the world). This is unnecessary when you consider that bottled water is often just filtered tap water. Conserving water, food and other resources is an important step towards reducing overall energy use, because most everything that is made, transported and thrown away requires the use of fuel and water.

Rationale

Worldwide Impact of Climate Change is grave, as evidenced by the followings on International context:

- In the U.S. alone, nearly 1,000 tornadoes have killed many people and inflicted \$9 billion in damage.
- The 2010 heat wave in Russia killed hundreds of people and led to a 40% fall in the harvest of food grains.
- Floods in Australia and Pakistan killed thousands of people and devastated agricultural lands.
- Recurrent droughts in China have eroded millions of acres of farmland.
- Tsunami in Japan - Nuclear plant affected and played havoc to the local habitat
- Recurrent and continuous famines in Ethiopia, Somalia and riots for food by hungry millions.
- Recurrent floods in South East Asia, Philippines, Indonesia, Thailand.
- Almost all nations small or big are affected, one way or another, with increasing intensity.

Such impacts creates:

- Severe famine or heavy floods
- Loss of life and livelihood
- Loss of agriculture crops and animals
- Increased risk of disease outbreaks and challenges of new microbial pathogens
- Damage to infrastructure and communication particularly in rural areas.
- Setback to social and economic development and emergence of social turmoil with increased rural urban divide.
- Pushing farmers in rural areas again back below poverty line.

Ensuring FOOD SECURITY is therefore of paramount significance as although there is enough food, in 2010-12, almost 870 million people were estimated to be undernourished (Food and Agriculture Organization of United Nations, 2012). In addition, another billion people are malnourished. The paradox is that concomitantly a large number of people mainly in richer countries are over eating, resulting in long-term health issues. For poor farmers, food is not only a basic need but it is the single, and often fragile, support for maintaining livelihood. What is true at the household level is also true at the macroeconomic level. There are 32 countries, 20 of them in Africa, facing food crisis and in need of international emergency support. In most of these countries, agriculture is an important source of employment.

Objective of the Conference is to deliberate on food and nutritional security. Between now and 2050, the world's population will increase by one-third. Most of the additional 2 billion people will live in developing countries and more people will be living in cities. FAO estimates that production will have to be increased by 60 percent by 2050, to satisfy the expected demands for food and feed. Such a target is achievable provided the entire Agriculture sector is moved to adapt climate smart agriculture practices. The Conference will debate on how agriculture could be prioritized and come out with a declaration in that regard. About 400 participants/stakeholders which will include more than 100 farmers including women farmers will get together to deliberate on the aspects indicated at this International Conference.

Outcome

- To suggest policy, programme and initiatives, a definite system which provides timely redressal to affected families and empower individuals, communities and nation to develop effective response to climate related challenges
- To come out with a Declaration & Booklet on over all perspective
- To suggest to add this as a subject relevant in educational curriculums
- To suggest effective framework of programmes, policies, rules and regulation for achieving food water energy nexus at local level for individual families and communications
- To give voice to concern of farmers and rural poor and sharing their difficulties and facing same collectively at community level through leadership initiatives by sharing knowledge, technologies and provide needed financial support by way of direct assistance at local level.
- To design and develop sustainable development with built in legal framework to ensure effective implementation and accountability of those in public and private Governance System who are responsible to provide it
- To lead a smooth transition process through which income does not become less, but it grows gradually like that of other non-farm sector despite adverse impacts.
- To prepare future generation of farmers and leaders to convert these adversities in to opportunity.

Thus, AAU and NCCSD propose to raise concern of farmers in context of food security of hungry millions.

Organizers

Anand Agricultural University, Anand

Anand Agricultural University (AAU) was carved from the then Gujarat Agricultural University (GAU) with its head quarter at Anand by the Government of Gujarat with effect from 01-05-2004. ICAR, New Delhi has accredited the university and its three constituent colleges viz. B. A. College of Agriculture, Sheth M. C. College of Dairy Science and College of Veterinary Science and Animal Husbandry. At present, the university has 9 degree colleges and one PG institute, five polytechnic colleges, 23 on campus and 23 off campus Research Stations spread over nine districts viz., Ahmedabad, Anand, Botad, Chhotaudepur, Dahod, Kintada, Mahisagar, Panchmahal and Vadodara. Currently, this university is the premier institute for Agricultural Research, Education and Extension Education (www.aau.in).

National Council for Climate Change, Sustainable Development and Public Leadership (NCCSD) is a nonprofit organization. It aims to facilitate and carry out appropriate and target oriented action for climate change mitigation and adaptation, interlinking agriculture, sustainable development and rural development. It also aims to foster and leverage public leadership to achieve the goals of such an integrated approach and strengthen knowledge economy. Chairman of NCCSD is Hon'ble Justice B.P. Singh, former Judge of Supreme Court of India, Sarvshri Dr. M.S. Swaminathan, Prof. Nathu Puri, Shri Kantisen Shroff and Shri Rajendra H. Shende, UNEP at Paris are the patrons of the Council and Dr. Kirli N. Shelat (Rtd. IAS Officer) is an Executive Chairman (www.climategri.org).

Collaborators

- Indian Council of Agricultural Research (ICAR) : www.icar.org.in
- Central Research Institute for Dryland Agriculture (CRIDA) : www.crida.in
- International Food Policy Research Institute (IFPRI) : www.ifpri.org
- Florida A&M University - FAMU : www.famu.edu
- Kennesaw State University : www.kennesaw.edu
- GACSA : www.fao.org/gacsa/en/
- Junagadh Agricultural University
- Navsari Agricultural University
- Sardarkrushinagar Dantiwada Agricultural University
- Kamdhenu University

Supporters

International School for Public Leadership (ISPL) International School for Public Leadership is a non profit voluntary organization, promoted by Prof. Nathu Puri of Puri Foundation for Education in India. It is involved in competence building of existing leaders and of future generation to seize opportunities in Public Leadership, entrepreneurship and various walks of life. It has experience of working with grass root level leaders and future generation. In last two and half years, it has conducted more than 200 competence building programmes covering more than 9000 participants of rural areas of Gujarat (www.isplindia.org).

Environmental & Consumer Protection Foundation Organizations (ECPFO)

ECPFO is based in New Delhi, founded in 1993. It is fostering doctrines of "Egalitarian and Environmental Justice Movement of International Environmental Consumerism" through its Journal "International Journal of Environmental Consumerism". ECPFO is striving to seek positive cooperation through partnership on collaboration with Government, National & International Organizations and Private & Public Institutions. The ECPFO ardently believe in the sacred views of Mahatma Gandhi who said "The Earth provides enough to satisfy man's need, but not for man's greed."

Shri Kantisen C Shroff Family Voluntary Organizations Consortium (SKVOC)

Shri Kantisen C Shroff, a veteran in NGO has promoted Shroff Family Voluntary Organizations. This includes - Shrujan Trust, Shroff Foundation Trust, Samarth Gram Vikas Trust, Vivekanand Research Training Institute (VRTI), Vivekanand Gram Udyog Society, Shroff Family Charitable Trust, Kisan Mitra, Aatapi Seva Foundation. The group is working in more than 2,000 villages with 600 field workers in Maharashtra and Gujarat. It is involved in livelihood programmes apart from Water Shed Management, River Basin Management, Health and Sanitary Programmes, Rural Education, Women empowerment etc. Mrs. Chandaben Shroff who heads Shrujan Trust was awarded with 'Rolex Award of Excellence' for promoting sustainable livelihood for women in Kutchh. The major contribution of the group is promoting sustainable livelihood by working in Kutchh and tribal areas of Gujarat where livelihood conditions were bad - with focus on agriculture and handicrafts. The group is supported by Excel Group of Industries.

Registration Form

Personal details:

- (1) Full Name
(For Certificate)
- (2) Gender: Male / Female
- (3) Date of Birth
- (4) Address for Correspondence

- (5) State: City: Pin Code: Telephone No: Mobile No: (With STD Code) Email: Qualification: Name and Address of the Organization: City: (Indicate your designation also)
- (6) State: Pin Code: Telephone No: Mobile No: (With STD Code) Email: Travel Plans: (a) Arrival Date: Time: Mode of Travel: Date: Time: Mode of Travel: (b) Departure Date: Time: Mode of Travel:

- (8) Type of accommodation required. In addition following information is required for International Participants:

- Name as per Passport
- Passport No.
- Place and Date of Issue
- Passport Valid up to
- Nationality

South Asian Bureau for Environment (SAFE)

SAFE is a registered Civil Society Organization working towards ecological restoration and environmental conservation to achieve sustainable development and poverty alleviation through community participation, partnership and reciprocity in the Indian Eco-region. SAFE has successfully launched India's first "Biorights" project and is empanelled with Ministry of Planning, Government of India.

Vigyan Prasar, New Delhi

Vigyan Prasar is an autonomous organization under Department of Science and Technology established in 1989. Objectives of Vigyan Prasar are to take up large-scale science popularization bases/activities, to promote and propagate scientific and rational outlook, to act as a resource-cum-facility centre for S&T communication. Vigyan Prasar is a national resource-cum-facility centre for S&T communication. Vigyan Prasar strives to adapt, utilize and employ new and emerging technologies for S&T communication / popularization. Vigyan Prasar's emphasis is on development, production, dissemination and marketing of S&T software. The emphasis is on development of a countrywide network for S&T popularization / communication.

Satyabhama University, Chennai

Satyabhama University is a pioneer Institute imparting knowledge in the areas of engineering, science, technology and education. The University has excellent infrastructural facilities including modern laboratories, library with video, Internet and other general amenities. To its credit it has been awarded B++ grade by National Assessment and Accreditation Council (NAAC) and ISO 9001: 2000 for professional quality management. The University plans to expand the applications of space technology, benefitting the common man in association with India Space Research Organization (ISRO).

IPPS, Visakhapatnam

Institute of Development and Policy Studies is established by the FASETS INDIA as an Institute for inter disciplinary studies and in the recent times has launched a major Programme on climate change at the grass roots through formation of Carbon Clubs. The Institute works through a distributed network of seven centers of R & D which are headed by former Chief Engineers and former Senior Professors of Andhra University. A major activity is the operation of website 'cleantcity.co.in' for public interaction in regard to Municipal Services. Shri S Satyanarayana, former Chief Engineer, is the Chairman of FASETS INDIA.

Call for Papers

Conference Theme

"FOOD, WATER, ENERGY NEXUS IN ARENA OF CLIMATE CHANGE"

Conference Sub Themes

- The Global Situation – Effects of Climate Change, Food security
- Effect of climate change on livestock in south Asia, Observed Impact on Agriculture in India, Climate Smart cities, Climate smart and sustainable Agriculture
- Impact of climate change at local level-impact on poor farmers and their needs
- Climate change and water cycle- Understanding Impact of Climate Change on Water Cycle for Agriculture, Food, water and energy nexus
- Biodiversity
- Biotechnology
- Bio-char
- Wasteland and wetland development
- Integrated Soil Fertility Management System (ISFM)
- Conservation of agriculture system
- Value added Agriculture -Market chain
- Organic and Inorganic inputs
- Market area
- Multiple source of income

- Energy saving and Energy efficiency
- Safety net to farmers
- Agro forestry and Perennial crops
- Crop selection
- Resource Conserving Technologies (RCTs)
- Soil health and moisture analysis card for farmers
- Changes observed in demand for food products
- Current system for meeting challenges—The Indian perspective

IMPORTANT DATES:

- Submission of Abstract (400 words maximum) on or before 01-06-2016.
- Acceptance of the paper will be intimated by 15-06-2016
- Submission of the full paper to be made before 31-06-2016
- Registration along with regular registration fee on or before: 15-07-2016
- Conference dates: 14-16 October 2016
- Abstract in MSWORD format typed in Times New Roman Font, size 12, Line Spacing 1.15, with Title, Authors (the presenter name to be underlined) and Institute's address should be submitted on-line at www.aau.in

REGISTRATION

Category	Indian delegates		Foreign delegates	
	On or Before 15-07-2016	Between 16-07-2016 to 30-07-2016	On or Before 15-07-2016	Between 16-07-2016 to 30-07-2016
Academicians, Govt. officials	NR 3000	INR 3500	USD 250	USD 300
Industry professionals, NGO	INR 5000	INR 6000	USD 300	USD 350
Post-graduate Students	INR 1000	INR 1200	USD 50	USD 70
Spouse	INR 1000	INR 1200	USD 50	USD 70

The registered participant will be provided conference kit (except spouse), compendium (except spouse), breakfast, lunch and dinner.

Visit the website www.aau.in or www.climatechange.aau.in or contact Conference Secretariat for details of mode of payment for registration fees.

ACCOMMODATION

Accommodation will be arranged in hotels/guest houses of the host institution or hotels on advance intimation and on payment basis. Please indicate the category of accommodation you need in your registration form, for enquiries and prior intimation for accommodation, please contact Dr. P. M. Bharpoda, Mobile No. +91-9427057618, email: tmbharpada@aau.in

Category	Type	Tariff (Rs.) per day
A	Hotels, guest house	Upto 500
B	Budget hotel, guest house	500-1500
C	Hotel - Economy	1500-4000
D	Hotel - Premium	4000 to 10000