

**Conference on  
Achieving Sustainable Development Goals in  
Challenged Agro-Ecosystems  
(ASDGCAE-24)**

**March 3-5, 2024  
ICAR-Central Arid Zone Research Institute  
Jodhpur**



**Organized by**



**Arid Zone Research Association of India, Jodhpur  
ICAR-Central Arid Zone Research Institute, Jodhpur**

## About The Conference

The rural economy of India heavily depends on agriculture and livestock management, which is now confronting newer challenges stemming from anthropogenic activities and the discernible impacts of climate change, such as high temperature, unpredictable rainfall and other extreme events. These factors collectively pose a threat to the overall sustainability of agri-food systems, particularly in agro-ecosystems already grappling with stresses. The heightened strain on agro-ecosystems already burdened by stress can lead to significant detrimental effects. In such a situation, these ecosystems, constrained in their adaptive capacity, undergo rapid degradation, resulting in reduced biodiversity, diminished primary and secondary productivity, less efficient nutrient cycling, and heightened dominance of aggressive exotic species. This degradation also gives rise to smaller and shorter-lived opportunistic species, coupled with decreased resilience to natural perturbations—the affects collectively termed as the "Distress syndrome." Despite the diverse nature of agro-ecosystems, like drylands, arid regions, coastal areas, hills, and aquatic environments, the manifestations of distress syndrome exhibit noteworthy similarities in features.

Amongst different stressed agro-ecosystems, drylands hold significant importance in India. Dryland agro-ecosystem encompass 68 percent of the cultivated area of Indian agriculture and contributes approximately 44 percent of the total food production, playing a pivotal role in securing India's food supply. The livelihoods of a vast majority of small-scale farmers are intricately tied to these dry regions. Compounding the inherent challenges, the influence of climate change is causing an expansion of drylands. This growth poses additional hurdles in maintaining the same level of ecosystem services from the land for our growing population.

Coastal agriculture faces a myriad of challenges arising from the dynamic activities of oceans and seas. These activities lead to the production of saline air and water, as well as land inundation and erosion. Upstream activities contribute to water quality degradation and impact its availability, further complicating the scenario for coastal farming.

Hillside agriculture encounters its own set of challenges, including remoteness, limited moisture, challenging soil conditions, and often a truncated growing season. The impact of extreme weather events adds another layer of complexity. These limitations contribute to a decline in the productivity of subsistence agriculture in hilly regions, triggering trends such as out-migration, land abandonment, and heightened livelihood insecurity. Brackish water aquaculture, though on its own has the potential to provide a sustainable source of food and income. Issues such as water pollution, oxygen depletion, feed sustainability and nutrient imbalances which are extensively affected by anthropogenic and climatic factors can negatively impact the aquaculture.

The common denominator in all the stressed agro-ecosystems is the inherently fragile natural resource base which makes sustainable development extremely challenging. The sustainable future in these ecosystems would depend on development of climate resilient digital agri-food systems, embracing of new-age horticulture, farm mechanization based on ICTs, IoT, & robotics powered by renewable energy, improvement of genetic resources with cutting edge technologies, transformative livestock management & aquaculture, and skill upgradation of farming community.

The proposed conference would serve as a platform for scientists and planners to assess ongoing research in these domains and prioritize targeted initiatives for sustainable development in these ecosystems facing unique challenges.

## Themes

- Natural Resources Management for Climate-Resilient Agri-food Systems
- Cutting-edge Technologies for Genetic Improvement of Crops and Livestock
- Digital Agriculture and AI-Powered Innovations
- Horticultural Transformation and Food Systems Revitalization
- New Opportunities in Livestock Management and Aquaculture
- Farm Power and Energy
- Innovation, Entrepreneurship and Policy

## Special Sessions

- Brainstorming Session on "Redefining Conservation Agriculture in Challenges Agro-ecologies"

## Call For Abstracts & Papers

The abstract (upto 450 words) summarizing the key research/points to be further presented and discussed in the session. It should be typed in English in MS Word (Times New Roman: 12 font size), 1.5 spacing and with margin of 30 mm from all sides. The submitted abstract should be original and unpublished. Abstracts should preferably be on one of the topics stated in themes. The abstract should include the Title, Name and Addresses of all authors, along with the email address of the corresponding author. Selected papers will be published in a special issue of a Annals of Arid Zone, the Journal published by AZRAI (NAARS Rating 4.7).

The full paper may comprise Title, Address, Abstract, Introduction, Materials and Methods, Results and Discussion, Conclusion and References (as per Journal style). The full paper may be prepared in 5 to 10 pages with single spacing, and tables and graphs should not be embedded in the text and prepared as separate files.

## Important Dates

Submission of Abstract:	15.01.2024
Acceptance of Abstract for Oral and Poster:	25.01.2024
Submission of Registration Form:	31.01.2024

## Registration Fee

Registration fee entitles the registered delegates to have one copy of the complete conference material, admission to all sessions, lunch, session tea, cultural program, reception, exhibition and transport by buses from the place of stay to the Conference venue and back. Registration fee in Indian Rupees may be paid through Demand Draft in favor of AZRAI-ASDGCAE2024 payable at Jodhpur or through online payment. Field trip will be on actual cost which will depend on the number of participants.

S. No.	Type of Participation	Registration Fee (Rs.)	
		Before January 31, 2024	After January 31, 2024
1.	AZRAI Members	4000	4500
2.	Non AZRAI Members	5000	6000
3.	RA/SRF/JRF	3000	3500
4.	Students	2000	2500
5.	Corporate	6000	7000
6.	Accompanying Member	1500	2000

## Account details for payment

**Account holder's Name:** AZRAI-ASDGCAE2024

**Bank Name:** State Bank of India

**Account No.:** 42496099896

**IFS Code:** SBIN0003258

**MICR Code:** 342002009

## Online Registration & Abstract Submission

Please visit [www.azrai.org.in](http://www.azrai.org.in), [www.asdgaecae24.in](http://www.asdgaecae24.in)

## Accommodation

Jodhpur is being a major tourist destination having wide range of accommodation, varying from luxury to economy class hotels. Organizers will make all possible efforts to accommodate the delegates in Guest Houses and Hotels in the City. Details of tariffs of the hotels will be given in second circular and also updated on AZRAI and CAZRI website. The organizing committee will help in arranging accommodation for registered delegates in budget category Hotels/Guest Houses on request and on first come first served basis. We would appreciate receiving such request up to 31<sup>st</sup> Jan, 2024 as it would help us in negotiating competitive tariff. Delegates should settle their hotel/guest houses bills directly before departure.

## About Organizers

### Arid Zone Research Association of India (AZRAI)

AZRAI, which stands for the Arid Zone Research Association of India, was founded in 1962 by the first generation of researchers from the Central Arid Zone Research Institute (CAZRI), Jodhpur. Its primary purpose was to serve as a conduit for scientific communication and collaboration among researchers working in arid regions around the world. In 1963, AZRAI started publishing its inaugural biennial journal called the "Annals of Arid Zone", which later transitioned into a

quarterly journal. This publication serves as a platform for the dissemination of research articles related to arid land studies. Additionally, the journal publishes special issues dedicated to specific topical themes, featuring contributions from eminent researchers from various parts of the globe. In addition to its publication efforts, AZRAI also plays a crucial role in organizing both National and International Conferences on a periodic basis. These conferences serve as forums where scientists can come together to exchange and share their research findings and experiences. This collaborative approach fosters discussions among scientists, planners, administrators, and the general public, bringing them onto a common platform to address issues of shared interest related to arid regions and their sustainable development.

## ICAR-Central Arid Zone Research Institute (CAZRI)

The venue for the conference, ICAR-Central Arid Zone Research Institute (CAZRI) in Jodhpur, stands as a distinguished research institution, uniquely established in October 1959 by the Government of India. Its establishment was a result of the recommendations made by Dr. C.S. Christian, an expert from CSIRO, Australia, acting under the auspices of UNESCO. The primary objective of CAZRI has been to champion the cause of sustainable development within the Indian Arid Zone. As an integral component of the National Agricultural Research System of India, operating under the Indian Council of Agricultural Research (ICAR) and the Department of Agricultural Research and Education (DARE), Government of India, CAZRI has made significant contributions over its seven-decade-long existence. The institute has played a pivotal role in enhancing our comprehension of the arid environment and its resources. Moreover, it has introduced numerous practical technologies that have had a tangible impact on land utilization and livelihood options, ultimately leading to a notable increase in overall productivity within this fragile agro-climatic region. Situated in Jodhpur, within the Thar Desert, ICAR-CAZRI has consistently taken the lead in marshaling scientific, technical, and policy-related expertise. Its concerted efforts have been dedicated to improving the quality of life and living conditions for the inhabitants of the desert, with a keen focus on ensuring environmental sustainability.



## About Jodhpur City

Jodhpur, traditionally referred to as the 'Sun City,' is located on the outskirts of the Thar Desert and was established in 1459 A.D. by Rao Jodha, a prominent leader of the Rathore clan within the Rajputs. Serving as the capital of the Rathore Kingdom, it held the distinction of being the largest kingdom in Rajputana. From a historical perspective, Jodhpur is renowned for its iconic landmarks, including Mehrangarh Fort, Umaid Bhawan Palace, and the Clock Tower. Mehrangarh, translating to the 'Majestic Fort,' ranks among India's largest forts. It majestically sprawls over 5 kilometers, perched atop a 120-meter-high hill in the heart of the city. Umaid Bhawan Palace, an architectural marvel constructed with intricately carved pink sandstone native to Jodhpur, dates back to 1943. Meanwhile, the Clock Tower stands as a prominent landmark in the vibrant old city, pulsating with activity.



After Jaipur, Jodhpur is the second-largest city in Rajasthan. It enjoys excellent connectivity via road and rail to all major cities across the country. Regular flights from Delhi, Mumbai and other major cities offer convenient access to Jodhpur. During the conference period, Jodhpur experiences pleasant weather, with daytime temperatures ranging from 25 to 36°C and nighttime temperatures between 18 to 24°C, under clear skies.

## Best Buys

Jodhpur is famous for wooden and metallic handicraft items, jooties (foot wear), lac work, tie and dye dress material. Some of India's most innovative designers have their ateliers and exclusive boutiques in Jodhpur.

## For any assistance/query please reach out to:

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Mobile: 9462931044 and 0291-2786689,

Dr. Mahesh Kumar, Co-organising Secretary, ICAR-Central Arid Zone Research Institute, Jodhpur, Mobile: 9460107994

Dr. N.R. Panwar, Co-organising Secretary, ICAR-Central Arid Zone Research Institute, Regional Research Station, Bikaner, Mobile: 9649652120

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## Sponsorship and Avertisement

Interested person may contact organising and co-organising secretarories and send their expriession of interest to asdgcae24@gmail.com, vipin\_cima@yahoo.com, npanwar.cazri@gmail.com, maheshcazri@gmail.com

Sponsorship categories	Logo position in banner/souvenir book	Rate	Benefits
Platinum sponsor	Logo in Banner +Full Page advertisement	05 Lakhs	Registration of 05 participants
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Silver Sponsor	Logo in Banner +Full Page advertisement	02 Lakhs	Registration of 02 participants
Bronze sponsor	Logo in Banner +Full Page advertisement	01 Lakhs	Registration of 01 participants
Back cover page of souvenir book	Full page	75000/-	Exhibition stall/Standees
Inside souvenir book	Full page	50000/-	Exhibition stall/Standees
Bag Printing	Logo and Name on bag	50000/-	-
Session Sponsor	Session Sponsor for Lunch or Dinner	At actual	Exhibition stall/Standees

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<b>Convener</b>	Dr. O. P. Yadav, Director, ICAR-Central Arid Zone Research Institute, Jodhpur

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