



تحت الرعاية السامية لصاحب الجلالة الملك محمد السادس نصره الله
UNDER THE HIGH PATRONAGE OF HIS MAJESTY KING MOHAMMED VI MAY GOD GLORIFY HIM
SOUS LE HAUT PATRONAGE DE SA MAJESTE LE ROI MOHAMMED VI, QUE DIEU L'ASSISTE



En collaboration avec



**Alliance for
Modernizing African
Agrifood Systems**

An ASABE Global Initiative

PROGRAMME FINAL

7ème Conférence Panafricaine du Génie Rural sur le thème

**GESTION DE L'EAU POUR UNE AGRICULTURE DURABLE ET RESILIENTE EN
AFRIQUE**

Conférence Organisée en Mode Hybride

22-24 OCTOBRE 2025

MARRIOTT HOTEL

FES, Morocco

Mercredi 22 Octobre 2025

8h00-9h00 Inscription

9h00-10h30 CEREMONIE D'OUVERTURE

SALLE SENTAL-AMBER

- M. Le Ministre de l'Agriculture, des Pêches Maritimes, du Développement Rural des Eaux et Forêts : M. Ahmed EL BOUARI
- M. Le Président de l'ANAFIDE : M. Aziz FERTAHI
- M. Le Président du Conseil Mondial de l'Eau: M. Louic FAUCHON
- M. Le Président de l'Association Panafricaine du Génie Rural PASAE: Pr Michael FAVORODE
- M. Le Président Honoraire de la CIID : Dr Ragab RAGAB
- M. Le Représentant de Mme La Présidente de l'Association Américaine du Génie Rural et Biologique ASABE : Dr Lalit VERMA
- M. Le Président Honoraire de la CIID : Dr Felix REINDERS

-

Comité d'organisation de la séance d'ouverture :

- Prof. El Houssine BARTALI-Vice-président de l'ANAFIDE : Modérateur de la cérémonie d'ouverture
- M. Youssef OUAJKA, membre du Bureau de l'ANAFIDE
- Prof. Mohamed BENMOUSSA, Vice-président de l'ANAFIDE
- M. Farid ELKHCHAI, Trésorier Adjoint de l'ANAFIDE
- M. Mohamed BOUAAM, Trésorier de l'ANAFIDE
- M. Abdelhamid CHAREF, Secrétaire Général de l'ANAFIDE
- M. Lotfi SENTISSI, Membre de l'ANAFIDE

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**10h30-11h30 Pause-Café
Inauguration de l'Exposition**

11h30-13h00 SESSION PLENIERE

SALLE SENTAL-AMBER

Communications d'ouverture- KEY NOTE

11h30-11h45

Gestion de l'Eau et Souveraineté Alimentaire dans un Contexte de Changement Climatique au Maroc

M. Zakria EL Yacoubi ; Directeur de l'Irrigation

Ministère de l'Agriculture, des Pêches Maritimes, du Développement Rural des Eaux et Forêts -(MAPMDREF)- **Maroc**

11h45-12h05

The Current and Future Gap between Water Supply and Demand and Possible Solutions to Narrow the Gap

Dr Ragab Ragab

Fellow-UK Centre for Ecology and Hydrology, CEH- **Royaume Uni**

Principal Hydrologist & Water Resources Management Specialist,

Président Honoraire de la Commission Internationale de l'Irrigation et du Drainage, CIID

12h05-12h25

How to take into account the Water-Energy and Agriculture Nexus in Africa

Mr Vincent Castel,

Chef de division agriculture et agro-industrie – Afrique du nord, Afrique centrale et Nigeria
Banque Africaine de Développement Tunis

12h25-12h45

Advanced Drainage and Irrigation Technologies to support Agro-Environmental Sustainability

Dr Chandra Madramoto

Président Honoraire de la CIID- McGill University, Canada

12h45-13h00

Conservation Agriculture as a Climate-Smart Strategy to Improve Crop Productivity and Soil Health in Rainfed and Irrigated Drylands

Mina Devkota, Krishna Devkota, Rachid Moussadek, Vinay Nangia

International Center for Agriculture Research in Dry Areas (ICARDA), Rabat, Morocco

13h00-14h30 DEJEUNER

PARALLEL SESSIONS

SALLE SENTAL-AMBER

14h30-16h00

Session A.1) Politiques et Cadres Réglementaires

14h30-14h45

-Sustainable Agricultural Water Management in Africa

FB Reinders - Afrique du Sud

Président Honoraire de la Commission Internationale de l'Irrigation et du Drainage,
Afrique du Sud

14h45-15h00

-Gestion des Ressources en Eau dans le Contexte des Changements Climatiques, Cas du Bassin Versant du Sebou

M. Khalid Ghomari

Directeur de l'Agence de Bassin Hydraulique du Sebou- Ministère de l'Équipement et de l'Eau Maroc

15h00-15h15

-Structuration des projets de dessalement pour l'irrigation agricole en Partenariat Public-Privé (PPP): retour d'expérience du Maroc

Tanji Rajaa¹, Boutaibi Youssef¹

¹ Direction de l'Irrigation et de l'Aménagement de l'Espace Agricole, Rabat, **Maroc**

Auteur répondant : Chef de Service de la Promotion et de la Mise en Place des PPP en irrigation
DIAEA/MAPMDREF

15h15-15h30

-Placing Health at the Heart of the WEF Nexus: A Framework for Sustainable Agricultural Development in Africa»

by Zainab Ashkanani*, Rabi Mohtar, and Rashed Albatayneh.

*Department of Biological and Agricultural Engineering
Energy Institute -Texas A&M University USA

15h30-15h45

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-Best Irrigation Practices in the context of Climate Change

Dr R.K.Gupta,

Secretary General ICID, New Delhi **India**

15h45-16h00 DISCUSSION

16h00-16h30 Pause-Café Visite des stands

SALLE SENTAL-AMBER

SESSIONS PARALLELES

16h30-18h00

SessionA.2) Politiques et Cadres Réglementaires

16h30-16h45

-Le programme PADIDZAR : levier pour un développement Inclusif et durable de la petite agriculture irriguée au Maroc

Assistance Technique DIAEA (Maroc) Mme Latifa Barakat Chef de Division DHA à la DIAEA- Chef de l'UGP PADIDZAR

16h45-17h00

-Rethinking Water Governance through Adaptive Investment Pathways Lens: Insights from Smallholder Irrigation development along Sand Rivers in Southern Zimbabwe

Author: Moline Chauruka^{1,2}

¹ Department of Irrigation Development, Harare, Zimbabwe

² Department of Soil Science and Environment, Harare, University of Zimbabwe, Zimbabwe

17h00-17h15

- Environmental Impact of the Dam at National Root Crops Research Institute Umudike Nigeria

By ¹ Joseph C. Adama and ² James Emmanuel

¹Department of Agricultural and Bioresources Engineering,

Michael Okpara University of Agriculture,

Umudike-Nigeria

17h15-17h30

DISCUSSION

SALLE MUSK

SESSIONS PARALLELES

14h30-16h00

Session B.1) Mobilisation de l'Eau

14h30-14h45

Dessalement : Etat de l'art -Solution pour l'Eau Potable et l'Irrigation-

Pr Béchir Hamrouni, Président de l'Association Tunisienne de Dessalement-Faculté des sciences de Tunis, Département de Chimie, 2092 Manar II-Tunis ; **Tunisie**

14h45-15h00

Interconnexion des bassins et systèmes hydrauliques pour renforcer l'offre hydrique : cas du projet d'interconnexion Sebou – Bouregreg

Direction de l'Irrigation (DIAEA) MAPMDREF **Maroc**

15h00-15h15

Public-Private Partnerships in Seawater Desalination for Irrigation in Morocco: Insights from the Chtouka and Dakhla Projects

Mohammed ELHABNOUNY^{1,2 *}, Salma OUDRHIRI², Youssef MENCHAFU¹, Aouatif SAAD¹

1 ASELab, Advanced Systems Engineering Laboratory, National School of Applied Sciences, Ibn Tofail University, Kenitra, **Morocco**.

2 Directorate of Irrigation and Management of Agricultural Land, Moroccan Ministry of Agriculture, Fisheries, Rural Development, Water and Forests

15h15-15h30

-Analyse multicritère pour la gestion intégrée des ressources en eau d'irrigation du périmètre de Chtouka

Bourziza^{1**}, Boularbah¹, El Fellah¹, El Khoumsi¹, Ramdi²

1.IAV Hassan II, Rabat -2 ORMVASM, Agadir **Maroc**

15h30-16h00

DISCUSSION

16h00-16h30 Pause-Café Visite de stands

SALLE MUSK

SESSIONS PARALLELES

16h30-18h00

Session B.2) Nouvelles Technologies

16h30-16h45

AIoT (Artificial Intelligence of Things)-Based In-Field Monitoring System for Precision Irrigation Management

Online presentation

Younsuk Dong, Ph.D

Assistant Professor and Irrigation Specialist

Department of Biosystems & Agricultural Engineering

Michigan State University - USA

16h45-17h00

-NISAR High-Resolution (200 m) Global Soil Moisture and its Application in Hydrology and Agriculture

Narendra N. Das 1, Gurjeet Singh, Preet Lal, R ajat Bindlish, Suengbum Kim, and Rowena Lohman -Michigan State University - USA

1-Associated Professor at MSU

17h00-17h15

-Evaluation of Artificial Neural Network Models for LongTerm Reference Evapotranspiration Prediction Under Climate Variability in Akwa-Ibom State, Southern Nigeria

Eludire OOa , Faloye OT b , Unanam I a , Patrick Ga , and Ogbene Fa

a Department of Agricultural and Bioresources Engineering, University of Calabar, Calabar PMB 1115, Nigeria

b Department of Water Resources Management and Agrometeorology, Federal University, Oye-Ekiti, Nigeria

17h15-17h30

-Rapid prediction of Pb and Hg traces in Water and Cocoa Beans using on PH-optimized GO-Au@Ag fabricated SERS-nanosensor -

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Felix Y.H. Kutsanedzie¹*

¹Research & Innovation Centre/ Mechanical Engineering Department, Accra Technical University, GP561, Tudu, **Accra-Ghana**

17h30-17h45

Hydrosat: AI and Smart Water & Crops Management Technologies for Sustainable and Resilient Agriculture in Africa

B. Lanedri and W. Bastianseen

International Irrigation and Water Resources Expert

Hydrosat International Compagny Luxembourg

17h45-18h00

-Smart irrigation pricing through hyperspectral remote sensing for sustainable water management

TAIA Halima^{1**}, EL AZIZI Sarah¹, AMHARREF Mina¹, WOZNIAK Edyta², BERNOUSSI Abdes Samed¹

¹ Faculty of Sciences and Techniques, University Abdelmalek Essaadi, **Maroc**

² Space Research Centre of the Polish Academy of Sciences, **Pologne**.

Online presentation

SALLE JAKARANDA

SESSIONS PARALLELES

14h30-16h00

Session C.1) Changements Climatiques

14h30-14h45

-The impact of climate change on food security in Nigeria: challenges, trends and adaptive strategies

Etim Ime, Ossom Inimfon S, Ekpo Abasiama, and Akindele Folarin Alonge

Department of Agricultural and Food Engineering

Faculty of Engineering -University of Uyo, Uyo , **Nigeria**

14h45-15h00

Problème d'eau et changements climatiques sur les sites de Dogueraoua

(Tahoua-Niger) : mesures circonstanciées et stratégies développées par les irrigants

Présentation EN LIGNE

Ing.Dr Yerima Bako Djibo Aboubacar

Maitre-Assistant des Universités CAMES -Université de Tahoua, BP. 255, **Niger** - Génie Rural-Hydraulique- Irrigation et Maitrise de l'Eau

15h00-15h15

-A Novel Resilience Assessment Approach of Farmers in Senegal in Various Economic Standings and Climate Conditions

Kieron Moller ^{a,*}, A. Pouyan Nejadhashemi ^{a,b,c}, Mohammad Tirgaris ^a, Muhammad Talha ^{a,d}, Nilson Vieira Junior ^e, Ana Julia Paula Carcedo ^f, Ignacio Ciampitti ^g, P. V. Vara Prasad ^h, Amadiane Diallo **Online presentation**

^a Department of Biosystems and Agricultural Engineering, Michigan State University, East Lansing, MI 48824, **USA**; ^b Department of Plant, Soil and Microbial Sciences, Michigan State University, East Lansing, MI 48824, **USA**; ^c Institute of Water Research, Michigan State University, East Lansing, MI 48824, **USA**; ^d Department of Computer Science and Engineering, Michigan State University, East Lansing, MI 48824, **USA**; ^e Horticulture & Product Physiology, Wageningen University & Research, Wageningen, Netherlands; ^f Plant Sciences, North Dakota State University, Fargo, ND 58102, **USA**; ^g Department of Agronomy, Purdue University, West Lafayette, IN 47907, **USA**; ^h Department of Agronomy, Kansas State University, Manhattan, KS 66506, **USA**; ⁱ Direction de l'Analyse, de la Prévision et des Statistiques Agricoles (DAPSA), Ministère de l'Agriculture et de l'Équipement Rural, PG8M+G77, Dakar, **Sénégal**

15h15-15h30

Hydrodynamic Study of Qaroun Lake for Sustainable Use Under Climate Change Challenges, El-Fayoum Governorate, Egypt.

*N. E. Eltahan 1, I. A. Gaafar 2, **Communication en LIGNE**

A. I. Eldor 3, H. M. Moghazy 4

1 Civil Engineer, Shore Protection Authority, Ministry of Water Resources and Irrigation, **Egypt**.

*Corresponding author: eng_eltahan@yahoo.com, Tel: +01063014144

2 Assistant Professor, Water Management Research Institute, National Water Research Center, **Egypt**.

3 Professor, Hydraulics and Irrigation Engineering Department, Alexandria University, **Egypt**.

4 Professor, Hydraulics and Irrigation Engineering Department, Alexandria University, **Egypt**

15h30-15h45

-The exploitation of Kuwait's brackish groundwater: a need for sustainable management to secure agricultural water supplies

Dr. Amjad Aliewi*, Dr. Adel Al-Haddad, Hydrgeol. Tariq Rashid

Hydrology and Water Resources Management Program

Water Research Centre, Kuwait Institute for Scientific Research, **Kuwait**

15h45-16h00 DISCUSSION

16h00-16h30 Pause-Café Visite de stands

SALLE JAKARANDA

SESSIONS PARALLELES 16h30-18h00

Session C.2) Changements Climatiques

16h30-16h45

-Redefining Farmer Resilience with Innovative Quantification Approaches

Kieron Moller ^{a,*}, A. Pouyan Nejadhashemi ^{a,b,c}, Mohammad Tirgaris ^a, Muhammad Talha ^{a,d}, Nilson Vieira Junior ^e, Ana Julia Paula Carcedo ^f, Ignacio Ciampitti ^g, P. V. Vara Prasad ^h, Amadiane Diallo ⁱ **Online presentation**

^a Department of Biosystems and Agricultural Engineering, Michigan State University, East Lansing, MI 48824, USA; ^b Department of Plant, Soil and Microbial Sciences, Michigan State University, East Lansing, MI 48824, USA; ^c Institute of Water Research, Michigan State University, East Lansing, MI 48824, USA; ^d Department of Computer Science and Engineering, Michigan State University, East Lansing, MI 48824, USA; ^e Horticulture & Product Physiology, Wageningen University & Research, Wageningen, Netherlands; ^f Plant Sciences, North Dakota State University, Fargo, ND 58102, USA; ^g Department of Agronomy, Purdue University, West Lafayette, IN 47907, USA; ^h Department of Agronomy, Kansas State University, Manhattan, KS 66506, USA; ⁱ Direction de l'Analyse, de la Prévision et des Statistiques Agricoles (DAPSA), Ministère de l'Agriculture et de l'Équipement Rural, PG8M+G77, Dakar, Sénégal

16h45-17h00

-Livestock Systems in Senegal From Current Realities to Future Opportunities **Online presentation**

Rasu Eeswaran ^{a,*}, A. Pouyan Nejadhashemi ^{a, b,c}, Aliou Faye ^d, Doohong Min ^e, P.V. Vara Prasade, Ignacio A. Ciampitti ^f

^a Institute of Water Research, Michigan State University, East Lansing, MI 48824 USA

^b Department of Biosystems and Agricultural Engineering, Michigan State University, East Lansing, MI 48824 USA

^c Department of Plant, Soil and Microbial Sciences, Michigan State University, East Lansing, MI 48824 USA

^d Senegalese Ins

tute of Agricultural Research, Dakar, Senegal

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e Department of Agronomy, Kansas State University, Manhattan, KS 66506 USA

f Department of Agronomy, Purdue University, West Lafayette, IN 47907, USA

17h00-17h15

Consumption-based Strategies Against Climate Shocks for Senegalese Farmers

by Mohammad Tirgari A. Pouyan Nejadhashemi, Biological and Agricultural Engineering

Department -Michigan State University – USA **Online presentation**

17h15-17h30

Upgrading Regional Food Policies for Improving Senegalese Farmer Welfare»

by Mohammad Tirgari A. Pouyan Nejadhashemi, Biological and Agricultural Engineering

Department -Michigan State University - **Online presentation**

17h30-18h00

DISCUSSION

SALLE CEDRE

SESSIONS PARALLELES

14h30-16h00

Session D) SESSION SPECIALE ANAFIDE-RWA-IWMI

Réutilisation des Eaux Usées Epurées en Agriculture

14h30-14h40

Introduction

Previous cooperation activities undertaken on the subject of REUSE

IWMI and ANAFIDE

14h40-15h

REUSE: Défis et Perspectives

Dr Ehssan El Meknassi

15h00-15h15

-Unlocking market potential for wastewater reuse

Joshua Bryant and Vincent Casey

Water Sector -Lead Resilience Water Accelerator- UK

15h15-15h30

-Assessment of Irrigation with Treated Wastewater: Growth Response of Olive and Pomegranate and Implications for Soil and Irrigation Systems

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W. El Khoumsi ; R. Bourziza ; H. Nedach ; H. EL Amrani ; S. Boularbah

Département de Génie Rural - IAV Hassan II Rabat Maroc

15h30-15h45

-Analyzing the effects of treated and untreated wastewater on growth and yield development of upland rice under drip irrigation in Nigeria

Aladeloye I. M., Adedapo A. M., Olatunji I. O., Oshifisan F., Edobor V. A., Odafi W. K., Akinbile C. O***.,

Department of Agricultural and Environmental Engineering, Federal University of Technology Akure, **Nigeria**

15h45-16h00

DISCUSSION

16h00-16h30 Pause-Café Visite de stands

SALLE JAKARANDA

18h30-20h00

-Réunion du Bureau de l'Association Panafricaine du Génie Rural PASAE

Suivie de

-l'Assemblée Générale de la PASAE (en mode hybride)

JEUDI 23 OCTOBRE

SESSIONS PARALLELES

SALLE SENTAL-AMBER

9h00-10h30

Session E.1)Economie d'Eau

9h00-9h15

-Towards achieving sustainable agriculture in Africa and future actions needed

Dr Mohamed Shehata WAHBA

Vice Président Honoraire de la CIID,

Emeritus Reseacher - DRI, NWRC, MWRI-Egypt

9h15-9h30

-Contrat de gestion participative de la nappe Fès- Meknès, dans le contexte de changements climatiques

Mme Leila MISANE, Secrétaire Générale de l'ABH du Sebou

9h30-9h45

- Gestion de l'irrigation et la mobilisation des eaux dans les zones oasiennes, cas des oasis du moyen Drâa.

Abdelaziz AIT MBIRIK 1, Abdelilah TARGUI 2, Atman BOUYGHF 2

1 Directeur de l'Office Régional de Mise en Valeur Agricole de Ouarzazate (ORMVAO)

2 Chefs de service à l'Office Régional de Mise en Valeur Agricole de Ouarzazate (ORMVAO)

9h45-10h00

Toward Sustainable Irrigation Water Management for Date Palm Cultivation in Tunisian Oases **Online presentation**

Dr Latifa Dhaoudi

Regional Research Center for Oasis Agriculture, Tunisia

10h00-10h15

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**-Modernisation des réseaux d'irrigation : Cas du Projet Garet
ORMVA de la Moulouya -Maroc**

10h15-10h30

DISCUSSION

10h30-11h00 Pause-Café Visite des Stands

SALLE SENTAL AMBER

SESSIONS PARALLELES

11h00-12h30

Session E.2) Economie d'Eau

11h00-11h15

**-Evaluation des Performances Physiologiques et Agronomiques de plusieurs Variétés
d'Aubergine Cultivées sous les Conditions de Pénurie d'Eau d'Irrigation.**

Dina MAACHI et Kamal ABERKANI*

1 Faculté Pluridisciplinaire de Nador, Université Mohammed Premier, Selouane, **Maroc**

11h15-11h30

-Resource Utilization Efficiency of Plant-based Protein Extractions

Farzin Eslami; Chinwendu Eze; Ebenezer M. Kwofie; Michael Ngadi

Department of Bioresource Engineering, McGill University, Montreal, **Canada.**

11h30-11h45

**-Paddy rice farm practices assessment aiming water resources protection. Application
of monitoring technologies at Lower Mondego, Portugal**

J. M. Gonçalves, V. Carantino, L. Pascal, M. Nunes, R. L. Pato, S. Oliveira, O. Filipe, C.
Santos, F. Melo, T. Vasconcelos, J. Hastwell, H. Phan

Polytechnic Institute of Coimbra, Coimbra Agriculture School-**Portugal**

11h45-12h00

**-Amélioration de l'efficiencia et réduction des coûts de la maintenance des réseaux de
distribution en canaux portés**

Mr JEBBOUR Said, Ingénieur de Génie Rural, **Maroc**, Consultant International

Email: jebbours@gmail.com-Tel: +212661301945

12h00-12h15

**-Economie d'eau d'irrigation dans les canaux de transport a travers la réadaptation
des modes de régulation existants**

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Mr JEBBOUR Said, Ingénieur de Génie Rural, **Maroc**, Consultant International
Email: jebbours@gmail.com-Tel: +212661301945

12h15-12h30
DISCUSSION

SALLE MUSK

SESSIONS PARALLELES
9h00-10h30

Session F.1) Systèmes Agroalimentaires et Energie

9h00-9h15

-Efforts to Reduce Water Usage in Food Process Operations

Dr Kumar MALLIKARJUNAN
Department of Food Science and Nutrition
Université du Minnesota, **USA**

9h15-9h30

-Agri-Food Systems and Energy

Professor Lalit Verma
University of Arkansas, AR, **USA**

9h30-9h45

-Some rheological and frictional properties of yam flour (*dioscorea rotundata*)

Tom, Emmanuel Emmanuel, Alonge Akindele Folarin and Ossom, Inimfon Samuel
Department of Agricultural and Food Engineering,
Faculty of Engineering,
University of Uyo, Uyo , **Nigeria**

9h45-10h00

-Consumer dynamics of organic foods among urban households in Africa:

A systematic review

Juliet Nambuubi*
PhD Program on AgriFood, Università Cattolica del Sacro Cuore (UNICATT), Piacenza,
Italy
*Uganda Martyrs University, Nkozi, Kampala-**Uganda**

10h00-10h15

-Effects of formulation and process variables on the density of briquettes from shea nut shells

Aliyu M1., Ahmed S. T1., Mohammed I. S1., Osunde Z. D1., Dorcas Tinuke Ezekiel-Adewoyin2., Cynthia Kusin Okoro-Shekwaga3, Rabi Isa4, Isah Abubakar Garba4, Olanrewaju Taofiq Olayinka5- **Nigeria**

1. Department of Agricultural and Bio-resources Engineering, Federal University of Technology, Minna, Nigeria-2.Department of Soil Science and Land Management, Federal University of Technology, Minna, Nigeria-3.University of Leeds-4.Department of Chemical Engineering, Federal University of Technology, Minna, Nigeria-5.Ahmadu Bello University, Zaria

10h15-10h30

DISCUSSION

10h30-11h00 -Pause-Café Visite de Stands

SALLE MUSK

SESSIONS PARALLELES

11h00-12h30

Session F.2) Systèmes Agroalimentaires et Energie

11h00-11h15

-Modelling and Optimization of Biodiesel Production by Transesterification of Mahogany (*Khaya senegalensis*) seed oil using central composite design (CCD)

Methodology

Usman D. D^{1,21, 2}, O. U. Dairo³³, B. G. Jahun²² and O. J. Adeosun³³

¹¹ ¹¹ Agricultural Mechanization and Sustainable Environment Programme, Centre of Excellence in Agricultural Development and Sustainable Environment (CEADESE), Federal University of Agriculture, Abeokuta, Nigeria

²Department of Agricultural and Bio-Resource Engineering, Abubakar Tafawa Balewa University, Bauchi, Nigeria

³Department of Agricultural Engineering, Federal University of Agriculture, Abeokuta, Nigeria

11h15-11h30

-Impact of Moisture Sorption Properties on the Design of Storage Facilities for Moringa Seed under Water-Stressed Conditions

Akintola, A.,^{1*} Aremu, A. K. ², Oyefeso B. O. ² and Siyanbola A. A. ¹

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1. Department of Agricultural and Bio-Environmental Engineering, Oyo State College of Agriculture and Technology, Igboora, Nigeria.
2. Department of Agricultural and Environmental Engineering, University of Ibadan, Ibadan, **Nigeria**.

11h30-11h45

-Development of 3G Rice-Soy Snacks: Effects of Extrusion and Frying Conditions on Physical, Chemical, and Thermal Properties

M. S. Sanusi, A. B. Bello, M. A. Salako, I. O. Ibrahim, T. B. Olaniran, M. O. Sunmonu
Department of Food Engineering, University of Ilorin
University of Ilorin, Ilorin, **Nigeria**

11h45-12h00

-Evaluation of a Single-Cylinder Compression Engine using Giant Palm Biodiesel Blends for Sustainable Energy

R. A. Busari*, K. R. Adebayo, A. Fadeyibi and A. T. Opobiyi
Food and Agricultural Engineering Department, Faculty of Engineering and Technology.
Kwara State University Malete, **Nigeria**
Corresponding author: Dr. Rasheed Amao Busari

12h00-12h15

-Design of a solar-powered portable cold room with phase change materials, mounted on a three-wheeled motorbike.

Ms Michelle Gathii, Online presentation

Department of Environmental and Biosystems Engineering, University of Nairobi, **KENYA**

12h15-12h30

DISCUSSION

SALLE JAKARANDA

SESSIONS PARALLELES

9h00-10h30

Session G.1) Entrepreneuriat et Transfert de Technologie

9h00-9h15

-Experience from the field – Scaling hard agtech for small growers at the bottom of the pyramid

Dr Klein Illeleji

Co-chair, ASABE/AMAA

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Professor of Agricultural & Biological Engineering - Purdue University, West Lafayette, Indiana, USA.

9h15-9h30

-Developing a solar-drip irrigation based agricultural service provider (asp) business model»

by **Ajit Srivastava**¹ , Ranjani Krishnan ² , Abel Girma³ , and Vinsoun Millogo ⁴

¹Professor, Biosystems and Agricultural Engineering, Michigan State University,

²Professor and Associate Dean, Broad College of Business, Michigan State University, USA

9h30-9h45

-Beyond the Mirage: Navigating Water-Business Risk Pathways Through Stakeholder Priorities in Morocco's Export Agriculture—A Multi-Dimensional Max Diff Analysis

Ismail Elhassnaoui¹, Wafae EL Harraki², Rajaa Tangi³, Youssef Brouziyne⁴, Justina Muchelenje¹, Charles Wight¹, Meriem Boumkhakh⁵, Youssef Zayeh⁵

¹**Water Witness International, Edinburgh, UK**

² The National Superior School of Mines-Rabat, Morocco

³ The Directorate of Irrigation and Landscape Arrangement - Ministry of Agriculture, fisheries, rural development, water and Forest, Morocco

⁴ International Water Management Institute-MENA region, Egypt

⁵ Agronomic and Veterinary Institute Hassan II (IAV), Morocco

9h45-10h00

-Adaptation du système californien aux conditions rurales africaines

M. JEBBOUR Said, Ingénieur de Génie Rural, Maroc, Consultant International

10h00-10h15

-Evaluation of a Single-Cylinder Compression Engine using Giant Palm Biodiesel Blends for Sustainable Energy

R. A. Busari*, K. R. Adebayo, A. Fadeyibi and A. T. Opobiyl

Food and Agricultural Engineering Department, Faculty of Engineering and Technology. Kwara State University Malete, **Nigeria**

Corresponding author: Dr. Rasheed Amao Busari

10h15-10h30

DISCUSSION

10h30-11h00 Pause-Café Visite des Stands

SALLE JAKARANDA

SESSIONS PARALLELES

11h00-12h30

Session G.2) Entrepreneuriat et Transfert de Technologie

11h00-11h15

-Development and Evaluation of low-cost digital technology for Smart Management of Cereals Grains Storage Performances

A. El Aissaoui*, T. Bouali, A. Harkani, H. Bartali

*Researcher at National Institute of Agronomic Research INRA **Maroc**

11h15-11h30

-Evaluation of Soil Moisture Sensors and IoT -Technologies for Low-Cost precision Irrigation -Monitoring in Sorghum and Wheat Fields: A Semi Arid Context of Morocco

Assia. Harkani*, H. Ouhemi, H. Hajjaj, T. Benabdelouahab, Gaillard, P. Congduc, A. El Aissaoui-

*Researcher at National Institute of Agronomic Research

11h30-11h45

-Intelligent Analysis of NDVI Data from Drones using Remote Sensing and Machine Learning Methods Applied to Agriculture

H.Hajjaj ; B.Alaoui ; A.Harkani; M.Nabil; K.Ibno Namr;
K.Makroum ; and A. EL Aissaoui

National Institute of Agronomic Research-University Chouaib Doukkali
hajjaj.hasna@ucd.ac.ma

11h45-12h00

Digital Monitoring and Growth Modeling of a Biotic Stress Disease (Botrytis fabae) in Faba Bean Using Machine Learning

Kabli Meryem, Krimi Bencheqroun Sanae, Zouaki Hamid, El-Aissaoui Abdellah
National Institute of Agronomic Research INRA, University Chouaib Doukkali

12h00-12h15

DISCUSSION

SALLE CEDRE

9h00-10h30

Session H) Conservation des Eaux et des Sols

9h00-9h15

-Repenser les systèmes irrigués face aux défis du climat : leviers pour une agriculture résiliente et durable

Mme Ehssan EL MEKNASSI Youssoufi, Consultante, Coordinatrice méditerranée du COSTEA- Comité Scientifique et Technique Agricole -Montpellier **-France**

9h15-9h30

-Partial Root Zone Drying Irrigation System (PRD) for Water Conservation in Potato and Cucumber Crops

Ibrahim Louki and Abdulrasoul Al-Omran*

*Prof. of Soil and Water Sciences

Editor in Chief of JSSAS -College of Food and Agricultural Sciences

King Saud University- Riyadh, **Saudi Arabia**

Tel: +96614678444 -fax: +96614678440

Alternative email: alomranrasoul@gmail.com

9h30-9h45

-Microbiological Water Quality Assessment in Rice Agroecosystems in Central coastal region of Portugal

I. M. Duarte, Paula Amador, T. Vasconcelos

Polytechnic Institute of Coimbra, Coimbra Agriculture School-**Portugal**

Corresponding author: Pr Duarte: iduarte@esac.pt

9h45-10h00

-Land Reclamation in Lithuania

Dr. Otilija Miseckaite

Researcher at Vytautas Magnus University, **Lithuania**

10h00-10h15

-Enhancing Water Resources Decision Making Potential in Data Scarce Areas: case study of the Sasumua River Watershed **Online presentation**

Margaret W. Gitau* and Victoria M. Garibay

*Professor of Agricultural and Biological Engineering

Director, Institute for a Sustainable Future

International Outreach, Institute for Digital and Advanced Agricultural Systems

Expert Committee Member: National Academies of Sciences,

Engineering, and Medicine, 2023-2024

Purdue Insights Fellow, 2023-2024

Carnegie African Diaspora Fellow, 2020

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ABE 3024, 225 S. University Street, West Lafayette, IN 47907

Email (preferred): mgitau@purdue.edu

Phone: 765-494-9005 (Voice) Fax: 765-496-1115

10h15-10h30

-Influence of Rice Flooding Irrigation on Antibiotic Resistance: Case Study in Central Portugal

Amador, I. M. Duarte, T. Vasconcelos

Corresponding author: Professor Maria Paula Amador

Polytechnic Institute of Coimbra, Coimbra Agriculture School

Bencanta, Coimbra 3045-601, **Portugal**

10h30-11h00 Pause-Café Visite des Stands

CEDRE ROOM

10h30-12h30

ICARDA-ANAFIDE side-event program,

“Use of Green Energy in Sustainable Agriculture Water Management in Africa.”

10h30-10h35

Welcome and Opening Remarks

Dr. Krishna Devkota,

Soil-Water-Agronomy Team, ICARDA

10h35-10h50

Green energy transition for realizing water security

Prof Chandra Madramootoo, PH ICID; Univ McGill University

10h50-11h05

Smartphone Applications for Efficient Water Use and Reduced Initial Costs of Green Energy

Eng. Anas Mansouri

Private Sector

11h05-11h20

Green Energy Generation and Water Rationalization on the Farm Level

Dr. Mohie El Din Omar

Soil, Water and Agronomy Team

ICARDA

11h20-11h35

Water–energy challenges and green pathways for sustainable agricultural

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development in North Africa [online]

Dr. Mohamed Naouri

11h35-11h50

The Role of Green Energy within the Water-Energy-Food, WEF Nexus : Towards Efficient Water and Energy Use Efficiencies and Securities

Prof. Ragab Ragab, Président Honoraire de la CIID

11h50-12h00

ICARDA innovations on soil and water management for resilient drylands

Dr. Krishna Devkota,

Soil-Water-Agronomy Team, ICARDA

12h00-12h10

Q & A and Way forward: (Group discussion)

How sustainable water management technologies can be integrated into policy institutionalization

12h10-12h15

Wrap up

Dr. Mohie El Din Omar

ICARDA

12h30-14h00 Déjeuner Marriott Hotel Restaurant

SALLE SENTAL-AMBER

SESSION PLENIERE

14h00-16h30

Session Spéciale AMAA

16h30-17h00 Pause-Café

SALLE SENTAL-AMBER

SESSION PLENIERE

17h00-18h00

RECOMMENDATIONS

SEANCE DE CLOTURE

RESTAURANT DIAMANT VERT

19h30-22h00

Dîner de CLOTURE -

Les bus feront le départ de l'hôtel MARRIOTT à 19h

VENDREDI 24 OCTOBRE

VISITES TECHNIQUES OPTIONNELLES

VISITE 1- 8h30-15h00

DEPART du Bus à partir du Marriott hôtel à 8h30

Nouveau périmètre d'irrigation équipé en goutte à goutte, réalisé dans le cadre du projet de sauvegarde de la plaine du Saiss prenant l'eau d'irrigation à partir du barrage de Mdez.

VISIT 2- 8h30-15h00

Station de Traitement des Eaux Usées STEP Boues activées - Système d'approvisionnement de la grande agglomération de Fès en eau potable

Départ des Bus à partir du Marriott hotel à 8h30

POSTERS

HYDROPOD: Soil-Free Farming for Water-Smart Food Production

Kehinde Blessing Temitope

Department of Agricultural and Environmental Engineering, Obafemi Awolowo University,

Ile-Ife, Osun state, **Nigeria.**

btkehinde@student.oauife.edu.ng

Empirical Characterization of Soil Water Retention and Availability for Rainfed Crop

P. C. Mba* and D.D. Uyeh Assistant Professor****

Department of Biosystems and Agricultural Engineering, Michigan State University,
East Lansing, Michigan 48824, USA

Development of a Vertical Agrivoltaic System

A. Harkani*, E. Nassih, M. Raddid, N. Rochdi, A. El Aissaoui

National Institute of Agronomic Research INRA- Centre Régional de la Recherche Agronomique de Settat *Dr. Assia Harkani Researcher

Irrigation d'appoint : Importance et application sur le blé.

H. Ouhemi, A. Harkani, A. El Aissaoui,

National Institute of Agronomic Research INRA,

Système intelligent de détection de rangs pour la navigation autonome en agriculture .

N. Ait Hammou ; H. Mousannif ; B. Lakssir et A. EL Aissaoui

National Institute of Agronomic Research INRA,

Détection de l'empreinte des panneaux photovoltaïques à partir d'images satellites et d'approches d'apprentissage automatique.

K. Laaroussi ; M. Mohiddine ; T. Benabdelouahabe ; A. Harkani ; M. Nabil ; A. El-Aissaoui

National Institute of Agronomic Research INRA,

Drone-Based Multispectral Imaging for Detection and Assessment of Biotic Stress in Wheat

L. Satia ; R. Mamane Bako ; A. Harkani ; S. Maimouni ; A. EL Aissaoui

National Institute of Agronomic Research INRA,

Intelligent Row detection System for Autonomous navigation in Agriculture

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Najia. Ait Hammou*; H. Mousannif ; B. Lakssir and A. ELAissaoui
INRA-University Cadi Ayyad Marrakech Morocco

Evaluation of Surface and Subsurface Drip Irrigation for Rice Using Drought-Tolerant Genotypes in two locations in the south-central zone of Chile

1Hamil Uribe, 1Karla Cordero, 1Ruben Gallegos; Researcher

1Instituto de Investigaciones Agropecuarias (INIA) ; Centro de Investigación Quilamapu, Chillan, Chile

Water-Smart Aquaculture: Evaluating a Recirculatory System for Fish Productivity and Irrigation Reuse in Nigeria

Abiodun O. Iyiola and Olaitan L. Adeniyi

Department of Agricultural and Environmental Engineering, Obafemi Awolowo University.

Pour les auteurs des Posters en ligne, envoyer le texte du poster à l'attention de M. Bennani, à l'adresse mail suivante : events@j4tinfo.com . La taille du fichier du poster doit être inférieure à 8Mo.

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MERCREDI 22 Octobre 2025

Salle // Horaire	Sental-Amber	Musk	Jakaranda	Cedre
9h00-10h30	SESSION PLENIERE Cérémonie d'ouverture	-	-	-
10h30-11h30	PAUSE CAFE EXPOSITION	-	-	-
11h30-13h00	SESSION PLENIERE Présentations Keynote	-	-	-
13h00-14h30	DEJEUNER	-	-	-
14h30-16h00	Politiques et Cadres Réglementaires	Mobilisation de l'Eau	Changements Climatiques	Side Event IMWI-RWA Réutilisation des Eaux Usées Epurées
16h00-16h30	PAUSE CAFE	-	-	-
16h30-18h00	Politiques et Cadres Réglementaires	New Technologies	Changements Climatiques	-
18h30-20h	-	-	Réunion du Bureau et Assemblée Générale de la PASAE	-

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JEUDI 23 Octobre 2025

Salle // Horaire	Sental-Amber	Musk	Jakaranda	Cedre
9h-10h30	Economie d'Eau	Systèmes agro-alimentaires- énergie	Entreprenariat et Transfert de Technologie	Conservation des eaux et des sols
10h30-11h00	PAUSE CAFE EXPOSITION	-	-	10h30- 12h30 : Side Event ICARDA –
11h30-12h30	Economie d'Eau	Systèmes agro-alimentaires- énergie	Entreprenariat et Transfert de Technologie	ANAFIDE : sur Conservation des eaux et des sols
12h30-14h00 Pause-Café	-	-	-	-
14h00-16h30	Plénière Session Spéciale AMAA	-	-	-
16h30-17h00 Pause-Café	-	-	-	-
17h00-18h00	Session Plénière Recommandations CLOTURE	-	-	-
19h30-22h00 Dîner de Clôture	-	-	-	-

DISPOSITION DES SALLES

MARRIOTT HOTEL FES

