## Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA)

**Vol. 27 No. 2, Biannual Newsletter**

**June - December 2022**

### Executive Committee

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<td>President</td>
<td>Dr. Hamdan Salim Al Wahaibi</td>
<td>(Oman)</td>
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<td>Vice President Representative of West and Central Asian Sub-Region</td>
<td>Dr. Nizar Haddad</td>
<td>(Jordan)</td>
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<td>Members</td>
<td>Dr. Fadila Salameen</td>
<td>(Kuwait)</td>
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<td>Prof. Hichem BEN SALEM</td>
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<td>Dr. Abdelmoneim Taha Ahmed Elsiwallih</td>
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<td>Dr. Rida A. Shibli</td>
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### Editorial Committee

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<td>Executive Secretary</td>
<td>Dr. Rida A. Shibli</td>
<td>Isra’a I. Odat</td>
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Introduction

The Association of Agricultural Research Institutions in the Near East & North Africa (AARINENA) carried out many activities during 2022. These activities included the launching of the Date Palm Innovation Platform, signing of partnership agreements, sharing of excellent experiences from experts (in the plant, animal, fungi, and marine fields) in the Forgotten Foods, Neglected and Under-utilized Species (FF-NUS), and GFAR Regional Interaction for Near East and North Africa. In addition to different projects on Digital Agriculture, Extension of the Application of Date Palm Innovation Platform, Participation in FAO – Side Event, and execution of different webinars on the diverse topics related AARINENA networks.

In summary, AARINENA’s activities during 2022 included different workshops, training courses, webinars, and several meetings either virtually or physically. Also, we disseminated and communicated many activities such as webinars, workshops, talks…etc. of relevance to our members and partners. Lastly, AARINENA held its Fifteenth General Conference of AARINENA, on November 08 – 09, 2022.

AARINENA’s Fifteenth General Conference, Amman Mövenpick Hotel, 08 November 2022

Under the patronage of Prof. Dr. SarAARINENA, President of Al-Ahliyya Amman University, the Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA), represented by Prof. Dr. Adil Abdel Rahim, President of the AARINENA, and Prof. Dr. Rida Shibli, Executive Secretary of the AARINENA, inaugurated the Fifteenth General Conference of the AARINENA , at the Mövenpick Hotel Amman, on November 08, 2022, entitled “A paradigm Shift in agricultural Research and Innovation for Development Fostering Collective Actions on Forgotten Foods and Innovation Platforms” and in the presence of many agricultural research directors from different countries in the Near East and North Africa and many experts from around the Arab region, where Dr. Atef Swalem from the Food and Agriculture...
Organisation (FAO) gave a lecture entitled “Strengthening National Agricultural Research and Extension Systems”. After that, the scientific session entitled Forgotten foods and the neglected and untapped species began, which was chaired by Dr. Adel Abdel Rahim. The first lecture was presented by Dr. Hildegard Lingnau of the Global Forum on Agricultural Research (GFAR) entitled “Developing a Joint Design Process for Implementation of the Global Manifesto for Forgotten Foods to Keep Farmers at the Centre”. Then the second lecture, which was presented by Dr. Khaled Abu Laila, a researcher at the National Center for Agricultural Research, a lecture entitled “The situation and future contribution of the National University in achieving food security for the region”. Then the second session, entitled “Smart Agriculture and Climate Change”, began, which was chaired by Dr. Mahmoud Dwyri. The first symposium, presented by Dr. Theib Oweis, former advisor at the International Center for Agricultural Research in the Dry Areas (ICARDA), included a lecture entitled “Towards Climate-Smart Agriculture in the Water Scarcity Region in the Near East and North Africa”. The second lecture was presented by Dr. Funda KIDOĞLU on behalf of Dr. Bülent SÖNMEZ from Turkey, with a lecture entitled “Digital Technologies in Agriculture and Agriculture 4.0 in the Agri-Food Chain”. Finally, the third session was entitled “Date Palms in the Near East and North Africa”. It was chaired by Dr. Rida Shibli. The first lecture, which was presented by Eng. Nabil Arar on behalf of Eng. Anwar Haddad, President of the Jordanian Dates Association, included a lecture entitled “The Most Important Features of the Jordanian Experience in the Production and Marketing of Jordanian Dates”. The second lecture, which was presented by Dr. Muhammad Malkawi from the University of Science and Technology and a specialist in computer information, was a lecture entitled “The Date Palm Innovation Platform”. There were many valuable scientific discussions for each session.

During the meeting of the second day business meeting, November 09, 2022, the Executive Committee members, and the members of AARINENA elected Prof. Dr. Abdelrahim as a nomination officer, and Prof. Dr. Rida Shibli, as the rapporteur and then they agreed on the following:

- President:
All members and EC of AARINENA agreed that the President is Dr. Hamdan Salim Al Wahaibi, Director General of Agriculture and Livestock Research – Ministry of Agriculture, Fisheries and Water Recourses / Oman.

- Vice-President:
All members and EC of AARINENA agreed that the Vice-President will be one of Jordan (Mashreq Sub-Region) or Sudan (Nile Valley and Red Sea Sub-Region), then Sudan gave the chance for Jordan, Vice-President is Dr. Nizar Haddad, Director General (NARC) (Mashreq Sub-Region).
- Maghreb Sub-Region representative is Prof. Hichem BEN SALEM, Directeur Général, Institution de la Recherche et de l'Enseignement Supérieur Agricoles (IRESA) - Tunisia.
- Nile Valley and Red Sea Sub-Region representative is Prof. Abdelmoneim Taha Ahmed Elsiwailih, Director General, Agricultural Research Corporation (ARC), Sudan.
- Mashreq Sub-Region representative is Dr. Nizar Haddad, Director General (NARC) - Jordan.
- Arabian Peninsula Sub-Region representative is Dr. Fadila Al-Salameen, Manager of Biotechnology Program, Research Scientist, Environment and Life Science Research Centre- Kuwait Institute for Scientific Research (KISR).
- West Asian Sub-Region representative is Dr. Bülent SÖNMEZ, GD of Agricultural Research and Policies - Ministry of Agriculture and Forestry, Turkey.
- The Executive Secretary is Dr. Rida Shibli.

**AARINENA’s Projects 2022:**

1. **Digital Agriculture**

The Association of Agricultural Research Institutions in the Near East & North Africa (AARINENA) signed a Letter of Agreement with the Food and Agriculture Organization of the United Nations (FAO) on behalf of the Global Forum on Agricultural Research and Innovation (GFAR) under DeSIRA funding to conduct “Regional Survey and Study on Inclusive Digital Transformation of Agriculture in the NENA Region”. This included the collection of surveys and studies on attitudes and challenges of small-scale farmers towards digital agriculture in three countries (Jordan, Tunisia, and Egypt), to identify good practices for an inclusive digital transformation of agriculture. The survey was structured to capture small-scale producers’ attitudes and perceived challenges and drivers related to use of digital solutions, and reporting research review on the current scenario in Jordan, Tunisia, and Egypt on use of digital solutions by small-scale farmers.

2. **Application of the Date Palm Innovation Platform**

Due to high potential and increasing importance of the date palm in the NENA region, AARINENA and FAO continued their work in establishing and operationalizing the application of innovation platform that coordinated the efforts of the member countries at the regional and international levels and acts as an interactive hub for multi-stakeholders including researchers, producers, fund providers, farmers’ associations, private industries, investors, and government agencies to promote the date palm integrated production system in the NENA region and to maintain high competitiveness in a dynamic global market. The application serves as a hub for information and knowledge that effectively links relevant stakeholders to consolidate available research results, technologies, and innovations related to the date palm
production value chain. The application will also play a role in the technology transfer and capacity enhancement of various stakeholders using ICT solutions.

AARINENA conducted a webinar for launching a mobile application for the date palm innovation platform. This online event was held on December 7, 2022. This event came following the development of the date palm innovation platform, AARINENA and FAO developed a user-friendly mobile app that reflects the date palm innovation platform in its function, features, integrations, and modifications. The mobile app aimed to accommodate the date palm innovation platform to ease the interaction and communication between date palm's stakeholders.

The Application of the “Research, Technology and Innovation Platform for Date Palm Integrated Production Systems in the NENA Region” was tested on October 14, 2022.

AARINENA in collaboration with FAO conducted a series of country – by – country meetings as shown below:

1. First Meeting – NENA Region Meeting on June 06, 2022, that involved 18 experts in date palm from different Countries of the NENA. The decisions of the meeting involved:
   - To have one or more meetings in each country and this will be soon.
   - To approach the focal point of each country and ask them to contact and convince farmers and farmers' organization in their countries to actively participate in the upcoming meetings of relevance.
   - To launch the proposed meetings with Egypt, Algeria, and Tunisia in June 2022.
   - Then during the first two weeks of July 2022 the plan is to have the meetings with Iraq, Kuwait, and Saudi Arabia.
   - To have a webinar in the third week of July 2022.
   - To have the field day in Jordan in the fourth week of July 2022.
   - Lastly, to continue the meetings in Oman, Yemen, and United Arab Emirates first of August 2022.

2. Second Meeting – Algeria - INRA 22 June 2022, this involved 11 experts from Algeria - INRA
3. Third Meeting – Tunisia - IRESA 23 June 2022, this involved 13 experts from Tunisia - IRESA
4. Fourth Meeting – Egypt - ARC 03 July 2022, this involved 31 experts from Egypt - ARC
5. Fifth Meeting – Morocco - INRA 05 July 2022, this involved 28 experts from Morocco - INRA
6. Sixth Meeting – Jordan - 30 July 2022, this involved 13 experts from Jordan
7. Seventh Meeting – Iraq - Libya - Sudan 22 August 2022, this involved 11 experts from Iraq - Libya – Sudan
AARINENA’s Partnership Agreements 2022:

1. MoU between AARINENA and the Agricultural Engineers Association, on October 15, 2022

A memorandum of understanding was signed between the AARINENA and the Syndicate of Agricultural Engineers. On Wednesday, October 15, 2022, the agreement was signed by the Executive Secretary of the AARINENA, Professor Dr. Rida Shibli, and the President of the Syndicate of Agricultural Engineers, Engineer Ali Abu Nuqata.

This memorandum aims to strengthen cooperation in research fields and organize training programs of common interest to the two parties.

The two sides agreed to cooperate to implement and facilitate joint business. In addition to providing technical and economic advisory services and technical support on matters of common interest, promoting the exchange of ideas and experiences, and encouraging cooperative activities, by organizing relevant seminars and workshops.

The two parties pay great attention to announcing the activities of the joint activities in the various major media, audio, and print, in addition to social media.

2. MoU between AARINENA and the Veterinarians Association, on September 10, 2022

The President of the Veterinarians Association, Dr. Ahmad Al-Dahiyat, and the Executive Secretary of the Association of Agricultural Research Institutions in the Near East and North Africa “AARENINA”, Dr. Rida Shibli, signed a cooperation agreement between the two sides on September 10, 2022. The agreement aims to develop fruitful and constructive cooperation in the fields of research, training and rehabilitation, raising capacities and innovation, and developing frameworks for joint cooperation in scientific research mechanisms and the agricultural sector. https://aarinena.org/news/mou-between-aarinena-and-the-veterinarians-association-10-sep-2022/
**AARINENA’s Networks Activities 2022:**

- **AARINENA – Olive Network Webinar:**
  AARINENA organized a Webinars about the “Proper Operations for Harvesting Olive Tree”, by Eng. Raed Lutfi Ahmad, National Agricultural Research Center – Jordan, on October 10, 2022. The link of video is here: https://youtu.be/bJH9w0i2mzI

- **AARINENA – Medicinal and Herbal Plants Network Webinars:**
  AARINENA organized two Webinars for the Medicinal and Herbal Plants Network as follows:
  - AARINENA organized a Webinars about the “Immune System and its effects on Therapeutic System”, which was presented by Dr. Talal Taha Ali, on September 28, 2022. The link of video is here: https://youtu.be/sV_to0Ox6cw
  - AARINENA organized a Webinars about the “Our Food Our Drugs”, which was presented by Dr. Talal Taha Ali, on September 28, 2022. The link of video is here: https://youtu.be/-cpq44g0cDA

- **AARINENA – Genetic Resources Network Webinar:**
  AARINENA organized two Webinars for the Genetic Resources Network:
  - AARINENA organized a Webinar for the Genetic Resources Network about the “Assessment of the Genetic Diversity of Tomato Yellow Leaf Curl Virus in Kuwait”, which was presented by Dr. Ebtisam Al-Ali - from Kuwait Institute for Scientific Research (KISR), on September 14, 2022, and moderated by Dr. Rida Shibli, the coordinator of AARINENA’s Executive Secretary. This involved a lot of information about Tomato Yellow Leaf Curl Virus (TYLCV), genetic analysis for TYLCV, the ways that this virus spreads especially the white fly, the experiment done in KISR that results in the recommendation of how to reduce the spread of this virus especially the protection of the tomato plants from the white fly. The meeting involved useful discussions among the attendees from different members of AARINENA in the region. Click on the link to see the full YouTube video: https://www.youtube.com/watch?v=-mp4FMnqft0
AARINENA – Animal Production Network Webinars:

AARINENA organized many Webinars for the Animal Production Network as follows:

- Webinar about the “Impact of Thermal Stress and Drought on Farm Animals” on August 11, 2022, which was presented by Prof. Hosam Al-Tamimi, Jordan University of Science & Technology (JUST) – Jordan. This involved a lot of information about different tools used in many experiments done on the drought adaptation process, the heat stress, these done on the animals found in Jordan Valley. For more information see the link of YouTube video: https://www.youtube.com/watch?v=WhGn72QwKnA

- Webinar about the “Microsatellite based biodiversity of Arabian Goat”, which was presented by Prof. Raed Al-Atiyat, Mutah University - Jordan, on August 04, 2022. This involved a lot of information about genetic variability of the of the goat breeds in the Arabian countries, the reasons for losing the diversity of Arabian goats (such as drought, diseases, and crossing with exotic breeds), different experiments done on local goats in Jordan on goat breeding. For more information see the link of YouTube video: https://www.youtube.com/watch?v=xh4oP1qrRcQ

- Webinar about the “Factors affecting the sustainability of small ruminant production in Jordan”, which was presented by Dr. Jaafar Khazaleh, Al-Balqa Applied University - Jordan, on July 28, 2022. This involved constrains and risks affect ruminants in Jordan (young stock materials, feed shortage and water availability). For more information see the link of YouTube video: https://www.youtube.com/watch?v=G62YMzQDnSw

AARINENA - Date Palm Network Webinars:

AARINENA organized a series of webinars for the Date Palm Network as follows:

- Webinar entitled "The Effective Triangle for the Success Control of Palm Weevil ", which was presented by Dr. Muhammad Kamal Abbas from Agricultural Research Center (ARC) - Egypt, on October 31, 2022.

- Webinar entitled "The Role of Microorganisms in Solving Some Problems Facing Date Palm Acclimatization", which was presented by Dr. Lubna Abdeljaleel from Agricultural Research Center (ARC) - Egypt, on September 04, 2022. This important session was moderated by Dr. Mohamed Kamal Abbas, the coordinator of AARINENA’s date palm network, and it involved important information about the economic importance of date palm in Egypt and Arab countries, the methods of the production of date palm, the importance of tissue culture in the saving time for the production of plants, the processes of acclimatization of the date palm, the role of microorganisms in solving the problems of acclimatization, the quality of the products, and experiments that take place in the acclimatization. The meeting exhibited fruitful discussions among the attendees from the different members of AARINENA from the North Africa
and Near East (NENA) region. Below is YouTube link of this webinar; https://www.youtube.com/watch?v=N_kg1Y7WpYc

▶️ AARINENA – Biotechnology Network Webinar:

AARINENA organized a webinar for the Biotechnology Network:
- Webinar about the “Why Integrated Pest Management (IPM) should be urgently applied? What are the tactics of IPM?”, which was presented by Prof. Dr. Firas Al-Zyoud from Mutah University - Jordan, on July 28, 2022. The webinar was moderated by Dr. Henda Al-Mahmoudi, the coordinator of AARINENA’s Biotechnology Network. The webinar involved a lot of useful information about the main method of pest control adopted by many farmers, the importance of Integrated Pest Management (IPM) and pesticides reduction, conducted studies in Jordan related to IPM issues. This was followed by good discussions from the experts regarding this research paper. You can see the full YouTube video on the below link; https://studio.youtube.com/video/As2m9vf6gak/edit

AARINENA’S Participations with Partners and Members 2022

▶️ Food Security Conference in Jordan: The Reality and the Future Perspective, managed by Al-Ahliyya Amman University, December 01, 2022


▶️ Arab Agro Forum, December 04, 2022

AARINENA participated in the Arab Agro Forum, Dr. Rida Shibli who gave a presentation about “The scientific role of research, innovation, technology and climate-smart agriculture in the growth of agricultural production”, December 04, 2022.
The Fourth International Festival of Jordanian Dates, November 23, 2022

AARINENA participated in the Fourth International Festival of Jordanian Date, that coordinated between Jordan Date Association (Joda) and Khalifa International Award for Date Palm and Agricultural Innovation (KIADPAI).

Training Program on Agricultural Research for Development (AR4D) in Jordan, December 05 - 06, 2022

Food and Agriculture Organization of United Nations (FAO) and Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA).

Training Program on agricultural research for development (AR4D) in Jordan. The aim of this training program was to improve the capacity of National Agricultural Research System (NARS) to better design, implement and deliver AR4D in Jordan and to improve the impacts of research and their links to the extension and advisory systems.

This involved a lot of trainers from Jordan, participated and discussed a lot of information about the Case Study Outputs in Jordan with Special Focus on (AR4D) and Designing & Implementation Research Project & Writing Proposal.

Science and Innovation Forum 2022 - 20 October 2022

AARINENA participated with the Food and Agriculture Organization of the United Nations (FAO) in the Science and Innovation Forum 2022, on 20 October 2022.
AARINENA Side-Event “Enhancing knowledge sharing in support of agricultural innovation "Date palm innovation platform"”, on October 13, 2022

AARINENA Side-Event on October 13, 2022, side-event title “Enhancing knowledge sharing in support of agricultural innovation "Date palm innovation platform"

This side-event played a key role for the FAO Science and Innovation Forum and provided a great opportunity for AARINENA members and partners to share their ideas and engage in action. This online event focused on promoting the recently established date palm innovation platform in the NENA region (https://aarinena.org/palm/) and demonstrated the E-Platform as a digital means for collaboration and interaction among researchers, producers, funders, policy makers, private industries, government agencies and others to maintain high competitiveness of date palm products in a dynamic global market.

Olive International Seminar – Jordan, June 09, 2022

Dr. Rida Shibli participated in the Olive International Seminar on June 09, 2022, and gave a presentation about AARINENA’s Role in Research, Networking and Olive sector. This important international seminar involved a lot of olive experts from different places in the world. This included exchange of the experience in different areas of the olive sector, technological innovations in the production processes of virgin olive oil, advanced oxidation processes for olive mil wastewater treatments, green energy through synergistic of wastewater and algae, the origin of olives, production tracking (block-chain) for olive oil, effect of xylella fastidiosa on olives sector, and micronized natural minerals enhances olive tree’s key physiological parameters under Jordanian abiotic stress.
High Level Advisory Panel (HLAP)-CGIAR

The CGIAR nominated a High-Level Advisory Panel, which included GFAR and the regional fora from the global south in August 2022. HLAP was particularly established to guide CGIAR leadership and staff in strengthening their strategic engagement with countries and regional partners, especially those from the global south. With a six-month mandate, the first is to engage in facilitated discussions with significant stakeholders against the background of on-going consultations by CGIAR, GFAR and the regional fora (AARINENA, APAARI, FARA, CACAARI, FORAGRO etc.); the second is to review and advise on the Engagement Framework considering feedback from stakeholders; and the third is to formulate recommendations on the way forward. HLAP designed its work in a way to capture the feedbacks and responses from the stakeholders through different ways, including: 1) online survey, 2) one-on-one interviews, 3) focus group discussions. The results of the online survey and the one-on-one interviews have already been synthesized and what remains is the focus group discussion which will held out some time in Nov. 2022. So far, AARINENA participated in the drafting of the survey questionnaire, revision of CGIAR's engagement framework for partnership and advocacy and the one-on-one interview through its president, Dr. Adil Abdelrahim.