Deliverable N.: D2.4

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(including also the reporting on back-to-back workshops aiming at building a Europe - North Africa Stakeholders’ Alliance; tasks T2.1 & T2.4)

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LEAP4FNSSA CONSORTIUM

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<td>Szent Istvan University (SIU)</td>
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<td>Fundacao para a Ciencia e a Tecnologia (FCT)</td>
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<td>SWEDEN</td>
<td>Sveriges Lantbruksuniversitet (SLU)</td>
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A comprehensive report on this activity of the WP2 aiming at establishing the Europe-North Africa Chapter of the AU-EU FNSSA Partnership. The consolidation of 3 project tasks in a Europe-North Africa Event within the Africa Food Day Celebrations in Cairo in October 2019, under the auspices of Egypt’s President, enabled to initiate progress towards the desired impact. Key players from North Africa agriculture research centers and innovation startups were invited and improvement of the cooperation between private sector, farmers and research institutions from Europe and from North Africa on common thematic areas was initiated.
Index

Summary report ...................................................................................................................................... 8

Background and objectives ................................................................................................................... 14


LEAP4FNSSA Presentations .............................................................................................................. 17

Panel 1: Thematic priorities and topics to enhance an AU-EU Funders Alliances and a Europe-North Africa Chapter of the AU-EU research and innovation on FNSSA......................................................... 18

Panel 2 – Policies and Transfer Mechanisms to enhance AU-EU Funders and a Europe-North Africa Chapter of the AU-EU on research and innovation on FNSSA ......................................................... 20

Panel 3 Innovation agencies and entrepreneurs: Paving the way to establish a “Knowledge Communication and Innovation Hub” across North Africa and Europe ........................................ 21

Panel 4: Innovation roadshow by Idea-carriers ............................................................................... 22

Conclusions and Output by working groups on the Europe-North Africa Chapter of the AU-EU FNSSA Partnership ........................................................................................................................................ 24

29th - 30th October: 10th Africa Day for Food & Nutrition Security ....................................................... 26

29th and 30th October: Africa Food Day Exhibition ................................................................................ 27

Dialogue: Fostering Research & Innovation Hubs discussions with Egypt’s Agricultural Research Center ...................................................................................................................................................... 28

Dialogue: Towards a North African Stakeholders’ Alliance: Outcome of exchanges and Recommendations for future workshops ......................................................................................................................... 30

Annex 1 - LEAP4FNSSA Europe-North Africa Event programme ........................................................... 32

Annex 2 - List of speakers and organisers .......................................................................................... 34

Annex 3 - List of participants ............................................................................................................. 36

Annex 4 - Some Photos ...................................................................................................................... 38

Annex 5 - Entrepreneurship Support Ecosystem Scheme in Egypt .................................................... 39
Index of Figures

Figure 1 - H.E. Prof. Dr. Ezz El Din Abu Steit, Minister of Agriculture and Land Reclamation, Egypt and Hon. Amie Fabourah, Minister of Agriculture, Gambia visiting the LEAP4FNSSA stand....................... 27

Figure 2 - H.E. Dr. Mostafa Madbouli, Prime Minister, Egypt, is visiting LEAP4FNSSA Stand.............. 27

Figure 3 - Dr. Monica Idinoba, African Union Commission at the LEAP4FNSSA stand......................... 28

Figure 4 - Prof. Dr. Mohamed Soliman, Director of Agricultural Research Center (ARC) meeting LEAP4FNSSA partners............................................................................................................................ 29

Figure 5 - Visit to Central Laboratory of Residue Analysis of Pesticides & Heavy Metals in Foods (QCAP) with Dr. Ashraf El-Marsafy, Chairman of QCAP ................................................................. 29

Figure 6 - LEAP4FNSSA partners from Egypt, France, Germany, Italy with key stakeholders from Algeria, Egypt, Morocco and Tunisia..................................................................................................... 38

Figure 7 - The Inauguration of LEAP4FNSSA Europe-North Africa Event by H.E. Ambassador / Ivan Surkos, Head of the European Union Delegation and H.E. Dr. Ezz Eldin Abou Stetit, Miniser of Agriculture and Land Reclamation, and LEAP4FNSSA partners, October 28th, 2019 ......................... 38
Abbreviations

ANS   African Nutrition Society
AU    African Union
AUC   African Union Commission
AU-EU African Union-European Union
CEO   Chief executive officer
CGIAR Consultative Group for International Agricultural Research
CTO   Chief Technology Officer
DAAD  Deutscher Akademischer Austauschdienst e.V. (German Academic Exchange Service)
e.g.  Exempli gratia (« for exemple »).
EC    European Commission
Eng.  Engineer
ENP   European Neighbourhood Policy
ERANET (ERA-Net) European Research Area Net
EU-AU European Union-African Union
FAO   Food and Agriculture Organization of the United Nations
FNSSA Food and Nutrition Security and Sustainable Agriculture
GE-SEED German Egyptian Program for Scientific Exchange and Excellence Development (or GESP)
GERF German Egyptian Research Fund
GIZ   Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation GmbH)
GDP   Gross Domestic Product
GPS   Global Positioning System
H2020 Horizon 2020 Research and Innovation programme
H.E.  His/Her Excellency
ICARDA International Center for Agricultural Research in the Dry Areas
IFAD  International Fund for Agricultural Development
ICBA  International Center for Biosaline Agriculture
INRA  Institut National de la Recherche Agronomique
IRESA Institution de la Recherche et de l'Enseignement Superieur Agricoles
KCIH  Knowledge, Communication & Innovation Hubs
LEAP-Agri Long-term EU-Africa research and innovation Partnership on food and nutrition security and sustainable Agriculture
LEAP4FNSSA Long-term EU-AU Research and Innovation Partnership for Food and Nutrition Security and Sustainable Agriculture
M&E  Monitoring and Evaluation
MENA Middle East and North Africa
NEPAD New Partnership for Africa's Development
NGO   Non-governmental organization
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<tr>
<th>Acronym</th>
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<tbody>
<tr>
<td>PIMC</td>
<td>Programme and Innovation Management Cycle</td>
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<td>PRIMA</td>
<td>Partnership for Research and Innovation in the Mediterranean Area</td>
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<tr>
<td>Q&amp;A</td>
<td>Questions and answers</td>
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<td>QCAP</td>
<td>Central Laboratory of Residue Analysis of Pesticides &amp; Heavy Metals in Food</td>
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<td>R&amp;I</td>
<td>Research and Innovation</td>
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<td>SME</td>
<td>Small medium enterprise</td>
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<td>TICO</td>
<td>Technology and Innovation</td>
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<td>TVET</td>
<td>Technical Vocational Education and Training</td>
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<td>TYSP</td>
<td>Talented Young Scientist Program</td>
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<td>USAID</td>
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<td>Workshop</td>
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<td>World Food Programme</td>
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Summary report

The EC-funded LEAP4FNSSA project organised a workshop on October 28th 2019 on the occasion of the Africa Food Day held in Cairo, Egypt. The latter was organised by the Egyptian Government and the African Union Commission (AUC).

The workshop aimed at mobilising actors from Europe and from North Africa to form alliances at this sub-regional level in order to jointly define and implement research and innovation agenda. The specific objectives of this workshop were to jointly identify the (1) main challenges in North Africa sub-region; (2) the main programmes and actors addressing these programmes; and (3) to reach a consensus on concrete modalities for mobilising actors for a 2nd and 3rd sub-regional workshop to be held in North Africa in 2020 and 2021 respectively.

The overall aim of these sub-regional workshops therefore, is to improve coordination and at the end, launch collaborative actions, in particular, set-up mechanisms contributing to foster and maintain, in a sustainable manner, the EU-AU FNSSA (Food and Nutrition Security and Sustainable Agriculture) Platform to be established by the LEAP4FNSSA project.

Targeted participants were actors active in Europe and in Africa at this sub-regional level of North Africa: 1) representatives from funding agencies, who can support to build up an Alliance of funders, 2) researchers and national research/science academies, 3) knowledge brokers, 4) innovation hubs and extension services, 5) entrepreneurs (farmers, fishers and all actors along the food value chains), 6) Policy makers & actors in governance.

The workshop was chaired by high-level policy actors and international researchers.

Main questions the workshops want to answered are:

1. Main challenges (thematic areas) to development in the Subregion (systems based concepts).
2. Relevant actors working in these respective thematic areas.
3. Possible incentives and interfaces required to attract partners to join the Alliance.
4. Define necessary modes of communication and organisation for the follow-up to launch a subregional alliance.
5. Best practices for knowledge management between science and target groups.
6. Necessary interfaces / links between communities of practice and research & good examples.
7. Required information packaging & good examples.
8. Structural requirement and necessary resources to link community of practice to research and innovation platforms.
9. Concepts to connect farmers to operational research to assure Science based recommendations to be implemented in practice.
10. Concepts to link research to existing Knowledge, Communication & Innovation Hubs to test solutions from research. Development ideas for innovation funds that can fuel rural labs.
11. Concepts envisaged for upscaling mechanisms for successful science based outreach.
Representatives from Egypt, Morocco, Algeria, Tunisia and Europe participated in different panels and sessions:

1. **Panel 1:** Thematic priorities and topics to enhance an AU-EU Funders Alliances and a Europe-North Africa Chapter of the AU-EU research and innovation on FNSSA.
2. **Panel 2:** Policies and Transfer Mechanisms to enhance AU-EU Funders and a Europe-North Africa Chapter of the AU-EU on research and innovation on FNSSA.
3. **Panel 3:** Innovation agencies and entrepreneurs: Paving the way to establish a “Knowledge Communication and Innovation Hub” between Europe and North Africa.
4. **Panel 4:** Innovation roadshow by Idea-carriers.

Beforehand, the presenters were given a template for a “rapid fire presentation” which would include the following into their slides:

- **PERSON:** your Name, Country and institution.
- **TOPIC:** Indicate topic from slide 4, you are addressing.
- Critical factors for development success / limiting factors.
- Most pressing thematic PRIORITY concerning this topic.
- Key actors, important players.
- Critical factors for Collaboration between actors: enabling environment and interfaces to assure collaboration,
- Achievable GOAL.

This scheme allowed to highlight many issues addressing the questions stated.

At a world café session, actors discussed necessary mechanisms, priorities for action, triggering innovation activities, enabling environment for joint action.

**Conclusion of the workshop**

The conclusions of LEAP4FNSSA Europe-North Africa Event were presented upon his request, to H.E. Dr. Ezz Eldin Abou Steit, Egypt’s Minister of Agriculture and Land Reclamation, who presented the summary on October 30th with the conclusions of the Africa Food Day technical sessions:

- The North African participants of the LEAP4FNSSA Europe-North Africa Event agreed on launching collaborative regional research programmes in form of a public private alliance of partners between Europe and North Africa, to develop joint food and nutrition security research and innovation projects within the AU-EU FNSSA Partnership.
- A regional sustainable partnership platform will foster clustering of activities/projects and enhances synergies.
- The participants identified mechanisms, priorities for action and triggering innovations to be embodied in the regional platform.
- They emphasized the need to address the topics of climate change mitigation and adaptation, as well as natural resource management and the interdependency of water, food and energy.
- Adoption of value chain approaches within given territories of the region was recommended. Innovative financial mechanisms for farmers and comprehensive insurance systems must be designed and implemented.
- Triggering innovation by expanding the use of information technology, knowledge management and dissemination and agricultural extension have been highlighted.
Necessity of supporting research linkages to the private sector and to policy making as well as securing its funding have been recognized.

An exhibition was held in the same premises of the conference during the 2 days, to which LEAP4FNSSA participated with a stand that enabled increasing the exposure of the project and promoting it to a number of high ranking officials, as well as to interact with the private sector exhibiting and visiting, as well as with a large number of researchers and international agencies. Among the prime visitors, the Prime Minister of Egypt, the Egyptian Minister of local Trade and Supply, and the Ministers of Agriculture and of Higher Education of the Gambia.

Conclusion of the organisers

The process and the workshop were welcomed by the participants. The results have been summarised in a report. The outcomes of this initiative were well communicated at northern African level and AU level.

Partners offered to organise a follow-up workshop in Morocco, Tunisia or Algeria. Dr. Imane Thami Alami, Head of Scientific Division, Institut National de la Recherche Agronomique (INRA) in Morocco and Dr. Yossef Ben-Meir, President, High Atlas Foundation offered to organise the next meeting.

Next steps

- To integrate the outputs of the Workshop into a broad model for a potential collaboration with the participants of the workshop.
- To communicate the outcomes and recommendations:
  - To attract other partners,
  - To include donors from Europe and Africa.
- To organise next workshop in Morocco.

The Workshop was organised by LEAP4FNSSA

The general objective of LEAP4FNSSA is to establish a sustainable structure, or ‘Platform’, for the efficient and coherent implementation of the AU-EU Research and Innovation Partnership as described in the AU-EU HLPD Roadmap on Food and Nutrition Security and Sustainable Agriculture (FNSSA).

To ensure this efficient and coherent implementation, LEAP4FNSSA also aims at integrating mechanisms improving existing FNSSA research and innovation systems. Aiming at conducting research which lead to innovation being put into practice at scale, implies to embed research with innovation processes through appropriate mechanisms and to set up interfaces between development actors, thus improving FNSSA research and innovation systems.

LEAP4FNSSA supports the implementation of the African Union and European Union Research and Innovation Partnership on Food, Nutrition Security and Sustainable Agriculture. This partnership is organised around a set of priority areas formulated in the FNSSA Roadmap and approved by a High Level Policy Dialogue on Science, Technology and Innovation.
The organisers

BURKINA FASO
Fonds National de la Recherche et de l'Innovation pour le Développement (FONRID)

EGYPT
Egyptian Agricultural Research Centre
Ministry of Agriculture and Land Reclamation of Egypt
Ministry of Higher Education and Scientific Research (MHESR)
Knowledge Economy Foundation (KEF)

FRANCE
Agence Nationale de la Recherche (ANR)

GERMANY
Bundesanstalt für Landwirtschaft und Ernährung (BLE)
Deutsches Zentrum für Luft und Raumfahrt EV (DLR)
Go Africa Katharina Kuss (GA)

GHANA
Council for Scientific and Industrial Research- Science and Technology Policy Research Institute (CSIR-GH)

International / ITALY
Centro Internazionale di Alti Studi Agronomici Mediterranei (CIHEAM-IAMB)

SOUTH AFRICA
National Research Foundation (NRF)

All presentations related to this event and other relevant documents are available on request through the LEAP4FNSSA project coordination: leap4fnssacoordination@cirad.fr

LEAP4FNSSA Europe-North Africa Event was organised as part of the 10th Africa Food Day. It has been a very successful event, with both high-level political, strategic networking and effective communication components. In spite of various constraints, LEAP4FNSSA Europe-North Africa Event was prepared and managed with very high involvement and professional skill from the consortium member, KEF and their team.

Follow up of this successful event is under consideration for the Europe-North Africa Chapter of the AU-EU FNSSA Partnership, together with its added value for the bi-continental partnership.

In particular, the next steps will be built on the good-will gained during these events, from all AU and EU participants and from both Academia, researchers, private sector and young entrepreneurs, leveraging their willingness to participate to this multi-country and multi-discipline blending of competences and resources.

As such, the rapid set-up of knowledge exchange and communication tools - such as an exchange platform and/or a cycle of meetings organized by thematic subjects, and/or value chains, and/or geographic areas - would be among the recommended tools, together with a customised coordination, as a transitory mechanism until the launch of the Europe-North African Chapter of the AU-EU FNSSA Partnership (with its related regulations).
Political dimension

The LEAP4FNSSA event was organised and recognised as part of the 10th African Food Day, which was attended by delegates from most African countries. The LEAP4FNSSA event on 28th October 2019 was introduced by H.E. Egypt’s Minister of Agriculture and Land Reclamation, and by the European Union Ambassador, who both gave introductory presentations and recognised the importance of the AU-EU partnership related to FNSSA.

LEAP4FNSSA teams had, during the Africa Food Day, several meetings with AU representatives (H.E. Josefa Leonel Correia Sacko, Dr. Laila Lokosang, and Ms Monika Ilbondo) which provided a platform for interesting discussions and which underscored LEAP4FNSSA’s commitment to the AU-EU FNSSA partnership.

The Egyptian Prime Minister and the Minister of Agriculture & Land Reclamation, as well as African delegates and AU representatives (such as the Minister of Agriculture of the Gambia, the Director of FAO Egypt, the Regional Director of IFAD, etc.), visited the LEAP4FNSSA stand which formed part of the Africa Food Day Exhibition. This provided the opportunity to present and explain LEAP4FNSSA objectives as well as confirm the launch of this Europe-North Africa Chapter of the AU-EU FNSSA Partnership (list of the participants to the Europe-North Africa Event and stand is enclosed in Annex 3).

Communication

Despite the short preparation time, attractive and informative flyers and communication tools were prepared and distributed.

The LEAP4FNSSA stand was part of the Africa Food Day fair, alongside other stands from ARC (The Egyptian Agricultural Research Center), ministries, international programs and organisations, as well as large agricultural companies. Such participation gave LEAP4FNSSA a great degree of visibility and confirmed the programme as part of the North African FNSSA “ecosystem”.

Strategic networking

The Cairo LEAP4FNSSA event on 28 October was attended by high level officials from Egypt, Morocco, Tunisia, Algeria (both R&I and ministries), as well as representatives from CGIAR (Icarda and World Fish), farmers’ associations, large private companies and young entrepreneurs.

The sessions were organised into four panels structured around specific thematic areas. The presentations elicited interesting debates and exchanges between stakeholders, and proposals were put forward for improved interactions and engagements. Panel’s discussions confirmed the interest of establishing multi-stakeholders’ platforms.

Funder’s priorities and (lack of) coordination such as joint funding mechanisms have been highlighted as key challenges in relation to effective support to impact driven R&I.

Complementary discussions involved LEAP4FNSSA team, North African countries and international organisations representatives (AU, FAO, Icarda, WFP, …), together with Egyptian authorities’ representatives and partners, and have been summarised during the Event conclusions presented below. Preliminary regional shared topics were proposed to the panellists for scientific partnership with the EU (such as increase value chain for traditional crops, water management, wheat, …) and proved to correspond with their core issues as well.
Additional workshops, at regional level, were suggested by the participants to be organised in the near future to strengthen links and go deeper on shared topics identification and networks establishment.

完善的 Conclusions

The conclusions of the LEAP4FNSSA Europe-North Africa Event were presented upon his request, to H.E. Dr. Ezz Eldin Abou Steit, Egypt’s Minister of Agriculture and Land Reclamation, who presented their summary on October 30th with the conclusions of the Africa Food Day technical sessions.

The North African participants of the LEAP4FNSSA Europe-North Africa Event agreed on launching collaborative regional research programmes in the form of a public private alliance of partners between Europe and North Africa, to develop joint food and nutrition security research and innovation projects within the AU–EU FNSSA Partnership.

A regional sustainable partnership platform will foster clustering and enhance synergies.

The participants identified mechanisms, priorities for action and triggering innovations to be embodied in the regional platform.

They emphasised the need to address the topics of climate change mitigation and adaptation, as well as natural resource management and the interdependency of water, food and energy.

Adoption of value chain approaches within given territories of the region was recommended. It was agreed that innovative financial mechanisms for farmers and comprehensive insurance systems must be designed and implemented.

Triggering innovation by expanding the use of information technology, knowledge management and dissemination and agricultural extension have been highlighted.

Necessity of supporting research linkages to the private sector and to policy making as well as securing its funding have been recognised.

Establishing novel farmers’ producers’ organizations is key to enable rural development and to achieve transformational changes.

The successful conclusion of the launching event of the LEAP4FNSSA within the Africa Food Day Commemoration in Cairo could potentially enable a rapid launch of the Europe-North Africa Chapter of the AU-EU FNSSA Partnership.

Follow-up to the event: towards a Europe-North Africa Chapter of the AU-EU FNSSA Partnership

The feasibility of establishing a Europe-North Africa Chapter of the AU-EU FNSSA Partnership was positively tested as a follow-up to the Europe-North Africa Event, between the team of LEAP4FNSSA (from Europe and Egypt) and our guests invited from North Africa and Europe, namely:

- From Tunisia: the Chairman of IRESA (Institution de la Recherche et de l'Enseignement Superieur Agricoles) and a junior start-up.
- From Morocco: the Head of Research of INRA (Institut National de la Recherche Agronomique) and a junior start-up.
• From Algeria: a junior start-up.
• From Europe: the Chairman of the European Farmers Association.

The enthusiasm and richness of the discussions were a good test for the future of a potential Europe-North Africa Chapter of the AU-EU FNSSA Partnership and this was confirmed by several communications and mails received from our guests and participants after the event.

A first major theme was validated during this session as the basis of a multi-country program: “Innovative Value Chains for Traditional Agriproducts”.

**Building on this successful event at global LEAP4FNSSA level is thus important.**

Based on the Europe-North Africa Event discussions and debriefing which identified preliminary regional shared topics for scientific partnership with the EU, other workshops at regional level should be organised in the near future, to strengthen the links established and set-up a methodology for shared topics identification and networks establishment.

LEAP4FNSSA partner KEF (Dorra Fiani and her team) was key in building-up and managing this LEAP4FNSSA North Africa event.

**Background and objectives**

The roadmap of LEAP4FNSSA focus on North Africa as a first public event, within the project calendar of activities, coincided with Egypt’s Chairmanship of the African Union during 2019, and the announcement of its hosting of the African Union yearly celebration of the Africa Food Day.

LEAP4FNSSA team decided collectively to seize this opportunity and approached successfully the Ministry of Agriculture and Land Reclamation of Egypt, hosting the Africa Food Day under the auspices of the President of the Republic, to include a Europe-North Africa Event, organised by LEAP4FNSSA, as part of the program, thus enabling an official launch to our activities in North Africa, confirmed by the effective presence of T. E., the Minister of Agriculture and Land Reclamation and the Ambassador of the European Commission Delegation to Egypt, together with the visit of the Prime Minister of Egypt to LEAP4FNSSA stand, and the Minister of Internal Trade and Supply, and the support during all the preparations and follow-up by the Agricultural Research Center in Egypt.

To benefit fully from this occasion, several Task Leaders joined forces to group several workshops into 1 full day event, thus achieving maximum impact, namely “Building a North African Stakeholders’ Alliance” workshop and Fostering Knowledge, Communication & Innovation Hubs in Egypt/North Africa workshop, together with the presentation of a report on “Funding Networks and Mechanisms” report (W2.4) and with support activities from WP4. The pooling of resources within LEAP4FNSSA project allowed to enhance the complementarity of the partners and to create the needed impact. Such approach should be studied for replication in similar contexts for the project implementation.

The promotion of the concept of a Europe-North Africa Chapter or Alliance, within the AU-EU FNSSA Partnership, towards the African Union and countries dignitaries involved in agriculture and food security required the effective presence and participation of the key North African representatives in the areas of research and innovation in FNSSA together with European representatives. In spite of the short period of time allowed for preparation once the organisation of the 10th Africa Food Day had been confirmed, LEAP4FNSSA team managed
to invite and secure the involvement of both researchers and academia and innovators from Morocco, Algeria and Tunisia, together with representatives of European countries. Their positive attitude and interaction with their Egyptian colleagues during the Europe-North Africa Event and the follow-up discussions indicates the potential for an effective Europe-North African Alliance supported by both researchers, private sector and start-ups. The set-up of a “Knowledge Communication and Innovation Hub (KCIH)” for the North Africa region, built upon the positive results of the Cairo event, will also contribute to foster linkages between the different European and African stakeholders.

The Cairo event enabled extensive discussions towards launching a public private alliance of partners between Europe and North Africa, to develop joint food and nutrition security research and innovation projects within the AU-EU FNSSA Partnership, to enable the emergence of synergies and the optimization of funding and investments, while establishing the linkages between all relevant public and private players in the region.

Specific objectives were identified:

- Importance of initiating rapidly tools for exchange of ideas and linkages and procedures for potential participants’ approval for a tentative calendar for the launch of an AU-EU Funders Alliance dedicated to FNSSA R&I.
- Foster knowledge, communication and innovation hubs, identify young entrepreneurs interested to develop business plans inspired by recommendations from the AU-EU FNSSA Roadmap, and link small businesses with research funding opportunities to fuel innovation, with the purpose to identify relevant innovation actors and approaches to work with research.
- Elaborate mechanisms to link research and practice and develop a methodology and an effective approach to matching the needs of farmers and private sector to the research community.
- Initiate a process to recruit “Pioneer Partners” willing to work jointly towards the establishment of this Europe-North Africa Chapter of the AU-EU FNSSA Partnership, creating a Consortium improving the level of collaboration between Europe and this region of Africa in the FNSSA domain, based on the institutionalisation of the public and private player’s linkages and existing cooperation.

The Europe-North Africa Event was organised by LEAP4FNSSA WP2 team, particularly KEF (Knowledge Economy Foundation, Egypt), Federal Office for Agriculture and Food (Germany) Agence Nationale de la Recherche (France), CIHEAM - Mediterranean Agronomic Institute of Bari (Italy), National Research Foundation (South Africa) and Go Africa (Germany).
28th October Europe-North Africa Event Workshops:
Building a North African Stakeholders’ Alliance and fostering Knowledge, Communication & Innovation Hubs in Egypt/North Africa

Welcome Addresses by AU-EU Official Representatives

Dorra Fiani, President, Knowledge Economy Foundation welcomed the participants and introduced the guests of honour: T.E. Ambassador Ivan Surkos, Head of the European Union Delegation to Egypt and Prof. Dr. Ezz El Din Abu Steit, Minister of Agriculture and Land Reclamation.

T.E. held a questions and answers session after their welcome addresses.

H.E. Ambassador Ivan Surkos, Head of the European Union Delegation to Egypt highlighted Europe’s strategic cooperation with Africa, adding that the general framework and priorities of the cooperation between the EU and Egypt are defined within the European Neighbourhood Policy (ENP). The new agreement aims at reinforcing the cooperation in supporting Egypt’s Sustainable Development Strategy Vision 2030. He emphasised that research and innovation play a major role in the cooperation between Egypt and Europe, which is reflected in funding instruments such as Horizon 2020, or Erasmus Plus. Both parties have recently signed an agreement on scientific and technological cooperation, including Egypt’s participation in the Partnership for Research and Innovation in the Mediterranean Area (PRIMA).

H.E. Prof. Dr. Ezz El Din Abu Steit, Minister of Agriculture and Land Reclamation officially opened the event with keynote remarks. He expressed his appreciation to the LEAP4FNSSA partnership and the recommendation of the African Union Commission to link the initiative to the 10th Africa Day for Food & Nutrition Security Commemoration; adding that coordination between African programmes is essential as it contributes to overcome political challenges, poor infrastructure, adaptation of conducive policies and the efficient use of natural resources as well as modern agriculture technologies. The creation of new networks and markets is important to enhance trade regulations and provide standards for safer crops and food security. He endorsed the African-European partnership on FNSSA research and highlighted the need for international collaboration on science and research as it contributes to the quality of food systems and sustainable agriculture.

Key points of discussion during the Q&A period, were on African food manufacturing and the need to develop local value-added in the continent through connection of research with private sector. Egypt has substantial research funding, but there is a need to strengthen collaboration with the private sector. Capacity building of entrepreneurship is a good approach to solve problems of farmers, but fair-trade regulations and fair prices are even more important. Of particular importance, the value chains of coffee, cotton and fruit need to be developed to support the small farmers and generate employment in rural parts of the African countries.

The guests of honour confirmed that rural development is being discussed as a potential field of cooperation between European Commission and the Ministry of Agriculture in Egypt. It will open new windows of opportunities and fill the gap of FNSSA research cooperation in Northern African countries. Bilateral relations between Europe and Egypt are numerous in the fields of security, research and trade, but these partnerships need to turn into successful joint private sector cooperation; as an example, the sector of solar energy based on international public private collaboration proved to have a high socio-economic impact.
The question of investments in agriculture and funding entrepreneurship was a burning issue addressed at the meeting. Start-ups and entrepreneurs suggested improving the mechanism for banks to finance agribusiness, even though agriculture continues to be considered as high-risk by the banking sector. For instance, the agricultural sector in Egypt generates 17% of the GDP and banks funding of agriculture is average 3% to date.

Participants at the event expressed the need for investments in the agricultural business incubation cycles. Young entrepreneurs and scientists consider that agribusiness development needs to be supported by customised business basics: networking activities, marketing assistance and research, legal and financial issues, access to bank loans, funds and technology. An enabling environment for start-ups would minimise the margin of risk and lower their administrative costs. Ideally, they could start with small and medium projects and work in networks that use research to improve value chains in Africa e.g. cotton and other products.

**LEAP4FNSSA Presentations**

Project partners from Egypt, France and Germany presented the Long-term Europe-Africa Partnership for Food and Nutrition Security and Sustainable Agriculture (LEAP4FNSSA) and the state of art of existing initiatives, topics and priorities for the Africa-Europe Partnership, indicating that the Cairo Event is a valuable contribution to the AU-EU Funders Alliance and the set-up of a Europe-North Africa Chapter of the AU-EU research and innovation Partnership for Food and Nutrition Security and Sustainable Agriculture.

**Dr. Tarek El-Arabi**, Director of Egypt-EU cooperation at the Ministry of Higher Education and Scientific Research (MHESR) gave five examples of Egypt’s participation in the Africa-Europe partnership in the agribusiness sector:

1) LEAP-Agri: participating to funding the joint Europe Africa Research and Innovation initiative related to Food and Nutrition Security and Sustainable Agriculture (FNSSA).
2) LEAP4FNSSA: partner in the collaborative network to support the Africa-Europe partnership on Science, Technology and Innovation.
3) Program to increase knowledge on science education and reduce the gap on validation of research.
4) Program in the agriculture sector of German Ministry for Development (North, South, East, West Africa).
5) PRIMA Foundation: part of the Partnership for Research and Innovation in the Mediterranean Area, which devises new research and innovation approaches to improve water availability and sustainable agriculture production in a region heavily distressed by climate change, urbanisation and population growth.

**Dr. Bernard Mallet**, Agence Nationale de la Recherche (France), presented two Europe-Africa projects in FNSSA and a 1st report on the funding mechanisms for AU-EU projects:

- The global and local challenges in Europe and Africa, on climate change and access to water are at the core of the two key AU-EU initiatives:
  - LEAP4FNSSA has the mandate to form a consortium of “Pioneer Partners for Partnership”, highlighting that FNSSA ecosystem of research and innovation funders is complex in terms of efficiency, policies/politics, countries and populations priorities. However, priority setting should take top-down and bottom up approaches to ensure alignment of policies and increase impact on FNSSA systems.
LEAP-Agri, a bi-continental Research and Innovation programme on FNSSA representing 30 partners, including 24 Ministries and Funding Agencies from 18 European and African countries, joining forces to fund and build an ERA-Net Co-fund project with financial support from the European Commission. To date, the network launched joint calls for proposal and currently supports 27 research and innovation projects.

- The report on the EU funding mechanisms for research and innovation presented the multiplicity of EU-related funding programs and the importance of providing to researchers and private sector, the necessary guidelines to design customized programs matching the funding opportunities.

Dr. Henning Knipschild, Federal Office for Agriculture and Food (BLE Germany), introduced the main objectives and activities of LEAP4FNSSA. He informed the audience that the Sub-Regional Stakeholders’ Alliance (the Europe-North Africa Chapter of the AU-EU FNSSA Partnership) will be formed through three main steps:

1) Involving and mobilising partners, funds and resources for research and action,
2) Programming demand-driven research targeting outcomes benefiting FNSSA, and
3) Supporting the implementation of research and innovation.

Four panels were organised throughout the day to set the scene on the importance of the Europe-North Africa Chapter of the AU-EU FNSSA Partnership and to discuss the applicability of thematic priorities, research policies and business ideas on AU-EU research cooperation.

Panel 1: Thematic priorities and topics to enhance an AU-EU Funders Alliances and a Europe-North Africa Chapter of the AU-EU research and innovation on FNSSA

Dr. Mohamed El Shinawi, Advisor to the Minister of Higher Education and Scientific Research, Egypt and Co-Chair of PRIMA Foundation, chaired Panel 1 and Panel 2.

Prof. Dr. Jacques Wery, Deputy Director General Research, International Center for Agricultural Research in the Dry Areas (ICARDA), moderated the discussions for the 2 panels.

Dr. Shireen Assem, Vice President for Research, Agricultural Research Center (ARC) in Egypt, emphasised food security and climate change as priority in her country. She expressed the need to ensure continuous development of agricultural production and to improve food security through research. Innovative agricultural technologies have substantial impact on food security and optimal use of natural resources, particularly water. She emphasised the production of new cultivars of various field and horticultural crops besides new breeds of livestock as an achievable goal that would highly improve agricultural production in Egypt.

Prof. Dr. Mahmoud Elies Hamza, President of Institution de la Recherche et de l’Enseignement Supérieur Agricoles (IRESA) in Tunisia, focused on the availability and security of food in the context of climate change. Tunisia is heavily affected by climate change - an increase of temperature by 1,5 Celsius means 10% decrease in agriculture production, which might even affect stability in the country. Although Tunisia has been striving to develop a national agriculture strategy, the funding of agriculture research is low and does not provide the resources needed for the upgrading of the agriculture sector.
Key actors involved in international research collaboration with Tunisia are CGIAR, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM) and International Center for Biosaline Agriculture (ICBA).

**Dr. Imane Thami Alami**, Head of Scientific Division, Institut National de la Recherche Agronomique (INRA) in Morocco, addressed the topic of micronutrients and nutrition security: whereas population growth, decreasing availability of natural resources and climate change is leading to decreased biodiversity. She called for the production of diverse, safe and micronutrient-dense diets to enhance human health in the Middle East and North Africa (MENA). Dr. Alami pointed to the key actors to be involved in the development of local crops varieties and food along the value chain, namely researchers, farmers and especially women farmers and the private sector.

**Haj/Hussein Abdel Rahman**, President Farmers’ Syndicate, Egypt, acknowledged the Africa-Europe cooperation on FNSSA. He said that we have enough resources to feed the world, enough land and fish in the seas, however hunger remains a challenge for many poor people around the world. As a representative of the 7 million farmers in Egypt, he asked for:

1) More and better funding for the agriculture sector  
2) Replacing traditional systems with modern technology in agriculture  
3) Improving the quality of seeds  
4) Developing fair trade relations between farmers and their eco-system  
5) Resources to develop agribusiness and value-added at rural level  
6) Reduce postharvest losses  
7) Preserve a clean natural environment

**Dr. Habiba Wassef**, Trustee of the African Nutrition Society (ANS) in Egypt, pointed out that all presentations dealt with the agriculture sector, although the focus should be on nutrition. She stressed that research results should be translated into policies and the need to link research communities to policy makers and executive bodies, whereas if research results are translated in a way to impact on socio-economic value, they can influence policies. She proposed that the themes of rural rehabilitation, pollution and polluted food, should be looked at in order to ensure healthy diets and consumer protection. She requested that policies outcomes reach out to consumers and inform them on the importance of healthy diets and food and nutrition security.

**The Q&A session highlighted the following:**

- The discussion on thematic priorities and topics for funder alliances pointed towards the need for interdisciplinary approach in research. The GIZ initiative NEXUS was mentioned as a good example to look at interdependencies between water, energy and food security, whereas the shift from a pure sectoral approach to solutions that embrace a cross-sectoral approach is essential.
- Another point of discussion was the importance of providing on-going support and knowledge to the farmers in relation to climate change and their strategies to take mitigation measures. Examples given by the President of Farmers Syndicate, pointed to farmers occasionally organising their own symposia, workshops to discuss their needs, new technologies, climate issues, in the absence of specialized extension services.
- The Panel commented on the trend in consumers changing attitudes towards seeking quantity and low prices, rather than the quality and taste of food.
The use of agriculture digital technologies such as apps, temperature and moisture sensors, aerial images and GPS technology, was discussed. On one hand, it increases the efficiency of extension services and the set-up of the needed forward and backward linkages in the agribusiness value chains, and on the other hand the coverage of digital networks is still very much lacking in rural areas and the methodologies combining the needed matching of online dissemination tools with the supply of quality offline support to the small farmers is not yet developed.

**Panel 2 – Policies and Transfer Mechanisms to enhance AU-EU Funders and a Europe-North Africa Chapter of the AU-EU on research and innovation on FNSSA**

*Dr. Mohamed El Shinawi*, Advisor to the Minister of Higher Education and Scientific Research, Egypt, and Co-Chair of PRIMA Foundation, emphasised the need for agriculture research to become “sexy”. Innovation in food and agriculture must be promoted as it creates job opportunities and is a key factor for economic growth and development, whereas linking industry with universities and research centres is crucial to ensure complementarity of action.

He pointed to the most pressing priorities as being job creation and income generation, food security, as well as sustainability and efficiency of production systems. Dr. El Shinawi listed a number of national and international funding instruments related to FNSSA, of which private national entities such as Sawiris Foundation, Qalaa Foundation, Misr El Kheir Foundation, FameLab, Newton-Mosharafa Fund, whereas international research collaboration funded by the EU instrument H2020 (2014 to 2020) and PRIMA (2018–2028), are a good example of co-ownership, co-programming, together with the EU-funded Technical Vocational Education and Training (TVET). He also mentioned the USAID programme Feed the Future, DAAD Scholarships, GE-SEED for scientific visits, GERF for scientific research projects. British Council: Internationalizing Higher Education and TYSP - a scholarship programme for young scientists as visiting researchers in China.

*Dr. Daniel Rossi*, Secretary General of the Italian Confederation of Farmers Confagricoltura and elected representative of the 29 Million farmers in Europe, focused his presentation on the adoption of technology, innovation and sustainable solutions in the agriculture sector.

Farmers need practical and sustainable solutions to scale up their operations to reach economy of scale. He stressed on the importance to identify the real local needs and to match them with existing innovative technologies including low-tech solutions if more effective, whereas technology transfer and local training support create win-win situations for local communities, farmers and entrepreneurs. Critical factors for success are knowledge dissemination among farmers of the structure and functioning of the agri-food chains and the use of effective tools to provide adaptable solutions. Dr. Rossi also emphasised the importance of focusing on the plants and animals’ genome for local food systems.

*Prof. Dr. Jacques Wery*, Deputy Director General Research, ICARDA, presented ICARDA (CGIAR) DryArc initiative project, which aims at contributing to the achievement of Sustainable Development Goals by 2030, through systemic innovation in the Drylands which prevail in all North African countries up to several Asian countries.

He pointed out to the urgency to move faster and to open up to the private sector and to the donors to leverage efforts and rise up to this challenge.
The four pillars of the DryArc action are: 1) combining knowledge (local, regional, international) to design systemic innovations, 2) accelerating scaling up of impactful target innovations, 3) continuous integration of disruptive technologies, and 4) enabling institutional environment (decision-making, M&E, absorptive capacity, investment).

Eng. Amr Abu Freikha, Chairman, Tanta Motors, Egypt, presented his commitment to improve the Egyptian and African adoption capacities in the areas of science, technology, innovation and sustainable solutions. From an agribusiness private sector company point of view, the most pressing related thematic priorities are the necessity to address water scarcity and cross-cutting issues such as the governance model, marketing and customized financial tools. The Farmers Academy Foundation launched by Tanta Motors, to develop a Centre of Excellence as a public-private partnership to train the next generation of entrepreneurs in the field of FNSSA, has received EU funds for its training programme.

Emad Elazhary, Strategy & Business Development Director, Vodafone Egypt, presented the company contribution to digital tools in Africa rural sector:
1) M-PESA, a mobile app widely used in Kenya for payments addressing the issues of inexistent banking networks in the rural areas
2) Digi-FARM, an app developed to enhance the agriculture eco-system.

In Egypt, the company is piloting the digital monitoring of a one million trees plantation in cooperation with Cairo University and presented the importance of the use of data sets technologies to monitor crops and plant diseases, and the importance of availing them to the small farmers, whereas mobile technology helps substantially to develop, manage and use networks and infrastructure.

Panel 3 Innovation agencies and entrepreneurs: Paving the way to establish a “Knowledge Communication and Innovation Hub” across North Africa and Europe

This session aimed at contributing towards FNSSA systems improvement and mechanisms for research funding. Panellists of the session were representatives of industry, funding institutions, researchers and practitioners in existing innovation hubs. As stakeholders, they provided valuable input to improve FNSSA systems and roadmap in the frame of the Africa-Europe High Level Policy Dialog (HLPD).

Mrs. Dorra Fiani, President, Knowledge Economy Foundation, Egypt chaired and moderated Panel 3.

Eng. Hanan El-Hadary, Executive Director, Technology and Innovation Industrial Council of the Ministry of Trade and Industry, Egypt, presented the strategy of the Ministry in the field of innovation. She stressed the importance of the TICO (Technology and Innovation) offices, established in several ministries and universities, to bridge the gap between research, innovation and markets and emphasised that the agro-business sector represents a major component of its Council activities.

Eng. El-Hadary presented several projects of which the Council specialised herbs and spices laboratory and certification, energy efficiency and food production innovation and showcased initiatives such as e.g. Bootcamp “Bozour”.
Dr. Harrison Charo Karisa, Country Director, Egypt and Nigeria, WorldFish/CGIAR, emphasised climate change and nutrition security as key issues. Nutrition sensitive processing and healthy food systems need improvement in the context of food insecurity, malnutrition and climate change. Most pressing priorities are: policies, nutrition security and capacity development. Technologies to produce affordable, accessible, safe and nutritious fish and fish foods within environmental limits are a challenge. He calls for vibrant policy and business investments to empower women and youth and to create entrepreneurship opportunities across the sector.

Dr. Yossef Ben-Meir, President, High Atlas Foundation, Morocco, presented their innovative program for planting organically and monitoring fruit trees in Morocco: in particular dates and almonds. The High Atlas Foundation developed a novel strategy to secure regular funding for the support and capacity building of the farmers, based on the system of carbon credits, as the main challenge for the Foundation is to achieve stable and substantial revenues, to cover their developmental as well as business goals, considering that in Morocco (as well as all North African countries), most of the farmers have only one-hectare of land. The revenue generated by this program covers administrative costs with all profit margins invested in farmers education and community development.

Eng. Osama Sorour, Chief Strategy Officer, Giza Systems Group, Egypt, emphasised the need to focus on water scarcity and water management. He presented a pilot project related to water saving technology implemented by the company in Saudi Arabia with the set-up of a test farm split into 2 identical sections, of which the one equipped with water management technology enabled to validate a saving of 40% in water cost.

Giza Systems Group established a Foundation specializing in funding and managing “FabLabs” enabling youth and start-ups to test their prototypes; to date, five FabLabs operate in the main cities of Egypt of which a mobile FabLab. This program is funded by the company CSR budget and participation to donors funding.

Prof. Dr. Sameh H. Soror, Foreign Secretary & Supervisor of Scientific and Cultural Relations ASRT, Academy of Scientific Research & Technology, Egypt, presented the Global Innovation Index in which Egypt’s ranking grew by 15 positions this year. The Academy secures multiple roles of which acting as the funding agency of Egyptian researchers and managing the Egyptian component in most research and innovation internationally funded programs. It supports the linking of research with industry, such as the “Knowledge Technology Alliances” program, in which at least two institutions from the private sector, one NGO and one governmental institution should be involved.

Panel 4: Innovation roadshow by Idea-carriers

Entrepreneurs, start-ups and young idea carriers from North Africa shared innovative ideas inspired by science-based recommendations and new technologies. It gave exposure to the participants and provided opportunities to engage with private investors and examine the possibility of enhancing new transnational/regional businesses and research-innovation and business partnerships. Idea carriers acted as stakeholders contributing to discussions on an enabling environment for research and innovation.
Virginia Belsanti, Senior EU Project Expert, CIHEAM- Mediterranean Agronomic Institute of Bari moderated Panel 4 and presented the panel.

Mouhsine Lakhdissi, CTO and Partner, Agridata Consulting, Morocco, presented nutrition security and the traceability of food from the farm to the consumer as the most pressing issue under the FNSSA theme. In Morocco 40% of the GDP comes from agriculture, but food quality and environmental compliance need to be improved by evidence-based data and research results. Agridata is pioneering digital agriculture in Morocco with a range of mobile applications for extension services.

Eng. Hussein Mansour, CEO, Aller Aqua Egypt, confirmed that climate change and nutrition security are the key thematic areas for research and innovation in North Africa region. He stressed upon the need to convince youth to join the agriculture sector by enabling them to discover entrepreneurship opportunities and develop new activities based on digital tools for agriculture, adding that this is the future and the key to lower migration to cities and foreign countries.

Eng. Mansour developed the case of the fish value chain in Egypt, whereas its aquaculture sector is already the no.1 producer in Africa, however lacking a well-developed value chain for which the set-up of a fish producers and processors union is a necessary condition.

Lynda Allouche, Researcher at University of Ferhat Abbas Sétif 1, Algeria, presented an innovation project for the adoption of new technologies to improve milk production. Although Algeria is one of the biggest consumers of milk and despite support given to dairy farmers, milk production remains weak and its quality is still poor, insufficient to meet consumers demand. The project aims at genotyping of cows and hydroponic fodder production, and eventually develop cheese production, to increase value-added at small farmers level. Improving local milk production would have a strong socio-economic impact on food security, the development of the dairy value chain and nutrition, and providing women with new job opportunities.

Abdelrahman Fahmy, Start-up Chairman, Youth Thinking Green, Egypt, presented his company aims to foster the knowledge of entrepreneurship and sustainability among youth, through the implementation of educational programs and events, encouraging young entrepreneurs to focus on innovation and develop clean energy, food, water and waste management solutions. A successful project in 2016 based on the processing orange waste and industrial waste was the starting point of his business. To date, a series of new start–ups are being generated from this initiative.

Aida Selmi, Start-up Co-Founder, BIO-WONDER, Tunisia, presented her business model and strategy to produce juice and marmalade from prickly pear. She has participated in several donors-funded projects, but after three years of trying to scale up her business, she was faced with the need to fund more researches, beyond her financial means and decided to temporarily return to her university research job, thus accepting to relaunch her project from the start.

Yehia Radwan, Co-Founder of Blossom and member of Enactus Egypt, presented himself as an output of research and innovation in Egypt. Enactus is a platform for university students to collaborate with business and academic leaders in the development of entrepreneurial-based projects that empower people to transform opportunities into real, sustainable progress for themselves and their communities, using science-based recommendations for innovation and
products. Among the project developed, are the processing of cheap alternative fertilisers, bio-waste fermentation and composting, whereas the high price of organic as well as chemical fertilizers are critical factors. A major challenge is the facilitation of entrepreneurial action at rural level, to improve people’s lives socially, financially and economically, whereas significant results can be achieved by developing the cultivation of stronger and healthier cultivar and providing farmers with entrepreneurial knowledge.

The roadshow triggered brokerage of innovative ideas among participants, contributing to establish new contacts and develop innovative solutions related to FNSSA. The event enabled the start of potential cross-regional, research collaborations and commercial partnership. It achieved the target to trigger interest in the creation of a North African multi-stakeholder alliance to enhance research and innovation processes and facilitate funding for youths, SMEs and start-ups. Established contacts will ideally strengthen sub-regional research-innovation partnerships, funding alliances and innovation hubs.

Conclusions and Output by working groups on the Europe-North Africa Chapter of the AU-EU FNSSA Partnership

The Europe-North Africa Event panel discussions output and conclusions were organised, at the end of the sessions, in the form of 4 groups each with a thematic topic, and in which all panellists and guests mixed up. This triggered quality discussions among representatives from Algeria, Egypt, France, Germany, Italy, Morocco and Tunisia. The output structure covered the Europe-North Africa Chapter of the AU-EU FNSSA Partnership: Mechanisms, Priorities for Action, Triggering Innovation, Enabling Environment, as presented here below:

Europe-North Africa Chapter of the AU-EU FNSSA Partnership - Mechanisms

- Creation of a database on FNSSA Research Community
- Identification of shared problems and priorities
- Establish a network and a collaboration mechanism of ALL stakeholders (Institutions, Private Sector, and funders)
- Twinning mechanism in Northern African countries
- Living Labs and Innovation Hubs
- Clustering and synergy mechanisms

Europe-North Africa Chapter of the AU-EU FNSSA Partnership - Priorities for Action

- Water use/ reuse
- Improve crops varieties
- Agrifood nexus (yields, resources, energy, nutrition)
- Use of genetic tools for resilience
- Private sector policies/ incentives and structures for farmer aggregations
- Modernisation of practical solutions
- Value chain cooperation (Bottom up and top down)
- Low scale technology adaptation and translation
- Risk management
- Harmonizing food safety standards
Europe-North Africa Chapter of the AU-EU FNSSA Partnership - **Triggering Innovation**

- Climate change/ carbon emission
- Innovation for small holders- technology awareness as top priority, with customized digital agriculture
- Youth challenges and contributions / rural labs
- Economic value /difficulties and economic innovation contributions
- New mind –Sets
- Policies, programmes, laws and regulations, amendments
- Urgency and emergency (donor coordination)
- Incentive for innovation, which is not the same for a farmer/bank, research institutions do NOT reward innovation
- Need more research on triggers, incentives models need to be developed
- More funding to analyse impact, losses, benefits

Europe-North Africa Chapter of the AU-EU FNSSA Partnership - **Enabling Environment**

- A shared vision and shared agenda of private innovators - farmers’ communities – banks
- Forums and “sorting- houses” to facilitate shared agendas
- Reporting sessions for R&I projects coordinators tested with “experts” from banks, private sector and farmers’ associations
- Examples from Morocco, Tunisia to apply on food quality labels and IPR practices, and shared economic returns
- All North African countries to benefit from equal treatment of funding opportunities
- More funding for scaling innovation.

**Summary of the conclusions**

*The conclusions of the LEAP4FNNSA Europe-North Africa Event were presented upon his request, to H.E. Dr. Ezz Eldin Abou Steit, Egypt’s Minister of Agriculture and Land Reclamation, who presented their summary on October 30th with the conclusions of the Africa Food Day technical sessions.*

The North African participants of the LEAP4FNNSA Europe-North Africa Event agreed on launching collaborative regional research programmes in the form of a public private alliance of partners between Europe and North Africa and to develop joint food and nutrition security research and innovation projects within the AU-EU FNSSA Partnership.

The participants identified mechanisms, priorities for action and triggering innovations to be embodied in the regional platform.

They emphasised the need to address the topics of climate change mitigation and adaptation, as well as natural resource management and the interdependency of water, food and energy.
Adoption of value chain approaches within given territories of the region was recommended. Innovative financial mechanisms for farmers and comprehensive insurance systems must be designed and implemented.

Triggering innovation by expanding the use of information technology, knowledge management and dissemination and agricultural extension have been highlighted.

Necessity of supporting research linkages to the private sector and to policy making as well as securing its funding have been recognised.

Establishing novel farmers’ producers’ organisations is key to enable rural development and to achieve transformational changes.

The successful conclusion of the launching event of the LEAP4FNSSA within the Africa Food Day Commemoration in Cairo, could potentially enable a rapid launch of the Europe-North Africa Chapter of the AU-EU FNSSA Partnership.

29th - 30th October: 10th Africa Day for Food & Nutrition Security

LEAP4FNSSA partners and guests to the Europe-North Africa Chapter of the AU-EU FNSSA Partnership Event were invited to attend the 10th Africa Day for Food & Nutrition Security technical sessions day and commemoration celebrations. The event was under the auspices of the President of the Republic of Egypt and organised by the AU Commission’s Department of Rural Economy and Agriculture of (AUC DREA) together with the Government of the Arab Republic of Egypt.

It was sponsored by the New Partnership for Africa's Development (NEPAD) Agency, World Food Programme (WFP), Food and Agricultural Organization of the United Nations (FAO), Consultative Group on International Agricultural Research (CGIAR) and Harvest Plus.

Topics of the “10th Africa Day for Food and Nutrition Security were:

- **CLIMATE CHANGE and NUTRITION SECURITY**: Productive, nutrition sensitive and healthy food systems to address food insecurity and malnutrition in the light of climate change.
- **POLICIES and NUTRITION SECURITY**: Food and nutrition policies investing in food system-based initiatives for improved food basket and nutrition.
- **MICRONUTRIENTS and NUTRITION SECURITY**: Production of diverse, safe and micronutrient-dense diets.
- **VULNERABLE POPULATIONS and NUTRITION SECURITY**: Expanding and improving the food baskets of vulnerable, displaced and refugee population.

Structural scopes of an envisaged collaboration

- **RESEARCH INTO USE**: Increased utilization of science-based recommendations
- **INVESTMENT**: Harnessing and inspiring commitments to strengthen food and nutrition policies for investing in food systems.
- **CAPACITY DEVELOPMENT**: Improved capacities in adoption of science, technology, Innovation, and sustainable solutions.
- **YOUTHS**: Opportunities for youth investment in nutrition security program
- **GENDER**: Empowering women in agri-food value chains.
29th and 30th October: Africa Food Day Exhibition

An exhibition was held in the same premises of the conference during the 2 days, to which LEAP4FNSSA participated by installing a stand that enhanced the exposure and promotion of the project, to a number of high ranking officials the private sector, as well as large number of researchers and international agencies. Among the prime visitors, the Prime Minister of Egypt, the Egyptian Minister of local Trade and Supply, and the Ministers of Agriculture and of Higher Education of the Gambia.

Following are selected pictures, and the full list of visitors is in Annex 3 enclosed.
Dialogue: Fostering Research & Innovation Hubs discussions with Egypt's Agricultural Research Center

LEAP4FNSSA partners and invitees and guests from Algeria, Morocco and Tunisia were invited by Dr. Mohamed Soliman, Chairman of Agricultural Research Center of Egypt to visit the Center and in particular three units, on October 30th, 2019 afternoon.

- Agricultural Genetic Engineering Institute
- Regional Center for Food and Feed
- Central Laboratory of Residue Analysis of Pesticides & Heavy Metals in Foods (QCAP)

The purpose of these visits was to develop and strengthen connections for future collaboration and funding applications. Particularly Intra-North African research collaboration can be strengthened by mutual visits and personal relations. Reciprocal visits between universities and research institutes should be encouraged, as exposure to other scientists and stakeholders creates networking opportunities of particular value, to better understand problems and address scientific, social, and technical challenges from a broader perspective. To be noted, the Central Laboratory (QCAP) is registered as the Center of Excellence in Africa for pesticides and heavy metals analysis, and the ARC receives on a yearly basis a large number of visiting and resident researchers from the different African countries.
Figure 4 - Prof. Dr. Mohamed Soliman, Director of Agricultural Research Center (ARC) meeting LEAP4FNSSA partners

Figure 5 - Visit to Central Laboratory of Residue Analysis of Pesticides & Heavy Metals in Foods (QCAP) with Dr. Ashraf El-Marsafy, Chairman of QCAP
Dialogue: Towards a North African Stakeholders’ Alliance: Outcome of exchanges and Recommendations for future workshops

Networking session between participants

LEAP4FNSSA team organised (during 29th October afternoon) a debriefing dialogue with selected panellists from our Europe-North Africa Event, representing funders, researchers, stakeholders and private sector representatives from Northern African and European countries, to discuss and measure the potential for joint priorities and project ideas.

Funders participating in the discussion confirmed their commitment to the type of projects taking a bottom-up approach. A lively and heated discussion took place around which priorities in food, nutrition security and private sector involvement, should be selected as a first series of potential research topics for collaboration projects and horizontal issues.

It was agreed that gender is a cross-cutting issue and must be built in all types of collaborative research projects on FNSSA. Particularly the Europe-North Africa Chapter of the AU-EU FNSSA Partnership needs to ensure gender balance in consortia and decision-making. Participants to the networking session analysed possible topics of regional interest (such as food transition, water management, traditional crops, …) and agreed to pursue their priority collaboration on the topic of: Innovative value chains for traditional agriproducts.

Recommendations for future activities and workshops

Intra-African collaboration of FNSSA Partners was affected by the short preparation period allowed for the 10th Africa Food Day. Late decision and programme sharing provided a challenging environment particularly for LEAP4FNSSA partner KEF, who spent a lot of energy on linking our event to the AFD. Unfortunately, colleagues from National Research Foundation (NRF, South Africa) could not get visas on time, and partners from West Africa Council for Scientific and Industrial Research - Science and Technology (CSIR-GH Ghana) and Fonds National de la Recherche et de l'innovation pour le développement (FONRID –Burkina Faso) cancelled their participation at the last minute.

Collaboration between LEAP4FNSSA work packages has been developed and strengthened especially between WP2 and WP4. The involvement of Centro Internazionale di Altistudi Agronomici Mediterranei (CIHEAM-IAMB) and the Ministry of Higher Education and Scientific Research (MHESR, Egypt) has proven to be essential. CIHEAM recommended researchers and start-ups from Algeria, Tunisia and Morocco to be invited to the event and published LEAP4FNSSA conclusions on the project website.

Future activities and workshops:

Based on the Europe-North Africa Event discussions and debriefing which identified preliminary regional shared topics for scientific partnership with the EU, other workshops at regional level should be organized in the near future, to strengthen the links established and set-up a methodology for shared topics identification and networks establishment.

The LEAP4FNSSA partners involved from both WP2 and WP4 agreed on the necessity to set-up rapidly a follow-up to this successful event, and to establish the Europe-North Africa Chapter of the AU-EU FNSSA Partnership, and to take into consideration the added value of this event for the bi-continental (AU-EU) partnership. The outcome of this event is as well a
proof of the viability of an upscaling approach, considering the number and quality of the interested parties identified and in particular the private sector and the large funding agencies.

Building on this successful event at global LEAP4FNSSA level is thus important to benefit from, in particular the rules and conditions for future partners’ participation should be set-up rapidly and proposed to the range of interested international and national agencies, in order to maintain our credibility and capitalize in an optimum manner on the effort and budget invested.

LEAP4FNSSA partners involved in WP2 consider that the next meeting to be organised could be in Morocco and would be targeting more on innovation hubs and rural development.

As indicated in the report introduction, the decision by LEAP4FNSSA WP2 partners in coordination with WP4, to seek the sponsorship of the Africa Food Day organizers (the AU and the Ministry of Agriculture) for our Europe-North Africa launch, resulted in adopting a methodology of pooling several activities and deliverables from WP2 tasks, into one full day event. This approach proved to be very efficient in securing a successful launch not only for the Europe-North Africa Chapter of the AU-EU FNSSA Partnership, but as well for LEAP4FNSSA, and led our group to recommend the adoption of this method for other events/regions.

The outcome of the combined tasks within a specific Work Package and the cooperation between the partners of several Work Packages proved to be efficient and functioning, thus allowing to be combined with the planned upscaling approaches for the set-up of a Europe-Africa International Research Consortium (IRC), contributing to:

- FNSSA Systems Improvement (as part 3 of the four-step model Programme & Innovation Management Cycle, PIMC) towards a long-term AU-EU collaboration in FNSSA.
- Building a Pioneer group of institutions, which have a relevant mandate and adequate resources to play, under a joint Europe-North Africa Alliance, a significant role in the AU-EU partnership in STI.
Annex 1 - LEAP4FNSSA Europe-North Africa Event programme

9:00 – 9:45: Registration and refreshments

9:45 – 10:15: Welcome address
H.E. Ambassador Ivan Surkos, Head of European Union Delegation to Egypt
H.E. Prof. Dr. Ezz El Din Abu Steit, Minister of Agriculture & Land Reclamation

10:15 – 11:10: Brief outline of LEAP4FNNSA and the prospect for the enhancement of an AU-EU Funders Alliance and a North Africa Chapter on research and innovation for Food and Nutrition Security and Sustainable Agriculture – FNSSA.

*Triggering presentations, followed by a short discussion with participants, will aim at facilitating panelists interventions and works by presenting a state of art of existing activities and initiatives, priorities and topics as well as needed resources, which could support or already contribute to building AU-EU Funders Alliance and enhancing a North Africa Chapter.*

- Dr. Tarek El-Arabi, Director of Egypt-EU Cooperation, Ministry of Higher Education and Scientific Research, Egypt
- Dr. Bernard Mallet, Agriculture Projects Coordinator, Agence Nationale de la Recherche, France

Moderator: Henning Knipschild, Int’l Coop, Federal Office for Agriculture and Food (BLE), Germany

11:10 – 11:30 Coffee break and informal networking

Panels’ discussion
Panelists will take stock of outcomes and discussions of the above session and will help analysing and identifying possible ways and mechanisms, to enhance *AU-EU Funders Alliance and a North Africa Chapter on research and innovation on FNSSA.*

Honourable Chair: Dr. Mohamed El Shinawi, Advisor to the Minister of Higher Education and Scientific Research, Egypt and Co-Chair of PRIMA Foundation.

Moderator: Prof. Dr. Jacques Wery, Deputy Director General Research, ICARDA (CGIAR).

11:30 – 12:30 Panel 1 – Thematic priorities and topics

- Dr. Shireen Assem, Vice President for Research, Agricultural Research Center (ARC), Egypt
- Prof. Dr. Mahmoud Elies Hamza, President, Institution of Agricultural Research and Higher Education (IRESA), Tunisia
- Dr. Imane Thami Alami, Head of Scientific Division, National Institute of Agricultural Research (INRA), Morocco
- Haj/ Hussein Abdel Rahman, President Farmers Syndicate, Egypt
- Dr. Habiba Hassan-Wassef, Trustee, African Nutrition Society, Egypt

12:30 – 13:30 Panel 2 - Policies and Transfer Mechanisms
• Dr. Mohamed El Shinawi, Advisor to the Minister of Higher Education and Scientific Research, Egypt, and Co-Chair of PRIMA Foundation
• Dr. Daniele Rossi, European Secretary General of Confagricoltura (Italy)
• Prof. Dr. Jacques Wery, Deputy Director General Research, ICARDA (CGIAR)
• Eng. Amr Abu Freikha, Chairman, Tanta Motors, Egypt
• Emad Elazhary, Strategy & Business Development Director, Vodafone Egypt

13:30 – 14:30 Lunch

14:30 – 16:30 Paving the way to establish a “Knowledge Communication and Innovation Hub” across North Africa and Europe

This session aims at contributing towards the discussion and outcomes set in the morning panels in form of an innovation road-show format, where idea carriers / innovators present their experience and innovative ideas centred on FNSSA topics, and highlight the role of modern communication concepts and ideas to integrate research and innovation, with the aim of exploring possible partnerships and alliances, that could increase critical mass to enhance AU-EU & North African Alliances.

14:30 – 15:30. Panel 3 - Innovation agencies and entrepreneurs
• Eng. Hanan El-Hadary, Executive Director, Technology and Innovation Industrial Council, Ministry of Trade & Industry, Egypt
• Dr. Harrison Charo Karisa, Country Director, Egypt and Nigeria, World Fish/CGIAR
• Dr. Yossef Ben-Meir, President, High Atlas Foundation, Morocco
• Eng. Osama Sorour, Chief Strategy Officer, Giza Systems Group, Egypt
• Prof. Dr. Sameh H. Soror, Foreign Secretary & Supervisor of Scientific and Cultural Relations ASRT, Academy of Scientific Research & Technology, Egypt

Moderator: J. Dorra Fiani, President, Knowledge Economy Foundation, Egypt

15:30 – 16:30. Panel 4 - Idea-carriers
• Mouhsine LAKHDISSI, CTO and Partner - Agridata Consulting, Morocco
• Eng. Hussein Mansour, CEO, Aller Aqua, Egypt
• Lynda Allouche, Independent Researcher & Innovator, Algeria
• Abdelrahman Fahmy, Chairman and Founder, YTG, Egypt
• Aida Selmi, Co-Founder, Bio-Wonder, Tunisia
• Yehia Radwan, Co-Founder of Blossom and member of Enactus Egypt, Egypt

Moderator: Virginia Belsanti, Senior EU Project Expert, CIHEAM-Bari

16:30 – 17:00 Conclusions

Facilitators: Henning Knipschild, Germany, J. Dorra Fiani, Egypt
Conclusions will aim at building a comprehensive framework of recommendations on ways, mechanisms, priorities and innovations towards the establishment of the AU-EU Alliance and Europe-North African Chapter on R&I in FNSSA.
Annex 2 - List of speakers and organisers

<table>
<thead>
<tr>
<th>#</th>
<th>Company/Ministry/Embassy/Agency Name</th>
<th>Name of Representative</th>
<th>Position</th>
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<tbody>
<tr>
<td>1</td>
<td>The European Union</td>
<td>H.E. Ivan Surkos</td>
<td>Ambassador - Head of Delegation</td>
</tr>
<tr>
<td>2</td>
<td>Ministry of Agriculture &amp; Land Reclamation, Egypt</td>
<td>H.E. Dr. Ezz Eldin Abou Steit</td>
<td>Minister</td>
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<td>3</td>
<td>Agricultural Research Center (ARC), Egypt</td>
<td>Dr. Mohamed Soliman</td>
<td>President</td>
</tr>
<tr>
<td>4</td>
<td>Agricultural Research Center (ARC), Egypt</td>
<td>Dr. Shereen Assem</td>
<td>Vice President for Research</td>
</tr>
<tr>
<td>5</td>
<td>Knowledge Economy Foundation, Egypt</td>
<td>J. Dorra Fiani</td>
<td>President</td>
</tr>
<tr>
<td>6</td>
<td>Federal Office for Agriculture and Food (BLE), Germany</td>
<td>Henning Knipschild</td>
<td>International Cooperation and Global Food Security</td>
</tr>
<tr>
<td>7</td>
<td>CIHEAM-Bari, CIHEAM – Mediterranean Agronomic Institute of Bari, Italy</td>
<td>Virginia Belsanti</td>
<td>Senior EU Project Expert</td>
</tr>
<tr>
<td>8</td>
<td>Agence Nationale de la Recherche, ANR, France</td>
<td>Bernard MALLET</td>
<td>Agriculture Projects Coordinator</td>
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<tr>
<td>9</td>
<td>Go Africa, Germany</td>
<td>Katharina Kuss</td>
<td>Founder, CEO</td>
</tr>
<tr>
<td>10</td>
<td>Ministry of Higher Education &amp; Scientific Research, MHESR, Egypt</td>
<td>Dr. Tarek El Arabi</td>
<td>Director of Egypt-EU Cooperation</td>
</tr>
<tr>
<td>11</td>
<td>ICARDA, Egypt</td>
<td>Prof. Dr. Jacques Wery</td>
<td>Deputy Director General Research</td>
</tr>
<tr>
<td>12</td>
<td>Institution de la Recherche et de l’Enseignement Superieur Agricoles/ IRESA, Tunisis</td>
<td>Dr. Mahmoud Elies Hamza</td>
<td>President</td>
</tr>
<tr>
<td>13</td>
<td>Institut National de la Recherche Agronomique (INRA), Morocco</td>
<td>Dr. Imane Thami Alami</td>
<td>Head of Scientific Division Senior Research</td>
</tr>
<tr>
<td>14</td>
<td>Tanta Motors, Egypt</td>
<td>Eng. Amr Abu Freikha</td>
<td>Chief Executive Officer</td>
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<td>15</td>
<td>Agro Network- Confagricoltura (Italy)</td>
<td>Dr. Daniele Rossi</td>
<td>Delegate Research &amp; Innovation, Chairman Copa Cogeca WP RES EU Coordinator National Food Tech Platforms</td>
</tr>
<tr>
<td>16</td>
<td>Farmers Syndicate, Egypt</td>
<td>Haj/ Hussein Abdel Rahman</td>
<td>President</td>
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<tr>
<td>17</td>
<td>Ministry of Higher Education &amp; Scientific Research, Egypt</td>
<td>Dr. Mohamed El-Shinawi</td>
<td>Advisor to the Minister of Higher Education and Scientific Research</td>
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<td>No.</td>
<td>Organization/Entity</td>
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<td>18</td>
<td>Academy of Scientific Research &amp; Technology (ASRT), Egypt</td>
<td>Dr. Amr Farouk Abdel Khalik</td>
<td>Assistant ASRT President</td>
</tr>
<tr>
<td>19</td>
<td>ASRT/ Academy of Scientific Research and Technology (MHESR)</td>
<td>Prof. Dr. Sameh H. Soror</td>
<td>Foreign Secretary &amp; Supervisor of Scientific and Cultural Relations And Faculty of Pharmacy, Helwan</td>
</tr>
<tr>
<td>20</td>
<td>Food and Agro Industries Technology Center (FAITC), Egypt</td>
<td>Eng. Hanan El-Hadary</td>
<td>Executive Director</td>
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<tr>
<td>21</td>
<td>Vodafone Egypt, Egypt</td>
<td>Emad Elazhary</td>
<td>Strategy &amp; Business Development Director</td>
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<tr>
<td>22</td>
<td>High Atlas Foundation, Morocco</td>
<td>Dr. Yossef Ben-Meir</td>
<td>President</td>
</tr>
<tr>
<td>23</td>
<td>Ferhat Abbas University Setif 1, Algeria</td>
<td>Lynda Allouche</td>
<td>Senior Researcher</td>
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<tr>
<td>24</td>
<td>Agridata Consulting, Morocco</td>
<td>Mouhsine LAKHDISSI</td>
<td>CTO and Partner</td>
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<tr>
<td>25</td>
<td>Youth Think Green (YTG), Egypt</td>
<td>Abdelrahman Fahmy</td>
<td>Chairman</td>
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<tr>
<td>26</td>
<td>World Fish, Egypt</td>
<td>Dr. Harrison Karisa</td>
<td>Country Director, Egypt and Nigeria</td>
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<td>27</td>
<td>Aller Aqua Egypt</td>
<td>Eng. Hussein Mansour</td>
<td>CEO</td>
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<td>28</td>
<td>Giza Systems Group, Egypt</td>
<td>Eng. Osama Sorour</td>
<td>Chief Strategy Officer</td>
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<tr>
<td>29</td>
<td>Blossom - Enactus Egypt</td>
<td>Dr. Yehya Radwan</td>
<td>Co-Founder Blossom/ Business Advisor</td>
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<tr>
<td>30</td>
<td>BIO-WONDER, Tunisia</td>
<td>Eng. Aida Selmi</td>
<td>Co-Founder, CEO Researcher</td>
</tr>
<tr>
<td>31</td>
<td>Africa Nutrition Society (ANS) National Nutrition Sciences Committee</td>
<td>Dr. Habiba Hassan Wassef</td>
<td>Trustee</td>
</tr>
</tbody>
</table>
**Annex 3 - List of participants**

<table>
<thead>
<tr>
<th>#</th>
<th>Company/Ministry Embassy/Agency Name</th>
<th>Name of Representative</th>
<th>Position</th>
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<tbody>
<tr>
<td>1</td>
<td>World Food Programme (WFP), Egypt</td>
<td>Dr. Alia Hafez</td>
<td>Head of the Nutrition Unit</td>
</tr>
<tr>
<td>2</td>
<td>Ministry of Agriculture Foreign Agricultural Relations</td>
<td>Dr. Saad Moussa</td>
<td>Supervisor of Agricultural Foreign Relations</td>
</tr>
<tr>
<td>3</td>
<td>The European Union Egypt</td>
<td>Dr. Heba Gaber</td>
<td>Research and Innovation Officer</td>
</tr>
<tr>
<td>4</td>
<td>ICARDA, Egypt</td>
<td>Francois Stepman</td>
<td>Communication Expert</td>
</tr>
<tr>
<td>5</td>
<td>Embassy of the Kingdom of the Netherlands, Egypt</td>
<td>Shaimaa Nasr</td>
<td>Policy Advisor Agriculture</td>
</tr>
<tr>
<td>6</td>
<td>BASF Ltd., Egypt</td>
<td>Inji Zaki</td>
<td>Regional Sustainability &amp; Digitalization Mngr</td>
</tr>
<tr>
<td>7</td>
<td>Enactus Egypt</td>
<td>Fatma Sirry</td>
<td>President and CEO</td>
</tr>
<tr>
<td>8</td>
<td>Enactus Egypt -6th of October University</td>
<td>Mohamed Hisham</td>
<td>Ex. President O6U</td>
</tr>
<tr>
<td>9</td>
<td>AFAAS And Desert Research Center (DRC)</td>
<td>Dr. Hala Yousry</td>
<td>North Africa Representative and Board Member of AFAAS</td>
</tr>
<tr>
<td>10</td>
<td>GIZ</td>
<td>Maha Khallaf</td>
<td>Head of Water and Wastewater Management Program</td>
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<tr>
<td>11</td>
<td>Alex Bank, Egypt</td>
<td>Amr Sabry Ismail</td>
<td>Head of Agricultural Products</td>
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<td>12</td>
<td>Morocco RDC Nutrition (Ibn Tafail University)</td>
<td>Dr. Aguenaou Hassan</td>
<td>Director</td>
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<td>13</td>
<td>Misr El-Kheir Foundation</td>
<td>Hala El Shahed</td>
<td>Acting Manager of TVET department</td>
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<td>14</td>
<td>Misr El-Kheir Foundation</td>
<td>Suzan Bibawi</td>
<td>SR. Manager</td>
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<td>15</td>
<td>Food and Agro-Industries Technology Center (FAITC), (MoTi), Egypt</td>
<td>Dr. Amgad El-Kady</td>
<td>Executive Director</td>
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<td>16</td>
<td>Egyptian Agriculture and Industrial Development co./ The African Economy Council</td>
<td>Magdi Fanous</td>
<td>Chairman</td>
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<td>17</td>
<td>Embassy of Italy</td>
<td>Eng. Ismail Faramawi</td>
<td>Senior Agri Expert</td>
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<td>Ministry of Higher Education &amp; Scientific Research, MHESR, Egypt</td>
<td>Soha Mohsen</td>
<td>Assistant Unit</td>
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<td>19</td>
<td>Ministry of Higher Education &amp; Scientific Research, MHESR, Egypt</td>
<td>Norhan Eldallal</td>
<td>Officer</td>
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<td>20</td>
<td>VSVRI (SERVAC) Vet Serum &amp; Vaccine Research Inst</td>
<td>Prof. Dr. Mohamed Madkour</td>
<td>Executive Manager</td>
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<td>21</td>
<td>VSVRI (SERVAC) Vet Serum &amp; Vaccine Research Inst</td>
<td>Dr. Fatma Fadel Warda</td>
<td>Senior Researcher</td>
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<td>22</td>
<td>Ministry of Agriculture</td>
<td>Wael Mohamed</td>
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<td>Moataz Ahmed Abd Elmoneim</td>
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<td>Ragab Fawzi</td>
<td>Minister Office</td>
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<td>Visitation it</td>
<td>Amin El-masry</td>
<td>General Manager</td>
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<td>26</td>
<td>Field Crops Research Institute (FCRI)</td>
<td>Dr. Alaa Eldin Mahmoud</td>
<td>Chairman</td>
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<tr>
<td>27</td>
<td>Animal Health Research Institute (AHRI)</td>
<td>Dr. Momtaz Abdel Hady Afify</td>
<td>Director</td>
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<td>28</td>
<td>CASP/Central Administration for Seeds production</td>
<td>Dr. Hatem Ibrahim</td>
<td>Chairman</td>
</tr>
<tr>
<td>29</td>
<td>Ministry of Water Resources and Irrigation</td>
<td>Abdel Latif Khaled</td>
<td>Head of Irrigation Sector</td>
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Annex 4 - Some Photos

Figure 6 - LEAP4FNSSA partners from Egypt, France, Germany, Italy with key stakeholders from Algeria, Egypt, Morocco and Tunisia

Figure 7 - The Inauguration of LEAP4FNSSA Europe-North Africa Event by H.E. Ambassador / Ivan Surkos, Head of the European Union Delegation and H.E. Dr. Ezz Eldin Abou Stetit, Minister of Agriculture and Land Reclamation, and LEAP4FNSSA partners, October 28th, 2019
Annex 5 - Entrepreneurship Support Ecosystem Scheme in Egypt