

## National School of Agriculture in Meknès (ENA) Morocco

# Serving Agriculture and Rural Development for more than 77 years



#### *June 2020*



## History

- 1942: Creation of Moroccan School of Agriculture
- 1957 : Change of name : Moroccan School of Agriculture => National School of Agriculture of Meknès
- 1964 : Implementation of 4-years program
   => Training of polyvalent agricultural enginner
- 1972 : Implementation of 4-years program
   => Training of specialized agricultural enginner
- 1986 : Implementation of 6-years program
   => Training of specialized agronomist enginner (Master degree)
- 2008-2009: Alignment on « Bac + 5 » training system









- The National School of Agriculture (ENA) in Meknes (ENA) is a public institution of higher education in agriculture with administrative and financial autonomy.
- Since its creation in 1942, ENA was placed under the Governmental Authority in Charge of Agriculture.
- As an institution of higher education, ENA must comply with the regulations of the law 01-00 which organizes higher education sector in Morocco.
- Accreditation of the education curriculum and the management of faculty members career is under the Governemental Autority in charge of Higher Education



#### **Missions**

According to the law 01-00, the missions of ENA consist of :

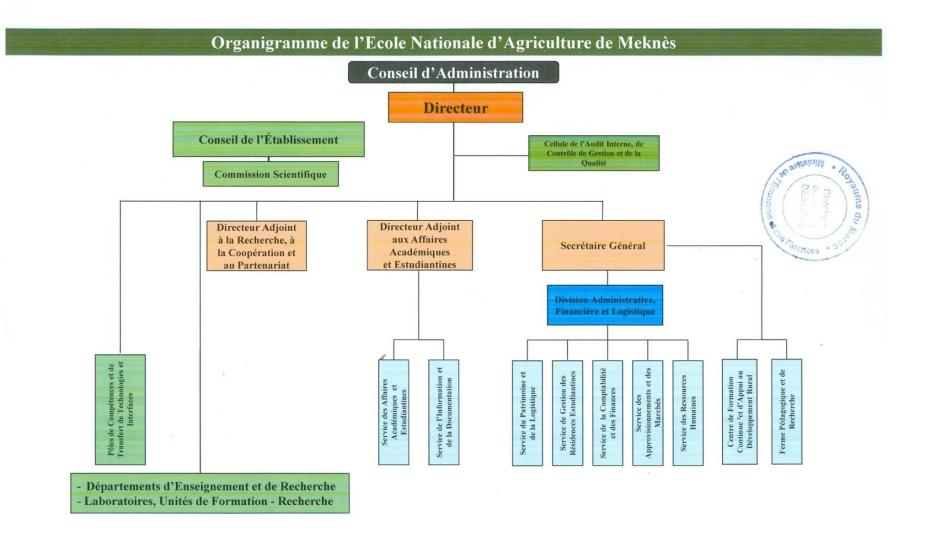
- Providing quality education programs leading to the degree of "Ingénieur Agronome" equivalent to a Master's Degree
- Undertaking continuing education (training) programs to prepare youth for the integration in the job market;
- •Carrying out **scientific and technological research activities** in the various fields of agriculture and rural development;
- Contributing to knowledge dissemination and technology transfer.







#### Governing bodies

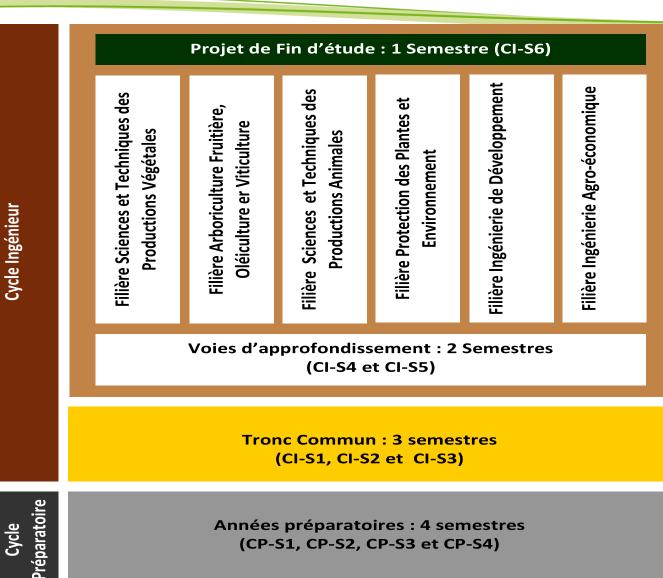




#### Ecole Nationale d'Agriculture de Meknès

## Initial education: Curriculum

Accredited curriculum 2014-2019 In accordance with National Standards of Pedagogical Regulations



New accreditation in preparation (2019-2024) : Readjustment of education programs according to the needs of the profession and the labor market



Ecole Nationale d'Agriculture de Meknès

#### Traineeships : Highlight of the education at ENA-Meknès

- Crucial importance in the training curriculum : duration (25-60% Total Hours/ semester), accompaniment, evaluation (1 module, coefficient 10)
  Permanent contact with the exploitation and agricultural institutions and companies
- Field or professional trainings are implemented to expose the students to real world experiences in agriculture and agro-industry
- Every year, there is at least one field training inserted in the program.



## Alumni insertion

 120-130 alumni graduate each year (10% from francophone African countries; 13 countries in sub-Saharan Africa) and constitute good ambassadors of ENA and Morocco in their own countries.

• By the end of the year 2018, more than **3700 alumni** have graduated from ENA, with more than 450 of them are foreign from the Sub-Saharan Africa countries.

• ENA's Alumni are active in **various fields**, both at the **national and international** levels. They are hired by **governmental institutions** as well as by the **private sector**.

 An alumni insertion monitoring unit, has been created to follow and evaluate the insertion of alumni in the job market).

Study on insertion (66th class, 2012): insertion rate 96% (62% in the private sector, 26% in the public sector, 12% in the semi-public sector); 58% in the agricultural sector; 42% via insertion test; 29% via direct employer contact; 18% by response to an ad; 2% via Training Institution



## Foreign alumni

- 10% of the total number of students per year
- 458 alumni between 1946 and 2018
- 225 alumni of 3 European Countries (1946-1991): France (215), Spain (10), Yugoslavia (1)
- 1 alumni of Palestine
- 227 alumni from 27 countries in sub-Saharan Africa (since 1960)
- Foreign alumni: Ambassadors of ENA and Morocco in their countries.





#### Alumni insertion

Annual organization of an ENA Students Forum in partnership with the profession (12th Edition in 2018)

Openness to the professional world and preparation for insertion into market job







#### Integrating Education with Research:

Education through research : use of research results and experiences in education

Education to Reseach : initiation of students to research (seminars, graduation thesis)

 Integrating Research with Development: The areas of Research must target national priorities of agricultural and rural development (Green Morocco Plan Strategy) as well as respond to expectations of professionals.



#### **Research areas :**

The research areas covered are those of the **Green Morocco Plan**, namely:

- Crop production and diversification for various ecological zones in Morocco
- Fruit trees development, olive growing and viticulture
- Natural resources management: soil, water, rangeland, forests, etc.
- Biodiversity, biotechnology and plant genetic improvement
- Animal production on farm and on rangeland
- Food technology and local produce valorization
- Protection of Plants and Environment
- Agricultural machinery and mechanization
- Agricultural economics and market research
- Rural sociology and development engineering
- Information Technology and Communication



#### **10 Accredited research team : 45 research axis**

Intitulé de l'équipe	Acronyme de l'équipe	Nombre d'axes de recherche	Responsable de l'équipe
Dynamiques Rurales, Innovations et Développement Durable	DRIDURA	5 axes	Pr. EL AMRANI Mohamed
Sociétés Rurales et développement territorial	Rural <i>Observ</i>	4 axes	Pr. AZIZ Larbi
Technologies, Education et Développement Rural	TDRE	3 axes	Pr. FAGROUD Mustapha
Interactions Plantes-pathogènes et Phytoprotection	Phyto-ENA	4 axes	Pr Abdeslam TAHIRI
Zoologie Agricole	EZA	5 axes	Pr. BOUTALEB JOUTEI Abdelmalek
Agroécologie et Environnement	AGREE	6 axes	Pr. ECHCHGADDA Ghizlane
Amélioration et Valorisation en Production Fruitière	AVPF	5 axes	Pr. MESSAOUDI Zerhoune
Systèmes Sol-Plante-Eau-Climat et Management durable en Agriculture	SPEC-trum	3 axes	Pr. BOUABID Rachid
Biotechnologies, Procédés et Chimie des Aliments Fonctionnels et des Nutraseutiques	QualiFoods_ENA	5 axes	Pr. BELKORA Ilham
Diversité génétique, Agrophysiologie, Adaptation et Profilage chimique des plantes	DAAP	5 axes	Pr. BAHRI Hakima

Ecole Nationale d'Agriculture de Meknès

#### **Scientific Production :**

- More than 90 scientific publications by year (1,5 publication/teacher/year
- Annual production of a collection of scientific publications
- Edition of an online scientific journal: <u>www.alternativesrurales.org</u> (6<sup>th</sup> Number)



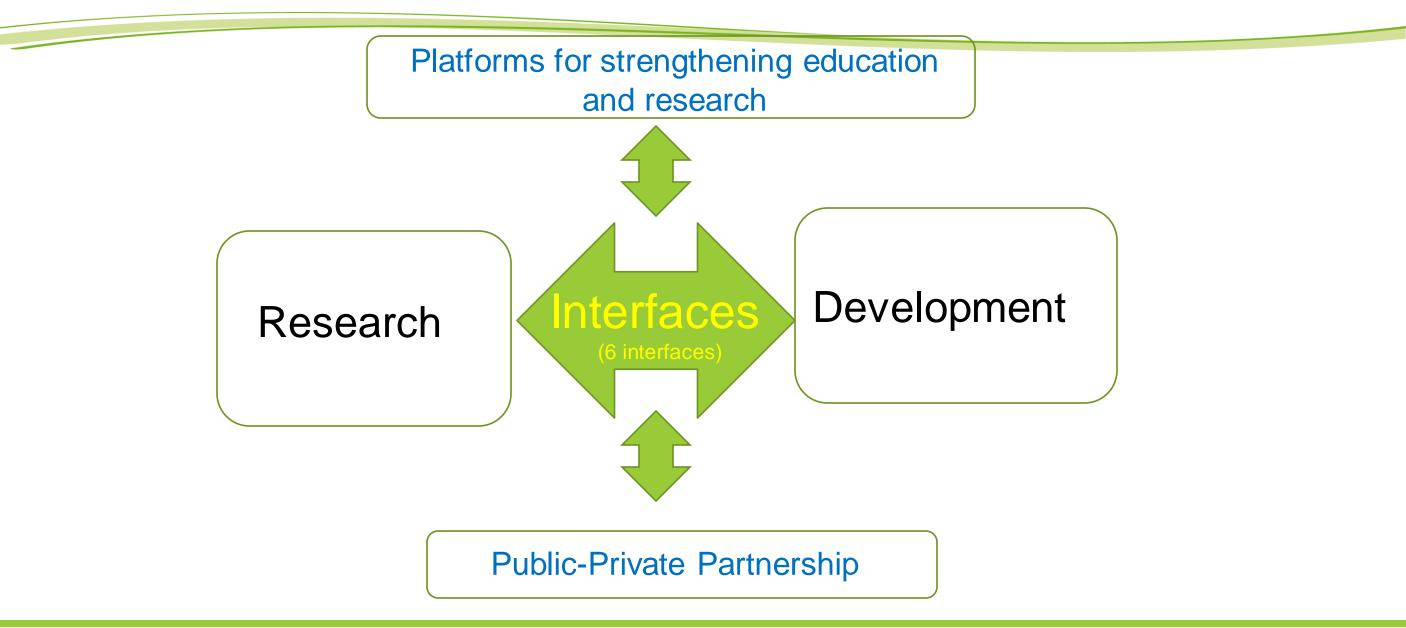


- Dissemination of knowledge and research achievements:

- \* Scientific and technical publications : 90 publications/year
- \* Seminars, Congresses, Information days, ...: A hundred or so scientific and technical events between 2012 and 2018, nearly 15 events a year
- Technology Transfer:

**6** Interfaces and Competence Centers: Training, Demonstration Platforms, etc.







Ecole Nationale d'Agriculture de Meknès

**Pedagogical and Research Farm** (90 ha): Platform for practical education, research and technologies transfer











#### **Agropôle Olivier :**

- a center of excellence for the
- development and promotion of the olive oil value chain. This center was created to assist and support the olive tree growers and the olive oil production in the country.
- 25 ha: orchards, nursery, laboratories, crushing plant, trituration residue recovery units, training, tasting competition, advice and technical assistance ...





#### **Center for Training and Support to Rural Development** :

a platform concerned with agricultural research and development studies, training for the agricultural sector, audio-visual production, expertise and extension









#### Ferti-Conseil:

a soil testing laboratory approved by the Government for soil- water-plant analyses and recommendations to farmers in terms of crop fertilizing and soil management.





#### **Phyto-Conseil:**

a plant pest and disease diagnostic laboratory concerned with identifying crop pests and diseases and issuing recommendations to farmers





Center for Experimentation of Agricultural Machinery and Equipments (CEAMA):

a center of expertise for developing technical references and subsequent recommendations to the local farmers.





## **Cooperation and Partnership**

#### ENA works with various partners such as:

- Universities and higher education and research institutions (national and international)
- Public organizations
- Private operators
- Professional organizations
- Local government organizations
- Agencies for international cooperationNGOs

More than 60 cooperation agreements have been signed in the last 3 years





#### **Human Resources:**

✓ 60 permanent faculty members
 ✓ 20 vacancies (teachers + professionals)
 ✓ 140 administrative, technical and support staff





#### Facilities :

# ✓ ENA is organized in 8 training and research departments :

- Basic Sciences and Food Technology
- Agronomy and Plant Genetics
- Arboriculture-Viticulture
- Plant Protection and Environment
- Soil Science and Agricultural Machinery
- Animal Production and Range Mangement
- Agricultural Economics
- Rural Development Engineering





#### **Facilities :**

#### Modern teaching and research facilities :

- Educational Block : Amphitheaters
- Classrooms
- Laboratories
- Experimental farm
- Library, internet
- Housing studios for national and international trainees and visitors)







#### **Student residences and dependencies:**

**Three dormitories** (residences with a capacity of **600 students** with **dependencies** (restaurant, laundry, infirmary, sports facilities ...).







## Thank you for your attention Abdellah ABOUDRARE Deputy Director of Research Cooperation and Partnership

## <u>aaboudrare@enameknes.ac.ma</u>

www.enameknes.ac.ma

