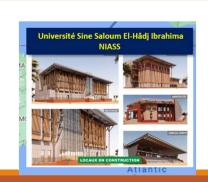




Senegal Case Study EXPERIENCE OF UNIVERSITY SINE SALOUM EL HÂDJ IBRAHIMA NIASS

Pr NDEYE COUMBA TOURE KANE RECTOR

5th September 2023 "Applied Sciences as drivers for regional innovation ecosystems in Africa"



Senegal's Presentation

196,722 km2 western extremity of African continent.

Senegal's population at 17.7 million in 2022,

compared to 16.2 million in 2019 and 13.5 million in 2013 (ANSD, 2022).

A quarter of population live in the Dakar area (0.3% of the territory)

Main economic sectors:

Primary Sector - raw materials,

Secondary Sector – manufacturing,

Tertiary Sector - services and

Quaternary Sector – knowledge

Industries: food processing, mining, cement, artificial fertilizer, chemicals, textiles, refining imported petroleum, and tourism.

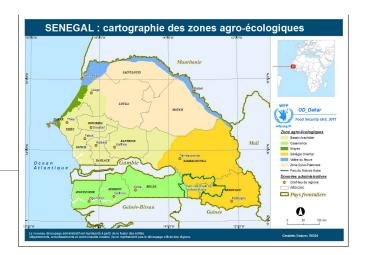
Agriculture is one of the dominant parts of Senegal's economy (17% of GDP).



Senegal's Presentation

Senegal's startup scene in 2023 (10 spots)
Regional Ranking 4th In Western Africa and

Global Ranking 82nd "Global Startup Ecosystem Index! 2023 »



Popular for entrepreneurs and investors in West Africa

- Favorable business climate and robust institutions.
- Senegalese startup ecosystems ++++
- innovation funding, and programs such as accelerators and incubators
- Incubators at universities +++

==> plagued by high rates of pollution, a highly informal economy, difficulty in accessing finance and funding, low female participation and high costs of living.

Senegal's Presentation

- Agriculture is one of the dominant parts of Senegal's economy (17% of GDP).
- •Senegal continues to rely on rain-fed agriculture. Only 5% of the land is irrigated
- Agriculture occupies about 75% of the workforce.

Climate: alternation of two seasons; a rainy season from July to October.

Rainfall: deficient and poorly distributed over time and space



Challenges: Poor soil, weather conditions, a lack of infrastructure and access to quality seeds and fertilizer.



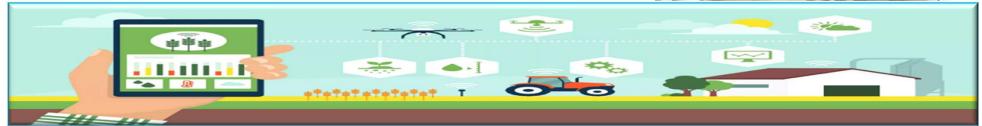
CHALLENGES IN AGRICULTURAL ENTREPRENEURSHIP

USSEIN'S CONTRIBUTION

PRODUCTION CHALLENGES

- Access to land
- Access to water and its optimization
- Access to quality inputs
- Access to new equipments
- Acces to Technical knowledges of innovative farming practices and moderne agriculture





TRANSFORMATION CHALLENGES



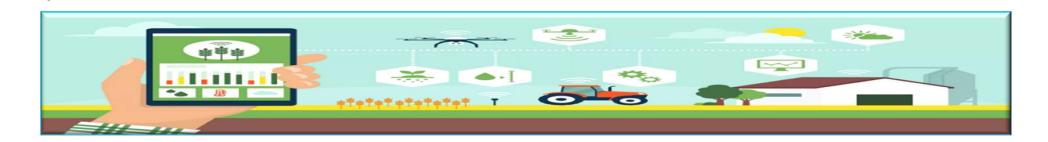
Packaging

Normalisation (Characterization, labelling, quality..)

Prototyping

modern Equipments





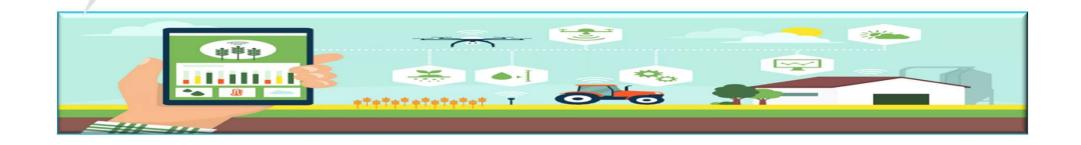
CROSS-CUTTING CHALLENGES

Scaling up quality competitiveness

Digitization/ automating

Funding

Formalization



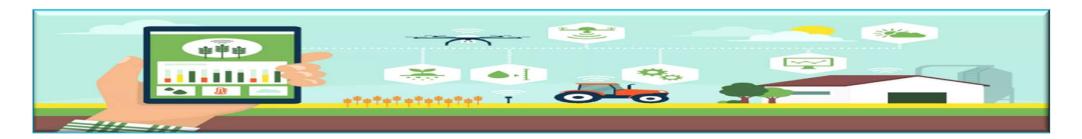
TRAINING SECTORS AT USSEIN: A FAVORABLE OFFER FOR AGRICULTURAL ENTREPRENEURSHIP





Academic project contribution in human capacity building

- Cover large sectors of the agricultural value chain
- Standard system of LMD and bioengineering
- Competency based approach: Emphasis on vocational degrees (30 Bachelor and masters) of agriculture-related jobs,
- Promote the use of **scientific parks and incubators** in order to encourage self-employment
- A new university oriented towards learning by doing and entrepreneurship
- Community service projects are counted as training modules



Academic project contribution in human capacity building

- Hydraulics,
- rural engineering, machinery and renewable energies
- Remote sensing and climatology
- AgroTic •
- Organic and Eco Agriculture

Transformation

- Nutrition and food
- Food science and Technology

- Management of fishery resources, fisheries and aquaculture
- Agrosilvopastoral and fisheries advice
- Management of farmer organizations

Production

Management



STRATEGIES AND INITIATIVES TO SUPPORT INNOVATIVE ENTREPRENEURSHIP INCUBATORS-PARTNERSHIPS-POLICIES

FabLab
Living Lab/studios
Coworking spaces

Fundraising support Sourcing of projects Promotion of resear results through entrepreneurship



Preincubation Incubation challenge networking Events

Training and coaching Support for research and development hosting of Project





PARTNERSHIP DEVELOPMENT & POLICIES

Partnership	Policies
 NATIONAL Farmers organisations Industries local authorities Development of linkage University territories Businesses 	Senegalese Startup Act Creation of DER/FJ and BCE Student entrepreneur status
 INTERNATIONAL AFD, Enabel, DAAD, HSWT, GIZ USAID - World Bank 	PROJECT FOR SUPPORT TO SKILLS DEVELOPMENT AND YOUTH ENTREPRENEURSHIP IN GROWTH SECTORS (African Dev Bank)

visible boosts to the startup scene, business registration period, financial support youth and women entrepreneurship

STUDENT'S INITIATIVES

AGRINUM

P2E2A DAYs

INNOVATION AWARDs

CLIMATHON

STUDENT's **COOPERATIVES**

ILLUSTRATIVE INITIATIVES

automation of agricultural tasks with an on-board system (Rebot).

INNOV DIGITECH AGRO

decision support

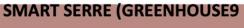
• control of climatic parameters in the greenhouse

BISMILAH DELICE

biscuits made from local cereals



detection of plant diseases and





SEVEN-TECH





















Capacity Building in Agriculture













La recherche au service du développement du secteur de l'agroalimentaire





THANK YOU FOR YOUR ATTENTION

