

***Innovation opportunities and Challenges in Africa:
The experience of winning Innovation Prize for Africa 2015***

Pr. Adnane Remmal, Morocco

Challenges vs Innovation opportunities

- Africa is rich with various cultures, human and natural resources
- All economic forecasts agree that tremendous economic growth is expected in the continent in the coming decades
- Such growth implies challenges and issues specific to the region for which there needs to be innovative and adapted solutions

- Health issues
- Nutrition issues
- Environmental issues
- Energy issues
- Water issues
- Education challenges

These issues are **specific** to the region

Each one of them represents the **opportunity** to change things and **grow sustainably**



Johannesbourg, Casablanca and Nairobi, Emerging cities

Which are the main drivers of innovation?

- **People** with innovative and constructive ideas and projects
- **Early stage financing** (from prototype to actual product and first customers)
- **Growth** financing to scale up and address a bigger target
- Fund raising to **enlarge the scope** and **develop new products** or to expand in international markets
- **Enabling environment/strong innovation ecosystem:** policy which allow innovations to flourish (IP, Business registration, collaboration among innovation enablers etc.)

Which of these drivers exist in African countries and which are rare ?

1/ Innovative useful projects:

Innovations that address an urgent and shared need to a specific location. More and more research done in African countries

2/ Business Angels to :

-Finance early stage projects
-Bring managerial experiences and resourceful network

3/ Government support :

Many countries encourage and finance entrepreneurship initiatives (Several examples in Ghana, Morocco, South Africa...)



AIF: An example of a catalyzer of Innovation in Africa



A **team** of professionals with diverse backgrounds: Serial entrepreneur, Trade and development specialists, Experienced businessmen..

OUR THEMATIC FOCUS

INNOVATION & TECHNOLOGY

we release untapped potential in Africa, driving pragmatic, African-led solutions (Africans for Africa)

GOVERNANCE AND COMPLIANCE

we promote African governance and access to law and legal resources

SOCIAL IMPACT DEVELOPMENT

we sustain livelihoods through empowering the local population and through income generation.



FOUNDING BOARD MEMBER

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AIF: Mission statement and purposes



The Innovation Prize for Africa (IPA) was initiated in 2011, to strengthen the African innovation ecosystem by rewarding and mobilizing for African innovators. IPA honours and encourages **innovative achievements that contribute towards developing new products, and increasing efficiency or saving costs in Africa**

A true Panafrican initiative : 3000 entries from 49 African countries

Winning project :

We have developed an effective and affordable patented alternative to the use of antibiotics in poultry farms:

The NP1600

A natural and affordable product, that can be used in both developed and developing countries



Natural: NP1600 is a mixture of natural products (clays and phenolic compounds) known for their antibiotic and anticoccidial effect without any toxicity



Cost-saving: NP1600 is an affordable alternative to the use of other feed additives: antibiotics, anticoccidials and mycotoxin fixator



Patented and suitable in different contexts: NP1600's composition is patented by LIPAV with the potential to be marketed in both developing and developed countries



3 chemical products replaced: considerable reduction of toxicity risks in the farm products



Antibiotics : End of systematic use as growth promoter agents

Result : Reduction of the risks of developing resistance to drugs



Anticoccidials : End of the use of chemical products

Result : Reduction of the amount of chemical residues in meat and eggs



Mycotoxin fixator: One less product to purchase and administer

Result : Reduces all costs associated with it

By replacing 3 products, NP1600 is an effective and cost saving alternative to the previous treatments

Bacterial resistance to antibiotics is a major global health concern to which no solution is currently known

WHO: Increase in antibiotic resistance and a decrease in antibiotics' efficiency

- *The emergence and propagation of pathogenic germs resistant to drugs has accelerated*
- *We are about to lose these miracle drugs*
- *The speed at which we are losing these drugs is beyond the one at which we are able to develop new ones*
- *In reality, the R&D resource that could bring us new antimicrobial drugs is running dry*



Dr. Margaret Chan,
Director General of
the World Health
Organization (WHO)

Since 2006, Europe regulates the use of antibiotics, but with limited efficiency



- **Ban of antibiotics** as growth promoters in all EU farming plants to « **counter the emergence of bacteria resistant to antibiotics** due to their excessive or uncontrolled use»



- **Huge increase** in the use of antibiotics to **treat animals diseases** in the Netherlands, as a result of the ban

How to combine productivity of breeding and fight against antimicrobial resistance ?

Other projects under development :

Natural Plant Protector: An alternative to pesticides with multiple effects :

- Growth promoter
- Antiparasitic
- Antifungal
- Antibacterial
- Insect repulsive
- Insecticide

Development stage:

Big scale field trials

Boosted Antibiotics:

Boosting process on existing antibiotics by adding synergic molecules that break the resistance mechanisms thus making the resistant bacteria sensitive again

Development stage:

Phase III Clinical trials on patients with urinary infections caused by resistant germs. Results: 24 cured patients (100%)

**Thank you for your
attention**