



Long-term EU-AU Research and Innovation Partnership for **Food and Nutrition Security and Sustainable Agriculture**

# Dialogue for Action and Brokerage in West Africa: Fostering Knowledge, Communication & Innovation Hubs

Virtual Workshop | 28 - 29 October 2020





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## 1-TOPIC : AGRO ECOLOGICAL TRANSITIONS OF FOOD SYSTEMS: NEW IDEAS TO LINK TOGETHER THE HEALTH OF AGROECOSYSTEMS, ANIMALS AND HUMANS

- Not easy to apply recommended 10,000 kg/ha of compost in western Africa;
- So, can only one compost be efficient for 2, 3 or all crops cultivation?
- In fact, we know crops nutrient needs are different often opposite!





## 1-TOPIC : AGRO ECOLOGICAL TRANSITIONS OF FOOD SYSTEMS: NEW IDEAS TO LINK TOGETHER THE HEALTH OF AGROECOSYSTEMS, ANIMALS AND HUMANS

- Our idea focus to solve those twice limit in sustainable agric
- We are going to specify organic fertilizer by  $X-Y-Z-X'-Y'-Z'$  and MO (where X, Y, Z, X', Y', Z' represent the rate of N, P, K, Ca, Mg, S and Organic humic, fulvic and humin acid)
- We determine mineral potential of weeds by bio-mineralization

using EM strain





## 1-TOPIC : AGRO ECOLOGICAL TRANSITIONS OF FOOD SYSTEMS: NEW IDEAS TO LINK TOGETHER THE HEALTH OF AGROECOSYSTEMS, ANIMALS AND HUMANS

- So, we give economic value to weeds and farmers don't need to use herbicide
- 50 liters of specific organic fertilizer to have more than traditional organic harvest
- Some yields are as high as those of chemical agriculture with same cost;
- When apply with 10% of recommended chemical fertilizer amount, yields are above conventional results.





## 2 - CRITICAL FACTORS FOR DEVELOPMENT SUCCESS / LIMITING FACTORS.

- Lacking of equipment for laboratory analysis;
- More research more for standard organic fertilizers formulation;
- Needs technical/financing partners to grow production at industrial scale (automatization);
- In Benin, Chemical fertilizers are subsidized (politic orientation).





### 3 - MOST PRESSING THEMATIC PRIORITY CONCERNING THIS TOPIC.

- Weeds are present many part of Africa, each country can produce efficient organic fertilizer and reduce 50 to 80% of chemical needs;
- A. Dangote (richest man in Africa) is going to install the world biggest one chemical fertilizers factory in Nigeria;
- Without alternative agro-systems will be destroyed in next few years;
- EOA farmers are increasing till now, if they don't find sustainable solution for their production, this can make them return to chemical





#### 4 - KEY ACTORS, IMPORTANT PLAYERS

- Investor in organic business
- Scientist and technician (engineering) about technology improving
- Sustainable value chain actor and networker
- Research and Certification institute







## 5 - CONDITIONS FOR ENHANCING ACTORS' COOPERATION (CRITICAL FACTORS, ENABLING ENVIRONMENT AND INTERFACES TO ENSURE COLLABORATION)

- Create a co-working space about topic's challenge
- Building of green trade business circle locally, at countries scale and go flow west African network





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# THANK YOU

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