## LIVESTOCK AND ECOLOGICAL PROTECTION WITH JUNCAO TECHNOLOGY



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Seminar.

## Juncao Technology

2

• It's nearly 40 years now since JUNCAO Technology started to emerge and thrive in research and application, from using grasses to substitute wood for edible and medicinal mushrooms production, extended to areas like JUNCAO ecological management, JUNCAO fungi feed, JUNCAO fungi fertilizer, JUNCAO biomass energy and materials, and such systematic innovations of JUNCAO Technology has provided scientific and comprehensive basis and series of integrated techniques for the development of the new "high-yield, fine quality, high efficiency, ecologically-compatible, and safe in operation" emerging industry – the JUNCAO Industry.

• JUNCAO Technology has been extended to a pilot demonstration center since 2016 in Bauchi State Nigeria and some of the grasses were tested in animal feed, desertification and erosion control with the cooperation of Bauchi State Government of Nigeria. The global application experiences show that JUNCAO Industry developed with JUNCAO Technology is a new sustainable industry with high ecological and economic efficiency, for its' development can not only help in excellent solution for soil and water conservation, environment protection, employment and poverty alleviation problems, but also has many active sidedeffects in enhancing and increasing food security and economic development, all with great potentials. In May 2017, JUNCAO Technology was listed as one of the China-UN Peace and Development Fund projects to provide reinforced assistance to developing countries in promoting sustainable development of agriculture, eradicating poverty and implementing the 2030 Agenda for Sustainable Development with a Chinese solution.

### **Ecological Problems**



#### **Gully Erosion**







# **Ecological Problems**

- Nigeria like some other countries of the world is experiencing various forms of environmental problems which range from oil spillage, flood, erosion, desertification among others.
- Desertification, Erosion and feed shortage are some of the most glaring of these environmental hazards and the phenomenon has affected some states in the northern part of Nigeria, but the impact has been more glaring since the famine of 1971-1973 in this part of the country. By location, Northern Nigeria is situated in the semi arid areas with average annual rainfall or less than 600 mm bordering on the Sahara desert (Folaji, 2007)

• Generally, desertification affects eleven (11) northern state while erosion effect five states.

6

• states of Nigeria referred to as the frontline state, these include: Adamawa, Borno, Yobe, Jigawa, Kano, Katsina, Zamfara, Sokoto, Kebbi, Bauchi and Gombe. These states are agricultural producing areas and are affected by desert encroachment that is fast moving southwards. Desertification is attributed to loss of the lands biological productivity in arid, semi arid and dry sub humid areas (Cunningham and Saigo, 2001).

#### Animal Feed Shortage





Increasing commercialization of crop residue, poor management of available grazing reserves and burning of rangelands by crop farmers resulting in acute shortage of livestock feed. Most of the 415 grazing reserves established by the defunct Northern Regional government have since been lost.

Only 141 were formally documented and gazette in 21 states and Federal capital territory, though the government failed to back these agreements with legislation guaranteeing exclusive usage or take active measures to prevent encroachment.

- Production of some high valued crops like tomato, onion etc. produce low or almost no crop residues for livestock feeding and further diminishing available fodder.
- This increasing rat of rural banditry and cattle rustling which have grown in scale and organization in several Northern States where large bandit groups operate is driving herders to the South.
- The rest succumbed to pressure from rapid population growth and associated demand for farmland. The cumulative effect has been to significantly reduce the availability of designated grazing reserves forcing herders to seek pasture elsewhere.









Propagation of Juncao grass in GAMAWA L.G.A, Bauchi State For desertification control

Juncao Technology and its application for Desertification/Gully Erosion control in Gombe state Nigeria









#### Establish Grazing Reserves, stock routes and Encourage Ranching by propagating Juncao grasses

12

There is urgent need to reform and improve grazing arrangements. As a first step, the federal government, working with state governments and Juncao Center should jointly survey, demarcate and officially document existing grazing reserves and stock routes that have not been over-run by human settlements and infrastructure. New Grazing reserves and stock routes in consenting states should be established and livestock production and management be improved in order to minimize contacts and friction between herders and farmers. Grazing reserve laws should be reviewed to suit the current situation. Provision should be made for the Fulani herdsmen to secure rights to land use so as to reduce insecurity and mitigate any probable conflict.

Separately the federal government should take steps and collaborate with Junao Center to encourage ranching. State governments should promote ranches, by clarifying processes for acquiring land and obtaining credit, devising modalities for propagation of Juncao grasses, ranch management training, and create more awareness.





#### Planting Juncao grass with harder's for Animal feed











Training herders on how to cut Juncao grass and feed their Animals







#### >Adoption of JUNCAO Technology

> The Nigerian Government has since commence adopting JUNCAO Technology at pilot level in Nabardo and have planted JUNCAO grass in the northern part of Bauchi Satate part of the areas targeted for the desertification/Erosion and the government grazing reserve programs to forestall Harders/Farmers conflicts and it has so far proved positive. I hope adoption of JUNCAO Technology will be part of means of solving harder's/farmers conflict not only in Nigeria but Africa as a whole

# CONCLUSION

Escalating conflicts between herders and farmers are among Nigeria's most pressing security challenges. This could potentially generate bloodshed on an even wider scale unless ending this violence is made a national priority. Strengthening law enforcement, supporting local conflict prevention and resolution mechanisms, establishing and protecting grazing reserves, encouraging ranching would all make a significant and immediate difference. Thank you.



# •Thank you All