Acta Scientific MICROBIOLOGY (ISSN: 2581-3226)

Volume 5 Issue 11 November 2022

Short Communication

How to Convert Sahara Desert into Fertile Land

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DOI: 10.31080/ASMI.2022.05.1160

Received: September 06, 2022

Published: October 18, 2022

Abstract

Sahara is desert Africa Located North Africa Area 9.400 m km^2.

Agriculture is not possible in high Temperature and water scarce areas specially during Summers Temperature reaches 49 - 50 degree centigrade. Pond development, interlinking of rivers, amrit sarovar yojana, Tank, iri, Jhalara, Talab, Tanka, Johad, Panam keni, Khadin dana, Dhora, Kund, Bawari, Baoli, Zing, Nadi, Bhandara, Phad, Bamboo drip irrigation, Ramtek, Jackwell tek, Eri, Tank, Khul, Zabo, Ruza are some traditional water conservation methods.

These can be developed For water conservation, water used for growing trees, forest give us medicinal plants, timber, fire wood. Plants absorb air pollutants, trees save sand drift, allow them to bind water, Plants absorb noise pollution, Reduce land pollution and purify air, reduce water pollution. Clay Nano Particle Technology (CNT), Liquid Nano Clay (LNC), LNC decrease water utilization 90%, transform desert sand into productive land mass (Kristian Morten Olesan, Norway 2020).

Keywords: Sahara Desert; Sand; Agriculture; Transformation

Introduction

High temperature, increasing temperature, Global warming, Ocean acidification, melting snow caps, drought, flood, fresh water scarcity, Increasing population, increasing demand of drinking and fresh water, industrialization, escalating vehicle use, cutting trees, removing forests, house construction, forests removed from more than 50% earth surface, increasing Carbon di oxide, increasing oxides of carbon, oxides of sulfur, oxides of nitrogen, all causing air pollution. Area equal to more than half Rajasthan converting desert.

Evry year Globally. Northeast more than 240000 km^2 area converting desert.

Desert Control Technology (DCT) and CNT (Clay Nanoparticle Technology) is useful for controlling desert.

DCT is useful deserts like Great Victoria Desert, Great Sandy Desert, Sierra Nevada Desert, Black Rock Desert, Baja, Painted Desert, Wyoming Desert, Snake River, Thompson Okanagan, Western Arid desert, Guadalupe Mountains Texas, Mojave Desert, Saguaro Desert, Mojave desert, White sand desert/White sand national park, Grand Canyon, New Mexico Desert, Arizona Desert, Colorado Desert, Great Basin Desert, Sonoran Desert, Chihuahuan Desert North and West African Desert (Aral sea converted desert), Tinami desert, Gibson Desert, Simpson Desert, Little sandy desert, Middle East UAE desert Temperature exceeds 50^{o}C, Thar Desert into productive land, This will also augment Flora and fauna and productivity of the region. One more method is selecting the desert area and digging upto certain depth (2-2.5m), sprayed with water for certain period. initially 2-3 hours and then 2-3 days successively then plants and trees are grown. The trees to be planted include

Jatropha, Prosopis, Pongamia, Mango, Badam, Sapota, Mango, Jamun, Palm, Papaya Coconut and other medicinal plants. Soil added is black, red or alluvial soil. Drip irrigation is also used [1-10].

Conclusion

Cellulose plus water plus sand paste prepared and mixed to desert sand Forms micro nano structure changes arid zone into productive wetland.

This is erosion resistant and few water and nutrients are required. Revival and Conservation of Traditional water resources can also help convert desert into wetland. with availability of water flora and fauna will also increase.

Bibliography

1. Akinremi OO., *et al.* "Evaluation of Palmer drought index on Canadian Prairies". *Journal of Climate* 9 (1996): 897-905.

2. Ali Z., *et al.* "A Novel multi Scalar drought index for monitoring Desert, Strzelecki Desert".

3. Alley WM. "The Palmer Drought Severity Index – Limitations and Assumptions". *Journal of Applied Meteorology and Climatology* 23 (1984): 1100-1109.

4. Zhang MX. "Dynamic changes of wetland resources based on MODIS landsat image data fashion". Eurasip Journal on Spongy This fiber soil holds and retains nutrients and moisture, and crop grows much better (2018).

5. Mann HB. "Spatial - temporal variation and protection of wet – culture soil in 24 hours". Land resources in Xinjiang. *Econometrica* 13 (1945): 245-259.

6. Mao DH., *et al.* "Chinas wetlands loss to urban expansion". Source. Thin Starch when mixed with sand, PLA sand barriers Poland degradation and Development 29 (2018c): 2644-2657.

7. Mao DH., *et al.* Conversions between natural wetlands and sand barriers (4-5 years stability), Grass square (1-3 years stable farmland in China: A multiscale geospatial analysis. Science of ity), PLA and barriers (7-8 years stability). The total Environment 634 (2018a): 55-560.

8. De., *et al.* "Little change in global drought over past 60 years". *Nature* 491 (2012): 435.

9. Zhao K. "Chinese Marsh Chronicle". Doctoral dissertation, Sci – structure changes desert into wetland. Less nutrients and water is required. ence press (1999).

10. Zou YC., *et al.* "Culture. Conservation of water and revival of traditional water resources (1-10). Water use conflict between wetland and agriculture 140-146". *Journal of Environmental Management* 224 (2018).