

LIQUID NATURAL CLAY



*Making Earth
Green Again*

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Executive Summary



Limited resources

Water, fertile soil, imported labor.



Rising demand

Growing population, growing cities, agricultural demand, desert greenery.



The solution

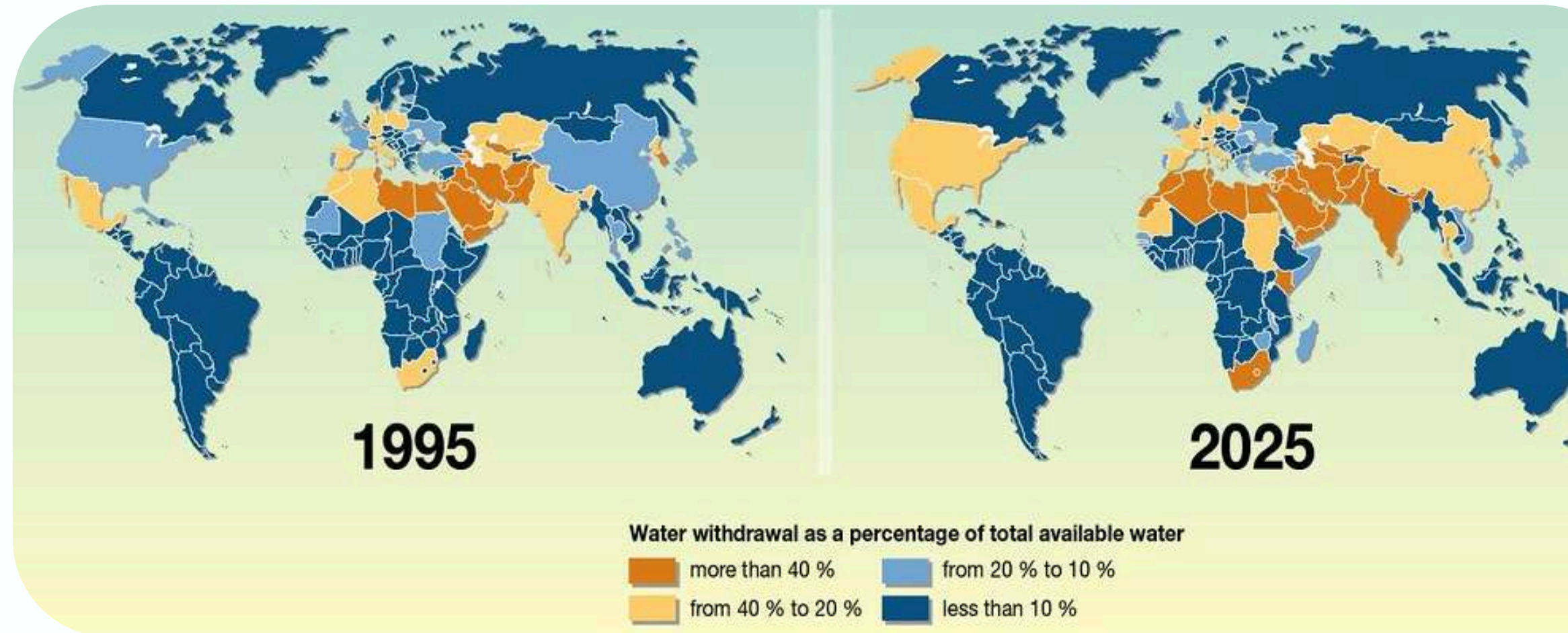
LNC is an organic, natural, water-saving solution set to be a game changer.

Limited resources, such as **water scarcity, diminishing fertile soil, and reliance on imported labor**, are placing immense pressure on the agricultural sector.

Rising demand due to **population growth, urban expansion**, and increased need for agricultural production and desert greening is further intensifying this strain

In response, **Liquid Natural Clay (LNC)** provides an innovative, organic solution that **conserves water and revitalizes soil**, positioning itself as a revolutionary tool for sustainable agriculture and landscape management.

Global Challenges We Face



Water Scarcity

Agriculture accounts for 70% of global freshwater use, but by 2025, 1.8 billion people will live in regions with absolute water scarcity, severely affecting agricultural sustainability and ecosystem health.

Soil Degradation

Currently, 33% of the world's land is moderately to highly degraded due to erosion, salinity, and desertification, impacting global food security and reducing crop yields by up to 50% in some regions.

Urbanization & Climate Change

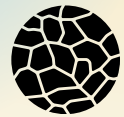
By 2050, nearly 70% of the global population will live in urban areas, further stressing land and water resources. In addition, climate change is predicted to reduce global crop yields by up to 25% by 2050, increasing the strain on agricultural land.

Global Challenges – Why Change is Urgent



Irrigation Inefficiency

Up to 50% of water is wasted in traditional irrigation systems.



Soil Destruction

Soil degradation is accelerating due to erosion, salinity, and desertification.



Population Growth

Growing populations and expanding urban areas place immense pressure on agricultural systems and natural resources.



Traditional Farming Challenges



Inefficient Water Use

Requires frequent irrigation, losing up to 50% of water to evaporation and poor soil absorption.



Slow & Costly Soil Treatment

Conventional clay treatments take 7-15 years to show results and demand up to 100kg of raw material per m².



High Costs and Environmental Impact

Expensive and resource-intensive processes that degrade over time, requiring repeated applications.



Labor-Intensive

Highly intrusive methods require significant manual or mechanical labor, increasing operational costs and risks of human error.

Introducing Liquid Natural Clay (LNC)

The Solution:

LNC is a patented, 100% natural solution, locally manufactured and applied on-site, that transforms sandy, arid soils into fertile, water-retentive landscapes in just a few hours.

How It Works:

- *LNC forms a sponge-like structure in the soil, retaining water and nutrients at the root level.*
- *One application lasts up to 5 years, saving up to 50% in water usage & boosting yeild upto 62%.*



Using our pioneering Liquid Natural Clay (LNC) technology, we transform arid lands into fertile grounds, supporting sustainable agriculture and greening the desert.

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What is LNC?



Liquid Natural Clay (LNC) is a 100% natural, chemical-free mixture of water and industrial clay. It can be applied using existing irrigation systems, where it seeps into the soil, creating spongy structures at the root level. This allows for up to 50% water savings without the need for additional equipment.



AS SEEN ON



3 EASY STEPS



APPLY

Apply directly to sand or arid soil to form a sponge-like structure



SAVE

Saves up to 50% water with a non-intrusive method



GROW

Increases crop yields by up to 62% & combats desertification

How Does It Work?

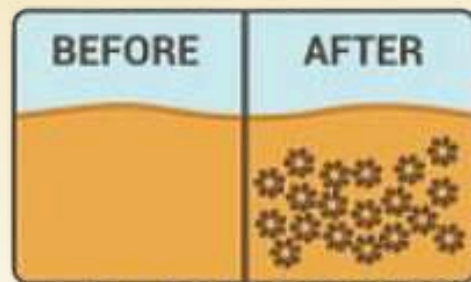


Mixing: LNC is prepared by mixing water with naturally occurring clay particles

Application: The liquid LNC is applied to the target area using conventional irrigation or spraying methods.



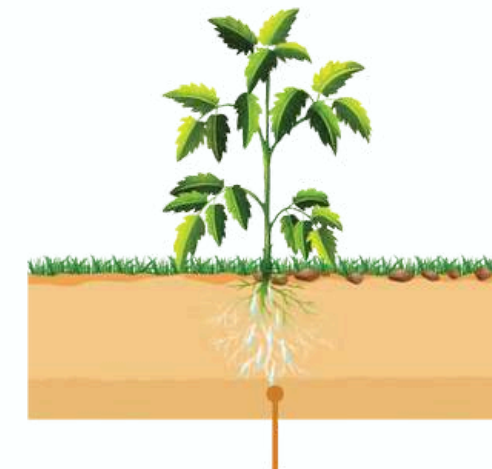
Transformation: Clay particles bind to sand grains, creating a sponge-like structure that retains water and nutrients.



Penetration: LNC seeps into the soil, reaching the root zone.

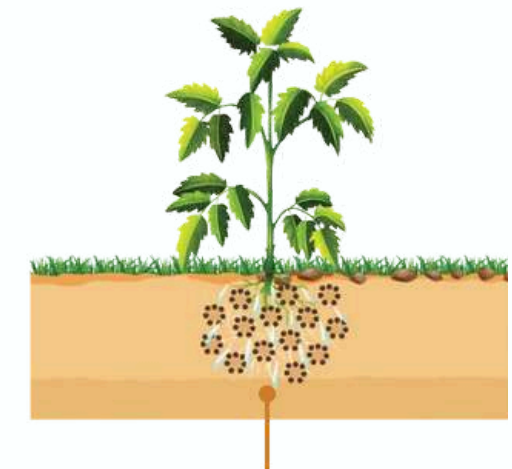


BEFORE LNC



Water and nutrients drain away from the plant roots in sandy soil.

AFTER LNC



LNC binds to sand particles, creating a sponge-like structure that retains water and nutrients at root level.

Results: Within 7 hours, the soil is transformed, ready to support healthy plant growth with reduced water requirements.

Why LNC is a Game-Changer



Water Savings

Reduce water usage by up to 50%, drastically cutting water costs and conserving this precious resource.



Fertilizer

Save 15-20% on fertilizer costs while maximizing nutrient efficiency.



Sustainability Impact

Achieve 15-30% carbon footprint reduction through improved resource efficiency and soil health.



Yields & Energy

Reduce energy consumption by 15-25% by optimizing pumping requirements while increasing yield by up to 62%.



Maintenance

Extend equipment lifespan and reduce maintenance costs by 10-20%, saving you time and money.



Long-Term Soil Health

One application lasts up to 5 years, enhancing soil fertility and resilience while reducing future construction and operational expenses by 15-20%.



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Savings potential varies by individual circumstances. Contact us for a personalized analysis.

LNC's Unique Advantages



Water Savings

LNC saves up to 50% water compared to traditional irrigation.



Fast Results

LNC improves soil within hours, while traditional treatments take months to years for noticeable results



Non-Intrusive Application

LNC requires minimal intervention, easily applied using existing irrigation systems.



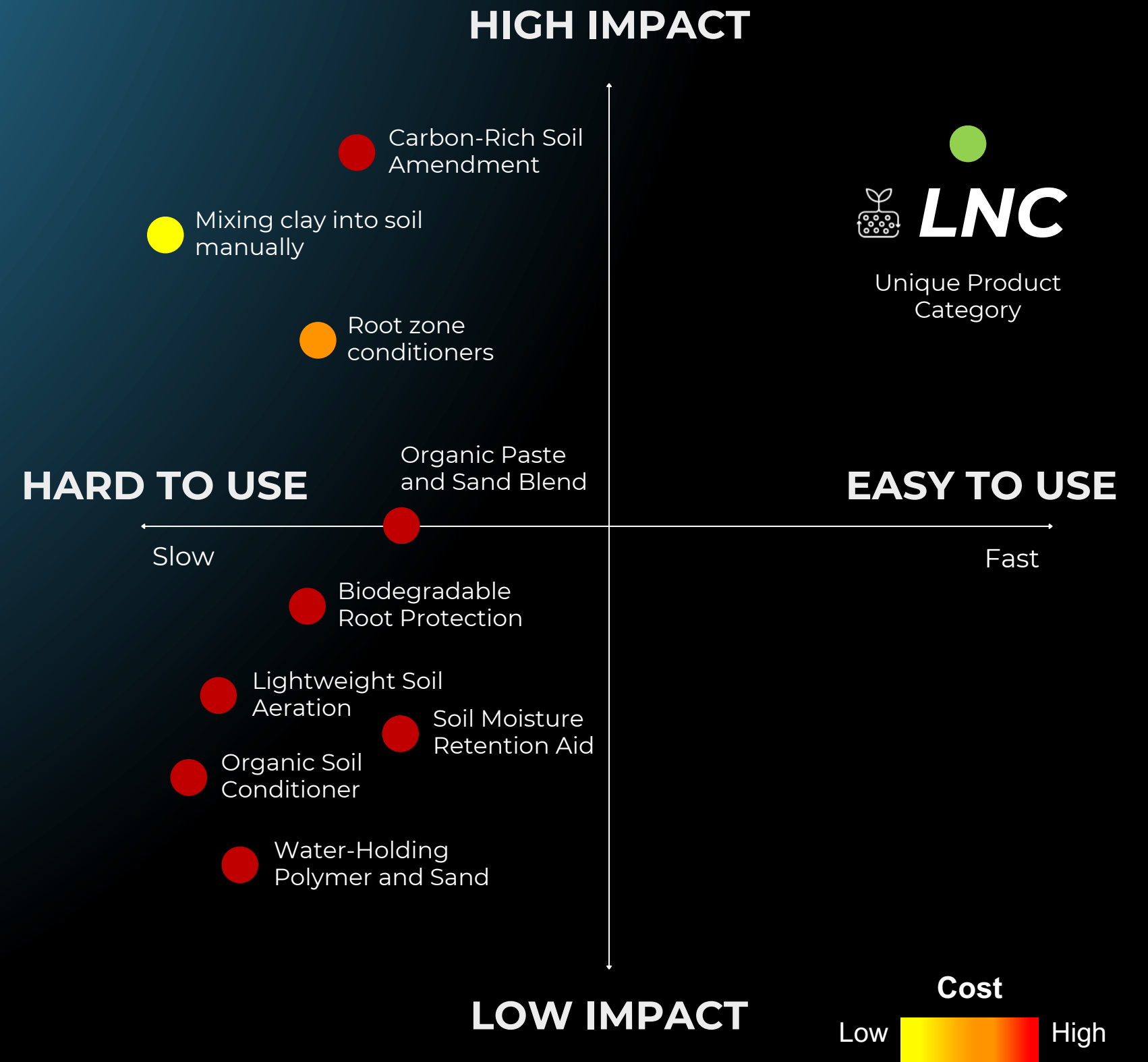
Long-Term Impact

One LNC application lasts for up to 5 years, reducing the need for frequent reapplications.



Cost-Effective

LNC requires just 1/100th of the raw materials needed by traditional clay treatments, reducing long-term costs.





Global Support for LNC Technology

Liquid Natural Clay (LNC) is **recognized by global organizations** for its sustainability and innovation. Institutions like the Bill & Melinda Gates Foundation, World Economic Forum, and European Union support **its potential to tackle environmental challenges**. Collaborations with research centers, such as the University of Arizona and ICBA, validate its impact on agriculture, water conservation, and desert greening. Government bodies and sustainability leaders, including the Ministry of Climate Change & Environment and Masdar City, advocate for LNC as part of a greener future.

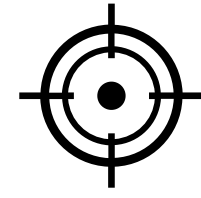
BILL & MELINDA
GATES foundation



SUCCESS STORIES



Client: **Masdar City, Abu Dhabi**
Location: **Pump Track Park, Abu Dhabi**
Date: **May 15, 2024**



About the Project

Masdar City launched the region's largest pump track, a 7,500 square meter facility for bicycles, scooters, skateboards, rollerblades, and wheelchairs. It includes three tracks totaling over 500 meters, catering to all skill levels and people of determination.



Project Scope

Masdar City has specified Nano Clay in all of their new and existing projects as a soil amendment to conserve water for all plants "Allow for "Nano Clay" or approved equal soil amendment". This aligns with the water-wise approach of the Velosolutions pump track, which utilized recycled materials and LNC from Mawarid Desert Control.

THE RESULTS

LNC was used in constructing the region's largest pump track. **An 7-month monitoring study with live soil moisture tracking showed an overall water savings average of 60%.** This project, highlighted by Masdar on several occasions, demonstrates LNC's effectiveness in large-scale applications and its significant water conservation potential.



Sebastien Miller
Design Manager at Masdar City
United Arab Emirates



Liquid Natural Clay has been instrumental in water conservation and maintaining our lush [Green Landscapes for Masdar City](#). The Pump Track Park led the way as an early adopter of LNC, addressing water savings in a traditional urban context and supporting the Federal agenda on water scarcity and security. Through a study of over 7 months, we observed water savings of up to 60% for trees during specific months of the year.



MASDAR CITY OPENS THE REGION'S LARGEST PUMP TRACK, FEATURING SUSTAINABLE MATERIALS

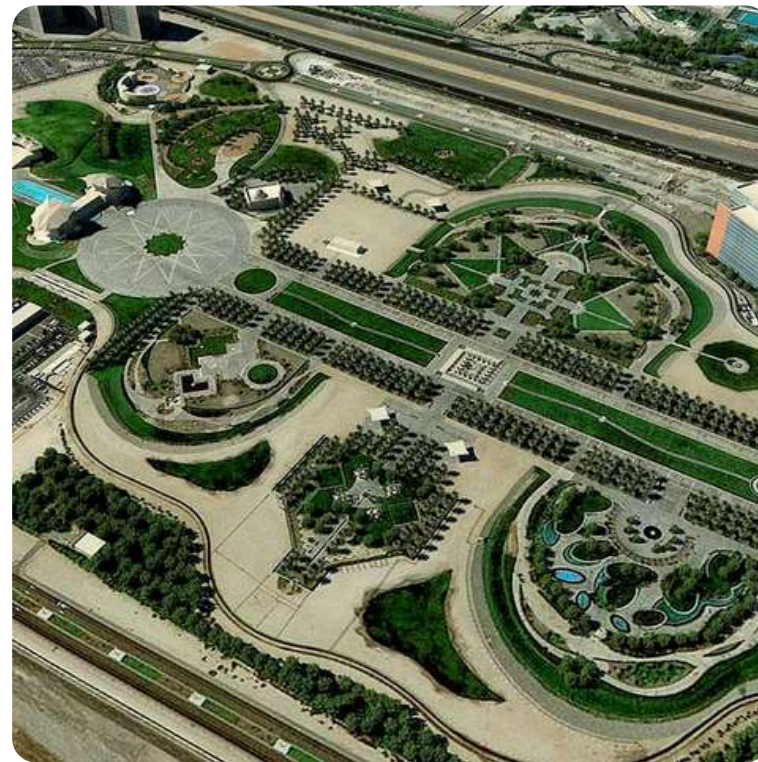
15 May 2024 Like Share



Success Stories of LNC Implementation



Client: **Khalifa Park**
Location: **Abu Dhabi, U.A.E**



*This project is a large public park located in Abu Dhabi, United Arab Emirates. Lawn area is the type of plant that was planted, with a sensor monitor installed. The application method used was manual and the **reduction of water by 52%** while **increasing soil moisture content.***

Client: **Balinese Garden**
Location: **Dubai, U.A.E**



*This project is Dubai's first high-end, eco-conscious residential development. Ground cover, shrubs, lawns, and trees were planted using a manual spray method. The treatment area is approximately **10,000m² for lawns, shrubs, and ground cover, with 160 trees** at each site.*

Client: **U.S. Agriculture Validation Study**
Location: **Yuma, Arizona, U.S.A**



*The LNC treated plot showed reduced mortality, improved water circulation, and better hydration. **Watering schedules were cut by 50%** and **fertilizer use by 40%**. LNC was effective in droughts, increasing watermelon rind thickness by **13%** and sugar content by **7.5%**. It also reduced transplantation shock in bell peppers, promoting healthy growth.*

Global Impact & Local Manufacturing



UAE-manufactured

LNC is locally manufactured by Soyl in the UAE with global implications, leading efforts to combat desertification and support water conservation globally



Local Commitment

The group's high ICV scores highlight LNC's local value to UAE's sustainability goals.



Global Reach

LNC is already transforming landscapes from the UAE to the U.S., proving its adaptability to different climates and industries.





Our Clients

We've partnered with many organizations to solve their agricultural and landscaping challenges.



EMAAR



إمكان
I M K A N

ARADA



سي

Wide-ranging Uses

LNC is a versatile and efficient solution that can be adapted to various industries and applications, paving the way for a more sustainable and greener future.



Agriculture & Forestry

Crop Production: Improve yields and water efficiency in arid climates by applying LNC via existing irrigation systems, enhancing soil's water and nutrient retention capacity.

Soil Reclamation: Revitalize degraded land for sustainable farming by restoring soil structure and fertility through LNC treatment.

Reforestation: Enhance seedling establishment and survival rates in challenging environments by improving soil moisture and nutrient availability with LNC.

Drought Mitigation: Build resilience against water scarcity by creating a water-holding capacity in the soil with LNC, reducing irrigation needs.

Landscape & Communities

Urban Greening: Create vibrant green spaces in challenging environments by enabling plant growth in arid soils and reducing water requirements with LNC.

Dust Control: Reduce airborne dust and improve air quality by binding soil particles with LNC, creating a protective layer against wind erosion.

Water Conservation: Lower irrigation needs and save precious resources through LNC's enhanced water retention capabilities in landscaping and green spaces.

Sustainable Landscaping: Enhance aesthetic appeal with eco-friendly practices by utilizing LNC to establish and maintain healthy vegetation with minimal water usage.

Sports & Resorts

Golf Courses: Maintain lush fairways and greens with less water by improving soil's water retention capacity and reducing irrigation frequency with LNC.

Sports Fields: Create durable and playable surfaces year-round by enhancing soil stability and moisture retention with LNC, reducing maintenance needs.

Resort Landscaping: Enhance guest experience with thriving greenery by enabling successful plant growth in arid climates with LNC, creating a luxurious ambiance.

Water Management: Optimize water use for cost savings and sustainability across sports and resort facilities through LNC's water-saving properties.

About Us



At Soyl, we don't just work with soil— we revolutionize it. Powered by Liquid Natural Clay (LNC) technology, we turn dry, barren land into fertile grounds ready for growth. Cut water usage in half, boost yields, and create a sustainable ecosystem that lasts.

**Making Earth
Green Again**



Powered by **Desert Control**

A MAWARID HOLDING COMPANY

What we believe in



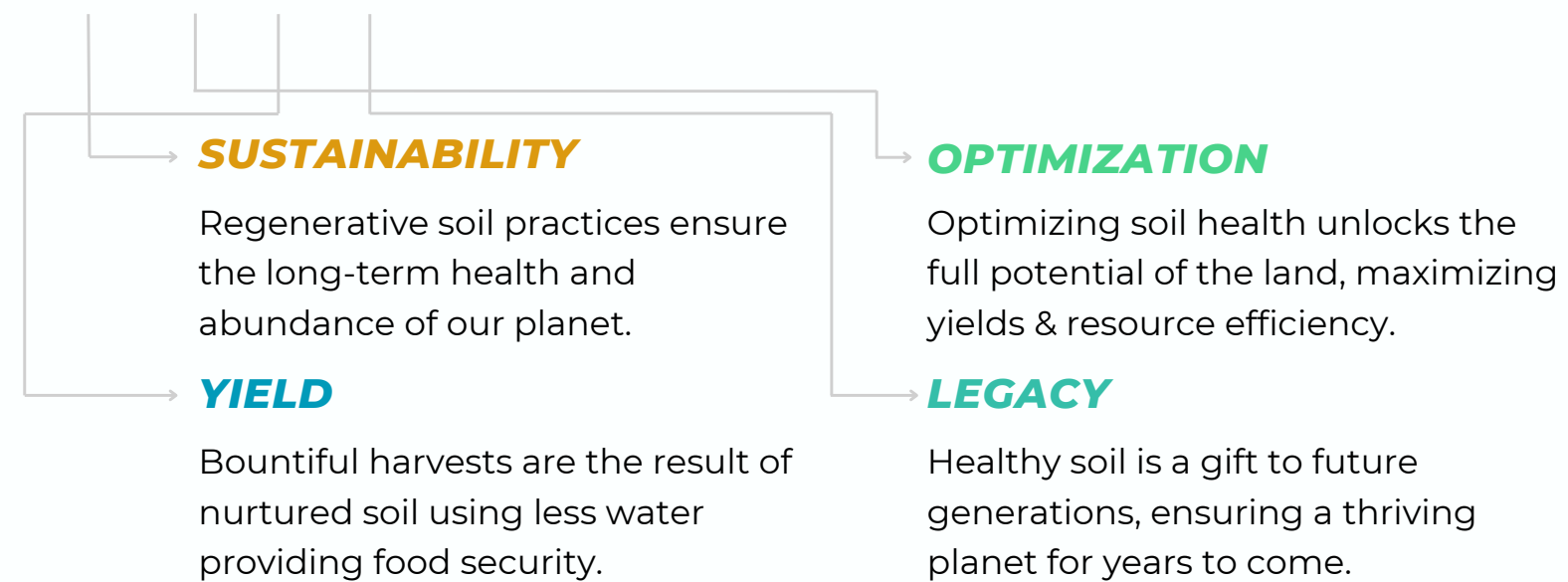
Healthy Soil: At the foundation of Soyl's innovation is Liquid Natural Clay (LNC), which transforms arid soils into fertile ground.

LNC: This technology ensures the soil retains water and nutrients, creating optimal conditions for plant growth.

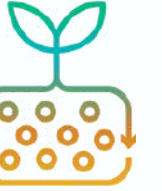
Healthy Growth: The result is vibrant, sustainable plant life, enhancing agriculture and landscapes while conserving resources.

Healthy, thriving soil is the foundation of a sustainable future.

Soyl



Certifications



شهادة تسجيل في ضريبة القيمة المضافة
VAT Registration Certificate

تمت الموافقة على تسجيل ضريبة القيمة المضافة من قبل هيئة الزكاة والضريبة والجمارك العامة (GAZT) بتاريخ 2020/06/17.

أهم المصنف: شركة ديزرت كونترول لايكود ناتورال كلاي مانيفاتشرز - سول بروبيري شيب ل.ل.س.
 رقم التسجيل الضريبي: 31015837500003
 تاريخ نفاذ التسجيل: 2020/07/01
 عنوان المصنف: الدوحة، المنطقة الصناعية، ج.م.ك، 19324

شهادة تسجيل في ضريبة القيمة المضافة
VAT Registration Certificate

أهم المصنف: شركة ديزرت كونترول لايكود ناتورال كلاي مانيفاتشرز - سول بروبيري شيب ل.ل.س.
 رقم التسجيل الضريبي: 31015837500003
 تاريخ نفاذ التسجيل: 2020/07/01
 عنوان المصنف: الدوحة، المنطقة الصناعية، ج.م.ك، 19324

IN-COUNTRY VALUE CERTIFICATE

BARARI NATURAL RESOURCES L.L.C.

56.80%

Company General Information
 License No: CN-1136524
 Issue Date: 06.08.2023
 Valid Until: 24.09.2024

INDUSTRIAL LICENSE
رخصة صناعية

License No: IN-2005357
 Issued on: 26/06/2024
 Valid until: 26/06/2025

Establishment Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
 Address: 21 Al Jadaif St - Abu Dhabi Industrial City - ICAD I - Abu Dhabi - United Arab Emirates

Practice Agricultural Activity License
رخصة ممارسة نشاط زراعي

License Number: AGL-2023-13438
 Issued on: 26/06/2024
 Valid until: 26/06/2025

Establishment Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
 Address: 21 Al Jadaif St - Abu Dhabi Industrial City - ICAD I - Abu Dhabi - United Arab Emirates

شهادة مطابقة
CERTIFICATE OF CONFORMITY

Certificate Number: 23-03-45833E23-03-0674800002
 Issued To: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.

Product Category: Food
 Product Sub-Category: Organic fertilizers/inputs

SCHEDULE OF CERTIFICATION
 Ministry of Industry and Advanced Technology

Company Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
 Product Category: Organic
 Certificate No: 23-03-45833E23-03-0674800002
 Registration Date: 16/03/2023
 Valid Until: 15/03/2024

Sl.No	Brand Name	Model Number	Product Details	Country of Origin
1	Desert Control	NA	Liquid Natural Clay LNC	United Arab Emirates

SCHEDULE OF CERTIFICATION
 Ministry of Industry and Advanced Technology

Company Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
 Product Category: Organic
 Certificate No: 23-03-45833E23-03-0674800002
 Registration Date: 16/03/2023
 Valid Until: 15/03/2024

Sl.No	Brand Name	Model Number	Product Details	Country of Origin
1	Desert Control	NA	Liquid Natural Clay LNC	United Arab Emirates

ICBA
 Key Findings for the Liquid Nano Clay (LNC) product being tested in turf and Bermuda grass pilot field trials in a desert environment

1. It is very important to identify soil microorganisms that can act as the soil population in hot and dry conditions. Liquid Nano Clay (LNC) is one of the most promising solutions to improve the soil productivity and plant growth.

2. Bermuda grass treated with LNC could have water savings as high as 47% and 10% higher biomass production for certain treatments.

3. LNC treatment significantly increased soil water content in the LNC treated plots. The soil was observed and tested by soil test samples one month and four months after the LNC application (15% of increase & 20% of loss 2023).

4. LNC treatment significantly increased soil water content in the LNC treated plots. The soil was observed and tested by soil test samples one month and four months after the LNC application (15% of increase & 20% of loss 2023).

OMRI Listed
 The following product is OMRI Listed. It may be used in certified organic production or food processing and handling according to the USDA National Organic Program regulations.

Product: Desert Control LNC
 Company: Desert Control
 Mury Weyens
 1219 E 2105 Street
 VMA Arizona 85335 United States

Product number: dca-16739
 Class: Crop Fertilizers and Soil Amendments
 Expiration date: 1-Sep-2024

Registration certificate of fertilizers and agricultural conditioners

This is to certify that the product is registered at the Ministry of Climate Change & Environment according to the following information:

Certificate No.: DXB-APN-34-2318036
 Verification Code: 225-0254
 Issue date: 13-07-2023
 Expiry date: 12-07-2028

Operation Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
 Operation Address: 21 Al Jadaif St - Abu Dhabi Industrial City - ICAD I - Abu Dhabi - United Arab Emirates

شهادة مطابقة
CERTIFICATE OF CONFORMITY

Certificate Number: 23-03-45833E23-03-0674800002
 Issued To: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.

Product Category: Food
 Product Sub-Category: Organic fertilizers/inputs

Reach out to us



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www.soyl.ag

Soyl HQ

Nation Tower, Abu Dhabi, UAE

Email: info@soyl.ag

Phone: +97123015555

Mohaned Al-Sharif

Manager - Business Development

Email: mohaned.alsharif@soyl.ag

Mobile: +971553699717



موارد القابضة للإستثمار
MAWARID HOLDING INVESTMENT

A **Mawarid Holding** Company