

LIQUID NATURAL CLAY



Powered by Desert Control



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Making Earth Green Again

LNC: A GAME-CHANGER

WHAT IS LNC? 



Liquid Natural Clay (LNC) is a 100% natural, locally manufactured, 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.

AS SEEN ON:



Seen

TRTWORLD



Arabian Business

Khaleej Times



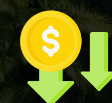
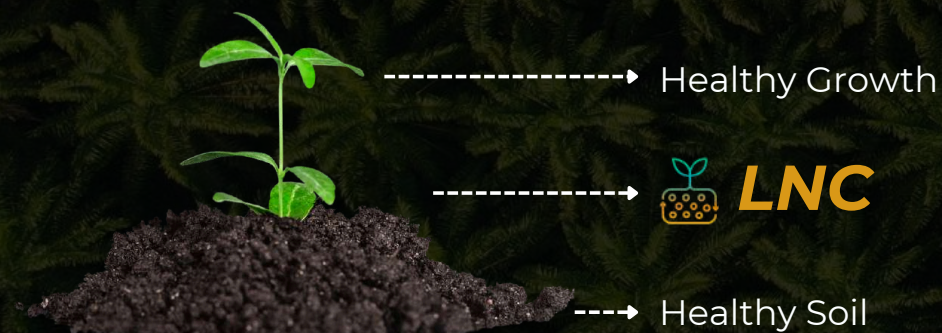
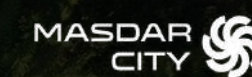
WE SUPPORT:



OUR SUPPORTERS:



BILL & MELINDA GATES foundation



COST: AFFORDABLE, ABUNDANT, NO HEAVY EQUIPMENT

LNC is made from affordable and abundant materials, requiring no heavy machinery, significantly lowering operational costs.



PRACTICALITY: NO TREE OR PLANT REMOVAL

LNC can be applied without removing trees or plants, making it a practical solution for developed or vegetated areas.



VALUE CREATION: DESERT LAND TO VALUABLE REAL ESTATE

LNC turns barren desert land into fertile, productive land that can become valuable real estate or farmland.



ROI: ACHIEVED WITHIN A SHORT TIMEFRAME

ROI can often be achieved in as little as 6 months, making LNC a quick-return investment for farmers and land developers, depending on water costs and project scale.

SUPPORTING UN SUSTAINABLE DEVELOPMENT GOALS:



ZERO HUNGER (SDG 2):
Increases soil fertility and crop yields, securing food sources for millions.



CLEAN WATER & SANITATION (SDG 6):
Reduces irrigation water use by up to 50%, making agriculture more sustainable.



CLIMATE ACTION (SDG 13):
Improves carbon sequestration, reducing CO₂ emissions.



LIFE ON LAND (SDG 15):
Restores biodiversity, improves ecosystems, and prevents further land degradation.

Up to
50%
Water Saving

Cut water usage in half, ideal for water-scarce regions.

Up to
62%
Higher Yields

Grow more with less water and fewer resources

100%
Natural

Safe, sustainable, and environmentally friendly.

Other Savings: Improve soil health for up to 5 years, reduce carbon footprint by 15-30%, cut fertilizer costs by 15-20%, and lower maintenance expenses by 10-20%, all while enhancing efficiency and sustainability.

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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

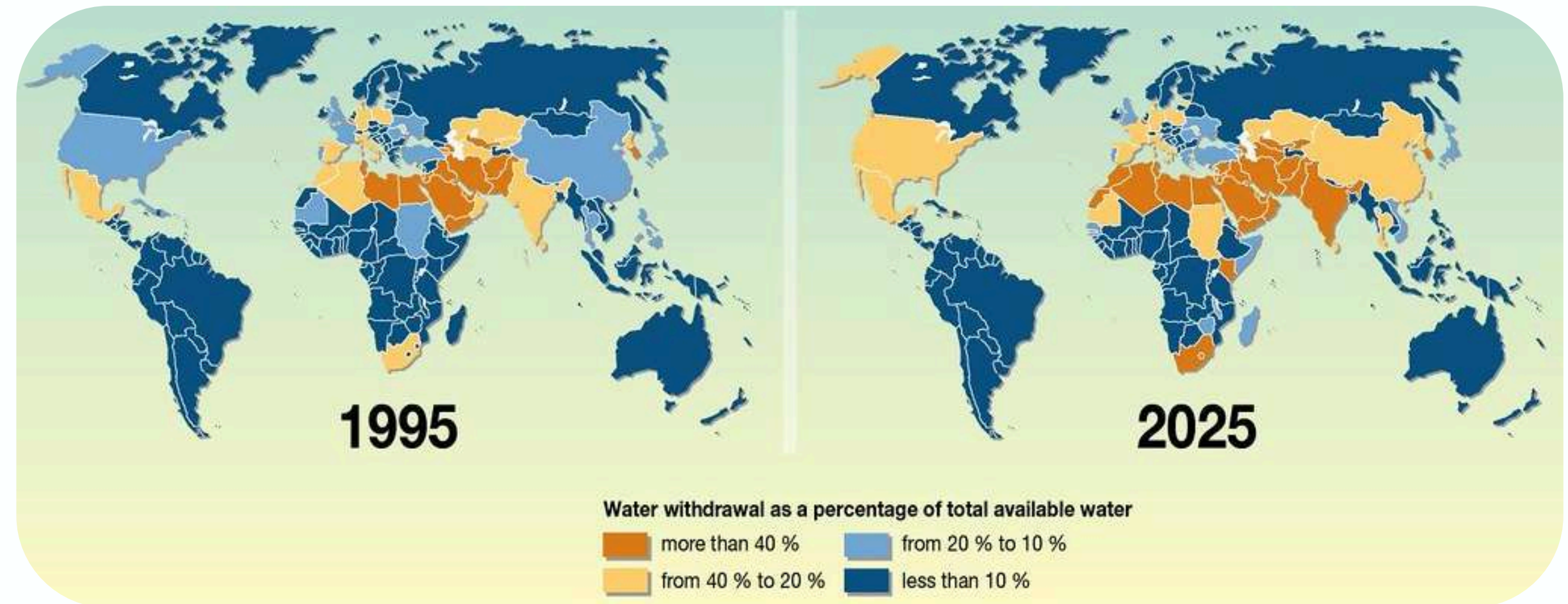
LNC is an organic, natural, water-saving solution set to be a game changer.

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

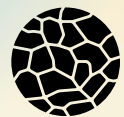
By 2050, nearly 70% of the global population will live in urban areas, further stressing land and water resources. In addition, climate change is predicted to reduce global crop yields by up to 25% by 2050, increasing the strain on agricultural land..

Global Challenges – Why Change is Urgent



Irrigation Inefficiency

Up to 70% 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 70% 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



Mashable



3 EASY STEPS



APPLY

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



SAVE

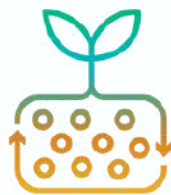
Saves up to 50% water with a non-intrusive method



GROW

Increases crop yields by up to 62% & combats desertification

How Does It Work?

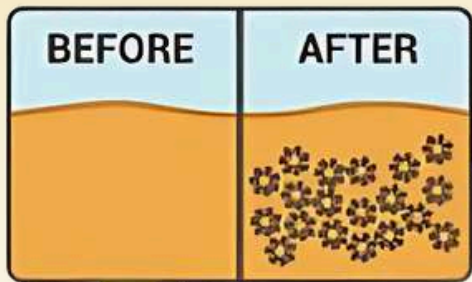


Mixing: LNC is prepared by mixing water with naturally occurring clay particles

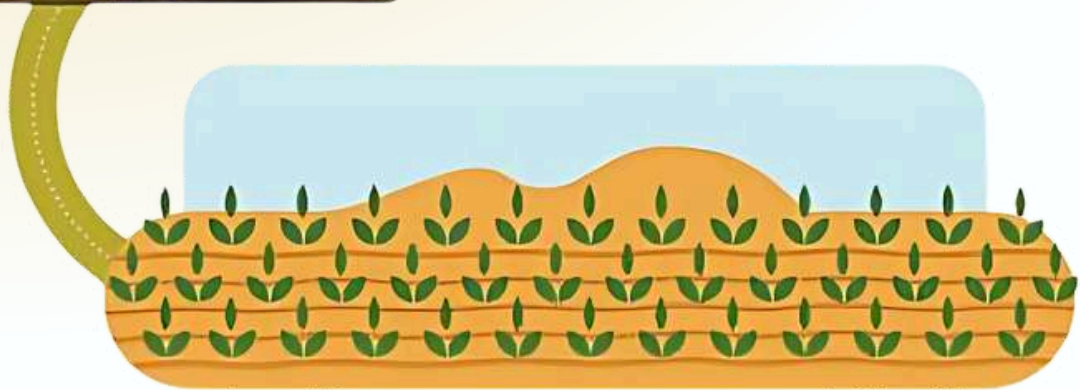
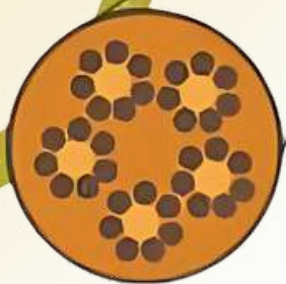
Application: The liquid LNC is applied to the target area using conventional irrigation or spraying methods.



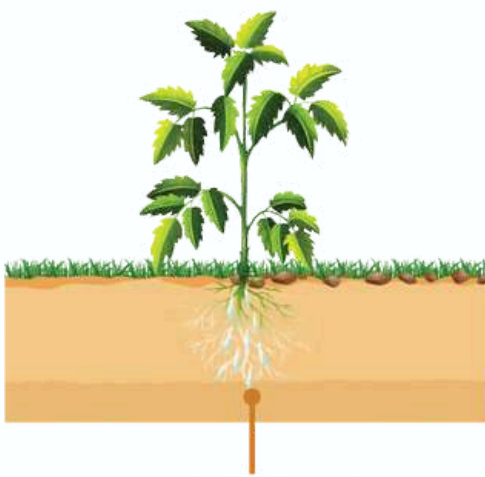
Transformation: Clay particles bind to sand grains, creating a sponge-like structure that retains water and nutrients.



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

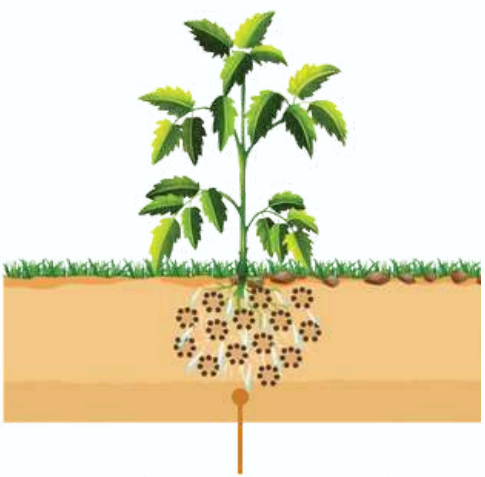


**BEFORE
LNC**



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.



Yields & Energy

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



Fertilizer

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



Maintenance

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



Sustainability Impact

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



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%.



Soyl

**Making Earth
Green Again**

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Global Support for LNC Technology

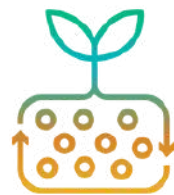
Liquid Natural Clay (LNC) is **recognized by global organizations** for its sustainability and innovation. Institutions like the Bill & Melinda Gates Foundation, World Economic Forum, and European Union support **its potential to tackle environmental challenges**. Collaborations with research centers, 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



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.



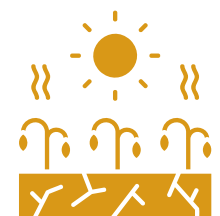
Agriculture & Forestry



**Crop
Production**



**Soil
Reclamation**



**Drought
Mitigation**



**Reforestation
Support**

Landscape & Communities



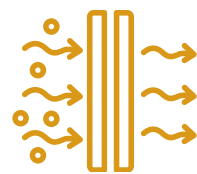
**Urban
Greening**



**Sustainable
Landscaping**

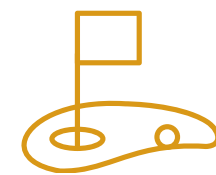


**Water
Conservation**

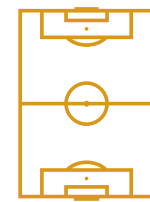


**Dust
Control**

Sports & Resorts



**Golf
Courses**



**Sports
Fields**



**Resort
Landscaping**

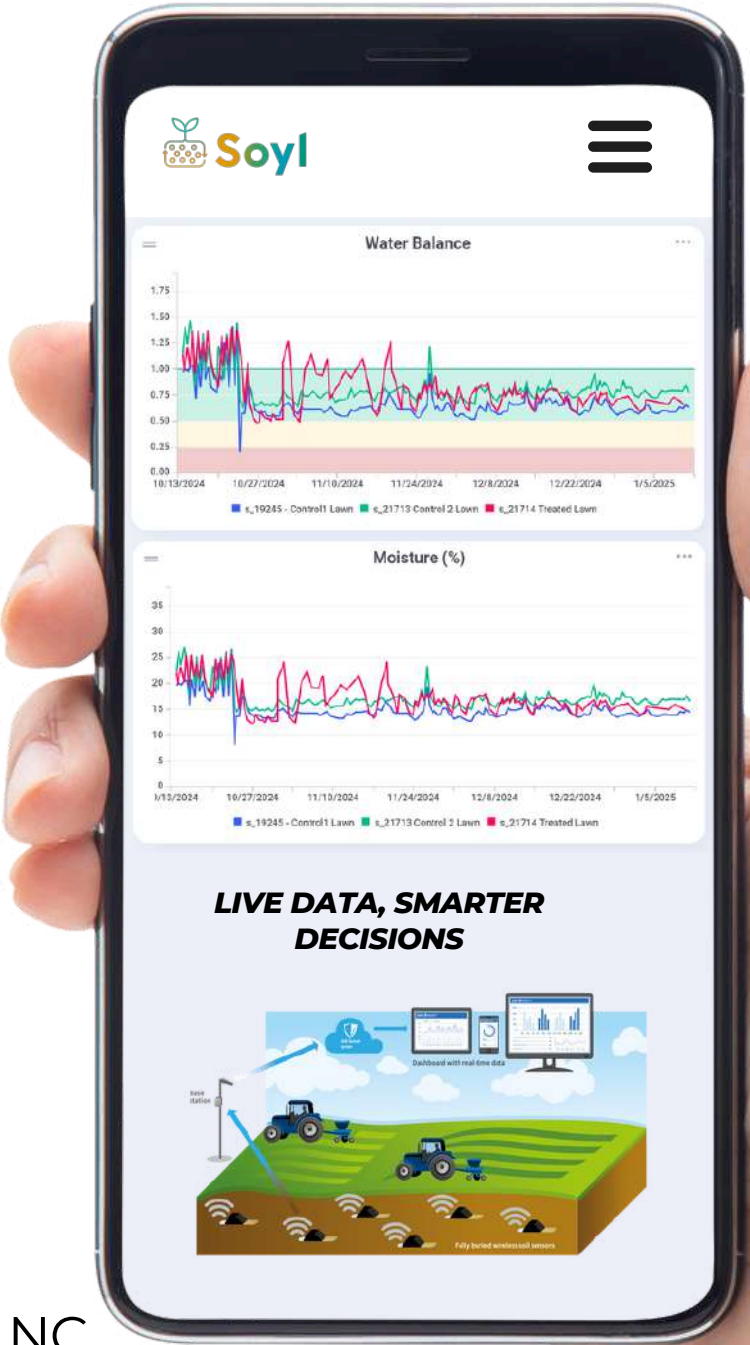
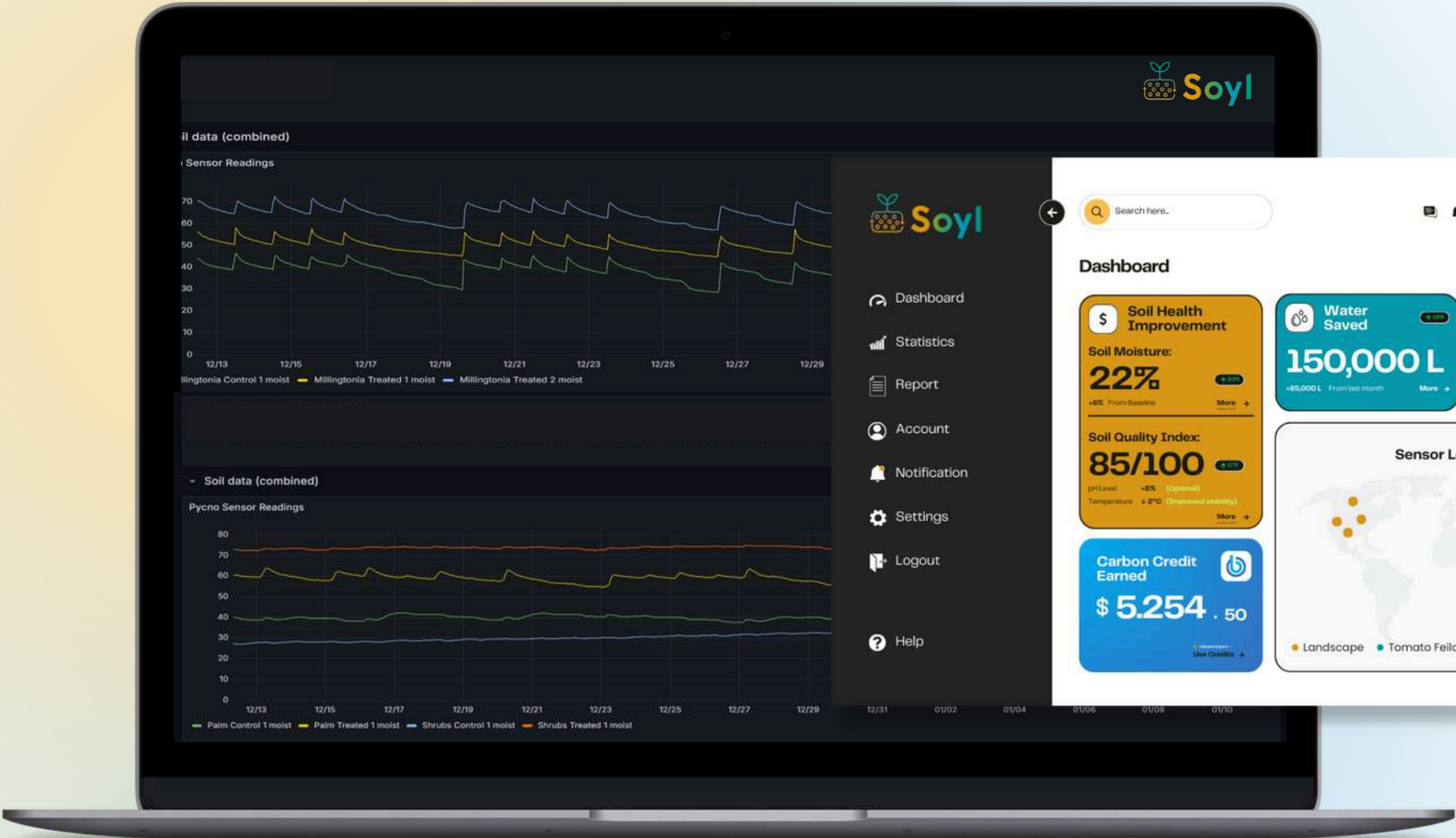


**Water
Management**

SOYL DASHBOARD



Soyl's **Sustainability Score** dynamically measures a client's environmental impact based on key metrics such as **water saved, soil health improvement, carbon footprint reduction, and biodiversity impact**. By tracking real-time data, the score reflects tangible ESG progress, helping clients optimize resource use and enhance sustainability efforts.



- **Real-Time Impact:** Showcasing measurable improvements in soil health and water savings with LNC.
- **Data-Driven Insights:** Providing transparency on sustainability metrics and regeneration progress.
- **Scalable Applications:** Enabling visibility across sectors, from agriculture to urban landscaping.

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.



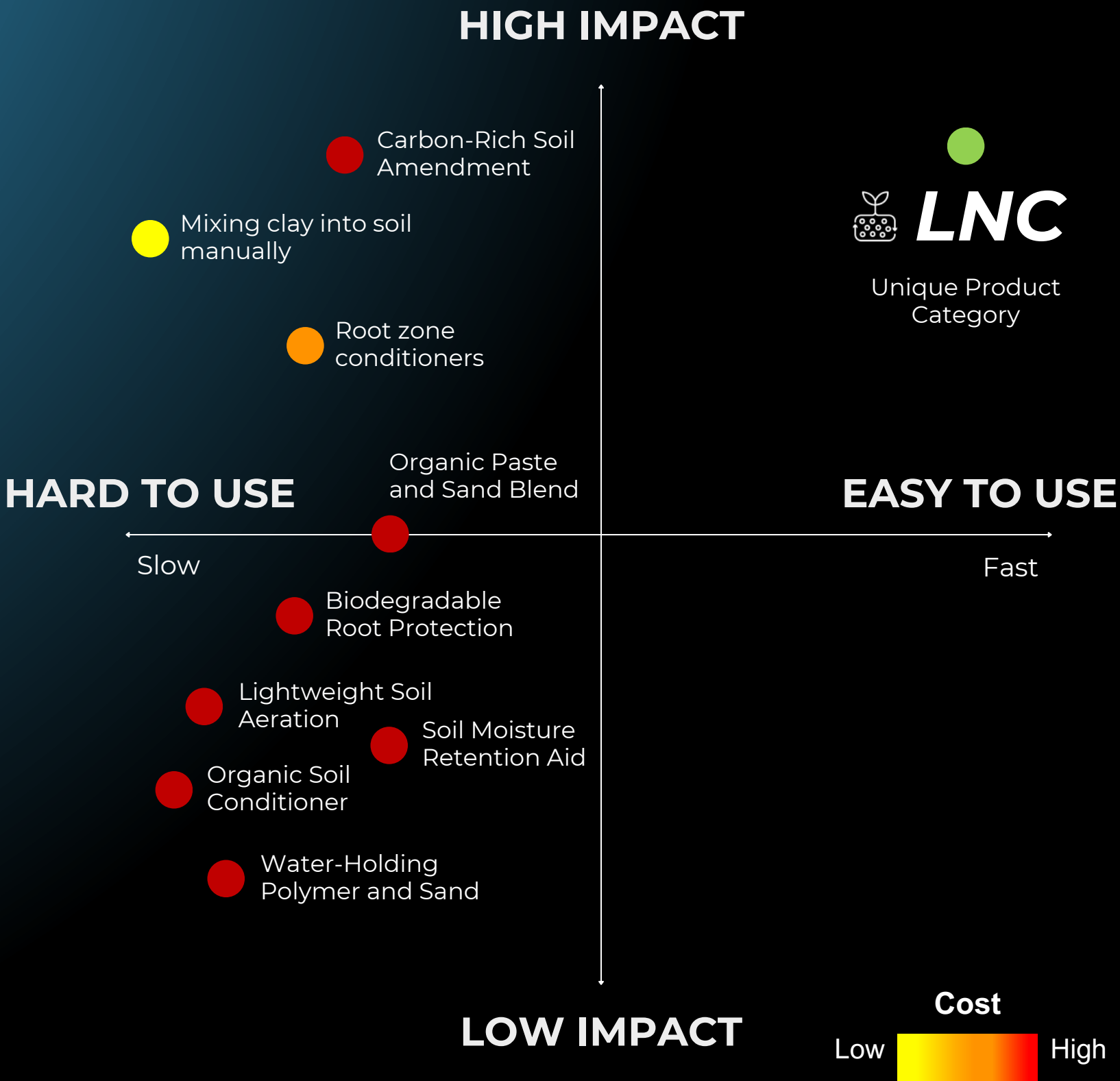
Long-Term Impact

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.





Our Clients

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



KEY PROJECTS



**DAMAC
HILLS**



- Trump Golf Course and turf management, improving water efficiency and reducing irrigation needs.
- Enhanced soil structure for better drainage and nutrient absorption.
- Sustainability alignment with UAE's environmental goals for water savings.



بلدية مدينة أبوظبي
ABU DHABI CITY MUNICIPALITY

- Soil improvement and water retention enhancement for Al Kazna Forest, Date Palm Farms, & Fruit Trees Farm.
- Desert greening through LNC applications to support tree and vegetation growth with lower irrigation needs.
- Reduction of soil salinity and enhancement of nutrient retention for long-term plant health.



**INNOVATION
ACCELERATOR**

PORTFOLIO
INNOVATION

- Urban greening and landscape enhancement in sports facilities and public areas.
- Water conservation in turf management, ensuring long-term sustainability.
- Support for Saudi Vision 2030 environmental goals.

- Selected for the WFP Innovation Accelerator Portfolio to develop sustainable soil solutions for food security.
- LNC applied in arid and degraded lands to enhance soil fertility and improve water retention.
- Supports WFP's mission to combat hunger by increasing agricultural productivity in resource-scarce regions.
- Field trials & pilot projects in food-insecure areas to test LNC's impact on crop resilience and yield improvements.



- Soil enhancement for sustainable agriculture in arid environments.
- Water conservation technology to reduce irrigation demand while maintaining high crop yields.
- Improved nutrient efficiency in Silal-backed farming initiatives.



- Soil fertility enhancement for IHC's agricultural investments.
- Sustainable urban greening solutions using LNC for landscaping projects.
- Increased water efficiency for large-scale agricultural projects under IHC's portfolio.



- Water-saving solutions for farming and agricultural sustainability.
- LNC applied to improve soil health in arid farmland.
- Nutrient retention optimization for sustainable crop production.

EMAAR

- Landscape sustainability improvements in Dubai Hills Estate using LNC to reduce water consumption by up to 50%.
- Enhanced turf health and green cover durability with LNC application.
- Carbon footprint reduction by optimizing water and fertilizer use, aligning with Emaar's ESG strategy.



- Smart water management for landscaping in Al Zahia Residential & Commercial using LNC solution
- Urban greening solutions for eco-friendly development.
- Soil structure reinforcement to support long-term vegetation growth.



- Urban landscaping sustainability in Masdar City Pump Park with LNC-enhanced green spaces.
- Optimized irrigation systems for long-term water conservation.
- Contribution to Masdar's Net Zero and climate resilience initiatives.



- Urban greening and landscape enhancement in sports facilities and public areas.
- Water conservation in turf management, ensuring long-term sustainability.
- Support for Saudi Vision 2030 environmental goals.

ARADA

- LNC used in Arada Nursery to improve soil moisture retention.
- Tree and plant health improvement with less irrigation.
- Salinity reduction in landscaped areas, preventing soil degradation.

إمكان
I M K A N

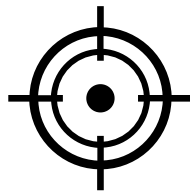
- Luxury landscape sustainability in Al Jurf Gardens & Ghadeer Al Taysr using LNC to maintain green areas with minimal water use.
- Erosion control and soil strengthening for long-term land development projects.
- Carbon footprint reduction by improving soil conditions naturally.

CASE STUDY: PUMP TRACK, MASDAR CITY, ABU DHABI, UAE

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

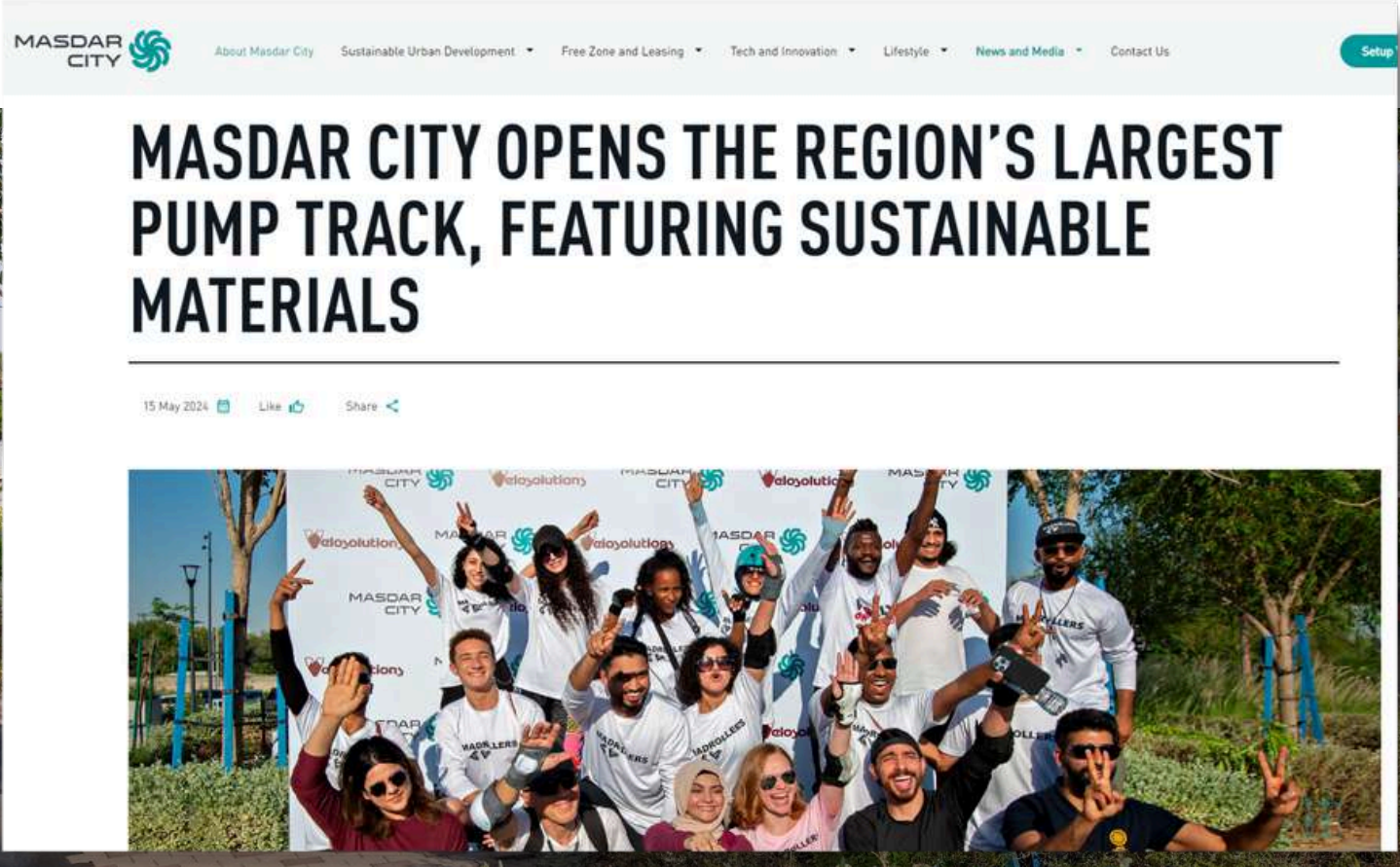
LNC was used in constructing the region's largest pump track. **An 7-month monitoring study with live soil moisture tracking showed an overall water savings average of 60%.** This project, highlighted by Masdar on several occasions, demonstrates LNC's effectiveness in large-scale applications and its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



CASE STUDY: LNC PROJECT AT ICBA, DUBAI, UAE

INTRO

Liquid Natural Clay (LNC) is revolutionizing **agriculture sustainability** by enhancing **soil quality**, **improving water retention**, and **increasing nutrient efficiency**. Conducted at the **International Center for Biosaline Agriculture (ICBA)** in Dubai, UAE, the trial evaluated LNC's impact on **crop yield**, **water use efficiency**, and **nutrient use efficiency** under sandy soil conditions.



Background & Objectives

- Conducted in **collaboration between Desert Control & ICBA**
- Objective:** Validate LNC's effectiveness in **improving soil quality, water retention, and agricultural productivity** in sandy desert conditions
- Trial Period:** March 2020 – September 2020
- Scope:** Applied LNC on **Bermuda grass, pearl millet, watermelon, and zucchini** to assess **water savings, crop yield, and soil fertility**

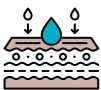
Breakdown by Crop Type

Crop	LNC Application Rate	Yield Increase (%)	Water Use Efficiency (%)	Nutrient Use Efficiency (%)
Pearl Millet	1.5%-2.5% LNC	+28%	+27.7%	+39%
Watermelon	2.5% LNC	+17%	+16%	+26%
Zucchini	1.5% LNC	+62%	+61%	+63%
Bermuda Grass	1.2 kg LNC injected & sprayed	Double biomass growth (1,081 g/4m² → 2,259 g/4m²)	+47% water savings	Improved soil phosphorus & potassium levels

Evaluation Metrics



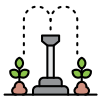
Soil Health



Water & Nutrient Retention



Crop Yield



Irrigation Efficiency

Key Findings from Turf & Bermuda Grass Trial



Bermuda Grass as a Climate-Resilient Species

- Thrived in **UAE summer conditions**, unlike turf grass which failed
- LNC-treated plots had **up to 47% water savings** while achieving **higher biomass production**



Soil Salinity & Nutrient Balance Improvements

- Significant decrease** in topsoil salinity observed in treated plots
- Increased available phosphorus (P) & potassium (K)**, enhancing nutrient uptake
- Organic matter content improved**, boosting soil fertility



Water Use Efficiency Gains

- LNC-treated plots **retained nearly twice** as much soil moisture
- 30%+ confirmed water savings** with ET-based irrigation schedules



Boosted Biomass Production

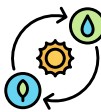
- 1.2 kg LNC injected with fungi **doubled biomass growth**, from 1,081 g/4m² to **2,259 g/4m²**

Key Findings from Agricultural Crop Trial



Yield Improvement Across All Crops

- Pearl Millet: **+28%** yield increase
- Watermelon: **+17%** yield increase
- Zucchini: **+62%** yield increase



Water & Nutrient Efficiency Gains

Water Use Efficiency (WUE):

- Pearl Millet: **+27.7%**
- Watermelon: **+16%**
- Zucchini: **+61%**

Nutrient Use Efficiency (NUE):

- Pearl Millet: **+39%**
- Watermelon: **+26%**
- Zucchini: **+63%**



Impact of LNC Application & Production Methods

- 1.5% LNC concentration yielded better** efficiency than 2.5% for Pearl Millet
- Zucchini responded best to 1.5% LNC (**+79% yield increase with mycorrhiza**)
- Watermelon performed better with 2.5% LNC (**+24% increase with mycorrhiza**)



LNC Production & Application Methods Matter

- Large-scale inline mixing** method **performed better** than semi-automated mixing
- LNC spray** application into soil **improved yield by 52%** compared to control

OVERALL IMPACT & NEXT STEPS

- LNC significantly improved soil fertility, water retention, and crop productivity in desert conditions
- Confirmed ability to reduce irrigation demand while boosting plant resilience

- Findings support large-scale adoption in landscaping & agriculture

POTENTIAL NEXT STEPS WITH ICBA

- Expand Trials:** Test additional crops & soil types over extended periods
- Long-Term Monitoring:** Measure multi-year sustainability impact
- Scale Implementation:** Pilot LNC in commercial farms & green infrastructure projects

CASE STUDY: DUBAI HILLS ESTATE, DUBAI, UAE

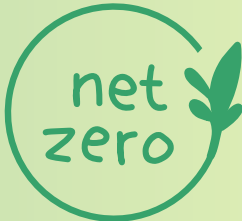
DUBAI HILLS
ESTATE



IMPACT &
MEASURABLE
RESULTS

EMAAR

ESG ALIGNMENT:
Demonstrates Emaar’s
leadership in sustainable
land management.



WATER SAVING INITIATIVE IS
ALIGNINED WITH
**UAE’S NET
ZERO 2050**

Supports Net Zero 2050 goals by promoting
efficient water use and long-term sustainability.

Liquid Natural Clay (LNC) is revolutionizing **landscape sustainability by enhancing soil quality, optimizing water retention, and improving nutrient availability.** Applied across **Dubai Hills Estate**, LNC strengthens **soil resilience**, ensuring **long-term health and efficiency** in urban green spaces.

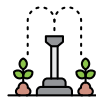
EVALUATION METRICS



Soil
Health



Water &
Nutrient
Retention

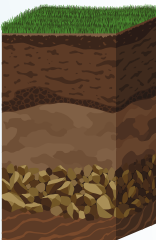


Irrigation
Efficiency

RESULTS

Soil Health & Biodiversity

Healthy soil is essential for resilient urban landscapes. LNC applications in Dubai Hills have enhanced organic matter, nutrient availability, and microbial activity, leading to better plant growth and carbon sequestration.



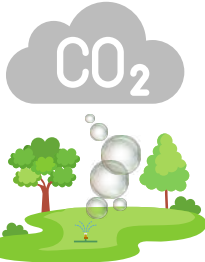
**ORGANIC
MATTER
INCREASED**

BY
37%
1.24% → 1.7%

boosting nutrient absorption

**ALKALINITY
REDUCED:**

DECREASED
48%



Enhancing soil permeability
& plant growth

SUPPORTING United Nations

THE GLOBAL GOALS



RESTORES
DEGRADED LAND &
BIODIVERSITY.

Water Stewardship & Sustainable Irrigation

The Dubai Hills Project demonstrated measurable improvements in water conservation by integrating Liquid Natural Clay (LNC) into existing landscaping practices.



**WATER
HOLDING
CAPACITY
INCREASED:**

16% → 24%↑

enabling less frequent irrigation cycles

SALINITY REDUCTION:

EC decreased from
741 TO μS/cm

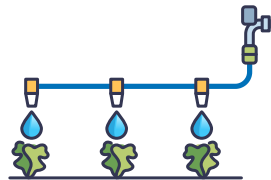
700

improving soil conditions



**REDUCED
WATER
DEMAND:**

Enhanced
Irrigation
Efficiency
without
compromising
plant health



SUCCESS STORIES



Location: Private farm, Al Ain, Abu Dhabi
Segment: Agriculture
Type: Date Palms



RESULTS:

Water Savings

50%

Location: Forest, Al Khazna, Abu Dhabi
Segment: Forest/trees
Type: Salvadora, Ghaf, and Ziziphus



RESULTS:

Water Savings

67%

Location: Forest in Sweihan, Abu Dhabi
Segment: Forest/trees
Type: Ghaf



RESULTS:

Water Savings

67%

Location: Public Park in Abu Dhabi
Segment: Landscaping
Type: Paspalum Grass



RESULTS:

Water Savings

40%

Location: Trump Golf Club, Dubai
Segment: Golf Course
Type: Landscaping



RESULTS:

Water Savings

40%

Location: Sports park – Abu Dhabi
Segment: Landscaping
Type: Mixed native groundcover & trees



RESULTS:

Water Savings

50%

SUCCESS STORIES: BEFORE & AFTER LNC



CLIENT:
Trump International
Golf Club, Dubai



PLANT/CROP TYPE:
Paspalum grass



BEFORE

AFTER

RESULTS:

Water Saved on
Lawns

40%

Water Saved on
Shrubs & Trees

60%

CLIENT:
Al Khalidiya Park,
Abu Dhabi

**KHALIDIYA
PARK**

PLANT/CROP TYPE:
Paspalum grass



BEFORE

AFTER

RESULTS:

Water Saved on
Lawns

38%

CLIENT:
Private site,
Dubai

**PRIVATE
SITE**

PLANT/CROP TYPE:
Paspalum grass



BEFORE

AFTER

RESULTS:

Water Saved on
Lawns

45%

CLIENT:
ICBA – UAE Adaptive
Agriculture Reference
Validation



PLANT/CROP TYPE:
Watermelon, Zucchini &
Pearl Millet



BEFORE

AFTER

RESULTS:


Water & Fertilizer
savings

20-50%



Increased Crop
Yields

17-62%

CLIENT:
Pump Track, Masdar
City, Abu Dhabi



PLANT/CROP TYPE:
Mixed Landscape



BEFORE

AFTER

RESULTS:

Water Saved on
Shrubs

60%



Water Saved on
Trees

46%

CLIENT:
Alfalfa Crop,
Forage

**PRIVATE
SITE**

PLANT/CROP TYPE:
Alfalfa



BEFORE

AFTER

RESULTS:

Water Saved on
Crops

50%

Increase in Crude
Protein


17%

Preserved organic matter, reduced
salinity, and improved overall soil health

CLIENT:
Ziziphus Spina Christi
Trees

**AFFORESTATION
PROJECT**

PLANT/CROP TYPE:
Christ's Thorn
Jujube Trees



BEFORE

AFTER

RESULTS:



Water Saved on
Trees

58%

CLIENT:
Desert fruit tree
cultivation

**CITRUS TREES
PROJECT**

PLANT/CROP TYPE:
Mixed varieties
of citrus trees



BEFORE

AFTER

RESULTS:



Water Saved on
Trees

50%

CLIENT:
Prosopis
cineraria

**AFFORESTATION
PROJECT**

PLANT/CROP TYPE:
Ghaf tree



BEFORE

AFTER

RESULTS:



Water Saved on
Lawns

67%

CLIENT:
Punica granatum
trees

**DESERT
FRUIT TREE
CULTIVATION**

PLANT/CROP TYPE:
Pomegranate
trees



BEFORE

AFTER

RESULTS:

Water Saved on
Lawns

50%

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

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.

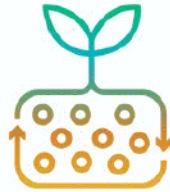


Global Reach

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



Certifications



إمارة أبوظبي - دولة الإمارات العربية المتحدة
Ministry of Industry & Advanced Technology

شهادة تسجيل في ضريبة القيمة المضافة
VAT Registration Certificate

تؤكد الهيئة العامة للزكاة والدخل، بتاريخ 2020/06/17، أن الممول 394758375 هو مسجل في ضريبة القيمة المضافة.

Hereby, The General Authority of Zakat & Tax (GAZT) certifies that the taxpayer below is VAT registered on 17/06/2020.

Taxpayer Name: شركة باراري للموارد الطبيعية المحدودة
VAT Registration Number: 37015837500003
Effective Registration Date: 2020/07/01
Taxpayer Address: أبو ظبي، الإمارات العربية المتحدة

اسم الممول: شركة باراري للموارد الطبيعية المحدودة
رقم التسجيل الضريبي: 37015837500003
تاريخ التسجيل: 2020/07/01
عنوان الممول: أبو ظبي، الإمارات العربية المتحدة

يؤكد الممول على أنه مسجل في ضريبة القيمة المضافة، وأنه ملتزم بدفع ضريبة القيمة المضافة على مبيعاته وخدماته، وأنه ملتزم بتوفير سجلات ضريبية دقيقة وموثوقة.

هذه الوثيقة مرسلة من النظام الآلي ولا تحتاج إلى توقيع
- الهيئة العامة للزكاة والدخل -

إمارة أبوظبي - دولة الإمارات العربية المتحدة
Ministry of Industry & Advanced Technology

شهادة تسجيل في ضريبة القيمة المضافة
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Hereby, The General Authority of Zakat & Tax (GAZT) certifies that the taxpayer below is VAT registered on 17/06/2020.

Taxpayer Name: شركة باراري للموارد الطبيعية المحدودة
CR / License / Contact No.: 1010590200
Tax Period: ربع سنوي - Quarterly
First Filing due date: 2020/10/31

اسم الممول: شركة باراري للموارد الطبيعية المحدودة
رقم التسجيل الضريبي: 1010590200
الفترة الضريبية: ربع سنوي - Quarterly
تاريخ تقديم الملف: 2020/10/31

يؤكد الممول على أنه مسجل في ضريبة القيمة المضافة، وأنه ملتزم بدفع ضريبة القيمة المضافة على مبيعاته وخدماته، وأنه ملتزم بتوفير سجلات ضريبية دقيقة وموثوقة.

هذه الوثيقة مرسلة من النظام الآلي ولا تحتاج إلى توقيع
- الهيئة العامة للزكاة والدخل -

IN-COUNTRY VALUE CERTIFICATE

Certificate ID: 126143
Issue Date: 06.08.2023
Valid Until: 24.09.2024

BARARI NATURAL RESOURCES L.L.C.

56.80%

Company General Information
License No: CN-1136824
Company Type: Non SME in UAE
Financial Year End Date: 31.12.2022
Company based in: Within UAE
Company Business: SERVICE PROVIDER

For Cases of Re-Certification
Re-Certification (V) No.:
Reason for this Re-Certification:

Signed By: Chairman of Supplier
Name: Faisal Shaheen
Designation: Group Chief Executive Officer

Verified as per ICV Agreed Upon Procedures (AUP)
Chairman of Certification Body
Name: Faisal Shaheen
Designation: Partner
Company: Deloitte & Touche (M.E.)

Certificate issued based on ICV Version 3.0

Industrial License

License No: IN-2000357
Issued or Updated Date: 26/06/2024
Expiry Date: 02/04/2025

Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.

21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

الترخيص الصناعي
رقم الترخيص: IN-2000357
تاريخ الإصدار أو التحديث: 26/06/2024
تاريخ الانتهاء: 02/04/2025

الجهة المصدرة: وزارة الصناعة والتكنولوجيا
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: تصنيع منتجات زراعية - Manufacturing of agricultural products

المنتجات: أسمدة سائلة - Liquid fertilizers

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

Practice Agricultural Activity License

License Number: AGL-2023-14308
Verification Code: 899999
Release Type: Renewal

26/06/2024
02/04/2025

26/06/2024
02/04/2025

الترخيص لممارسة النشاط الزراعي
رقم الترخيص: AGL-2023-14308
رمز التحقق: 899999
نوع الترخيص: تجديد - Renewal

تاريخ الإصدار أو التحديث: 26/06/2024
تاريخ الانتهاء: 02/04/2025

الجهة المصدرة: وزارة الزراعة والبيئة
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: زراعة - Cultivation

المنتجات: منتجات زراعية - Agricultural products

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

CERTIFICATE OF CONFORMITY

Certificate Number: 23-03-45863723-03-067402NB0002
Registration Date: 16/03/2023
Valid Until: 15/03/2024

Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
P.O. Box 114043, Musaffah ICAD 1 - 245-WH-02-26
Abu Dhabi, United Arab Emirates

الترخيص: 23-03-45863723-03-067402NB0002
تاريخ التسجيل: 16/03/2023
تاريخ الانتهاء: 15/03/2024

الجهة المصدرة: وزارة الصناعة والتكنولوجيا
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: تصنيع منتجات زراعية - Manufacturing of agricultural products

المنتجات: أسمدة سائلة - Liquid fertilizers

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

إمارة أبوظبي - دولة الإمارات العربية المتحدة
Ministry of Industry & Advanced Technology

إعلان التسجيل
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: 23-03-45863723-03-067402NB0002
Registration Date: 16/03/2023
Valid Until: 15/03/2024

الاسم التجاري: شركة باراري للموارد الطبيعية المحدودة
نوع المنتج: عضوي
رقم الشهادة: 23-03-45863723-03-067402NB0002
تاريخ التسجيل: 16/03/2023
تاريخ الانتهاء: 15/03/2024

الجهة المصدرة: وزارة الصناعة والتكنولوجيا
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: تصنيع منتجات زراعية - Manufacturing of agricultural products

المنتجات: أسمدة سائلة - Liquid fertilizers

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

إمارة أبوظبي - دولة الإمارات العربية المتحدة
Ministry of Industry & Advanced Technology

إعلان التسجيل
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: 23-03-45863723-03-067402NB0002
Registration Date: 16/03/2023
Valid Until: 15/03/2024

الاسم التجاري: شركة باراري للموارد الطبيعية المحدودة
نوع المنتج: عضوي
رقم الشهادة: 23-03-45863723-03-067402NB0002
تاريخ التسجيل: 16/03/2023
تاريخ الانتهاء: 15/03/2024

الجهة المصدرة: وزارة الصناعة والتكنولوجيا
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: تصنيع منتجات زراعية - Manufacturing of agricultural products

المنتجات: أسمدة سائلة - Liquid fertilizers

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

ICBA

September 14, 2019

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

It is very important to identify soil amendments that can enhance soil properties in hot and dry conditions. Liquid Nano Clay (LNC) is one of the most promising solutions to improve the soil productivity and plant growth. Desert Control Company in collaboration with the National Center for Research and Agriculture (NCRA) conducted the effectiveness of LNC product on turf and Bermuda grasses used for landscape purposes compared to the "baseline as usual" cultivation model of golf course complexes. The experiment was conducted at NCRA research station, looking into the water and nutrients retention and biomass production in desert conditions where LNC treatments application [0.0002500]. The key findings after evaluation of the 80 Liquid Nano Clay (LNC) treatments, untreated pilot plots on turf and Bermuda grass plots, were as follows:

- Bermuda grasses cultivated a green grass candidate for the LNC summer season compared to turf grasses where the latter grass species could not survive the high temperatures during the hot summer season and finally died.
- Bermuda grass treated with LNC could have water savings as high as 47% and 10% higher biomass production for certain seasons.
- Treated turfs significantly decreased in the LNC treated plots. This outcome was observed and verified by turf test samples one month and four months after the LNC applications (24th February & 24th May 2019).
- LNC treatment significantly increased soil moisture 7 percent of the surface soils compared to the untreated which was highly consumed by the grasses for their development.
- Soil analysis for the second sampling (one month) showed that treatments 1.2 kg LNC treated, 2.2 kg LNC treated & combined with Turf, 0.7 kg LNC treated with version - 2 applications, 1.2 kg LNC treated with version - 30 LNC and 1.2 kg LNC treated with version Bermuda significantly increased soil moisture-maintained content compared to the control especially in the upper soil depth up to 10 cm.
- Treatment 1.2 kg LNC treated and 1 kg LNC treated with version turf were the ones that showed best organic matter content especially at the second soil sampling.
- If treatment 1.2 kg LNC applied combined with Turf, was very effective in boosting the growth of Bermuda grass species and demonstrated double fresh biomass production (270.9 g/m²) compared to the one observed for 1.2 kg LNC untreated plots (205.1 g/m²) with a total of water savings of 47%.
- ET based irrigation schedules on LNC treated plots with reduced flow rates of water showed good results and could lead to confirmed water savings of over 50%.
- During 11 based irrigation cycles of 10 minutes 1.2 kg LNC treatment was observed to have the highest soil moisture levels (almost twice as high as reference 1 kg) with over 30% less water consumption without any compromise on grass growth by using LNC.
- 100% LNC treatments showed better results in terms of growth stages and time periods.

It is vital for agriculture implemented in desert areas to adopt management practices, technologies and apply products that contribute to fresh water savings and ensure the cultivation and retention of existing flora that will enhance crop growth and continuous development. LNC is such a product that its efficiency is evaluated for the first time in field trials following a systematic research study in desert climate conditions.

Desert Control
Director of Program

ICBA
International Center for Research and Agriculture

P.O. Box 114043, Musaffah ICAD 1 - 245-WH-02-26
Tel: +971 2 458 1150, Fax: +971 2 266 1150

www.icba.ae
www.icba.ae

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
Murry Weems
1219 E 21st Street
KUMA Arizona 85315 United States

Category
MCP, Bentonite

Issue date
13-Jun-2023

Product number
dca-16739

Class
Crop Fertilizers and Soil Amendments

Expiration date
1-Sep-2024

Restrictions
Not applicable.

Organic Materials Review Institute
P.O. Box 11558, Eugene, OR 97446-3758, USA
541.343.7600 - info@omri.org - OMRI.org

UNITED ARAB EMIRATES
MINISTRY OF CLIMATE CHANGE & ENVIRONMENT

الإمارات العربية المتحدة
وزارة التغير المناخي والبيئة

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.: DKB-APN-34-2318038
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 Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

Commercial Name: Liquid Natural Clay
Product Category: Certified Organic Fertilizers
Producing Company: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
Country of Origin: United Arab Emirates

الترخيص
رقم الترخيص: DKB-APN-34-2318038
رمز التحقق: 225/0254
تاريخ الإصدار: 13-07-2023
تاريخ الانتهاء: 12-07-2028

الجهة المصدرة: وزارة التغير المناخي والبيئة
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: تصنيع منتجات زراعية - Manufacturing of agricultural products

المنتجات: أسمدة سائلة - Liquid fertilizers

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

UNITED ARAB EMIRATES
MINISTRY OF INDUSTRY & ADVANCED TECHNOLOGY

الإمارات العربية المتحدة
وزارة الصناعة والتكنولوجيا

شهادة مطابقة
CERTIFICATE OF CONFORMITY

Certificate Number: 23-03-45863723-03-067402NB0002
Registration Date: 16/03/2023
Valid Until: 15/03/2024

Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.
P.O. Box 114043, Musaffah ICAD 1 - 245-WH-02-26
Abu Dhabi, United Arab Emirates

الترخيص: 23-03-45863723-03-067402NB0002
تاريخ التسجيل: 16/03/2023
تاريخ الانتهاء: 15/03/2024

الجهة المصدرة: وزارة الصناعة والتكنولوجيا
الجهة المستلمة: شركة باراري للموارد الطبيعية المحدودة

نوع النشاط: تصنيع منتجات زراعية - Manufacturing of agricultural products

المنتجات: أسمدة سائلة - Liquid fertilizers

الموقع: 21 Al Jada 9 St - Abu Dhabi Industrial City - ICAD 1 - Abu Dhabi - United Arab Emirates

What we believe in

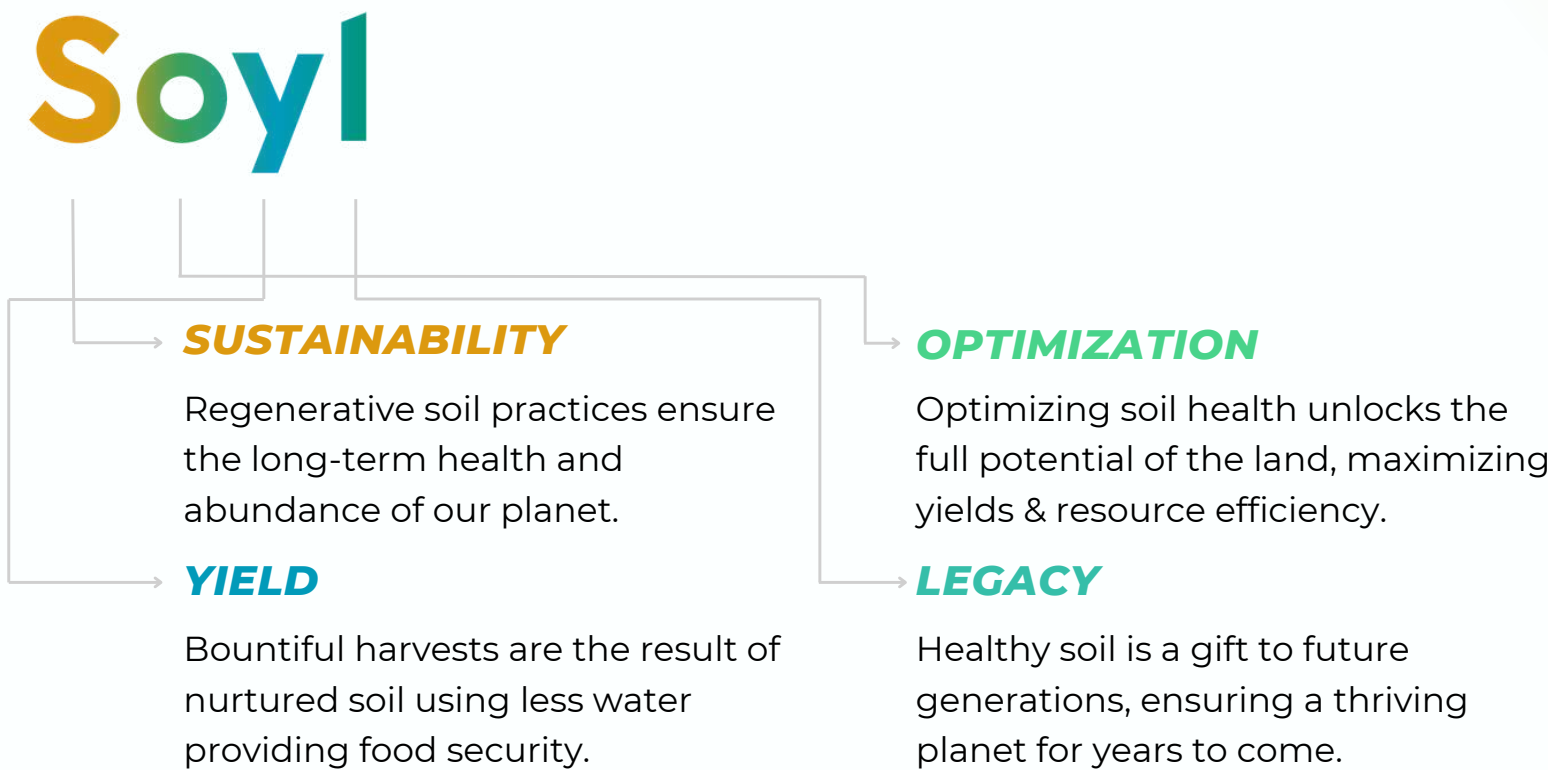


Healthy Soil: At the foundation of Soyl's innovation is Liquid Natural Clay (LNC), which transforms arid soils into fertile ground.

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**.*



Reach out to us



Powered by **Desert Control**

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