

# LIQUID NATURAL CLAY



Powered by Desert Control

*Making Earth  
Green Again*

[www.soyl.ag](http://www.soyl.ag)







# Executive Summary



## **Limited resources**

*Water, fertile soil, imported labor.*



## **Rising demand**

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



## **The solution**

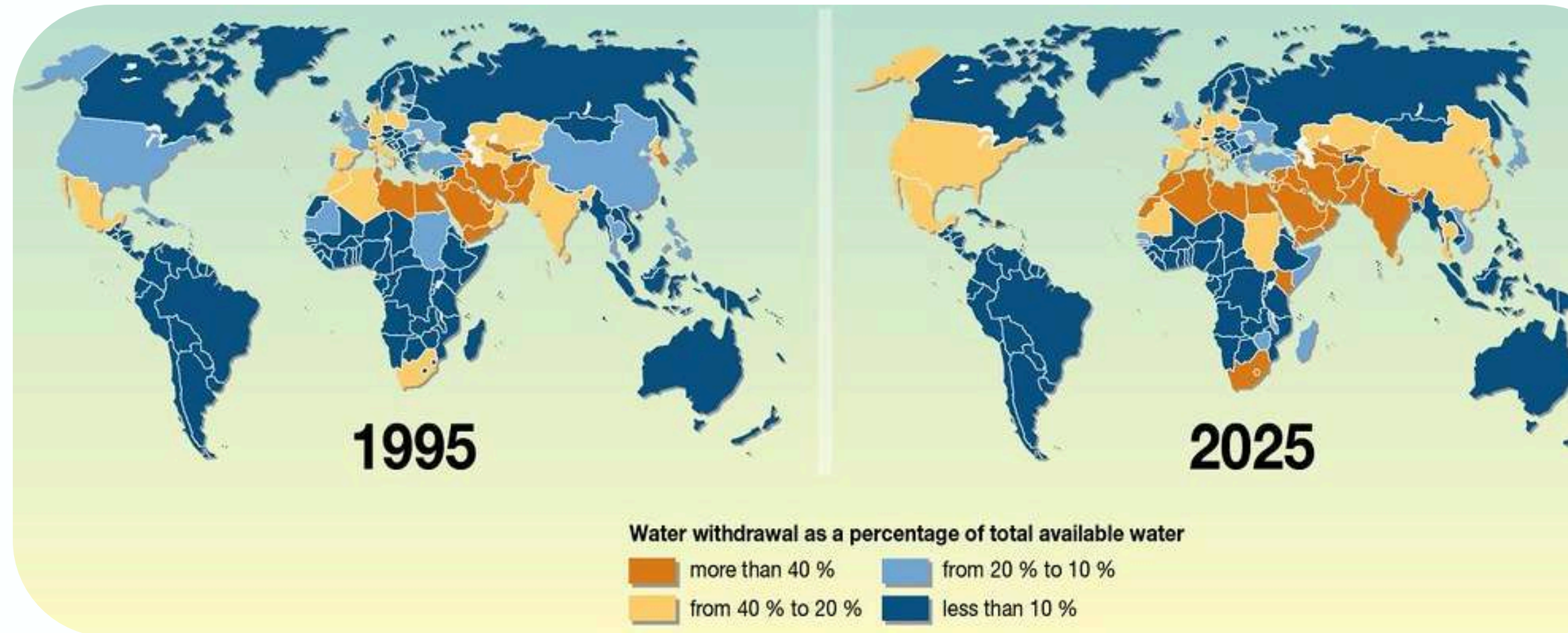
*LNC is an organic, natural, water-saving solution set to be a game changer.*

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.

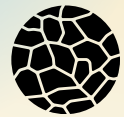


# Global Challenges – Why Change is Urgent



## **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 m<sup>2</sup>.



### **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.

[www.soyl.ag](http://www.soyl.ag)





# 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?

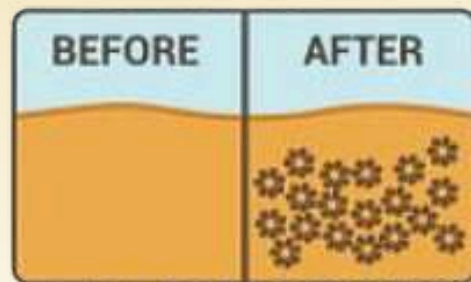


**Mixing:** LNC is prepared by mixing water with naturally occurring clay particles

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



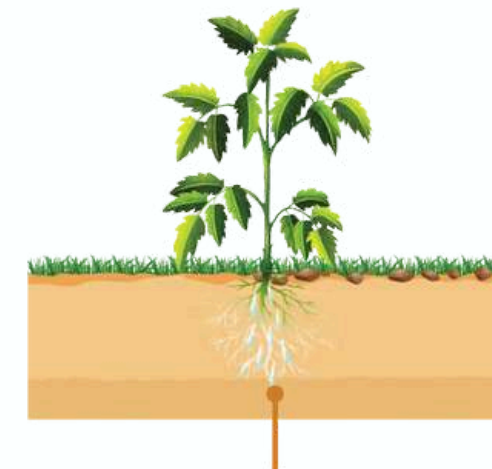
**Transformation:** Clay particles bind to sand grains, creating a sponge-like structure that retains water and nutrients.



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

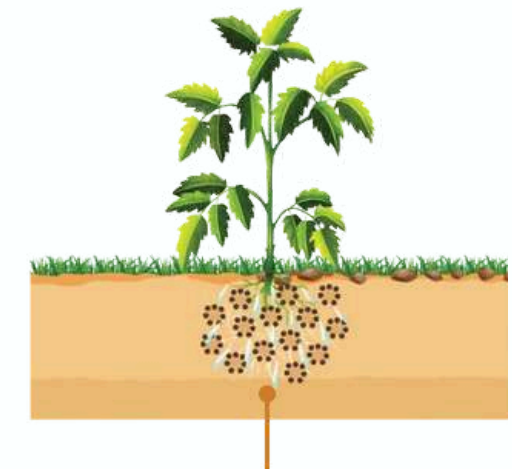


**BEFORE LNC**



*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%.



# Soyl

**Making Earth  
Green Again**

[www.soyl.ag](http://www.soyl.ag)

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.



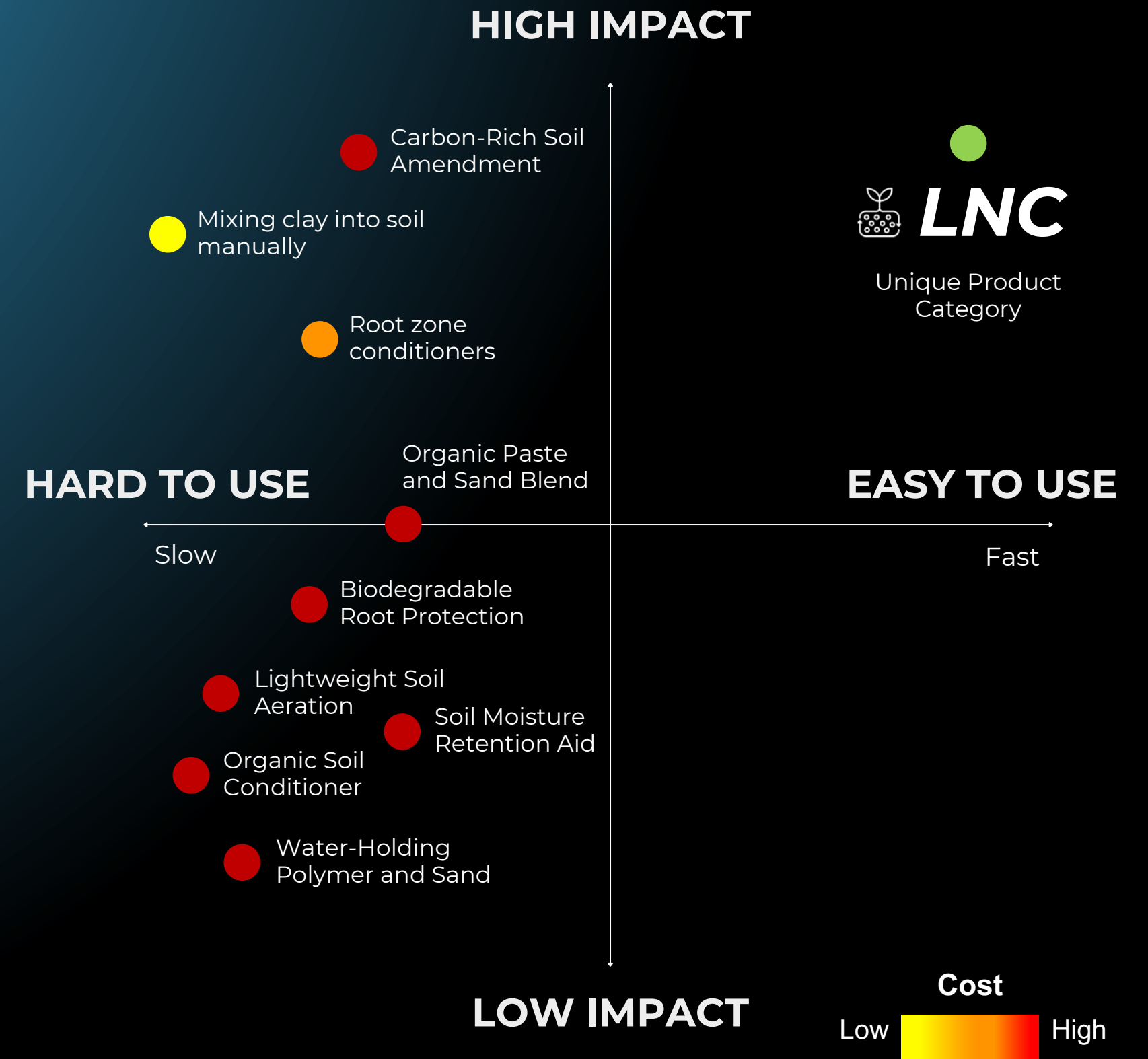
## Long-Term Impact

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

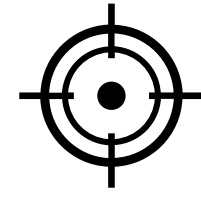




# SUCCESS STORIES



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.

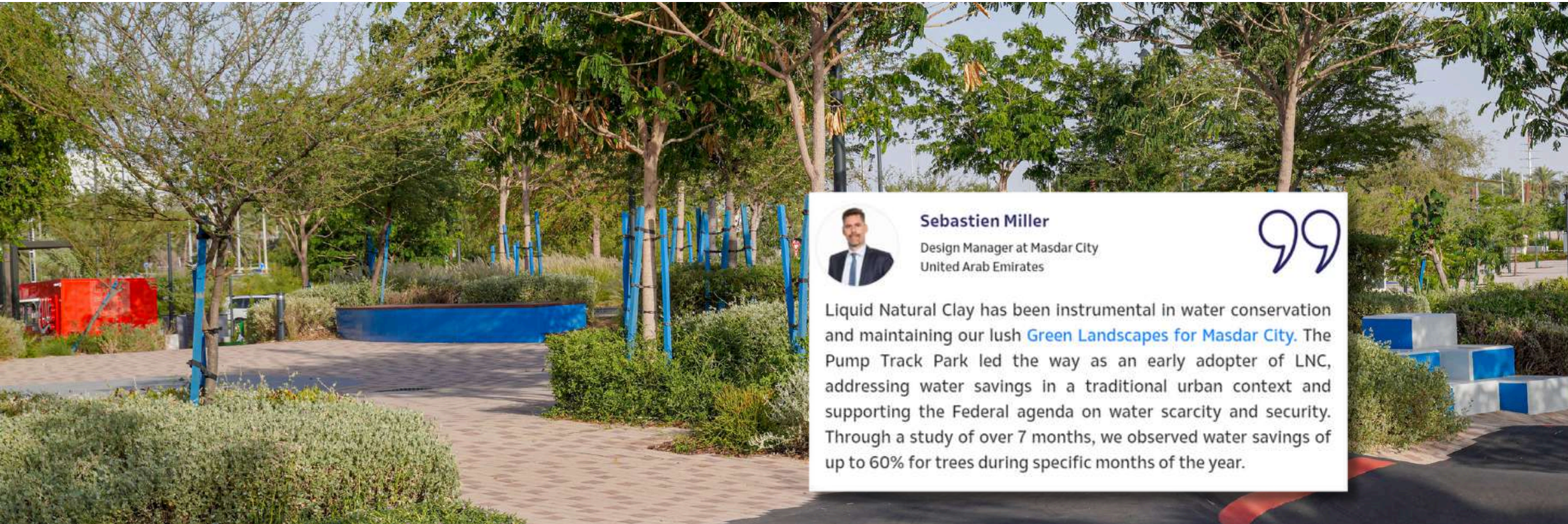


## Project Scope

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

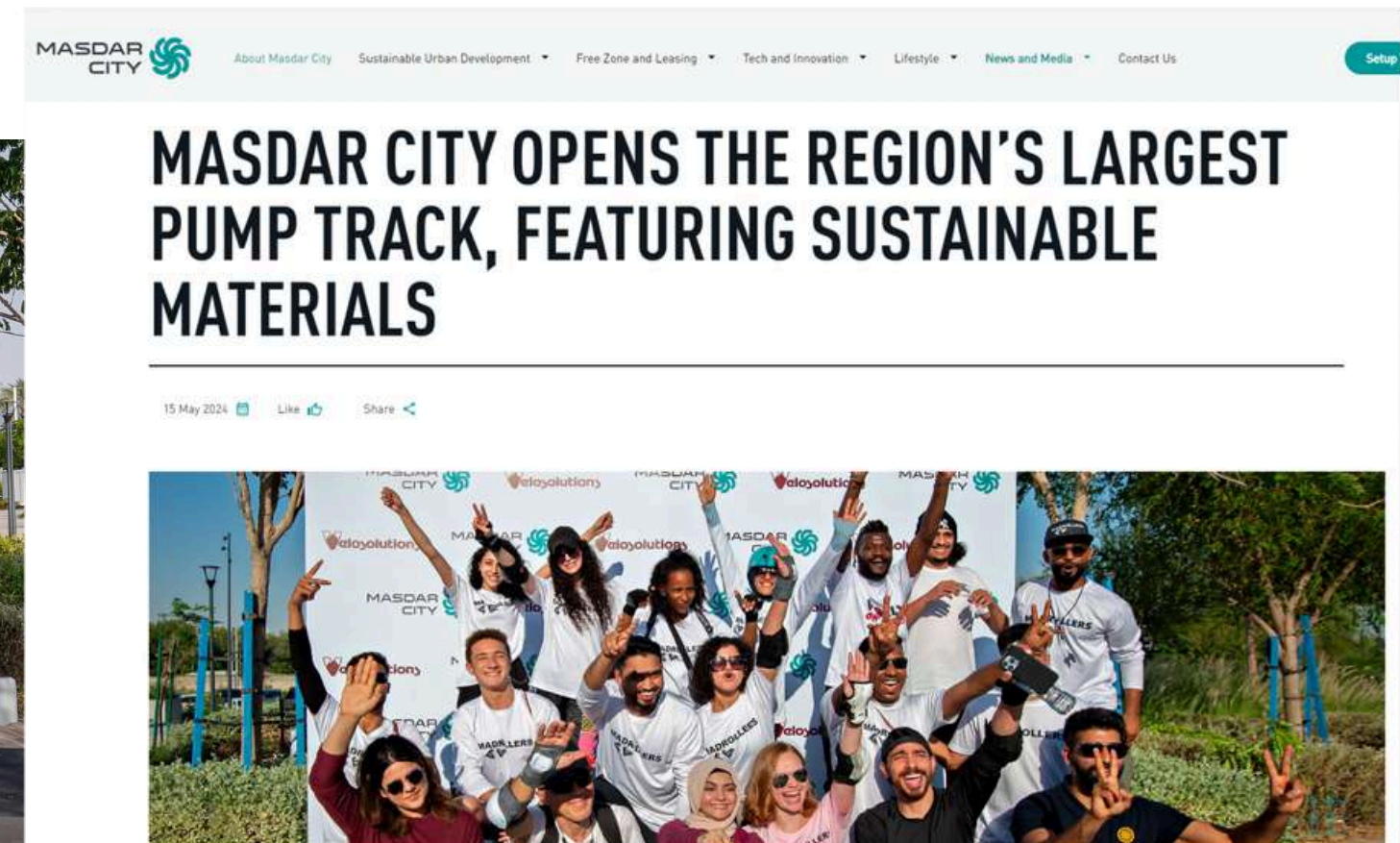
LNC was used in constructing the region's largest pump track. **An 7-month monitoring study with live soil moisture tracking showed an overall water savings average of 60%.** This project, highlighted by Masdar on several occasions, demonstrates LNC's effectiveness in large-scale applications and its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





# 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 **10,000m<sup>2</sup> 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.





# 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



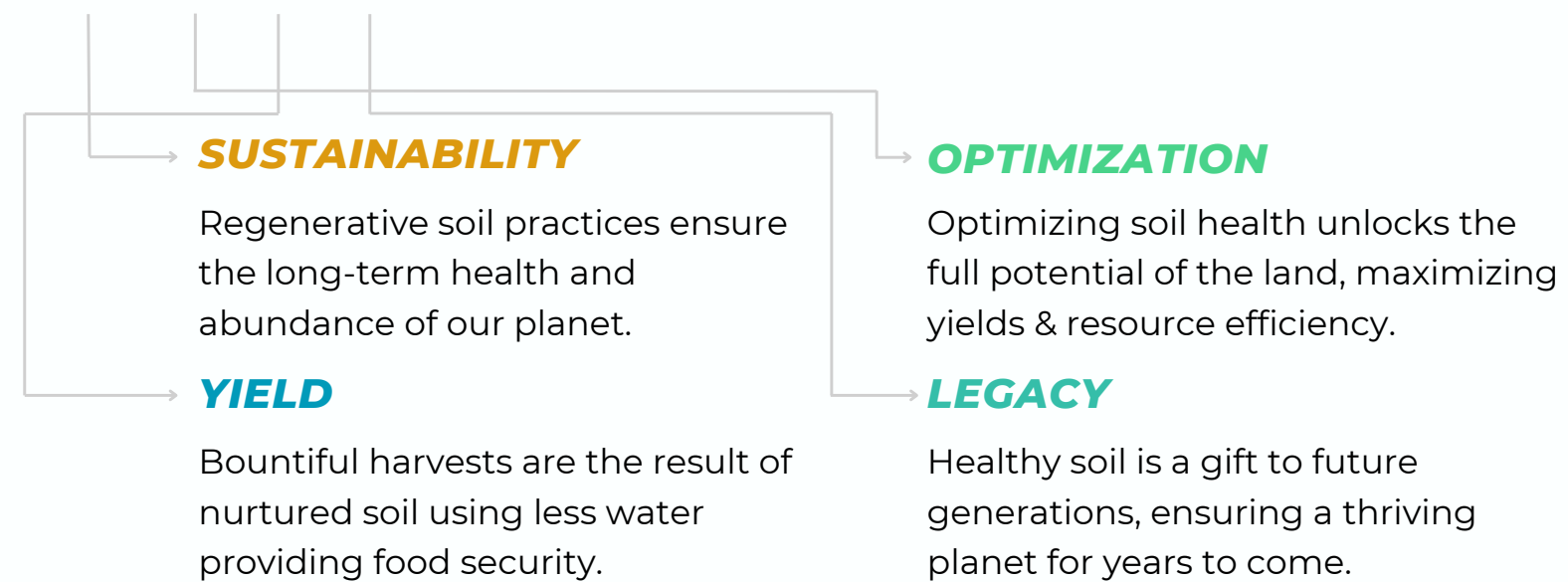
**Healthy Soil:** At the foundation of Soyl's innovation is Liquid Natural Clay (LNC), which transforms arid soils into fertile ground.

**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



### **SUSTAINABILITY**

Regenerative soil practices ensure the long-term health and abundance of our planet.

### **YIELD**

Bountiful harvests are the result of nurtured soil using less water providing food security.

### **OPTIMIZATION**

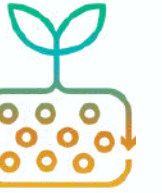
Optimizing soil health unlocks the full potential of the land, maximizing yields & resource efficiency.

### **LEGACY**

Healthy soil is a gift to future generations, ensuring a thriving planet for years to come.



# Certifications



**شهادة تسجيل في ضريبة القيمة المضافة**  
**VAT Registration Certificate**

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

تاريخ التسجيل: 2020/07/01  
رقم التسجيل: 310715837500003

**شهادة تسجيل في ضريبة القيمة المضافة**  
**VAT Registration Certificate**

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

تاريخ التسجيل: 2020/10/31  
رقم التسجيل: 310715837500003

**IN-COUNTRY VALUE CERTIFICATE**

Company General Information:  
License No: IN-2005357  
Issue Date: 06.08.2023  
Valid Until: 24.09.2024

**56.80%**

**INDUSTRIAL LICENSE**

License No: IN-2005357  
Issue Date: 06.08.2023  
Valid Until: 24.09.2024

**Practice Agricultural Activity License**

License Number: AGL-2023-13438  
Issue Date: 26/06/2024  
Valid Until: 02/04/2025

**CERTIFICATE OF CONFORMITY**

Product Category: Organic fertilizers and agricultural conditioners  
Issued by: SGS

**SCHEDULE OF CERTIFICATION**

Company Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.  
Product Category: Organic

**SCHEDULE OF CERTIFICATION**

Company Name: Desert Control Liquid Natural Clay Manufacturing - Sole Proprietorship L.L.C.  
Product Category: Organic

**Key Findings for the Liquid Natural 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 Natural Clay (LNC) is one of the most promising solutions to improve the soil productivity and plant growth.

**OMRI Listed**

Product: Desert Control LNC  
Company: Desert Control  
Issue Date: 13-Jun-2023

**Registration certificate of fertilizers and agricultural conditioners**

Product Category: Organic fertilizers and agricultural conditioners  
Issued by: Ministry of Industry and Advanced Technology

**CERTIFICATE OF CONFORMITY**

Product Category: Organic fertilizers and agricultural conditioners  
Issued by: SGS



# Reach out to us



Powered by **Desert Control**

[www.soyl.ag](http://www.soyl.ag)

## **Soyl HQ**

Nation Tower, Abu Dhabi, UAE

Email: [info@soyl.com](mailto:info@soyl.com)

Phone: +97123015555

## **Mohaned Al-Sharif**

Manager - Business Development

Email: [mohaned.alsharif@soyl.com](mailto:mohaned.alsharif@soyl.com)

Mobile: +971553699717



موارد القابضة للإستثمار

MAWARID HOLDING INVESTMENT

A **Mawarid Holding** Company