

FIVE

Supplier and Extended Supplier Sustainable Agricultural Production: Soil, Water and Biodiversity Management

At FIVE, we are fully committed to promoting sustainable practices and environmental stewardship in all aspects of our operations, including agricultural production. We recognize the crucial importance of soil, water, and biodiversity management in ensuring the long-term health and productivity of our agricultural systems.

As part of our commitment to these principles, we have planned several measures of research, monitoring and collaborative engagement to support sustainable practices and enhance soil, water and biodiversity management. This program aims to explore innovative techniques and best practices that can minimize the environmental impact of agricultural production while maximizing its efficiency. Our plan is to focus on areas such as soil conservation, organic farming methods, integrated pest management, natural resource conservation and biodiversity enhancement.

We actively engage with our vendors throughout our supply chain and agricultural organizations, ensuring we work with agricultural practitioners that share our commitment to implementing sustainable agricultural production methods including in water, soil and biodiversity management. Through this initiative, we aim to empower local stakeholders with the knowledge and tools necessary to implement sustainable practices and protect their soil and biodiversity resources.

We plan to organize frequent engagements between various members of FIVE and our agricultural suppliers and extended suppliers to increase knowledge and implemented practices that cover a wide range of topics, including sustainable farming practices, soil conservation methods, agroecology, and the importance of biodiversity in agricultural ecosystems. By promoting knowledge sharing and capacity building, we believe in creating a ripple effect that extends beyond our hotel's immediate sphere of influence, benefitting the wider community.

Within our food product sourcing, we aim to increase our focus on local farmers and smart agricultural companies who embrace sustainable practices to enhance the cultivation of soil, water management and preservation of biodiversity. Additionally, on our properties we have implemented small-scale organic herb, vegetable and fruit gardens that play supportive roles in promoting biodiversity by attracting important pollinators. Key management interests remain on additional initiatives FIVE can participate in including the potential sponsorship of honey-producing beehives and developing a micro-greenhouse on the rooftop of a FIVE hotel. Focusing on landscaping projects that incorporate native, region-adjusted, and drought tolerant and pollinator species is another avenue in which FIVE aims to impact its immediate and surrounding environment. These initiatives not only enhance soil fertility and biodiversity but also serve as educational demonstrations for our guests, inspiring them to consider sustainable practices in their own lives.

Initiatives by our Extended Supply Chain

3

Partnership with International Growers - Best Sustainable Agricultural practices

One of FIVE's key suppliers for fruits and vegetables, **Barakat**, employs a portfolio of local and global farm partners that adopt sustainable agricultural production practices. As part of FIVE's supplier relationship with Barakat, understanding our extended suppliers and prioritizing those that engage in soil, water and biodiversity management is an important focus area. FIVE along with Barakat conducts visits with select vendors to learn about their sustainability measures and to continuously advise on further improvements.

One of FIVE's extended agricultural partners through Barakat includes extended supplier **Shalimar Fresh** who incorporate the following sustainable agricultural initiatives:

- water management through closed-loop irrigation systems
- full utilization of natural flood flow
- capture of rainwater
- RO systems
- creating natural riparian/wetland areas to clean water.

Concerning their management of soil health, Shalimar Fresh follows:

- fixed planting schedules with crop rotation intervals
- ongoing research concerning integrated pest management to promote soil fertility and conservation
- worm farming work to promote soil health
- development of biopesticides to promote soil health and biodiversity.

Shalimar Fresh minimizes soil erosion through:

- contour cultivation

- cover crops
- minimal tillage techniques
- Fertilizers and compost mixes are also sourced through known sources and are made from ethical and organic ingredients.
- Heavy metal analysis is also conducted, and relevant authentic certification is provided as evidence to protect against soil pollution.

KEITT Exports has made technological development a key focus area to minimize its environmental impact and to increase operational efficiency that benefits its workers and customers.

Sustainable Growing Practices ...some grower's example


Our Sustainability Pillars

KEITT Group believes in investing in 3 key enablers – **Digitalization, Strength in Talent and People** and **Technological development** to spur innovation and transformation in our operations and across our supply chain.

This allows us to unlock greater societal and environmental sustainability outcomes in our 5 pillars.



Organisational Health
Ensuring continued economic viability



Technical Capability
Investing to drive progress and betterment for society



Environment
Maintaining our environmental footprint



People & Community
Investing in the well-being of our employees and feeding and feeding better communities



Customers
Ensuring continued economic viability

← Creating Sustainable Value for all stakeholders →

KEITT EXPORTS

Sustainability

Since the company was founded, farming sustainably has been a core commitment of all our operations, and this commitment has been further reinforced as the business has expanded.

- ▶ **Water Management**
 - Recycling: Closed loop irrigation systems.
 - Storage: Fully utilize natural flood flow.
 - Capture: Active rainwater capture from building/structures/growing tunnels.
 - Cleaning: Water cleaning systems, including reverse osmosis and creation of natural riparian/wetland areas.
- ▶ **Energy Conservation** - Training sessions on the efficient use of electricity in Kenya. Energy efficient fixtures e.g. Use of Solar panels & efficient bulbs.
- ▶ **Environment Projects** - Development of wetland areas within our farms, ensuring all water returning to rivers and lakes is of good quality.
- ▶ **Worker Welfare** - Ethical awareness on farms e.g. Partner Africa ETL training for supervisory roles, worker welfare committees, Gender equality supported, Training & development schemes for staff, Health awareness training - HIV, malaria, Social / sport clubs.
- ▶ **Community Projects** - Fair Trade premium used to build Primary School Classrooms, employ teachers, student bursaries, community water projects, loans for small business start ups.

Corporate Social Responsibility - We take our responsibilities to our customers, staff, and the environment very seriously. We realize we can only operate successfully when we fully engage and respect these core interests. & to include within our daily business as key factors:

- Freedom
- Integrity
- Responsibility
- Accountability
- Innovation
- Quality

SHALIMAR FRESH

An additional key supplier for FIVE's fruit and vegetables includes Mirak Farms. Mirak is a UAE-founded pioneer in desert smart agriculture and now manages contract farms globally including in Armenia, Tunisia, and Greece. The agricultural business employs a host of measures to conduct sustainable agriculture with specific focus on water, soil and biodiversity management. FIVE has conducted on-site visits with Mirak to learn about their cutting-edge agricultural production practices in smart agriculture and to strengthen FIVE's supplier relationships around mutually-driven sustainability goals.



Mirak Farms promotes soil health and minimal impact on land by:

- employing over 85 hectares of controlled-environment greenhouses allow for efficient growing through optimized space and year-round growing

Within its water management, Mirak implements:

- aquaponics, developing a unique system where plants grow directly into mineral rich water without the need for soil.

This further aids in soil conservation and also in water conservation through smart control of resource deployment that targets the roots efficiently and recycles wastewater. To promote efficiency in space and resources, this method allows plants to grow more closely without supporting the full weight of the plant, increasing yield per input of resources.



[About Mirak](#) [Agriculture](#) [Produce](#) [Contact Us](#)



THE BEST OF NATURE. GROWN JUST FOR YOU.

Growing vegetables and plants in the desert was once considered an impossible and impractical task that was destined to fail. With innovation, vision, determination and technology, Mirak overcame these challenges and accomplished the impossible.

Today, Mirak produces over 12,000 tonnes of produce across 4 different countries and exports fresh fruits and vegetables across the globe within 24 hours of harvest.

Mirak utilises innovative methods and advanced agricultural techniques of plant cultivation, specifically tailored to regional climates to ensure we deliver **The Best of Nature.**

HISTORY



Pioneers since
1985

INNOVATION



Latest technologies
in agriculture

PRODUCTION



12,000+ tonnes
annually

GROWING SYSTEMS



GREENHOUSES

Mirak has over 85 hectares of controlled-environment greenhouses - including glass, polycarbonate and plastic greenhouses. These greenhouses allow us to create optimised weather conditions which allow seeds to develop in the environment that suits them best.

Weather conditions are carefully monitored to ensure the fastest and healthiest plant growth all year round.



AQUAPONICS

Mirak has developed a unique aquaponic system where plants grow directly into mineral rich water without the need for soil. Plants grow quickly and can be placed closer together because root systems do not need to support the full weight of the plant. Aquaponics also reduces water consumption as the water is recycled through the plants.



HYDROPONICS

Mirak also implements three types of Hydro-Ponic systems in our farms including Vertical Growing System, a Channels System and the Bench Pot Growing System (*developed exclusively by Mirak through research and experience in growing in the difficult environmental conditions of the UAE*). These three systems allow efficient and cost effective production of many vegetables with increased yields and quality.



Within Barakat’s global portfolio of local and global farm partners, INI Farms and Global Green Team are two out of many are focused on pioneering sustainable agriculture. FIVE maintains interest in understanding all of Barakat’s farm partners who are extended suppliers to FIVE.

INI Farms promotes water management by:

- saving 70% of its water by using 100% drip irrigation technology to sustain its growing systems.

The Farm promotes soil health and quality produce by:

- using organic fertilizers and safe chemicals rendering its products GAP certified.

It has aligned its water, waste and labour working goals with UN SDGs to provide a standard upon which the farm can measure its performance.


Global Green Team, a Dutch-based farm company employs a range of measures to facilitate sustainability. This includes for water management:

- Saving water through filter and recirculation of excess not used by the plants.
- Allowing growers to need less than one watering can of water for one kilogram of produced leafy greens.

With regard to its efforts to protect biodiversity, the farm includes:

- a step-by-step plan of integrated pest control including prevention, monitoring, decision making, nonchemical methods (green agents and biological pest control)
- targeted use of chemical agents
- minimizing chemicals
- focusing on biological pest control methods as green and chemical crop protection agents facilitates healthy and robust growth with minimal impacts on soil, ecosystems and consumers.

Sustainable Growing Practices ...some grower's example




YOUR GLOBAL SOURCE OF FRESH!

SUSTAINABILITY IS IN OUR DNA

We are Harvest House. We are a producer organisation of Dutch growers. We are committed to providing everyone in the world with access to affordable, healthy and delicious food. At an sustainable way. With that we make a promise: **we are the source of a healthy life.**

We set out how we do this sustainably in our sustainability policy. Because Global Green Team is part of Harvest House, we contribute to this every day. The sustainable thought of Harvest House, applies just as much to us.



GLOBAL GREEN

SAVING FOR NEXT GENERATION

Sustainable

Our processes from production (70% water saving) to consumption (low wastage) are certified sustainable. We deliver best-in-class environmental, social and governance goals compliant with UN-SDGs.

Wastage Reduction

Transaction level multi-stage wastage monitoring against benchmarks leading to reduction below 2%

Sustainable Social Capital

Pursuing Environmental, Social & Governance Goals

6 Gender Equality

MAKING ACES GENDER NEUTRAL

Equal Pay for equal work
80% women workers in Fresh Cuts
Premium for women farmers
Financial incentives for g.e education

8 Decent Work and Economic Growth

IMPROVING LIVELIHOODS

No child labor employed
Rural jobs 32%+ minimum wages
Premium to farmers for better quality
Financial inclusion: no cash transactions

12 Responsible Consumption and Production

SAFETY & ENVIRONMENT PROTECTION

Less than 2% wastage across supply chain
70% Water saved with 100% drip irrigation
Env protection by implementing GAP
Safe Produce for the consumers

INI FARMS

Barakat's UAE-based farms VeggieTech and Al Themar are key players driving smart agriculture revolution within the GCC and specifically UAE. FIVE conducts periodic visits to both VeggieTech and Al Themar to follow closely on the latest developments in sustainable agricultural production and energy efficiency adopted by the local farms. These farms are core suppliers to FIVE through Barakat as they reduce the need for significant transportation networks and ensure top quality produce.

At VeggieTech, soil health is prioritized through the implementation of:

- soil-less growing media through perlite and cocopeat reducing the need to impact the land
- Ensure pesticide free produce are grown

With water management a key focus area, VeggieTech has set up:

- hydroponic infrastructure to achieve a 75% reduction in water use compared to open farming

Further to promote biodiversity, grow light assists produce a yield of 3x and 95% reduction in water and associated fertilizers and pesticides required in open farming. In 100 sq m, VeggieTech reports growth yields equivalent to 1 acre of open farm.



[Home](#) [About Us](#) [Why VeggieTech](#) [Products](#) [Community](#) [DO GOOD](#) [News](#) [Contact Us](#)



What We Do

Transforming traditional farms into Protected Hydroponics farms that grow

✔ **Soil-less**

Growing plants grow media (perlite, cocopeat), with added nutrients and without soil, hence pesticide free produce.

✔ **Hydroponics Principles**

75% reduction of water usage compared to open farming on proven & robust science & technology.





Creating Indoor Vertical Farms with Grow Lights assisted Hydroponics

Faster Harvest Cycles

3X Times the harvest cycle in the same time period, hence 25 Days only instead of 75 days in the field in conventional agriculture.

95% Less Water and Fertilizers

95% Reduction of Water usage compared to open farming, hence Optimized use of Fertilizers & Nutrients.

Effective Space to Yield ratio

100 Sq meter grow area can produce as much as 1 acre farm, providing maximum return on investment.

Al Themar Farms is a UAE leader in sustainable agriculture. To address water scarcity, the farm follows various practices to conserve the precious resource. This includes:

- treating its wastewater through a grey water system allowing for the recycling water use in irrigation of its plants.
- Uses 100% recycled water for irrigation

To promote soil health, Al Themar operates a leading mushroom facility that:

- collects mushroom waste and uses it as natural fertilizer for its open farming operations, enriching soil health and minimizing the use of processed fertilizers.
- Mushrooms are grown pesticide free and are certified ready to eat through ISO 22000.

Focusing on promoting biodiversity, Al Themar uses:

- bumblebees as natural pollinators within its greenhouses of plants
- uses an extensive hydroponic system including a patented Nutrient Growth System (NGS) saving 80% in fertilizer use to reduce artificial impact on land

Overall, Al Themar Farms follows sophisticated water, soil and biodiversity management strategies.



[HOME](#) [PRODUCTS](#) [CONTACTS](#)

EXPLORE OUR SPECIAL OFFERS



ABOUT US

We at Themar Al Emarat, pride ourselves with our locally grown, pesticide-free produce that bursts with nutrition, year-round.


The First commercial, large scale hydroponic project in Sharjah

We utilize 185,804 m² of arid desert land for our all year round production.

Agro-Tech for ceaseless production

We deploy advanced technology for the best produce and optimum output.







NATURAL POLLINATION

NATURE'S CRITICAL POLLINATORS GET BUSY


AT THEMAR, BUMBLEBEES ARE USED TO POLLINATE PLANTS INSIDE THE GREENHOUSES



Improves crop quality



Increases yield



Reduces Labor

SUSTAINABILITY



100% OF IRRIGATION WATER RECYCLED

High efficiency in water consumption, despite agriculture being a water-intensive industry.



80% SAVINGS IN FERTILIZER NUTRIENTS

The NGS patented crop system allows for 100% recirculation of nutrient solution



80% ENERGY SAVING

Deployment of the largest single micro-grid solar plant.

Barakat's suppliers also include two farms based in Australia and Egypt that are also adopters of sustainable agricultural production techniques. FIVE will continue to evaluate its extended suppliers as important stakeholders as all three nodes of its fruit and vegetable supply chain bear interest in advancing sustainability through collaboration and monitoring.

Premier Fresh Australia an Australian fruit and vegetable supply chain business works with its suppliers to implement sustainable agriculture practices including for water management:

- hydroponics at Lancaster Farm

To protect biodiversity and soil impacts:

- minimizing land use through greenhouse facilities.

Egypt-based Magrabi Farms follows a 'common-sense' approach that addresses water, soil and biodiversity through practices such as:

To protect soil and biodiversity:

- incorporating rational use of pest control, fertilizers and manures

To conserve water and resources:

- efficient use of energy and water, and recycling and reuse of materials.

To promote biodiversity and health:

- Its products include certifications including BioSuisse, Fair Trade, and HACCP.

Sustainable Growing Practices ...some grower's example



WE'RE COMMITTED TO DRIVING SUSTAINABLE INITIATIVES

Sustainability to us, means ensuring a sustainable supply of fresh produce and a prosperous Australian horticulture industry for generations to come.



Economic Resilience



People & Communities



Environmental Leadership



Stakeholder Value

PREMIER FRESH AUSTRALIA

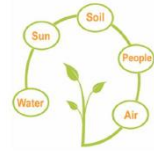


Sustainability

As an agricultural company, Magrabi Agriculture is committed to sustainable agriculture and encourages the implementation of Integrated crop management (ICM) which is a common-sense approach that combines the ecological care of a diverse and healthy environment with the economic demands of agriculture.

Within its ecological care of a diverse and healthy environment, Magrabi Agriculture's environmental policy covers the following issues:

- Rational use of plant protection products
- Rational use of fertilizers and manures
- Pollution prevention
- Efficient use of energy, water and other natural resources
- Recycling & re-use of materials
- Wildlife and landscape conservations and enhancement



MAGRABI

Some of the Local growers



TANOOS AGRICULTURAL SYSTEMS L.L.C.

FIVE Extended Supplier Visits to Promote Sustainable Agricultural Production Practices





