

TECHNICAL INFORMATION

FINAGRI

Eco-Friendly Water Saving in Mordern,
Sustainable Landscaping



Natural Water Conservation for Our Future Generations



FINAGRI

What is FINAGRI?

FINAGRI is a very efficient moisture retaining soil additive, consisting of fully natural mineral material. In times of increasing water scarcity all around the globe, water has to be used wisely and not wasted through uncontrolled landscaping or agriculture.

The sandy soils area have a very low water holding capacity and require an average irrigation demand of 12–15 liters per square meter daily.

FINAGRI improves the soil structure and increases the water holding capacity of the soils to the extent that infiltration speed of irrigation water will be reduced by up to 85%. Plant roots have more time to absorb the water and loss of water through percolation is reduced drastically.

FINAGRI's additional benefits are:

- Savings of 50% electricity for pumping of irrigation water
- Direct wear & tear savings on maintenance for pumping units & irrigation equipment
- Reduction of storage cost for irrigation water (minimize/ eliminate tanks)
- Reduction of chemical fertilizers during maintenance and operation through prevention of leaching. Therefore monetary savings in time, logistics, labour, spreading
- Healthier and faster growth of plants and crops which can be substantially proven (temperature controlled areas, i.e. Green houses and open areas)
- pH is reduced which effects growth rate by providing the plants more nutrients.
- FINAGRI has a high CEC and contains lots of nutrients
- Replaces the usage of peat moss completely
- Reduces carbon footprint

FINAGRI is Natural Mineral Resource Originated in India



FINAGRI is a Natural Resource and a Mining Product



Broken Rock Pieces of FINAGRI's Minerals

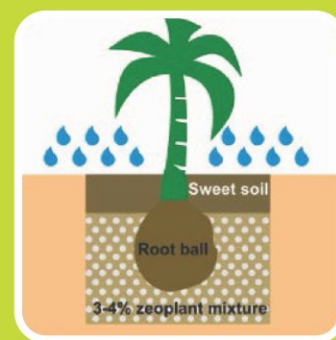


FINAGRI is Manufactured in India



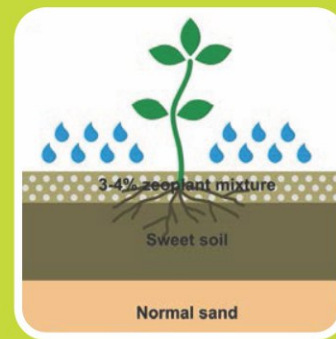
Palm Trees

Mix FINAGRI with sweet soil taken out of the tree pit at ratio 3-4% by volume. Fill the mix back to the pit at 15 – 30 cm layer; then place the rootball on this layer and fill the rest of the FINAGRI-sweet soil mix around the root-ball until root-ball is fully covered. Fill the upper pit with normal sweet soil.



Shrubs & Ground cover

Mix FINAGRI with sweet soil and fill around the roots of the plants similarly to the application for trees. For planting beds just mix FINAGRI at 3–4 kg/m² in the sweet soil at a depth of 15–30 cm



Lawns

Apply 3 kg/m² on the sweet soil and rake in or mix in by rotavator at a depth of 8–10 cm. After levelling of the FINAGRI-Sweet soil mix, grass can be planted by stolons or turf.

Physical & chemical characteristics of FINAGRI

pH	: 6.7 – 7.1
Content of potassium	: 3 %
Soluble potassium content	: 0.7 %
Content of nitrogen	: 800 mg/kg
Content of phosphorous	: 400 mg/kg
Ca & Mg	: 160 meq/kg

Guaranteed savings by using FINAGRI:

- Minimum 50% irrigation water
- Minimum 50% on NPK fertilizers
- Pumping, storage, electricity & maintenance cost for irrigation

Application Rates FINAGRI

Please find our application rates for FINAGRI (new plantations) as follows :

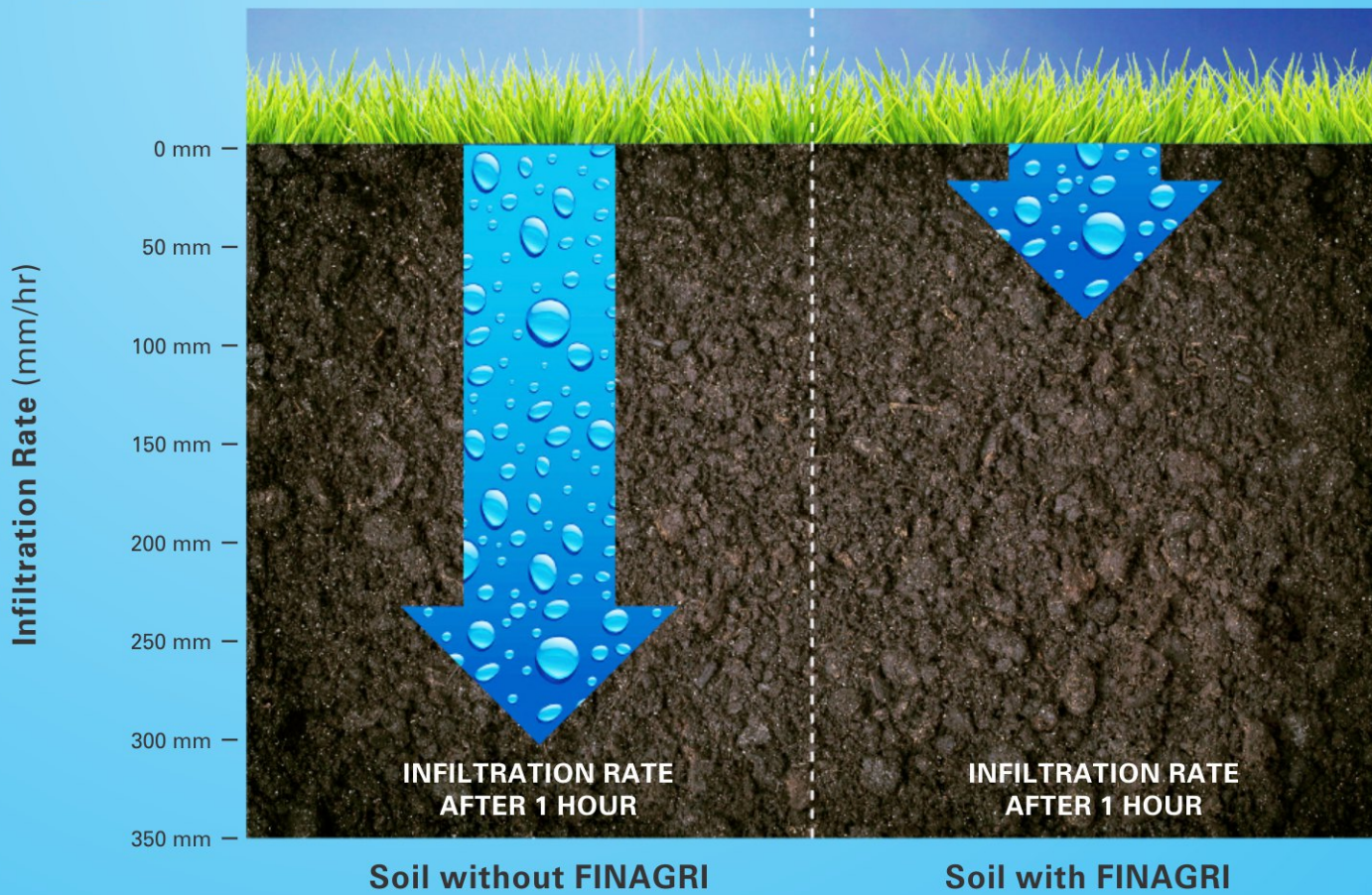
Plant	Unit	Dosage Kg/unit	Mixed methodology
Palms	piece	50 to 120	Depending on root depth & pit size to achieve 3% ratio by volume
Trees	piece	40 to 100	Depending on root depth & pit size to achieve 3% ratio by volume
Shrubs	piece	1 to 2	Depending on root depth/volume
Shrubs	m ² bed	5	Mixed in the upper 20 cm of the topsoil
Grass	m ²	3	Mixed in the upper 8-10cm of th topsoil
Ground cover	m ²	3 to 4	Mixed in the upper 10-15cm of the topsoil
Ornamental grass	piece	1	Mixed in the grass pit
Flower bed	m ²	3	Mixed in the upper 8-10cm of the topsoil
Pomogranate	piece	15 to 20	Depending on root depth & pit size to achieve 3% ratio by volume
Banana	piece	25 to 30	Depending on root depth & pit size to achieve 3% ratio by volume
Drum stick	piece	20 to 25	Depending on root depth & pit size to achieve 3% ratio by volume
Lemon/orange	piece	15 to 20	Depending on root depth & pit size to achieve 3% ratio by volume
Teak	piece	30 TO 50	Depending on root depth & pit size to achieve 3% ratio by volume
Melia dubia	piece	30 to 50	Depending on root depth & pit size to achieve 3% ratio by volume
Sandel wood	piece	30 to 50	Depending on root depth & pit size to achieve 3% ratio by volume

The ideal ratio of FINAGRI should be at 3-4% mixture to the sweet soil at the roots level.



FINAGRI reduces the Infiltration Rate & Increases the Water Hoarding Capacity of the Soil

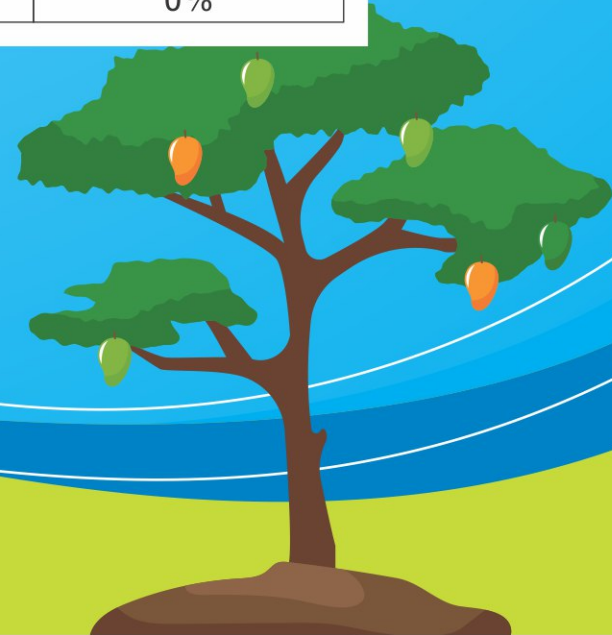
The Chart shows how deep the irrigation water flows down the soil within 1 hour



Case Study Kutch Area

Fact Sheet & Comparison the 2 Communities

	Green Community with FINAGRI	Uptown without FINAGRI
Planted Area	180,000 m ²	160,000 m ²
Ratio of Planted Area	1.125	1.00
Daily Irrig, Water Volume in m ³	1,266	2,813
Water Saved	40%	0%



The Advantages of FINAGRI

FINAGRI gives you a lot of advantages to care for your plants, consumption of irrigation water and protection of the environment.

100% Natural

FINAGRI has major components, which are common for good quality natural soils. They are inorganic natural rock types.

Component : rhyolitic tuff
: clinoptilolite

High Water Holding Capacity (WHC)

Due to its natural structure, FINAGRI can easily absorb and store huge amounts of irrigation water and it prevents this water from percolating uselessly deep into the ground as FINAGRI keeps it at the root level. Run-times of irrigation systems and irrigation intervals for parks and gardens can be decreased once FINAGRI is used.

Minimum of 50% Less Water and Fertilizer Expenses

With the application of FINAGRI one can save high cost for operation and maintenance. FINAGRI will effectively save money by reducing irrigation water application by minimum 50% and will make plants look much healthier even under harsh desert conditions. The investment in FINAGRI pays back in short time.

Desert Area

FINAGRI is testified and approved in the hardest climatic conditions. Sand, high temperatures, direct sun light, salty ground and high saline water tables. Numerous official clients and government departments, as well as selected major developers in the Kutch Area were amazed by the results of FINAGRI. FINAGRI helps to green the desert and saves massive amounts of irrigation water.

Protect the Environment

Besides extensive irrigation also the over usage of chemical fertilizers is threatening the environment. With FINAGRI one will be able to use much less fertilizers, because of lesser water usage and the nutrition binding effect of FINAGRI. Additionally FINAGRI contains all necessary macro, mezzo and micro elements for the plants which are released according to the needs of the plant roots. Using less synthetic fertilizers is active protection of the environment and saves additional money.

Beautiful Growth of Your Plants

The FINAGRI effect will show up within days after its application. From the very first day one needs to apply half irrigation water and even plant mortality will be reduced. The soil or sand remains humid and porous. Sandy ground agglomerates and does not blow away even in windy areas. Plants are continuously better supplied by water and fertilizers right there, where they need it and will show their beauty already after a couple of days.

Experimental Trial Result in the irrigation schemes of Kutch Area and reduced rates with FINAGRI

Type of Plant	Unit	MONTH					
		May, June, July, August		September, October, November, March, April		December, January, February	
		Without FINAGRI	With FINAGRI	Without FINAGRI	With FINAGRI	Without FINAGRI	With FINAGRI
Plam Trees	Liters/Tree	150	60	110	50	75	38
Ornamental Trees	Liters/Tree	100	40	75	35	50	25
Shrubs	Liters/Tree	15	7	11	5	7.5	4
Hedges	Liters/m ²	10	5	8	4	5	3
Ornamental Grass	Liters/m ²	10	5	10	5	8	4
Lawns	Liters/m ²	12	6	10	5	8	4
Cactus & Succulents	Liters/Plant	8	4	6	3	4	2
Rock & Run Plants	Liters/Plant	10	5	8	4	6	3

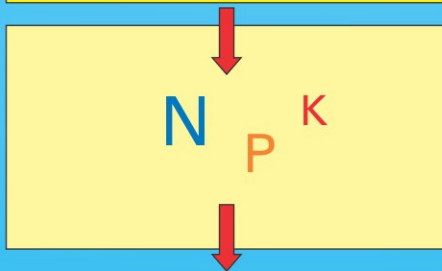
The irrigation water can't "RUSH" through anymore due to the strongly decreased percolation time.

The components can fill their "WATER TANKS", and also the remaining water needs much more time to find its way down, so it will be much longer available in the upper roots level for the plants.



Without FINAGRI

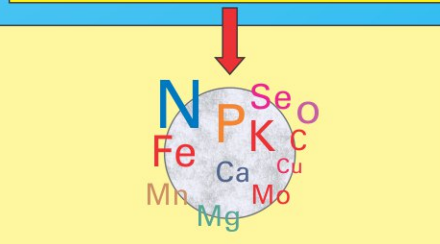
Synthetic fertilizers



A high amount will be washed out by the irrigation water into the ground, causing environmental problems and wasting money!!!

With FINAGRI

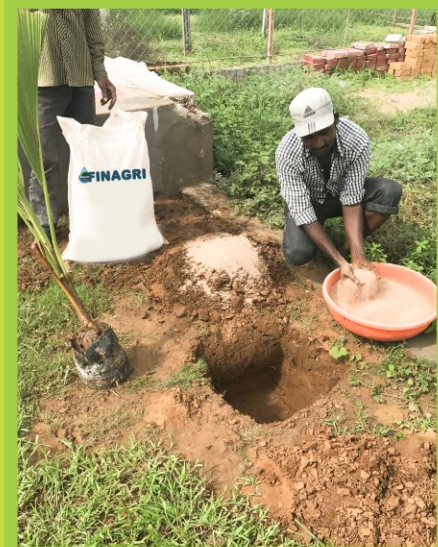
Synthetic fertilizers



The FINAGRI particles bind the nutrition elements on its active surface and avoid to washing them out by the irrigation water. The FINAGRI particles keep all necessary macro, mezzo and micro elements in the active zone where the plants can use them. With this effect the necessary amount of N:P:K fertilizers and other organic fertilizers can be reduced.



FINAGRI is just applied once and does not need any reapplication later on....





FINAGRI



AN ISO 9001:2015 & WHO GMP CERTIFIED COMPANY


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