

## SEA-WATER FARMING

### SALICORNIA

#### Crop of the Future

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A novel experiment in agriculture farming with seawater has shown encouraging Results in the coastal area of the Kutch district in Gujarat, India Salicornia- the plant grown in this region is the world's first salt tolerant plant which would revolutionise the economy of the wasteland costal regions of the world. Salicornia or Sphire is a cactue-like miniature miracle crop, which is under experimental cultivation in 125 heactares of coastal wasteland at Lun village in the Kutch district, giving employment to needy ruralfolk. The plant has also successfully been cultivated in Mexico in South America Saudi Arabia and West Asia for research to evaluate its economic viability. But scientists here are much impressed with its rapid growth because of the favourable climate and soil of the region. The plant promises to be economically viable here because of the low input cost and cheap labour.

Though the plant is irrigated with sea water, it absorbs all the salt and does not harm the soil. Surprisingly, the plant withers away with sweet water. This is unheard of in the history of agriculture. On the contrary it thrives on saline water.

This twiggy plant is leafless and has spikes, which mature in six months and release tiny seeds which yield 30 per cent edible oil. This yield is better than the yield from soyabean. The oil has also been considered for use by consmetic and pharmaceutical industries. It has also been added with diesel fuel at 12:1 ratio with successful results.

The other tried uses of the plant include making green vegetable, salad, pickle and

Herbal green salt for humans and high protein forage for animals.

Besides, its straw is a good source of pulp for coarse paper and building material. The plant, a halophyte (salt toierant) is also eco-friendly as it absorbs carbon dioxide from the atmosphere and thereby checks the green-house effect the world is worried about.

In a short span of six months, the region has become a green pasture of land attracting a larg number of birds, unusual phenomena seen in this part of the state.

About 25,000 square kilometers in Gujarat are saline wastelands. Of these, areas located at sea coast or having sub-soil saline water upto 4.5 per cent salt content equal to that of seawater can be utilised for production of Salicornia.

Encourage by the success of this experiment plants are afoot to grow this rare plant in another 400 hectares this year itself. It htrives in drought conditions and failure of monsoons helps its speedy growth-a miracle crop indeed.

More than 90 percent of earth's water is saline, which is ufilised properly not only can revolutionise agriculture, but can also help create environment conducive to mankind.

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