SUSTAINABILITY FOR CASTOR INDUSTRY

SEA CASTOR SEED YIELD IMPROVEMENT PROJECT 2023-24

Presented by:

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SEA Castor Model Farm Project

GLOBAL CASTOR CONFERENCE 2024

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SEA

Castor Model Farms

2016-2024

The Journey so far:

- We have completed eight years.
- Thanks to one and all who participated in the project.

Progress of the Model Farms Project:

Year	No. of Model Farms	No. of Coordinators	Area Covered (Ha.)
1st (2016-17)	68	2	75
2nd (2017-18)	140	4	160
3rd (2018-19)	258	7	207
4th (2019-20)	405	7	328
5th (2020-21)	362	7	350
6th (2021-22)	500	7	350
7th (2022-23)	574	7	400
8th (2023-24)	600	7	400

SUSTAINABILITY FOR CASTOR INDUSTRY

Results:

Year	Model Farms Yield (Kg/Ha.)	Non-Model Farms Yield in same Area/same Farms (Kg/Ha.)	Incremental Growth (Percentage)
1st (2016-17)	3500	--	--
2nd (2017-18)	4516	2503	80%
3rd (2018-19)	3846	2455	56%
4th (2019-20)	4305	2506	72%
5th (2020-21)	4422	3210	37%
6th (2021-22)	4456	2954	50%
7th (2022-23)	4402	2903	48%
8th (2023-24)	4416	3359	32%

Castor Yield in India (Kg/Ha.)	Castor Production in India (Lakh Tons)
1256	10.55
1738	14.43
1407	10.82
2016	19.62
2125	17.56
2088	16.94
2108 +68%	18.81 +78%

Key Insights:

- Average productivity in model farms has increased substantially, thanks to SEA intervention in the last 8 years.
- Each model farm is connected with 50/100 castor farmers in the surrounding area.
- Over 30,000 farmers connected with the project and benefited.

Factors Contributing to Increased Productivity:

a) Good agronomic practices
b) Quality seeds
c) Spacing between two plants (6'X6' or 7'X7')
d) Increase in number . of picks
e) Increase in number of branches & pods
f) Continuous guidance and supervision by experts and coordinators.

Intercropping with Castor

- As castor is a crop sown at wide spacing, one can get more income by taking short-term monsoon crops in it.
- Castor can be easily intercropped with green gram, black gram,sunflower, soybean, sesame, and groundnut.

Benefits of Intercropping:

a) **Maximizes land use:** By growing two crops on the same piece of land, farmers can maximize their resources and generate more income from their land.

b) **Increases yield:** Groundnut plants can fix atmospheric nitrogen, which can be used by the castor plant to increase its growth and yield.

c) **Reduces crop failure risk:** Growing multiple crops can reduce the risk of crop failure.

d) **Improves soil fertility:** Both castor and groundnut have different root systems, which can help to improve soil health and fertility.

e) **Diversifies income streams:** Farmers can diversify their income streams and reduce dependence on a single crop. This can help to mitigate risks and increase financial stability for farmers.

Photographs of

Castor Model Farms

2023-24

Following the instructions provided by the agricultural expert, the farmer has commenced irrigation for the castor crop in Banaskantha district.

September 09, 2023

Following the guidance from the agricultural expert, the farmer has initiated intercultural operations in the castor crop in Rajkot district.

September 13, 2023

An agricultural expert collaborates with a farmer to monitor and report on the castor model farms in Visnagar Tehsil, Mehsana.

October 25, 2023

In Kachchh, farmers cultivating castor have achieved promising results based on the information and instructions provided in the project.

November 04, 2023

Under the supervision of the district coordinator, applying insecticide in the model farm situated at Upleta Village, Rajkot.

November 08, 2023

Instructing the farmer on post-harvest handling of castor clusters at Jerol Village, Rajasthan.

December 12, 2023

Holding discussions with farmers on current activities and the adoption of new technologies in castor cultivation at Kharavda Village, Mehsana.

December 14, 2023

Field demonstration motivating and raising awareness among fellow farmers about the benefits of implementing good agricultural practices in castor cultivation at Rajkot district.

January 19, 2024

Conducting field demonstrations to motivate and raise awareness among fellow farmers about the benefits of implementing good agricultural practices in castor cultivation at Adhoi village, Kachchh.

February 12, 2024

Engaging in discussions with lead farmers at Jetda village, Banaskantha, regarding current activities and the adoption of new technologies in castor cultivation.

February 13, 2024

Offering insights on enhancing castor productivity while minimizing costs for farmers at Kamana village, Mehsana.

February 14, 2024

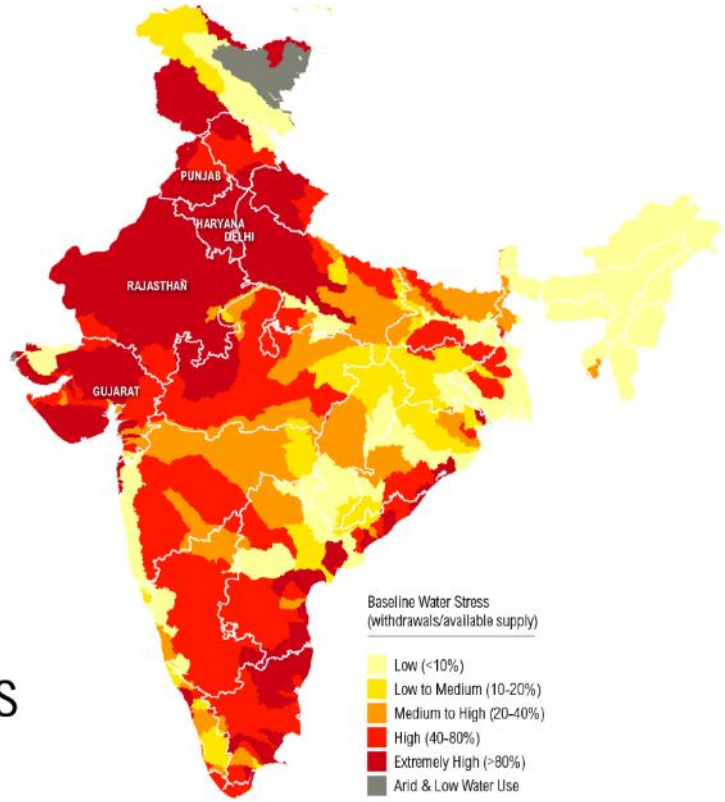
SEA

Rain Water Harvesting Project

2019-2024

Addressing India's Water Crisis: The Need for Water Harvesting

54%
of India
Faces
High to
Extremely
High
Water Stress



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54%
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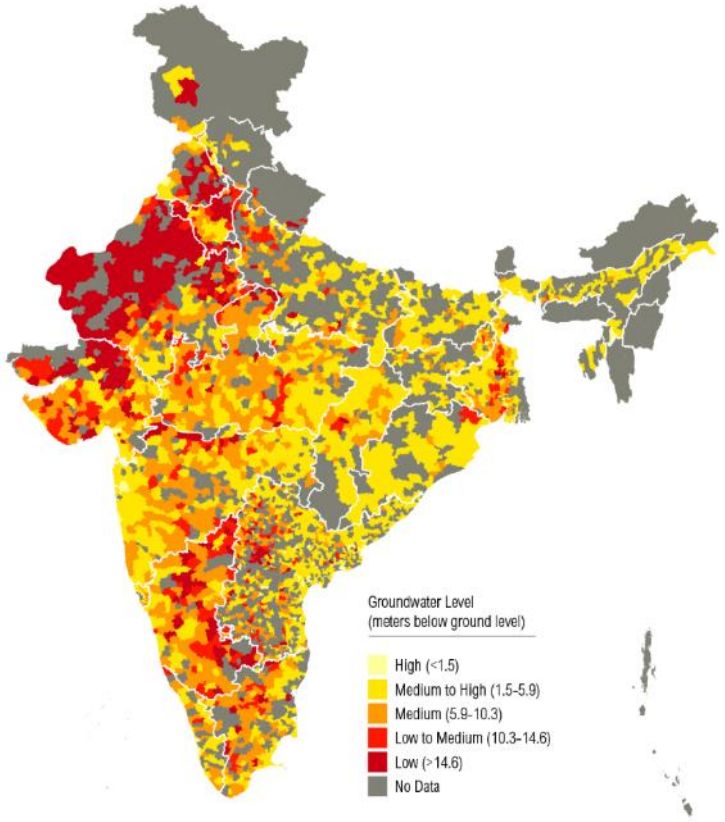

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Rain water harvesting project 2019-24

- The last five years, along with the yield improvement project, undertook a water harvesting project on a 50:50 basis, where the participating farmer bears half the cost.

Action:

- SEA has worked on three types of surface water recharging methods at farm level:

1. Recharging of Well

2. Bore well

3. Recharge pits

Well Recharge

Borewell Recharge

Recharge Pits

Rain Water Harvesting Project 2023-24 (April to June – 2023)

- In the year 2023-24, our project target was to recharge 100 sites. We successfully recharged 100 sites.

- The recharging was done through the installation of 7 bore wells, 45 pits, and 48 wells in the Saurashtra and North Gujarat regions.

SEA Rain Water Harvesting Project

Planning for Rain Water Harvesting Project 2024-25 (April to June – 2024)

- Target - 150 recharging
- Including new area – Kutch and Rajasthan

Achievements:

- Increased water availability for irrigation
- Reduced dependence on external sources of water
- Improved soil health
- Reduced risk of flooding and water runoff
- The level and quality of the water improved
- Farmers are able to take on one additional short crop

Thank You!