

Castor from Western India – a Highly Sustainable Crop

The castor crop is grown extensively in the Gujarat and surrounding region of western India for several decades. The crop grows well in marginal, sandy soil and is drought resistant. Castor oil has no real nutritional value for humans or animals and is considered non-food¹, non-feed. The farmers consider castor to be easy to grow and easy to sell, and they appreciate its long shelf life which enables easy storage and transportation. They choose it as a profitable³ (low cost/benefit ratio) cash crop that complements their dairy farming and food crop cultivation. Selling castor seed is straightforward and transparent in the many hundreds of open trading yards in the region. There are no corporate monopolies.

The region is not forest rich, and most farms have existed for generations. In fact, forest lands have actually increased recently in this region².

The huge number of smallholder farmers have a long legacy of growing castor crops and they do so by choice – they consider the crop to be somewhat of an “insurance policy” due to its robust resistance to drought and its “low input, easy to grow, easy to store, easy to sell” legacy.

There is little waste associated with castor cultivation and processing. Once crushed, the seed yields a little less than fifty percent oil, the remaining “cake” or “meal” being valued as a highly effective organic fertilizer¹. The cake may also be used internally in the crushing operation as a high calorific value carbon neutral biofuel.

During its life cycle, castor crop derives all of its carbon from atmospheric CO₂ (biogenic carbon), which is returned to the atmosphere only when destroyed, thus completing the “circular” cycle⁴. This is in stark contrast to fossil fuel based derivatives whose carbon has been sequestered in crude oil for over a million years. Using castor oil derivatives instead of their fossil fuel based alternatives, prevents the depletion of crude oil, one of our most valuable finite natural resources.

As custodians of SuCCESS™, the world’s first sustainable castor code, SCA understands that sustainability is a never ending journey of continuous improvement. It is a journey that we hope we can take together.

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5015816/> US Library of Medicine NIH (National Institutes of Health) Refers to castor oil as a non - edible oil crop. It also describes castor cake as an efficient fertilizer.
2. SEA (Solvent Extraction Association) reports that castor farming yield has improved over the last 7 years; Directorate of Economics and Statistics reports that crop intensity has increased, but land usage has in fact decreased over the past 3 decades. Since 2016, there has been no land expansion for castor farming.
3. 2016 baseline study of 1,000 castor farmers by founding members of the Pragati initiative in 2016.
4. https://www.bio.org/sites/default/files/legacy/bioorg/docs/Position_Carbon_Footprint_PCF.pdf