

Climate Change and SEWA

How it Affects SEWA's Members

- Rainfall patterns altered
- Increased flooding
- Degradation of fertile soil
- Damage to crop and houses
- Rapidly changing cropping patterns
- Increase in the variety and incidence of various health issues
- Biodiversity loss, including the sudden disappearance or extinction of birds and animals in urban and rural areas
- Increased salinity and fluoride content of ground water

Visible Effects in SEWA's districts...

- **Surendranagar District:**
 - Neel gaaye (wild boar) is thriving and causing significant crop damage
 - Water table has receded between 25 ft and 50 ft
 - Sudden increase in certain diseases
- **Sabarkantha District:**
 - Increased rainfall has altered cropping patterns
 - Increased incidence of diseases, like chikengunia
- **Mehsana District:**
 - Average yield of some major crops has declined
 - Complete reversal of flowering and fruiting patterns, including with lemons and custard apples
 - Increase incidence of malaria in humans and foot and mouth disease in cattle

What is SEWA Doing to Mitigate the Effects of Climate Change?

SEWA's Sustainable Agriculture Campaign

- Reintroduction of vermicompost and other organic farming methods
- Campaign for Jethropha cultivation
- Integrated land development and water management programmed
 - land leveling, farm bundling, check dams, recharging of ground water
- Encouraging of traditional processing practices
- Weather Insurance Project

SEWA's Initiatives in Water and Forestry

Women, Water, and Work Campaign

- Promoting water recharging with traditional and modern technology
- Raise awareness for water testing for salt and fluoride content
- Awareness of clean drinking water

Feminize our Forests campaign

- Nursery raising - fruit trees and medicinal plants
- Moisture conservation through wasteland development
- Plantations for natural recharge
- Creation of fuel, fodder and employment at local level

Promotion of Renewable Energy

- Gobar gas (bio-gas) plants
 - Traditional burning and decomposition of cow dung by farmers emits methane and CO₂
 - These plants were being built on community basis
 - Burning methane gas to produce electricity
 - Produces quality farm manure
 - Potential for carbon emission credit scheme
- Promotion of solar-powered water pump for salt worker
- Solar lantern production

Eco-Friendly Construction

- SEWA has started a construction company called SEWA NIRMAAN
- Aims to build eco-friendly homes, with eco-friendly materials
- Homes built are relatively cooler during the summer and warmer during the winter
- Bricks used are made of fly ash, not clay, to conserving fertile top soil

Awareness Raising

- SEWA has led **awareness rallies** to promote water conservation, planting trees, and nurturing saplings
→ 26662 members were reached with 205 rallies
- **Eco-tourism:** Ganeshpura tree growers (Mehsana district) have developed an eco-tourism centre to generate revenue and to raise awareness about the impact of climate change on the livelihoods of the rural poor and how they are responding to it
- **Climate Change Videos:** SEWA is preparing videos on its grass roots activities to mitigate climate change

Future Projects

- Sale of carbon credits to take advantage of financial markets for members
- Partnership with World Bank Institute (WBI) . World Bank to assist in documenting impacts of climate change on the poor and their coping mechanisms