



Context

- Land degradation robs livelihoods of lowland pastoralists in Chifra.
- Floods from the highlands, dwindling rains and overgrazing make it worse.
- Conflicts over scarce resources and dependence on food aid increase.
- Urgent need for a behavior change in pastoralists to learn farming skills.

Innovative ways of working

The big shift to **agro-pastoralism**



AGRI-SCIENCE

Cropping zones mapped based on soil moisture content (GIZ, ICRISAT & Agri-universities)



SOCIAL DYNAMICS

Community chiefs (*Kedoh Abbotti*) coin byelaws, fine crop-grazing and facilitate the shift



EXTENSION SYSTEM

Pastoral Agriculture and Development Office acts as conflict mediator and byelaw enforcer

OUTCOME

Success of lead agro-pastoralists encourages others to shift to the new system



INNOVATIVE TECHNOLOGY

Water Spreading Weirs capture highland floods and spread to lowlands (Designed by GIZ-SDR)

Harnessed flood water re-greens degraded pastoral lands in Ethiopia

- Land that couldn't grow any crops was turned into a productive oasis in 3 years in Chifra, Afar



2015
Built Water Spreading Weirs



Harnessed the highland floods



Taught pastoralists farming skills



2018
Introduced 8 food-feed crops

- Better food security: 52 households in the pilot project, who grew food and forage, relied less on food aid
- Sustainable pastoral systems: Increased feed and water access around the year.

2016

Pastoralists farm 24 ha with project guidance

Produced biomass of about 10 t/ha

2017

Farming area increased to 46 ha

Produced biomass of about 12 t/ha

2018

Pastoralists take their own cropping decisions

Crops grown: Sorghum, maize, teff, mung bean, cowpea, elephant grass, pigeon pea and lablab



Future steps

- Flood analysis of Afar region using Sentinel-1 satellite data shows flood-based farming potential:
 - 550,000 ha in Belg (Short rains)
 - 1.2 million ha in Meher (Rainy season)
- Pilot to be upscaled in Shebelle and Genalle basins in Somali region and Omo-Gibe basin



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