

Conservation Development situations in the World and Member Countries and Policy Implication of C.A.

- ❖ CA adopted in America, Australia, U.K., Brazil, Canada
- ❖ Latin America and South Asian countries
- ❖ CA promoted
 - ❖ easy credit
 - ❖ extension programmes
 - ❖ pasture conversion by providing free seedlings
 - ❖ enforced land retirement due to excessive soil erosion and taxes due to soil erosion
- ❖ In France, Europe, Spain – CA – 1 m.ha.
- ❖ European Agriculture Federation (EAFs)
- ❖ United National Associations in France, Germany, UK, Spain, Portugal and Italy founded to promote CA.

- ❖ **CA has been adopted in Japan, Malaysia, Indonesia, Nepal and Bangladesh**
- ❖ **Community led initiative strongly supported by R&D organizations and farmers and industry participation – widespread adoption.**
- ❖ **Targeted Policy Approach and Motivate Farmers**
- ❖ **Punjab – Water table going down-grow other crops than rice**
- ❖ **Pride and Peer pressure- Canada, Ontario's Environmental Farm**
- ❖ **Plan(EFO) Programme- innovative approach to Environ. Conservation & voluntary participation of farmers to assess the Envir. Risks & raise environmental awareness**
- ❖ **Farmers driven process supported by Govt. through funds & technical advise.**
- ❖ **Appropriate Incentives- short & long term impact, diversification & Infrastructure**

Conservation Policies & Programmes

CA Programmes/Studies launched

- ❖ African Conservation Tillage network(ACT)
- ❖ French Agriculture research Centre for International development(CIRAD), swedish
- ❖ SIDA funded Regional land Mgt. Unit
- ❖ FAO

Study throws light on

- ❖ Challenges farmers face in keeping soil covered
- ❖ gaining access to adequate equipment
- ❖ Controlling weeds
- ❖ Challenges faced to implement true PA

Farm Conservation Bill of US

Lays emphasis on- Cons. of resources, clean water, improvement in Grassland habitat & biofuel

- ❖ CSP- maintain & enhance quality of water, air, soil & habitat-\$ 45,000/year
- ❖ CRP-reduce soil erosion-plant grasses-rental payments & 50 % cost sharing
- ❖ WRP-restore & protect wetlands- 100 % funding
- ❖ GRP- help to protect & restore grasslands, pasture , range and other lands(90 % restoration cost funded)
- ❖ FRPP – protect Ag. land from urban sprawl & other development- one time payment
- ❖ EQUIP- to reduce air and pollution use, energy use and wildlife impacts(70% cost sharing)
- ❖ CWLCP- ensure no overall net loss & achieve net gain in performance of wet land acreage

Conservation Policy in India

- ❖ **No Policy as such**
- ❖ **Govt- Watershed Development Programme- to conserve water & reduce soil erosion**
- ❖ **Promotion of RCT-zero-till drill, laser land leveling, straw baler, straw combine etc.**
- ❖ **R-W Consortium- ICAR- CIMMYT**
- ❖ **Alternate crops –Diversification**

Following recommended

- ❖ **Minimum support price, subsidy, Institutional financing, no free electricity, PPP, Land consolidation, Encourage Cooperatives, voluntary participation of farmers, NGOs, etc.**

Conservation Ag. Strategies in India

Conservation of water through

- ❖ paddy sown in unpuddled soils
- ❖ paddy sown on ridges
- ❖ Less frequency of irrigation
- ❖ laser land leveling- 25 % saving in water

Conservation Tillage Studies

- ❖ Development & demonsturation of zero-till drill, strip till drill, roto-till drill, till planting, raised bed planter etc.

Conservation Ag. Strategies in India

Farm Residue Management through

- ❖ stubble shaver,
- ❖ straw chopper cum incorporator
- ❖ straw combine
- ❖ straw baler

Environmental Pollution

- ❖ Exhaust gas emission norms for tractors/engines
- ❖ Fuel standards
- ❖ CNG
- ❖ Biofuel Mission

Conclusions

Benefits accrued of CAT

- ❖ Reduction in cultivation cost (1500-2000 Rs/ha)
- ❖ Savings in water and nutrients (25-30%)
- ❖ Reduced occurrence of weeds and savings in pesticides (20-25%)
- ❖ Increased yield (05%)
- ❖ Protection of environment by elimination of burning of straw (Cattle feed)
- ❖ Facilitating recycling of residue and plant nutrients (Back to soil)
- ❖ Opportunities for sensible/profitable crop rotations.

WE to Conserve for US

THANK YOU