

World Vision MUS Programming: a few minute review



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Multiple Use Water Services (MUS)

- World Vision (WV) has extensive programming incorporating MUS, though not always called by MUS
- Domestic+ MUS water systems include livestock watering, community gardens, and household kitchen gardens
- The central importance of MUS for WV programming is shown by multiple use water services being one of the three priority areas of the WV West Africa strategy for programming in all sectors

Water Conservation

- Natural resource management and the conservation of water resources is an important element of MUS
- Efforts have resulted in preservation as well as regeneration and increases of water resources
- Other significant food security and livelihood benefits have also resulted from these conservation efforts

Farmer Managed Natural Regeneration

- In Niger, Tony Rinaudo worked with farmers for natural regeneration of trees from nurturing viable stumps



Typical early 80's field in Niger



Now up to 150 trees per hectare

Galma, Niger



1975



2003

Farmer Managed Natural Regeneration (FMNR) resulted in significant reforestation as shown by black spots which are trees

Impacts of FMNR in Niger

- Reforestation – 5 million hectares reforested averaging 40 trees per hectare
- Increased incomes - \$200/year for each family
- Increased food security – Additional 500,000 tons of grain per year, enough for 2.5 million people

FMNR lessons learned carried to Ethiopia

- Humbo Community Managed Natural Regeneration – South Nations, Nationalities and Peoples Regional State (SNNPRS)

Humbo
Mtn,
Feb
2002



Humbo
Mtn,
Mar
2010

Impacts of Humbo CMNR

- Benefits came in just a few years
- Increased infiltration of rainwater for increased groundwater supply
- Reduced loss of topsoil through wind and water erosion
- Regeneration of natural forest enhanced biodiversity including herbs, grasses, and scrubs and provided habitat for wildlife not seen for years
- Firewood and fodder grasses for coop members

Other Example Conservation Efforts in Ethiopia

- Reforestation through natural regeneration and tree planting
- Conservation areas to prevent erosion and loss of soil and water
- Gully erosion mitigation
- Check dams

Cut and carry system was made possible by promoting forage development in the catchments



Saessie T. Emba ADP Gulabeneea cactment

The observed impact



Saessie T. Emba ADP, Gulabene catchments

Gully Treatment with gabion check dam construction at Gulia Abeneba sub district



In area where 70% of the livelihood of the community is dependent on livestock, saving water and productive grazing land is crucial

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Unbelievable change from an eroding gully



Cut and carry system is vital to avoid livestock interference in conservation area



Check dams create reservoirs used for supplementary irrigation



Not only groundwater but also surface water is increasing at the down stream area of the catchments



Fruits and vegetables, vital for nutrition of children, are now surviving because of the availability of water



Impact observed

- Water infiltration and soil accumulation in the trench increased.
- The downstream water table and its discharge increased, allowing 1,200 hand-dug wells to be constructed
- Manual and motorized irrigation systems are enabled because of the discharge resulting in diversified crop income
- Farmers mono-cropping system changed to variety cropping system resulting in improved dietary uptake
- 4,000 ha of rehabilitated land is used for both forage of apiculture and food for animas by cut and carry system

Thank you