Water Budgeting (Harvesting)

- WatrPlan.xls
Watershed division (Hydrology)

- Run-off zone
  - High slopes more than 15%
    - Non-structural (vegetation management) practices
    - NO Structural (engineering) practices

- Recharge Zone
  - Mild slopes from around 5 to 15%
    - Soil conservation practices
    - Land use planning
    - Agro-forestry practices
    - Building dams

- Storage zone
  - Low slopes less than 5%
    - Farm ponds
    - Percolation tanks
Contour trenching on Run-off Zone for soil conservation

Check Dams on recharge zone Water
Run-off zone (Structures)

- **Continuous contour trenches (CCT)**
- **Staggered contour trenching**
  - Help to retain soil cover
  - Reduce run-off velocity
  - Plantation to stabilise the soil
- **Earthen Gully Plugs / Stone gully plugs**
  - Constructed across the ill defined gullies
  - Are meant to stabilise gullies and reduce the velocity
- **Water absorption Trenches (WAT)**
  - WAT are constructed at the bottom of foothill. Slightly oversized, to arrest the water finally.
Contour and staggered trenches
A brushwood Check dam
Recharge zone (Structures)

- **Farm Bunds** serve combined purpose of soil and water conservation in-situ in the farm lands.

- **Compartment bunds** Division of large land pieces into small compartments. Use full in soil water conservation.

- **Nalla Bunds** serve combined purpose of soil and water conservation.
Farm pond for run-off harvesting
**Percolation Tanks**

- Normally constructed on the mildly sloping lands.
- Advantage is increased storage
- It also helps in recharge
- Could be used for the protective irrigation in case of dry spells
Check dams with RCC
Vented Dams good for high rainfall areas.
Community Participation

- Stake holders should well aware about water literacy.
  - Rainfall pattern
  - Ground water recharge
  - Water availability
  - Withdrawal for domestic and irrigation purposes

Consistent efforts and capacity building leads community for their participation in the programme.
Lack of integrated approach.
Result of Integrated Approach
By working in concert with nature in this way, we shall manage resources in an integrated fashion which shall avoid some of the past failures that were not considered for the larger-scale impacts.

Thank you