WATER HARVESTING AND RECYCLING

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WATER HARVESTING AND RECYCLING

Water harvesting is defined as the process of collection of natural precipitation from prepared watersheds for beneficial use

Rainfall – important component of dryland crop production

High intensity dryland rainfall causes nearly 25 to 30% of rainfall to be lost as surface runoff

Need for managing water calls for
developing water harvesting technologies
suitable to different rainfall, soil and
topographic situations

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Designing water harvesting structures

Catchment and storage capacity

Small catchments may not be able to contribute sufficient water while very large catchments may lead to excessive silting of the pond and possibly damage the structure by overflow

The optimum area of catchment in red soils
is 1 ha which can yield 250 m³ of water

A farm pond is ideal for the collection of
this water

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Designing water harvesting structures

Criteria's for Farm pond construction

❖ Detailed features of the catchment / watershed area

❖ Suitable site for the pond

❖ Possible utilisation of the stored water

❖ Cost benefit analysis

❖ Total requirement of water for irrigation/livestock/domestic use

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Farm Pond

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Use of sealants for farm pond

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Water storage in farm pond

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Use of stored farm pond water – protective irrigation to crops at critical stages

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Use of stored farm pond water – rearing fishes

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Use of stored farm pond water – Azolla cultivation