Minor Irrigation (M.I.) Schemes in India (2001)

An irrigation scheme having cultivable command area (CCA) up to 2000 hectares is classified as minor irrigation (M.I.) scheme in India. Types of M.I. scheme include Dug Well, Shallow Tube Well, Deep Tube Well, Surface Flow Irrigation Scheme and surface Lift Irrigation Scheme.

- **Dug Wells** are small wells (up to 100 cu m capacity) which belong to individual farmer. These are most common type of M.I. schemes and are constructed by drilling a hole of 1 to 2 m diameter and 20 to 25 m deep. The expected yield is 0.25 to 0.5 cu m per hour and can provide water for about 200 days in a year.

- **Shallow Tube Wells** give yield of 100-300 cu m per day, which is about 2-3 times that of a dug well. It is normally operated for 6-8 hours during peak irrigation period.

- **Deep Tube Wells** are drilled to the depth of more than 100 m and designed to give a discharge of 100-200 cu m per hour. Its annual yield is roughly 15 times that of an average shallow tube well and usually constructed as public scheme (owned and operated by government departments or corporations).

- **Surface Flow Irrigation Schemes** utilize rainwater for irrigation purposes either by storing it or by diverting it from a river or stream. The small storage tanks (ponds) are mostly community owned. The command areas of such schemes are less than 20 ha. Government departments or local bodies generally construct the large storage tanks, which have 20-2000 ha command area.

- **Surface Lift Irrigation Schemes** are costly in operation. These are constructed in regions where topography does not allow direct flow irrigation and water is available in rivers or streams for at least about 200 days in a year.