

Utooni Development Organization

Statistical Quantity Survey
(Sand Dam Related Construction)

Assumptions:

Average membership: 40

Members work 1 day a week on projects: terraces, trees, demo farm, seed bank (52 days)

Members work extra days on dams:

Days to collect sand and stones: 30 days

Days to construct dam: 20 days

1 dam extension is equivalent to 1/3 of a full dam.

INPUTS

groups

members

days

rate

Total

Self help groups

67

Dams

53

Dam extensions

13

Terracing in metres

133,700 m

Demo plots

55

Weekly Work Day contribution

67

40

52 days

250/-

34,840,000/-

DAM CONTRIBUTION**Digging Foundations**

53

40

6

250/-

3,180,000

Collecting Stones and Sand

53

40

30

250/-

15,900,000

Collecting Water

53

40

2

250/-

1,060,000

Building

53

40

20

250/-

10,600,000

Food during Building

53
20 days
3000/-
3,180,000

Total cost for 53 dams

33,920,000/-

Contribution. toward 1 dam 640,000/-

Extension dam contribution (1/3 of a dam)

640,000 x 13 x 1/3
2,773,333/-

TOTAL CONTRIBUTION OF SELF HELP MEMBERS

71,533,333/-

Cost benefit analysis of sand dam in first year of use: (2010)

| | |
|----------------------|--------------------|
| Cost of average dam: | 575,184 |
| SHG contribution: | 640,000 |
| Total cost: | 1,215,184/- |

| | |
|--------------------------------|---------------------|
| Volume of water in average dam | 100,000 cu. m |
| Cost of water per cu metre: | 100/- |
| Value of water: | 10,000,000/- |

Cost benefit ratio in first year of operation: 1,215,184 : 10,000,000
or **1:10**

Compiled by:

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