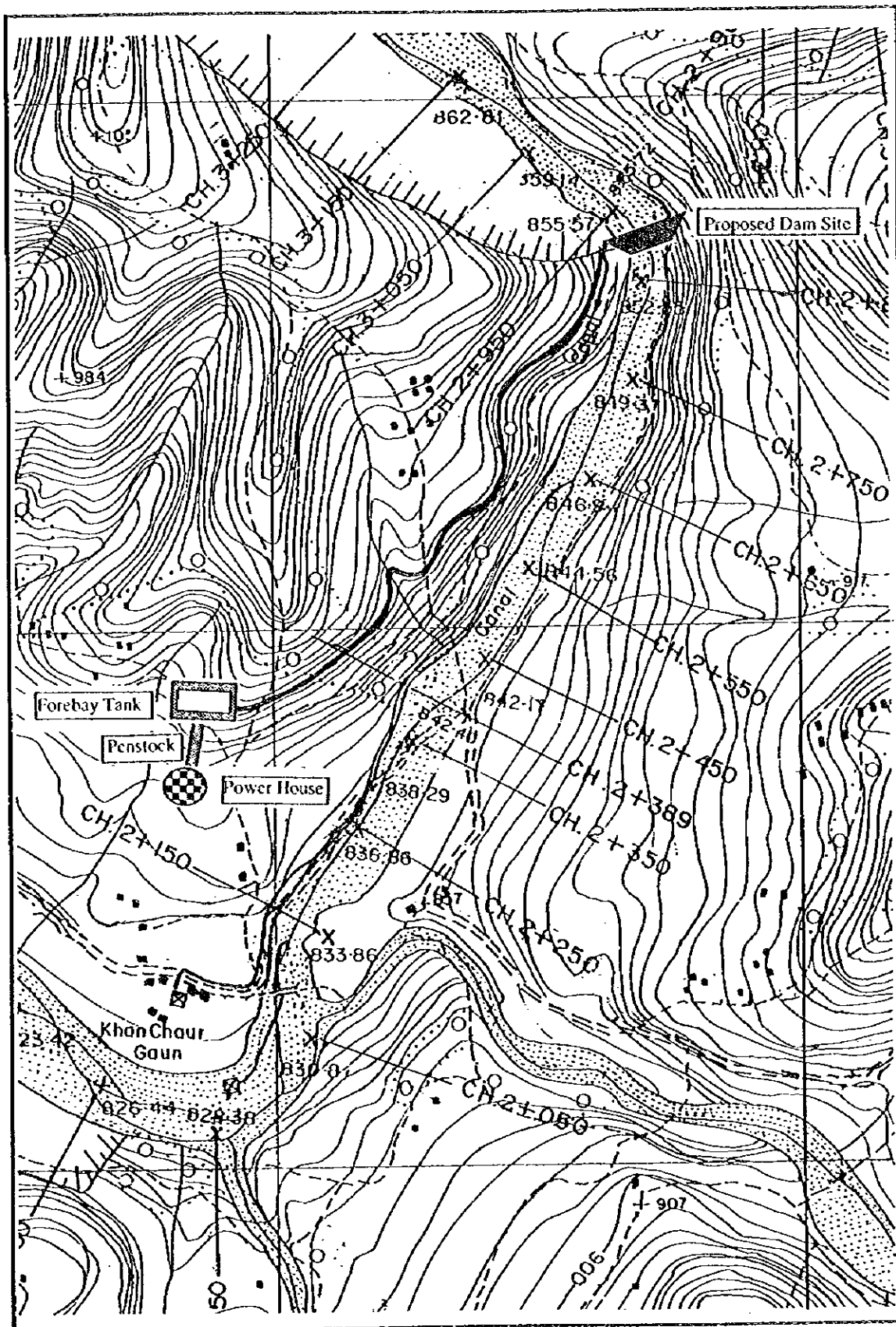


**Fig. 2.2.3**  
**Schematic Diagram for Recovery of**  
**Canal at Landslide Section**

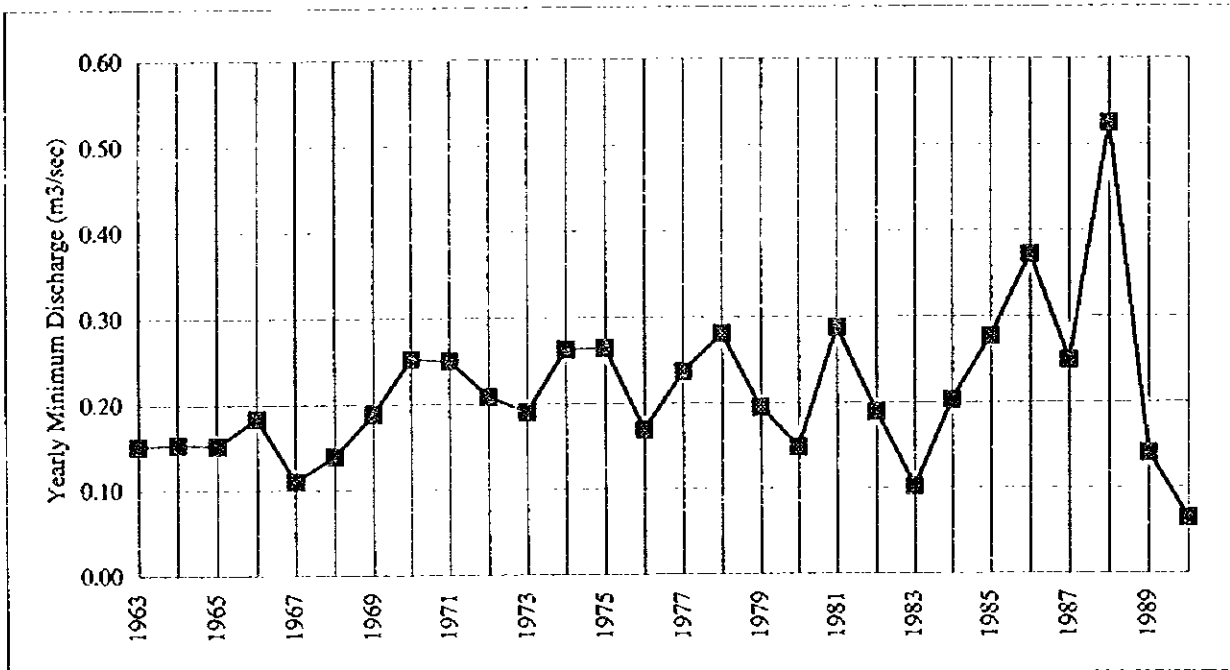
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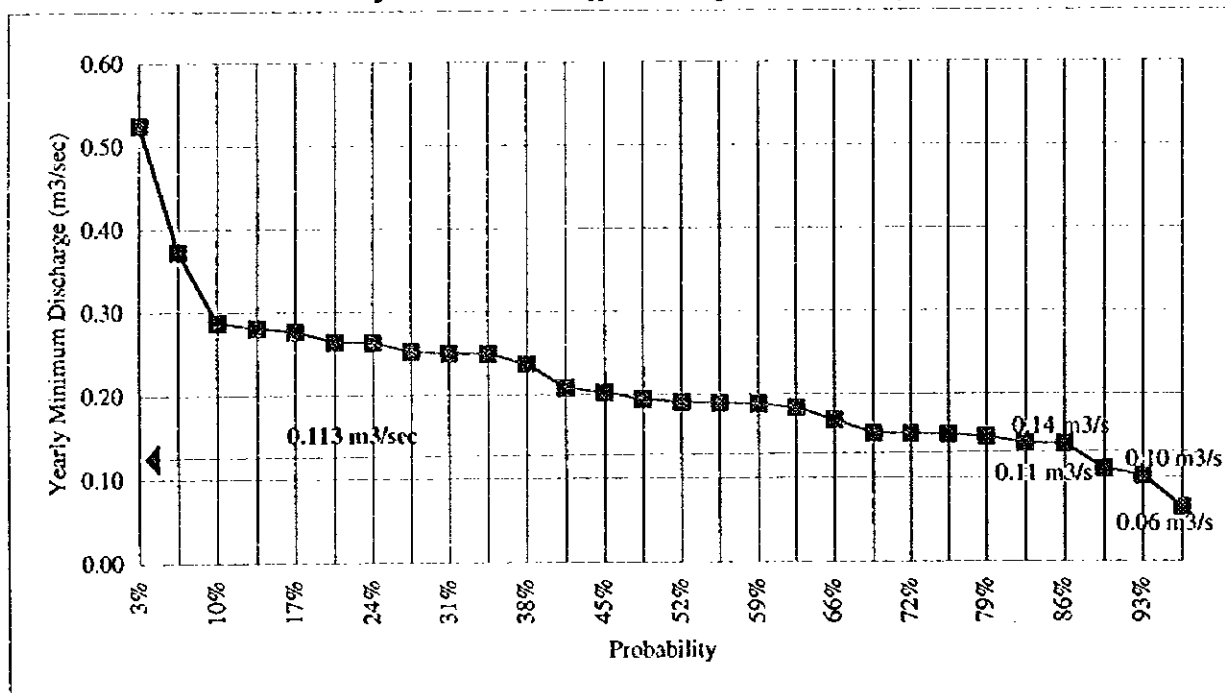
**Fig. 2.3.1**  
**General Layout for Micro-Hydropower**  
**Scheme in Namtar/Tilar Area**

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### Yearly Fluctuation of Runoff Discharge

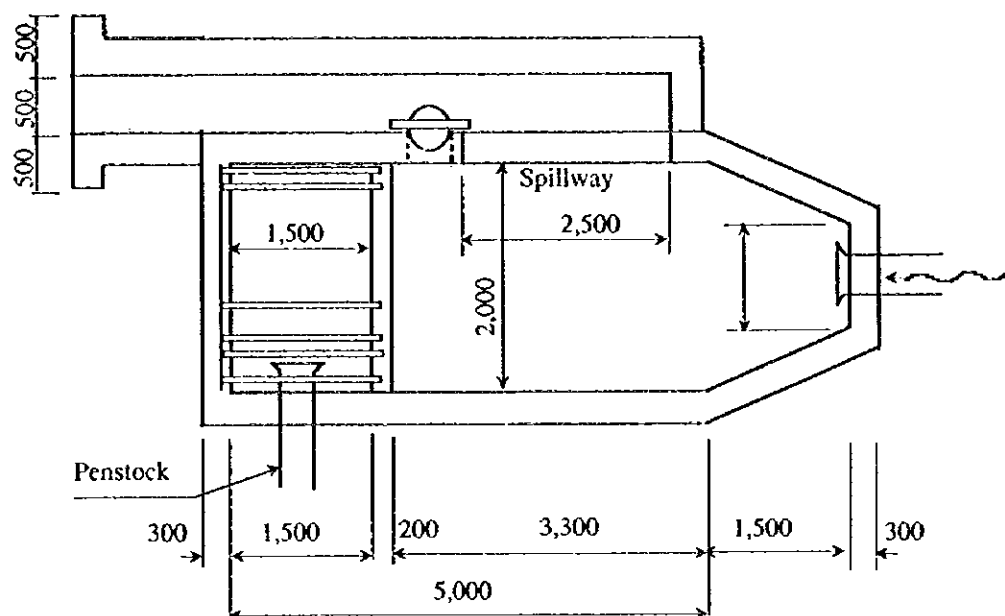


### Yearly Minimum Runoff Discharge & Probability



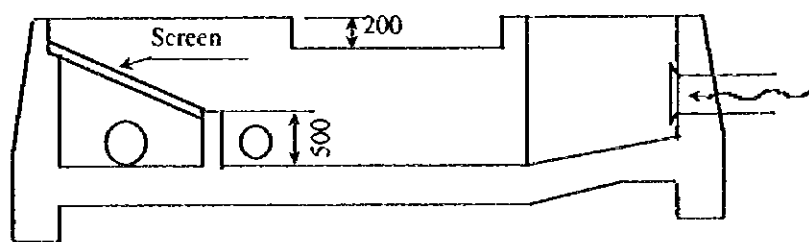
**Fig. 2.3.2**  
Minimum Monthly and Yearly  
Discharges at Check Dam Site

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### PLAN

Not to Scale

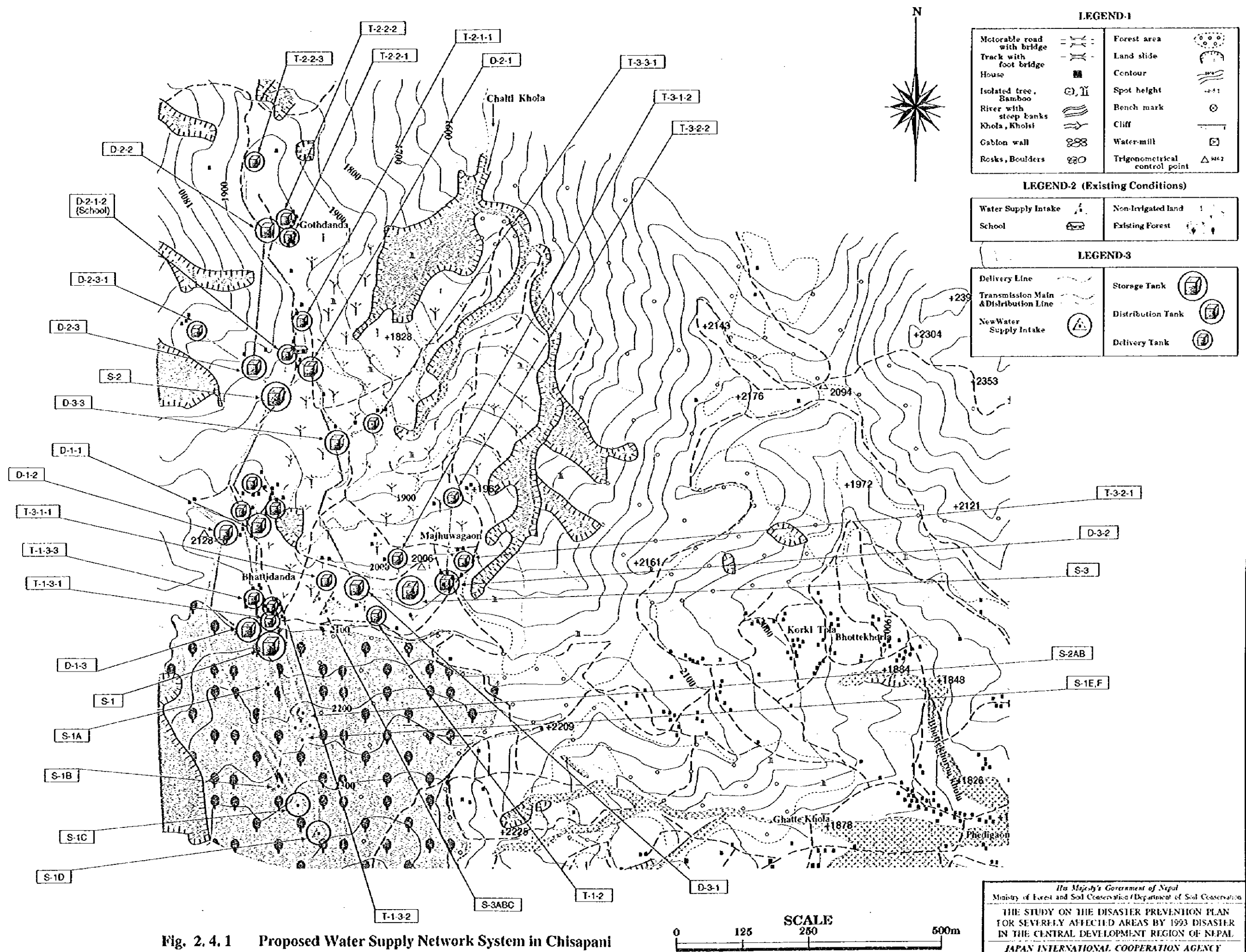


### PROFILE

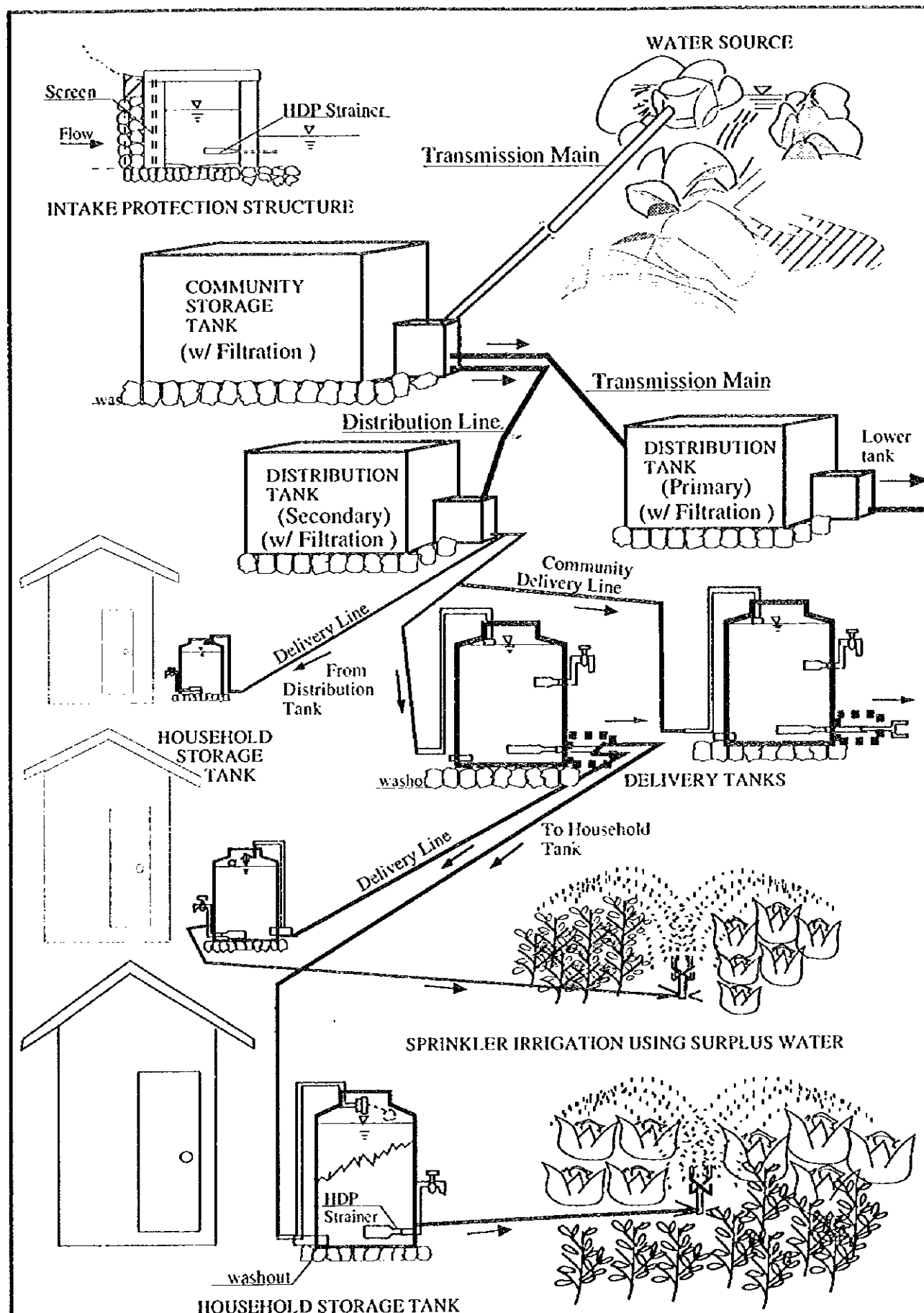
Not to Scale

**Fig. 2.3.3**  
**Schematic Drawing for Forebay Tank**

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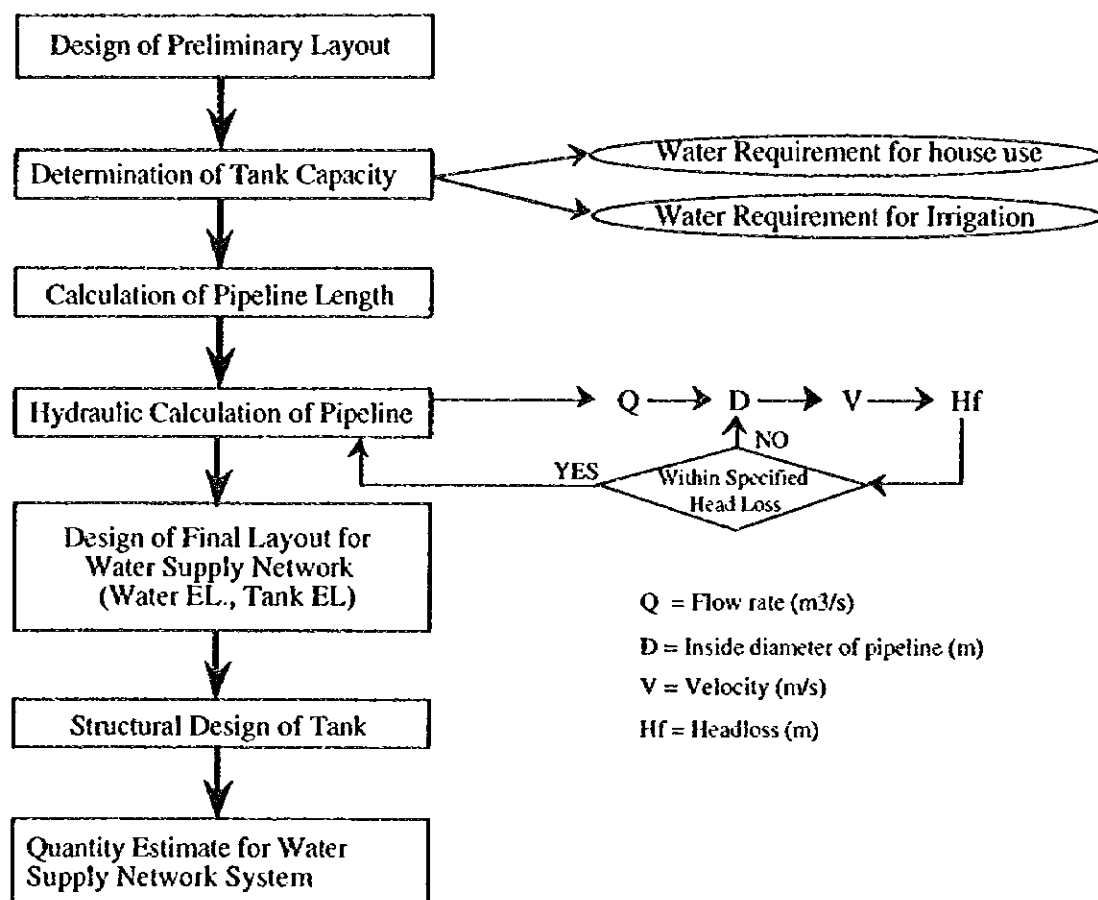






**Fig. 2.4.2**  
**Sketch Drawing for Rural Water Supply**  
**Network Development in Chisapani Area**

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**Fig. 2.4.3**  
**Flowchart for Design of Water Supply**  
**Network System in Chisapani Area**

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# LEGEND

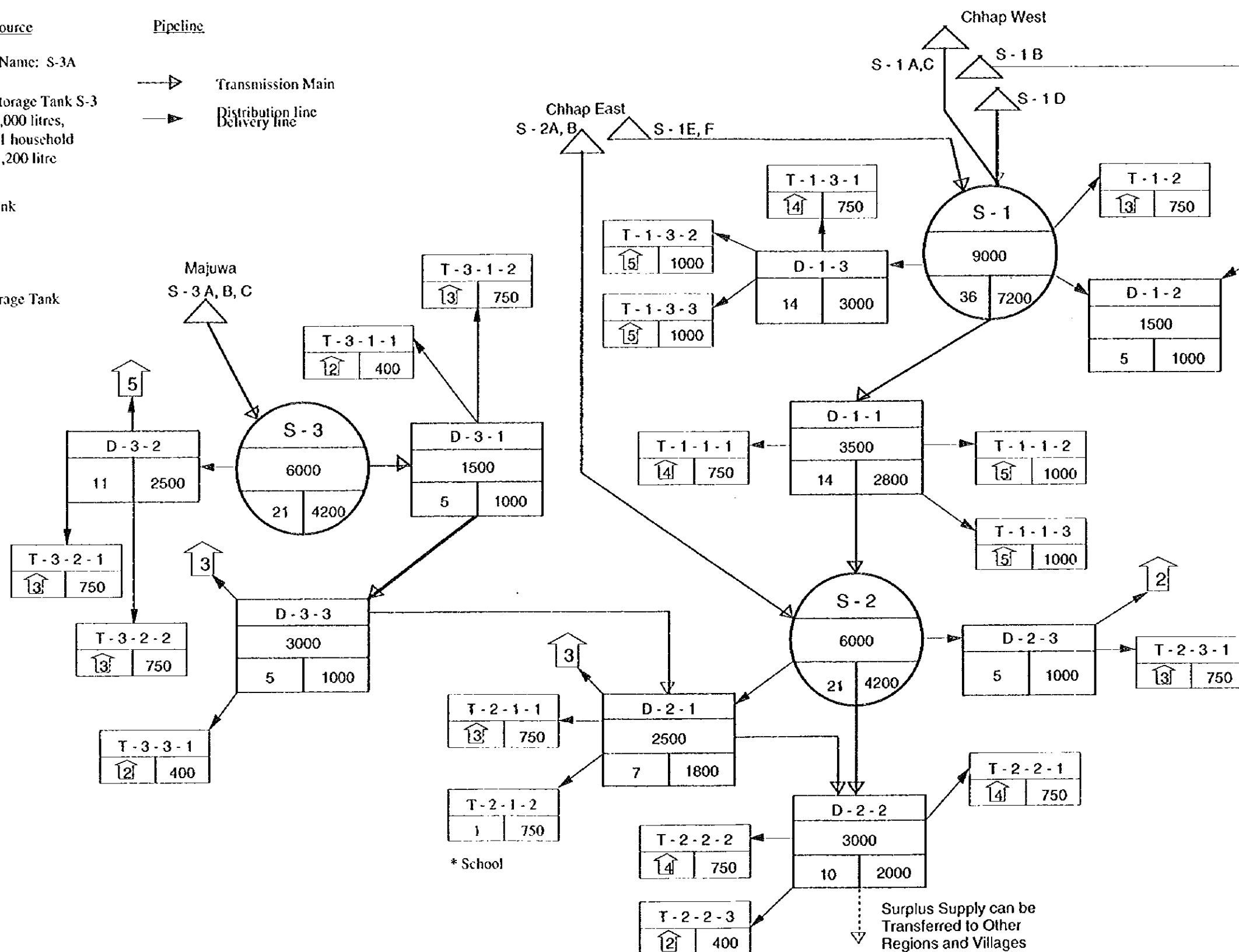
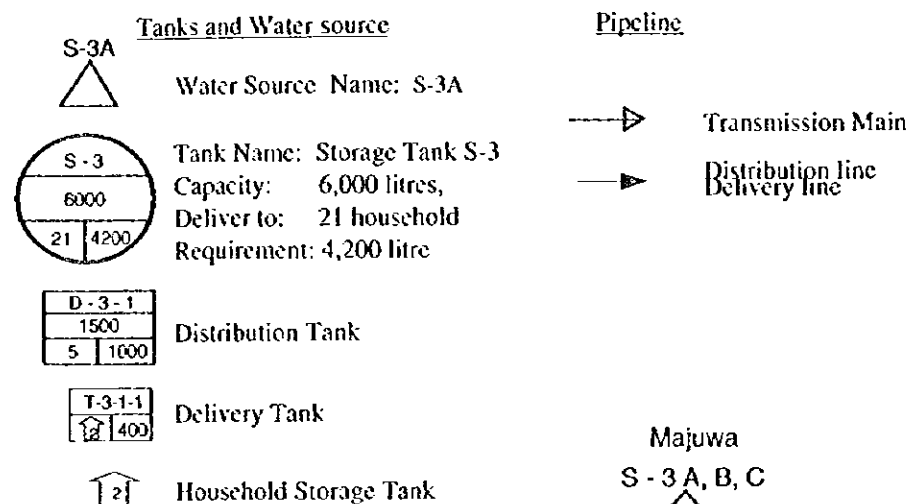
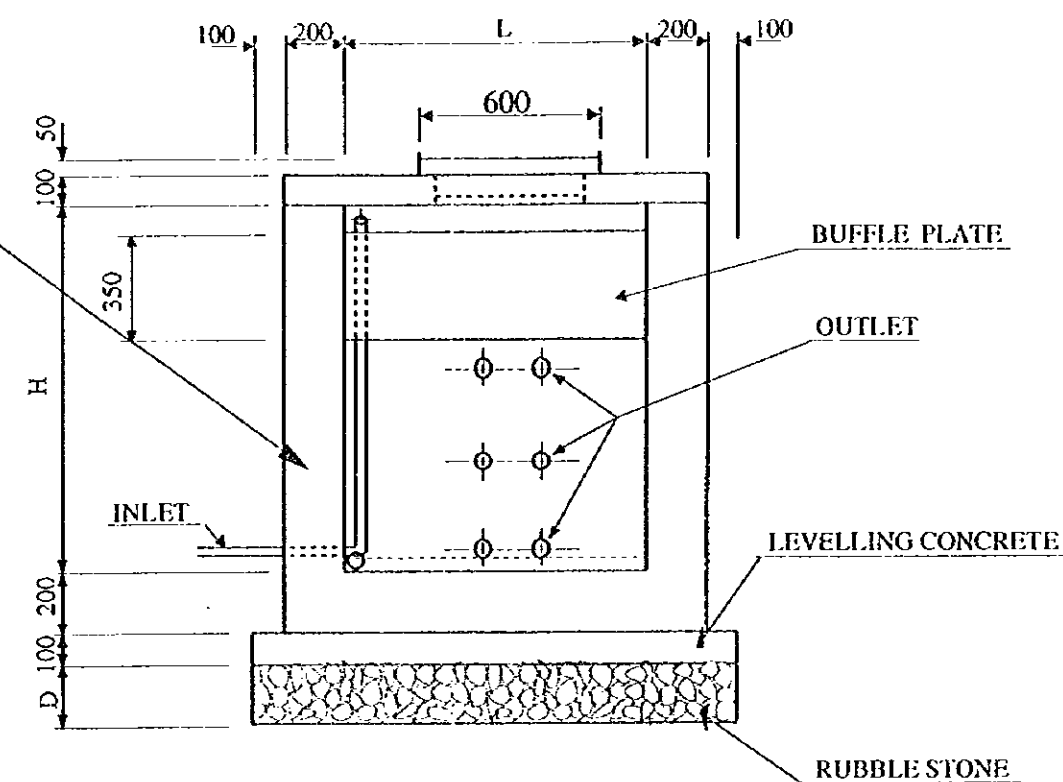


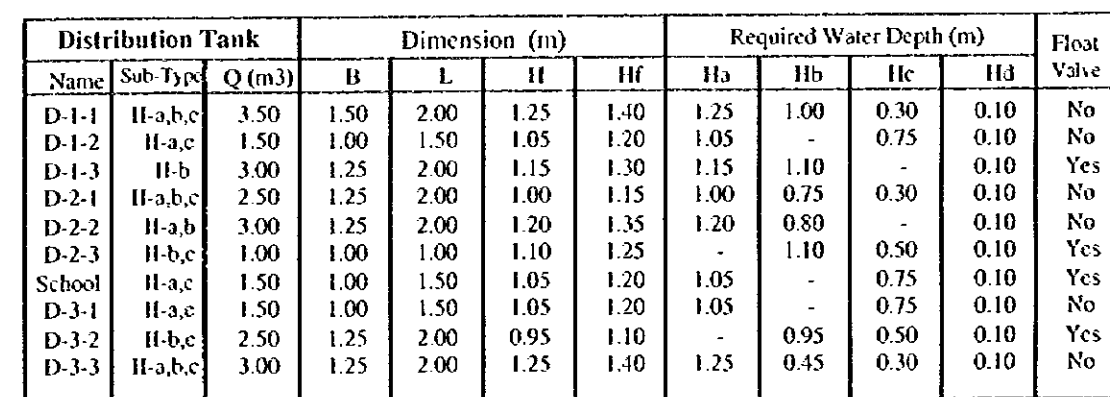
Fig. 2.4.4 Schematic Diagram for Rural Water Supply Network Development in Chisapani Area





SECTION A - A

## SECTION B - B



**Fig. 2.4.6      Distribution Tanks**



## READY-MADE PLASTIC TANK AND RELATED STRUCTURE

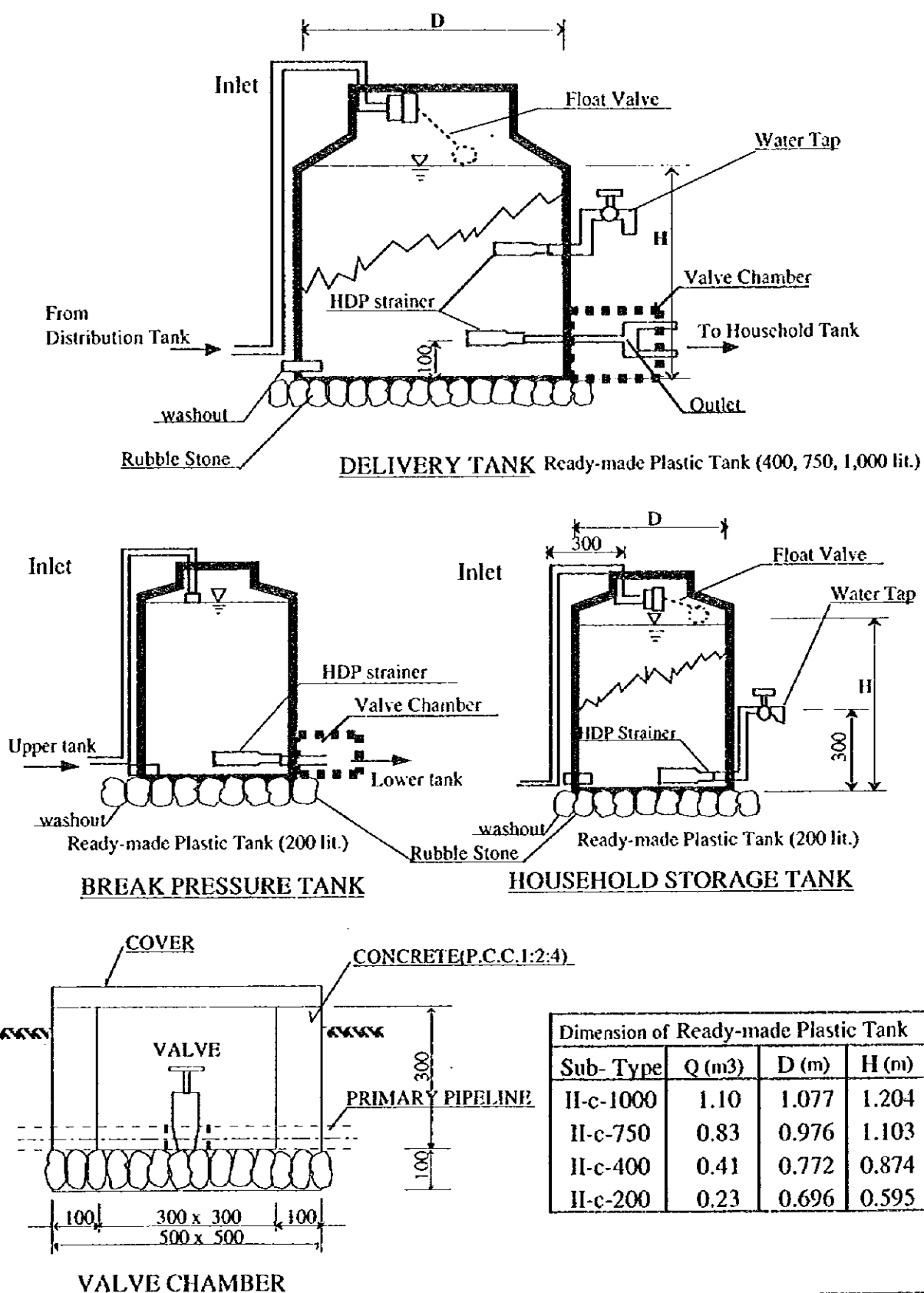
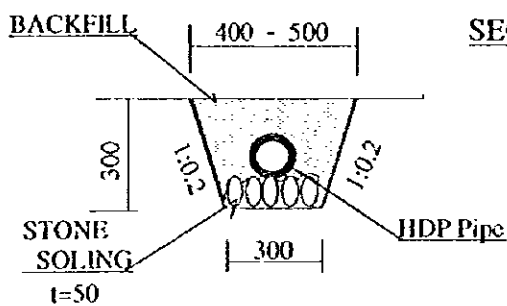
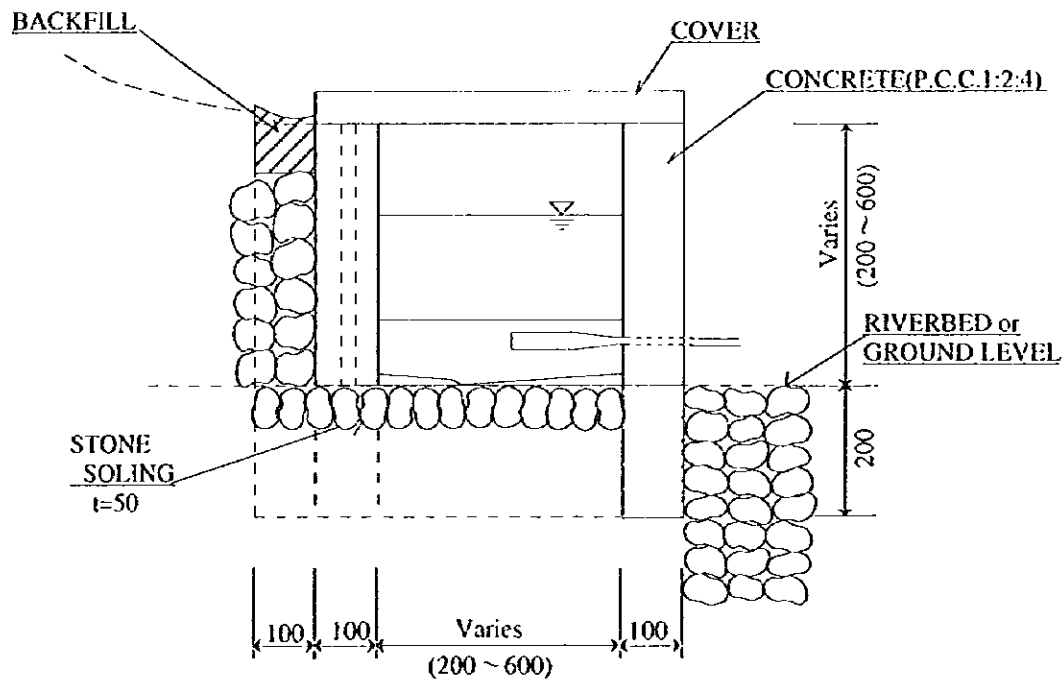
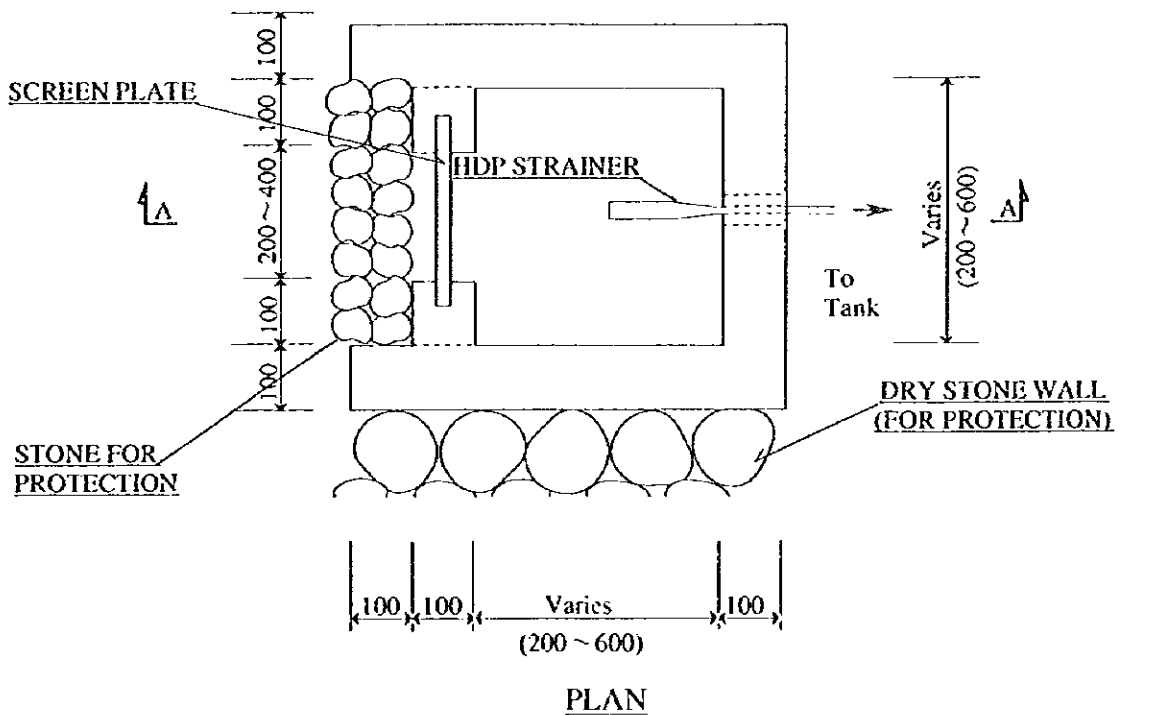


Fig. 2.4.7  
Plastic Tank and Related Structure

## INTAKE PROTECTION STRUCTURE



Not To Scale

**Fig. 2.4.8**  
**Intake Protection Structure**

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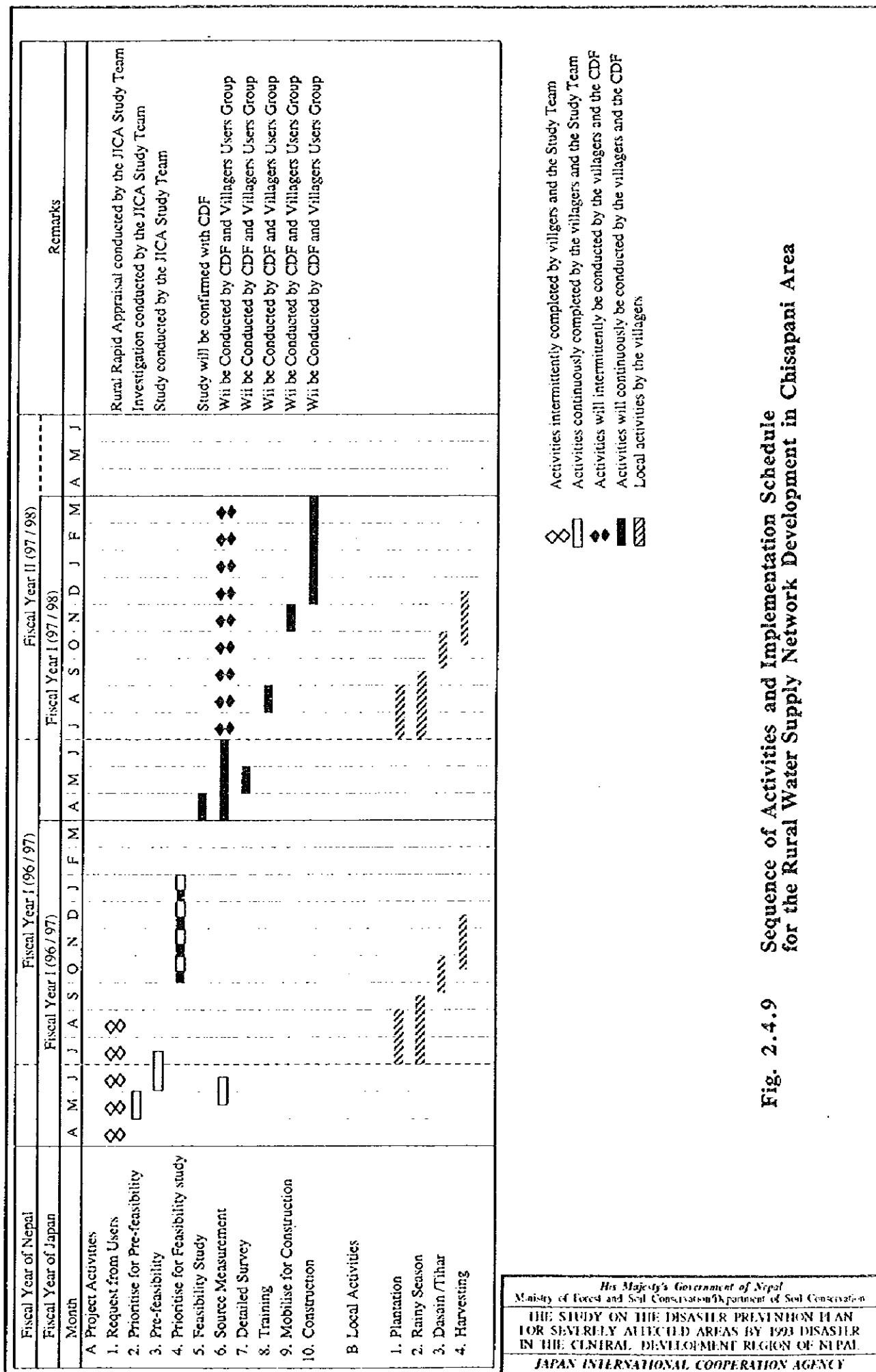


Fig. 2.4.9 Sequence of Activities and Implementation Schedule for the Rural Water Supply Network Development in Chisapani Area





Plate A: Vs gabion retaining wall under construction. The last layer is 3 m wide.

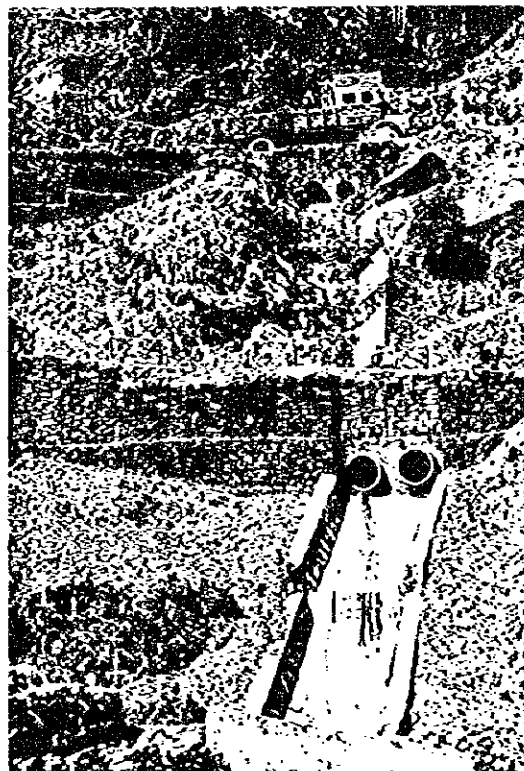


Plate B: Two subsequent double pipe culverts 0.60 cm with controlled outlet over some distance.

**Photo 1.2.1 Examples for Hill side Works  
in Rural Road Improvement (1/2)**

Source: Road Construction in the Nepal Himalaya:  
The Experience from The Lamosangu - Jiri Road Project.  
ICIMOD, March 1987

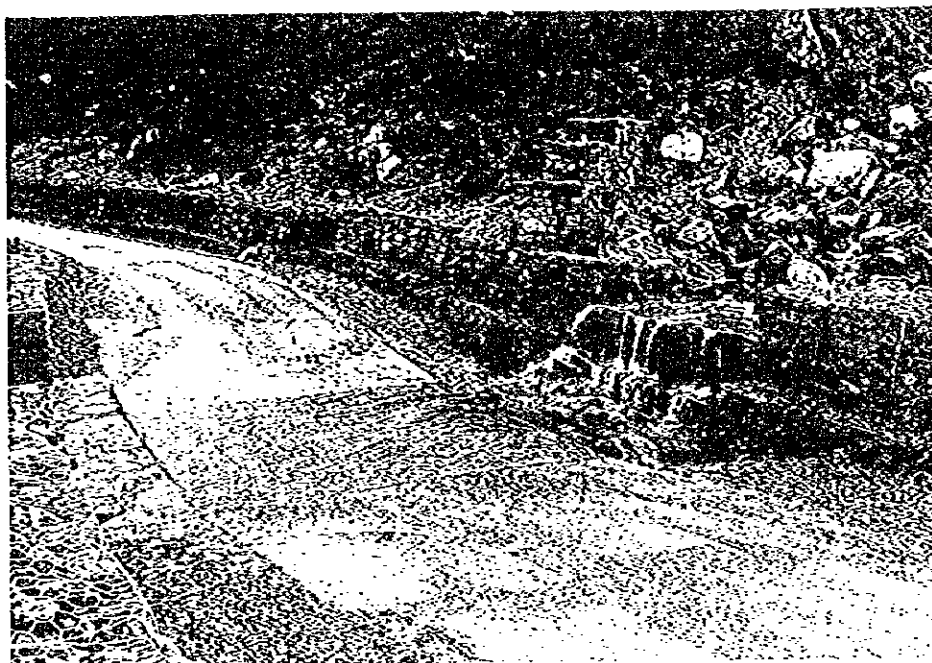


Plate C: Causeway with water guiding inlet and outlet structures.

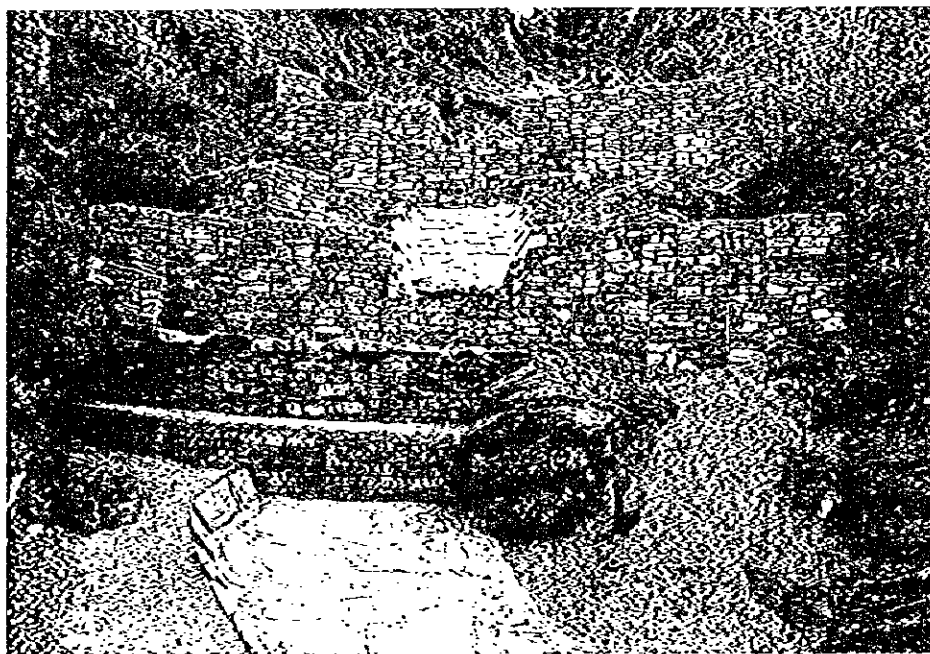
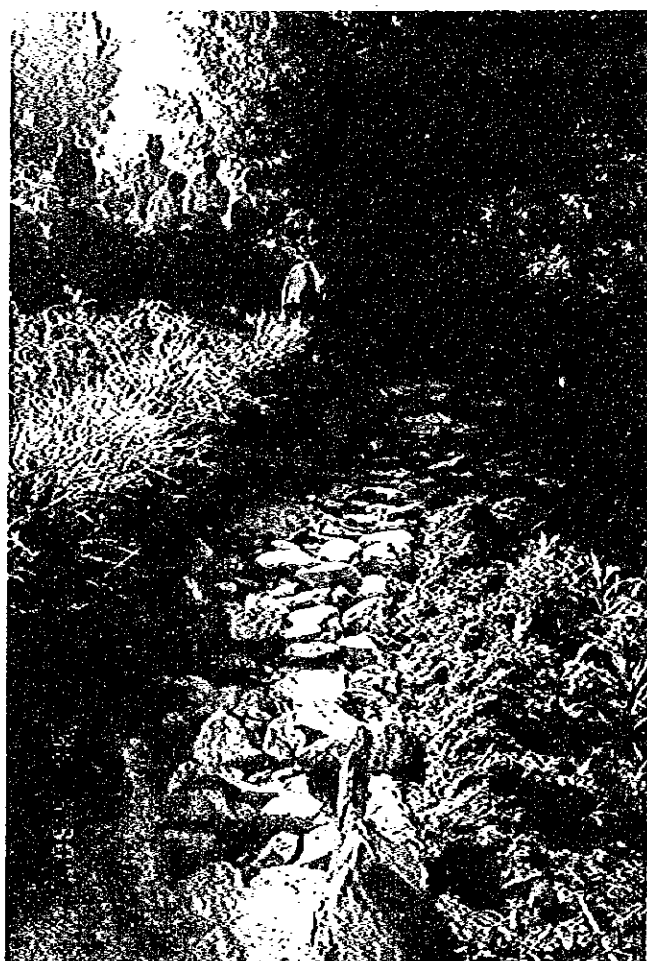


Plate D: Inlet protection of a gully by two checkdams with channeled water flow and stone slab covered checkdam crowns and steps.

**Photo 1.2.2 Examples for Hillside Works  
in Rural Road Improvement (2/2)**

Source: Road Construction in the Nepal Himalaya:  
The Experience from The Lamosangu - Jiri Road Project.  
ICIMOD, March 1987



Intake structure and headreach section using Gabion, concrete structures and HDP pipes (above).

Feeder canal with wet masonry (left).

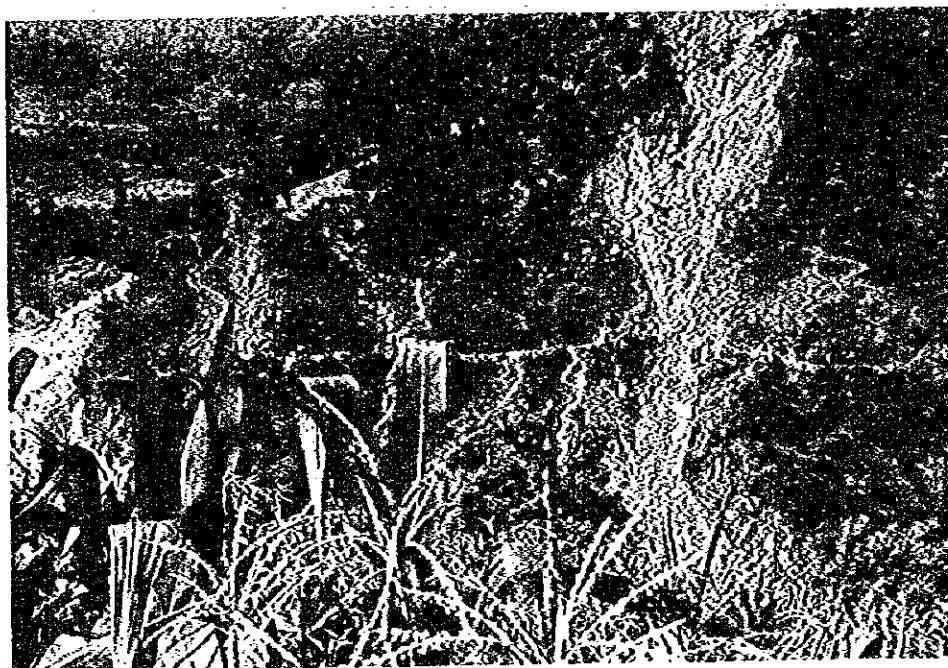
**Photo 1.5.1**

**Rehabilitation in Garrigaon Irrigation Project under People's participation**

(assisted by IFAD in May 1996,

Phedigaon / Phatbazar, Palung VDC, Makwanpur.)

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Headreach canal is disconnected by a heavy landslide .



Intake structure and headreach canal along Manahari Khola were covered by debris.

**Photo 1.5.2**

**Damages to Intake structure and Headreach canal in Namtar Irrigation Project.  
(Namtar / Tilar, Namtar VDC, Makwanpur)**

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Aqueduct will be recovered after removal of soil and debris.



Culvert as well as gabion protection works were destroyed by debris from the stream.

**Photo 1.5.3**

**Example of Damages to Crossing structures (Namtar Irrigation Project, Namtar VDC, Makwanpur).**

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Testing of existing source (above); Newly found sources (below).



**Photo 1.5.4**

**Water source Inventory under People's participation in Chisapani.**

**(Chisapani, Agra VDC, Makwanpur)**

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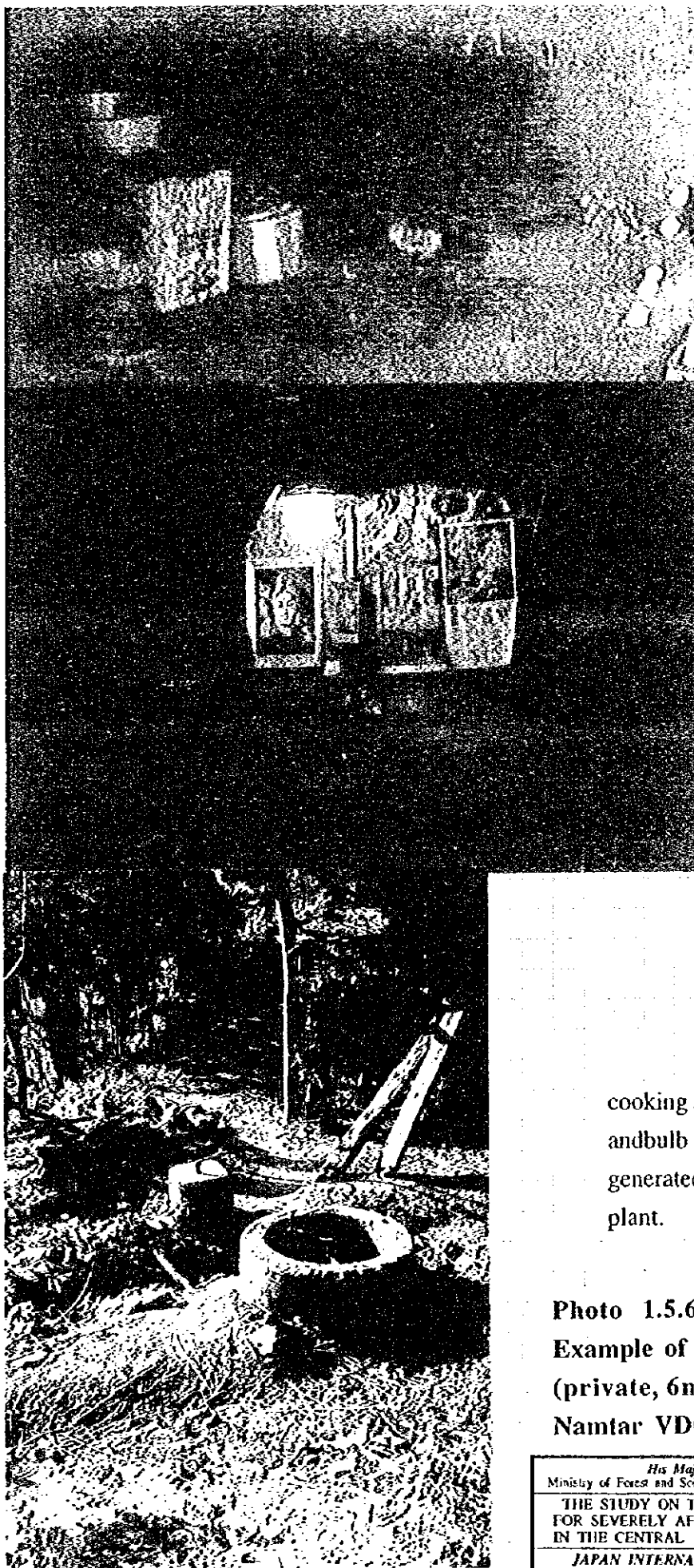


**Photo 1.5.5**

**Trial plantation of Mulberry tree seedlings under People's participation with JICA Expert and the Study Team in June, 1996.**

**(Chisapani, Agra VDC, Makwanpur)**

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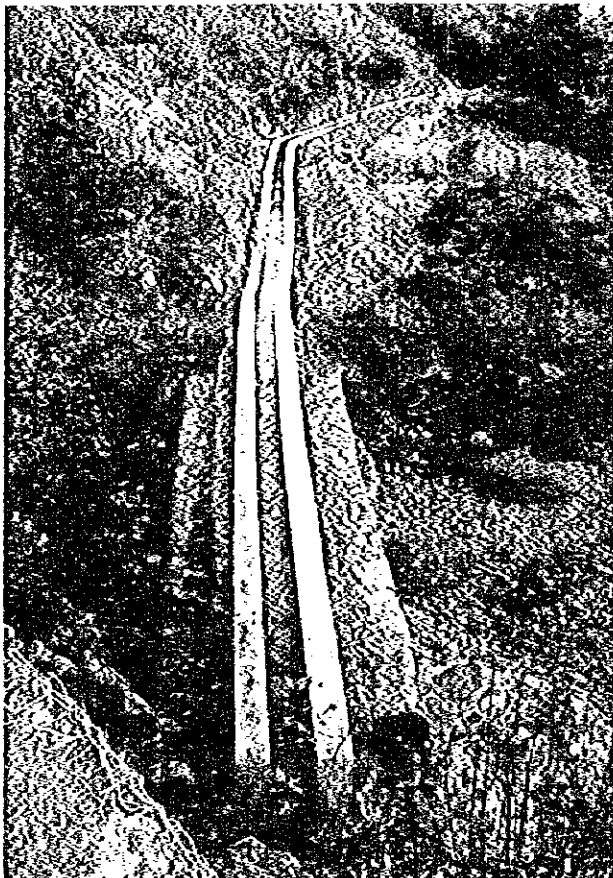


cooking stove (above)  
and bulb (below)  
generated by a biogas  
plant.

**Photo 1.5.6**  
**Example of a Biogas plant**  
**(private, 6m<sup>3</sup>) in Jyarpur,**  
**Namtar VDC, Makwanpur.**

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Temporal repair with gabion wall  
and iron pipe (below).

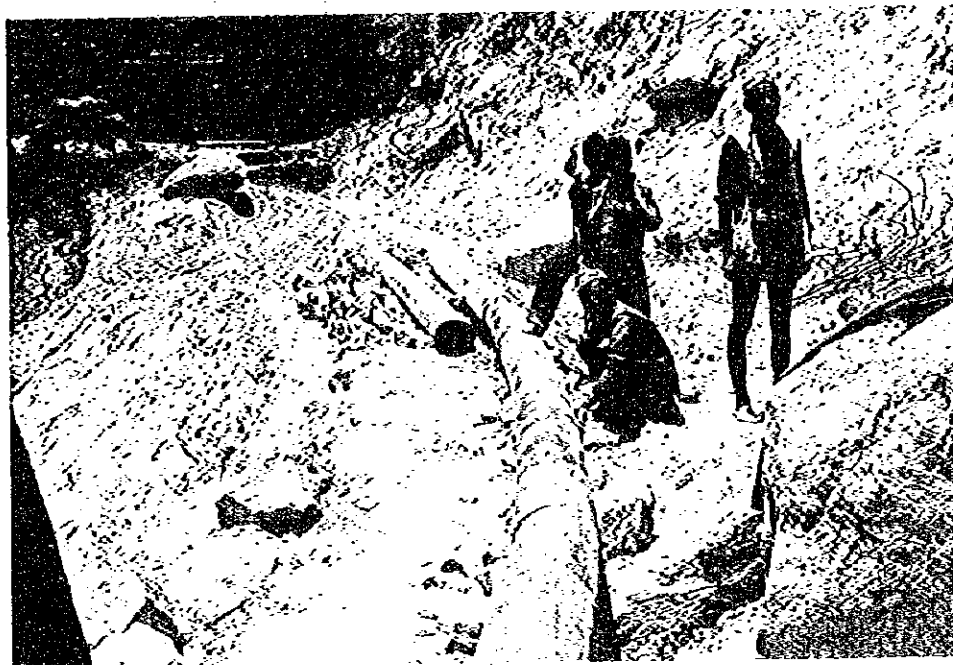
Final repair with gabion wall  
and cemented canal (above).

(Kurugaon, Palung VDC, Makwanpur)

#### **Photo 1.5.7**

**Example of Reclamation of  
Crossing structure under  
People's participation.**

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HDP pipes are laid on gravel and covered by earth (above) after jointed (below).



**Photo 1.5.8**

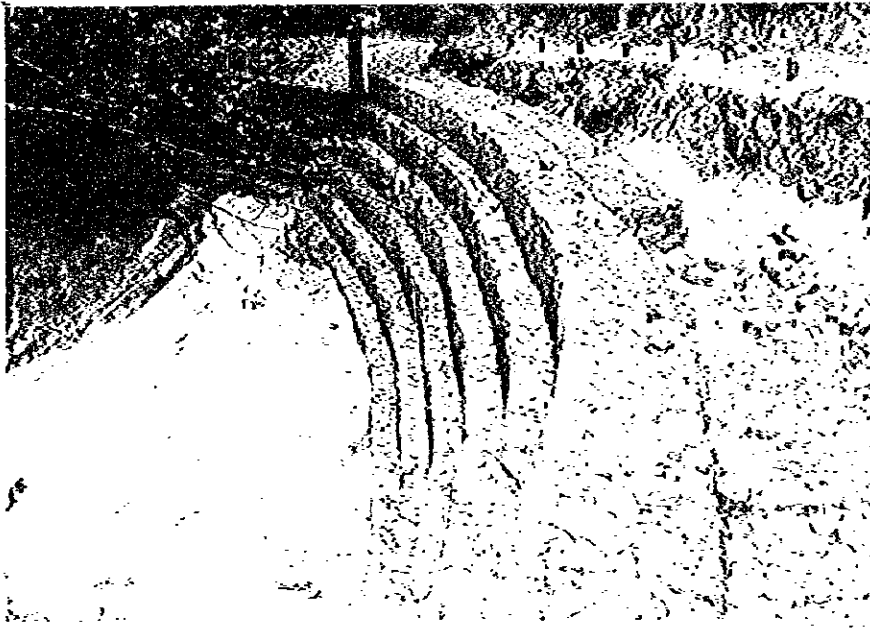
**Example of Rehabilitation of Headreach canal using HDP pipes under People's participation.**

**(Povati Irrigation Project, Dolakha District)**

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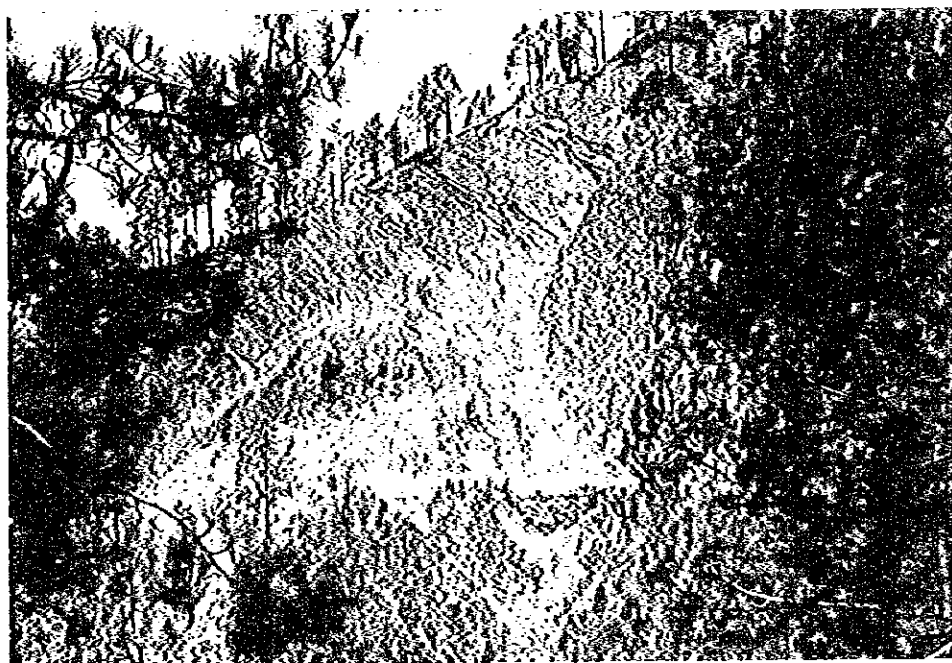
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**Photo 1.5.9**  
**Example of Gabion propwall**  
**construction under People's**  
**participation.**  
**(Daman, Tribhuvan Highway,**  
**Daman VDC, Makwanpur).**

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**Photo 2.1.1 Site - (1)**

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Photo 2.1.2 Site - (2)

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**Photo 2.1.3 Site - (3)**

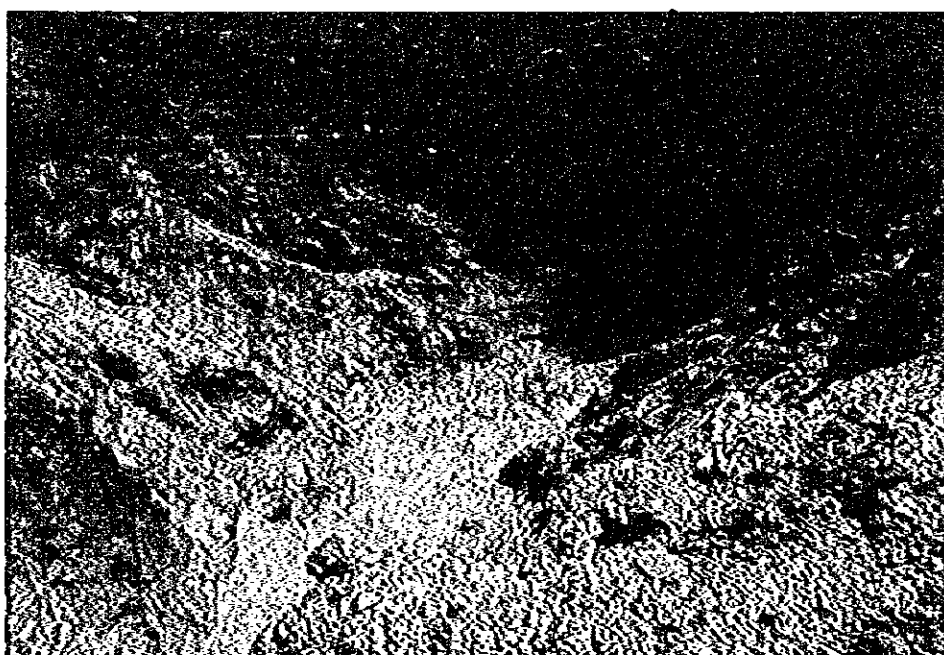


Photo 2.1.4 Site - (4)

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Photo 2.1.5 Site - (5)

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