

Table 3.5.6 Estimated Per Ropani Production of Pear and Lemon

Name of Fruits	Pear	Lemon
Trees/Ropani	7	20
Production/Ropani	600 kg	500 pieces/tree
Price(Rs)	Rs 3 per kg	0.75 per piece
Total (Rs)	12,600	7,500
Remarks	From fifth year after plantation	From fifth year after plantation

Source: Hearing Survey by the Study Team, 1996

Table 3.5.7 Export of Medicinal Herbs (1974/75-1994/95)
(Rs Million)

Year	India	Other Countries	Total Export
1974/75	2.2	9.9	12.1
1975/76	2.8	6.3	9.1
1976/77	6.3	5.8	12.1
1977/78	6.5	5.5	12.0
1978/79	5.2	4.4	9.6
1989/80	13.5	1.5	15.0
1980/81	16.5	0.9	17.4
1981/82	6.4	0.5	6.9
1982/83	5.9	0.5	6.4
1983/84	8.0	0.6	8.6
1984/85	27.9	0.8	28.7
1985/86	16.6	0.3	16.9
1986/87	8.1	0.1	8.2
1987/88	16.4	0.2	16.6
1988/89	13.7	0.8	14.5
1989/90	4.5	2.6	7.1
1990/91	21.3	1.2	22.5
1991/92	22.4	4.5	26.9
1992/93	24.0	3.5	27.5
1993/94	15.4	2.3	17.7
1994/95	25.3	6.3	31.6

Source: Economic Survey, Ministry of Finance, 1995

Table 3.5.8 Some Medicinal Herbs and their Cost of Production and Net Profit

Medicinal Herbs Particulars	Chiraito (Swertia chirayita)	Jatamansi (Nardostachys Jatamansi)	Sugandhawal (Valeriana wallichii)
Planting Season	Feb/Mar to Apr/May	Mar/Apr	Feb/Mar (can be harvested after two years)
Expenditure per ha (Rs)	21,190 (1,060 per ropani)	14,400 (720 per ropani)	44,000 (2,200 per ropani)
Average Production per ha /kg	1,000 (50 kg per ropani)	750 (38 kg per ropani)	3,000 (150 kg per ropani)
Price per kg (Rs)	50	30	45
Annual Income per ha (Rs)	50,000 (2,500 per ropani)	22,500 (1,125 per ropani)	135,000 (6,750 per ropani)
Net Income per year (Rs)	28,810 (1,440 per ropani)	8,100 (405 per ropani)	91,000 (4,550 per ropani)

Source: Nepal Herb Production and Processing Company Ltd.

PHEDIGAON / PHATBAZAR



LEGEND:

Geology

- mr Markhu Quarsites, Phylites
- Ku Kulekhani Schists, Phylites
- Strik and dip of bedding plane

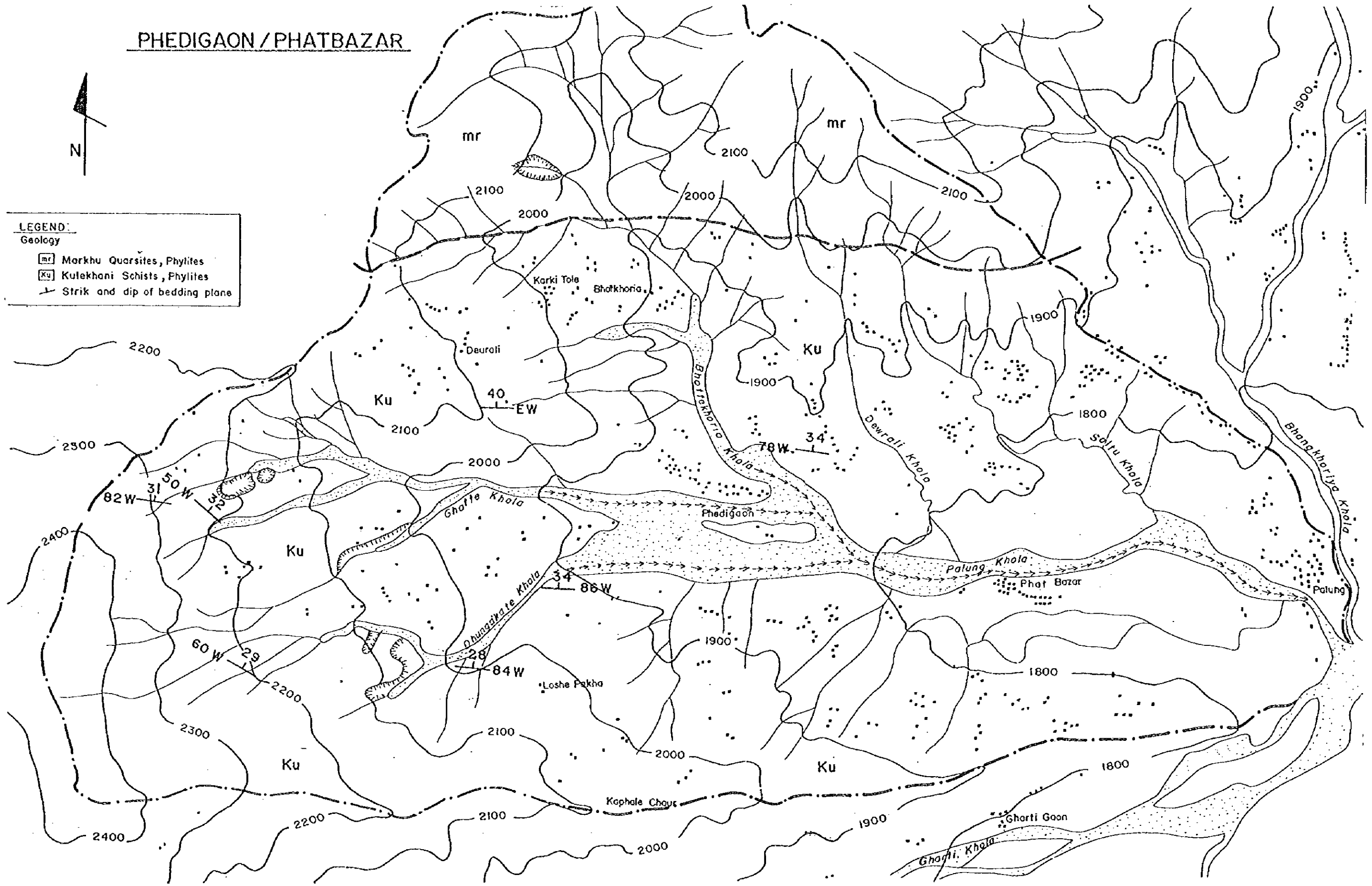
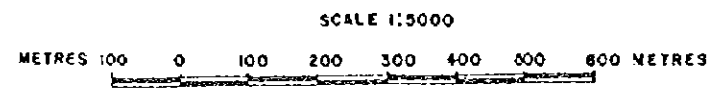


Fig. 3.1.1
Topographic Map of
Phedigaon/Phatbazar Area



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Profiles of Phedigaon Torrents

Vertical scale = 1:2000
 Horizontal scale = 1:5000

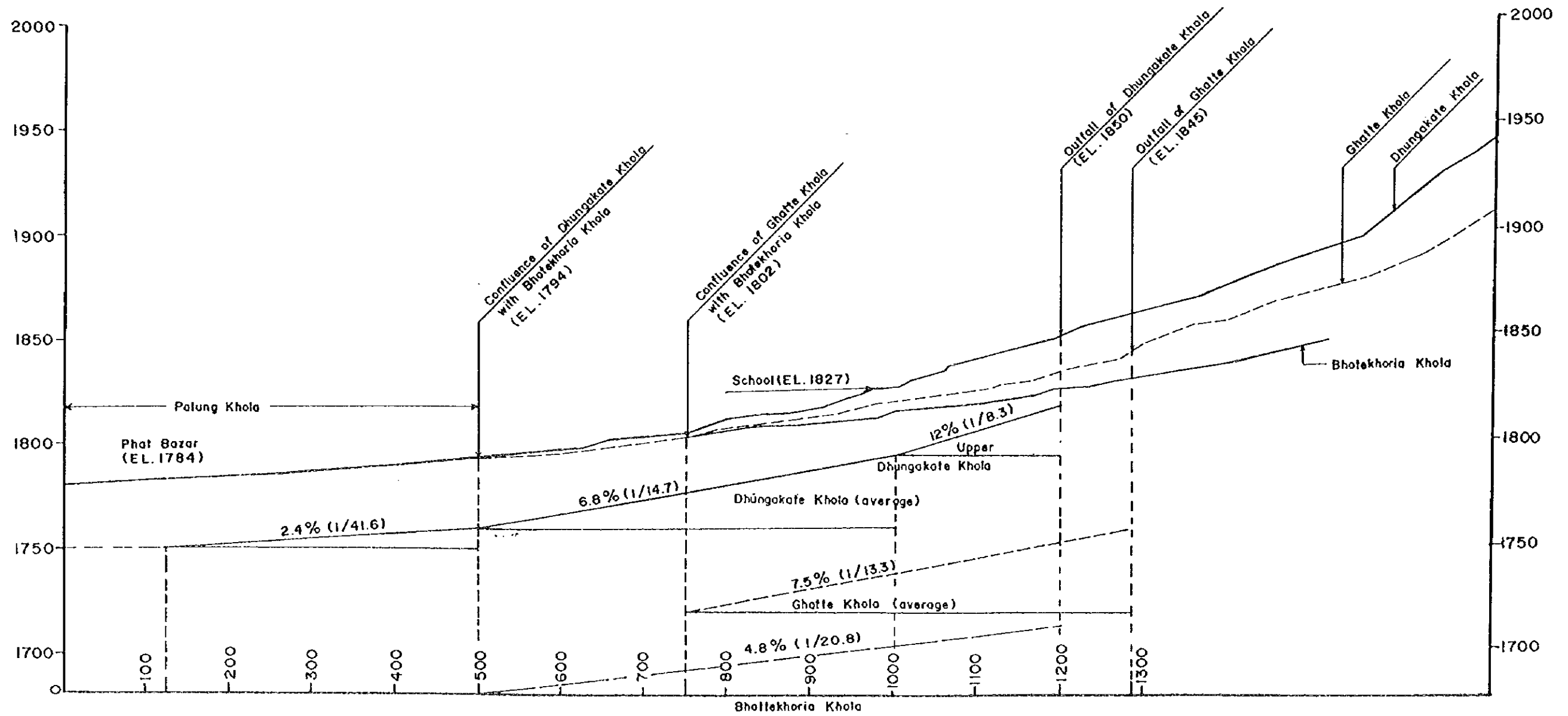
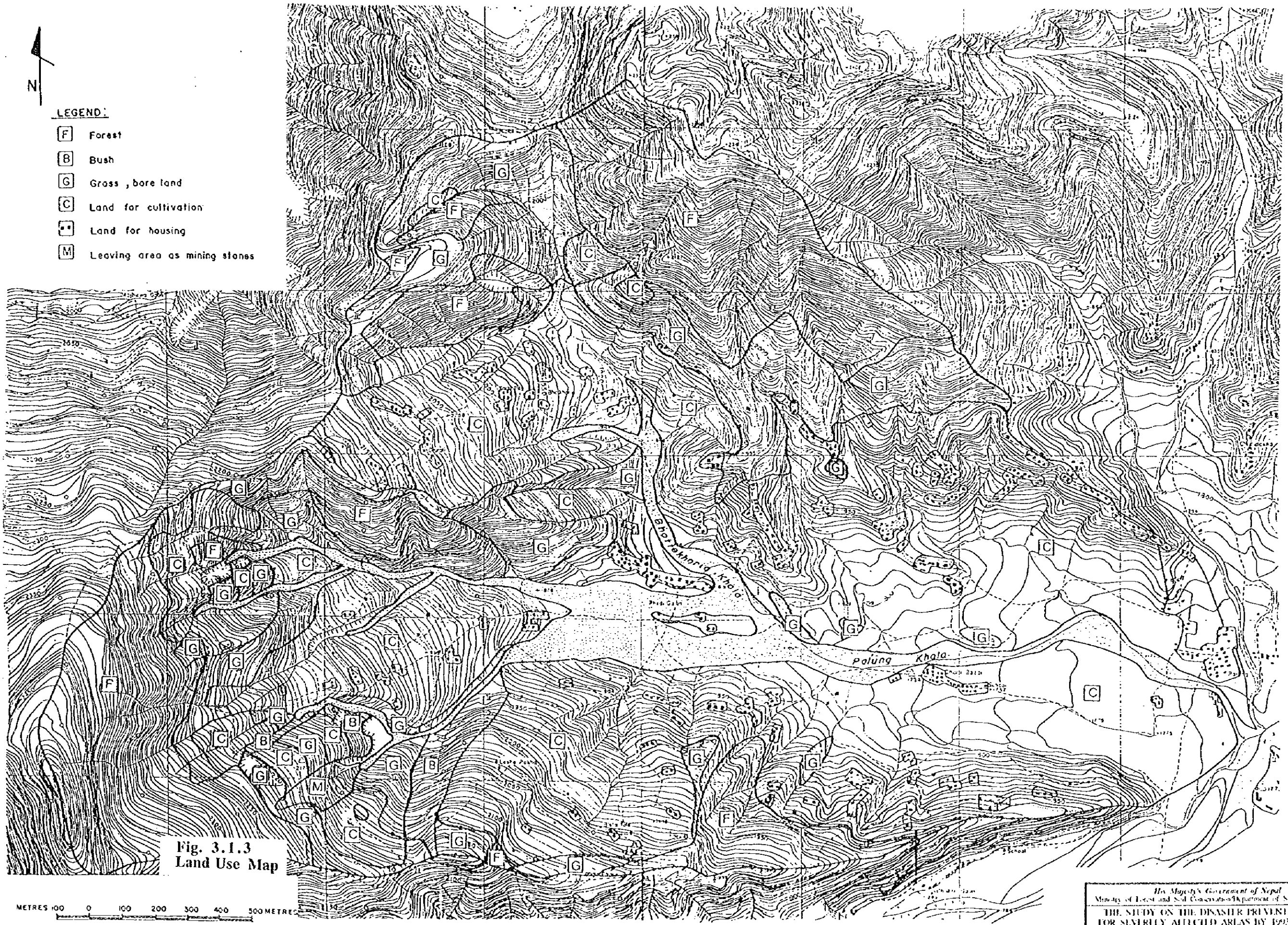


Fig. 3.1.2
 Profiles of Phedigaon Torrents

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- LEGEND:**
- F Forest
 - B Bush
 - G Grass , bare land
 - C Land for cultivation
 - Land for housing
 - M Leaving area as mining stones

Fig. 3.1.3
Land Use Map

METRES 100 0 100 200 300 400 500 METRES

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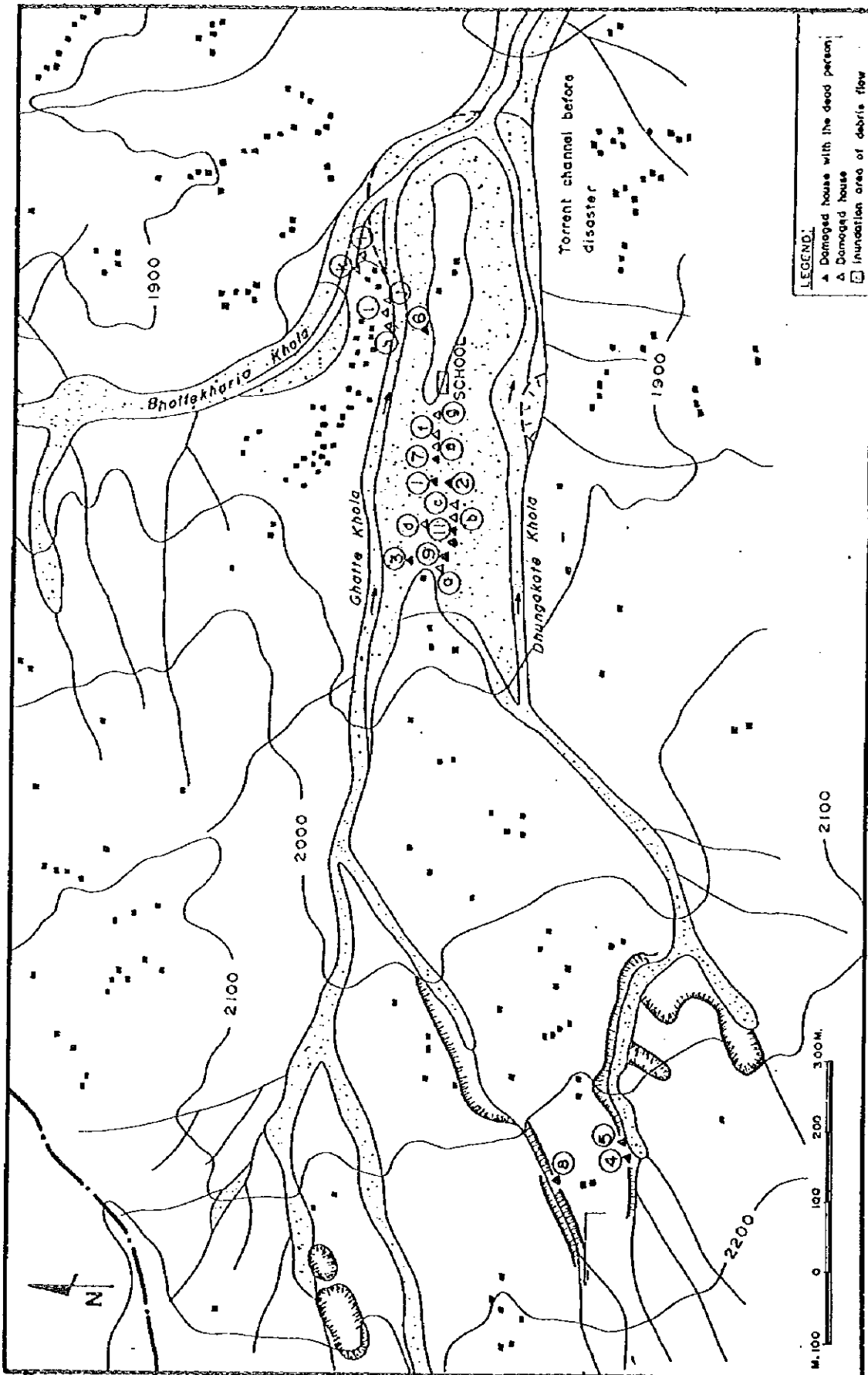


Fig. 3.2.1
Location of Damaged Houses due to the 1993 Disaster

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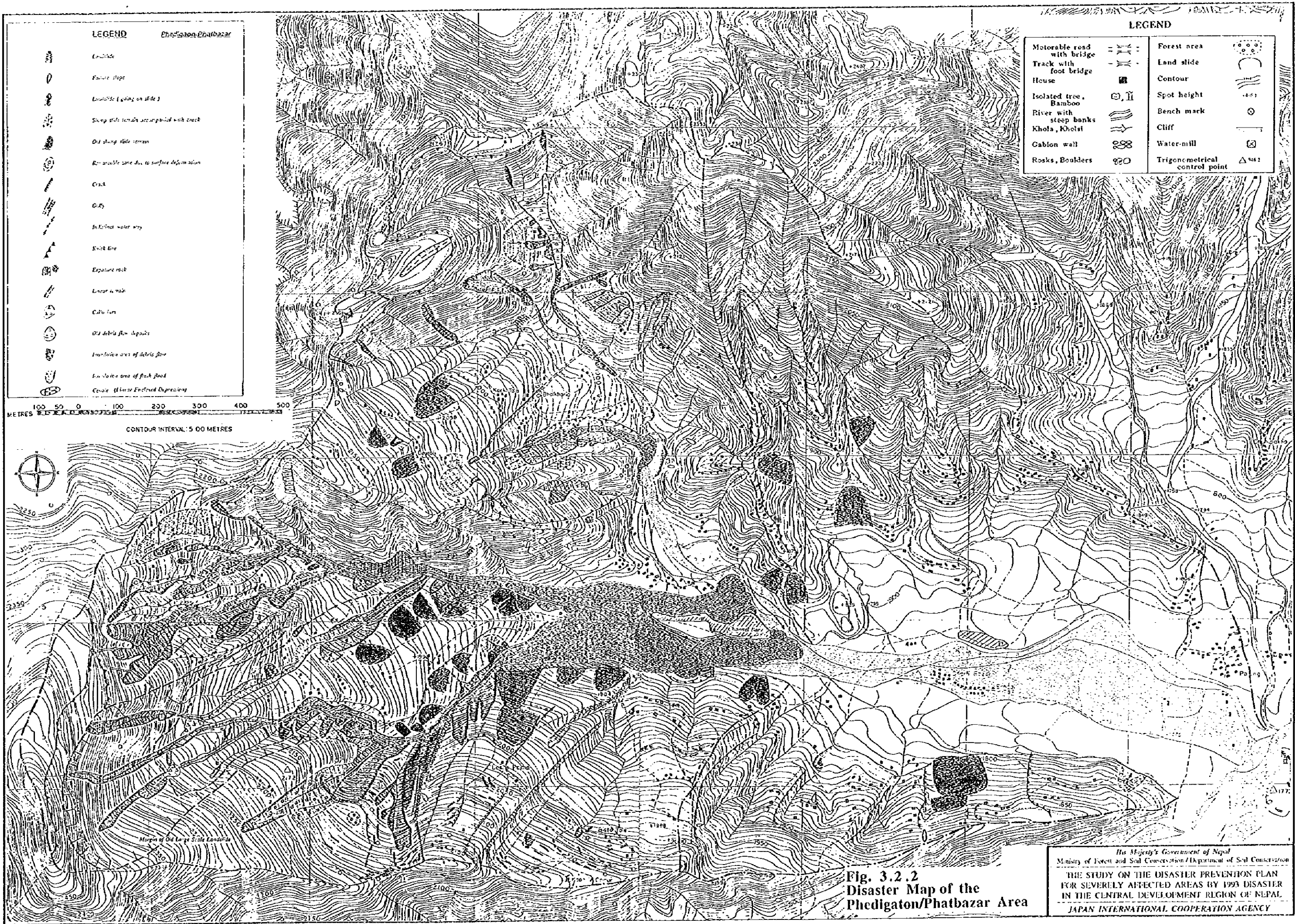
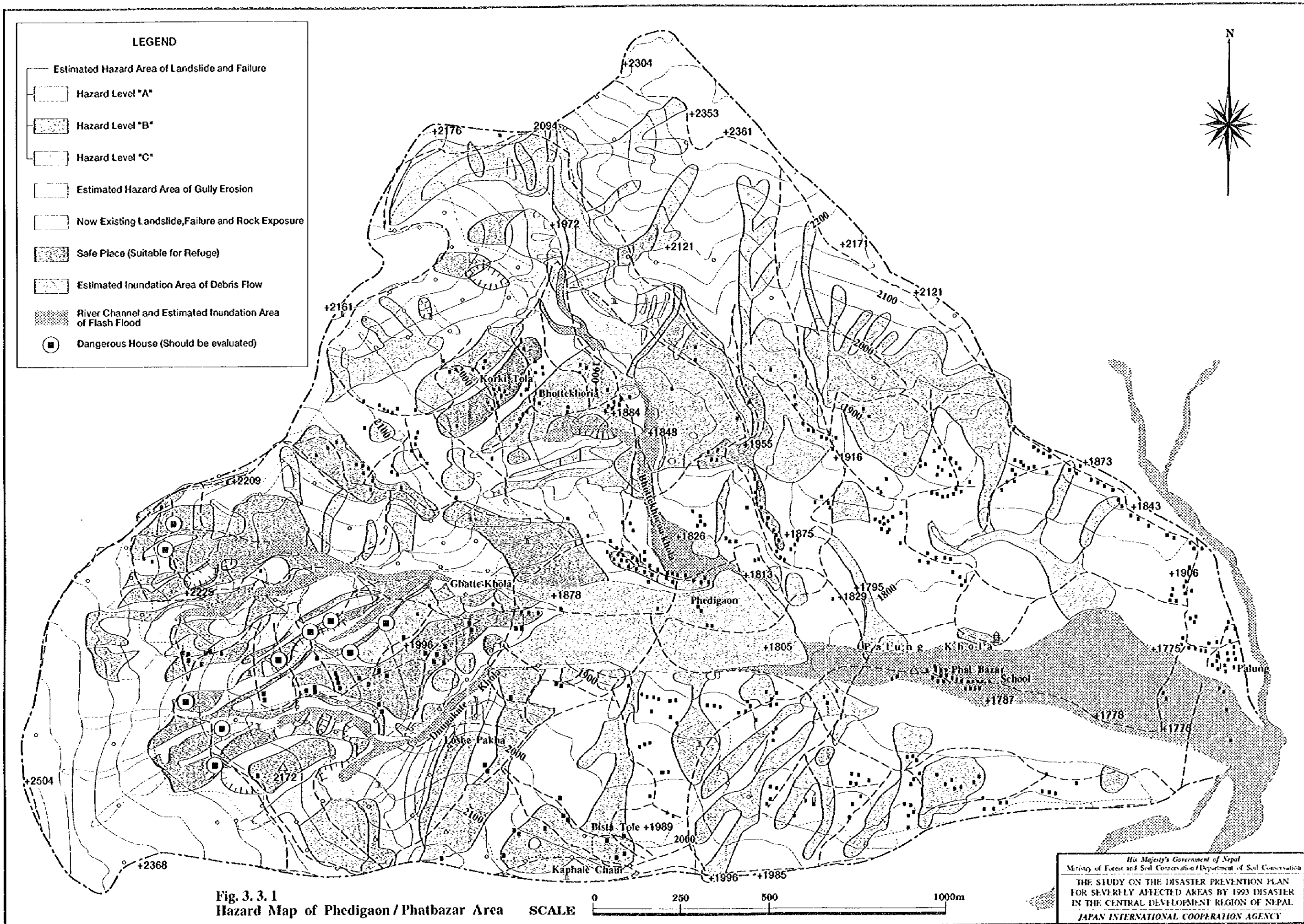


Fig. 3.2.2
Disaster Map of the
Phedigaton/Phatbazar Area

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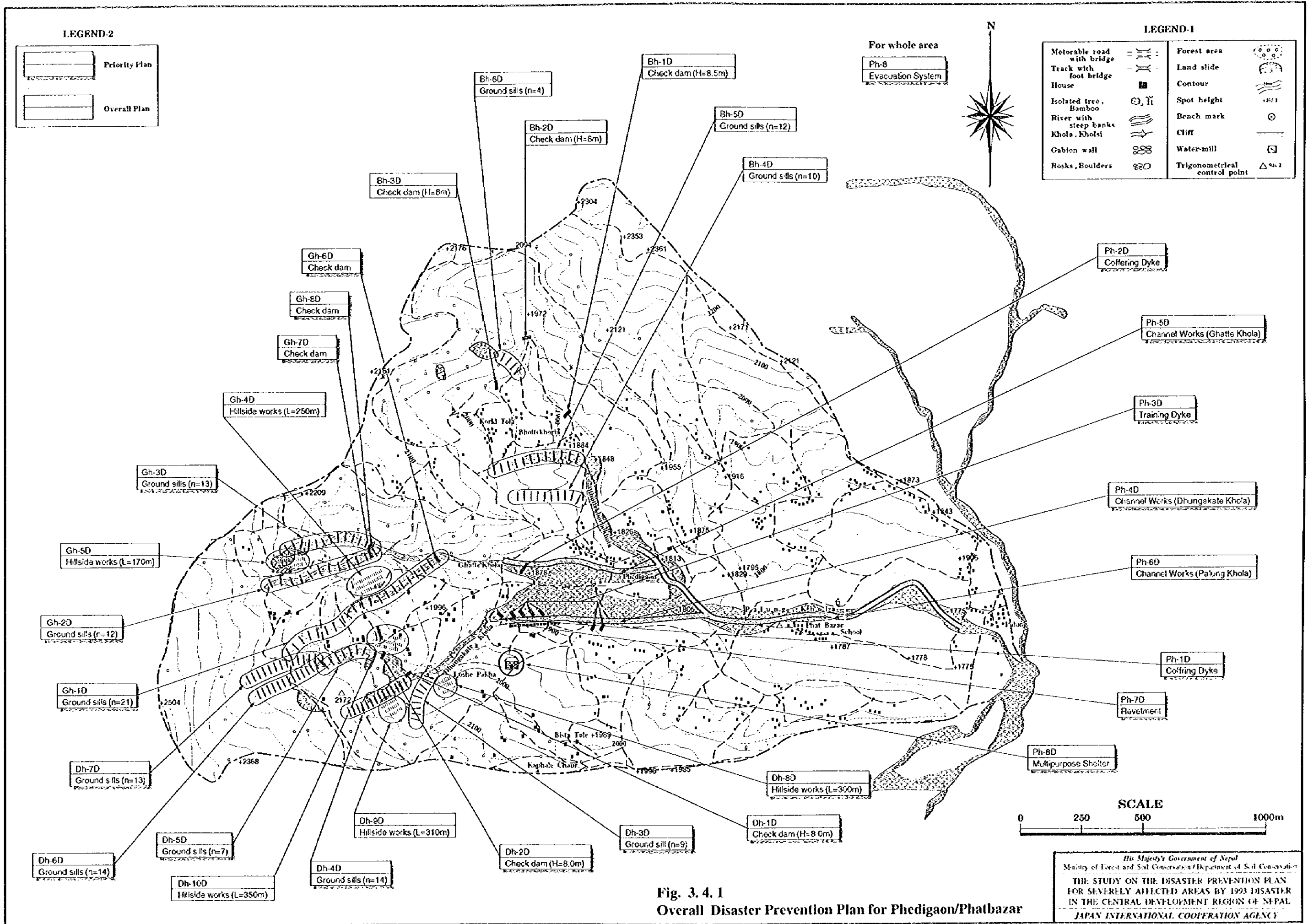


Fig. 3.4.1
Overall Disaster Prevention Plan for Phedigaon/Phatbazar

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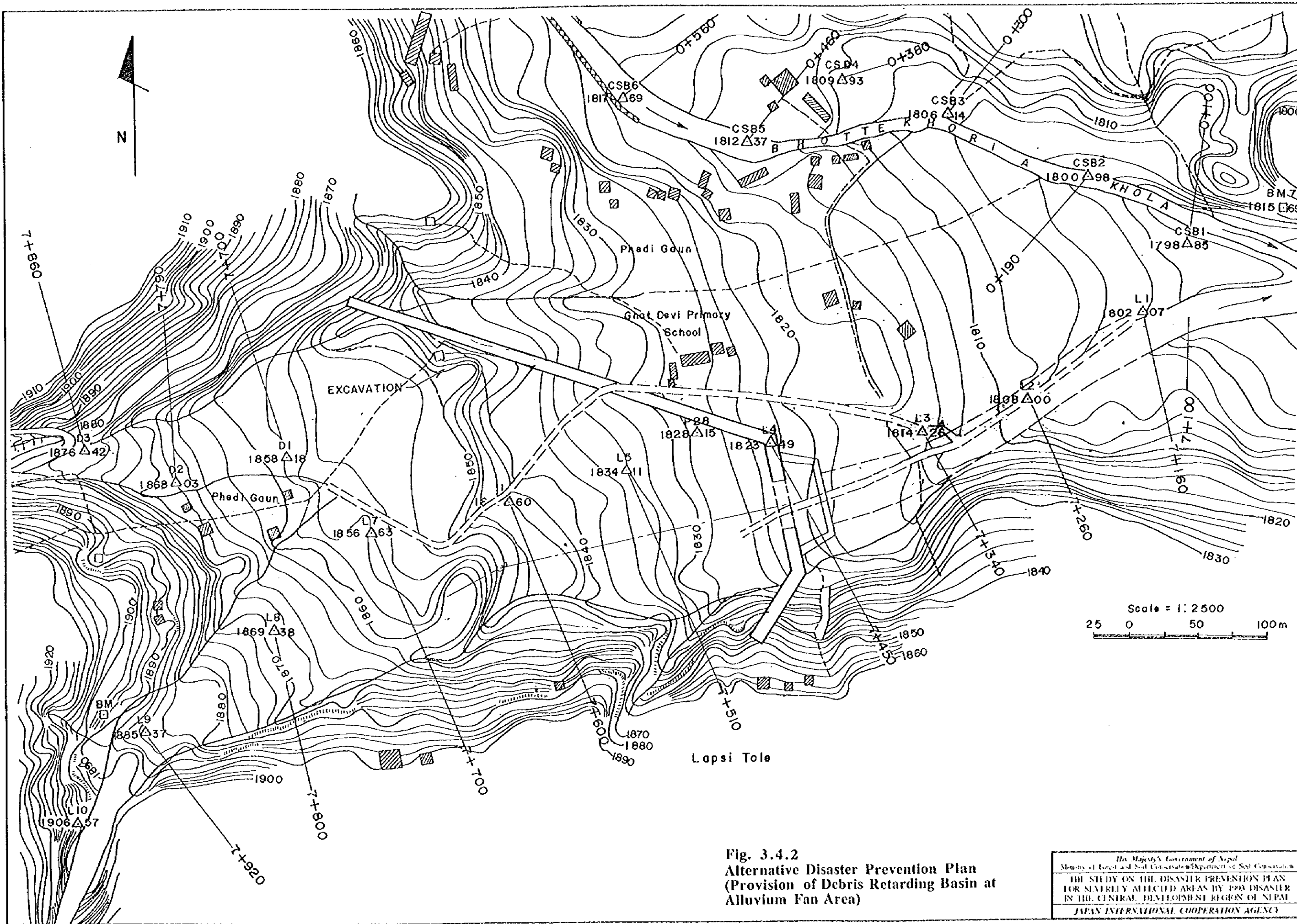


Fig. 3.4.2
 Alternative Disaster Prevention Plan
 (Provision of Debris Retarding Basin at
 Alluvium Fan Area)

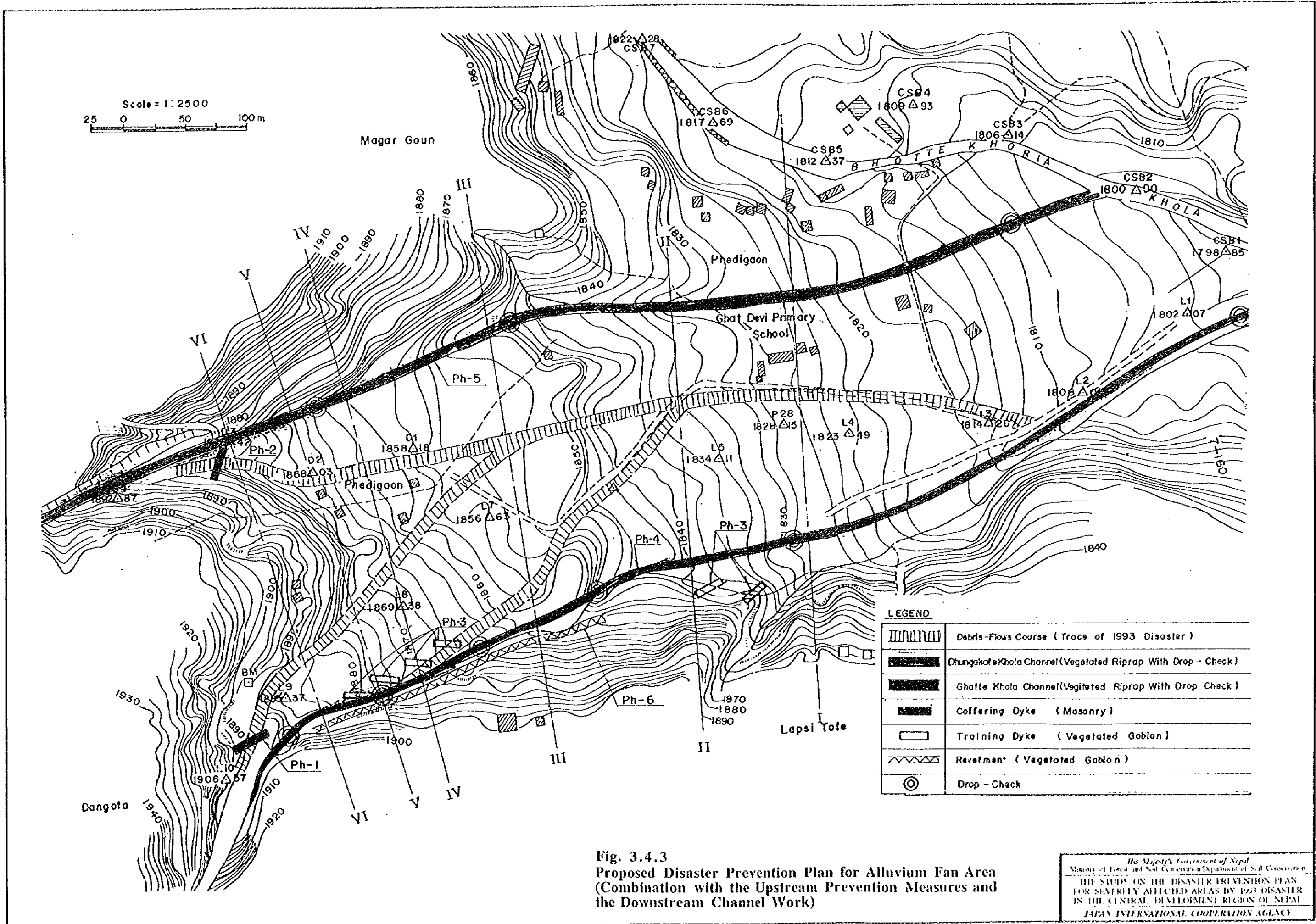


Fig. 3.4.3
Proposed Disaster Prevention Plan for Alluvium Fan Area
(Combination with the Upstream Prevention Measures and
the Downstream Channel Work)

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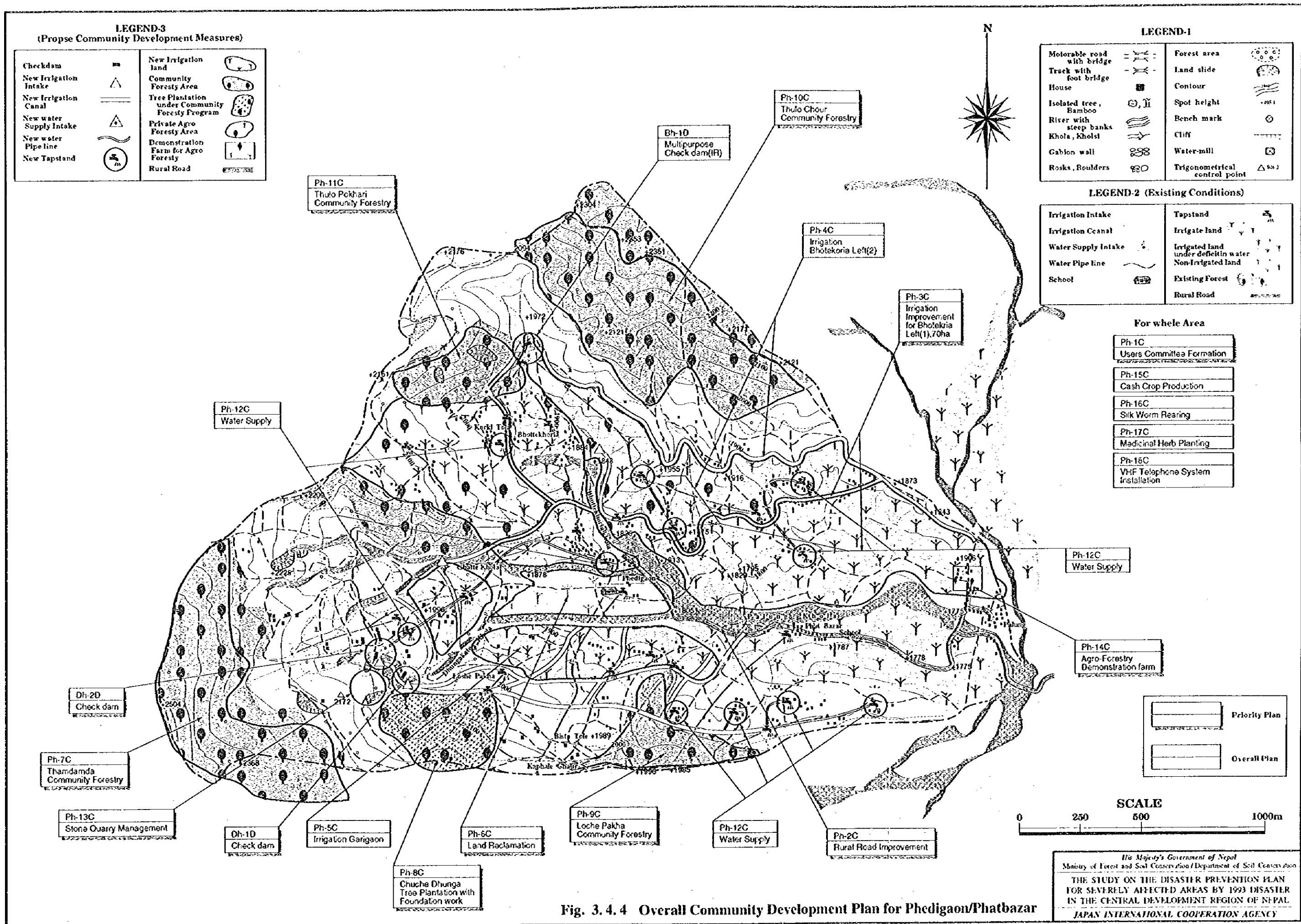
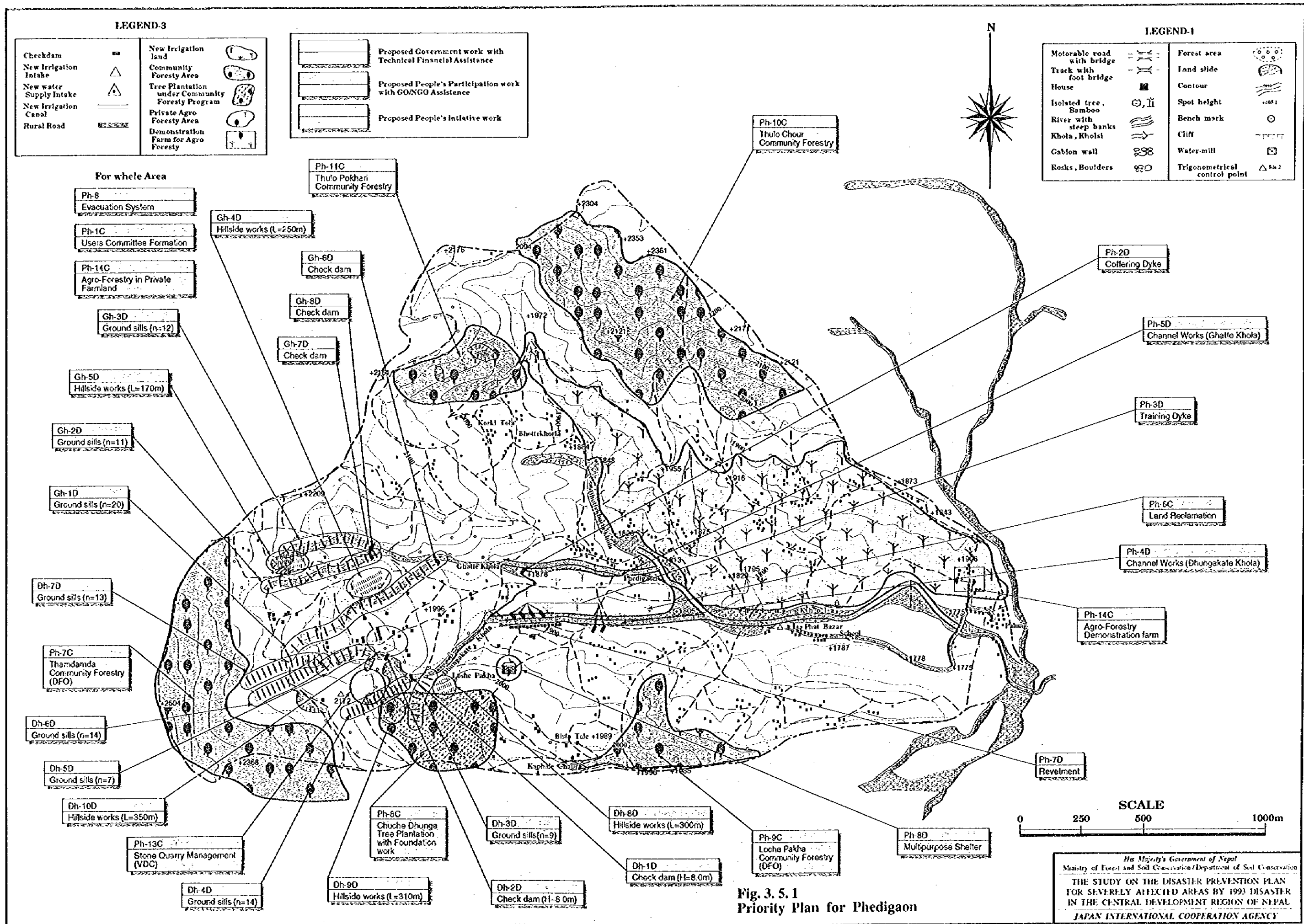


Fig. 3.4.4 Overall Community Development Plan for Phedigaon/Phatbazar

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LEGEND-3

Checkdam	▬	New Irrigation land	▬
New Irrigation Intake	△	Community Forestry Area	▬
New water Supply Intake	△	Tree Plantation under Community Forestry Program	▬
New Irrigation Canal	▬	Private Agro Forestry Area	▬
Rural Road	▬	Demonstration Farm for Agro Forestry	▬

▬	Proposed Government work with Technical Financial Assistance
▬	Proposed People's Participation work with GO/NGO Assistance
▬	Proposed People's Initiative work

LEGEND-1

Motorable road with bridge	▬	Forest area	▬
Track with foot bridge	▬	Land slide	▬
House	▬	Contour	▬
Isolated tree, Bamboo	○, ▬	Spot height	△
River with steep banks	▬	Bench mark	○
Khola, Kholst	▬	Cliff	▬
Gabion wall	▬	Water-mill	▬
Rocks, Boulders	▬	Trigonometrical control point	△

For whole Area

- Ph-8 Evacuation System
- Ph-1C Users Committee Formation
- Ph-14C Agro-Forestry in Private Farmland

- Gh-3D Ground sills (n=12)
- Gh-5D Hillside works (L=170m)

- Gh-2D Ground sills (n=11)
- Gh-1D Ground sills (n=20)

- Dh-7D Ground sills (n=13)

- Ph-7C Thamdanda Community Forestry (DFO)

- Dh-6D Ground sills (n=14)
- Dh-5D Ground sills (n=7)

- Dh-10D Hillside works (L=350m)

- Ph-13C Stone Quarry Management (VDC)

- Dh-4D Ground sills (n=14)

- Ph-11C Thulo Pokhari Community Forestry

- Gh-4D Hillside works (L=250m)

- Gh-6D Check dam

- Gh-8D Check dam

- Gh-7D Check dam

- Ph-8C Chucho Dhunga Tree Plantation with Foundation work

- Dh-3D Ground sills (n=9)

- Dh-6D Hillside works (L=300m)

- Dh-1D Check dam (H=8.0m)

- Dh-2D Check dam (H=8.0m)

- Ph-10C Thulo Chour Community Forestry

- Ph-2D Coffering Dyke

- Ph-5D Channel Works (Ghatte Khola)

- Ph-3D Training Dyke

- Ph-6C Land Reclamation

- Ph-4D Channel Works (Dhungakate Khola)

- Ph-14C Agro-Forestry Demonstration farm

- Ph-7D Revetment

- Ph-9C Loche Pakha Community Forestry (DFO)

- Ph-8D Multipurpose Shelter

Fig. 3.5.1 Priority Plan for Phedigaon

SCALE
0 250 500 1000m

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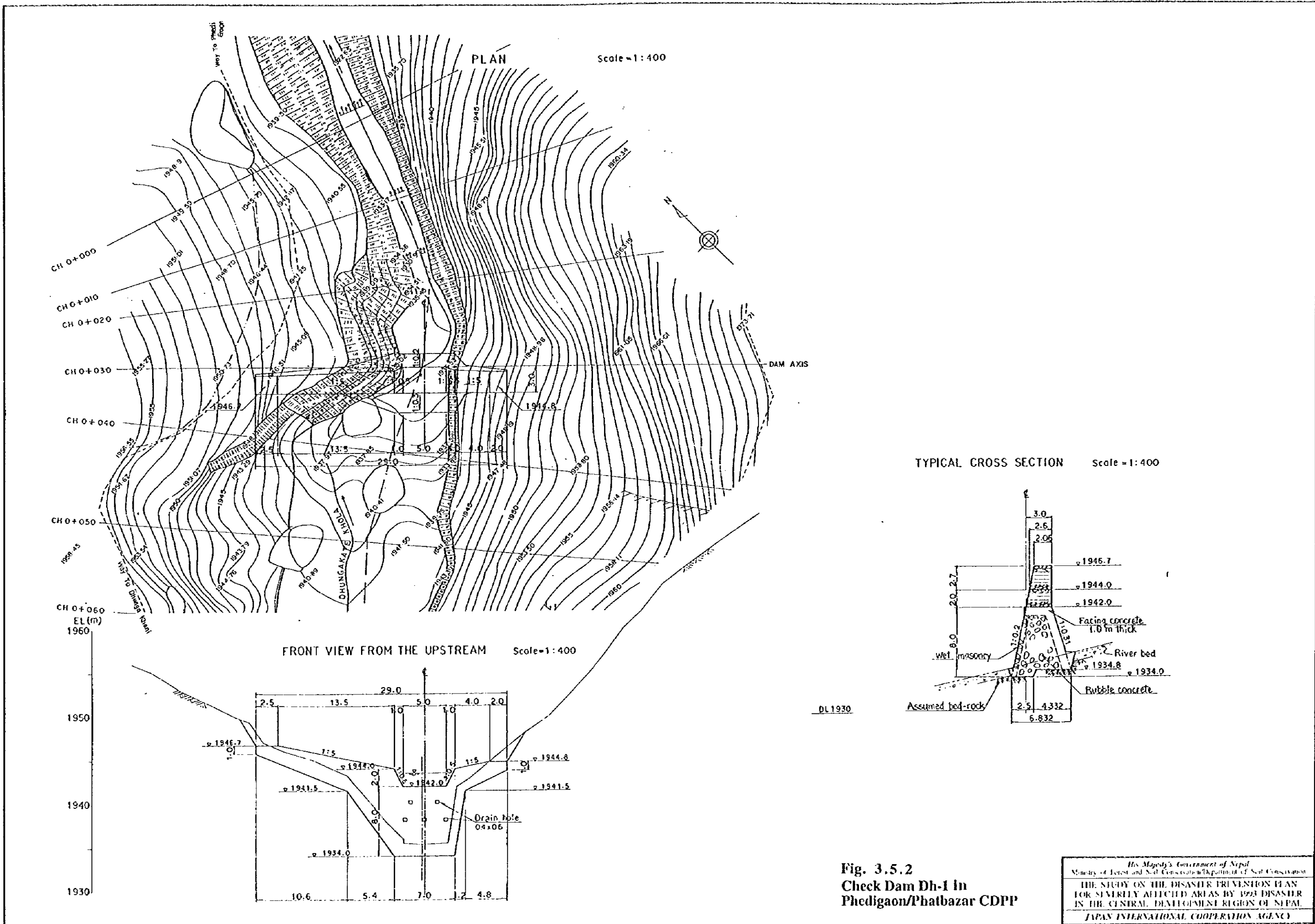
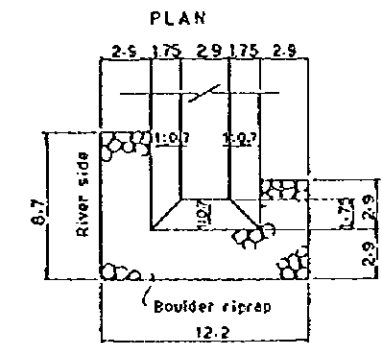
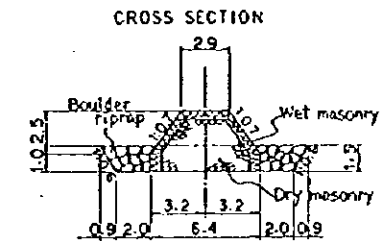
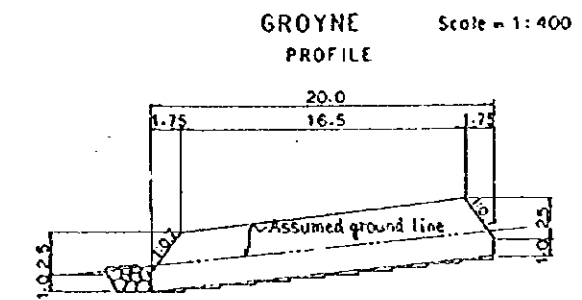
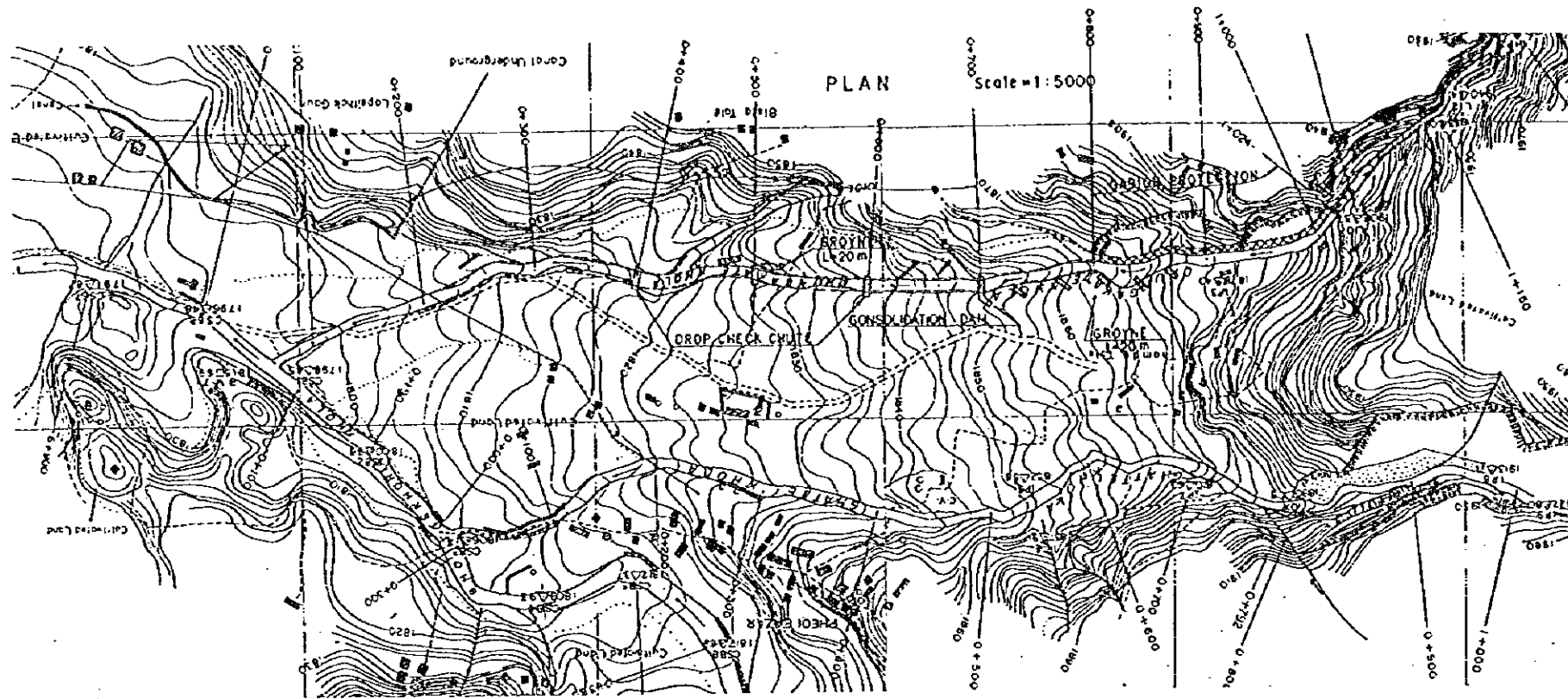
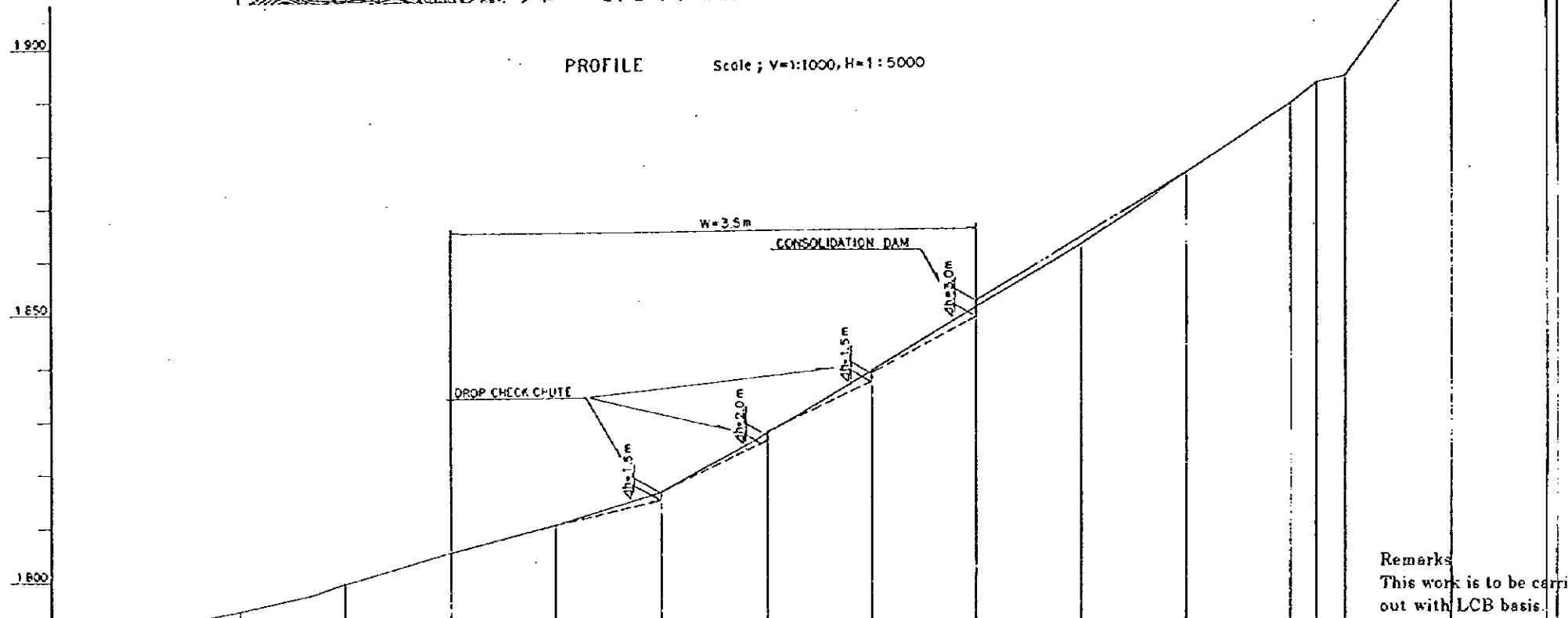


Fig. 3.5.2
Check Dam Dh-1 in
Phedigaon/Phatbazar CDPP

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Remarks:
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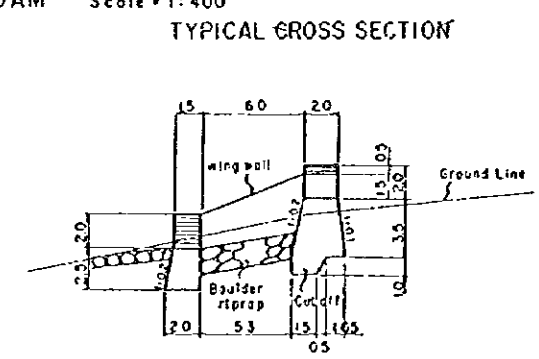
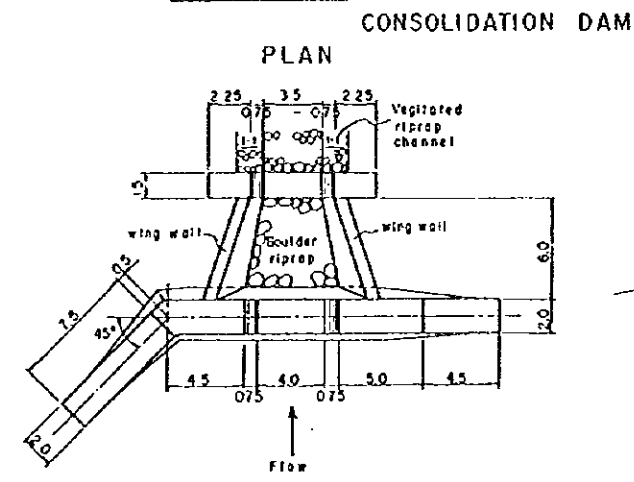
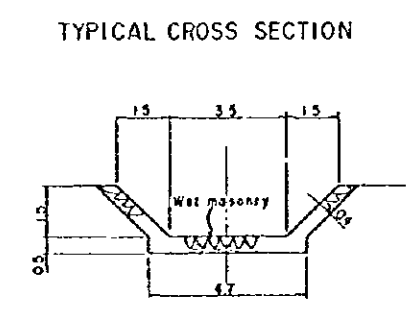
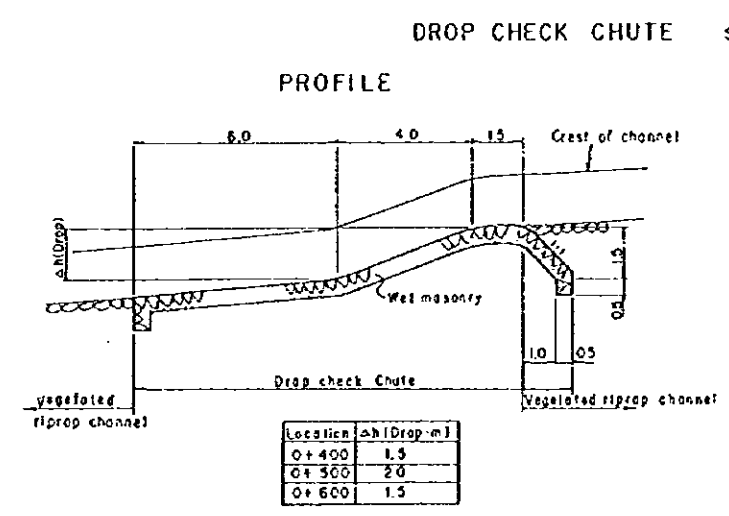
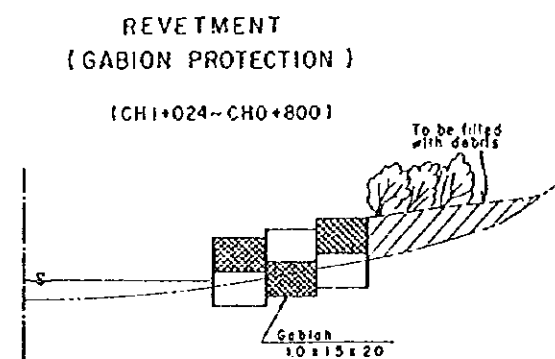
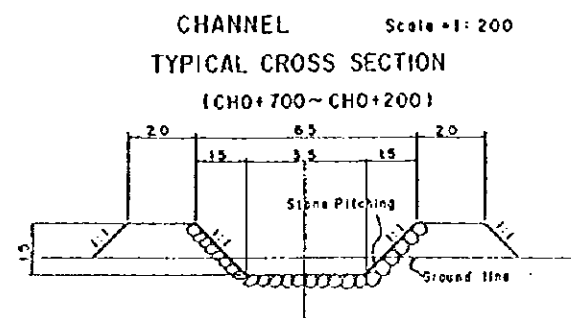
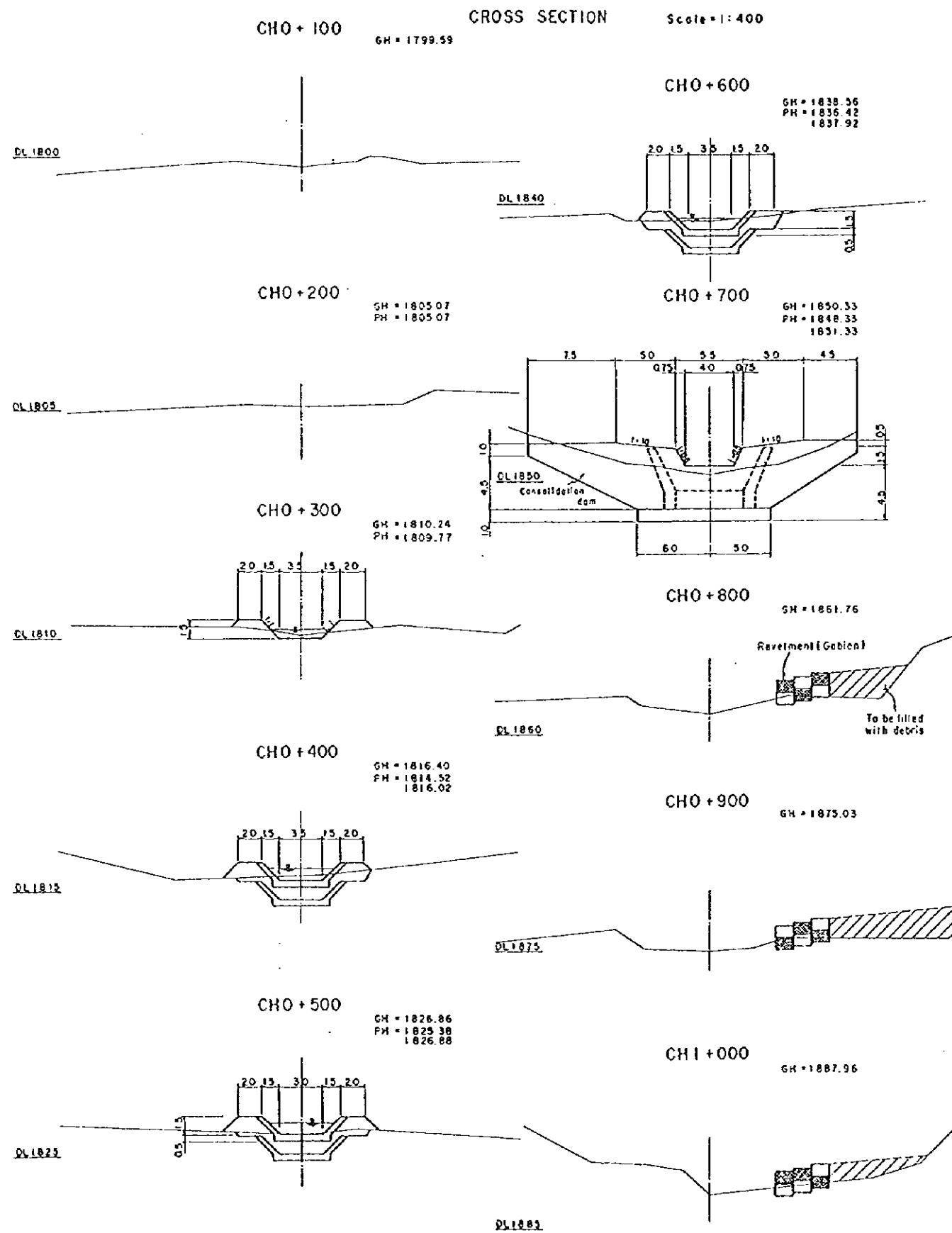


Remarks:
This work is to be carried out with LCB basis.

DL 1790																			
GRADIENT					4.7%		9.35%	9.54%	10.41%	11.85%	11.85%	Estimated deposition gradient							
ELEVATION																			
ELEVATION	1790.48	1794.14	1797.19	1799.12	1805.07	1805.07	1810.34	1815.03	1820.76	1826.51	1832.26	1838.01	1843.76	1849.51	1855.26	1861.01	1866.76	1872.51	1878.26
GRADIENT	3.51%	4.29%	6.43%	5.95%	5.17%	5.78%	10.84%	11.70%	11.77%	11.43%	13.27%	12.93%	16.33%	5.23%	27.87%	16.06%			
CHAINAGE	0+900	7+000	0+070	0+100	0+200	0+300	0+400	0+500	0+600	0+700	0+800	0+900	1+000	1+024	1+050	1+150	1+220	1+250	1+300

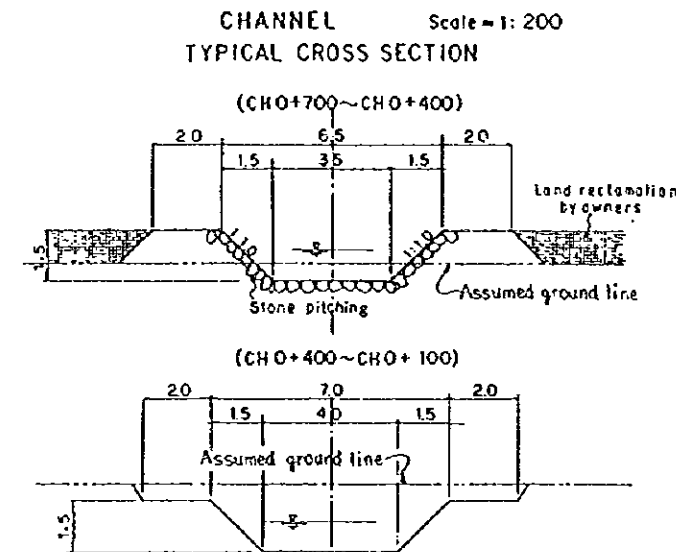
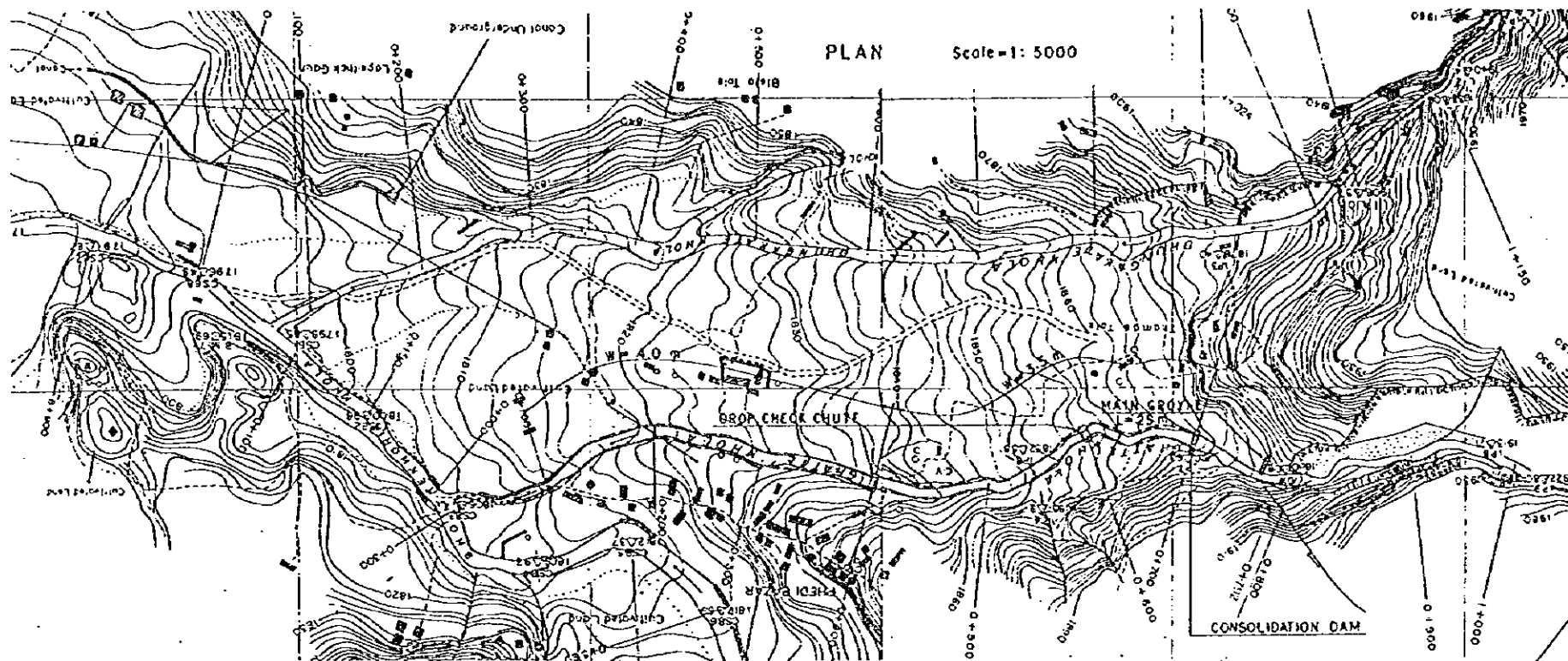
Fig. 3.5.3 Channel Works for Dhungakate Khola in Phedigaon/Phatbazar CDDP

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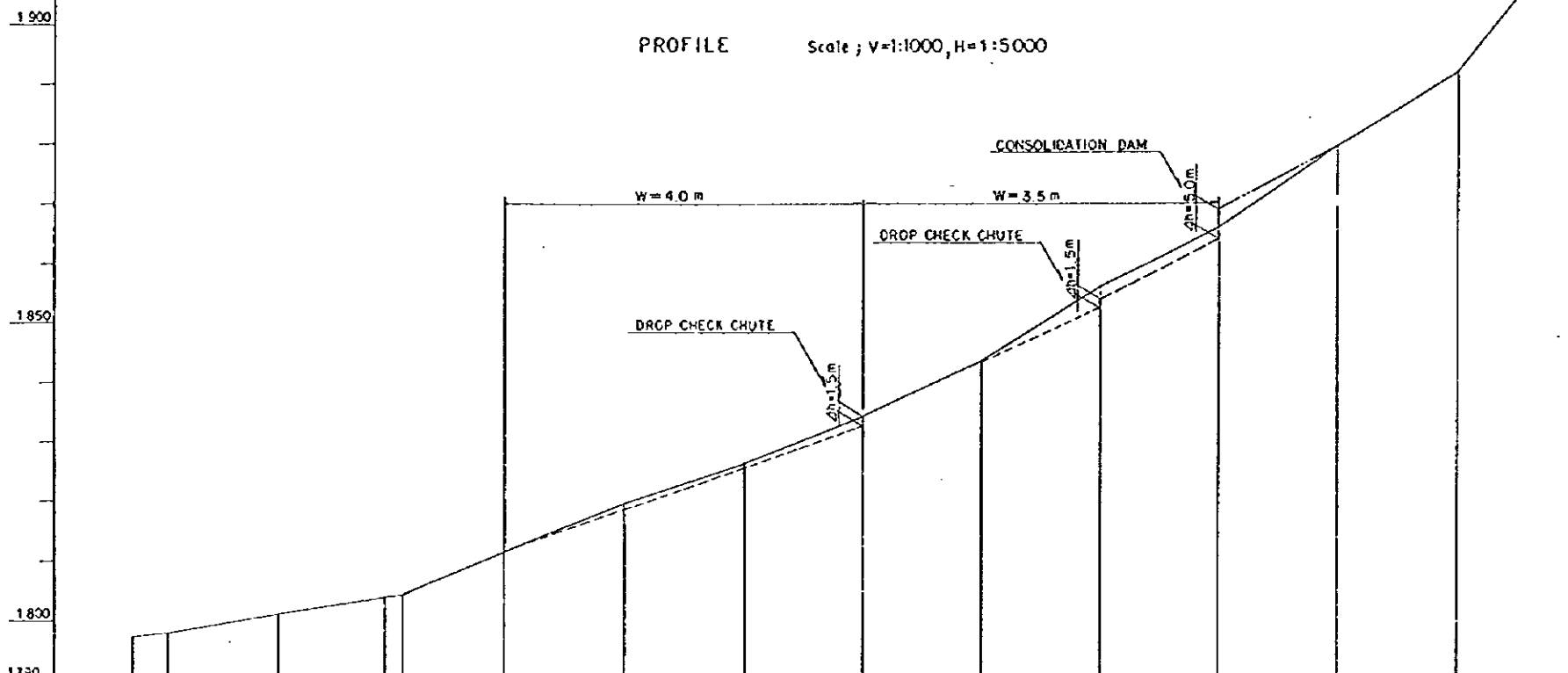


Remarks:
This work is to be carried out with LCB basis.

Fig. 3.5.4
The River Structures Related to Channel Works for Dhungakate Khola



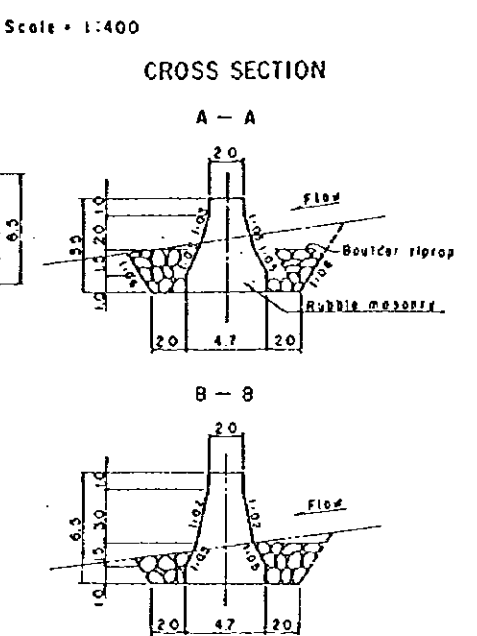
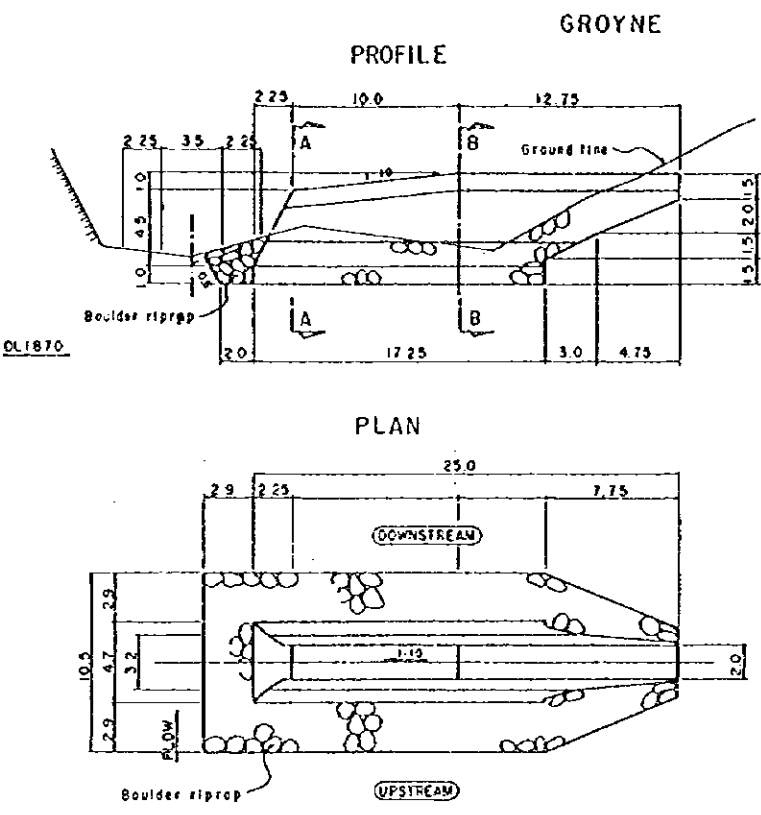
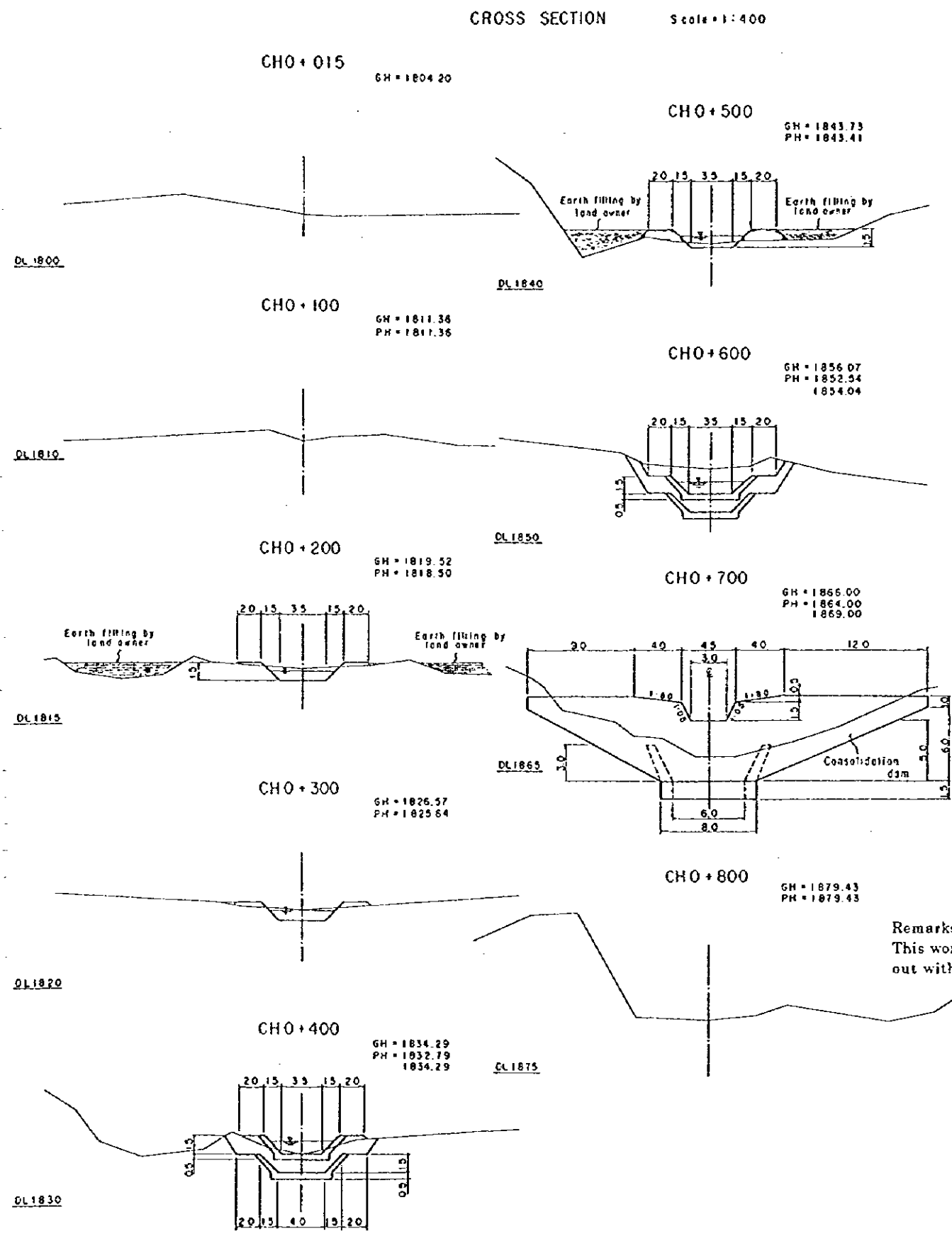
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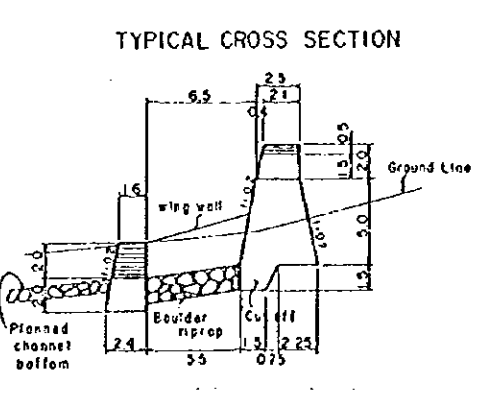
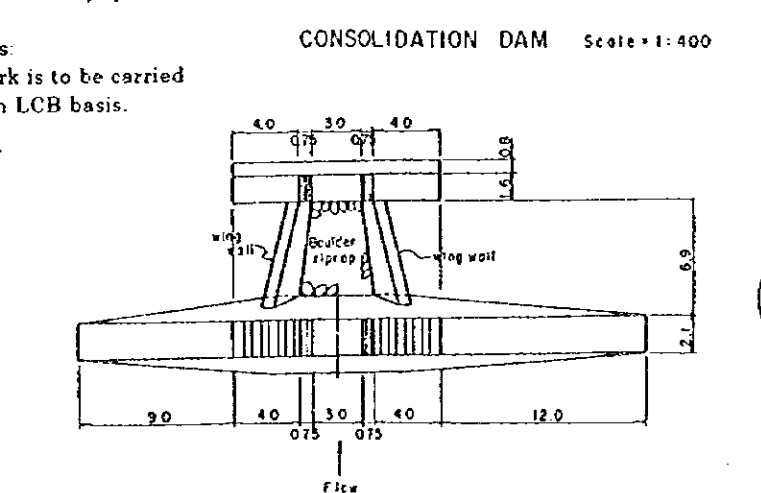
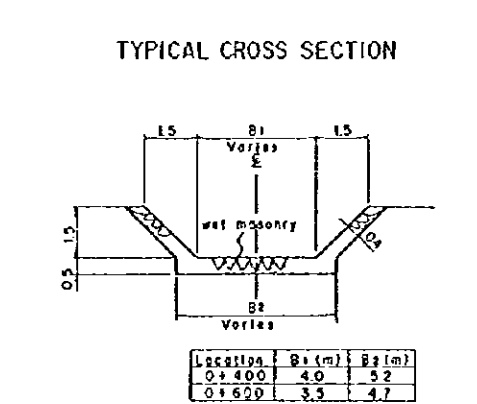
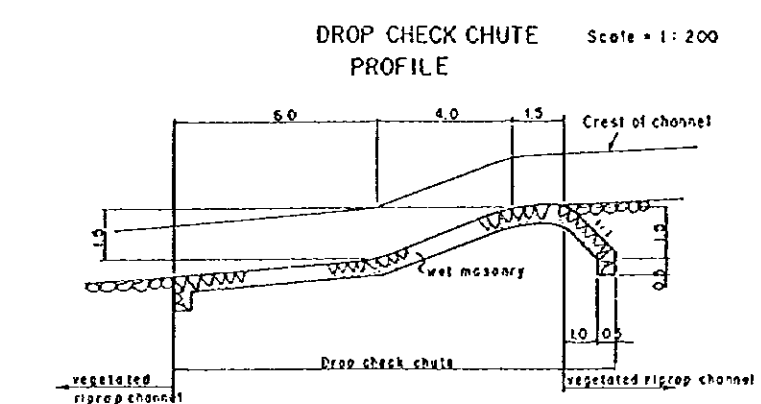
DL 1730														
PROPOSED RIVER BED	GRADIENT													
	ELEVATION													
EXISTING RIVER BED	ELEVATION													
	GRADIENT													
CHAINAGE														
	0+070	0+100	0+150	0+200	0+250	0+300	0+400	0+500	0+600	0+700	0+800	0+900	1+000	
GRADIENT	7.143 %					9.125 %			9.96 %		10.43 %			
ELEVATION	Estimated deposition gradient													
EXISTING RIVER BED	1797.18	1797.54	1800.38	1803.52	1804.28	1811.28	1812.28	1813.28	1814.28	1815.28	1816.28	1817.28	1818.28	
GRADIENT	2.43 %	3.40 %	3.28 %	2.0 %	8.42 %	8.16 %	7.05 %	7.72 %	9.44 %	12.34 %	9.93 %	13.43 %	12.32 %	24.68 %
CHAINAGE	0+070	0+100	0+150	0+200	0+250	0+300	0+400	0+500	0+600	0+700	0+800	0+900	1+000	

Fig. 3.5.5
Channel Works for Ghatte Khola in
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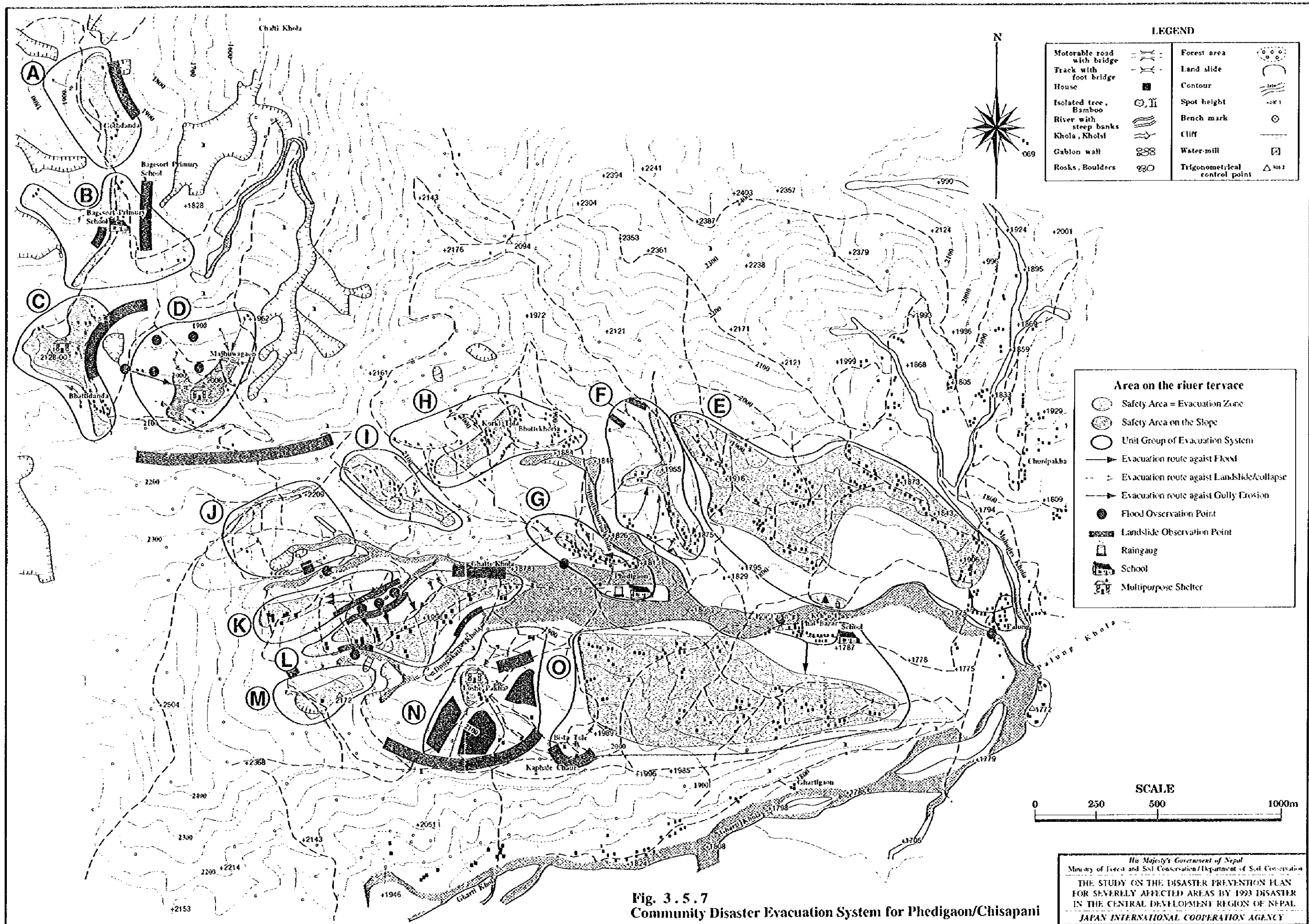
Remarks:
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Remarks:
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Fig. 3.5.6
The River Structures Related to Channel Works for Ghatte Khola

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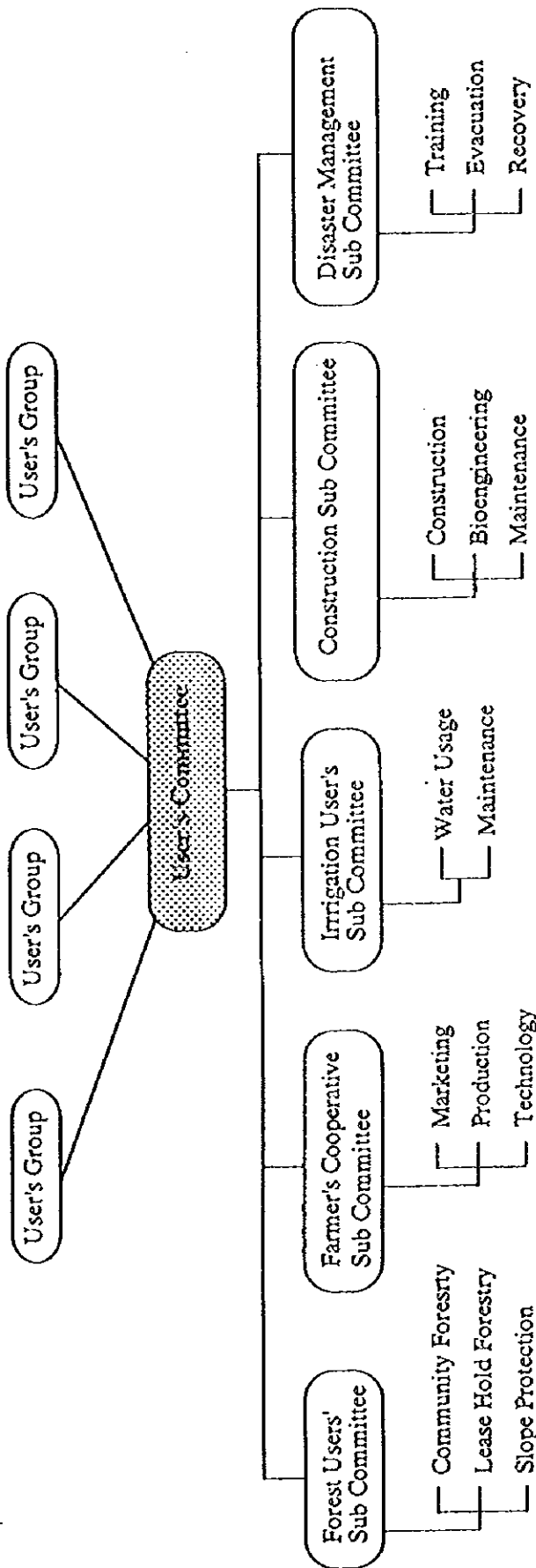


Fig. 3.5.8
Organisational Structure of Community

1st Stage: User's Committee is to be formed to unify the community and to facilitate all community development projects coming up.
2nd Stage: Sub Committee is to be formed in accordance with implementation of each project.

Notes:

- 1) User's Committee should be legally accepted by the HMG.
- 2) User's Committee should involve all the people in the community.
- 3) There may be other functions operated by Sub Committee that are not listed up in this chart.

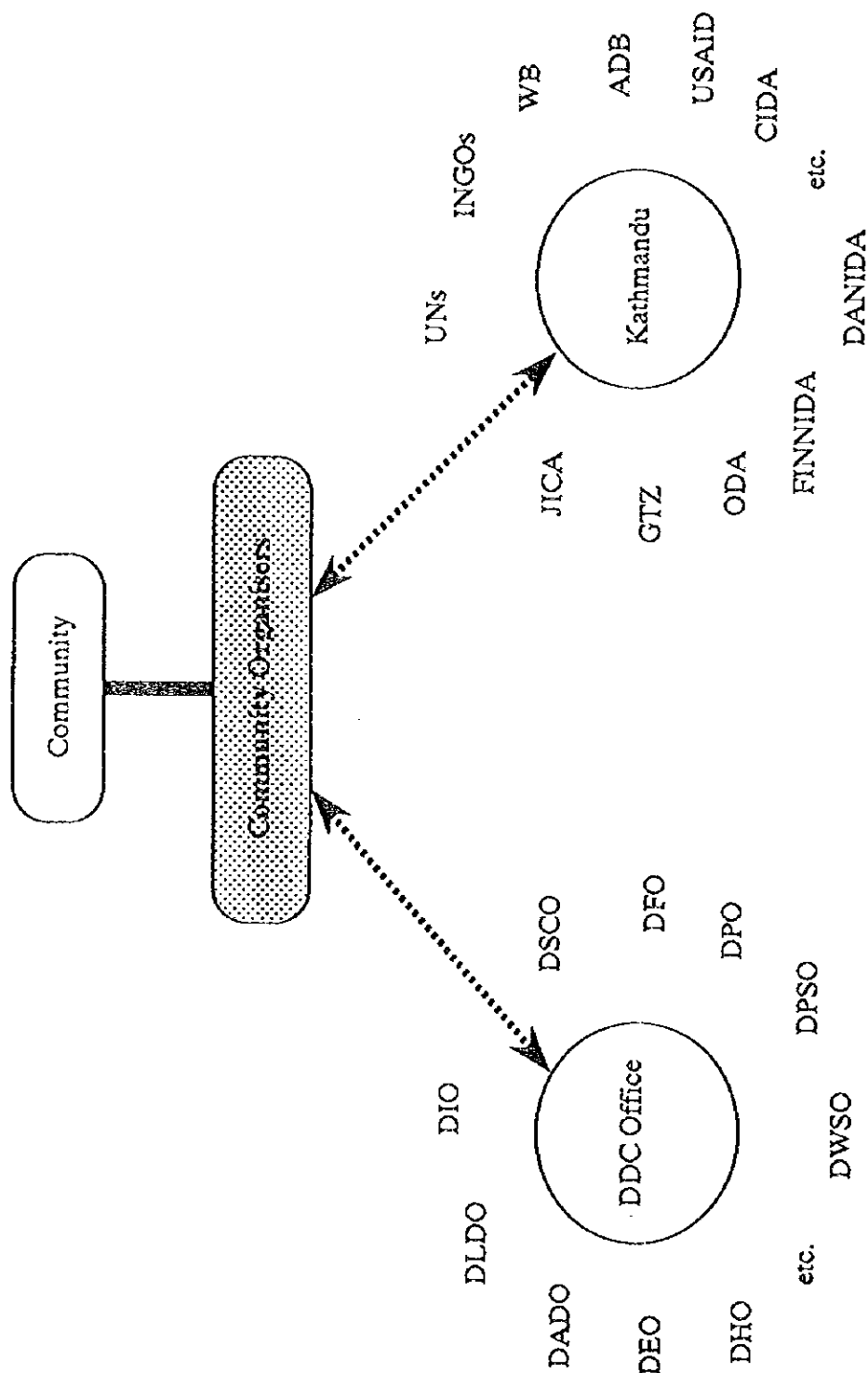
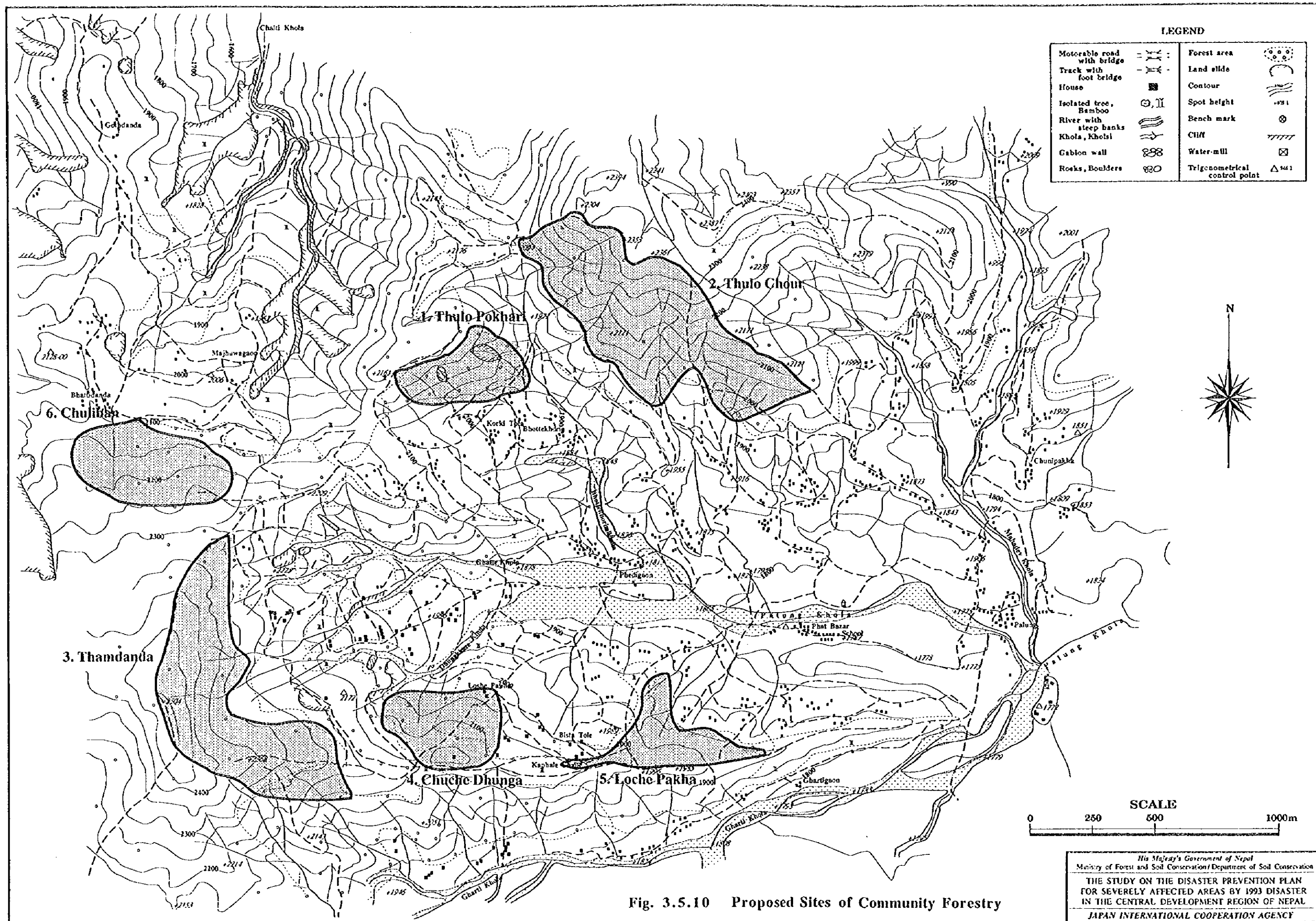


Fig. 3.5.9
Community Organisers

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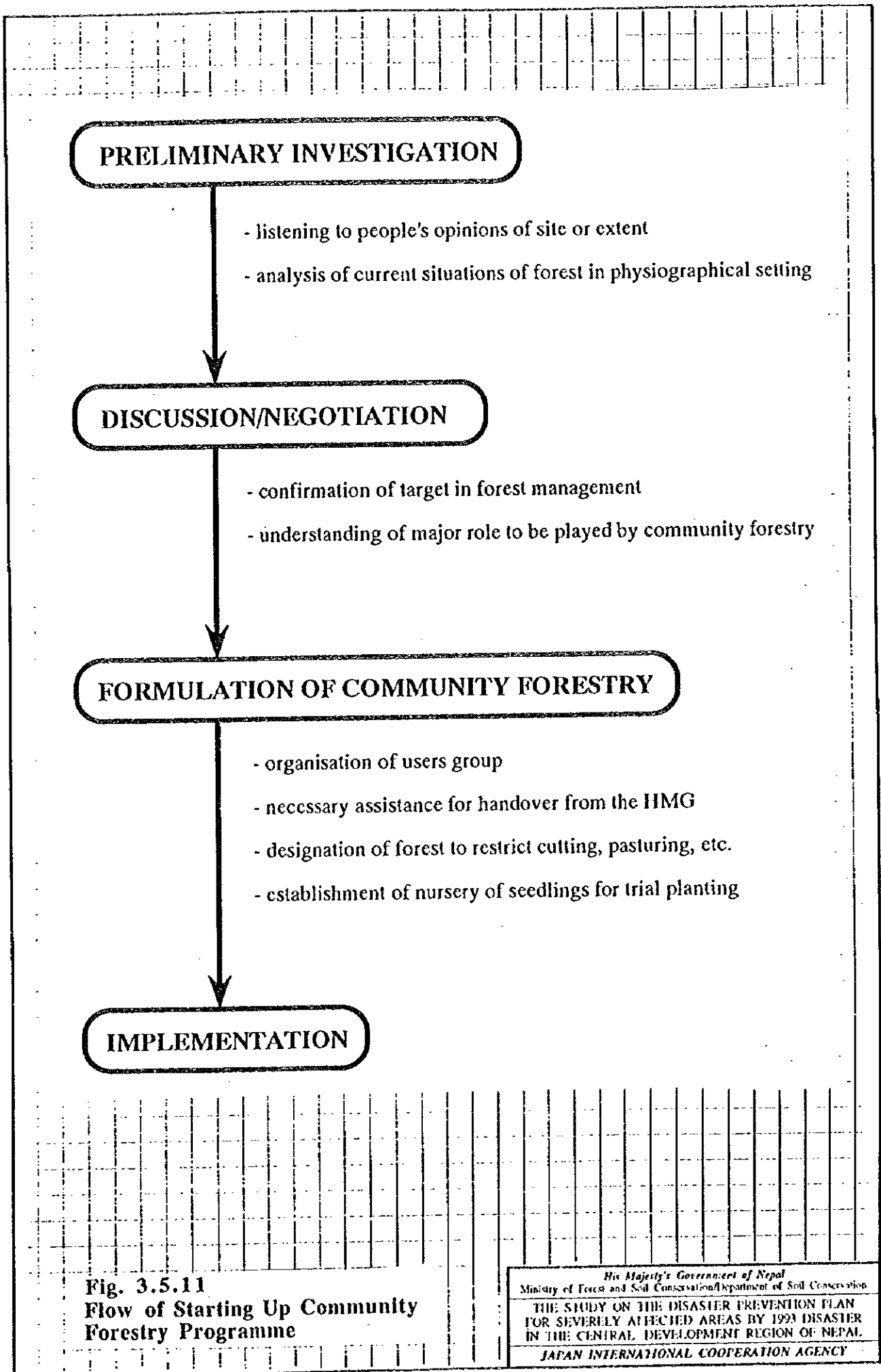


Fig. 3.5.11
Flow of Starting Up Community Forestry Programme

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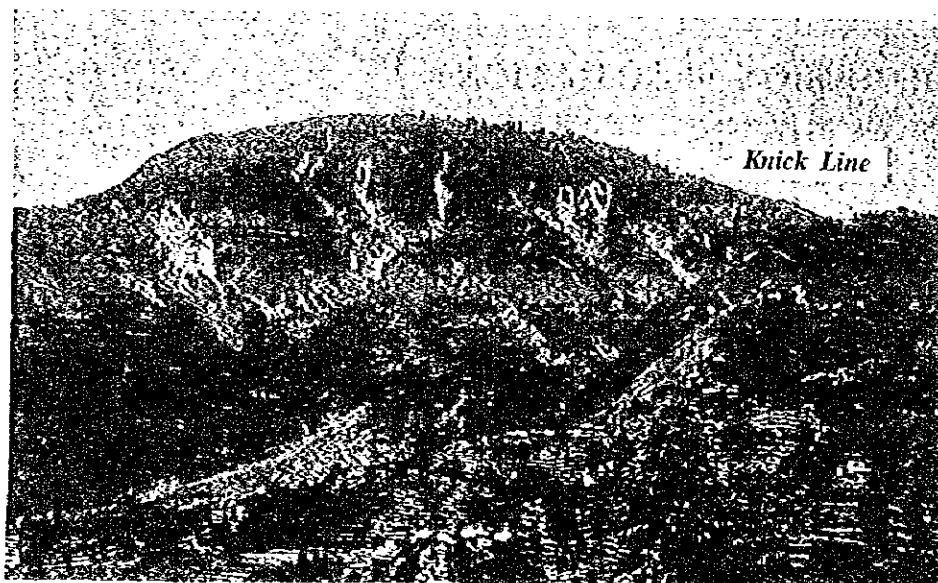


Photo 3.4.1
Landslide at the Upper Stream of the
Dhungakate Khola and the Gatte Khola

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**Photo 3.4.2 Focus Group Discussion of Males
in Phedigaon**



**Photo 3.4.3 Focus Group Discussion of Females
in Phedigaon**

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**THE STUDY ON THE DISASTER PREVENTION PLAN
FOR SEVERELY AFFECTED AREAS BY 1993 DISASTER
IN THE CENTRAL DEVELOPMENT REGION OF NEPAL**
JAPAN INTERNATIONAL COOPERATION AGENCY

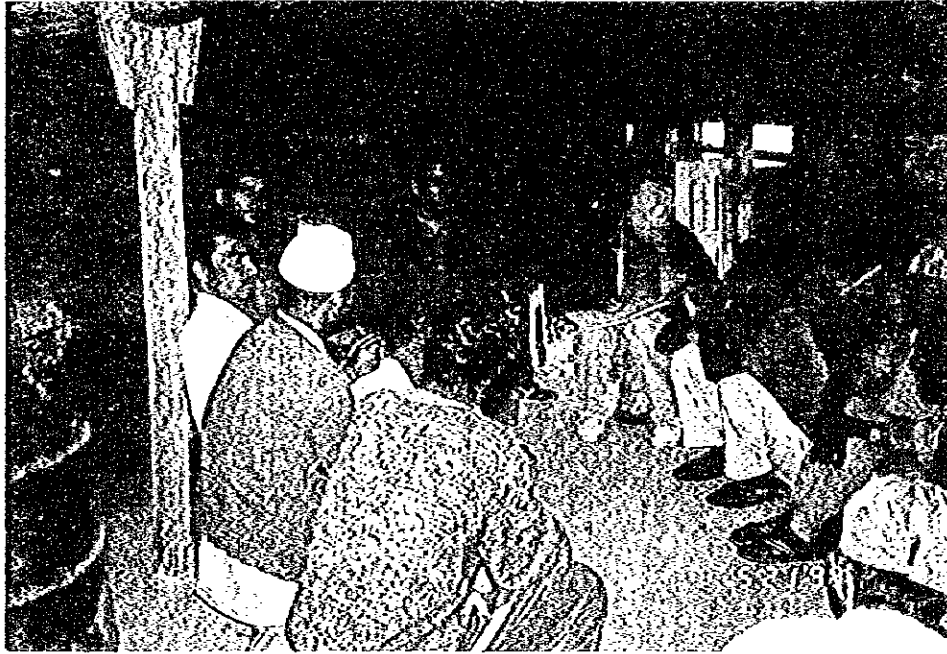


Photo 3.4.4 Focus Group Discussion of Males in Phatbazar



Photo 3.4.5 Focus Group Discussion of Females in Phatbazar

His Majesty's Government of Nepal
Ministry of Forest and Soil Conservation/Department of Soil Conservation
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