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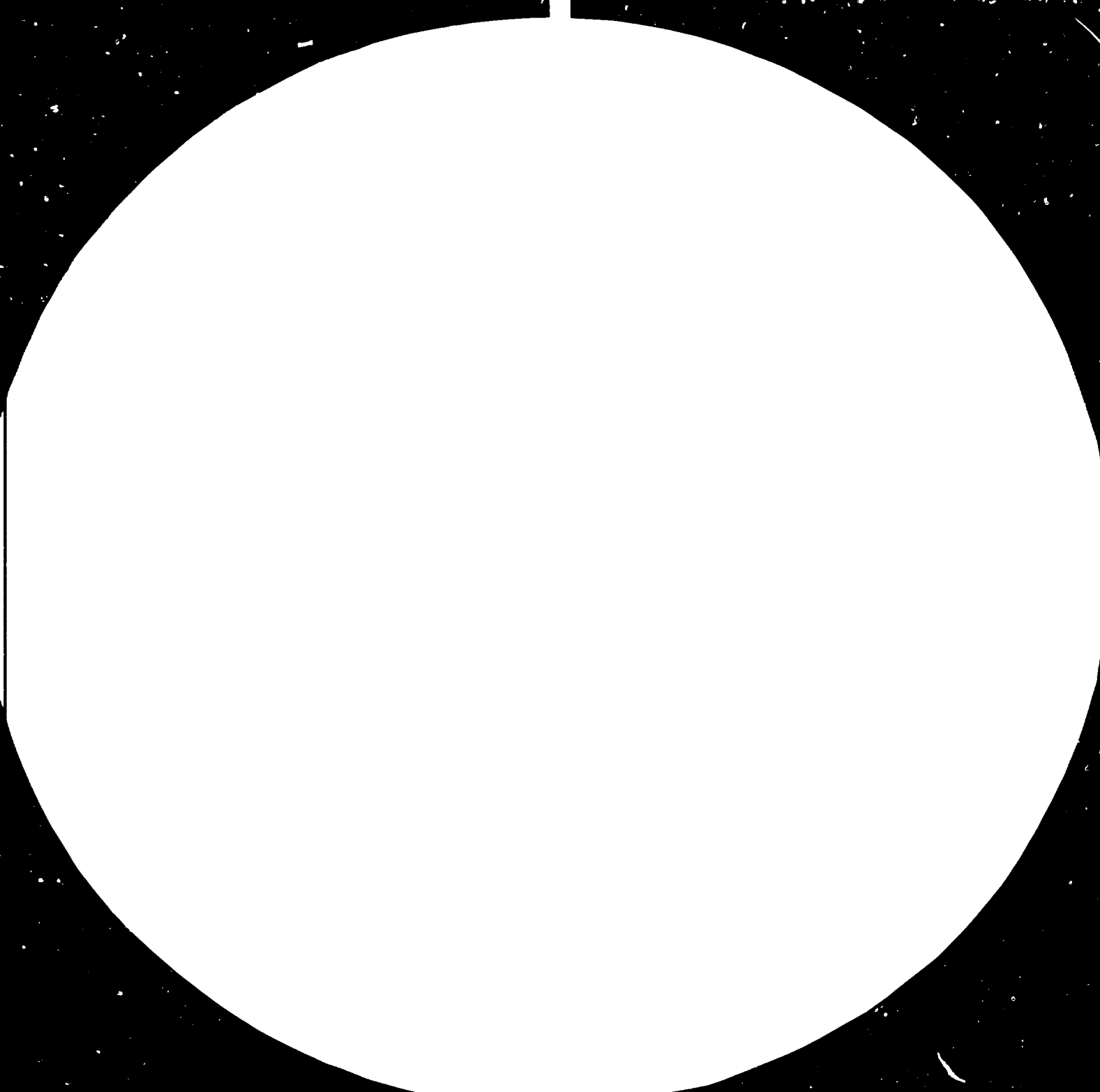

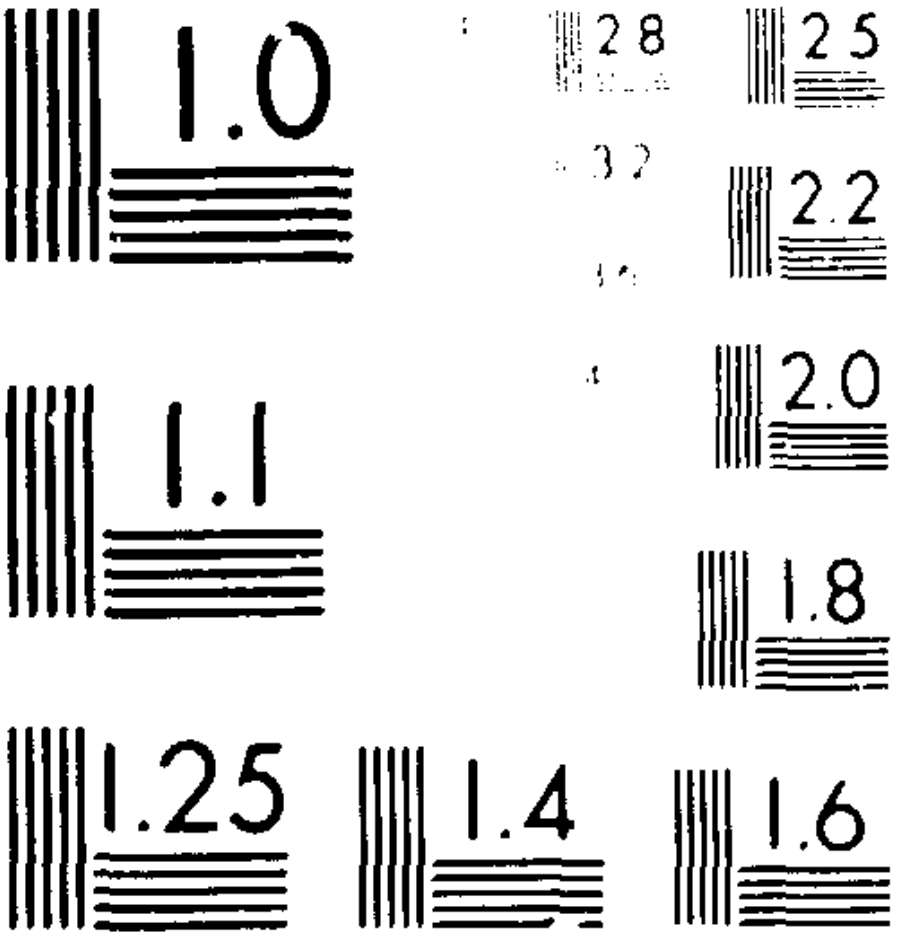
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MICRO-HYDEL PROJECT IN NEPAL*

by

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The Kingdom of Nepal with about fourteen million people, covers an area of 140.700 sq.km. The country rises steeply from about 75 m in the southern Terai to high Himalayan Ranges (Mt. Everest 8886 m) in a short stretch of about 180 km. It receives high rain fall from south west monsoon mostly concentrated during the months from June to September. Also it has perennial snow fed rivers like Karnali, Koshi, Gandaki, with enormous discharge of water. The total run-off in the Kingdom amounts to about 170 million m^3/year. The perpectual snow-line is about 5,000 m above mean level. This natural gift with the Himalayan topography is a boon for us in generating hydro-power at a cheaper rate, which in turn, could be transmitted from place to place, in the country, for various types of development works. As such, if this natural resource of power could be harnessed in a planned way duly co-ordinated with other spheres of development in the country, we have no doubt that our country will soon come at par with the other developing countries of the world.

Thousands of Kholas (streams) flowing in the almost hilly regions of the country, are capable of producing electricity for fulfilling short term and continuous requirement of hilly district headquarters and mainhilly places through mini-micro-hydel schemes. Supply of power through these schemes of capacity ranging 30 KW to 500 KW is more cheaper than that through long transmission line in the hilly regions. Also, it avoids, the difficult and costly maintenance of the transmission line. The development of small hydel plants are planned on the basis of development growth axis. The main features of some of the small hydel projects under completion and under construction are given as follows:

1. Doti Small Hydel project

To electrify Doti, one of the district headquarters of the Seti Zone, situated in the far-western hilly regions of the country, a small hydel project site in Sallena Gad Khola (stream) was selected. It is under construction and after completion of it it will generate 200 KW.

2. Namche small Hydel project

To electrify Namche Bazar the route and the camp area of Mt. Everest, situated in the Eastern hilly regions of the country, a small hydel project site in Dudh Koshi River at about 3,300 m above mean sea level has been selected. The power station will generate 780 KW which will be used in electrifying as well as room heating of the bazar.

3. Dhading Micro-Hydel Project

To electrify Dhading one of the district headquarters of Bamati Zone, situated in the central hilly regions of the country a small hydel project site in Arbung Khola was selected. It is under completion and will generate 32 K 32 KW. The estimated cost of the project is about Rs 1,140,900.

4. Gorkhe Micro-Hydel Project

This project is planned to electrify Gorkhe Bazar Paupati Nagar and Fikal, the small village bazars of Illam district in the Mechi Zone in the Eastern hilly region of Nepal. This project is under completion. After completion of the project it will generate 90 KW of electric power with the water head of 19 m and design discharge of 300 L/ces. The estimated cost of the project is Rs 2,220,400.

5. Darchula Micro-Hydel Project

This project is located in the far western hilly region of the country, at Darchula, one of the district headquarters of Mahakali Zone. This project is under construction in Lasku Gad (stream). Power station generates 100 KW (2x50 KW). The cost of the project is estimated as Rs 35,40,000.

6. Syanja Micro-Hydel Project

To electrify Syanja, the district headquarter of Gandaki Zone situated in the western hilly region of the country, a hydel project is planned in the Seti Dovan Khola (stream) with design discharge of 500 L/sec and net head of 15.5 m. The installed capacity of the scheme will be 120 KW (3 units-each 40 KW). The estimated cost of the project is 3,540,000.

7. Manang Micro-Hydel Project

To electrify Manange, Tnki-Manang, Braga, Ghyaru, Khangsar, the villages of Manang district in Gandaki Zone in the western development region near the Chinese border, a small hydel project is planned in the sabche Khola (stream) design discharge of 390 L/sec and net head of 34.2 m, the scheme will generate 80 KW (with 2 units each 40 KW).

The capacity of the projects under construction and under Report preparation ranges from 30 KW to 50 KW. Estimated cost per KW of such plant ranges from Rs. 25,000 to 35,000 depending upon the assessibility of the project.

MICRO-HYDEL PLANTS

(30 KW to 500 KW)

Projects under construction

1. Darchula
2. Doti
3. Jumla
4. Dandeldhura (Ruplagad)

Western region

5. Jomsom
6. Baglung
7. Shyanja
8. Gorakha
9. Dhading
10. Baglung (Kusma Shera)

Central region

11. Manang
12. Helambu

Eastern region

13. Namche
14. Phidim
15. Gerkhe
16. Taplejung
17. Khandbari
18. Bhojpur
19. Okhaldunga
20. Ramechhap

Projects under report preparation for western region

21. Bajura
22. Accham
23. Kalikot
24. Jajerkot
25. Pyuthan
26. Rukum
27. Humla
28. Rolpa
29. Salyan
30. Kalikote
31. Baitadi
32. Dolpa
33. Bajnang
34. Mugu

Western region

35. Nawal Parashi
36. Parbat
37. Arghakhachi
38. Myagdi
39. Tanahu
40. Gulmi
41. Lamjung

Central region

42. Rasuwa
43. Sindhuli

Eastern region

44. Udaipur
45. Khotang
46. Chainpur
47. Walenchok
48. Panchthar