## Slope Engineering for Mountain Roads

## Edited by G. J. Hearn

This book provides a complete guide to the study, design, construction and management of landslide and slope engineering measures for mountain roads, with an emphasis on low-cost. The geographical focus of the book is on the tropics and sub-tropics, but is also highly relevant to other regions where heavy rain, steep slopes and weak soils and rocks combine to create slope instability. The causes and mechanisms of landslides are described, and the hazards they pose to mountain roads are illustrated. Methods of desk study, field mapping and ground investigation are reviewed and illustrated, with an emphasis on geomorphological and engineering geological techniques. The design and construction of alignments, earthworks, drainage, retaining structures, the stabilization of soil slopes and rock slopes, and the control of erosion on slopes and in rivers and streams are covered. Slope management as part of road maintenance and operation is reviewed, and procedures for risk assessment and works prioritization are described.

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## **Cover illustration:**

Use of gabion and masonry retaining walls and revetments for road support and slope protection along the Dharan-Dhankuta road, east Nepal, designed by Rendel Palmer & Tritton, now High-Point Rendel.

Photograph by G. J. Hearn.

## Contents

Foreword	vii
Acknowledgements	ix
How to use this book	xi
Part A – Landslides and Mountain Roads	
HEARN, G. J. & HUNT, T. A1 Introduction	1
HEARN, G. J., HUNT, T. & WEEKES, R. A2 Project phasing and procurement in relation to slope management	7
HEARN, G. J. A3 Slope materials, landslide causes and landslide mechanisms	15
HEARN, G. J. A4 Landslide risk management for mountain roads	59
Part B – Site Investigation	
HEARN, G. J. B1 Scope and programming	67
HEARN, G. J. B2 Desk studies	71
HEARN, G. J. B3 Field mapping	103
HUNT, T. & HEARN, G. J. B4 Ground investigation	117
HEARN, G. J. & HUNT, T. B5 Slope movement monitoring	127
Part C – Design and Construction	
HEARN, G. J. & HUNT, T. C1 Route corridor and alignment selection	135
HEARN, G. J. & HUNT, T. C2 Earthworks	145
HEARN, G. J., HUNT, T. & D'AGOSTINO, S. C3 Soil slope stabilization	165
HEARN, G. J. C4 Rock slope stabilization	189
HUNT, T., HEARN, G. J. & D'AGOSTINO, S. C5 Retaining structures	209
HEARN, G. J. & HUNT, T. C6 Slope and road drainage	231
HEARN, G. J., HOWELL, J. & HUNT, T. C7 Erosion control	243
Part D – Slope Management	
HEARN, G. J. & HUNT, T. D1 Slope management	269
Glossary of terms	285
Index	293