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THE WORLD LANDSLIDE INVENTORY

Abstract: The International Geotechnical Societies' UNESCO Working Party on World Landslide Inventory has been formed from the International Association for Engineering Geology's Commission on Landslides, the International Society for Soil Mechanics and Foundation Engineering's Technical Committee on Landslides and representatives of the International Society of Rock Mechanics to establish a World Inventory of Historic Landslides. The Inventory, a contribution to the International Decade for Natural Disaster Reduction would assist United Nations agencies in understanding the world distribution of landslides. The Working Party has prepared a Suggested Method for Reporting a Landslide and drafted a Suggested Method for a Landslide Summary. These methods allow the creation of uniform, computer-processible banks of landslide data. A survey of existing landslide inventories reveals considerable potential for improvements with existing microcomputer-based technology. Landslide inventories provide the fundamental information necessary for sound risk management or landslide insurance schemes. Their information on landslide dimensions allows the construction of volume-frequency curves for estimating total sediment production, for the prediction of hazards from landslide runout and of the encroachment of landslides on uplands. The successive occurrences of landslides in an area may form a pattern, allowing more precise prediction of sites liable to move in the future. Annual and longer term patterns of landsliding may give advance warnings of times of high landslide hazard and suggest likely responses to climatic changes.

INTRODUCTION

A Working Party of the International Association for Engineering Geology Commission on Landslides and Other Mass Movements, the International Society for Rock Mechanics and the International Society for Soil Mechanics and Foundation Engineering Technical Committee on Landslides has been formed to assist the establishment of a World Inventory of Historic Landslides. The