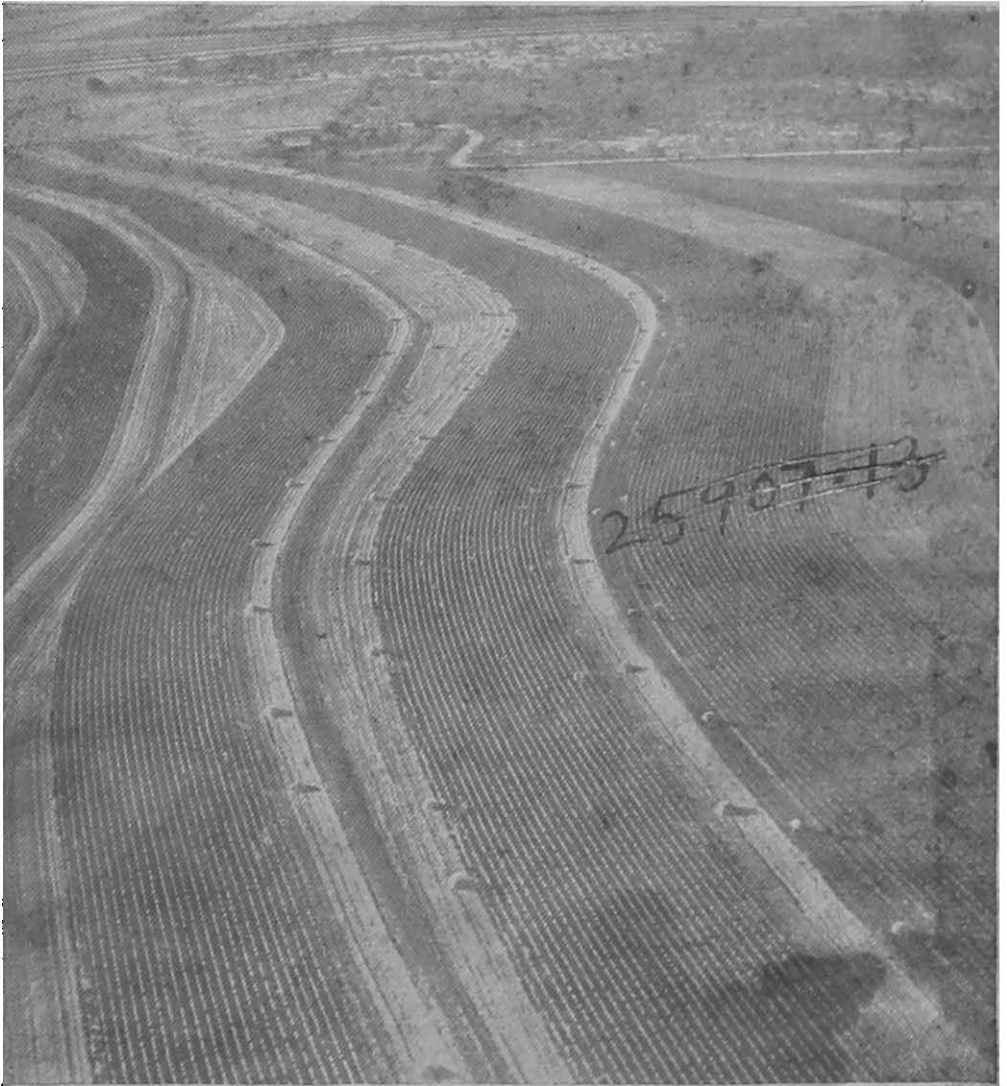


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Terracing for Soil
and Water Conservation

TERRACING

for
SOIL *and* WATER
CONSERVATION



FARMERS' BULLETIN No 1789
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IN THE PRODUCTION of farm crops and livestock, American farmers are confronted with the problem of conserving soil and rainfall on sloping lands. The importance of this problem has been overlooked in the past, and the continual loss of fertile topsoil by erosion has already rendered useless large areas of good farm land for profitable cropping. Additional areas are being abandoned each year. Farmers must adopt soil-conserving practices on erodible slopes before a permanently successful type of agriculture can be established.

Early American farmers introduced the use of hillside ditches to combat soil erosion. The ditches themselves proved inadequate, but the principle of controlling erosion by systematically intercepting surface runoff on sloping lands has led to the use of farm terracing. The development of terracing as recommended today has required years of use, extensive field observations and experimentation, and many modifications from time to time in construction procedure. When terraces are properly used and constructed and adequately supported by approved cropping and tillage practices they provide one of the most effective erosion-control measures applicable to cultivated lands. When improperly constructed or not coordinated with proper land use practices they often accelerate rather than retard soil losses.

This bulletin has been revised in order to give its readers the benefit of the most up-to-date information on terrace construction and maintenance in coordination with other recommended soil-conservation practices. The information it contains is based on the terracing work of the Soil Conservation Service in every important agricultural region of the United States.

This bulletin supersedes Farmers' Bulletin 1669, Farm Terracing.

TERRACING FOR SOIL AND WATER CONSERVATION

By C. L. HAMILTON, *Agricultural Engineer, Section of Engineering, Division of Conservation Operations, Soil Conservation Service*¹

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INTRODUCTION

PROGRESS OF TERRACING

FOR CENTURIES agriculturists of other countries have used terraces effectively to combat soil erosion and facilitate tillage practices on sloping land. More than 4,000 years ago the Incas terraced their steep hillsides, and over 2,000 years ago the present practice of terracing rice fields in the Philippine Islands was begun by the natives. That terraces are widely distributed is indicated by the terrace vineyards of Europe, the terraced fields of the Orient, and the more recent terracing of wheatfields in Australia. These terraces are raised level benches supported on one or more sides by walls of masonry or sloping banks of turf and exemplify the true meaning of the word.

In the United States the term "terrace" has become identified with a hillside channel or ridge constructed for the purpose of controlling the flow of surface water. The true terrace, or bench terrace, as it is commonly known, is used only in limited areas where necessary to cultivate excessively steep slopes.

¹ Revised by T. B. Chambers, Chief, Engineering Division. It contains the information gained during 5 years of terracing work carried on by the Soil Conservation Service since the publication of the earlier edition. Former members of the Division, particularly Hans G. Jepson and G. E. Ryerson, assisted the author, who also used information from former studies made by C. E. Ramser and M. L. Nichols.