



Agricultural Terrace Pattern along Climatic Gradient

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Agricultural terraces are a well-distributed agrotechnical method for planting in various places in the world, from ancient time and until today. The aim of the current poster is to demonstrate the spatial distribution of agricultural terraces along a climatic gradient of sub-humid Mediterranean, semi-arid and arid climate zones.

In the Judean Mountains (central Israel), a region under sub-humid Mediterranean conditions, agricultural terraces are characterized by terrace coverage on slopes and in valleys. Annual rainfall average in this region is 800 mm, allowing for vast rain-fed agriculture based on direct rain. In the Judean Shephelah (central Israel), a region under semi-arid conditions, agriculture terraces are located in small spots on the slopes, and in terrace fields in the valleys. Annual average rainfall in this region is between 300 and 400 mm. Rain-fed agriculture was sustained by direct rain and additional runoff generated on rock outcrops. In the Negev Highlands, (southern Israel), a region under arid climate conditions with annual rainfall average of 100 mm, runoff farm terraces are located in valleys, and agriculture sustenance was based on water harvesting from the slopes.

In conclusion, climate has a dominant effect on agricultural terrace distribution, and ancient farmers knew how to adapt to different climate conditions.