Recommendations of Günther Kunkel, to stop desertification,

given to Dieter Seifert in an Interview in July 2004 at his garden in Vélez Rubio/Spain

(Dr. G. Kunkel is biologist and author who lived many years in arid regions of the earth and who has published about 50 scientific books and 400 articles. He realised together with his wife, MaryAnne Kunkel, projects to cultivate arid areas.)

1. Situate water containers above the area to be cultivated to enable irrigation without pumps
2. Terracing is recommended when possible and when it avoids environmental damage
3. A cover of stones or gravel can reduce water loss
4. Another possibility to avoid water losses is the use of plastic foils (see his book[1] "Gärten und Gärtnern in Trockengebieten")
5. Indigenous plants that can more easily withstand drought should be preferred
6. Drought-resistant accompaniment plants should also be fostered to ensure a durable plant cover
7. Experiments should begin with a multitude of small sectors to gain experience
8. Fencing is recommended to protect the vegetation against grazing animals
9. Walls serve as protection against erosion; but care has to be taken for percolation and for overtopping
10. Walls also protect against drying by the wind
11. Do your work with caution, avoiding levelling and avoiding widespread monoculture
12. Irrigate at the right time, never in the sunshine
13. Irrigation is necessary mainly in the initial phase; drip irrigation has the disadvantage that the formation of roots is weak, so that the transition to the phase without irrigation is delayed
14. Cultivation has to be adapted to the seasonal conditions of the region. E.g. the planting time should be coordinated with the rainy season
15. Calulation of water needed cannot be done exactly; there are many factors influencing the necessary amount of water
16. Dr. Kunkel recommends contacting experts (e.g. Prof. Dr. H.N: Le Houérou, France, and books of A.P.A. Vink; H.-J v. Maydell: Yaron, Danfors, Vaadia and L. Dudley Stamp.

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[1] Günther and Mary Anne Kunkel: JARDINERÍA EN ZONAS ÁRIDAS / Gärten und Gärtnern in Trockengebieten. ed. Alhulia, Salobreña/Granada www.lafertilidaddelatierra.com
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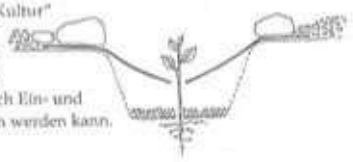

Abb. 15-a (rechts).—„Xero-Kultur" unter Extrembedingungen, mit Plastik (schwarze Linie) den Effekt der Verdunstung nutzend, wie solche oft durch Ein- und Ausstrahlung hervorgerufen werden kann.

Abb. 15-b (unten).—Mit Plastik unter den Steinen an der Oberfläche kann auch bei kargen Regenfällen den Pflanzen zusätzliche Feuchtigkeit zugeführt werden; bei Starkregen allerdings könnte „Überschwemmungsgefahr" bestehen ...

Abb. 16.—Mehrere mit Wasser gefüllte Plastikbehälter für direkte Tropfbewässerung. Die Behälter werden dem Boden zu angebohrt und das Bohrloch (z.B. mit einem Zahnstocher) halbverstopft. Professionelle ziehen natürlich das leitungsbedingte Tropfbewässerungssystem vor.