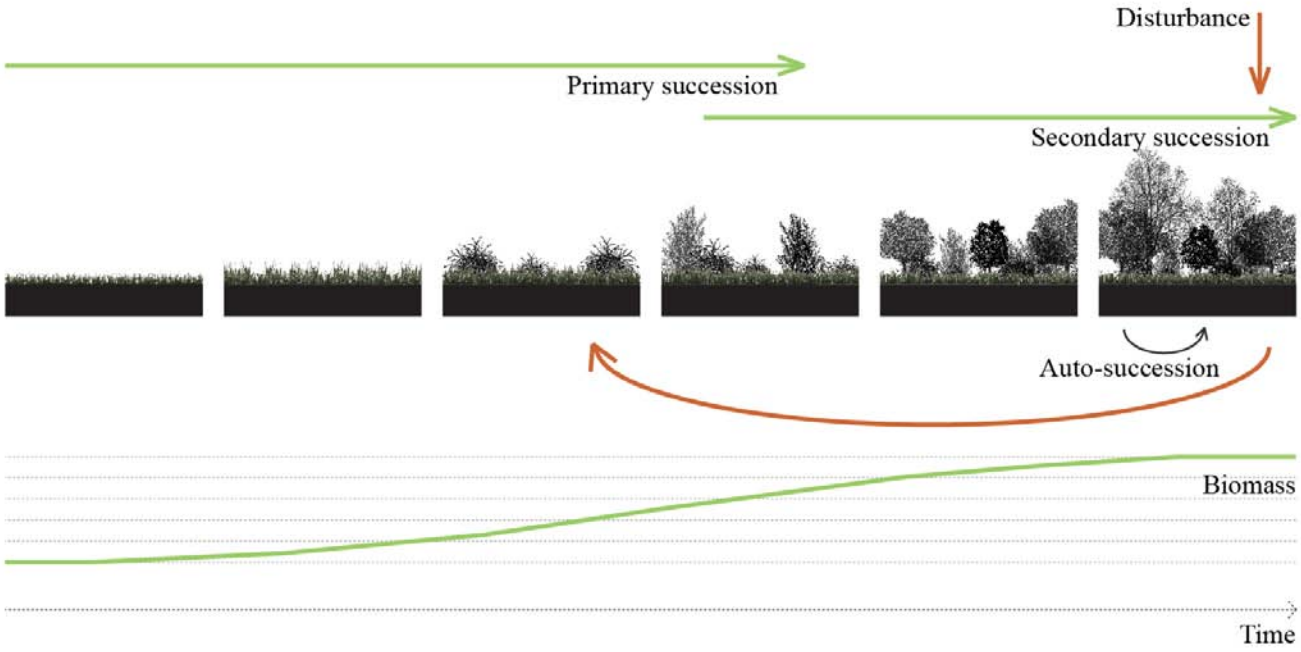
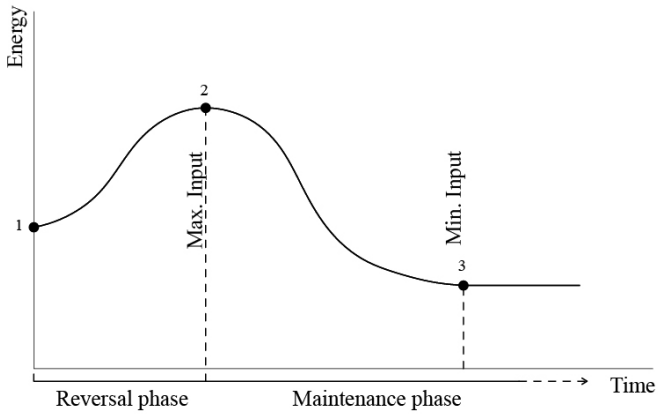


In arid countries such as the UAE, characterized by extensive areas of drylands and increasing urban pressure in territorial and water resources, desertification process has been highly accelerated during last decades. Since 2002, the "Greening the Desert" program has been implementing different projects in order to combat desertification in the Gulf. Although well intentioned, some of the measures have been criticised for their unsustainability and high energy demand.

This paper discusses desertification and land degradation and, more specifically, highlights the main causes and indicators of desertification in the UAE. Among others, hyper-aridity, over-exploitation of water resources, soil erosion and over-grazing are the most representatives. Throughout the hypothesis that the desert is not a condition but a state within an ecological process, this reasoning explains the possibility of reversing desertification process in arid ecosystems, which is graphically demonstrated with a theoretical curve relating energy input/time ratio.

Along the "de-desertification" process, maximum energy inputs are needed to a reversal phase and a minimum energy input is needed for a maintenance phase. The less energy input needed during the process, the more sustainable and efficient the process becomes.

This paper proposes an ecological landscape approach, figuring measures that sustain low energy inputs for greening the UAE deserts, based on a deep understanding of the desert ecosystem's dynamics, the identification and manipulation of the natural limiting factors and the consideration of the interconnection between the site's intervention scale and the larger scale of the territorial context, always considering landscape in its most inclusive conception.



DESERT AS A REVERSIBLE TRANSITION

Reversibility, Desertification, De-desertification, Energy input-time, Ecological succession, Resilience

PROAP Landscape Architecture
Rua D. Luis I,19 - 6º
1200-149 Lisbon, Portugal
+351 213 951 724
proap@proap.pt
www.proap.pt

Nunes, J. (Landscape Architect - PROAP)
Ribas, C. (Landscape Architect - PROAP)
Campos, T. (Landscape Architect - PROAP)
Sanz, B. (Landscape Architect - PROAP)
Authors