CONCEPT

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The Regeneration of Slussen International Competition

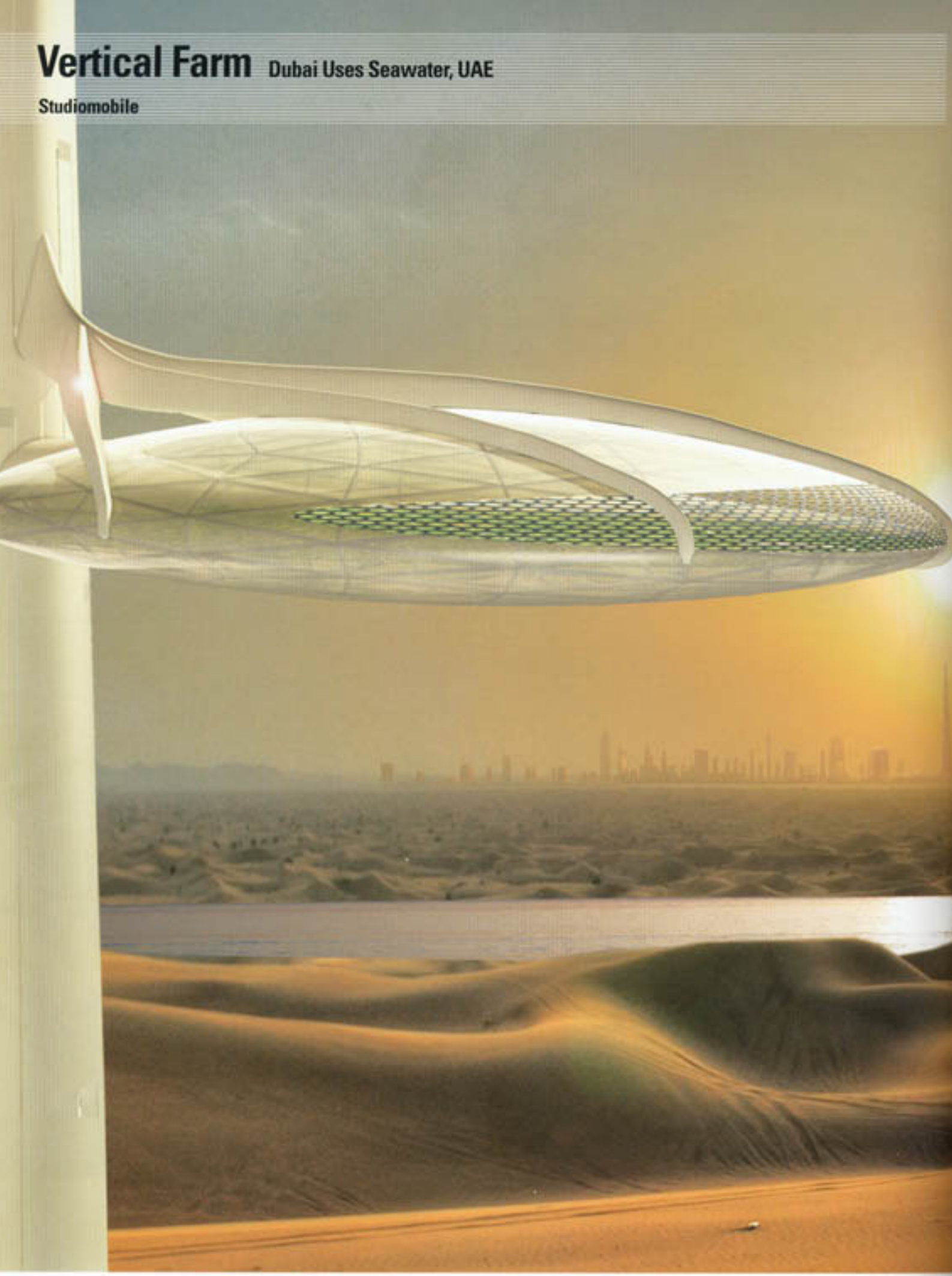
Myongji University Chapel Kim, Seok-chul

Nestlé Application Group Querétaro Rojkind Arquitectos

Dogok-1 Cultural Center WONYANG

Vertical Farm Dubai Uses Seawater, UAE

Studiomobile

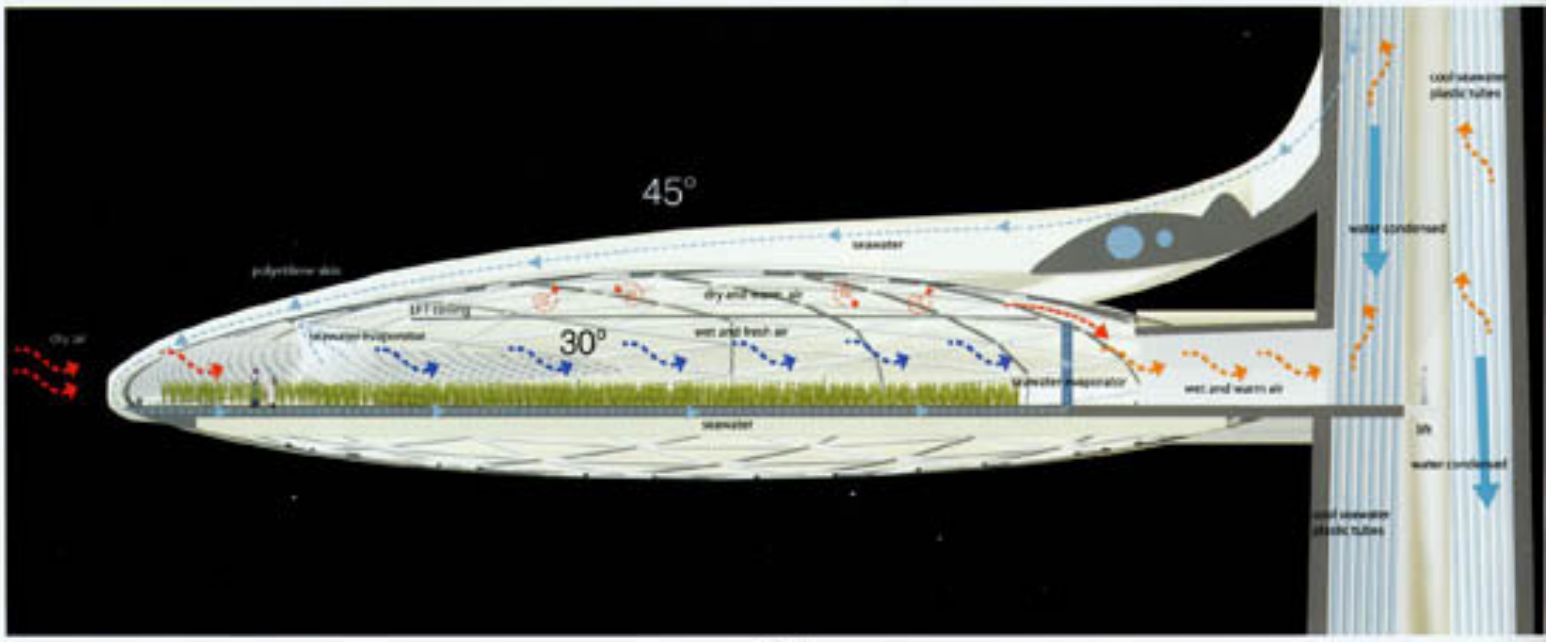


두바이에 위치한 해수 수직 농장은 담수 및 지역 채소의 부족, 끔찍한 도시 교통, 수송 문제, 높은 토양가치 문제를 해결하기 위해 계획된 최소의 집약 경작 형태의 도시 설계안이다. 이것은 5개의 나뭇가지 형태에 고정된 5개의 고치형 온실을 통해 이루어진다. 고치형 온실은 알맞은 해수를 수송하고 분무하여 적도지대의 환경처럼 작물에 습하고 차가운 흐름을 유지시킨다. 온실은 경강 구조 및 폴리에틸렌 덮개로 구성된다. 이것은 자외선을 반사하고 적외선을 흡수하는 성질을 포함하도록 특별히 처리되며, 사용수명이 끝날 때 100% 재활용될 수 있다. 해수 증발기는 저렴하고 놀라울 정도로 효과적인 관지로 만들어진다. 해수 증발기는 해수로부터 탄산칼슘을 결정화하여 조개처럼 경화시킨다. 진행공정은 제어 가능하며, 결과는 증발기 수명이 거의 무기한으로 연장될 수 있다.

The Seawater Vertical Farm is set in Dubai where the lack of fresh water and of local vegetables, the awful urban traffic, the transport problem and the high soil value makes realistic the idea of using some urban plots for intensive cultivation. The design of the Seawater Vertical Farm is quite simple. It provides for five cocoon-greenhouses fixed to five branches that also transport and nebulize the seawater creating a humid and cool flow, ideal for the plants, like the environment of the equatorial forest. The greenhouses are composed by light steel structure and polyethylene covering. It is specially treated to incorporate ultraviolet-reflecting and infrared-absorbing properties and can be 100% recycled at the end of their useful life. The seawater evaporators are made of cardboard sheets, cheaper and surprisingly effective. They crystallise calcium carbonate from the sea water and harden like sea shells. The process is controllable and the results indicate that the life of the evaporators can be extended almost indefinitely.

Written by Studiomobile

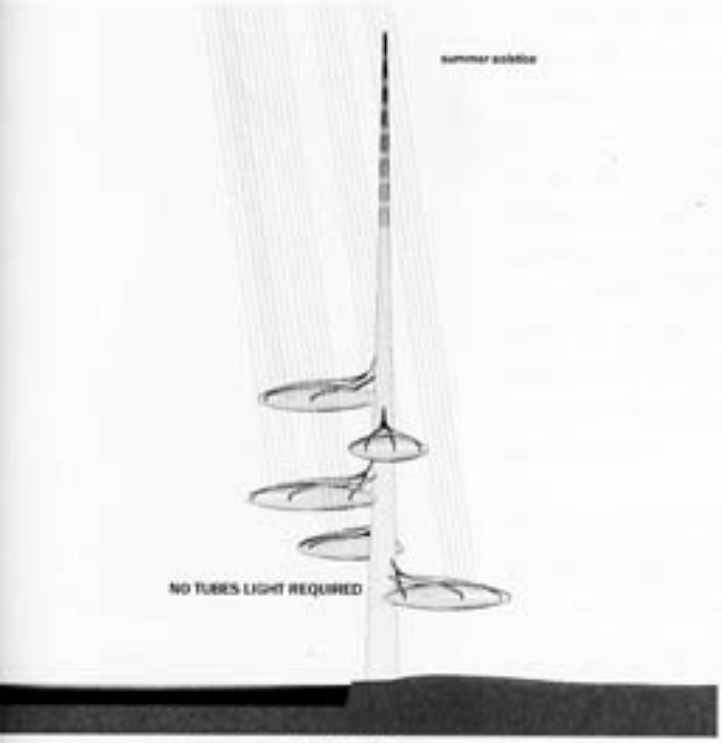
Site Plan


45°
30°
seawater
polyethene skin
dry air
wet and fresh air
wet and warm air
seawater
water condensed
cool seawater
plastic tubes

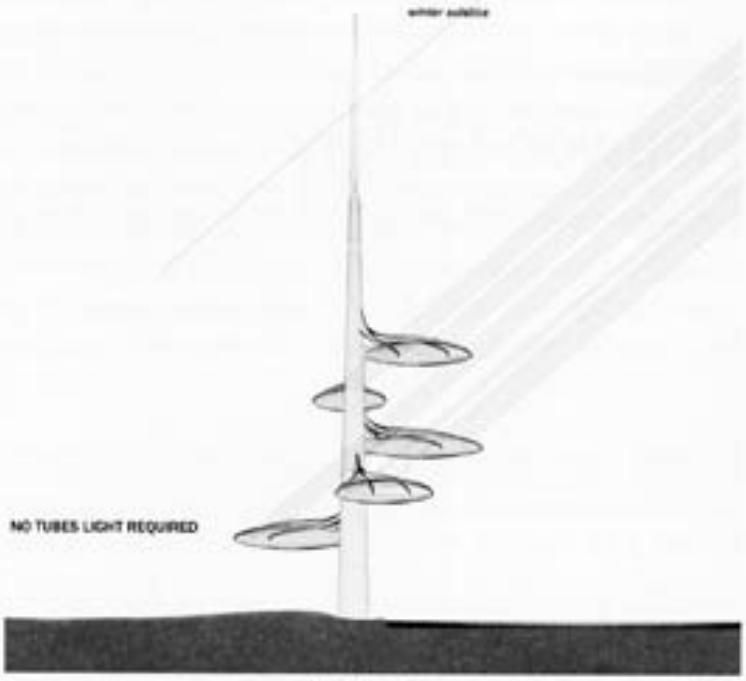
Section

ects Studiomobile **Use** Urban Development at Farm **Site** 3,500m² **Bldg. Area** 10,800m² **Bldg. Scale** 5 Stories above ad, 2 Stories below Ground **Structure** Concrete **Max.** t 250m

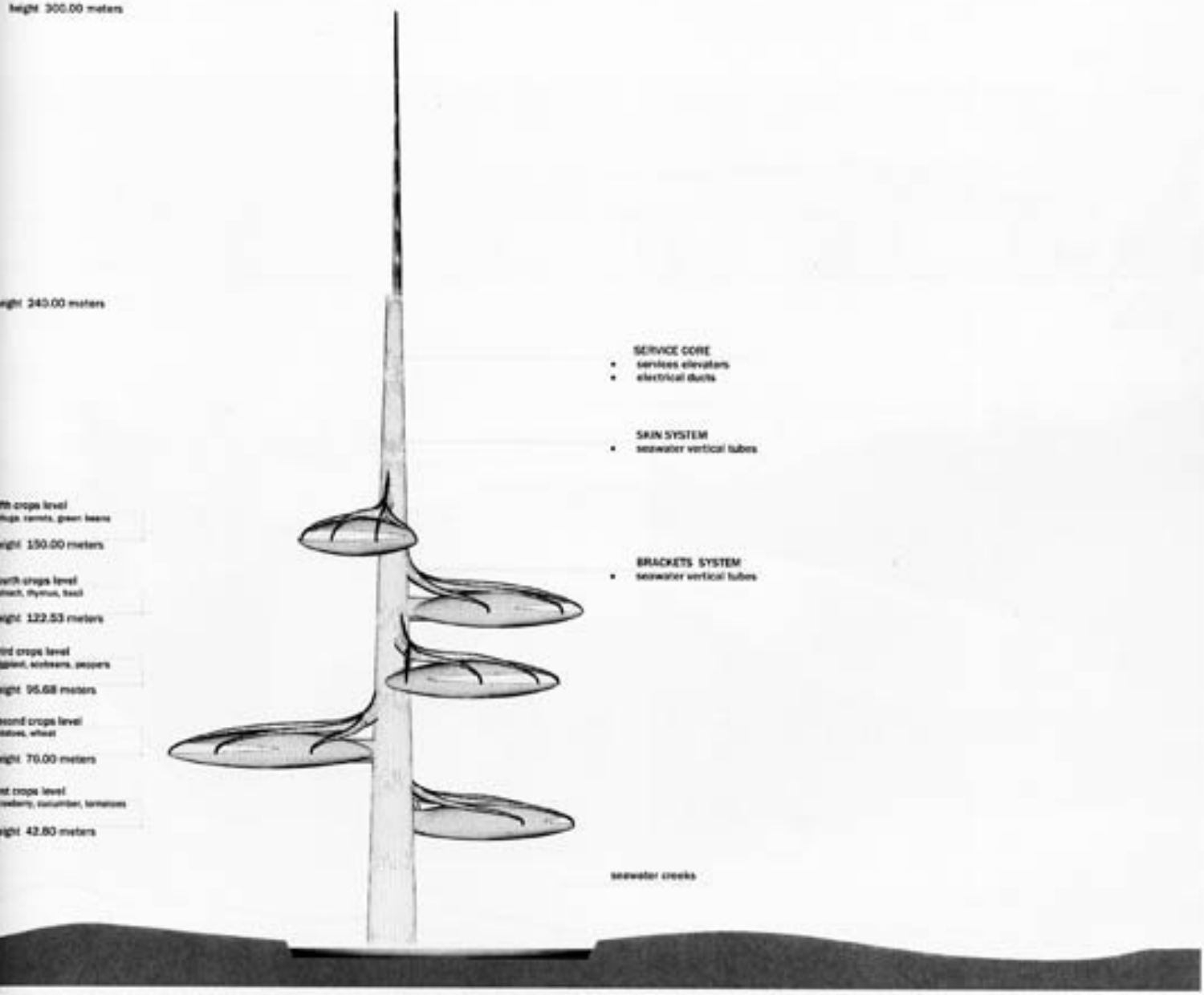
Axonometric



East Elevation



West Elevation



South Elevation(Tower Levels Crops)

INDEX