

Vertical Farming



The article below is taken from 'techtarget' aiming to help IELTS candidates boost their vocabulary and have enough ideas for them to fully cover any topic in Speaking and Writing. The useful ideas are written in **Bold**, collocations highlighted with relevant terms being <u>underlined</u>, followed by their definitions coming along.



Vertical Farming

Vertical farming is the practice of growing <u>produce</u> in vertically stacked layers. The practice can use soil, hydroponic or aeroponic growing methods. Vertical farms attempt to produce food in challenging environments, like where <u>arable</u> land is rare or unavailable. The method helps mountainside towns, deserts and cities grow different types of fruits and vegetables by using skyscraper-like designs and <u>precision</u> agriculture methods.

Most vertical farms use <u>enclosed</u> structures similar to greenhouses that stack vertically, either directly above each other or <u>staggered</u> for better natural light exposure. If saving space is of <u>utmost</u> importance, hydroponic methods as a growing <u>medium</u> instead of soil allow for reduced weight and lower water requirements by up to 70%. The use of aeroponics further reduces weight and water requirements. Most vertical farms are either hydroponic or aeroponic and do not have <u>runoff</u>, which would make the potted plants heavier.

Vertical farming typically uses a mix of natural light and <u>artificial</u> light. Artificial lighting is often LED-based and may be driven by a <u>renewable</u> power source such as <u>solar</u> power or wind turbines.

Supporters of vertical farming praise the impact it can have now and in the future to increase food security and have a positive impact on human health. It would reduce the amount of farmland needed, which could decrease <u>deforestation</u> and pollution, and help urban areas be <u>self-sufficient</u>.

Rasht **IELTS** House **Javidan** Language Centre www.rashtielts.ir

Tel: 32008661-4



Vertical Farming



Critics of vertical farming claim that most designs don't efficiently deliver the necessary artificial light to keep the design green. Many vertical farms have <u>hefty</u> electric bills to produce good yields. Furthermore, the necessity for vertical farming is <u>disputed</u> as critics argue that the problem is not a lack of farmable land but inefficient usage.

ON-TOPIC ITEMS:

- produce: noun / prodju:s/
 agricultural and other natural products
- arable: adjective UK /'ær.ə.bəl/ US /'er.ə.bəl/ arable farming land is used for, or is suitable for, growing crops

• precision: adjective [before noun] /prɪˈsɪʒən/

- used to describe machines, tools, etc. that are made to a very accurate and exact standard
- **medium**: **noun** [C] **UK /**'mi:.di.əm/ **US /**'mi:.di.əm/ **plural** media or mediums a method or way
- runoff: noun UK /'rʌnɒf/ UNCOUNTABLE

 flow of water or chemicals from one place to another, especial

a flow of water or chemicals from one place to another, especially when this damages the environment

- artificial: adjective US /ˌar-ţə'fɪʃ-əl/ made by people, often as a copy of something natural
- renewable: adjective UK /rr'nju:.ə.bəl/ US /rr'nu:.ə.bəl/ renewable forms of energy can be produced as quickly as they are used
- solar: adjective [before noun] UK /'səʊ.lər/ US /'soʊ.lə-/
 of or from the sun, or using the energy from the sun to produce electric power
- deforestation: noun [U] UK /di:_for.r'ster.ʃən/ US /di:_fo:r.ə'ster.ʃən/ the cutting down of trees in a large area, or the destruction of forests by people
- self-sufficient: adjective US / self-səˈfɪʃ-ənt/ able to provide what is necessary without the help of others
- hefty: adjective UK /'hef.ti/ US /'hef.ti/

large in amount, size, force, etc.

dispute: verb /dr'spju:t/

to disagree with or express doubts about something

Selected and Edited by: Pouya Sharifi

Javidan Language Centre

Rasht **IELTS** House **Javidan** Language Centre <u>www.rashtielts.ir</u> Tel: 32008661-4