

## Heatwaves :

There is no, at the present time, a universal comprehensive and common definition to the term heat wave. It differs from an area to another because temperature that people from a hotter climate consider normal can be termed a heat wave in a cooler area if they are outside the normal climate pattern for that area; A heat wave is a prolonged period of excessively hot weather generally during summertime. During the heatwave the more the humid air is the more the uncomfortably hot the temperature is which sometimes results in likely suffocation.

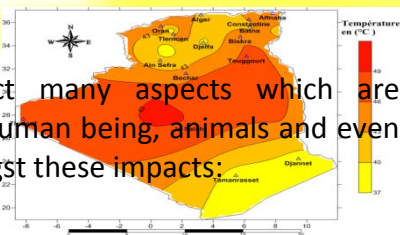
It can be stated, that in order to carry out a complete study of heatwave, the maximum temperature should be considered (during the day) and the minimum (at night) the humidity the sunshine levels, the amount of evapotranspiration, wind speed and direction, most studies are concerned with maximum temperature and duration.

## Heatwaves risks

Heatwaves impact many aspects which are closely linked to human being, animals and even vegetation, amongst these impacts:

### Environment

- Affect the ecosystem dynamic
- Vegetation and wild animals area changes
- Increased wildfires
- Increased evapotranspiration
- Increased pollution



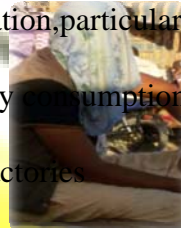
## Agriculture

- Threaten vegetation cycle particularly in flowering period of the plant
- Reduced soil moisture and increasing salinity amount
- Deterioration and loss crops



## Economy

- Water overexploitation, particularly drinking water
- Increased electricity consumption and shortage
- Stopped work in factories



## Health

- Mortality and morbidity (children, elderly population, people with chronic disease, obese)
- Increased human body temperature
- Sweatness excess (1 liter per hour)
- Nosebleed
- Heatstroke
- Heat-rush
- Reduction of blood pressure and high heart rate
- Heart attack and stroke
- Hospital overcrowding



## Mitigation of heatwaves effects

*House engineering should of the building planning through adapting windows to them in a way to not trap the sunlight during the day their size should reach less than 1/6 of the external wall*

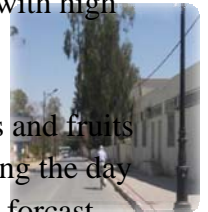
## Urbanism:

- Building domes and cooling techniques to slow down heat.
- House painting should be in light colours (avoid white)
- Choosing local isolation building materials
- Create green spaces near the buildings



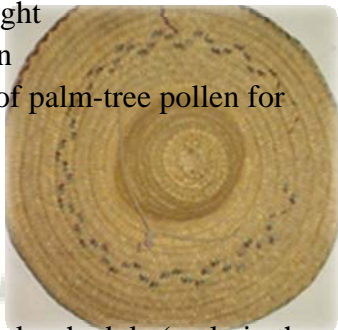
## Daily Practices

- Avoid sunstroke by keeping people indoors avoiding direct exposure to the sunlights (elderly population, children and sick persons).
- Drinking water and juices to stay well hydrated
- To wear lightly colours weight loose-fitting clothes
- to wear light weight hats for extra protection.
- Keep windows closed
- Keep the air conditioner at 25°C
- Reducing electric consumption
- Avoid eating hot food with high calories
- Avoiding junk food
- Better eating vegetables and fruits
- Avoiding traveling during the day
- Keep watching weather forecast



## Agriculture

- Irrigation at night
- Extra irrigation
- Conservation of palm-tree pollen for further use



## Economy

- Changes in work schedule (early in the morning and if possible for night in summertime).
- Work in rotation for the year.



*Studies of heatwaves monitoring should be carried out in a scientific way and in field with regard to the ecosystem patterns for the seek of adapting to this phenomenon in a sound way.*

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