

Parks Contributions in Achieving SDG



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Management Society (MyParks)***





MISSION

To support the sustainability of parks and recreation by promoting holistic planning, design, conservation and management.

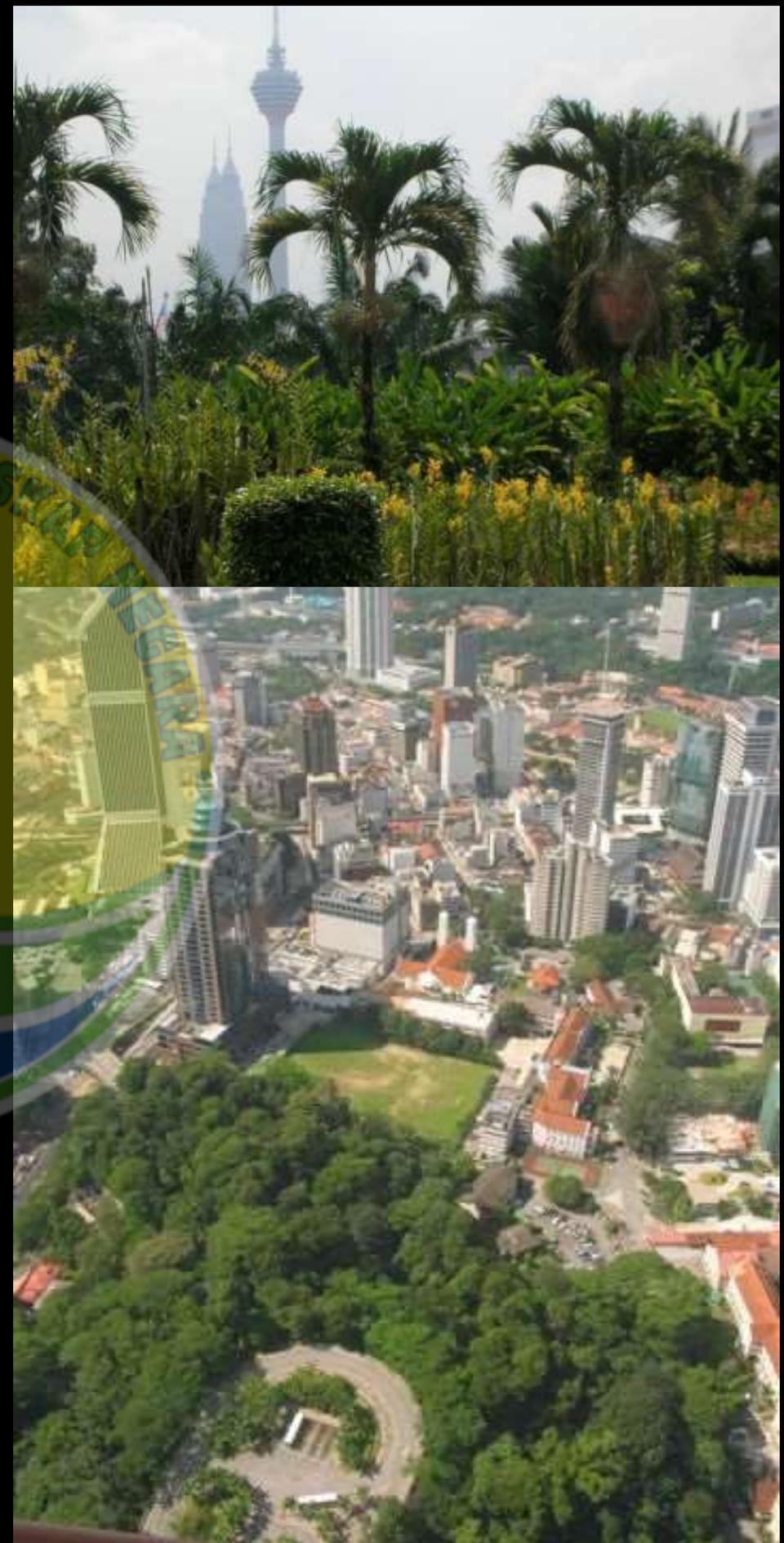
VISION

All Malaysians to have access to parks and natural areas in pursuit of quality living environment and lifestyle.

1. Dato' LAr. Hj. Ismail Ngah (*Ex-Officio*)
2. Dr. Noor Azlin Yahya (*President*)
3. Rotina Hj. Daik (*Vice President*)
4. Noriah Mat (*Secretary*)
5. Dr Ahmad Nazrin Aris Anuar (*Treasurer*)
6. Nur Suriani Salleh (*Asisstant Secretary*)

Urbanisation in Malaysia

- In 1980, 35% of Malaysian population living in urban areas; in 1995, 55%
- Today, 76% Malaysians lives in urban area
- Urban forests and parks (urban green space) ameliorate the harsh conditions of urbanized areas
- Urban green space is important to balance the density and distribution of the population
- Urbanisation leads to challenging conditions; affecting the physical and mental health
- Especially due to the existence of vegetation in large areas, parks contribute in combating environmental problems; contributes in biodiversity conservation as well as benefiting social and cultural needs.



Sustainable Development Goals

- In September 2015, the General Assembly of the United Nations adopted the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs).
- Sustainability can only be achieved if ecological balance exists.
- Some goals specifically address ecological and environmental protection where greeneries play very important roles.



The Global goals for sustainable development.

Image source:

<https://www.un.org/sustainabledevelopment/news/communications-material/>

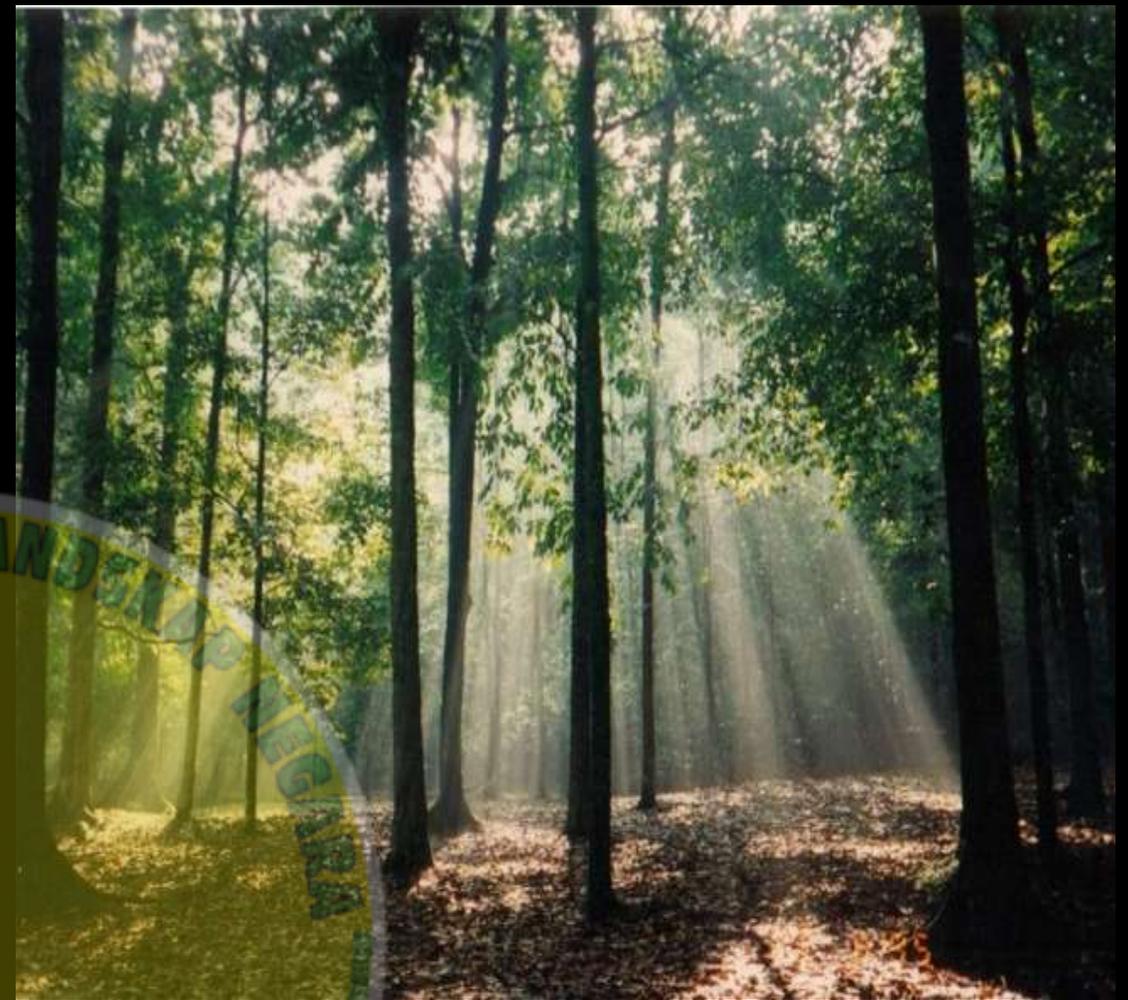
Benefits

Socio-cultural values and services:

- Physical fitness/Healthy lifestyles (humans and pets)
- History/culture
- Therapeutic and healing functions
- Energy of green space as appreciated in tai-chi, chi qong and traditional practice/exercise
- Economic spin-off: local businesses, food and beverage stalls, green tourism

Environmental functions:

- Adaptation and mitigation of climate change
- Storm water management, examples of wetlands
- Natural biological filters to air pollution and dust, noise screens etc.
- Areas for biodiversity conservation, refuge of wildlife, endemic plants.
- Environmental education



Conservation, education and recreation benefits

- Habitats for conservation of biodiversity
- Relate to historical/cultural values
- Educational recreation
- Therapeutic benefits
- Impacts of green experience on personality development



Parks and human well being

- Parks contribute to human's physical and mental well-being.
- Vegetation improve recovery rate in hospitals and recovery centres, relating to reduced stress in the presence of nature.
- Recreational activities are associated with physical health.
- Study in Japan: a forest bathing trip once a month would enable individuals to maintain "NK" or natural killer activity (Li, 2010).
- Walkable green spaces positively influence the longevity of urban senior citizens (Takano et al., 2007).
- Children 5 to 18 years old with attention deficit/hyperactivity disorder, reduced symptoms with presence of greeneries.
- Crucial to human's physical and mental well-being, trees are important to achieve the goals below:

Goal 3: Good health and well-being

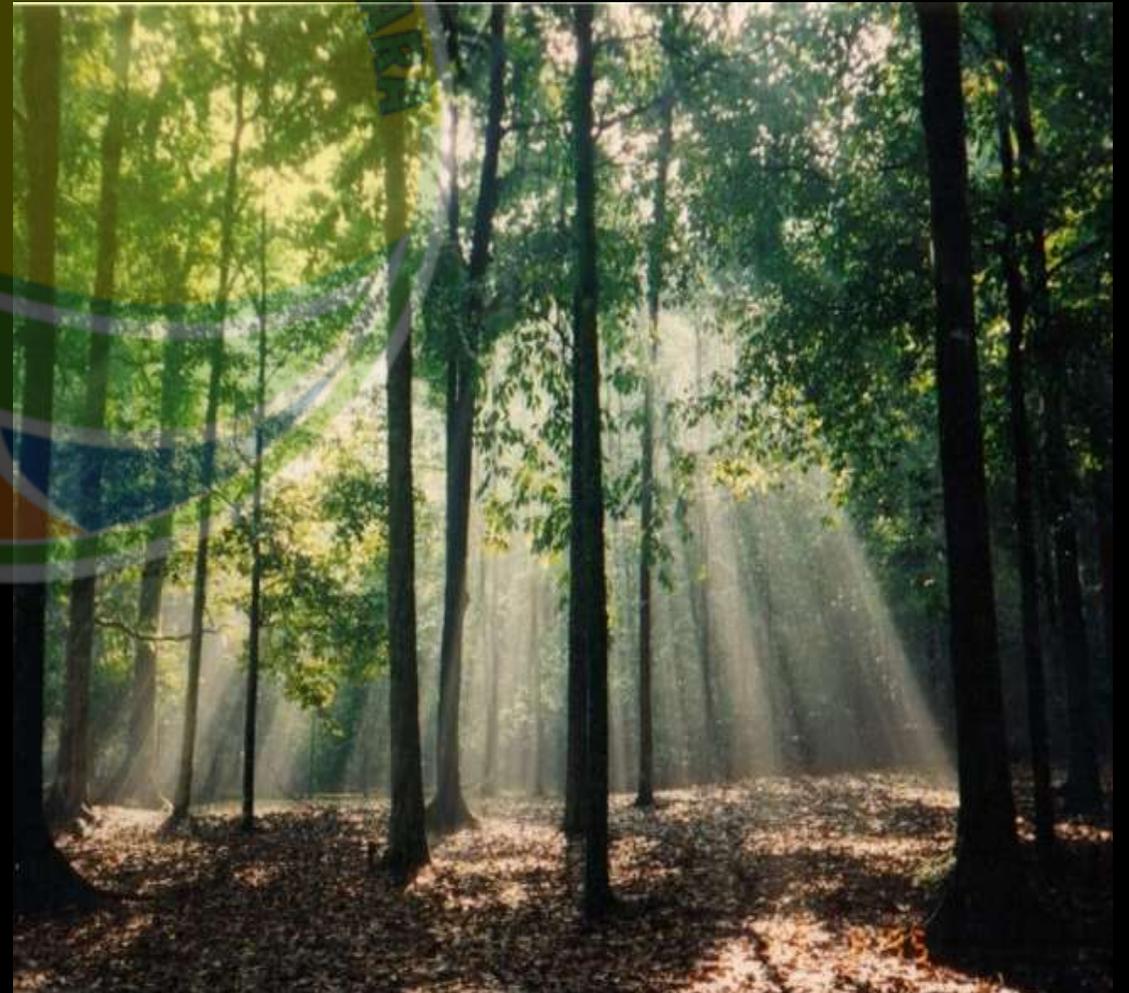
Goal 11: Sustainable cities and communities



Aesthetics



Health



Parks and socio cultural benefits

- Parks bring economic benefits that are direct or indirect.
- Not only ameliorating harsh climate, the availability of parks increase property values.
- Parks create business opportunities to people living in the area. Providing a source of income to communities.
- Biodiversity resources found in parks attracts tourism activities. National parks or reserves, for example, improves economic benefit to the local communities.
- Parks are locations suitable for environmental education. Animals and plants in parks make good education reference
- Parks can be related to cultural heritage
- Thus, these goals are associated:

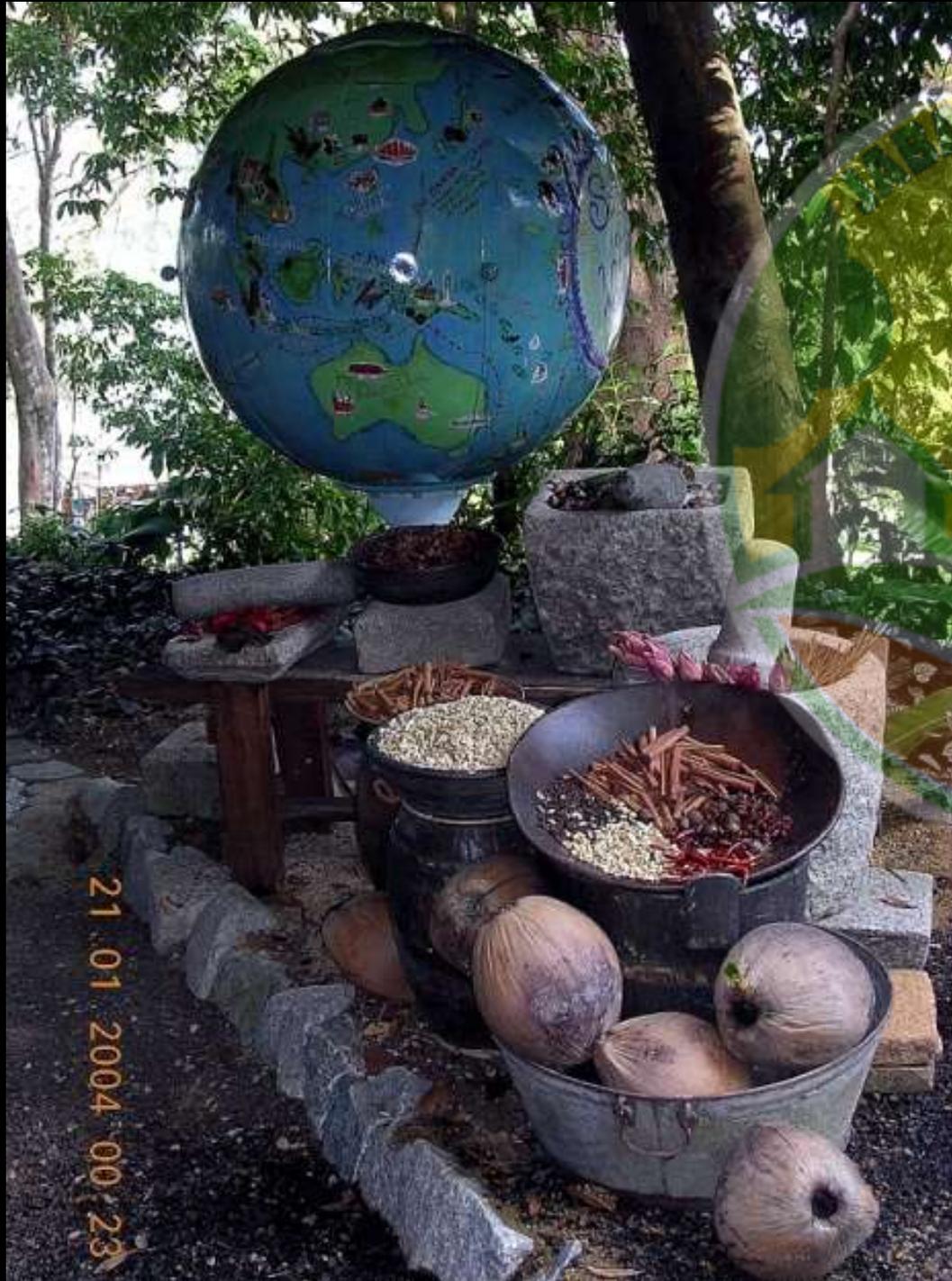
Goal 4: Quality Education

Goal 8: Decent work and economic growth

Goal 11: Sustainable cities and communities



Parks and cultural heritage





- Cultural identity
- Healing properties
- Positive energy



Education

Accessible to public; parks are convenient venues for environmental education and other outdoor activities.



Parks
generates
economy



Parks and ecological functions

- Plant foliage can filter pollutants e.g. ozone, nitrogen oxides, ammonia and sulphur dioxides.
- Filter particulate matter like dust, micro sized metals and other pollutants.
- Plants clean the air by taking in carbon dioxide and produce oxygen during photosynthesis.
- Water quality improves with existence of vegetation.
- Rainfall impacts reduced & soil erosion prevented from entering into waterways
- Thus reducing storm water runoff, and the risk of flood and death of life under water.
- Plants mask unsightly views and a good noise reducer, thus acting as a pleasant barrier.
- Serving these important engineering functions and more, plants in parks can be linked to the goals below:

Goal 6: Clean health and sanitation

Goal 13: Climate action

Goal 14: Life below water

Goal 15: Life on land



Ameliorating Climate Change

- Increasing surface temperature
- Changing precipitation pattern
- Rising sea-level
- Increasing frequency and intensity of extreme events

- Heat wave
- Drought
- Extreme rainfall

Tropical cyclones (Typhoon)

Symptoms of climate change

Sudden storm

Flash floods

Natural disasters

Temperature increase

Peninsular Malaysia- 0.5 to 1.5 °C

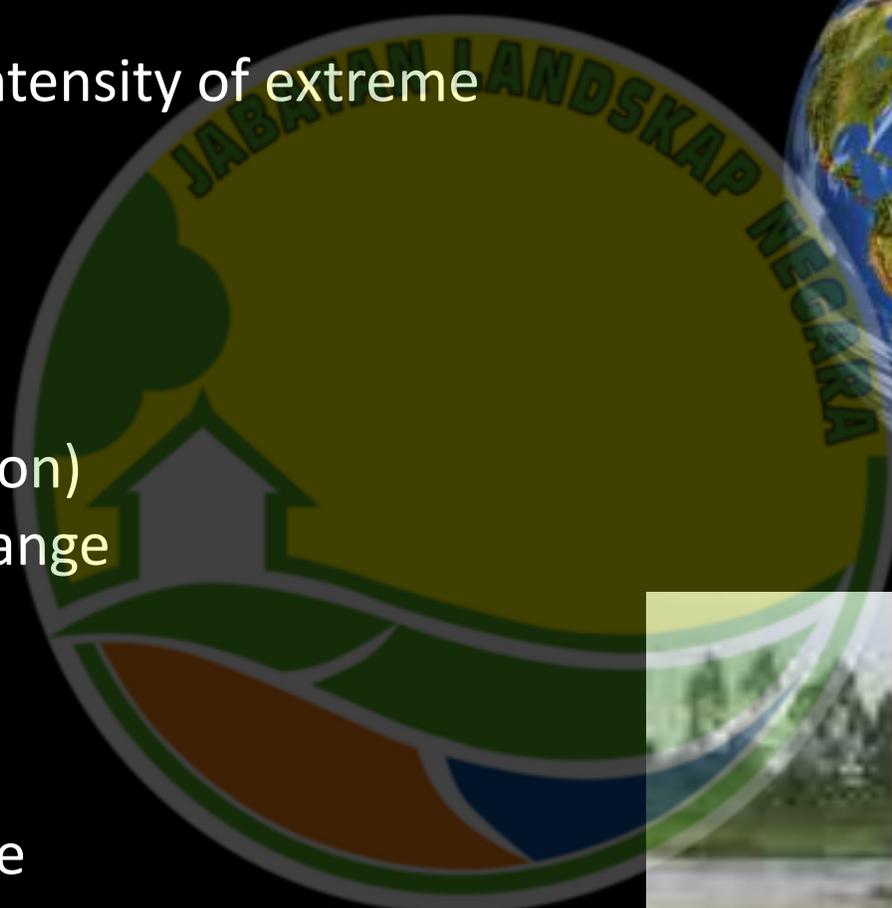
East Malaysia – 0.5 to 1.0 °C

Rainfall

Increase by 6-10% - PM & Sarawak

Increase by > 10% - Sabah

Source: MMD



Plants in parks: Functions

- Act as filters to reduce heat-island effects in urban areas
- Serving as natural biological air filters to air pollution and dust, act as noise screens and help in water management.



Plant values

- 50-year lifetime one tree generates \$31,250 worth of oxygen,
- Provides \$62,000 worth of air pollution control
- Recycles \$37,500 worth of water,
- Controls \$31,250 worth of soil erosion (Sherer, 2003).



Water retention and flood mitigation



Conclusion

- Parks are clearly linked to goals 3,4,6,8,11,13, 14 and 15.
- Managing parks to optimize their functions is our main agenda to support Sustainable Development Goals.



Parks objectives for sustainability

- Habitats for conservation of biodiversity
- Relate to cultural values
- Educational recreation
- Ameliorating climate impacts
- Ecological balance
- Happier and healthier people



**Together we
move the
world towards
sustainability**



Thank you

from

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