CLAIMS:

1. A process for maintaining comfortable room conditions in a tropical climate, the process comprising operating a ventilator at least:

   i. drawing fresh air from outside the room when temperature outside the room is at or lower than temperature in the room; or

   ii. drawing fresh air from outside the room when the air quality in the room falls below a predetermined quality level and temperature in the room is not exceeding a set point; or

   iii. exhausting air from the room when air quality in the room falls below a predetermined quality level; or

   iv. cyclically drawing fresh air from outside the room for a first predetermined duration when temperature outside the room is at or lower than temperature in the room and exhausting air from the room for a second predetermined duration; or

   v. cross-ventilating the room for a predetermined duration when temperature outside the room is at or lower than temperature in the room and/or air quality in the room falls below a predetermined level.

2. The process according to claim 1, wherein determining air quality includes sensing carbon dioxide level in the room.

3. The process according to claim 1 or 2, further comprising setting an air-conditioner to operate in a temperature range of substantially 26-28°C.

4. The process according to any one of claims 1-3, wherein drawing fresh air or cross-ventilating comprises adjusting an air flow by regulating a speed of a fan disposed in the ventilator that draws in fresh air.

5. The process according to any one of claims 1-4, further comprising passing the air through a mesh to trap or stop insects from intruding.

6. The process according to any one of claims 1-5, further comprising passing the air through a filter, which is selectable depending on pollution level outside the room.

7. A method of operating a ventilator in a room located in a tropical climate, the method comprising at least:

drawing fresh air from outside the room when temperature outside the room is at or lower than temperature in the room; or

drawing fresh air from outside the room when air quality in the room falls below a predetermined quality level and temperature in the room is not exceeding a set point; or

exhausting air from the room when air quality in the room falls below a predetermined quality level; or

cyclically drawing fresh air from outside the room for a first predetermined duration when temperature outside the room is at or lower than temperature in the room and exhausting air from the room for a second predetermined duration; or

cross-ventilating the room for a predetermined duration when temperature outside the room is at or lower than temperature in the room and/or air quality in the room falls below a predetermined level.

8. The method according to claim 7, wherein determining air quality includes sensing carbon dioxide level in the room.

9. The method according to claim 7 or 8, wherein drawing air or cross-ventilating comprises adjusting an air flow rate by regulating a speed of a fan disposed in the ventilator.

10. The method according to claim 9, wherein operating the ventilator comprises setting a duration on a timer or setting a smart system that automatically actuates the fan’s operation.

11. The method according to any one of claims 7-10, wherein drawing fresh air from outside the room, exhausting air from inside the room, cyclically drawing fresh air from outside the room and exhausting air from the room or cross-ventilating the room

improves air quality in the room by decreasing the carbon dioxide level, a volatile organic compound (VoC) or allergen level in the room.

12. The method according to any one of claims 7-11, wherein operating the ventilator comprises operating an air-conditioner in the room with a thermostat set at substantially 26-28 °C.