

## Chapter VI. CONCEPTUAL DESIGN APPROACH

Conceptual Design approaches are the entry point of to find solution regarding design issues that emerged from the problem analysis. Design issue determination become the cornerstone of the concepts of design solution below.

### A. How to project the future 2036 through out the building design?

Allowing adaptive designs to address a variety of issues such as economic, social, and environmental concerns while still remaining a long-term investment. Such as having a regulated waste treatment system can reduce damage to the surrounding structures, so it can establishing sustainable structures can make human life easier, provide more options, and provide greater management. In order to address this, adaptable structures with increased lifecycle value will be designed and constructed. Adaptable buildings lower the total cost of ownership over the course of their entire lifecycle, with the greatest savings occurring during the in-use period. As a result of the rapid deterioration of some materials, the quality of the materials used in adaptable buildings is particularly crucial.

### B. How to overcome time differences so as to optimize athlete performance through architectural solutions?

To improve the quality of sleep, athletes can make adjustments to the room, such as:

- provide good sound insulation so that the bedroom is soundproof.

The room insulation must not only reduce activity from outside but also pay attention to the condition of the electronics in the room so that there are no devices or electronics that make sounds that interfere with their sleep performance.

- Provide the option of closing in natural light from outside the window so that teenagers who come with a drastic time difference can rest without being disturbed by natural light from outside.

For this, you can add panels or with curtains in the room that are thick enough not to penetrate the light.

- Provides programmable artificial light settings by room users so that they familiarize their eyes when they will adapt to the clock in the country.

Currently there are LED lights that can be adjusted the intensity of the light and a timer when they light up which can be adjusted by the user in the room.

- Provides good air temperature quality normally between 18°C and 24°C which can be adjusted by the user to feel comfortable.

Good air quality and cold will make it easier for room users to rest comfortably.

### **C. How to resolve participants' psychological issues during times of stress through the use of a healing architecture ?**

To provide a stress-relieving environment in the psychology of adolescent athletes who wish to participate in activities on the premises. Numerous techniques can be used in the healing architecture, including the following:

1. Provide apertures that allow natural light to enter active spaces such as community areas, cafeterias, classrooms, and active sports rooms such as badminton, swimming, volleyball, basketball, and ball courts.
2. Create an artificial view in areas that require tranquillity, such as relaxation rooms, dining rooms, and classes that require a high level of attention.
3. In the eating area, play relaxing noises such as natural sounds or classical music.  
It dampens sound in rooms that require silence to achieve a sound intensity level of less than 35 dB.
4. Incorporate supporting sculptures or works of art to create a tranquil ambiance.

5. Design a room in the manner of a house, with each cluster having a common service room such as a living room, dining room, or pantry.
6. Designate a space for cooling or relaxing with natural or man-made landscape.<sup>2</sup>  
The application of color in accordance with their psychological requirements. Avoid lively hues such as yellow, red, and orange in relaxation and healing regions since they cause adrenaline to be released. When it comes to the sleeping area and personal space, utilize calming hues such as light blue, white, and lavender to help teenagers sleep better during the night. Sports facilities and gymnasiums can benefit from the use of adrenaline-inducing hues like red and fresh colors like green to help lift their spirits as they prepare for matches and compete. In the meanwhile, colors that arouse and stimulate hunger, such as yellow, will be used in dining facilities such as cafeterias to assist participants regain their appetite.

**D. How to ensure the safety of participants, particularly international youth participants?**

Maintaining a separate drop-off zone from the parking lot, locating bicycle racks away from traffic, and providing an easily identifiable and secure building entrance all contribute to greater safety. Sites and facilities for youth centers have been located in close proximity to residential areas, schools, and other youth activities. Avoid placing a youth center near a busy junction, a flight path, or an industrial area. Selected facilities for renovation that are sufficiently spacious and adaptable to handle a broad range of youth activities are being examined.