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**"GREEN CONSTRUCTION: ANALYSIS ON GREEN AND
SUSTAINABLE BUILDING TECHNIQUES"**

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Cost efficiency; Environment friendly.**

ABSTRACT

Green building definition encompasses more broadly a building planned, constructed, operating, preserved or reused to preserve occupying wellbeing, enhance employee morale, utilise natural capital wisely and reduce the effects on the ecosystem. In other terms, in all phases of building design the green construction process combines environmental aspects. The project reflects on the planning, renovation, service and maintenance processes which includes design and production efficiency of lots, energy and water efficiency, resource efficiency, indoor environmental quality, maintenance of building owners and overall environmental impacts of the house. The design and use of environment-friends materials with associated or better features than conventional building materials should therefore begin with the design of green buildings.

INTRODUCTION

The word 'Green' applies to sustainable policies from the construction of buildings to the option of landscape. It is also optimistic and economic for the usage of electricity, water, storm and west. The word "grand building" should not only apply to objects, but to building plans, construction planning and construction and encourages your family's economic wellbeing and well-being. The world and the culture. Green building has positive social and environmental consequences which affirm your future contribution and the way we live for years to come. A intelligent move forward towards personal economic rewards In reality, buildings with around 40% of the natural resources derived from the developed nations, almost 70% of the energy consumed and 12% of the drinking water, produce about 45% and 65%

of the waste disposed of in our waste sites have a huge effect on the world. They are also liable, as a result of their activity, for a mass of toxic pollutants, which include 30% of greenhouse gases, and a further 18%, which are indirectly driven by materials. At the same time, the poor condition of indoor conditions will lead to health concerns for staff in office buildings and thus reduce productivity.

The construction industry has a substantial environmental influence from an environmental point of view. Residential buildings reflect a significant percentage of the environment designed. For general sustainability, material and construction choices are necessary. The scientific community worldwide has taken major initiatives to identify alternative, safe building materials and low-technology approaches that lead to a sustainable and economical construction that meets current comfort requirements. To achieve this objective is an outstanding solution to the adoption of green building products. In a country's sustainable growth it is helpful to choose building products with minimal environmental burdens. Therefore, it is essential and important to make a building commitment towards environmental concerns. Selecting materials that are environmentally preferable is an ideal way to improve sustainable sustainability in buildings. Although new innovations are clearly needed immediately to simplify the application of low-impact construction materials, a number of technologies or systems are currently in operation. Much came from earlier influxes of ecological houses, driven by the environmental revolution of the 1970s and then strengthened by energy-efficient buildings. Their approach has been described as successful at sharing best practise ideas with committed green defenders, builders and the individuals looking for alternate ways of defining the mechanism for material procurement, and very few such structures promote effective and substantive usage of a building design-decision phase of the local and recycled construction materials.

A green building minimises the depletion of natural capital during building and service. During development and service, the aim of a Green Building is to be minimal. The objective of the Green Building Architecture is to minimise demand for non-renewable energy and increase their efficiency in usage as well as maximise renewable material reuse, recycle and use. Optimize the use of bio-climatic architectural practises of site sources and sumps, use less energy to energy; use efficient equipment in order to meet their needs in the lighting sector, climate control and other fields. Maximize renewable energy use, energy consumption; use minimum energy to power itself; use less waste and construction. Efficient building materials and construction practises. The development phase involves working as a team in all areas of architecture and design, device preparation and operations, the contractor and lanscape designer, air conditioner, electricity, plumbing and energy contractors. They analyse objectively the environmental impacts of a design choice and find viable design options to mitigate adverse impacts and improve environmental positive impacts. In short, in a green house, we examine the following facets of the building architecture in an interconnected manner. Climate and global pollution are becoming a major problem for humankind. Major companies across the world are helping programmes to delay the degradation of natural capital to guarantee that growth and climate are combined.

LITERATURE REVIEW

Diana Gutierrez (2018) The construction industry has a substantial environmental influence from an environmental point of view. Residential buildings reflect a significant percentage of the environment designed. For general sustainability, material and construction choices are necessary. The scientific community worldwide has taken major initiatives to identify alternative, safe building materials and low-technology approaches that lead to a sustainable and economical construction that meets current comfort requirements. Education for operation, repair and construction owners Improper and poor maintenance can impede the efforts of designers and contractors to develop an environmentally friendly resource efficient facility.

Indunil D. Batuwangala (2018) To achieve this objective is an outstanding solution to the adoption of green building products. In a country's sustainable growth it is helpful to choose building products with minimal environmental burdens. Consequently, the building of environmental contributions is high and consequently crucial. Selecting materials that are environmentally preferable is an ideal way to improve sustainable sustainability in buildings. Although new innovations are clearly needed immediately to simplify the application of low-impact construction materials, a number of technologies or systems are currently in operation. Much came from earlier influxes of ecological houses, driven by the environmental revolution of the 1970s and then strengthened by energy-efficient buildings. Their approach has been described as successful at sharing best practise ideas with committed green defenders, builders and the individuals looking for alternate ways of defining the mechanism for material procurement, and very few such structures promote effective and substantive usage of a building design-decision phase of the local and recycled construction materials..

Chandra Shekhar Singh (2018) Green houses also concentrate on indoor as well as outdoor water conservation. Indoor and native water supply schemes and drought-resistant selections of outdoor water supplies can help avoid excessive waste of valuable water resources. The usage of heavy and light water-closet flushing options (implemented in Nuwaraeliya, Sri Lanka at The Tea Factory Hotel) helps for example save indoor water. Current studies and experience showed that natural systems can be a very good way of water and waste water filtering and eliminating toxins which can be effectively reused for irrigation etc. An rise in respiratory ailments and asthma and the usage of additives that can emit gases from products have added significantly to the sensitivity of the environment inside our dwellings. The green building focuses on interventions that will reduce the impacts of possible pollution including source regulation, source dilution and filtration of the source.

Kaanchan M. Patil (2017) India India Because of accelerated urbanisation, enormous environmental issues arise in the building sector. The demand for residential units is increasing. This contributes to more electricity use, labour and raw materials that increase the carbon footprint. The environmental effects of all metro lines are now being targeted, such as temperature transition, ecological destruction. The approach is to use recycled resources and solutions for sustainable production. Sustainable growth satisfies today's demands and does not affect prospective generations' capacity to fulfil their own needs. This paper outlines the philosophy of sustainable growth that has taken centre stage in the last 20 years.

Sustainable building materials and technologies make this progress possible. The definition accepts that human civilisation is an intrinsic part of the natural environment and that it has to be maintained and sustained for the sake of human survival.

Asfari(2014) Included predictive energy models and monitoring systems, for example occupancy and daylight sensors, CO2 sensors and other air pollution alerts, are increasing building performance. Use sensors to monitor loads dependent on natural resources such as daylight and natural ventilation, and on their availability. Using energy efficiency software including the Energy Star Portfolio Manager to monitor energy and water usage. Integrate water-saving technology that reduces electricity costs and provides drinking water, such as rainwater collection and WaterSense equipment; Measure and check the energy conservation and predictive model objectives have been reached. Green architecture will help you create an environmentally sustainable and effective home with your resources on the long term Sun orientation for passive solar heating and lighting Build an energy-efficient system providing a thoroughly isolated envelope requiring fewer heating and cooling energy. Windows with low E to avoid heat loss. Green fabrics. Green materials. Sustainable tree wood, low-toxin fabrics, renewable materials and water-saving rolling stocks.

METHODOLOGY

Factors to take into account Plan, production and planning of the lot: The construction design and planning activities that are thoughtful and effective help to reduce the environmental footprint and increase the energy efficiency for modern structures. The designs focused on protecting vegetation, building retention/infiltration features on-site and orienting the building to maximise energy use in a green building are basic factors. Efficiency of resources: It is a reality that a verdant building works well in incorporating and implementing ideas when the content / device / method is selected at the design stage.

Material Selection

In construction the use of hazardous chemicals may affect a building's occupants' overall health. In actual fact, schools do not concentrate on choosing goods because of their ability to gas toxic substances, need routine servicing of certain chemicals or include the removal of goods that prolong the exposure loop, despite the increased understanding of the environmental health issues surrounding exposure to these products. The assessment of construction items from collection and final disposal of raw materials provides an improved understanding of materials' long-term cost. Not just the customer but also the consumer, the residents and the community pay these expenses..

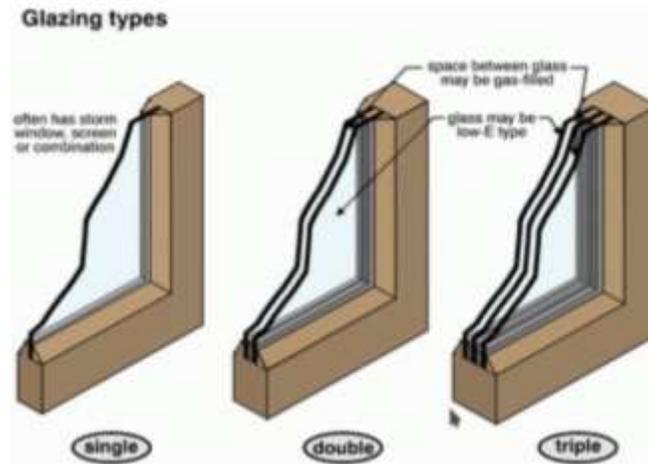


Figure1.1: Double paned windows cross section

Roofing materials: As radiant energy from the sun hits the surface of the roof, it becomes heat that radiates down to the Attic. And the rooms next door, Radiant obstacles limit heat accumulation in the upper room by not radiating heat from the roof to the upper floor and finally into the internal rooms. They block the entry into the house of up to 97% of the sun's radiant heat and can reduce attics to 30° on hot days, hold the entire house cooler and reduce air conditioning power usage.



Figure1.2: An example of cork and bamboo flooring

RESULTS AND DISCUSSION

Manufacturing measures for pollution control Action taken during the production process to avoid pollution will greatly lead to environmental sustainability. Manufacturing waste control programmes the waste reduction function shows, by minimising the quantity of scrap content, that the producer made measures to make the manufacturing process more effective. Material recycled: A substance that is recycled was made in part or in whole from post-industrial or post-consumer waste. Reduction of electricity the incarnated energy of a substance relates to the overall energy necessary to manufacture the material, including raw material collection. natural materials: natural materials: Natural products are typically less than man-made materials in combined energy and toxicity.

Table 1.1: sustainable/green actions suggested

Manufacturing Process (MP)	Building Operation (BO)	Waste Mgmt. (WM)
Waste Reduction (WR)	Energy Efficiency (EE)	Biodegradable (B)
Pollution Prevention (P2)	Water Treatment and Conservation (WTC)	Recyclable (R)
Recycled (RC)	Nontoxic (NT)	Reusable (RU)
Embodied Energy Reduction (EER)	Renewable Energy Source (RES)	Others (O)
Natural Materials (NM)	Longer Life (LL)	

They need fewer packaging and are less environmentally harmful. Theoretically, many are organic, like wood. Minimal building waste during installation eliminates the need for garbage space as well as cost savings. For eg, concrete was typically pre-mixed and shipped to the site with water. Materials from local sources: Locally manufactured construction materials shorten travel distances to reduce vehicle-generated air emissions. Local goods are also well adapted to weather and these acquisitions help the economies of the region. Quality of energy Energy quality is a key aspect of environmentally friendly construction materials. The ultimate objective of the use of energy effective materials is to reduce the amount of energy consumed on a construction site.

CONCLUSION

A number of measures should be taken in early building phases. This report compiles various activities which can be taken into account at all building periods. The report gives decision-makers guidelines for the selection of green and sustainability measures. The study proposes measures that are appropriate for the Jordanian economy. The report often lists the precautions associated with such behaviour. Depending on role and efficiency, the choice of behaviour varies. Professionals pick construction the green building strategies provide an unparalleled potential to make a significant contribution to current global pollution mitigation goals, accounting for 40 percent of the current emissions of electricity. The green building ranking tools are the traditional carbon metric.

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