

GREEN ARCHITECTS in India

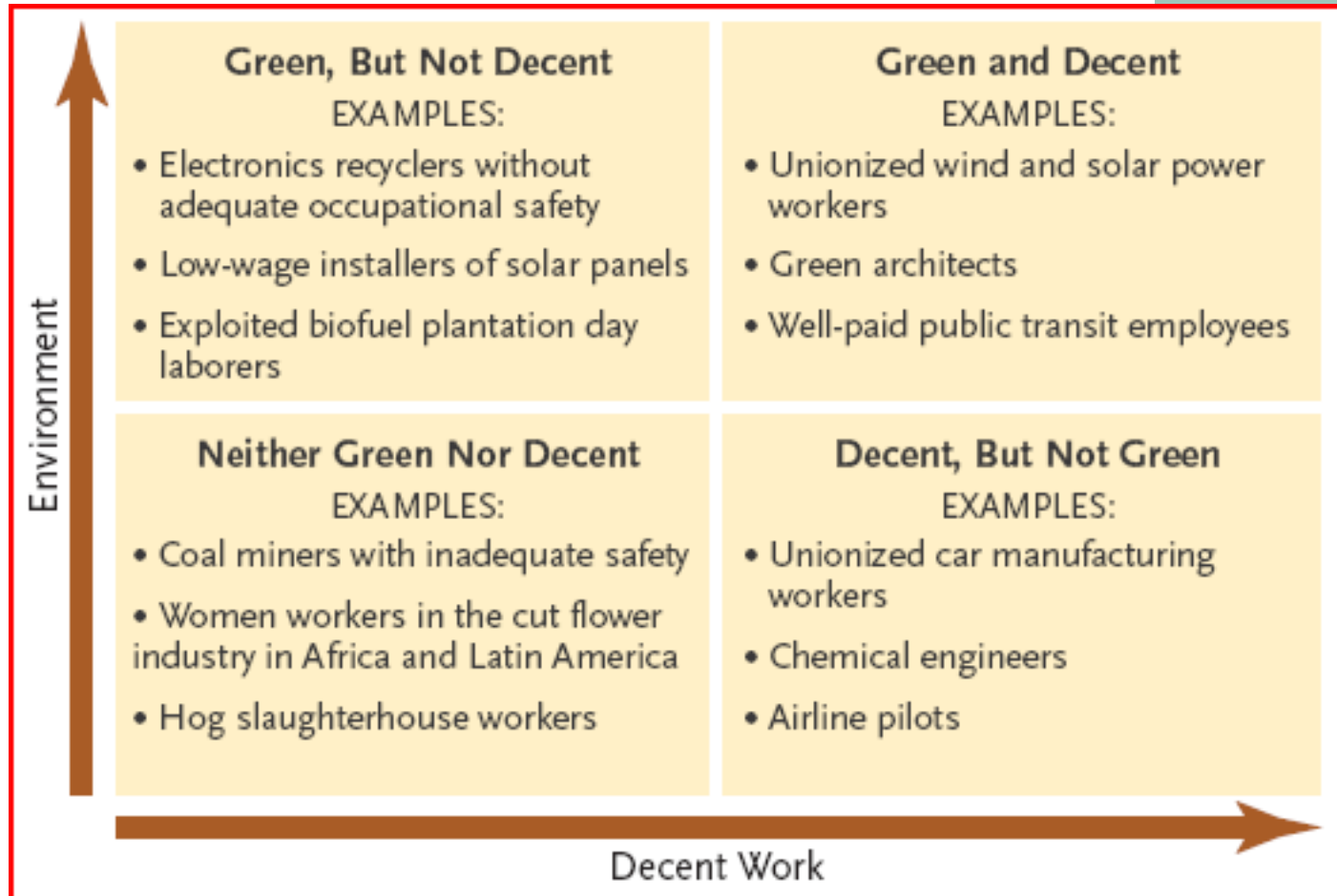
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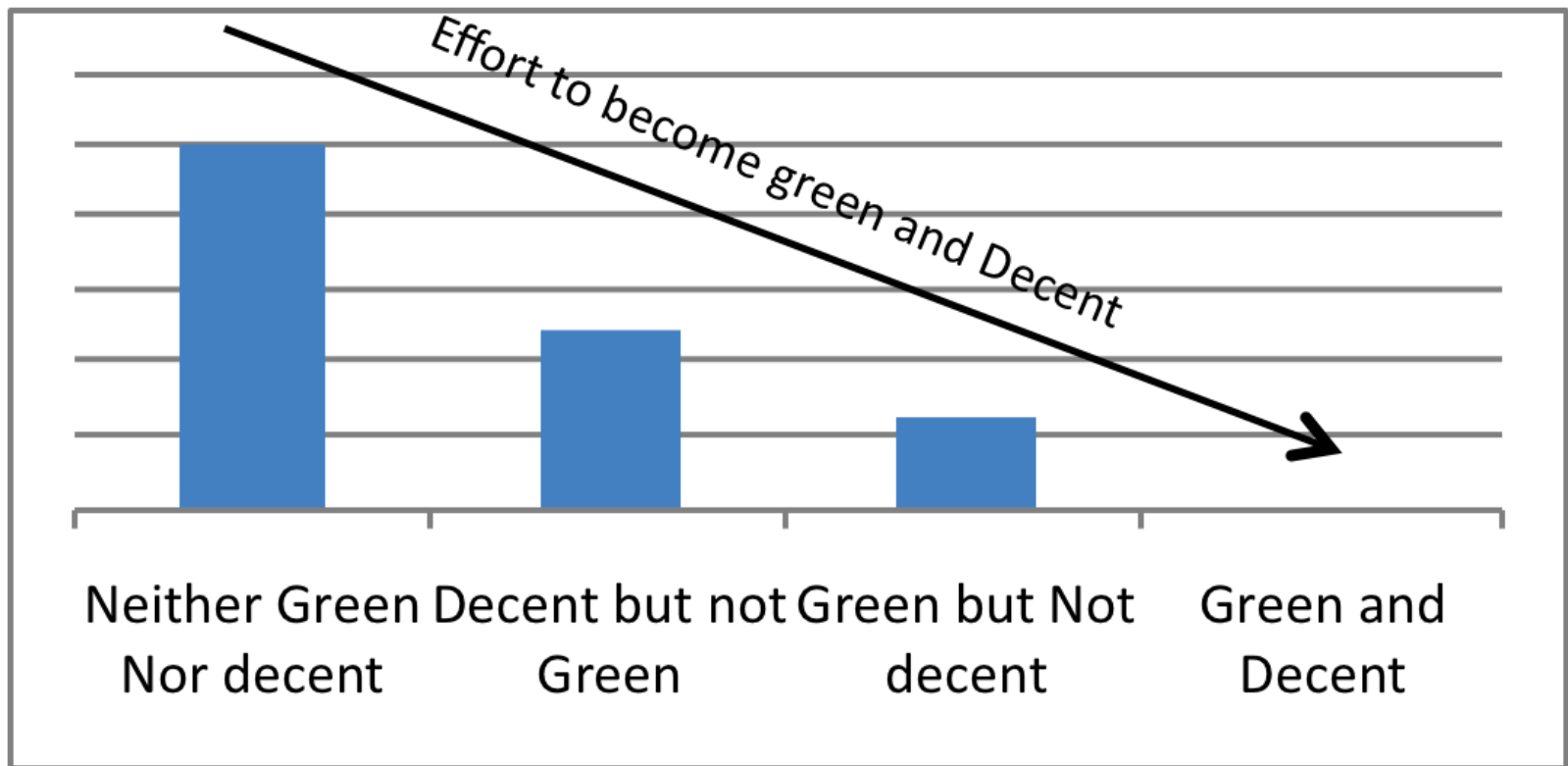
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New Delhi



Definition of Green Jobs



¹ Michael Renner, Sean Sweeney and Jill Kubit (2008), Green Jobs : Working for people and Environment, World watch Report 177



Development of “New India”

- India's economic growth is only sustainable with the equivalent infrastructure
- Presently the growing demand is not been met by the crumbling infrastructure, such as road networks, city transport, water & Sanitation etc.
- This requires a massive enlargement of urban infrastructure.
- The massive amount of fund (Rs 1292.37 Billion) has been made available to improve upon the basic services in the 60 major cities of India under the ambitious Jawahar Lal Nehru National Urban Renewal Mission (JNNURM).

Development of “New India”

The massive infrastructure development discussed in JNNURM (most of which talk about clean and green technologies) a large scope of architectural profession in India exists at present.

India has a plenty of resources for green building moreover Indian climate and economy is suitable for such constructions.



Projected potential of green building market in India

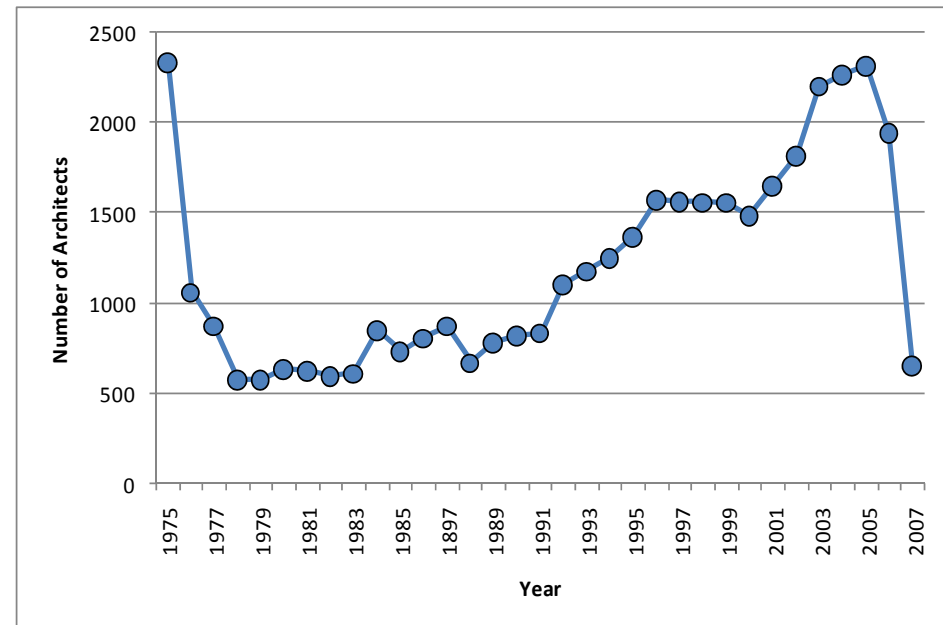
Skill Need

- The present skill sets of a fresh graduate architect severally lack the requirement. For example most of the Architecture schools and Civil Engineering courses taught at engineering colleges seldom teach a course on “Green buildings”. There is no dedicated course curricula devoted to green aspect of architecture at present.
- We require dedicated departments in the architecture schools/Engineering colleges on “Green Buildings” or “Green Architecture”.
- The conventional Architect does not fit into the shoe of “Green Architect”. A green Architect will essentially have the knowledge about the all the aspects like; effect to human health, environmental impact, loss of resources, waste, air/water/indoor pollution, energy/water/material consumption; while designing a building.
- This will essentially require our architect schools to have massive expansion in terms of faculty and course development.

Skill Gaps and training needs

Figure shows a significant gap between intake capacity and registered professionals. It is a matter of concern which needs attention of the policy makers. Still, green architect is a new profession so it is not possible to identify and quantify green architectural professionals in India. However, a few institutions like Indian Institute of Technology (IITs) have started to offer short term courses on green architect.

As projections show emerging demand of green construction in India and present paucity of architect professional will result gap in future. It may further widen if proper policies are not devised in the directions. Therefore, Ministry of Rural Development and Urban Planning must take initiatives in designing appropriate course in green architect. The following are key issues needs to be addressed in regard to green architectural profession.



Year wise registration of architects in India
Intake capacity is 9600 in 2009

Skill Gaps and training needs

- Lack of knowledge of the technology to be implemented, its operation and maintenance
- Lack of Knowledge on monitoring of different parameters, quality control of data such as maintaining regular calibration schedule of the meters in line with the requirements of a clean development mechanism
- Design details of the technology
- Operation and maintenance
- Understanding of quality control measures
- Optimizing energy performance
- Handling seasonal variation
- Trouble shooting
- Health and safety issues
- Overview of how the system is environmentally responsive
- Monitoring requirements in line with the guidelines of Clean Development Mechanism

Policy Response

- For attract the attention of policy makers and to attract the available skill in green construction profession the Government of India has initiated the following policy response:
- Government of India has launched “the energy conservation building code” (ECBC). This code is voluntary and applicable to all buildings or building complexes that have a connected load of 500 KW or a contract demand of 600 KVA, whichever is greater.
- International rating programmes like LEED (Leadership in Energy and Environmental Design) developed by US Green Building Council
- Energy Conservation Act, 2001 on reduction of energy consumption using efficient and conservation measurements
- Besides, the department, organisation, some NGOs and ministries such as Ministry of Rural Development, Ministry of New and Renewable Energy and Ministry of Labour and Employment are making efforts in this direction.

LEED INDIA

- ❖ 1,000 GREEN BUILDING BY END OF 2012.
- ❖ 10,000 COMMITTED BUILDING PROFESSIONALS ON GREEN BUILDINGS
IN INDIA BY END OF 2012.
- ❖ GREEN BUILDING CONCEPT SHOULD BE PART AND PARCEL OF BUILDING CONSTRUCTION.
- ❖ DEVELOP LEED INDIA AS A ROBUST GREEN BUILDING RATING SYSTEM.
- ❖ GREEN BUILDING SHOULD COST 4 TO 5% LESS VIS-À-VIS CONVENTIONAL BUILDINGS.
- ❖ TAP 4000 MILLION US\$ POTENTIAL ON GREEN BUILDINGS BY 2012.

LEED CERTIFIED PROJECTS IN INDIA

- ITC GREEN CENTER - GURGAON - PLATINUM
- WIPRO TECHNOLOGY- GURGAON - PLATINUM
- GREND FOS PUMPS
INDIA - CHENNAI - GOLD
- TECHNOPOLIS - CHENNAI - GOLD
- IGP OFFICE - GULBARG - GOLD

ITC Green Centre , Gurgaon



- This building has been awarded the Platinum Green Building rating by USGBC under LEED
- It stands the 7th Platinum rated building in the world.



THANK YOU