#### WATERWISE

# Try out poly-houses

S. VISHWANATH savs poly-houses with drip irrigation systems and misters can reduce the amount of water required for cultivation, evaporation losses can be reduced through mulching, and fertilizer use minimised by directly applying them in the right dose to the root zone of the plant

Tith a growing economy and growing urbanisation there is an increasing demand for fruits, flowers and vegetables in our cities. Catering to this demand offers a good potential for farmers and vegetable growers living close to the city. Enter the poly-house.

They started as greenhouses, structures of glass. Now since they are made of polyethylene material they are referred to as poly-houses. Covered spaces to protect plants offer many advantages. They can modify the climate; with netting the intensity of the sun can be modified; with natural ventilation they can be controlled for heat and humidity; they can protect against unseasonal rain and hail; and finally the soil inside can be modified to increase yield.

Poly-houses with drip irrigation systems and misters can reduce the amount of water required for cultivation; evaporation losses can be reduced through mulching; and fertilizer use minimised by directly applying them in the right dose to the root zone of the plant.

High yielding varieties of seeds can increase yield substantially within the poly-house.

Pest and virus management remains one of the biggest challenges since they can spread rapidly within the closed ecosystem. The initial investment cost can be high but the returns and good management can ensure a quick payback. Low cost poly-houses and poly-tunnels are another alternative.

Poly-houses can be built on a do-it-yourself basis on as small as 10 square metres. Larger ready-to-install ones come from 100 sq. m to 10,000 sq. m.

Schools and colleges provide an ideal space to build and run a poly-house. Depending on the space available, sizes can be appropriately determined. In government schools, poly-houses can be integrated with the mid-day meal scheme, supplementing vegetables required for the cook-

The learning space provided by poly-houses for students is also an advantage when they are located in schools. Children work with soil and learn the art of nurturing plants.

Rooftops also offer a wonderful opportunity. Flat roofs occupy a substantial part of the city and poly-houses can easily be located on rooftops. This will provide a steady stream of vegetables from the rooftop to the kitchen.

#### Water supply

One of the largest challenges for a poly-house



Capsicum cultivated in a low-cost poly-house

Typically, water requirement because of efficiency measures is dramatically reduced to as low as 5 to 20 litres per sq. m per day, depending on the plant grown. Yet this water is still required. Rainwater harvesting provides a wonderful opportunity to supplement the water requirement of a poly-house. The run-off of rainwater from the top of a poly-house is very high. This water can be collected in HDPE tanks, sump tanks or plasticlined large earth ponds and reused inside the poly-house through dips and misters. Since rainwater is very soft it will not clog the pipes, it will based cultivation is the requirement of water. reduce the requirement of fertilizers and will not

cause groundwater depletion / high energy use which the borewell demands.

In cities such as Bangalore, Chennai and Hyderabad, the water requirement for a six-month crop can easily come from the rain falling on the poly-house itself, thus making it self-sufficient.

Poly-houses are the future for India, with their high productivity and low water requirement as well as weather modification in a world faced with the consequence of climate change. Adopting them and adapting them to specific conditions would be water wisdom.

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#### NEWSCAN

Platinum LEED: Bearys Global Research Triangle (BGRT), a 9.5 lakh sq. ft research park developed by Bearys Group on Whitefield Ashram Road, Bangalore, has LEED certification by Indian standards in all future devel- V-P, among other dignitaries.

Green Building Council opments," says Syed Mo-(IGBC). "BGRT was launched hamed Beary, MD. with a vision to create an R & D hub in Bangalore. Our mission is to increase the green footprint and promote the green building movement in India. This award is recognition for our efforts and I hope that BGRT inspires the indusbeen awarded the Platinum try leaders to adopt greener

hamed Beary, MD.

The Platinum plaque was handed over by S. Srinivas, Exec Director, CII-GBC, to Mr. Beary in the presence of Jean-Pascal Tricoire, CEO & Global Head of Schneider Electric, Anil Chaudhry, Country President, and Annette Clayton,

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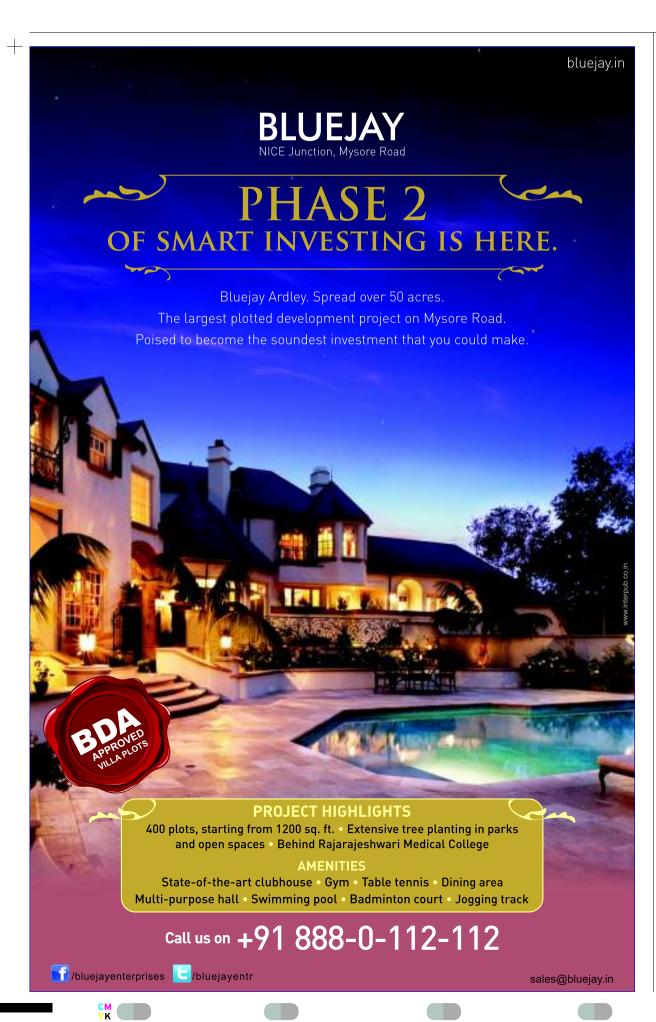
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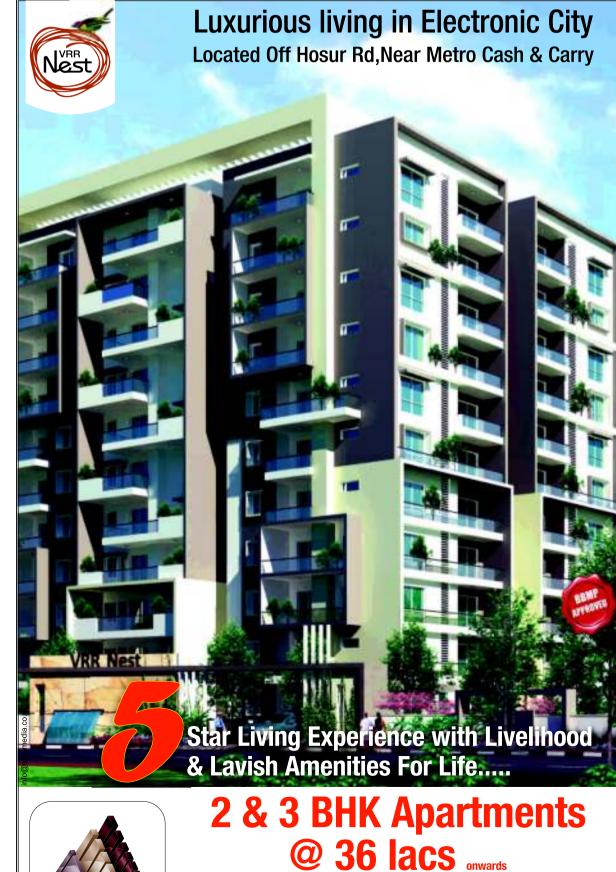
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