The urban farm of the future

IMAGINE quarter-acre city gardens teeming with fresh fish and vegetables, dotted every few kilometres throughout urban areas across the globe, where nearby residents walk from their home to the farm and purchase their protein and vegetable needs for their families. Imagine minimal or no transport costs, no refrigeration or storage costs, and no extra labour costs on top of what the farmers are paid to grow and tend the food. This is the ultimate vision of the ‘ecoCity Farm’.

The prototype won a weekly segment of the ABC TV’s New Inventors program last November and is now entering the next stage of development, to test the commercial application of the concept. It is the inspiration of Andrew Bodlovich from Nimbin and Robin Gleeson, Geoolongbar.

“I have not seen, nor have I read any international literature on anything that has the potential intervention scale of the ecoCity Farm concept and associated food chain integration,” NSW Department of Primary Industries leader in urban agriculture, David Mason said.

“I became aware of some very forward thinking urban agriculture innovation in my Churchill study tour last year. “The ecoCity Farm culture, known as enviroponics, combines aquaculture and chemical free greenhouse plant production that may be capable of being self-sufficient. “It would create enough food from a quarter-acre block to fulfill a significant part of the daily diet of 300 families.” Mr Mason says the plants in the hi-tech market-garden style farms use the nutrients from water inhabited by fish. The nutrient depleted water is then returned to the fish tanks for reuse.

People’s protein needs are met by eating the fish. “The closed system would use only five percent of the water used by traditional aquaculture systems or traditional farming to produce the same volume of product,” Mr Mason said. “The concept would be adapted to different climates and work in all but the coldest of conditions.”

The initial R&D has been completed and planning is now focused on developing a commercial scale system over the next 12 months leading on to domestic and then international market entries.

“The concept also fits well with farm diversification on existing rural ventures, creating new revenue streams as well as often using resources otherwise wasted by traditional farming. One revenue stream would be from producing the necessary organic ingredients for fish food.

Andrew Bodlovich, one of the brains behind the ecoCity Farm in the ‘enviroponics’ prototype – a combination of aquaculture and chemical free greenhouse plant production.

LEFT: ecoCity Farm grown buck choy.

ecoCITY Farm Advantages

- Strategic position food production and consumption in urban areas in the context of pandemics, globalisation, global warming, natural disasters, human health, community and environmental health
- Addresses environment management systems, food safety, food security, integrated pest management and biosecurity
- Integration with building and city design, including water reuse and organic waste recycling
- Consistent with developing integrated pest management and biosecurity
- The concept also fits well with farm diversification on existing rural ventures, creating new revenue streams as well as often using resources otherwise wasted by traditional farming.
- The concept addresses the sustainability principle of equity in the food chain, whereby operators benefit by being able to direct-market produce at a retail price, eliminating many of the middlemen in the conventional wholesale market chain.
- The operators would become price makers, rather than price takers, thereby achieving significantly higher profit margins while still offering produce to customers at reasonable prices.
- “The direct to consumer system would allow the ecoCity Farm operator to build strong customer loyalty and to educate customers about their food and related health and ecological issues.
- This integrated production, service, marketing and education package would have the capacity to reposition agriculture and associated agribusiness in urbanising parts of the world.”

Farming Small Areas Expo coming

INFORMATION about a new Prograze for Horses course highly relevant to Hawkesbury-Nerindale district horse owners, will be available at this year’s Farming Small Areas Expo at Richmond.

NSW Department of Primary Industries (DPI) conservation management officer, Helena Warren, will promote sustainable grazing in the Hawkesbury-Nerindale catchment.

She can advise visitors to the Expo on November 9 and 10 about training and on-ground subsidies to farmers for improved grazing management. She will also present a talk on feeding and pasture management for horses.

PRoFarm courses, particularly Property Management Planning and Farmbiz, will also be on show in the Expo Pavilion, promoted by education marketing officer, Mary Arch-Hessing.

Diet agronomist Ashley Senn will exhibit information on pastures, weeds and crops and present a talk on pasture establishment and how to have good quality pastures all year round.

Lesley Postle, technical advisor from DPI’s Emergencies and Strategic Response branch, will exhibit information on biological control weeds.

Diana Penson will head DPI’s bookshop exhibit at the Pavilion. The bookshop exhibit will feature a collection of stock for sale at substantially reduced prices. Books of specific interest will include Farming in a Small Way $10 (RRP $27.45), Growing Traditional Flowers Successfully $10 (RRP $20), Better Ball Buying $10 (RRP $22), Grassed Up $10 (RRP $33), Home Fruit Growers Guide $10 (RRP $19.95), and Geared Up $10.

Trevor Joseph, manager of Cumberland Nursery, will have available to purchase a wide variety of tube stock and drought smart native plants suitable for properties and gardens.

Knowledgeable horticultural staff will be available to give advice on plant selection and subsequent care.

LEFT: Meet new friends at the Farming Small Areas Expo at Richmond, November 9 and 10. NSW DPI staff will offer expert advice for many enterprises at its location in the Expo Pavilion.

Anne Oakeful, Science and Research technical officer will exhibit information on testing kits available for worm, soil, water and feed quality and present a talk on internal parasites in livestock.

A free worm count test will be available for producers who bring along fresh samples from sheep, cattle, goats or alpacas.

Back to Eden

NSW Department of Primary Industries leader of urban agriculture, David Mason, says Australia has an opportunity to lead the world with the innovation proposed by the ecoCity Farm.

“I hope it gets the home support it now deserves and requires,” he said.

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ecoCity Aims To Target:

- Existing store chains which carry chemical free food
- Institutional organisations (schools, prisons, remote communities)
- Property developers seeking to create sustainable communities
- Existing agribusiness
- Destination attractions in remote areas that have high volume fresh food requirements.

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