

# from carrots to cassava

**Dave Richards** makes the case for school gardens which make the global connections

**W**hat do the Queen, the Obamas, Gordon Brown and Geoffrey Field Junior School have in common? The answer: a well-publicised vegetable garden. Although the Geoffrey Field garden has only made it to the shortlist for the Pride of Reading environmental award, it is no less significant in trying to draw attention to the benefits of growing food locally in a world where the future of our daily bread/rice/maize meal is increasingly uncertain.

Sir John Beddington, the government's Chief Scientific Advisor, recently flagged up the likelihood of the world being consumed by the 'perfect storm' by 2030 – the consequences of a global population of about 8 billion combining with increased demand for water and energy, against a background of global climate change. The result will be mass migration, civil conflict, resource wars and hungry people.<sup>1</sup>

Fatih Birol, Chief Economist at the International Energy Agency, warns that the need to address this impending crisis is even more pressing because the majority of global oil reserves are likely to be used up by 2020. "One day we will run out of oil, it is not today or tomorrow, but one day we will run out of oil and we have to leave oil before oil leaves us, and we have to prepare ourselves for that day... The earlier we start, the better, because all of our economic and social system is based on oil, so to change from that will take a lot of time and a lot of money and we should take this issue very seriously."<sup>2</sup>

Tim Lang, Professor of Food Policy at the University of Leeds, adds further elements to what he calls the New Food Fundamentals – biodiversity reduction, massive urbanisation, labour shortage on the land, the impact of affluent diets on



*photos, from top: members of Geoffrey Field gardening club pose for Reading Evening Post; First Lady Michelle Obama and White House Chef Sam Kass planting the White House vegetable garden with students from the Bancroft Elementary; courgette from No 10 vegetable garden  
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photos from top: the RISC roof garden – designed to raise awareness of global issues, especially low-carbon living; globe artichoke (*Cynara scolymus*) is a wild thistle originating in the Mediterranean; the wild apple originates in Central Asia – the Ellison’s Orange (*Malus domestica*) was bred in Lincolnshire in 1904; the purple cone flower (*Echinacea purpurea*) is native to North America and is used in many herbal remedies; Emmer wheat (*Triticum diccicum*) was domesticated from the wild grass in the Fertile Crescent 10,000 years ago – it is still used to make organic pasta in Italy and is being used to breed new varieties of commercial wheat which will cope with climate change



health, and excessive production of meat and dairy (both heavy uses of water and grain). He warns that unless we change the way we grow and consume food: “We are sleep-walking into a crisis.”<sup>3</sup> These realities are acknowledged in the Department for Environment, Food and Rural Affairs’ (DEFRA) new UK Food Security Assessment package which aims to produce new policies to ensure sustainable and secure food<sup>4</sup>.

In recent years the school garden has received a great deal of attention and support from both the Department for Children, Schools and Families (DfCSF) and gardening charities. This reflects increased interest in growing fruit and vegetables throughout the country – local authorities are creating new allotments to reduce waiting lists and in 2008 sales of vegetable seeds overtook flowers – as well as a recognition of the educational value of the outdoor classroom. School vegetable plots also tick lots of boxes in the Sustainable Schools Framework and other government initiatives such as Healthy Living and Every Child Matters.

Looking through websites which make the links between school garden projects and the curriculum, there is one glaring omission – the global dimension. Where

are the connections between global food supply chains, trade justice, food security, climate change and Peak Oil? There have been a few initiatives such as the Eden Project’s *Gardens for Life* and Save the Children Fund’s *Mission Nutrition* collaboration with Blue Peter, but a trawl through the Learning Through Landscapes or Growing Schools websites reveals no guides on how to make the link.

School gardening stops at making compost and how to grow healthy vegetables. These are important life skills that will ‘future proof’ our children, but there is a missed opportunity to enable children and young people to understand the scale of the challenges faced by the human race.

Potentially, the school organic vegetable plot – producing low-mileage food using composted kitchen waste, harvested rainwater, constructed from reused or recycled materials – is an ideal springboard for exploring sustainable lifestyles and the connections between local and global. In the world of an impending perfect storm, food security unites people and communities around the world. Fuel, water and food poverty already affect people in both poor and rich countries. Understanding these

issues, and being part of the solution, is a fundamental part of children becoming global citizens in the 21st century, and must be brought into the curriculum. It is an essential ingredient in preventing ‘post-petroleum stress disorder’<sup>5</sup>.

Reading International Solidarity Centre (RISC) has just started two new projects which bring these elements together and build on the success of its edible forest roof garden which was shortlisted for the Observer Ethical Garden Award, 2009.

The Food4Families project, funded by the Big Lottery Fund’s Local Food scheme, will create 15 new school/community permaculture-inspired allotments in Reading over the next three years.<sup>6</sup> These will enable children and parents to have fun together while developing new growing skills, introduce fresh produce into their diets and learn about sustainable living, while schools will integrate the outdoor classroom into the curriculum through practical activities.

In the words of one participating head teacher, “We have been trying to engage with parents for many years. For the first

time, the allotment project has motivated parents to join their children in school activities”. This is echoed by one of the mothers, “It’s good that the kids and parents are involved – we can do things together and it’s spreading back home.”

The Schools Global Gardens Network is another three-year project, funded by the Department for International Development (DFID), but has a nationwide reach.<sup>7</sup> With partners Garden Organic<sup>8</sup>, Federation of City Farms and Community Gardens<sup>9</sup>, Food for Thought<sup>10</sup>, RHS Campaign for School Gardening<sup>11</sup>, Roehampton University<sup>12</sup>, RISC will work with school gardens around the country, exploring ways to make the leap between the potatoes or beans grown in their gardens, to the plantain or cassava grown in gardens in other parts of the world. Children will realise that planting seeds, feeding, watering and weeding plants, protecting them from pests and then enjoying the harvest is part of the web of life we all share. It is then a small jump to explore how global climate change might impact on growers around the world and what we all need to do to mitigate and

*photo: after watering and weeding Geoffrey Field gardening club enjoy a BBQ during the summer holidays – the Food4Families project aims to raise awareness of the food supply chain and encourage local food growing*





*photos: the School of Education at Roehampton University is developing a global school garden hub which will be used in its Initial Teacher Education and Continuous Professional Development courses*

adapt to these changes. Another sideways step will lead to food supply chains – who produces our food, food miles, trade justice, food security and hunger and nutrition.

A series of hub gardens will develop model global garden designs and planting schemes that can be used to explore every area of the curriculum. Teachers will collaborate in devising activities and resources which explore the global dimension.

A key element will be to highlight examples of sustainable farming in the Majority World which could be adapted for our own conditions. For example, the hugely successful transition to organic production forced on Cuba by the collapse of the Soviet Union and its cheap supplies of oil – an inspiring vision of a post-Peak Oil future – or exciting permaculture projects in Nepal and Malawi which have brought huge improvements in nutrition especially during the ‘hunger months’ before the harvest is gathered. A website will disseminate examples of good practice and resources to support the

global dimension in school gardens, and a series of regional training workshops will also be rolled out.

We are fated to live in interesting times when many of the pillars of the post-World War II world have been shown to be built on sand. Governments around the world are pursuing policies which they hope will bring economic growth and recovery at the same time as reducing carbon emissions. The outcome of the UN climate change conference in Copenhagen will be an indication of the ability of governments to negotiate their way towards preventing the perfect storm.

What is certain is that a sustainable and equitable future needs aware and active global citizens. Food is at the heart of our climate changing, oil-dependent lifestyles. We have been ‘eating’ petrochemicals – from the natural gas used to make artificial fertiliser, to the fuel used by farm machinery and articulated lorries supplying supermarkets – and the UK food supply chain accounts for at least 18% of greenhouse gas emissions<sup>13</sup>. School allotments will be part of the UK’s

food security strategy which is bound to include more coherent strategies for supporting urban agriculture. By embedding the global dimension they will also ensure young people understand how food arrives on our plates and their part in digging for victory in the fight to prevent the perfect storm. 🌱

For more information about these projects contact:

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📧 [www.risc.org.uk/garden](http://www.risc.org.uk/garden)

<sup>1</sup> Speech at Sustainable Development UK 09

<sup>2</sup> *The Independent*, 3 August 2009

<sup>3</sup> *The Times*, 6 March 2008

<sup>4</sup> *Food Matters: One year on DEFRA* August 2009

<sup>5</sup> Rob Hopkins *The Transition Handbook: From Oil Dependency to Local Resilience* Chelsea Green 2008

<sup>7</sup> Food4Families is funded by the Big Lottery Fund's Local Food scheme, receiving £235k grant over 3 years. has been developed by a consortium of 15 national environmental organisations, and is managed on their behalf by the Royal Society of Wildlife Trusts (RSWT). Supported by the Big Lottery Fund's Changing Spaces programme, Local Food will distribute grants to a variety of food related projects to make locally grown food more accessible. [www.localfood.org](http://www.localfood.org)

<sup>8</sup> The Department for International Development (DFID) manages Britain's aid to the Majority World and works to get rid of extreme poverty. The Development Awareness Fund provides grants to not-for-profit projects that are designed to promote public knowledge and understanding of development issues.

<sup>8</sup> **Garden Organic** is the country's leading organic growing charity.

[www.gardenorganic.org.uk/schools\\_organic\\_network/](http://www.gardenorganic.org.uk/schools_organic_network/)

<sup>9</sup> The **Federation of City Farms and Community Gardens** supports, represents and promotes over 1100 community-managed farms, gardens, allotments and other green spaces, creating opportunities for local communities to grow. [www.farmgarden.org.uk/](http://www.farmgarden.org.uk/)

<sup>10</sup> **Food For Thought** is one of Devon Development Education Centre's projects and links school gardens in Berkshire and Devon with similar projects in Uganda.

[www.globalcentredevon.org.uk/news\\_2006\\_FFTCampaign.htm](http://www.globalcentredevon.org.uk/news_2006_FFTCampaign.htm)

<sup>11</sup> The **RHS Campaign for School Gardening** aims to encourage and support schools to develop and actively use a school garden. [www.rhs.org.uk/schoolgardening](http://www.rhs.org.uk/schoolgardening)

<sup>12</sup> **Roehampton University** is creating an 'edible campus' and its School of Education is embedding the global dimension into its Initial Teacher Education courses. [www.projectdirt.com/group/cgruoutdoors](http://www.projectdirt.com/group/cgruoutdoors)

<sup>13</sup> *Food: an analysis of the issues* Cabinet Office Strategy Unit, 2008

*photo: Devon Development Education Centre's Food for Thought project links primary schools in Devon and Berkshire with those in rural Uganda through their exploration of sustainable food growing*

