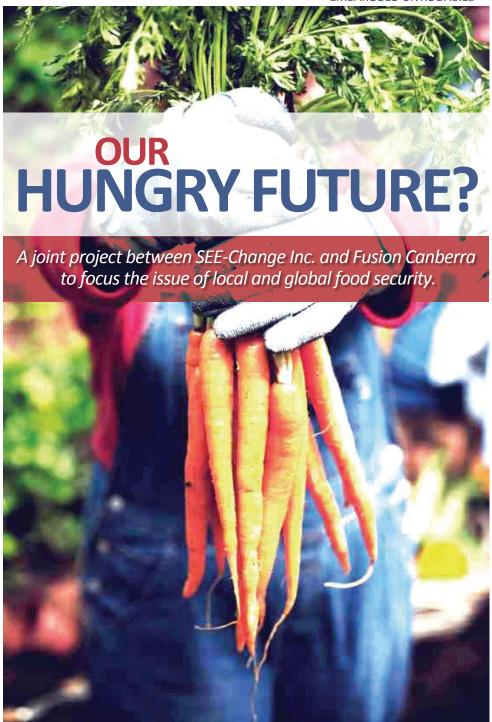
www.ourhungryfuture.org

For further information about this discussion paper and related events, please contact:

SEE-Change Phone 6162 2320 Email office@see-change.org.au
Fusion Canberra Phone 6162 3700 Email canberra@fusion.org.au
For bulk copies of this discussion paper, please contact Fusion Canberra.







OUR HUNGRY FUTURE?

Canberra is one of the world's most affluent and well serviced communities but threats are emerging to our food security and therefore to our lifestyle and social order. This discussion paper is part of a campaign running in 2013 to generate awareness and action in the community and government in relation to our potentially hungry future.

1. The common perception is that Australia produces and exports vast quantities of food...

and will become a super foodbowl for a starving world. Australian production and exports in the major sectors of meat, grain and dairy are at about either the same value level or in decline from levels in the mid 1990's (See pages 4 and 5 for statistics). Australia slipped from number 14 among world food trading countries in 2009, to 16 in 2010 – behind the Netherlands, Belgium and Malaysia.

Factors contributing to falling production include: droughts and floods, declining productivity of the soil, less area under production, fewer farmers and farm laborers, low returns on investment, urban sprawl, retailer and processor campaigns to drive food prices lower, cheap imported foods.

Reality however does not support that perception! Australia's food production potential is limited in both broad-acre and irrigated livestock and grain production:

Climate change will also have impacts, but the climate change debate is actually masking more immediate threats to our food affordability and supply.

the super foodbowl image is a mirage! In future, fuel oil crises, higher energy costs, population growth, global financial crises and declining supplies of phosphate and other fertilizers will exacerbate the situation.

We can expect declining food production and higher prices. Julian Cribb suggests that Australian food will double or triple in price (Canberra Times, 4 March 2013). This will generate community concern, social discord and extreme political reactions. Famine overseas will prompt mass movements of hungry people to Australia.

Discussion question:

What should our Governments do to alleviate the emerging situation?

About the Groups that produced this paper:

SEE-Change is a locally grown community group. Since 2006 they have inspired, informed and supported people to reduce their ecological footprint and build a more sustainable future for Canberra. SEE-Change acknowledges the support of the ACT Government in the form of annual grant funding. Visit www.see-change.org.au for more information. Fusion Canberra is an Australian grown international Christian youth and community agency, with 20 years experience in the ACT of training refugees and other disadvantaged people in food production and the new technology of aquaponics. Fusion Canberra's mission is to create a Canberra where nobody gets left behind, and their firm belief is that food security is one issue that needs to be addressed to create a Canberra that is truly sustainable in every sense.



Discussion question:

What do you suggest we can do to enhance food security in Canberra?

3. Fusion Canberra has suggested a strategy... using technology that Canberrans, other Australians and overseas countries could access now to enhance their food In Canberra a localized intensive food production industry could involve about 700 hectares of glasshouses, in and around the perimeter of the city, costing say \$1 billion in investment, a labour force of 10,000 people producing \$700 million to \$1 billion worth of fish and vegetables annually. Fish have the highest feed to flesh conversion rate of all animals and production can be increased as other meat prices soar. Those are ball-park figures but the concept is feasible.

THE STRATEGY: Villages, towns or even small cities like Canberra could establish localized intensive food production and processing operations. This would use local resources, create investment opportunities and local jobs, reduce transport, wastage and other costs, with profits and wages remaining in the local area. Diversification would strengthen the local economy

TECHNOLOGY to produce more food as broad-acre and irrigation production declines is related to aquaculture: hydroponics, aquaponics and fish farming are proven technologies with low water and energy use, reasonable investment requirements, require less chemical inputs and have no need of fertile soils and regular rainfall. Aquaponics (producing fish, vegetables and fruit in one system) and hydroponics (vegetables, fruit) produce \$1 to 1.5 million of produce per hectare per year, versus about \$80,000 per hectare in the field. Such operations use only 10% of water required in the field; produce less greenhouse gas emissions and reduce our carbon footprint.

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4. Disastrous events are probably closer than anticipated.

Time is running out!

In our more heavily populated world, major fluctuations in food production will have more disastrous consequences than in the past.

Reserves of food
even in
developed
countries are
insufficient to
cope with
national

Science is not offering quick fixes, and breakthroughs may take 20 years to implement.

How would you react to: significantly higher food prices? higher taxes to subsidise low income people? influxes of people fleeing starvation overseas? extremist political parties?

The scale of risk in the 21st Century is unprecedented: the welfare and lives of hundreds of millions of people are at

5. Further Discussion Questions

What do you know about peak phosphorous, peak oil, ocean acidification, or other threats to our food security? If you believe we have an emerging food security problem, what are the possible solutions?

Would you favour massive Government intervention or more local initiative and cooperation? Or would you leave it to corporations and free market forces?

Do you think it is feasible to establish a food production industry in the ACT? For a demonstration of Fusion's Aquaponics setup in Kambah please call 02 6162 3700.

OUR HUNGRY FUTURE?

is focusing attention on the threats to food security. Please turn to the back page for details of more events. We urge the ACT community and government to formulate a food policy...

and implement a program for the development by the private sector of a local intensive food production industry.

Australian Food Statistics exports exports live animals fish or shellfish imports mports 1500 1200 1000 fresh/chilled vegetables fresh/chilled fruit and nuts 350 300 250 200 grains oilseeds 10000 2000 other unprocessed food meat 350 10000 300 250 200 processed seafood dairy products 1500 1200 Data source: ABS (2013b), from http://www.daff.gov.au/agriculture-food/food/publications/afs/australian-food-statistics-2011-12

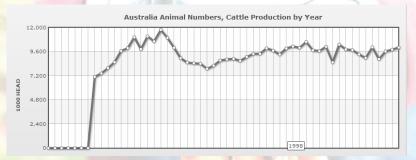
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Australian Wheat Production by year, 1960 - 2012



Australian Cattle Production by Year, 1960 - 2013





Size of Australian Sheep Flock

Source: ABS

from: www.sheepcrc.org.au

2011 figure is 73.1 million

Australian Cheese Production by Type Of Cheese

Type of Cheese	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
Cheddar	191,694	179,159	171,260	178,360	164,218	154,720	160,568
Semi Hard	76,813	75,529	73,854	61,659	82,494	68,176	66,898
Hard Grating	23,022	18,477	16,908	17,924	12,215	13,590	13,866
Fresh	75,441	84,443	90,934	75,430	81,682	95,418	93,966
Mould	5,847	6,030	7,966	8,915	8,663	6,736	5,042
Total Cheese	372,816	363,638	360,922	342,288	349,271	338,640	340,340

Data Source: Dairy Manufacturers, from www.dairyaustralia.com.au



Our Hungry Future?

21st May 2013, 7.15 pm, Tim Murray Lecture Hall, Canberra Grammar School, Red Hill

Julian Cribb is an acknowledged expert on Australia's food security.

This lecture with question and answer session will provide an overview of food security from an international and national perspective.

Organised jointly by <u>SEE-Change</u> and <u>Fusion Canberra</u>, this <u>lecture</u> is part of an 8 month long *Our Hungry Future* campaign that will change the way you think about food security, and provide food for thought on how we deal with the threat to this most basic of human needs.

To register, please visit: http://ourhungryfuture210513.eventbrite.com.au/

Other Events in 2013

August Sustainability Network; Eating for the Environment – ecoaction.com.au

25th August You Can't Eat Your Words; Panel Discussion, Gungahlin

September Food Growing Workshops at Canberra Environment Centre – ecoaction.com.au

16th November Own Grown Market Day; Meet local groups promoting ACT food security, Kambah

We invite you to join us in our awareness raising campaign:

Discuss this paper at a meeting of your service or social club, and with friends.
Write to your local member and to your local newspaper.

Attend lectures and other events on food security.

The campaign is organised by SEE-Change and Fusion Canberra with the support of other Canberra organisations with an interest in the subject. Members and supporters of these agencies number in the thousands. During 2013 we will organise lectures, meetings, discussion groups, media, demonstrations of aquaponic and other technologies which enhance food security, and put you in touch with other groups who are working around the region.

OBJECTIVES OF THE CAMPAIGN

- Raise awareness of food supply and food security in Canberra
- Campaign for ACT government to develop a food policy and staff to implement it
- Round table of stakeholders on food issues
- Guidance for ACT government on how to spend the money allocated for community gardens

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