



Australian Export Grains Innovation Centre

Maximising the value of Australian grain

Soft wheat opportunities

Dr Siem Doo Siah

Senior Research Scientist

Siem.Siah@aegic.org.au



Department of
Primary Industries and
Regional Development



AEGIC is an initiative of the Western Australian State Government and Grains Australia





Key points



Asian demand for cakes and cookies is increasing.

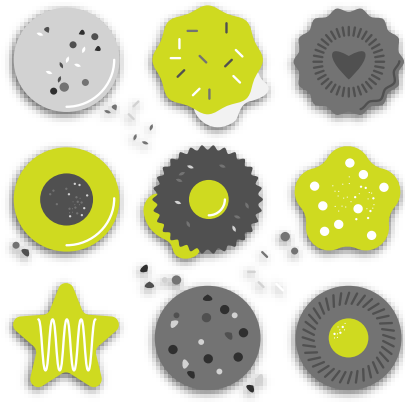


AEGIC = interface between the market and the Australian breeding programs.



Australian soft wheat may be a good option in the medium to long term.

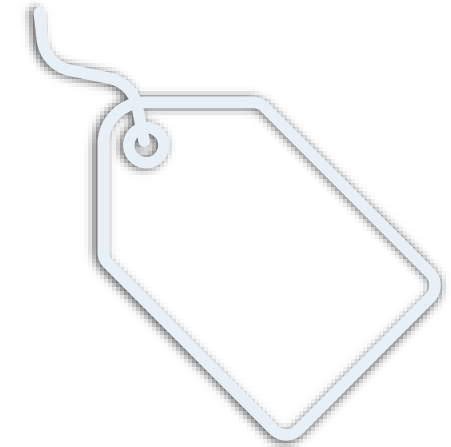
Soft wheat – why it matters



Quality = Soft kernel,
small particle size, low
water absorption

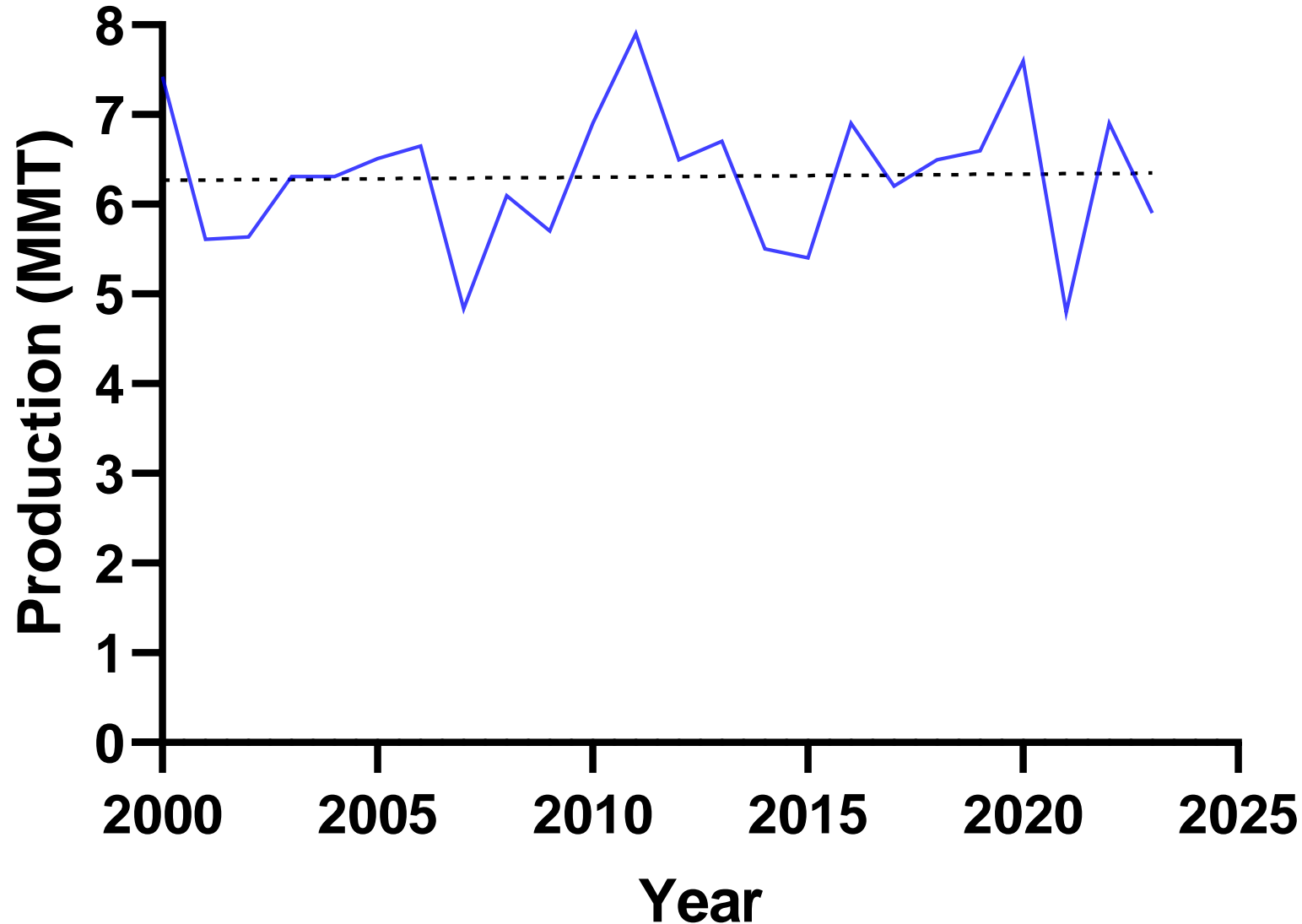


Limited **supply** option
globally – North
America



Pricing – production,
quantity, distance,
combined cargo

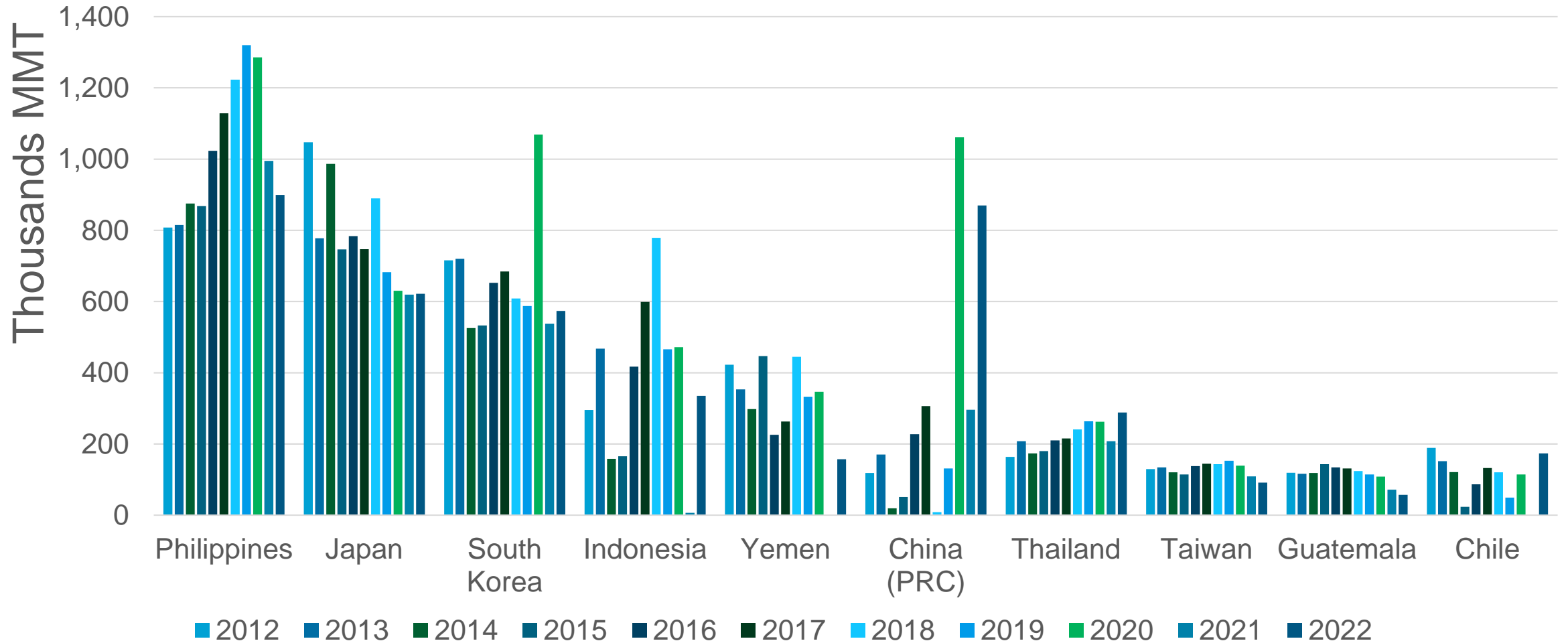
6.3MMT Soft White Wheat (SWW) Production, averaged 2000-23



>70% exported

Source: U.S. Wheat Associates

Top 10 SWW export destinations



South East Asia biscuit demand increased by 2030

Country	Population ^f (million)	Biscuit volume ^f (mmt)
Indonesia	294	0.9
Philippines	131	0.6
Vietnam	112	0.2
Malaysia	37	0.5
Total	574	1.8

^f2030 Forecast

Source: Euromonitor and AEGIC



AEGIC progress in Western Australia (WA) soft wheat development



Specific quality market expectations



Japan

Cake sensory quality & volume ✓



Indonesia

SRC values & biscuit spread ✓

SRC – Solvent Retention Capacity

Emerging market economy



AEGIC: the interface between the WA soft wheat breeding and markets



WASWGA = WA Soft Wheat Growers Association

WA soft lines tested by Indonesian mills in cookies



ASW (R) P=?	Nyala P=9.3					Wedin P=9.6	Ninja P=9.8			SWW P=9.5
-------------------	----------------	--	--	--	--	----------------	----------------	--	--	--------------

(R) = Indonesian mill reference sample; P = protein content (11 m.b.)

Aligning Australian soft wheat classification to meet Indonesian quality expectations

Selected for ongoing assessment to represent the SEA market

AACC 10-53
(with slight modifications)



Indonesian mill's method





Journal of Cereal Science

Volume 115, January 2024, 103829

6.8 CiteScore; 3.8 Impact factor



Hybrid Solvent Retention Capacity (SRC) to predict Australian soft wheat cookie quality

Aligning Australian soft wheat classification to meet Indonesian quality expectations.



Ibu Herni Sutanto
PT. Indofood Sukses
Makmur Tbk



Ibu Maria Widiyanti
PT. Cerestar
Indonesia Tbk,



**Dr Surjani
Uthayakumaran**
AEGIC



Dr Ken Quail
AEGIC



Dr Siem Doo Siah
AEGIC

Continued engagement with the Indonesian Flour Milling Industry



Indonesian wafer biscuits



Soft Wheat – Phase III



Indonesia - Scale up trial



Other Asian markets

Competitive soft wheat varieties on the way





Australian Export Grains Innovation Centre

Acknowledgements

- **DPIRD and Grains Australia for investing in this project.**
- Dr Ken Quail (Project Sponsor), Richard Simonaitis, Barry Cox and Dr Chris Carter.
- Analytical Chemistry Laboratory of AEGIC Sydney, Dr Surjani Uthayakumaran, Alyanna Tan, Mat Rees and Sabrina Lim for technical assistance.
- PT Bogasari, PT Cerestar, Australian Grains Technologies, InterGrain, LongReach, WA Soft Wheat Growers Association (WASWGA), GroIQ & Trialco. for technical cooperation.



AEGIC is an initiative of the Western Australian State Government and Grains Australia

aegic.org.au