Economic analysis of pulses-related policies in Pakistan

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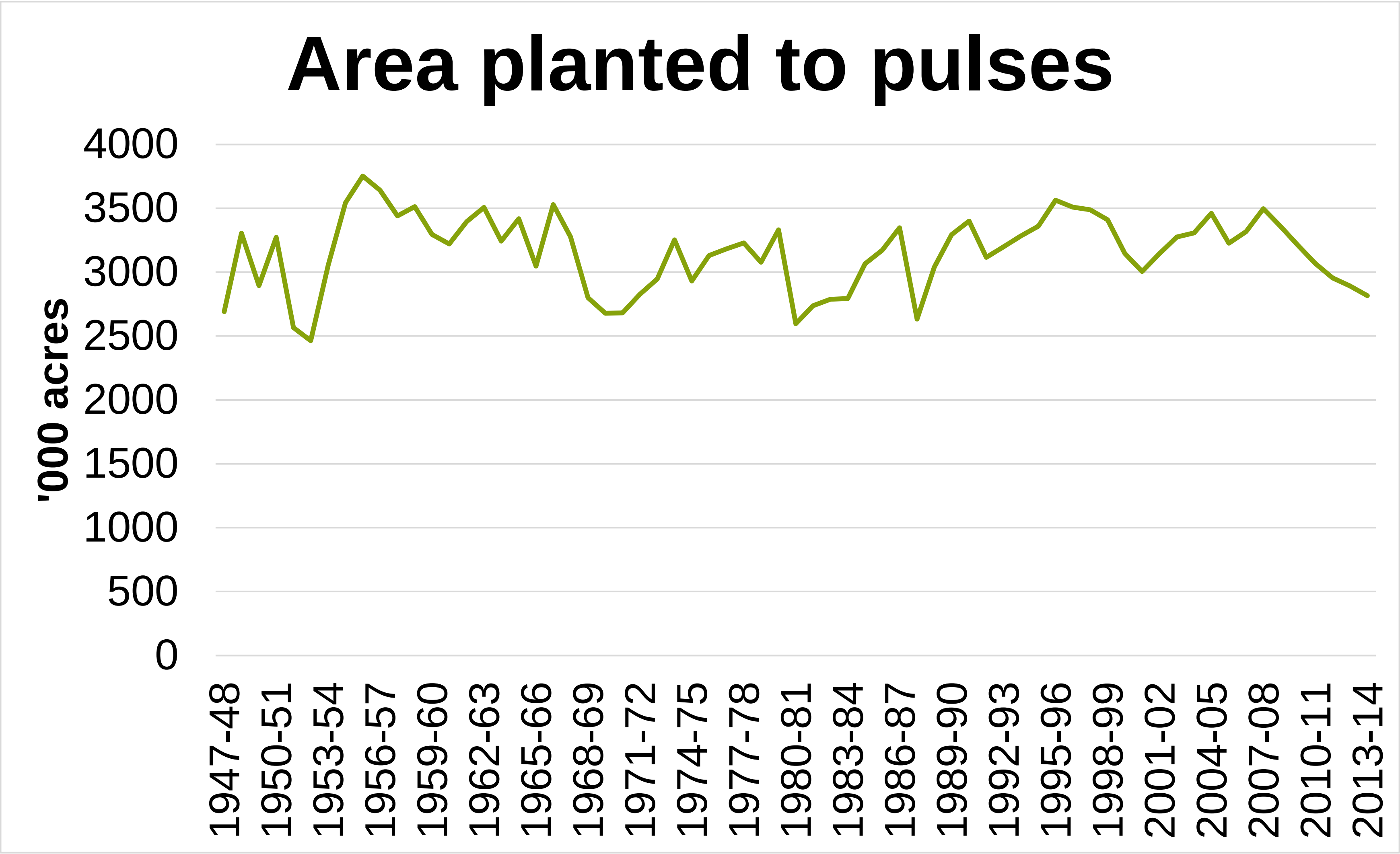
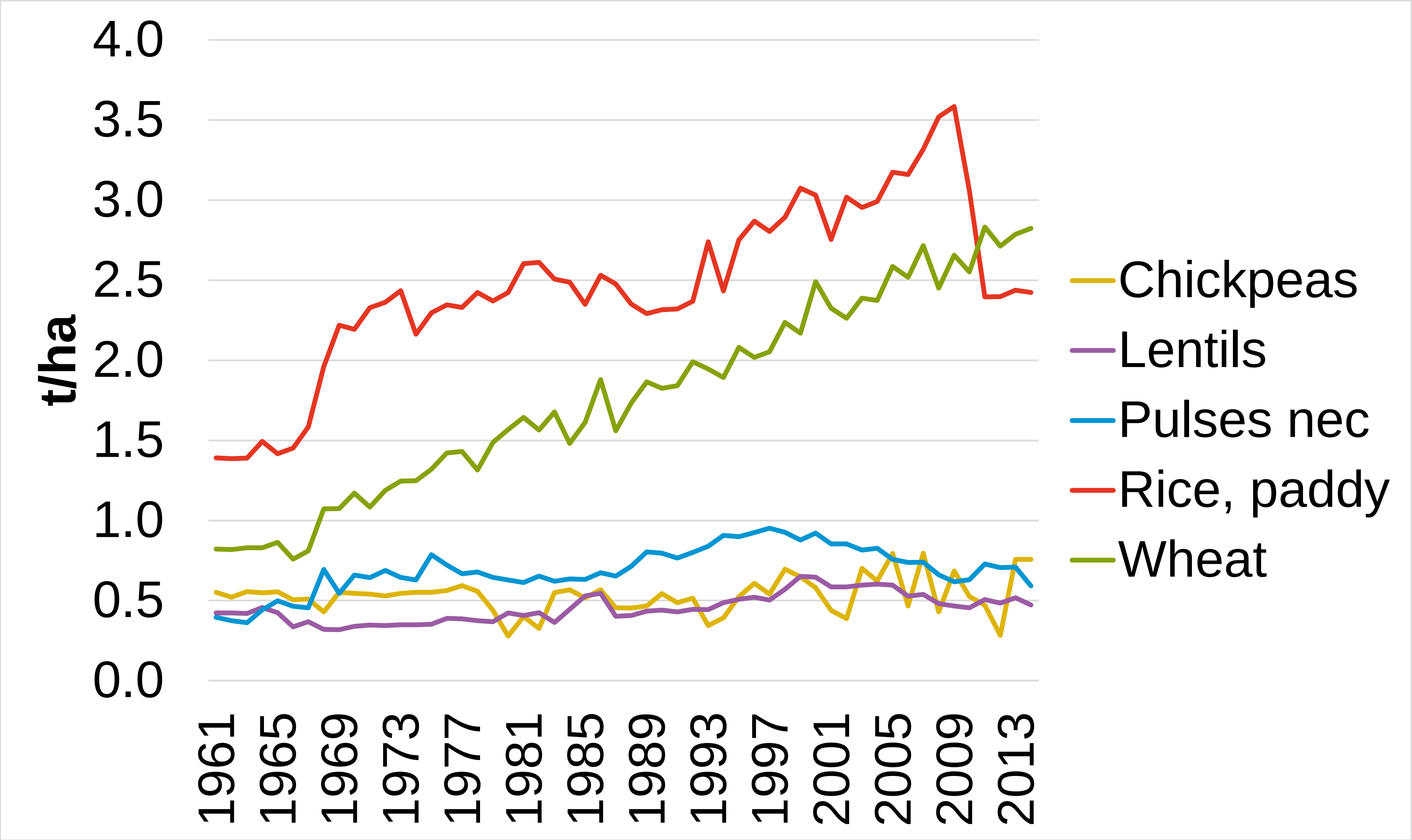
Australian Government
Australian Centre for International Agricultural Research

Background



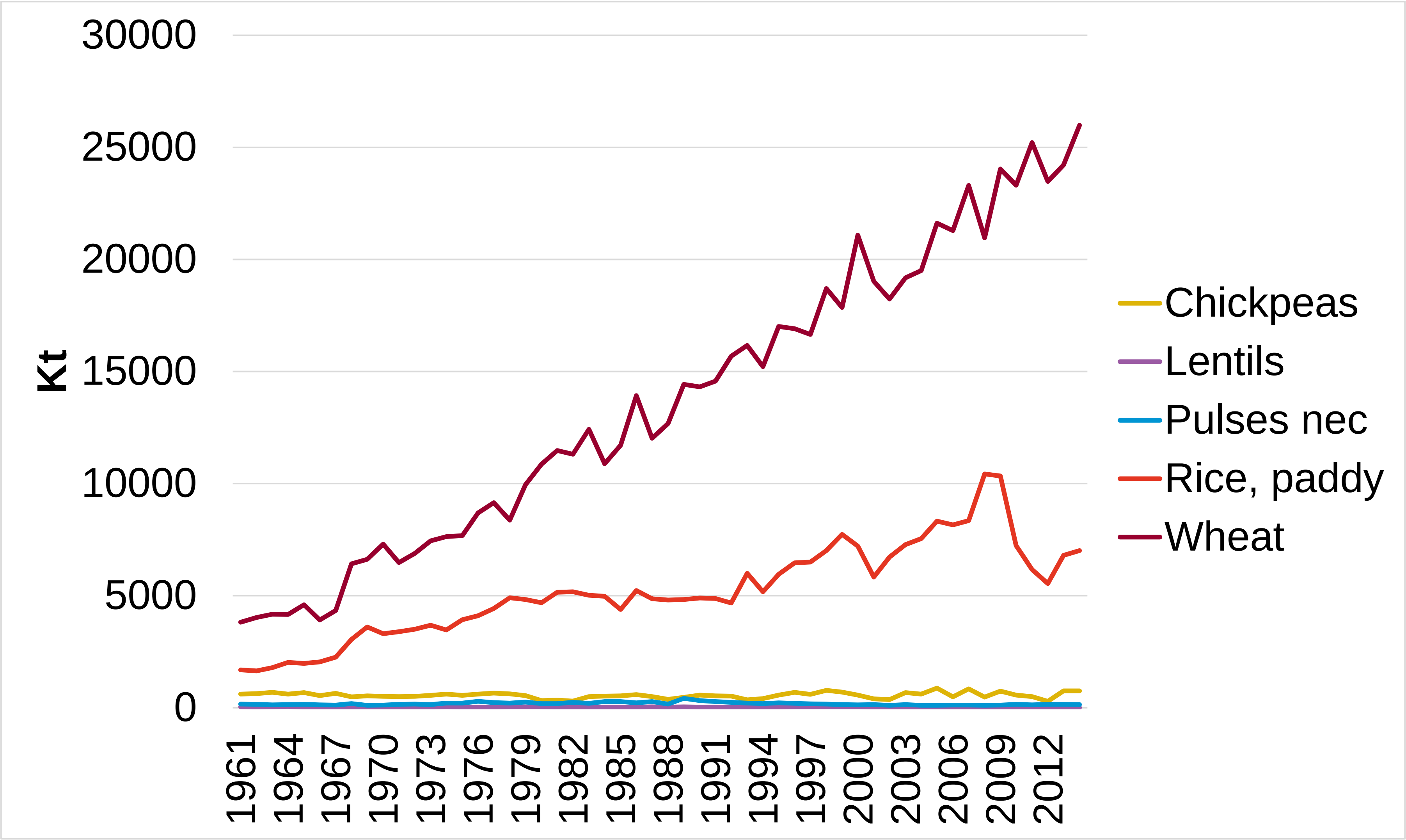
Area planted to pulses
'000 acres
4000
3500
3000
2500
2000
1500
1000
500
0
1947-48
1950-51
1953-54
1956-57
1959-60
1962-63
1965-66
1968-69
1971-72
1974-75
1977-78
1980-81
1983-84
1986-87
1989-90
1992-93
1995-96
1998-99
2001-02
2004-05
2007-08
2010-11
2013-14

Yields

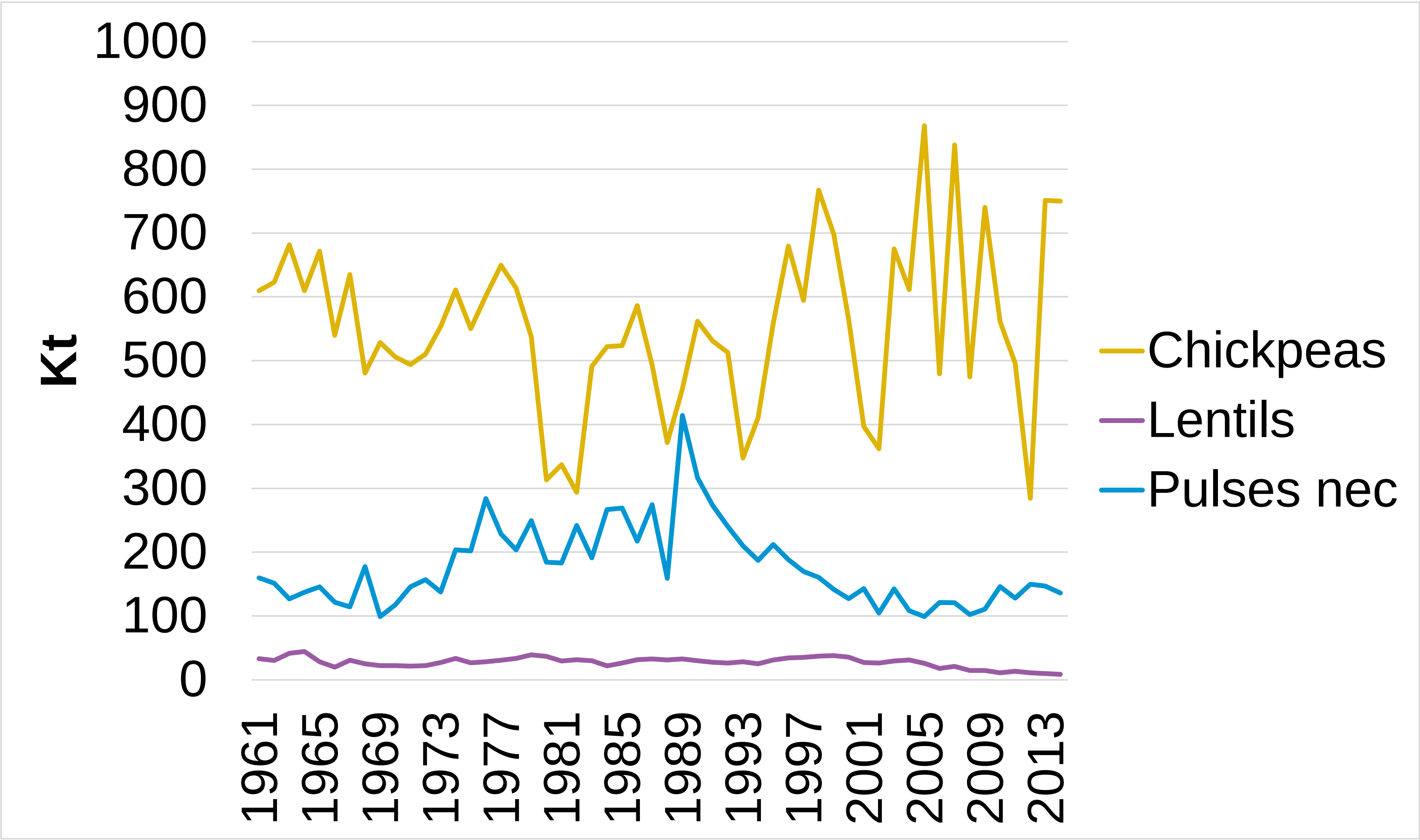


4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
t/ha
1961
1965
1969
1973
1977
1981
1985
1989
1993
1997
2001
2005
2009
2013
Chickpeas
Lentils
Pulses nec
Rice, paddy
Wheat

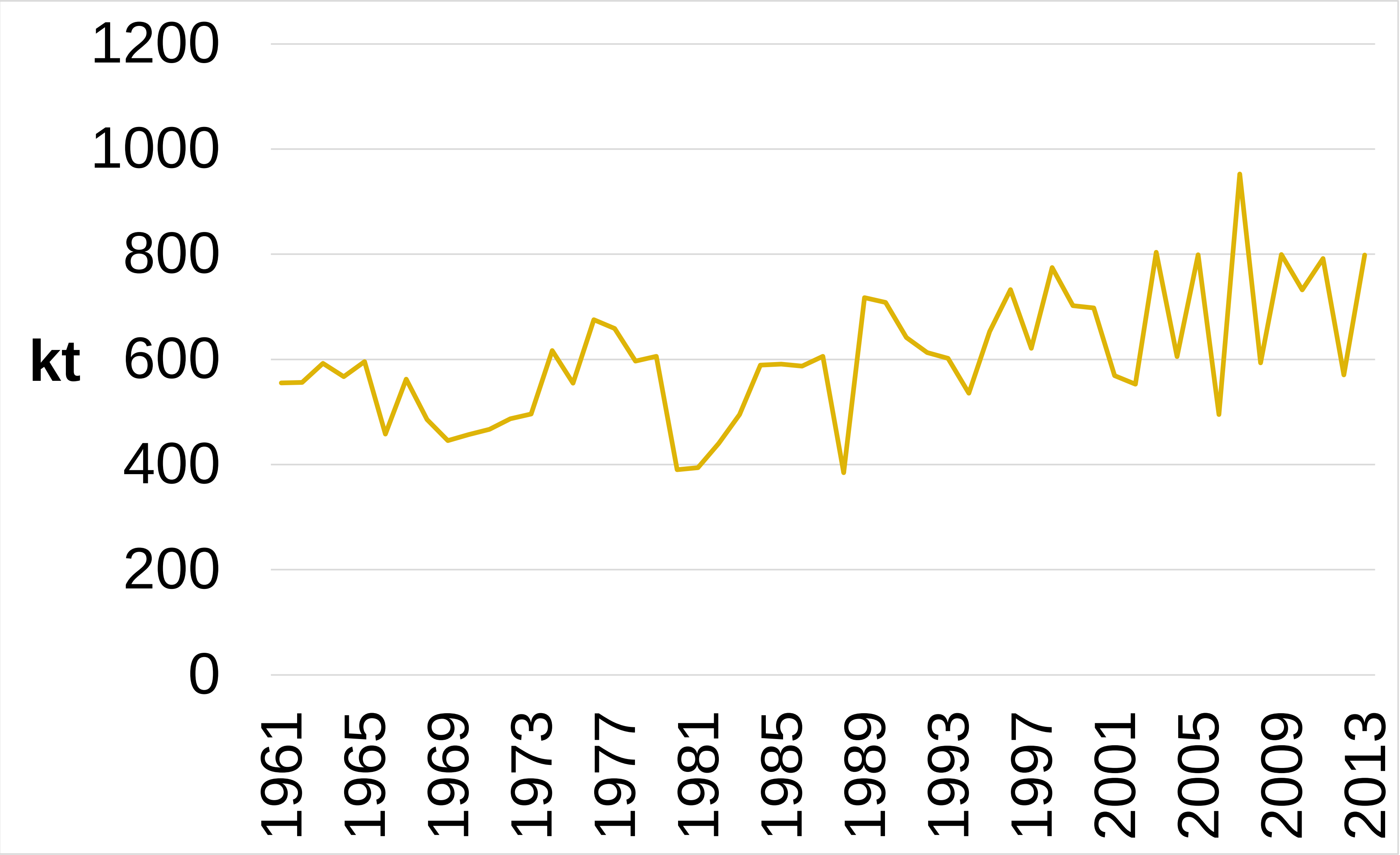
Production


30000
25000
20000
15000
10000
5000
0
Kt
1961
1964
1967
1970
1973
1976
1979
1982
1985
1988
1991
1994
1997
2000
2003
2006
2009
2012
Chickpeas
Lentils
Pulses nec
Rice, paddy
Wheat

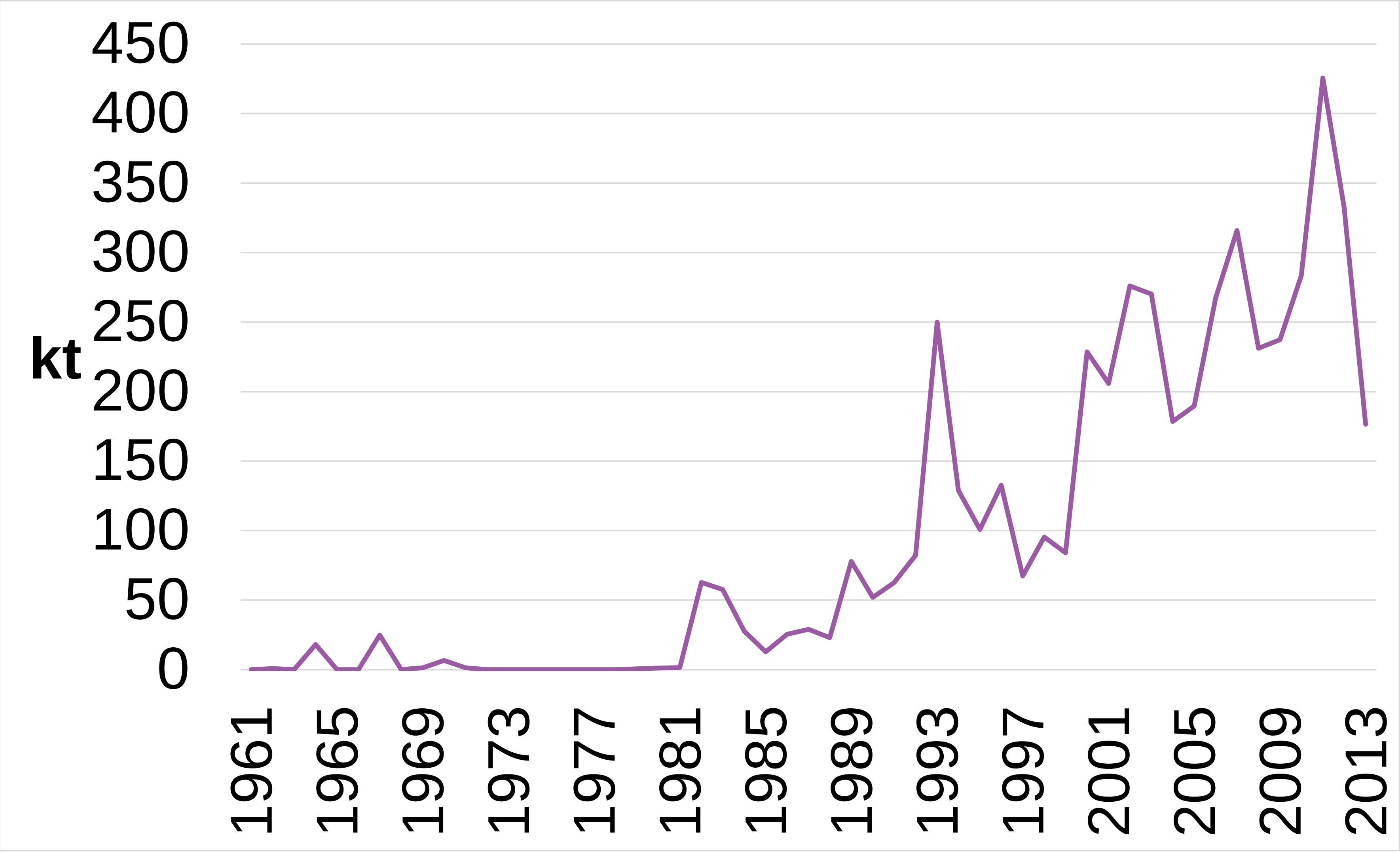
Production of pulses



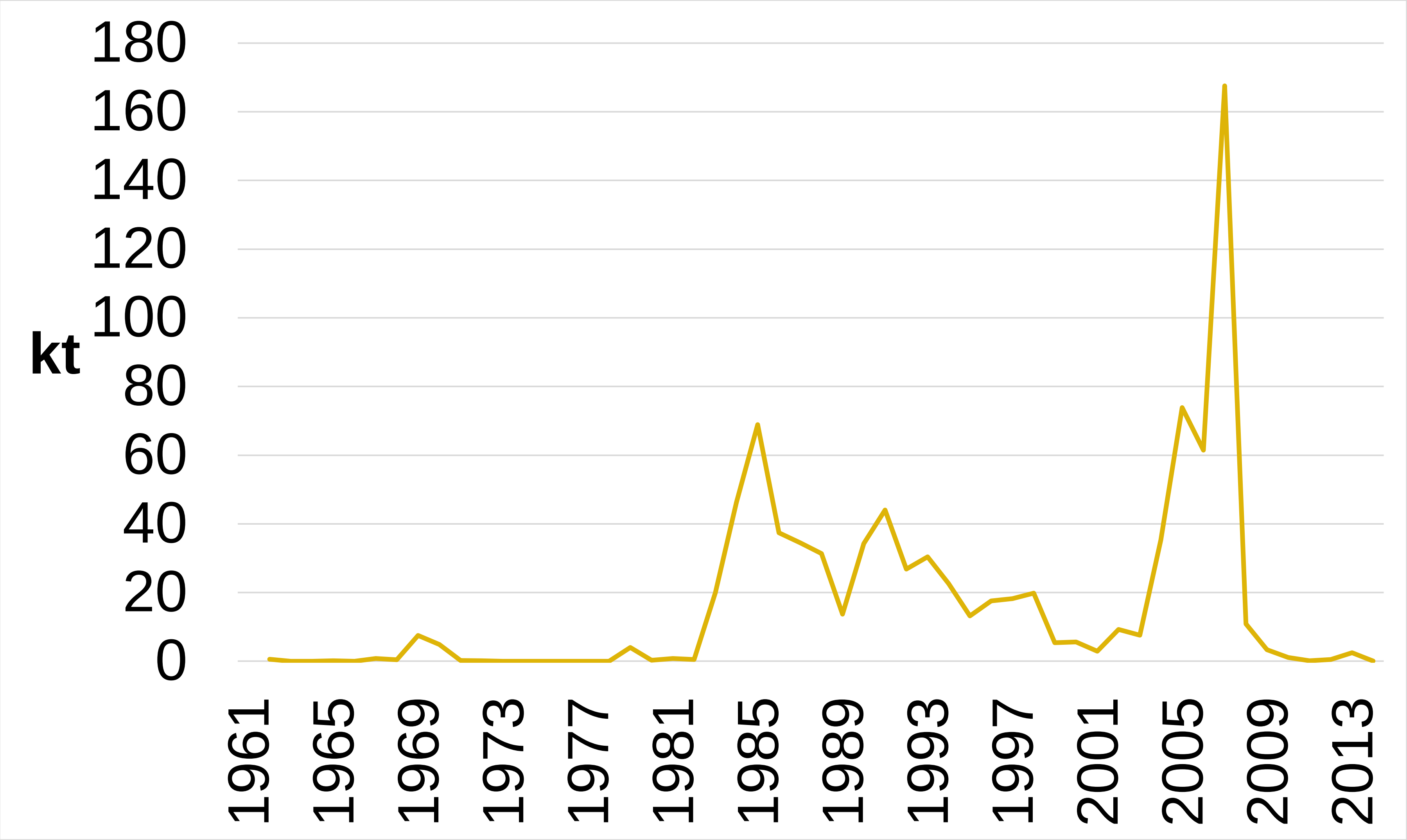
Consumption of pulses



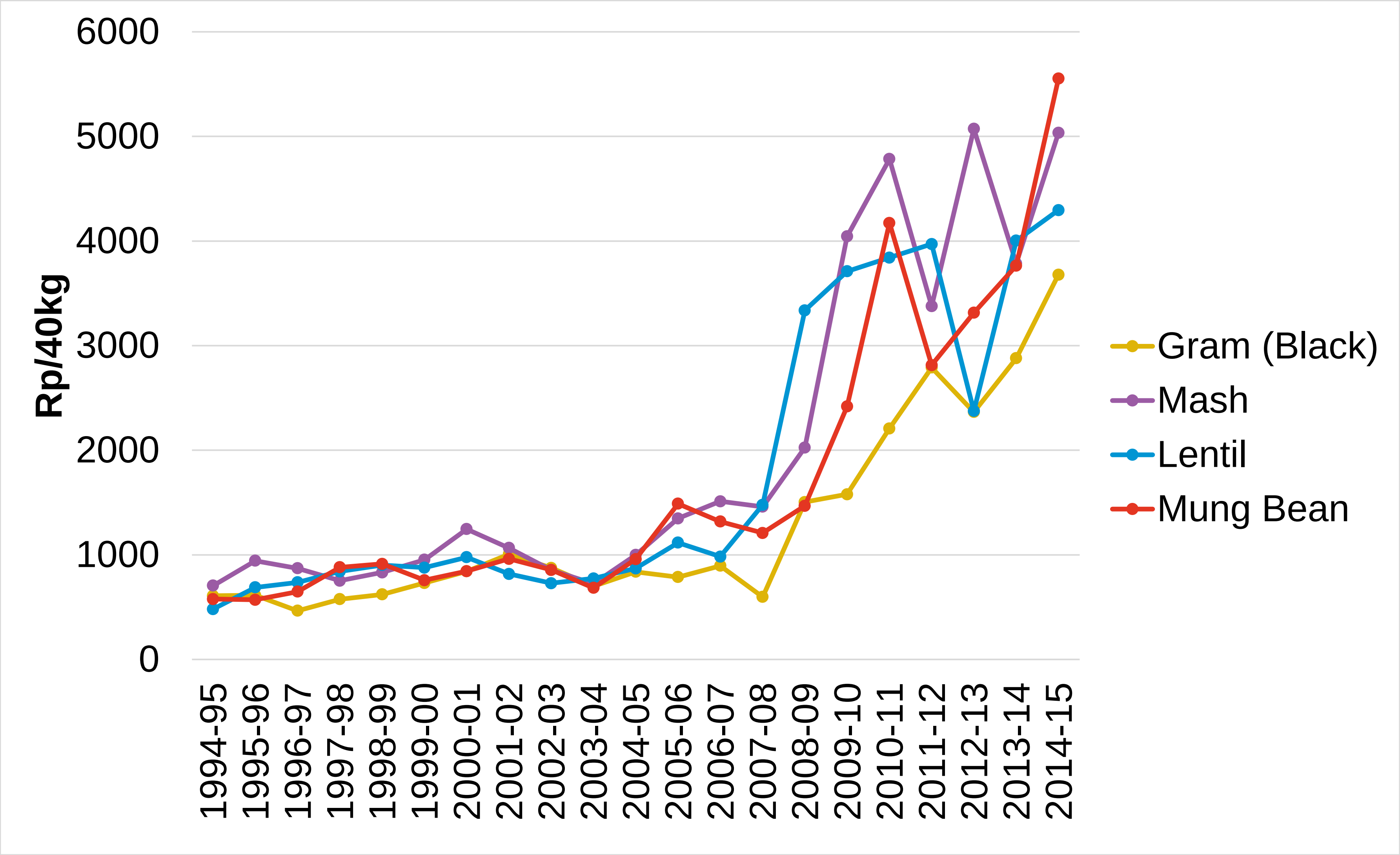
Imports of pulses



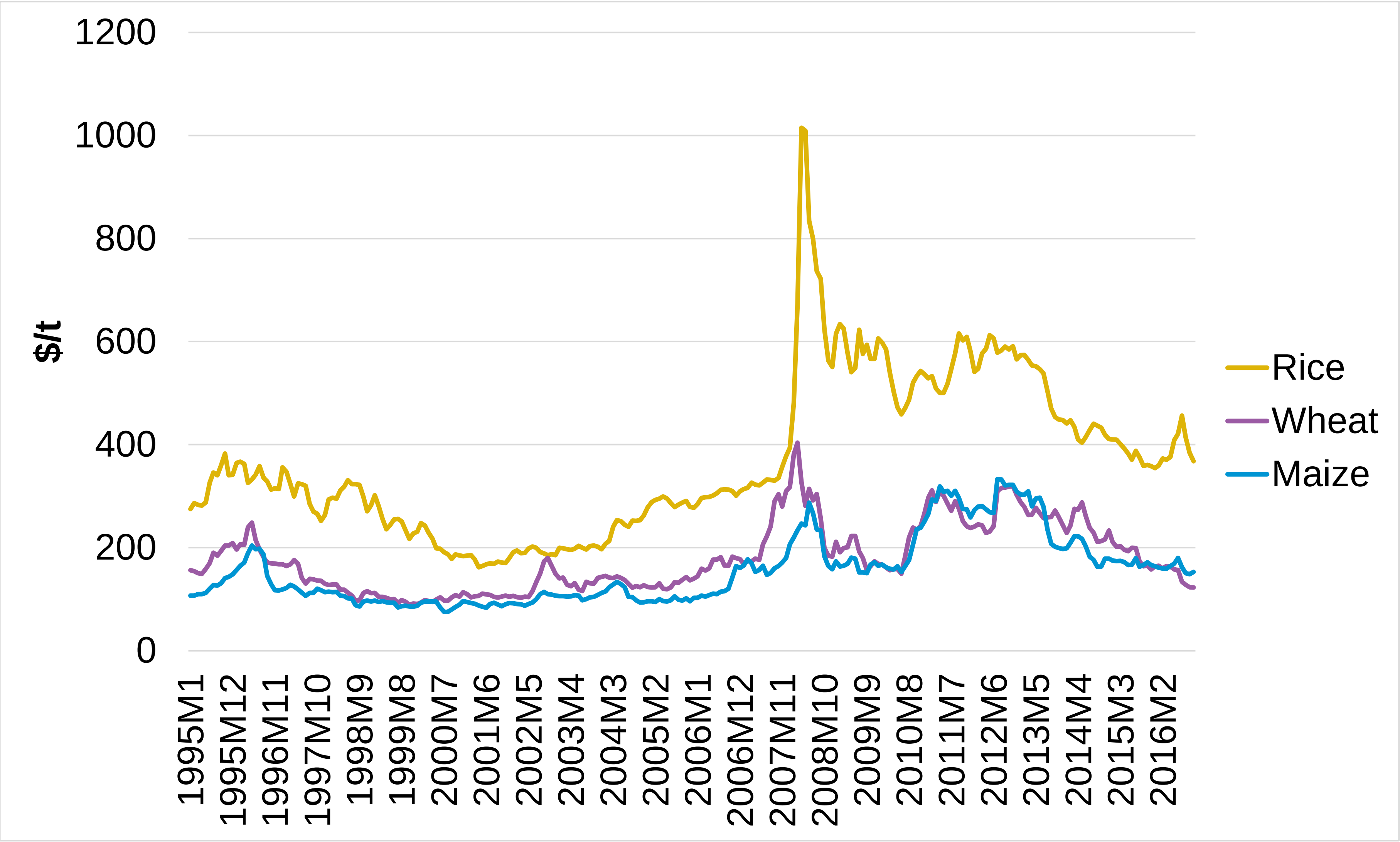
Exports of pulses



Wholesale prices of pulses



International grain prices



Polices

One direct policy for pulses:

- Export tax of 35%

Various direct policies for ag in general:

- Subsidies on fertiliser (plus water and energy)
- Concessional credit for capital improvements
- Investment in infrastructure, research, development, extension

Indirect policies:

- Floor price for wheat and sugar cane

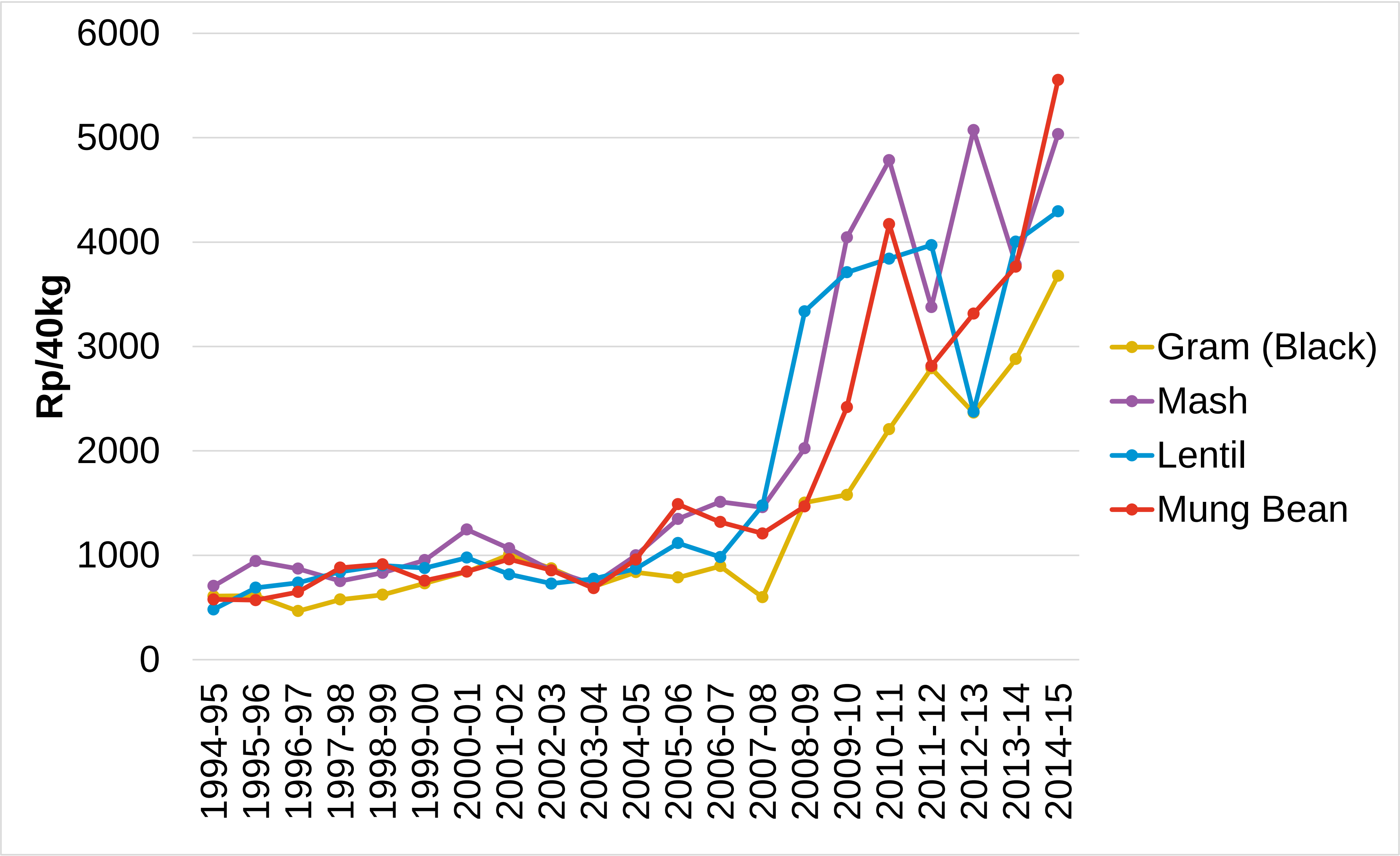
Export tax

- Implemented in 2007
- Federal Board of Revenue imposed a 35% regulatory duty on exports of pulses
- Export taxes can be justified to:
  - Raise tax revenue
  - Encourage downstream processing
  - Supress prices for the benefit of consumers

Export tax – justifications?

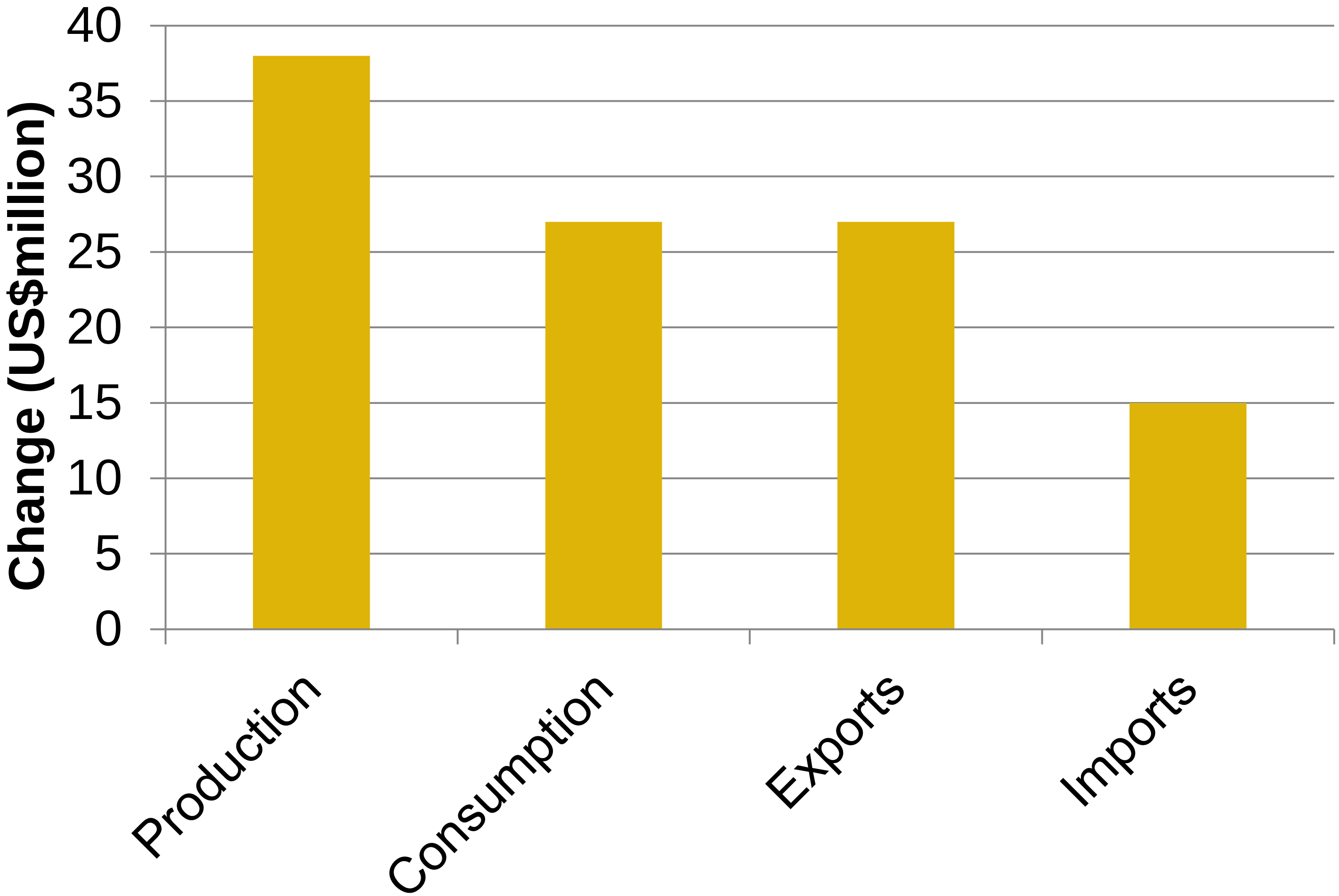
- Raise tax revenue – Revenue is almost zero. Tax is prohibitively high so there is almost no exports
- Encourage downstream processing – Not clear whether this has developed
- Supress prices for the benefit of consumers – Domestic prices have continued to increase

Wholesale prices of pulses



If the export tax were removed

We estimate that legume prices will increase by about 7% and for chickpeas:



Export tax

- If the export tax was introduced to secure pulses for domestic consumption, it is a self-sufficiency policy

- While often well-intended self-sufficiency policies:
  - are inefficient
  - are expensive
  - generally lead to price volatility

Domestic support (2011/12)

Box	Measure	Value (US$m)
Green	Irrigation system rehabilitation	107
	Provision of wheat storage facilities	112
	Agricultural extension	36
	Other green box	10
Amber	Wheat market price support	647
	Fertiliser subsidy	566
	Electricity subsidy	5

Productivity shift

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- Investment in infrastructure, extension, research, development
- Benefit to the economy of US$25-45million
- Exports increase (US$5million)
- Imports decrease (US$3million)
- Consumer prices decrease (about 9%)
- Consumers better off (US$45million)

BUT

- Producers may be worse off (up to $20million)

Domestic support (2011/12)

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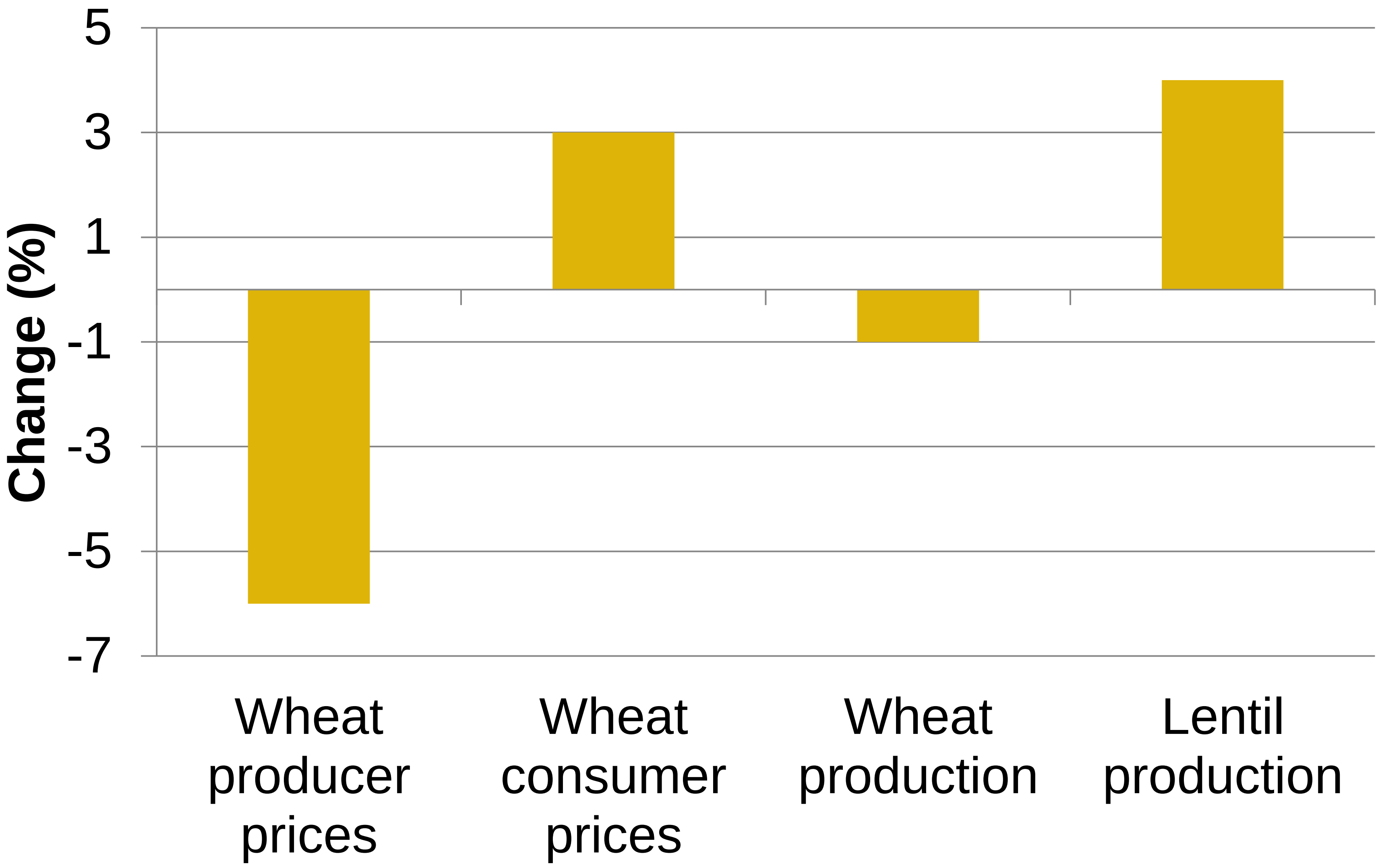
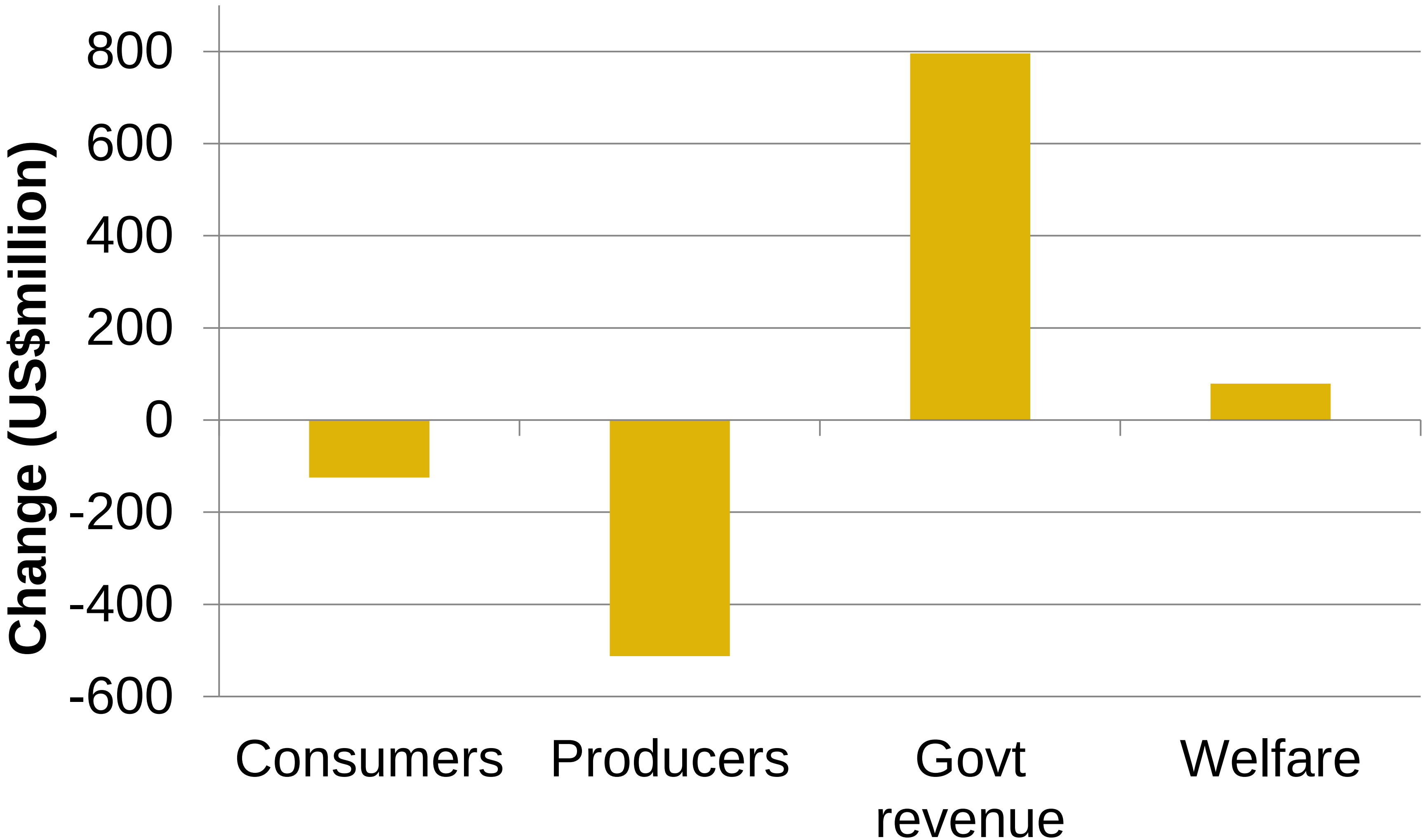
Wheat procurement price

- The government buys a share of the crop at an indicative "procurement" price
  - Rp 1,300/40kg
- The cost of this is US$647 million in 2011/12
- Current procurement price: US$305/t
- Well above the current world price:US$123/t
- Equivalent of a 148% producer subsidy
- Government buys 4 - 5million tonnes
- 17% of total production (26million tonnes)

Removal of wheat procurement



Removal of wheat procurement



Wheat procurement price

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- Aimed at food security
- May act as a welfare safety net for rural sector
    - But poorly targeted
- Distorts markets and prices:
    - Favours wheat producers
    - Detrimental to non-wheat producers

Fertiliser subsidy

- Worth $566million in 2011/12
- Pulses do not use as much fertiliser as wheat or other products
- Cost of fertiliser -
  - Wheat: Rp 6,725/acre
  - Mung: Rp 3,750/acre
  - Chickpea: Nothing
- Fertiliser subsidy favours non-pulse growers

Recommendations

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- Remove export tax
- Phase out wheat procurement policies
- Phase out fertiliser, energy subsidies
- Don't introduce pulse procurement policies or import tariffs

Recommendations

- Invest in infrastructure, research, development and extension
- Diversify sources of pulses imports (for food security)
- Strengthen function of markets (property rights, contract enforcement, rule of law). E.g. water pricing.