Farmers attitudes and adaptation behaviours to climate change

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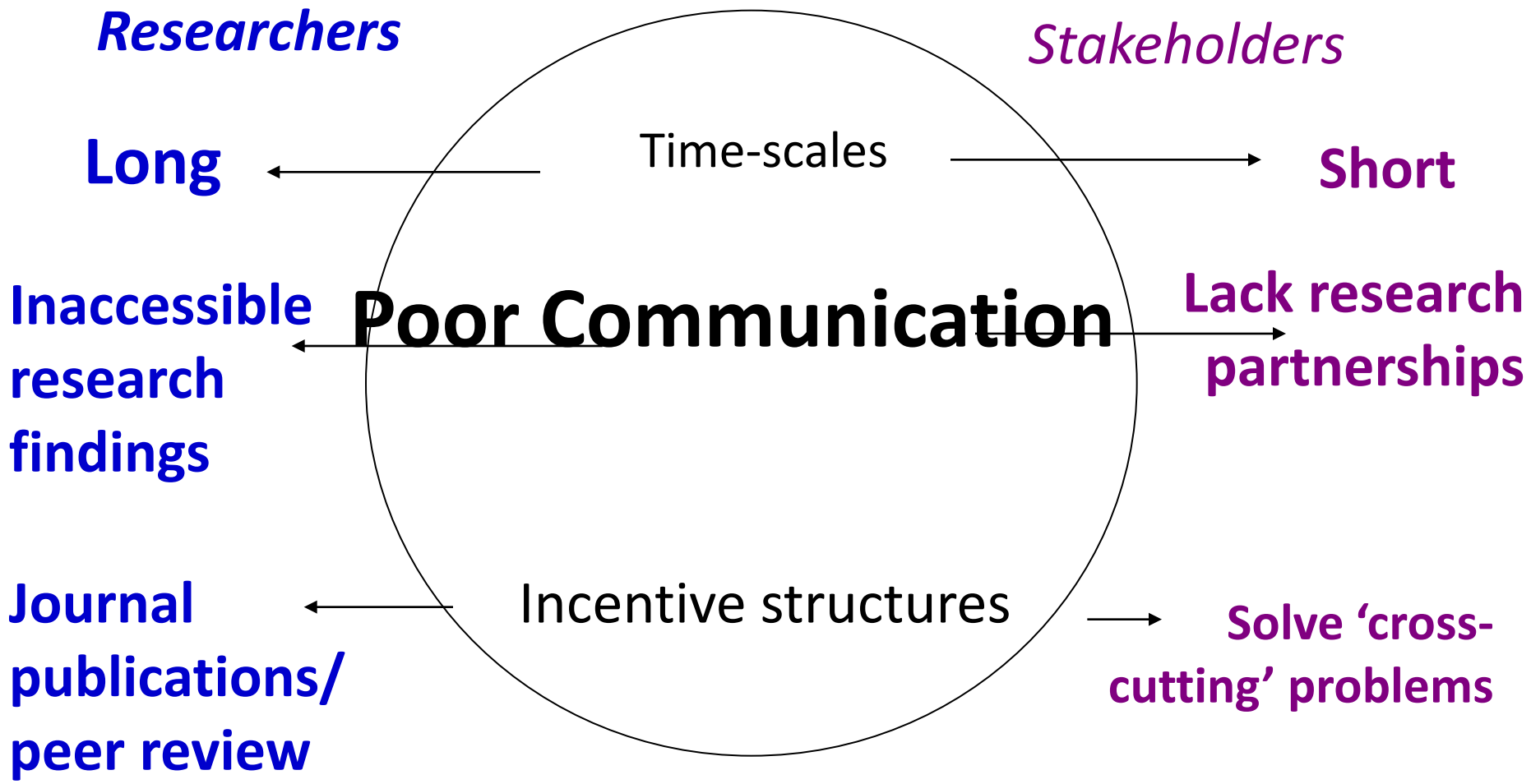
My Background

- PhD By Invitation
- Rurally located – Realise what is possible
- WIDCORP
- Opening of Research Fellow position
- Rest is history!

Barriers to Regional Research Engagement



SPLASH, 2008; Edwards, 2004; Walter, Davies & Nutley, 2004

Successful Research Partnerships

Communication

Respect/learning

Cultivating a real culture of collaboration

Structures

Processes

IRRR, 2004; W.K. Kellogg Foundation, 2002; Haire & Dodson-Pennington, 2002

Vic Farmer Survey Climate Change 2009

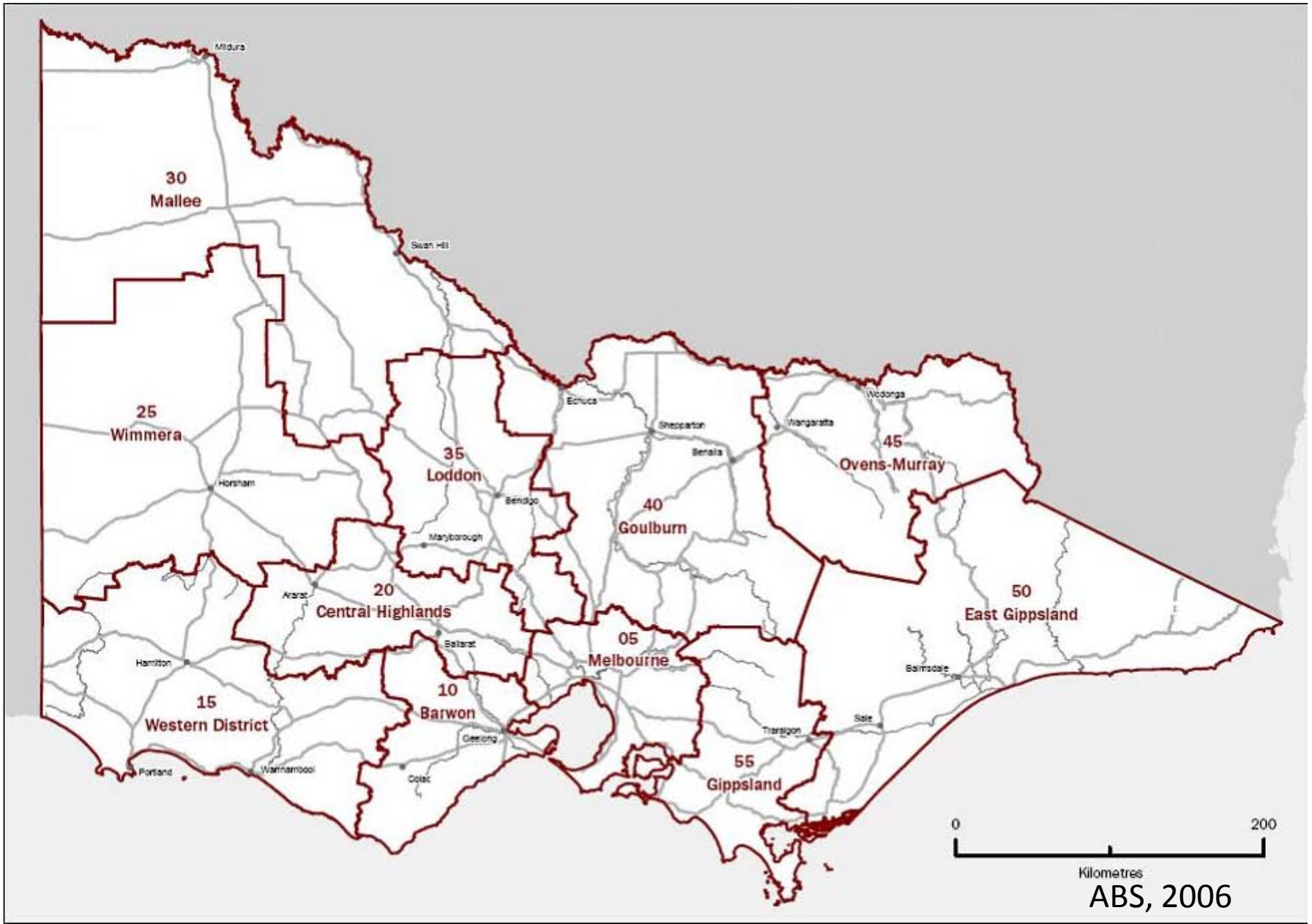
- Study Aim: Benchmark attitudes, knowledge and behaviours towards climate change, climate variability and greenhouse gas emissions across farm sectors and regions.
- Telephone/online survey from DPI contact database
- Data collection occurred June/July after 10 years of drought across Grains, Mixed, Livestock, Dairy, Horticulture, Forestry and Peri-urban groups
- 1500 Respondents
- Study areas:

  Demographic

  Structural (Farm activity, size, income, residence)

  Attitudes, Knowledge and Adaptations (Present/Future)

Map of Survey Regions

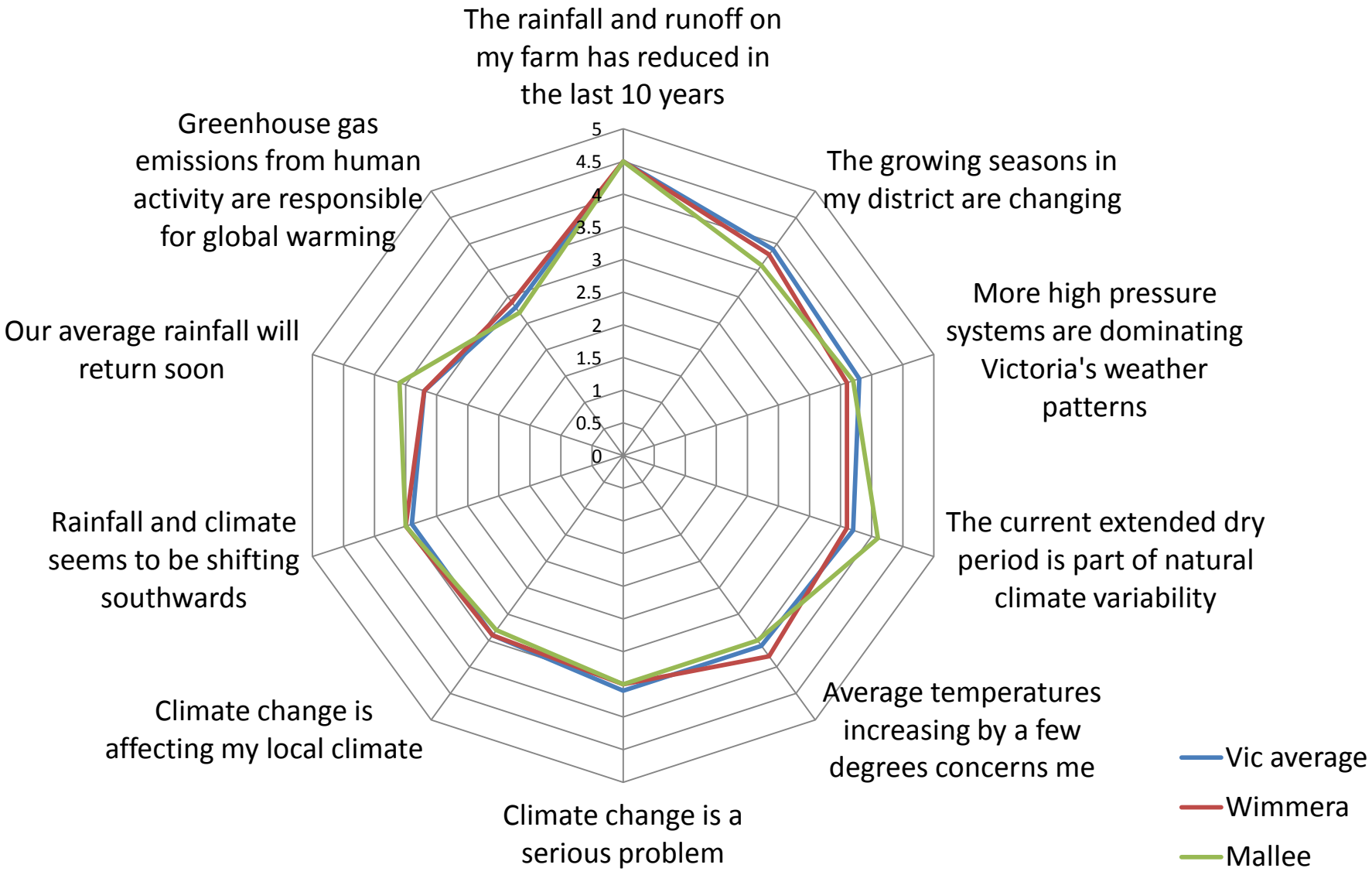


ABS, 2006

Key demographics

Variable	*WIMMERA (n= 68)*	*MALLEE (n= 182)*	*VIC AVERAGE (n= 1506)*
Gender	88% male	86% male	85% Male
Age (45 & 64 yrs old)	61%	72%	62%
Farm size (median)	1375 ha	911 ha	537 ha
Farm Activity	Grains, Mixed, Livestock	Grains, Horticulture, Dairy, Mixed	
Weekly hours	42 hours	53 hours	50 hours
Average off-farm income (mean)	34%	27%	33% income earned off-farm
Education (post-secondary)	35%	41%	46%
Resident status	74% on-farm	89%	87% on-farm

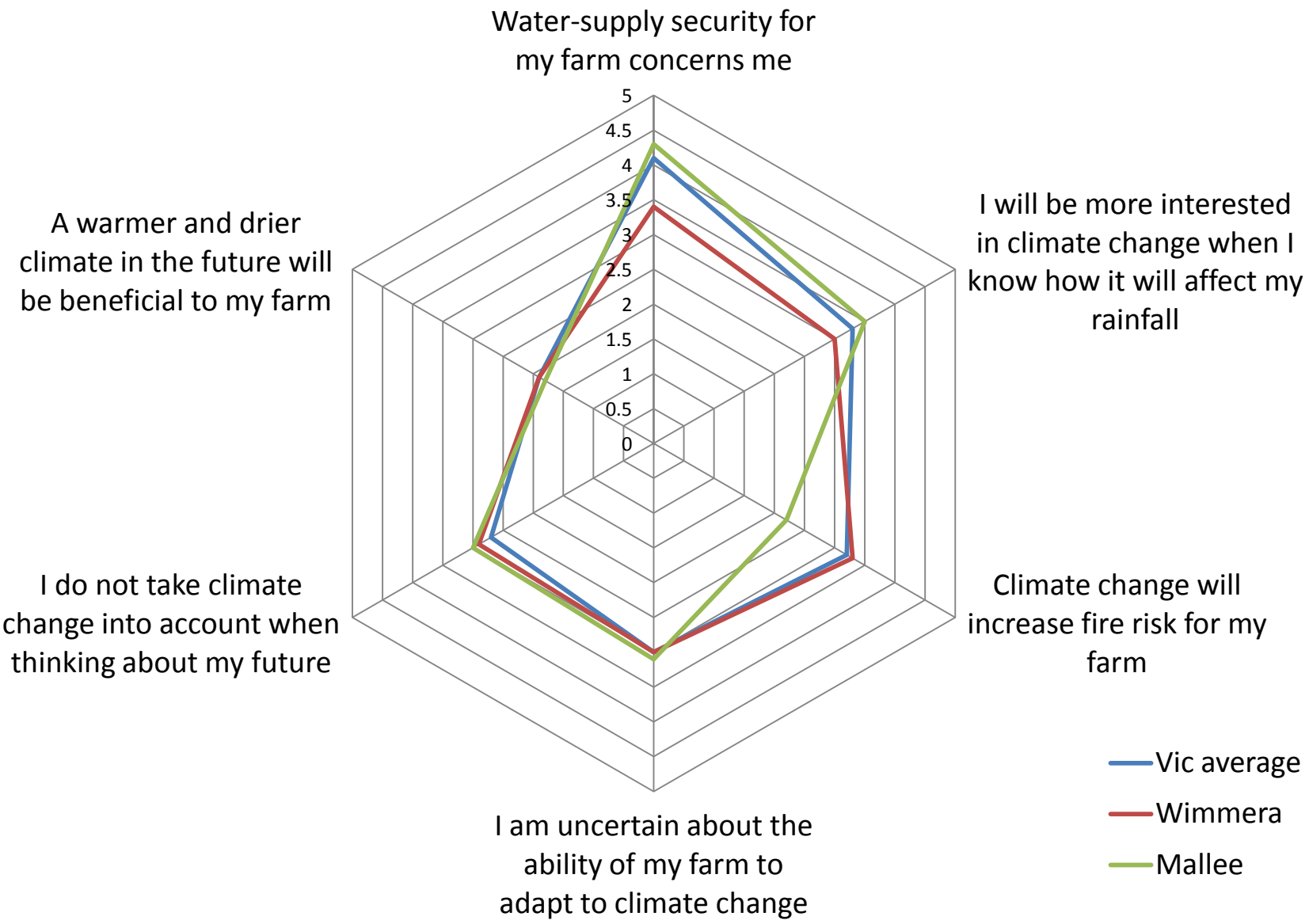
Climate-related attitudes



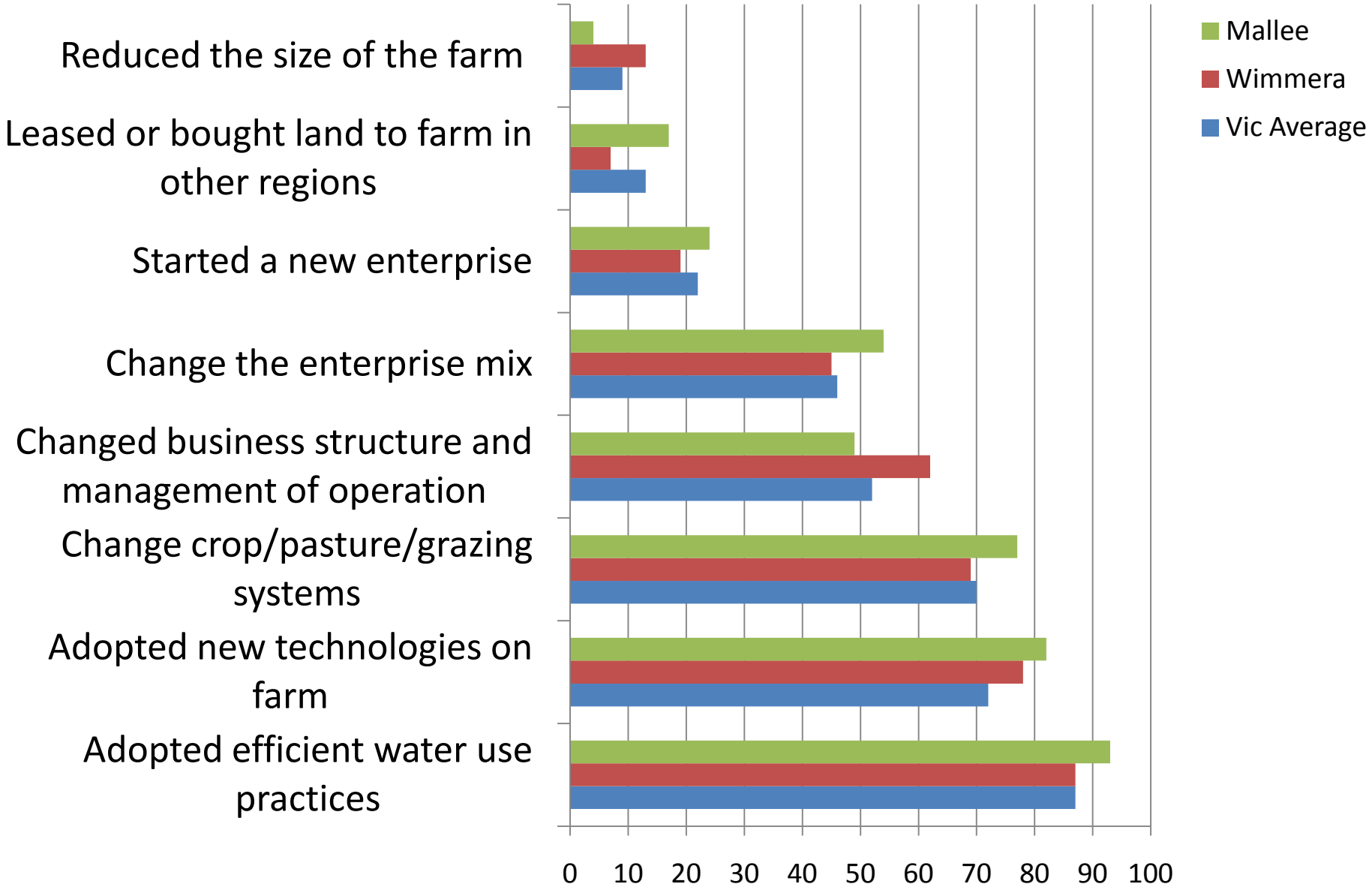
Identified Climate Change Factors

Anthropogenic climate change	(6 statements)	Unlikely to consider the long-term dry is part of natural climate variability and believes average rainfall will not return soon. Likely to attribute global warming to human activity, is concerned about climate change and the affect on local climate
Changing weather	(4 statements)	Likely to consider growing seasons changing, believes more high pressure systems are occurring, rainfall and climate is shifting southwards and rainfall and runoff has reduced over last 10 years.

Possible CC On-farm impacts



Adaptations to CC/CVariabilty



Future adaptations: CC/CV

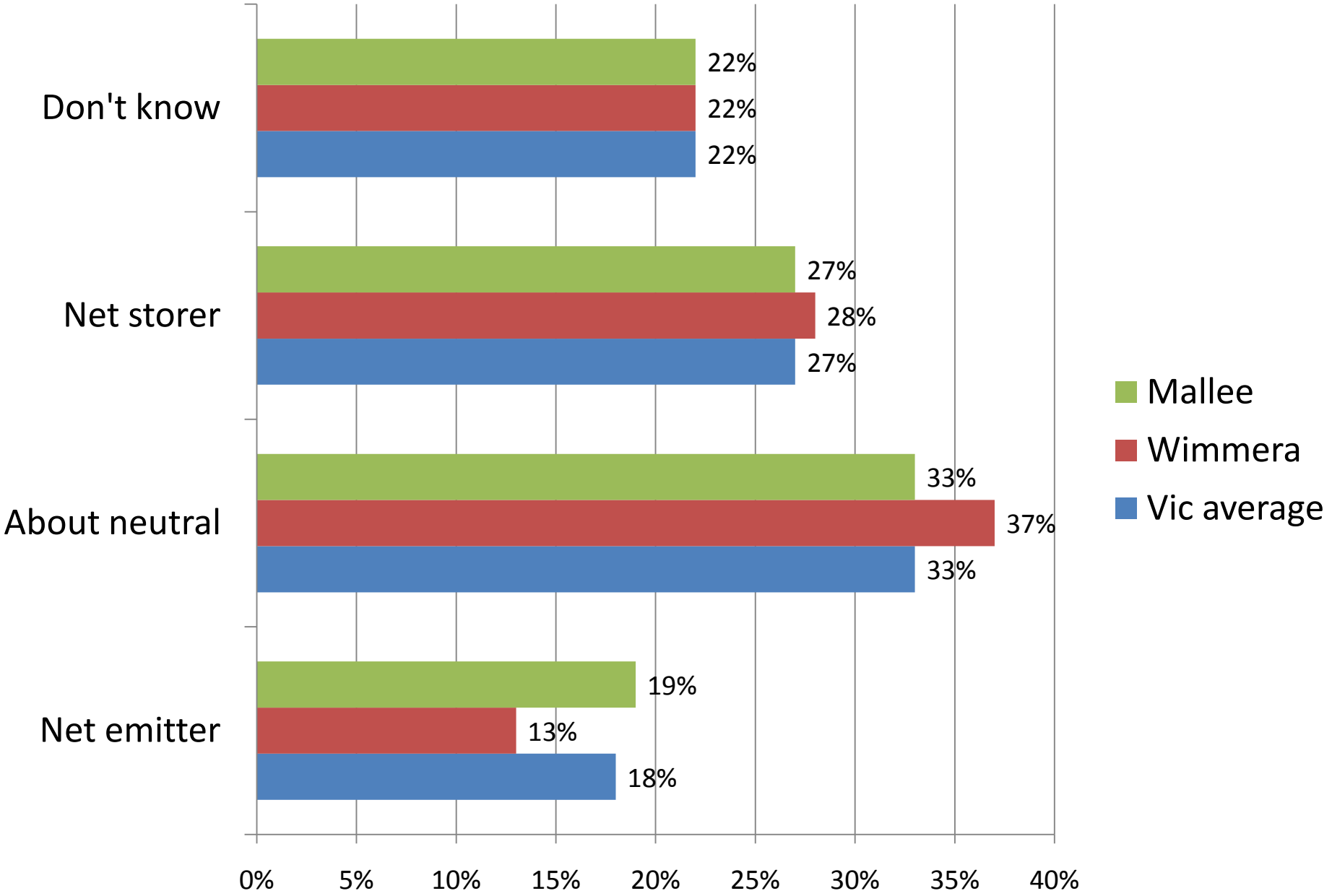
VERY LIKELY

- Efficient water use practices
- New technologies
- Change crop/pasture/grazing

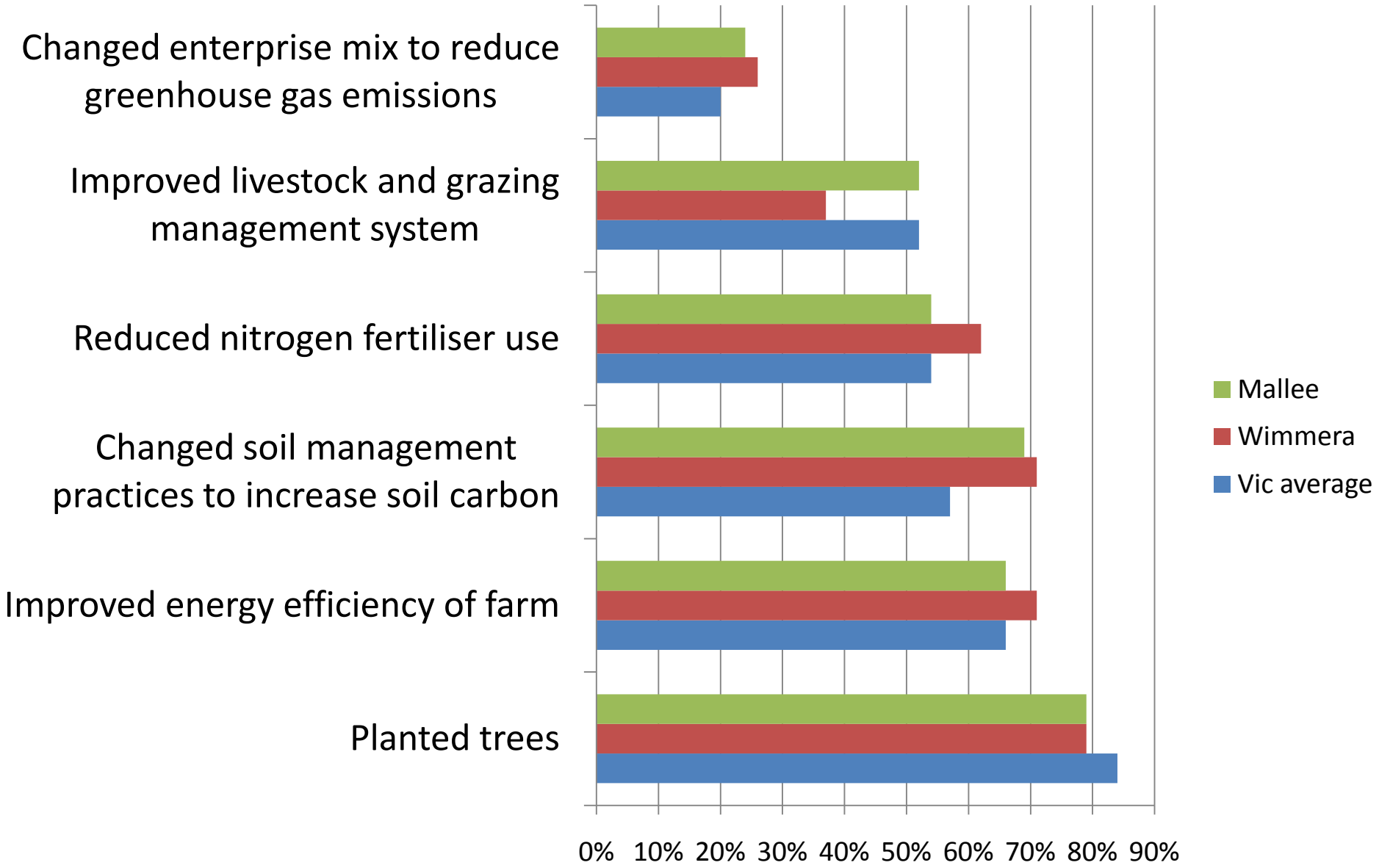
MOST UNLIKELY

- Reduce farm size
- Lease or buy land to farm in other regions
- Exist farming altogether

Knowledge of farm emissions



Actions taken to mitigate on-farm emissions



Future adaptations: GHG emissions

LIKELY

- Improve energy efficiency of farm
- Change soil management practices to increase soil carbon

MOST UNLIKELY

- Reduce nitrogen fertiliser
- Change enterprise mix to reduce GHG emissions

Acknowledgements

- Thanks to farmers who participated in Climate Change surveys
- DPI Staff
- Insightrix Research

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