

## Appendix 2. Farmers Observed Change in Weather Patterns Results

Table A2.1: Farmers' observed change in weather patterns over time grouped according to area (i.e., mountain, vlakte and coast) within catchment (i.e., Duiwenhoks/Breede; Goukou and Goukou/Gouritz).

		<b>RAINFALL</b>	<b>TEMPERATURE</b>	<b>WIND</b>
<b>DUIWENHOKS/ BREEDE</b>	<b>Mountain</b>	<ul style="list-style-type: none"> <li>• Rainfall has become less predictable and increasingly unstable</li> <li>• Increase of single intense rainfall events</li> <li>• Shift of seasonal winter rainfall into summer months</li> <li>• Longer dry periods between rainfall</li> </ul>	<ul style="list-style-type: none"> <li>• Winter season is now cold for shorter period of time</li> </ul>	<ul style="list-style-type: none"> <li>• No noticeable change observed</li> </ul>
	<b>Vlakte</b>	<ul style="list-style-type: none"> <li>• Increase of intense rainfall events</li> <li>• Longer periods of dry spells between rainfall events</li> <li>• Change from predictable drizzle periods over winter (50 + years ago) to more variable/extreme events, but average annual rainfall amount stays consistent overall</li> <li>• Consistently low rainfall years in 1990s and above average rain after 2010</li> <li>• Seasonal winter rainfall decreased and summer rainfall increased</li> </ul>	<ul style="list-style-type: none"> <li>• Winters are not as cold compared to 20 + years ago</li> <li>• Summers feel hotter (but high uncertainty)</li> </ul>	<ul style="list-style-type: none"> <li>• Less north-westerlies (in winter) and shift to south-westerlies or southerlies</li> </ul>
	<b>Coast</b>	<ul style="list-style-type: none"> <li>• More rainfall in one event</li> </ul>	<ul style="list-style-type: none"> <li>• Hotter daily temperatures over last five years</li> </ul>	<ul style="list-style-type: none"> <li>• No noticeable change observed</li> </ul>
<b>GOUKOU</b>	<b>Mountain</b>	<ul style="list-style-type: none"> <li>• Over last 10 years rainfall shifted a month later but no clear pattern</li> <li>• Increase of single intense rainfall events, but average annual rainfall amount stays consistent overall</li> <li>• Spring and summer months have more extreme rainfall events – winter rainfall become less reliable over time</li> </ul>	<ul style="list-style-type: none"> <li>• Summers are generally hotter</li> </ul>	<ul style="list-style-type: none"> <li>• South-easter blows rain to mountains</li> </ul>

	<b>Vlakte</b>	<ul style="list-style-type: none"> <li>• Last 10 years rainfall patterns shifted to later than usual</li> <li>• Fewer wetter winters – traditional winter rainfall shift into summer months</li> <li>• Increase of single intense rainfall events, no longer spread out over drizzle events (compared to 50 + years ago)</li> <li>• Wet and dry years are harder to predict – increased variability</li> <li>• Longer periods of dry spells between rainfall events</li> <li>• Onset of rainfall season shift by a month – from e.g. March to April</li> </ul>	<ul style="list-style-type: none"> <li>• Last five years had more extreme hot and cold days</li> </ul>	<ul style="list-style-type: none"> <li>• Since 2010, less north-west winds and more southerly to easterly winds (from the sea)</li> </ul>
	<b>Coast</b>	<ul style="list-style-type: none"> <li>• More intense rainfall over shorter period of time and more varied – no longer softer rainfall over longer periods of time</li> <li>• 20 + years ago had set seasons (typical spring and autumn rainfall) now highly variable</li> </ul>	<ul style="list-style-type: none"> <li>• Winters are not as cold</li> <li>• More extreme cold and hot events</li> </ul>	<ul style="list-style-type: none"> <li>• 30 + years ago used to get more regular ‘berg’ wind (hot dry northerly wind blowing from the interior to coastal district) now shifted to more coastal winds</li> </ul>
<b>GOUKOU/ GOURITZ</b>	<b>Mountain</b>	<ul style="list-style-type: none"> <li>• No noticeable change observed</li> </ul>	<ul style="list-style-type: none"> <li>• No noticeable change observed</li> </ul>	<ul style="list-style-type: none"> <li>• No noticeable change observed</li> </ul>
	<b>Vlakte</b>	<ul style="list-style-type: none"> <li>• More varied and unusual rainfall patterns over last 15 years</li> <li>• Increase of intense rainfall events</li> <li>• Opposite trend to western extent of Western Cape – receive good rainfall when drought in (e.g.) the Swartland</li> </ul>	<ul style="list-style-type: none"> <li>• No noticeable change observed</li> </ul>	<ul style="list-style-type: none"> <li>• Less north-west winds recently</li> </ul>
	<b>Coast</b>	Not surveyed	Not surveyed	Not surveyed