

Sustainable agriculture



Sustainable agriculture

Agriculture provides us with the food and products we use every day.

Appropriate management of our agricultural lands leads to greater profitability, environmental benefits, and supports viable local rural communities.

Agriculture in South East Queensland

Rural areas make up about 1.9 million hectares or 85% of South East Queensland (SEQ), much of which is managed by farmers.

Grazing is the dominant rural land use, utilising 51% of the land area in SEQ, whilst other more intensive agricultural activities, such as horticulture and intensive animal production, take up a further eight per cent.

The protection and sustainable management of agricultural land in SEQ is important to safeguard the capacity of the region to produce food, fibre and other materials for communities.

The need for sustainable agriculture

Sustainable agriculture refers to agricultural production that can be maintained without harming the environment.

Land use and development has caused several forms of land degradation and cumulative impacts that need to be addressed. Increased adoption of land management practices that address identified hazards and risks, and the introduction of rehabilitation measures, will aid the recovery of landscapes, sustain longer term productivity and reduce environmental impacts across the region.

The SEQ Natural Resource Management Plan 2009-31 outlines a number of targets for the improved management and condition of the region's natural resources. Implementing sustainable agricultural practices will be critical to meeting these targets.



Key challenges



Climate change

Predicted impacts of climate change likely to directly affect agriculture include more frequent and severe droughts, more intense rainfall events and associated flooding, more days over 35°C and increased pest and disease risk. Farming activities and practices will need to be adapted to manage these impacts.



Economic pressures

With increasing costs of production and lower profit margins, farmers need to increase their yields to remain financially viable. This puts pressure on the already stretched natural resources of land and water. Sustainable agricultural practices integrate environmental, economic, and social goals, to ensure that our farming communities can continue to provide the food and fibre products we use every day.



Population growth

SEQ is Australia's fastest growing region. Its population is expected to grow to 4.4 million by 2031, requiring the construction of an additional 750,000 homes. The area required to accommodate this growing population will put pressure on the remaining agricultural land and natural environment.



Water supply

Agricultural production requires large quantities of water. As the demand for water increases, and supply becomes less reliable, agricultural practices will need to become more water efficient.

Training, workshops, field days, incentives

Healthy Land & Water is working in partnership with landholders, industry bodies, community groups, government agencies and other land managers to facilitate the sustainable use of our region's agricultural land.

Activities include sub-catchment planning, workshops and field days, farm forestry, water-use efficient irrigation, fire management planning and property management planning.

Funding incentives to install off-stream watering points, fence remnant areas, undertake erosion control and other on-ground work are often available to support landholders in priority areas to increase farm productivity and improve the health of our catchments:



Property management planning

Property Management Planning (PMP) is a process that assists landholders to analyse their farming enterprise from a bio-physical, ecological, economic and social perspective and to formulate a well-rounded plan that takes into account factors such as vegetation management, soil conservation, nature conservation, land and water management and pest management. Healthy Land and Water's PMP service uses the latest in Geographic Information Systems and satellite imagery to assist landholders to develop a holistic plan for the long-term sustainability of their properties.



Sub-catchment planning

Sub-catchment planning is a targeted approach to improve landscape health, bringing neighbours in a sub-catchment together to focus on local land management and environmental issues. Usually focused on a shared creek or waterway, a sub-catchment group undertakes collaborative activities such as weed management and waterway revegetation; as the benefits of taking group action has a greater impact and uses fewer resources than if each landholder acted individually.



Practical information

Throughout the year, Healthy Land and Water arrange workshops and field days to provide opportunities for landholders to access practical information on sustainable agricultural practices. Healthy Land and Water bring in industry experts and peer leaders to ensure the latest technical advice and support is made available.



Farm forestry

Planting trees for timber production can provide farmers with a source of long-term income, making their enterprise more financially viable. Farm forestry can also utilise unproductive land and bring significant benefits in terms of biodiversity, water quality, reduced soil erosion, greenhouse gas abatement, improved grazing management and can help to manage salinity. Through its farm forestry program, Healthy Land and Water is currently working with eleven landholders to manage farm forestry plantations on approximately 850 hectares of land.





Fire management planning

Well managed fire regimes can improve conditions for primary production on grazing lands and support conservation activities in National Parks. Healthy Land & Water brings together landholders and National Parks officers who operate reserves on adjoining land to develop fire management plans and associated collaborative actions to improve land health and reduce wildfire risks.

Sustainable grazing program

Healthy Land and Water partners with government and corporate sponsors to provide landholders with the latest information and resources to make their grazing enterprises more sustainable. Healthy Land and Water's Sustainable Grazing Program includes field days and workshops on management practices that can improve productivity and catchment health.

Landholders who participate in these activities, and who have completed a property management plan, may be able to access funding for on-ground actions including the establishment of off-stream water points, fencing riparian areas, or implementing minimum tillage techniques, as part of a sustainable grazing system.

REFERENCES

¹ State of Queensland (Department of Environment and Resource Management) 2009, South East Queensland Regional Plan 2009-2031.

² Office of Climate Change (Queensland) 2009, Climate change impacts in Queensland [Internet].

³ Commonwealth Scientific and Industrial Research Organisation 2009, Water for Food [Internet].

⁴ Department of Infrastructure and Planning 2009, Regional Planning: South East Queensland [Internet].



Col and Jackie Clark, Oakey Creek near Beaudesert

The Clarke's have improved the productivity and sustainability of their grazing property. They changed from a set stocking approach, where cattle were allowed to graze on the whole property all year round, to a rotational grazing system.

The focus of the Clarke's' approach is keeping pasture plants healthy by resting paddocks to allow grass to recover after grazing.

Since changing their farm management approach, Col and Jackie have reduced sediment runoff and seen native pasture species return, all of which helps improve their bottom line.