

An assessment of potential land use in Queensland

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Estimates of the potential for expansion of crop and sown pasture areas provide a basis for development planning. Such estimates have been made for the state and range from 60 million hectares (Davies and Eyles 1965) to 40 million hectares (Ebersohn and Lee 1972). Estimates for crops have been made for part of the state (Skerman 1952; Gunn and Nix 1970; Ladewig 1971).

More detailed estimates of potential land use are available following an assessment by officers of the Queensland Department of Primary Industries. Using survey techniques aimed at providing a uniform interpretation and working from the soil associations provided in the Atlas of Australian Soils, an assessment of potential land use has been made for the state. The assessment is based on soil characteristics, climate and land form. The estimate of potential land use has been adjusted on the basis of soil fertility, species adaptation and infrastructure to give a "modified potential". This tentative modified potential is considered to be a more realistic estimate of potential land use in the short term.

Table 1: An Estimate of Potential, Modified Potential and Current Land Use in Queensland (m ha)

Enterprise	Potential land use		Current land use
	Estimated potential	Modified potential	
Crop	13.7	9.7	2.0
Sown pasture	41.2	20.7	4.2
Native pasture	106.4	130.9	155.2
Non-agricultural land	5.3	5.3	5.3
Reserves	6.2	6.2	6.2
Total area of State	172.8	172.8	172.9

The estimated potential reveals a capacity for a seven-fold increase in crop area, a ten-fold increase in sown pastures and a possible one-third reduction in native pasture area. The tentative modified potential suggests a capacity for a five-fold increase in crop area, a five-fold increase in sown pastures and a one-sixth reduction in native pasture over current land use, all in the short term.

Naps portraying crop, sown pasture and native pasture potential have been prepared.

It is considered that a high degree of technical accuracy has been achieved in this assessment because estimates are based on defined and measured land areas.

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Gunn, R.H., and Nix, H.A. (1970). Resources Series, Dept. Nat. Dev., Canberra.

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