

The effect of defoliation on root vigour with lightly clipped spear grass on the left compared with frequently clipped spear grass on the right.

Development and promotion of Ecograze (Australie)

DESCRIPTION

Research-based development and promotion of Ecograze principles and practices through on-farm testing and demonstration.

Aims / objectives: In 1992, Meat and Livestock Australia (MLA), a producer-owned company that provides services to the entire Australian red meat industry, initiated the Ecograze project. Ecograze was intended to provide innovative management options for the pastures in the eucalyptus woodlands of north-east Queensland. It was an eight-year collaborative research project undertaken by staff of the CSIRO (Commonwealth Scientific and Industrial Research Organisation) Sustainable Ecosystems and Queensland Department of Primary Industries with input from Queensland Department of Natural Resources and Mines. It formally concluded in 2001. However, many of the analyses and extension activities have been ongoing since then.

Methods: Ecograze was conducted on five commercial grazing properties that spanned different conditions and consequently allowed extrapolation of results to a much wider area across northern Australia. Practical grazing management strategies have been developed. The Ecograze team assessed the economic implications of managing land in various states by linking a pasture production model, to a model of farm economics. Research teams are currently testing the grazing management technology in commercial situations to understand the real costs and implications of implementing the research-derived Ecograze recommendations. The on-farm tests are supported by a number of new initiatives. These include a MLA funded project to specifically implement the Ecograze principles on farms as a means of reducing sediment and nutrients pollution of waterbodies. The National Action Plan for Salinity and Water Quality, through incentives, supports land management practices to reduce erosion, increase ground cover and minimise runoff. Funding is also provided by the Natural Heritage Trust to fence and sub-divide paddocks. All of these initiatives are supported by State Government agencies, who have extension staff based in the regions to assist farmers with implementing new practices. In the case of Ecograze, there are extension officers in the NE Queensland region who are actively promoting its management principles and are assisting producers in planning new strategies. Many of the Ecograze principles are also included in a new Grazing Land Management (GLM) Education package, developed by MLA and research and development agencies. The GLM package, which is delivered via a three-day workshop, is being extended to producers across northern Australia.

This approach highlights the importance of active collaboration between researchers, farmers, the beef industry and the government - in this case to develop a system to improve the condition of grazing lands. Through the central involvement of research, management options have been identified to suit different land users' needs, climates, grazing pressures and pasture conditions

LIEU



Lieu: Queensland, Northern Australia, Australie

Géo-référence des sites sélectionnés

• 142.42101, -20.55033

Date de démarrage: 1992

Année de fin de l'Approche: 2001

Type d'Approche

- traditionnel/ autochtone
- initiative/ innovation récente locale
- 🔽 fondé sur un projet/ programme



Programme organization: Ecograze principles are part of the Grazing Land Management education package delivered through workshops.



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OBJECTIFS DE L'APPROCHE ET ENVIRONNEMENT FAVORABLE

Principaux objectifs de l'Approche The Approach focused on SLM only

Development and promotion of Ecograze principles leading to adoption and thereby enhancing pasture productivity, soil condition and improved livelihoods for pastoralists.

The SLM Approach addressed the following problems: (1) Poor rangeland management leading to loss of productive palatable perennial grasses (3 P grasses) resulting in reduced ground cover, soil erosion, profit loss and in some cases irreversible land degradation. (2) Lack of understanding of underlying problems regarding mismatch of animal numbers to forage supply (pressure on grazing land) in a highly variable climate. (3) No clear technical recommendations regarding resting and rotation of rangeland

Conditions favorisant la mise en oeuvre de la/(des) Technologie(s) appliquée(s) sous l'Approche

• Cadre juridique (régime foncier, droits d'utilisation des terres et de l'eau): The existing land ownership, land use rights / water rights helped a little the approach implementation: In general, implementation of Ecograze principles is undertaken by an individual on private leasehold land. Ecograze is well suited to this individualised system.

Conditions entravant la mise en oeuvre de la/(des) Technologie(s) appliquée(s) sous l'Approche

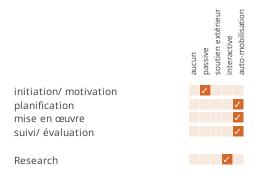
- Normes et valeurs sociales/ culturelles/ religieuses : Many pastoralists are conservative and change their systems only slowly. Treatment through the SLM Approach: There are ongoing education programmes and demonstrations on target properties.
- **Disponibilité/ accès aux ressources et services financiers**: Investment costs for fencing and water points can be burden on individual land holders. Treatment through the SLM Approach: There are various possible subsidies available (see 'Inputs', under 'Incentives').

PARTICIPATION ET RÔLES DES PARTIES PRENANTES IMPLIQUÉES DANS L'APPROCHE

Parties prenantes impliquées dans l'Approche et rôles

Quels acteurs/ organismes d'exécution ont été impliqués dans l'Approche?	Spécifiez les parties prenantes	Décrivez le rôle des parties prenantes
exploitants locaux des terres / communautés locales		Traditionally, men undertake on-farm planning, implementation of activities and provide labour. Women play an important role in planning and management of finances, and tend to take a more strategic view on NRM issues than the men.
gouvernement national (planificateurs, décideurs)		
Govt. agencies/extensionistes		

Participation des exploitants locaux des terres/ communautés locales aux différentes phases de l'Approche



Diagramme/ organigramme

Programme organization: Components and activities at different levels of the Ecograze programme.

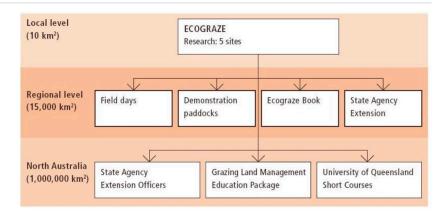
workshops/seminars, field days

consultation with specialists

fencing and water points

field observations; field observations of pasture composition; economic assessments

on-farm; on-farm field trials and demonstration areas



Prises de décision pour la sélection de la Technologie de GDT

Les décisions ont été prises par

- les exploitants des terres seuls (auto-initiative)
- principalement les exploitants des terres soutenus par des spécialistes de la GDT
- tous les acteurs concernés dans le cadre d'une approche participative
- principalement les spécialistes de la GDT, après consultation des exploitants des terres
- les spécialistes de la GDT seuls
- les responsables politiques/ dirigeants

Les décisions ont été prises sur la base de

- l'évaluation de connaissances bien documentées en matière de GDT (prises de décision fondées sur des preuves tangibles)?
- les résultats de recherches?
- expériences et opinions personnelles (non documentées)

SOUTIEN TECHNIQUE, RENFORCEMENT DES CAPACITÉS ET GESTION DES CONNAISSANCES

Les activités ou services suivants ont fait partie de l'approche

- Renforcement des capacités/ formation
- Service de conseils
- Renforcement des institutions (développement organisationnel)
- Suivi et évaluation

Recherche

Renforcement des capacités/ formation

La formation a été dispensée

aux parties prenantes suivantes exploitants des terres personnels/ conseillers de terrain

Formats de la formation

sur le tas entre agriculteurs (d'exploitants à exploitants) zones de démonstration réunions publiques cours

Sujets abordés

The Ecograze principles and findings have been incorporated into a training course entitled 'Grazing Land Management (GLM) Education Package'. To date (2005) over 100 farmers have participated in the course and it is anticipated that in the next three years this number will reach over 1,000 producers.

Service de conseils

Le service de conseils était fourni

- dans les champs des exploitants?
- dans des centres permanents

Key elements: In on-going research trials in cooperation with land-users, government officers build up their knowledge and capacity to support farmers . Field days form part of the extension and education process. , Government assistance with extension and training through free advice provided by extension officers is helpful, Subsidies to attend training courses like GLM Education also assist with the uptake and adoption of Ecograze. ; There is also a significant interaction between neighbouring properties in sharing of ideas and successes and failures. Commonly, these neighbouring properties are linked through catchment or a Landcare groups.

Renforcement des institutions

Institutions ont été renforcées ou mises en place non oui, un peu oui, modérément oui, beaucoup	au niveau suivant local régional national	Décrivez l'institution, ses rôles et responsabilités, ses membres, etc.
Type de soutien ✓ financier ✓ renforcement des capacités/ fo équipement	ormation	Plus de détails financial (see Annex A3)
Suivi et évaluation		

Bio-physical aspects were regular monitored by 0 through measurements Socio-cultural aspects were ad hoc monitored by land users through observations Economic / production aspects were regular monitored by 0 through measurements; Area treated aspects were ad hoc monitored by 0 through measurements No. of land users involved aspects were ad hoc monitored by project staff through measurements. There were no changes in the Approach as a result of monitoring and evaluation: Further research and testing, on-going monitoring and evaluation is underway after the initial project. It is too early to state what changes are likely other than obviously needing to adapt to individual land-users resources and available finances.

Recherche

La recherche a traité les sujets suivants

	sociologie
1	économie/ marketing
	écologie
1	technologie

The impact of the ongoing research on understanding and implementing the technology through the Ecograze project is significant, and continues to be so. Research into various technical aspects of grazing management has been recently supplemented by economic analyses of costs and benefits.

FINANCEMENT ET SOUTIEN MATERIEL EXTERNE

Budget annuel en dollars US de la composante GDT

< 2 000 2 000-10 000 10 000-100 000 100 000-1 000 000 > 1 000 000 Precise annual budget: sans objet Approach costs were met by the following donors: government (national government): 40.0%; local community / land user(s) (community / local): 60.0%

Les services ou mesures incitatives suivantes ont été fournis aux exploitants des terres

- Soutiens financiers/ matériels fournis aux exploitants des terres Subventions pour des intrants spécifiques Crédits
- Autres incitations ou instruments

Soutiens financiers/ matériels fournis aux exploitants des terres

Local Landcare groups often request assistance, and this is provided either from the research agencies or from extension officers or through grant applications to the Natural Heritage Trust.

Autres incitations ou instruments

During the research phase of Ecograze, incentives were not available. However, since then, newly established Government initiatives such as the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality, which commenced in 2003, have increased the number of incentives (eg support for on-ground works such as fencing, relocation of water points etc) available to implement management practices such as those recommended in Ecograze.

ANALYSES D'IMPACT ET CONCLUSIONS

Impacts de l'Approche

Est-ce que l'Approche a aidé les exploitants des terres à mettre en œuvre et entretenir les Technologies de GDT? Ecograze leads to retention of 3P grasses ('perennial, productive and palatable' grasses), and therefore better pasture coverage, soil retention and greater water use efficiency.

Did other land users / projects adopt the Approach?

Ecograze principles have been included in the new Grazing Land Management Education package - which is being used across northern Australia by Meat and Livestock Australia and other agencies also. It has also now been incorporated into university courses on grazing management.

Principale motivation des exploitants des terres pour mettre en oeuvre la GDT

🗸 sans objet

Durabilité des activités de l'Approche

Les exploitants des terres peuvent-ils poursuivre ce qui a été mis en oeuvre par le biais de l'Approche (sans soutien extérieur) ?

Non Oui, un peu Oui, modérément Oui, beaucoup

1

non oui incertain

Progress is continuing with further field trials and participation from land users. Those land users who have begun with the Ecograze system can continue without external support.

CONCLUSIONS ET ENSEIGNEMENTS TIRÉS

Points forts: point de vue de l'exploitant des terres

Points forts: point de vue du compilateur ou d'une autre personne-ressource clé

- Adoption of the technology should result in financial reward. (How to sustain/ enhance this strength: Continue ongoing economic analysis as an indication of technology success.)
- The system has been very well documented and adapted to the land users conditions through the involvement of research, the land users, primary industry, and extension. (How to sustain/ enhance this strength: Continued support for applied/on-farm research to adapt the system to the needs of the land users and the environment. Support for long-term monitoring.)
- State government extension agencies have also readily accepted Ecograze and are actively promoting its principles with landholders.
- The approach is focussed on changing attitudes to management in the long term. (How to sustain/ enhance this strength: Continue with training and education programmes.)

Faiblesses/ inconvénients/ risques: point de vue de l'exploitant des terrescomment surmonter

Faiblesses/ inconvénients/ risques: point de vue du compilateur ou d'une autre personne-ressource clécomment surmonter

• One-off training programs such as the Grazing Land Management Education package (a 3-day course) may not be enough to sustain initial commitment to testing new management options. Create support network and supply follow-up training and/or support.

RÉFÉRENCES

Compilateur	Editors	
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Examinateur David Streiff Deborah Niggli

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Personnes-ressources

Andrew Ash (andrew.ash@csiro.au) - exploitant des terres

Description complète dans la base de données WOCAT https://qcat.wocat.net/fr/wocat/approaches/view/approaches_2333/

Données de GDT correspondantes

Technologies: Ecograze https://qcat.wocat.net/fr/wocat/technologies/view/technologies_1332/ Technologies: Ecograze https://qcat.wocat.net/fr/wocat/technologies/view/technologies_1332/

La documentation a été facilitée par

Institution

• CSIRO (CSIRO) - Australie

Projet

• Book project: where the land is greener - Case Studies and Analysis of Soil and Water Conservation Initiatives Worldwide (where the land is greener)

Références clés

• Ash A, Corfield J and Taoufik T (undated) The ECOGRAZE Project: developing guidelines to better manage grazing country. CSIRO, Meat and Livestock Commission and Queensland Government:

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