

## QMDC's comments on the Agricultural Competitiveness Issues Paper

17 April 2014

### Comments to:

Agricultural Competitiveness Taskforce  
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This submission is presented by the Chief Executive Officer, Geoff Penton, on behalf of the Queensland Murray-Darling Committee Inc. (QMDC). QMDC is a regional natural resource management (NRM) group that supports communities in the Queensland Murray-Darling Basin (QMDB) to sustainably manage their natural resources.

### 1.0 General comments

QMDC recognises the urgent need to improve the ecological sustainability and profitability of the agriculture industry. Reforming legislation and policy in order to support development within the industry must however, be based on a serious commitment by government and industry, to maintain the integrity of Australia's natural resources in order to achieve sustainable food production. This will require a balance between economic incentives, education and regulatory options.

In our opinion it is crucial that this Paper facilitates solutions, which build upon sustainable productivity and profitability, and which should be able to be broadly applied. This QMDC believes is critical to reposition rural Australia so that it has a sound future and makes a renewed contribution to sustainable agriculture nationally and worldwide.

Integral to this repositioning is a universally agreed definition by which "sustainable agriculture" can be described and implemented by government and industry. Sustainable agriculture currently will mean different things according to different interests. QMDC asserts that an agreed definition needs to show clear parallels to ecologically sustainable development (ESD) principles, and incorporate these into the responsibilities of government and industry.

QMDC asserts the Paper should implement policies that clearly promote the need for ecological sustainability. The agriculture industry has historically contributed to land degradation and loss of biodiversity and some enterprises are continuing to harm natural resources. The agricultural industry, however, depends on healthy functioning ecosystems. Regional communities are very concerned about the declining condition of rural landscapes, about the capacity and mental health of landholders and about the effectiveness of government policies to protect agricultural land and rural livelihoods. Although opportunities abound for Australia to distinguish its agricultural products on the basis of vigorous environmental credentials, there is significant market failure. It is clear there is an urgent need for government to develop policy to protect and improve ecological resilience.

QMDC has used a number of tools with success to implement sustainable agriculture initiatives e.g. subcatchment and landscape planning, Landcare partnerships, Environmental Management Systems. Some of these tools are specific to NRM bodies; others have been developed by industry and government agencies. These will be described in more detail throughout this submission. QMDC asserts these tools would also be useful as part of the Paper's own toolkit when designing associated policy.

QMDC submit that it is in the public interest that agricultural assets (land, businesses, infrastructure) including the natural resources they depend upon be sustained beyond the lifetime of the landholder in order to secure the long term productivity capabilities and the integrity of the resources relied upon or invested in to.

## 2.0 Specific comments

### 1. Ensuring food security in Australia and globally

In reality, agriculture is not currently sustainable either within Australian production systems or globally. This poses a very serious issue for the government in regards to assessing what is needed now and in the future for food security, nationally and globally.

It is essential that regional food security be a key objective for today's policy makers for a range of reasons, both at a global and national scale. These reasons include international political instability, war, climate change impacts, resource conflicts and food shortages, all which will lead to an increase in displaced persons/populations and migration. Major risks to Australia's food supply include:

- Scarcity of water and nutrients
- Diminished air quality caused by noise, dust, lighting, greenhouse gases
- Conflicting land use and the reduction of food producing land to industries incompatible with agriculture, horticulture and grazing (especially coal seam gas (CSG) and open cut coal mining).
- Climate change and variability
- Contamination of ground and surface waters
- Soil salinity
- Weed and pest animals
- Biodiversity loss
- Energy inefficiency and inadequate demand management

- Poorly aligned and coordinated planning and policy e.g. urban sprawl and uncoordinated infrastructure corridors
- Weak environmental legislation
- Poor investment in agricultural Research, Development and Extension
- Dependency on fossil fuels
- Mining and energy industry infrastructure footprint & potential future contamination (from CSG and coal mining and if Australia was to move to nuclear energy options) This is emphasised by recent MLA study and legal opinion on liability of meat residues falling onto landholders, not resource companies
- Monoculture and biotechnology solutions that generate as many or more problems as they solve
- Consumerism culture
- Economic control by multinational corporations
- Political agendas
- Divorce and relationship break downs on family farms
- Rural mental and physical health
- Aging farmers, loss of intergenerational knowledge, uncertainties causing failure for succession planning, lack of subsidy to a sector which should be more highly valued e.g. regarded as an essential service. Need to ring fence our best agricultural land for the future
- Reduction in on ground funding e.g. Landcare or other projects to improve biodiversity
- Lack of farm labour

QMDC asserts that the food industry must primarily avoid, effectively manage or mitigate risks to and impacts on Australia's natural resources and environment. Left unchecked, these risks will manifest themselves as externality costs affecting production and sustainability.

- [What opportunities exist to expand agricultural production in Australia and how can we take advantage of them?](#)

Regional NRM plans prepared by regional NRM bodies provide opportunities to apply strategic planning mechanisms to assess the feasibility of expanding agricultural production in a specific bioregion. Currently tools are being developed for each regional NRM Plan to address this issue, taking into account a region's natural resources, future predicted climate impacts and the social resilience of local landholders and communities. It is crucial, that careful consideration is also given to social resilience, because the underlying viability of the sector needs to be holistically evaluated and addressed in order to understand how or where production can sustainably expand.

In the face of global instability production challenges for Australia's agricultural industry are profound. Driving productivity too hard will potentially exhaust productive capacity faster, failing to achieve a sustainable farming. The assertion that a rising middle class in Asia will be the saviour of Australian agriculture is not supported by QMDC.

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Additionally encouraging larger corporate farming systems will not necessarily increase gross production or overall sustainability and potentially undermines both improved productivity and ESD.

Facilitating the maintenance of the family farming unit and cooperatives may be more conducive to the future of Australian agricultural competitiveness. Research and a careful consideration of the state of the environment, political and natural, on global, national and regional levels are needed to determine what agricultural demographic best meets the long term demands on the agriculture industry.

- [How can farm businesses, food manufacturers and the retail sector be more responsive to domestic and global food demand and better integrate into domestic and global supply chains?](#)

By mitigating the risks outlined in the below Table.

Value chain stage	Risk factors	Mitigation measures examples
Resource protection	Land availability	Australian govt planning policies for designating and protecting the land resource: Increase areas best managed by government in the public interest
	Degradation of resource condition e.g. salinity, weeds	Stronger support for sustainable farming methods through NRM bodies
	Lack of water	Sound and on-going water resource planning. Increased investment in Water Use Efficiency
	Climate change e.g. incidence of flood, drought	Knowledge sharing and government policy initiatives
Production inputs	Increasing costs of production e.g. fertiliser, fuel, energy	Promote farming systems that maintain or build soil fertility, such as by the inclusion of ley pastures in cropping systems; Provide subsidies/ assistance in alternative energy solutions for farms e.g. bioenergy or solar at a property or regional level
	Lack of skilled labour	Training programs reflective of industry needs
	Climate variability	Extension and education activities through Regional NRM groups to introduce risk management farming practices

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Production	Resource allocation split between food, fibre and garment industries	Water pricing mechanisms
	Monoculture within industries	Incentives for more mixed farming approaches
	Distance to market	Alternative distribution e.g. more rail. Regional/seasonal consumption promoted.
	Take-up of technology	Encourage uptake of alternative energy source devices e.g. solar pumps
Processing	Narrow marketing opportunities	Encourage local planning support through Council planning schemes. Regional/seasonal consumption (more farmers' markets)
	Overseas processing	Marketing. Domestic processing/value adding.
	Lack of manufacturing sector	Government policy and renewed incentives
Marketing	Reliance on bulk commodity marketing	Encourage value adding in the regions. Promote product differentiation through demonstrated environmental credentials e.g. EMS ISO 14001
	Meeting international market demands	Market intelligence
	Lack of value adding opportunity in regions	Encourage local planning support through Council planning schemes
Food service	Poor branding	Industry self-regulation and government policy
	Lack of recognition of sustainably produced product. Verification of clean green credentials.	Recognition of environmental management systems ISO 14001

- Do farmers have access to timely, relevant and accurate information to fully inform production decisions to meet domestic and global food demands?

No, better coordination of regional providers needed to share research, development and extension services. The revised regional NRM plans will also be invaluable.

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- What opportunities exist for exporting Australian agricultural technology, marketing skills and expertise to improve global food security outcomes?

Regional NRM organisations have established international links through sharing their expertise with Landcare groups and farming communities in other countries e.g. Philippines, Africa, and New Zealand.

Coordinated regional exchanges between countries with similar assets and risks should be encouraged.

## 2. Farmer decisions for improving farm gate returns

QMDC suggests the following tools and processes can improve farmers' decision making processes:

- Sub-catchment and landscape planning

QMDC has promoted sub-catchment and landscape planning for more than 10 years as it has a demonstrated impact on the adoption and implementation of improved natural resource management and agricultural production practices. State and Federal Government programmes have supported QMDC to accelerate the implementation of sub-catchment group plans.

Sub-catchment and landscape planning is a local community process allowing landholders to address land, water, vegetation, and other NRM issues, as well as cultural issues, at a sub-catchment scale.

Working at a landscape (sub-catchment) scale allows coordination of community effort to resolve issues – many natural resource issues cannot be dealt with by only working on an individual property in isolation.

Achieving effective and long lasting solutions to NRM issues is the aim of the planning and implementation process, and it provides a sound resource base for productive and healthy properties.

Support through QMDC has included:

- contributions towards the employment of local Landcare group coordinators who assist landholder groups in the development, resourcing and implementation of their Plans
- the provision of planning, mapping, technical and other specialist support for the development and implementation of the Plans
- initiation and coordination of partnerships with State Government departments, industry organisations, research bodies and private companies to deliver political support, up-to-date science and technology
- significant investment of funds for landholders, local government, and other land managers to implement priority on-ground works which deliver more productive and sustainable farms and sub-catchments.

Participating in sub-catchment group activities can provide landholders with the evidence to gain recognition of their skills and knowledge through Agriculture, Conservation and Land Management and Rural Business Management qualifications.

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In QMDC's opinion sub-catchment plans developed with good science and up to date technology across all NRM areas should be considered as essential to the reconstruction and development of the industry.

Technical officers (from QMDC, local government, industry groups and State Government) can assist groups in gaining a broader understanding of ecological and catchment processes and the development of sub-catchment scale priorities for improved natural resource management and agricultural practices.

- Landcare

The *Australian Framework for Landcare* and its associated *Action Plan* serve as guides to stakeholders and prospective partners, including industry, corporations, governments at all levels and regional and catchment organisations, as to how they can engage with Landcare groups in addressing sustainability issues. The Landcare community contributes significantly to raising the awareness and understanding of landscape function and the impact of inappropriate practices, and encourages the adoption of suitable methods of management to enhance the health of Australia's land, water and biodiversity.

QMDC suggests that with twenty years of knowledge, experience and achievements to build on and a range of current and emerging environmental challenges, the Landcare movement could provide valuable insight to the government. More funding for Landcare is needed.

- Environmental management systems

*Australia's National Framework for environmental management systems (EMS) in Agriculture* (the Framework), was developed to provide a national context within which existing industry programs and growing interest in EMS could be "harnessed to best advantage to improve management and contribute to both market and environmental outcomes across industries and regions".

The adoption of the EMS initiative has been identified in the Regional Natural Resource Management Plan as a key implementation mechanism for the achievement of sustainable natural resource management across the QMDB. This approach if implemented well can be an effective means of developing actions to manage landscapes.

In light of the Paper's proposed objectives and in order to progress sustainable agriculture, the Framework is relevant today for the agricultural industry, regardless of landholders' current level of engagement with environmental management issues.

QMDC asserts that by taking the Framework into account the Paper will be able to support individual landholders who wish to make a significant contribution to improving the sustainability of agricultural production through EMS at whatever level and pace is practical and appropriate for them. In this way, the Paper will help meet NRM and community expectations of environmental, social and economic outcomes and provide a systematic approach to identifying and managing environmental, legal and commercial risk within the industry.

The principles for ESD developed for Australia<sup>1</sup> also apply to EMS. The Paper could collectively help Australia to deliver on these ESD principles.

The intended collective outcome should be an agricultural industry in which all parties are confident that they are managing agricultural resources in a collaborative way that conducts business well.

Farm gate returns, climate change and other risks, and the sustainability of the natural resource base are intrinsically linked. QMDC recognise that sustainably managed farms provide not only benefits to farmers but to the wider community in terms of ecosystem services. If these services are valued within policy and legislation and appropriately protected, and maintained farmers will be encouraged to operate allowing for a production/conservation balance.

- Application of risk management tools

Good science and the application of decision support tools will inform landholder decision making. This is essential to optimise production through less losses and greater more sustainable production levels.

- [What are the drivers and constraints to farmers adopting alternative business structures, innovations or practices that will assist them in improving farm-gate returns?](#)

Constraints limiting innovation include uncertainty in climate and natural resources, conflict over land, and poor economic returns due to high costs or market forces.

Drivers also need to become more efficient to survive especially with high labour and input costs.

- [What tools, skills and advice do farmers need to effectively adapt and respond to the risks they face?](#)
- Benchmarking against industry best practice. Assistance with this will help e.g. at a Landcare group level.
- Mentorships within districts and regions.
- Climate change training/advice to assist with farm adaptation.
- New financial products

QMDC supports a scrutiny of existing financial arrangements provided by banks and other financial institutions. We see the need to create new financial products and structures on the proviso they are based on good farming practices e.g. land condition assessments, and are more closely fitted to the current urgent needs of the rural sector as well as meeting future needs.

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<sup>1</sup> The goal of ESD is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes upon which life depends.



Debt financing although it has been crucial in supporting the growth and development of the rural sector has in QMDC's opinion not improved development as well as it could have. One reason for this is because interest rates pertaining to current rural lending products feature a substantial short term risk premium which conflicts with the longer term nature of farming. QMDC supports the call for a more extensive basis for securing agricultural capital in order to build the future resilience of the agriculture industry.

Financial institutions should be more intimately involved in farmer decision making through more robust property planning.

Droughts, floods, fire, and extreme weather events are major risks to farm enterprises. Climate scientists anticipate that the nature of these risks internationally will both get worse as climates get hotter, drier, wetter and/or colder but also create new agricultural opportunities. It is important for farmers to have access to information tailored to their region and industry, about the immediate and the longer term risk, as well as new cropping opportunities. Regional NRM bodies are currently reviewing NRM Plans with risk and opportunity planning.

- [What alternative actions or measures by governments, farmers or others would result in improved financial performance at the farm gate?](#)

Agricultural competitiveness cannot be contemplated without conducting comprehensive land and water condition assessments in order to protect public and private investment.

Crucial to the Paper's objectives is the need to attach "strings" to future public and private investment when providing suitably tailored funds and capital arrangements that enable the sustainability and development of at-risk Australian agriculture and its associated industries and infrastructures. QMDC assert that comprehensive land condition assessments are required for the purpose of establishing a prioritised list of actions, options and associated costs to address any potential liability issues and bring the asset up to an acceptable standard to facilitate its future redevelopment, including:

- Identifying any immediate liability or legal issues and make recommendations as to any urgent action that should be undertaken;
- Survey, analyses and provide a register of environmental, economic and social risks and provide a development plan for their management;
- Detail and address any issues where further risks to the property or landholder or deterioration of the property will result in a significant increase in sustainable development costs and be detrimental to public investment;
- Prioritise further works which will minimise financial risk to potential redevelopment proponents and encourage better development outcomes; and
- Optimise the development return on the overall investment which includes the purchase price and the capital costs of undertaking actions identified above.

Reducing production and market risk should also provide additional incentives to reduce financial risk premiums and lower capital costs. Furthermore private sector investment in the sector should increase in line with a lower risk profile for the sector.

Land is being sold at too high a price in relation to its production capacity and real value. Currently land capability plays a limited role in land sales. QMDC argues it should, land values and sale prices should not be determined by market values, they should reflect a true and accurate assessment of a land's production capacity. Farmers should not be put in an untenable position where they are encouraged to lend money over and beyond the land's productive capability. This has led to the current debt loads farmers face whereby the land they farm cannot produce the profits needed to repay the debt.

- **What approaches could be used to encourage improved drought preparedness?**

Increasing landholders' engagement in NRM planning processes, which involves assessment of risk factors affecting the productive capacity of a farm's resources e.g. soil and water resources.

Further education at a Landcare group or industry body level. Importance of soil carbon, farm biodiversity, optimal stocking rates or change in farm practices.

- **During drought, what measures are most effective in supporting long term resilience?**

The regional significance of policy implementation should be considered at the state and federal level. The application of drought support mechanisms can promote innovation for industries and communities to develop self-reliance by encouraging appropriate land management responses for regional based landscapes.

Policy should include land condition assessment criteria appropriate at the regional level.

Different land types respond differently under drought conditions, therefore regionally relevant baseline data of land condition for non-drought and drought years should be integrated into assessment criteria. The inclusion of Land Condition assessment criteria will improve the transparency of the assessment process when declaration of drought is sought. It will also form a comparative basis for recognizing difference in land management practices and inform the development of incentive or reward based programs for sustainable land practices.

Resourcing local drought committees to maintain regional assessment functions of "non-drought years" will help to improve baseline land condition comparisons when drought conditions prevail. This highlights the need for further information and technical research support for regions to develop a metric that informs such assessments. It may also capture the long term climatic change impacts in different regions on long term land capability.

Means tests that include information regarding self-assessed land condition could provide basis for differentiation of management strategies in achieving the outcome of self-reliance and effectiveness of strategies on long term capacity to manage climatic variability.

Strengthening extension services is important in order to focus on land management practices that apply a risk management strategy built on incorporation of responses to climate variability.

**Policy Recommendation:** That regionally based land condition assessment criteria are utilized in order to provide incentives for good land management appropriate to land type during times of drought. These assessments should be incorporated into financial institutions' decision making and disaster relief programs.

**Outcome:** Good land management appropriate to regional land types is achieved building resilient and adaptive production systems and communities, especially during times of drought. Land condition decline greater than that which is recognized as drought induced, and a result of management practices, is identified and assistance provided to apply better management appropriate to land type.

Business drought support measures should be inclusive of practices defined and in line with Industry codes of best management practice for the region being assessed. An expectation of minimum duty of care should be reflected in drought policy in relation to the environment.

Policy should support the ongoing development and provision of incentives for the on-ground adoption of current recommended practices for various industries at a regional to property scale. For example, the adoption of conservation tillage and increased soil water storage may not be recommended in areas of high salinity risk where deep drainage of that water into groundwater tables is more likely and other current recommended practices could be identified and supported for adoption.

Government drought policy influences and in some cases leads the strategies and tactics employed by landholders in response to drought on their properties and businesses. Government should act responsibly in drought policy to encourage land capability appropriate management practices, rewarding behaviour that supports the long term state of the natural resources and ecosystems and decreases the risk of long term degradation/mining of the resource base. Current drought policy is perceived as rewarding land degradation.

Urgently needed is an assessment of current knowledge and science to prioritise our landscapes in terms of climate change risk and impact e.g. is native pasture grazing systems more at risk than lowland floodplain cropping areas?

Improved mapping information is also needed to support property planning and natural resource management, including information on soil water storage capacity and landscape design impacts on landscape resilience to change in climatic variability.

Increasing the 'skill' of climate forecasting systems when applied at a regional scale is important. This could greatly enhance the capacity of land managers to incorporate this into their strategic and tactical responses.

Improving the scale of information for management decision making. Currently mapping of soils and landscapes in parts of Australia are limited in their useful application for planning unit/property based recommendations and assessment. Primarily, improved resourcing into research to better inform Land Capability thus Land Use Suitability at the regional and property scales could enhance self-reliance from land managers to better manage their landscape constraints in their production system while quantification of other landscape values e.g. biodiversity.

Subsidies for movement of livestock for agistment purposes does not require the assessment of the property they are being moved to or moved from at any point in the transaction. Processes to safeguard agistment to or from drought affected areas or where the land has not adequately recovered from drought conditions appears to be not well facilitated in current policy.

Policy positions with respect to drought should complement other state and federal policy/legislation e.g. where fodder is brought into a property for livestock, legal requirement to ensure that the product and transport is free of weed seed or other contaminants, should be adhered to and accompanied by a declaration. New and additional weed problems for a district should be avoided.

Stage of business maturity for agricultural enterprises impacts their capacity to respond adequately to drought conditions and long-term natural resource management e.g. developing versus established businesses have different economic drivers underpinning their production needs.

Economic measures in current policy do not incorporate ecological values and asset management. Eligibility-based means tests on economic assets do not currently consider the long term state of the natural asset which underpins the production system. Reliance on market values to underpin asset value tends not to incorporate the condition of that asset. This includes the poor recognition of ecosystem service values which are included in any landscape but not often linked to land market values. The opportunity cost of maintaining these systems is often arbitrarily linked to lost production. Inappropriate drought responses can lead to the degradation of these ecosystems. Stewardship services are not recognized in commodity markets for agricultural products to reward maintaining the ecological health of these systems.

Drought policy responses could provide support for the application of stronger regional based approaches that facilitate community and local industry approaches to managing climate variability in the longer term.

Land systems not managed appropriately have less resistance to the impacts of drought and puts additional stress on the natural environment which can lead to long term degradation.

- **How can new farmers be attracted to agriculture and how can they succeed?**

Financially reward best farming practices and provide incentives for landholders to train or re-train in key business skills, namely risk management, NRM, financial cash flows etc. Raising the profile of farming sector generally. Reducing industrial competition for and conflict over land or water resources for the farming sector. Providing succession training. Trial district and regional cooperatives such as share farming, shared machinery or different approaches to land ownership e.g. by manager buying shares in a property.

### **3. Enhancing access to finance**

It is obvious there is a need to ensure rural finance recognises the cyclical nature of agriculture. The Australian Reconstruction and Development Board as proposed in the current Reserve Bank Amendment Bill has the potential to develop more suitable finance structures for Australian agriculture.

- How do we better attract private capital into farm investment?

Financial benefits should be attributed to partners with capacity to value add e.g. process products.

Introduce changes through planning schemes for local government.

- What examples are there of innovative financing models that could be used across the industry?
- What would encourage uptake of new financing models?

Increased support for younger and migrant farmers to enter the market and temporarily lease properties managed by governments, cooperatives or ethical banks.

- What alternative business structures could be developed for farming that also retains ownership with farm families?

Succession planning training.

- How can foreign investment best contribute to the financing and productivity growth of Australian agriculture?

QMDC is concerned by the over reliance the Paper gives to foreign finance. Australian superannuation funds should be encouraged to invest into Australian agricultural investments or associated infrastructure assets. There needs to be a shift in culture that perceives Australian agriculture as a good or prudent investment by the market.

Government could incentivise investment in Australian agriculture providing a preferential benefit to Australian funds.

#### **4. Increasing the competitiveness of the agricultural sector and its value chains**

- How might existing laws and regulations be changed to address any market power imbalances in the agricultural supply chain, without limiting prospects for global-scale firms developing in Australia?
- How can the agriculture sector improve its competitiveness relative to other sectors in the economy?
- Which examples of overseas approaches to improving agricultural competitiveness have relevance for Australia?

#### **5. Enhancing agriculture's contribution to regional communities**

- What impact does the growth of populations in regional centres and the decline in more rural or remote townships have on farming businesses and the agriculture sector?

Mining developments often undermine agricultural development and stability. It is paramount that planning mechanisms create no go zones where development is not allowed to occur on agricultural land.

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A shift in economics in a region due to mining has long term deleterious effects- loss of community, loss of district specialisation, loss of allied industries. Liveability of communities should also be a factor, not just short term employment especially DIDO or FIFO workers. Recognition of resource development causing a decline in agriculture, tourism and manufacturing at a district level. Closure of family farms due to open cut coal mining has severe socio-economic impacts.

- [How can the agriculture sector best contribute to growth in jobs and boost investment in regional communities, including indigenous communities?](#)

QMDC advocates the following broad approaches:

- Implement business training/mentoring programs in secondary schools and within the industry to help develop the capacity within the agriculture sector;
  - Implement rural leadership programs to develop future agriculture, cultural and NRM leaders;
  - Support comparative advantage and niche branding opportunities that provide benefits for farmers engaged in ESD farming enterprises;
  - Recognise and develop programs to manage land retired from agriculture;
  - Support the development of skills and capacity building programs for indigenous Australians.
- [What community and policy responses are needed in rural and regional communities to adapt and change to new pressures and opportunities in the agriculture sector?](#)

Policies that are supported by a community, will lead to the issuing of social licences to operate to an industry or company, empowering communities to collaborate and work with industry, government and community. Regional NRM bodies operate within a community engagement framework and use this to work with communities to create sustainable communities.

Policies informed by good science and relevant local and regional research and development through extension services and wide community education could realize these opportunities and aid the strategic regional implementation of, for example, a national food plan. Backing that up with realistic government funding and incentives and well-coordinated administration and regulation across regions would also assist.

Policy actions by the government sector which would most benefit businesses that make, distribute and sell food include:

- Tax incentives for “100 mile” restaurants and businesses
- National awards for best environmental performances
- Financial support for major nutrient recycling schemes
- Financial support for energy innovations

Community sector responses could include:

- Education & marketing campaigns, for example, on food miles and seasonal food supply
- Facilitation of land management certification systems
- [How do we attract the next generation of farmers?](#)

By promoting the following actions:

- Advancing environmental performance of all components of the food industry through land management certification systems
- Greater production of diverse types of crops and organic foods
- Value adding to local and regional economies
- Promoting Aboriginal food interests and opportunities
- Regional research and development
- Consumer education
- Promotion of healthy food and eating habits
- Eco –efficiency and waste management

A strategic plan is needed to translate the national food policy into a set of regional natural resource and sustainable agriculture plans.

The most important benefits that Australian consumers should get from food supplies is the confidence that the agricultural industry is protecting the integrity of Australia's natural resources whilst achieving sustainable food production and consumption.

The health of a consumer is directly related to the health of the environment and its natural resources. Australian consumers need to reconnect to the natural cycles of seasons and support local or regional food industry economies.

Australian consumers and their local communities would greatly benefit if the food industry supplied food that provided the best social, environmental and economic outcomes for local communities. This could involve just simply supplying food that is in season, and grown locally where possible. Consumers need to be better educated about their food supply and their food suppliers in order to receive the most benefits in a holistic sense, knowing, for example:

- who the people are who grow their food
- how their food has been transported
- where the food comes from
- how it was produced
- what its nutritional value is
- What the ecological footprint is etc.

The government sector could do more by:

- identifying threshold limits for natural resources impacted on by industry activities and infrastructure
- aligning food policy and legislation to environmental legislation and policy so the food industry operates within those limits
- supporting better waste management and requiring nutrient recycling
- introducing mandatory labeling of crops
- facilitating land management certification systems through ALMG

## 6. Improving the competitiveness of inputs to the supply chain

- How can land, water and other farm inputs be more effectively deployed to better drive agriculture sector productivity, while maintaining or enhancing the natural resource base?

An emphasis on the need for improved profitability and ecological sustainability should prevail instead of recommending interventions primarily for the purpose of increasing production. Actions resulting from the Paper should support innovation that strengthens synergies between policies and strategies that equally improve profitability and ecological sustainability.

Regional NRM organisations are extending knowledge to, and building the capacity of, farmers integral to practice change. This requires forging partnerships with universities and other research institutions to further R, D & E investment.

QMDC is increasingly filling the gap left by State governments that have diminished their extension services over the past twenty years or so. Landcare and subcatchment groups are able to provide an important avenue for farmers to learn from each other and build their capacity. Aboriginal Rangers and their cultural programs are also able to increase rural and regional skills in NRM, and cultural heritage management.

- What skills including specialised skills and training, will be required in the future and how can these be delivered and uptake encouraged?
- How can we attract workers to agriculture – particularly in remote areas?
- How can we promote career pathways for the agriculture sector, including models to enable younger farm workers to gain broader industry experience?

Regional and district 'skills passports' where on farm training of workers can allow for multiple skill developments e.g. dairy skills, farm forestry, machinery driving experience, haymaking etc. Farmers are given training and financial assistance to pass on these skills to young farmworkers.

- How can rural industries and governments better identify, prioritise and fund research, development and extension?



- What irrigation, transport, storage and distribution infrastructure are required to support the food and fibre production systems of the future and how should this be funded?

Renewable energy options at a farm level, training and funding to encourage their development.

## 7. Reducing ineffective regulations

Regulations are an important tool available to governments for managing the environmental impact of land use e.g. biosecurity issues.

- How well do regulations affecting the industry meet their policy objectives?

The sustainability of prime agricultural land and Australia's food security requires all industries and development to view the soil as a finite resource and not a receiving medium for a whole range of toxic substances.

Regulation should be rigorously implemented so that industrial or development projects including residential avoid locating or impacting on productive land assets.

Many CSG, coal mining and other development Environment Impact Statements (EISs) and Environmental Authority (EA) applications have identified a large number of activities that have the potential to cause land contamination and or sterilisation.


QMDC asserts that mine drainage or acid run-off which dissolves heavy metals such as copper, lead and mercury into ground and surface water may also prevent Australia's ability to secure food for the future. This impact is too great to support mere actions of management or mitigation.

Proposed CSG or coal mining projects, for example, must be required to demonstrate and guarantee that their proposed mine management methods can prevent the problem of heavy metal contamination, and that mine design is effective and able to keep water away from acid generating materials and help prevent contamination of water sources, agricultural land and soils occurring. Whether heavy metals are treated actively through a water treatment plant or passively through a self-operating system any contamination is not acceptable.

The storage of large volumes of associated water awaiting treatment or reuse, potentially contaminated with many toxic substances, is a serious risk. If untreated CSG water, for example, comes into contact with good clay soils, they become impervious to water and useless for agriculture.

There are also contamination risks, associated with dam wall-failure and spills after intense rainfall events, as well as re-injected water contaminating aquifers.

Should the land associated with these projects be deemed agricultural land it may not be able to be reinstated or fully restored to a strategic cropping land condition. The development would therefore permanently alienate rather than temporarily diminish productivity.



QMDC submits that thorough and detailed rehabilitation research programmes have not yet demonstrated that mining prime agricultural land is only a temporary cessation to agricultural production and that disturbed landscapes and soils can be reconstructed to pre-mine capability and productivity. In order to return the soil close to its original state (and cropping potential), entire soil profiles would have to be cut into layers and then stockpiled separately and replaced, in order, after mining. Mixing of the soil profile is likely to result in depression of crop yields due to the increased salinity and exchangeable sodium percentage in the upper layers. Additionally, the stockpiling of soil (through open cut coal mining), would result in organic matter breakdown in the surface layer and in the dispersion and erosion of the subsoil layers. If the projects stockpiled a pile of topsoil for 10 years, most of it would be anaerobic. It would lose its biology and structure.

Another consideration is that if any proposed facilities are to be situated in flood prone areas this will mean that flooding poses the risk of further damage to stockpiles. The potential impacts of industrial and development projects on the cropping soils could include a reduction in the yield potential of the reinstated soil, loss or reduction of underground water supplies and dust impacts on surrounding crops.

The risk is that these projects because they are likely to occur within existing and/or proposed food production areas they will result in a fragmented landscape with inadequate buffers. Failure to protect agricultural areas will impact on landscape features that support agricultural systems, resulting in either complete losses of agricultural uses on affected lands or diminished productivity.

QMDC argues that by focussing on existing land use the opportunity to secure strategic cropping areas that will prove invaluable as climate refugia for cropping in the future is being overlooked.

Protecting agricultural land and associated soils requires addressing the need to protect water. If land achieves the strategic cropping land classification and or GQAL it is because of access to groundwater as well as cropping reliability etc.

The creation of buffer zones within regional planning are implemented to protect cropping capacity and should address other landscape impacts from industrial or business sites on urban areas, significant streams, wetlands, cultural sites etc. QMDC recognises that buffer zones are dependent on types of industry. Distances of those buffers therefore need to be determined according to the impact of that industry whether it be noise, lighting, dust, vibrations, traffic etc.

Direct disturbance to riverine, floodplain or wetland environments, or hydrological downstream impacts caused by the construction or location of infrastructure can be minimised by establishing and managing buffer zones.

QMDC suggests that as a general rule, buffer zones should exclude development from within a defined buffer zone for waterways appropriate to stream order and defined buffer zones upstream from and including wetlands. The limitation of water resources is clearly recognised by the *Murray Darling Basin Plan* and should therefore pose ongoing restriction to growth.

CSG mining operations and infrastructure in the QMDB are causing disruptions to current farming practices (ploughing, planting and harvesting, weed management, stock raising, irrigation etc.) and will impede future improvements because of restrictions related to gas wells and pipelines on farms or cropping fields. Many farmers continue to challenge the notion that farming and CSG mining can co-exist and are prepared to state their case in a court of law.

Productivity and competitiveness of Australian farmers is hampered by the uncertainty, time and stress of dealing with resource companies and regulators.

QMDC asserts specific regulatory measures need to be taken to ensure the following:

- That the compaction and disturbance of vertisol or cray-cracking soils is not permitted owing to scientific evidence that the structure or condition is unable to be rehabilitated.
  - That agricultural industry activities and infrastructure are excluded from within a defined buffer zone for waterways appropriate to stream order and defined buffer zones upstream from and including wetland; specifically 500m for stream orders 5, 6 & 7; 100m for stream orders 2, 3 & 4.
  - That agricultural industry activities and infrastructure are excluded from Ramsar listed wetlands and feeder streams for 100 kilometres or a safe distance depending on activity upstream.
  - That agricultural industry activities and infrastructure are not permitted to divert number 4, 5, 6, and 7 Stream Order waterways.
- [What opportunities are there to reduce ineffective or inefficient regulation?](#)
  - [Which regulations are disproportionate to the risks they are supposed to address?](#)
  - [How do we coordinate across governments to reduce regulations whose costs exceed their benefits?](#)

## 8. Enhancing agricultural exports

- [How can industries and government respond to the key challenges and opportunities to increase or enhance exports?](#)

Government's dominant response to increasing exports is to increase agricultural production. Widespread agricultural experience spanning over the past forty years urges government to seriously question the drivers of this response. Although there have been substantial on-farm productivity gains over the past forty years in Australian agricultural production and world agricultural trade, there has also only been a minimal increase in the real gross value of production. This has resulted in a decline in real farm income and a lack of environmental and social resilience.

More production from the same inputs is not sufficient to arrest declines in farm profitability and environmental and social resilience, nor will it enhance exports. Strategies and actions to enhance exports must fundamentally examine the medium to long term viable directions for productivity growth so as to overcome productivity challenges, for example, through land condition assessments, climate change adaptation and identifying practical ways to reduce dependency on externally sourced energy such as fossils fuels and fertilisers.

- How can the government take best advantage of multilateral and bilateral trade negotiations (including through the World Trade Organization and through free trade agreements (FTAs)) to advance the interests of the sector?
- How can engagement between industry and government on market access priorities for Australian agricultural products be improved, including to inform negotiations on FTAs?
- What changes could be made to biosecurity arrangements, both in Australia and in other countries, that would enhance global trade in agricultural products?
- How do we provide the appropriate biosecurity controls at minimum cost?

#### **9. Assessing the effectiveness of incentives for investment and job creation**

- How well is the current set of government programmes and incentives directed at the agriculture sector meeting their objectives, in terms of both effectiveness and efficiency?

The increase in dependency on short term project based funding is rarely questioned. QMDC's review of project based programs continue to challenge the effectiveness of the project funding model. Incremental initiatives such as lengthening project duration from, for example, one to three years, are not the solution to the structural deficiencies inherent in this funding model where the priority is to support long term landscape based continuous improvement in environmental management. The Paper must provide recognition and reward for superior management practices and outcomes. Programs and incentives need to significantly reduce ecological fragmentation which is often results from the limitations created by project based funding. Encouraging long term co-funding from the primary investor, the landholder is essential. Alternative mechanisms for attaining environmental outcomes need to be thoroughly researched including, payments for landholders where, for example, there are demonstrated NRM outcomes.

- Are government visa arrangements and programmes like relocation assistance, the Seasonal Worker Programme and Harvest Labour Services effective at channelling workers into the agriculture sector and what other approaches should be considered?

QMDC wholeheartedly supports aligning the visa program with volunteer work in rural areas affected by natural disasters and we would welcome its extension into providing greater support for the agricultural and NRM sectors.

In 2013, having successfully conducted flood recovery campaigns over two consecutive years (2011 & 2012), QMDC won the Regional Landcare and Environment Award for its 'Dirty Gloves' Flood Recovery program. QMDC's flood recovery program was launched in response to a very significant challenge, not only a major flood event in January 2013 but the cumulative impact of floods over three consecutive years.

These recurring flood events either further delayed recovery or actually destroyed recovery works, taking landholder's attention away from addressing issues such as wildlife corridor connectivity, improving water quality, increasing groundcover and other natural resource management issues.

QMDC determined the best way to address producer sustainability was to develop a natural disaster recovery program including sourcing volunteers (local and overseas backpackers seeking 2<sup>nd</sup> working holiday visas) to aid a more speedy landholder recovery.

QMDC has developed a range of materials as part of a 'Flood Recovery Policy and Procedures Manual' to ensure the smooth and professional running of a natural disaster recovery program.

This includes procedures for working with overseas volunteers, running volunteer base camps, setting up Work Health & Safety procedures for working on farms, as well as internal materials and support processes for staff members in direct contact with landholders. All volunteers must have an induction on work, health and safety policies and procedures and they receive free accommodation, food and safety gear to wear and use whilst on the job.

To help people, properties and natural systems recover for the benefit of the Queensland Murray-Darling Basin, the 2013 program delivered direct assistance to over 200 landholders, 123 rural properties and 4 escarpment parks and reserves across the Queensland Murray-Darling Basin. This assisted in protecting many hundreds of hectares of sensitive riparian zones through the successful and well-supported recruitment of 120 volunteers over a six-month period.

Since 2011, QMDC has helped to coordinate more than 950 volunteers to work on more than 450 properties across more than 100,000 hectares of the Queensland Murray-Darling Basin. With the support of the corporate, NGO and government sectors, QMDC has provided the logistical support (including tools, accommodation, catering and coordination) to keep hordes of enthusiastic Australian and international volunteers in good health and spirits.

- [What have other countries done to inspire agricultural investment?](#)

British Columbia Agricultural Land Reserve [link here](#)  
Hedgerow regulations, UK which could be adapted to protecting remnant vegetation pockets in Australia.

- [What has Australia done in the past that has had best effect?](#)

Fostered and supported local Landcare groups and support of on farm projects.

#### Other issues

- Regionalise production areas with the ability to regionalise R, D & E, marketing and processing.
- Value adding to production needs to be more fully considered.
- Provide incentives for efficient irrigation practices to better use water resources.
- Radically improve skills training in risk management, NRM and financial assessment.

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For further information, contact QMDC on (07) 4637 6200 or visit [www.qmdc.org.au](http://www.qmdc.org.au)

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