The Northern Territory Horticultural Association (NTHA) is the peak representative body for the horticultural industry in the Northern Territory. The NTHA represents commodity groups including mangos and other tropical fruits, vegetables and cucurbits, citrus, nurseries and cut flowers.

In a climate of considerable change a key function of the NTHA is to support growers to meet future challenges and facilitate strategic planning aimed at the promotion, growth and sustainability of the industry. Long term horticultural development depends on striking a balance between horticultural production and the security of the natural environment. Now is the time to start investing in mechanisms to support sustainable practices for the benefit of the industry, the community and the planet.

This submission considers the long-term strategic direction for sustainability in the Territory’s horticultural sector. With NTHA’s Territory 2030 submission having limited impact on the draft Territory 2030 Report it is more critical than ever to spread the message that investment in sustainable agriculture is a critical investment in the Territory’s future.

There is a wonderful opportunity for growth in the Territory’s horticultural sector if we start investing now for development in a 20 year timeframe and if we learn from the past. The key is to be proactive rather than reactive.
(a) consider the environmental issues, including opportunities and constraints, facing various types of agricultural production in the different geographical and climatic areas of the Northern Territory

Horticulture is a relatively young but rapidly developing industry in the Northern Territory. It is hypothesized that climate change and poor sustainability practices elsewhere in Australia, along with increasing national and international food security issues, are likely to result in continuing expansion of the Territory’s horticultural industry. It is therefore timely to consider what potential exists for sustainable agricultural development in Northern Australia. The short answer is that there is enormous potential, but not without a long-sighted strategic approach based on good science. Expansion without adequate planning and support will lead to misuse of resources and environmental destruction here, as it has done elsewhere.

The Northern Territory covers an area of approximately 1.35 million square kilometres, 17% of the Australian land mass, most of which remains largely undeveloped and ecologically intact. Although relatively little of this land mass is under production, or is likely to be productive in the future due to issues such as limited water resources, the existing industry is evidence of the capacity for intense and sustainable horticultural production. The rural Darwin, Katherine, Douglas Daly and Ti Tree areas provide a range of geographic and climatic conditions conducive to growing a variety of produce, and opportunities exist for horticultural development in other areas including Ali Curung, Elliott and other remote communities.

The full capacity of the Territory as a food producing region is still unknown. With the spotlight falling on Northern Australia predominantly as a result of environmental catastrophes in Southern Australia the focus here must be on sustainable development. Investment in sustainable agricultural systems should be prioritised as a strategic investment in the Territory’s future, and indeed in Australia’s future.

(b) examine best practice agricultural production in the Territory and other locations with similar geographical and climatic characteristics to that of the Territory and the ways in which best practice can be supported through appropriate policy, regulation and education

The NTHA has been proactive in moving the Territory horticultural industry towards a more sustainable future, through ongoing planning and promotion of good practice as well as a number of specific projects. The ‘Best Practice for Sustainable Land Use in the Northern Territory’ project produced Sustainable Land Use Guidelines, these guidelines outline in detail the path to sustainable production systems. More recent projects have examined the challenges of promoting sustainability amongst the industries least advanced participants, contributing to water efficiency outcomes, and developing a Natural Resource Management (NRM) Strategic Plan. Please go to the end of this submission to access best practice resources.
While the path may be laid there is considerable work yet to be done. The guidelines provide a platform for environmental accreditation but this must be supported by comprehensive science, practical assistance and effective regulation. NTHA hosts an Environmental Management Officer to implement the guidelines but this process needs to be supported by Government. Equally important is investment in research relevant to the Territory’s unique geographical and climatic conditions. Collaboration with our neighbours in Queensland, Western Australia and South East Asia will reduce the size of the challenge ahead and maximise the outcomes.

Horticulturalists are amongst our most significant land managers. The hard lessons have been learnt elsewhere and as the industry ramps up here in the Territory we have an opportunity to contribute to a new era of sustainable production. Growers are increasingly aware that while profit is still a driver, ethical conduct, environmental considerations, regulatory compliance and respecting and contributing to community values are key elements of successful business. With government support Territory growers will embrace the opportunity to establish industry best practice.

As the industry expands in the Territory some of the challenges ahead in the quest for more sustainable production practices include:

- Ramping up investment in agricultural research and development with the aim of filling critical knowledge gaps
- Providing accessible support services and building the capacity and confidence of growers to manage more complex production systems
- Implementing properly targeted, well resourced and efficiently implemented regulation to support good practice
- Improving market supply chains so as to decrease the greenhouse impact of inefficient transportation of product

(c) draw upon existing and emerging scientific research from a wide range of sources

Australia has poor credentials when it comes to developing sustainable agricultural systems and the bulk of what we have learned is relevant to the temperate and sub-topical climatic zones. Research and development (R&D) relevant to sustainable agricultural systems in the wet/dry tropics and the arid regions is limited. Some of the knowledge and skill set required has been learnt through trial and error but current practices will need to be underpinned by rigorous science and improved technology if significant and sustainable expansion of the industry is desired. Not only does there need to be investment in R&D but farmers need to be engaged in this process, this seems a statement of the obvious and yet farmers remain remarkably disconnected from R&D outcomes. Research needs to be coupled with extension services and technical assistance.
There are a number of drivers likely to result in expansion of Territory horticulture, not least being climate change which is predicted to significantly reduce rainfall in the southern states while rainfall is predicted to increase closer to the equator. An investment in sustainable food production should therefore be recognised as a key Northern Territory Government policy area, starting with a rejuvenation of the four existing research farms at Coastal Plains, Douglas Daly, Katherine and Ti Tree. If the foundations are set now the industry will be well positioned to capitalise on future opportunities and contribute to food security nationally and globally.

To develop a sustainable horticultural industry in the Northern Territory the following research priorities will need attention:

- Sustainable production systems to ensure perpetual economic and environmental outcomes
- Land capability to better understand different production zones
- New crops and crop varieties to improve crop suitability and diversity
- Plant disease and pests to protect our unique environment

(d) consult widely with relevant stakeholder groups

Planning productive and environmentally healthy regions will depend on effective consultation and ongoing communication between the various stakeholders - growers, non-government organisations and government agencies. There is considerable room for improved collaboration. Significant elements of the Territory horticultural sector remain almost entirely estranged from existing discussions, support services and R&D activities.

(e) adopt an inquiry methodology that considers long-term, inter-generational impacts of agricultural production on the Territory’s environment

Ecologically sustainable farming systems are possible with the appropriate investment in planning and science. Such farming systems, through the conservation of our natural environment, the maintenance of commercial competitiveness and the flexibility to adapt to changing circumstances, are capable of maintaining productivity indefinitely. With the ongoing support of government and the community this model has no negative long-term impacts. Potential positive impacts of a sustainable horticultural industry include:

- Increased viability and resilience of Territory rural economies
- Improved land management skills and protection of natural resources
- Greater food security locally, nationally and internationally
(f) include an analysis of carbon reduction schemes and their likely impact on agricultural enterprise in the Northern Territory

Although the agricultural sector has been somewhat insulated against the Carbon Pollution Reduction Scheme (CPRS) by being excluded from it until 2015, horticulturalists will feel an impact. Businesses will be indirectly affected by cost increases in farm inputs such as fuel, power, fertilisers and chemicals, to name just a few. But there are also benefits to be enjoyed if we are proactive in preparing ourselves for inclusion in the CPRS. Strategic involvement in the carbon economy offers both environmental and economic returns. It is also relevant to draw particular attention to the fact that in a carbon constrained world it will become increasingly important, and increasingly viable, to produce food at a local level.

Carbon is one of 13 key areas outlined in the NTHA’s Sustainable Land Use Guidelines. There are considerable gaps in our existing knowledge of the role of carbon in our farming systems, some questions which will need consideration over the coming years include:

- What are the best crops to maximise soil carbon input in each of the Territory’s geographic and climatic regions?
- What soil additives best enhance carbon uptake in Territory soils?
- What farming practices best enhance carbon uptake in Territory soils?

(g) examine the current and possible future contribution of agriculture and agricultural-based products to the Northern Territory economy, including the provision of employment and enterprise opportunities to indigenous people living in remote and regional areas

With production valued in excess of $160 million per annum horticulture, and the flow-on business it generates, is a significant contributor to the Northern Territory economy. There are more than 600 horticultural businesses operating in the Territory and, with horticulture being the most intensive employer in the agricultural sector, some 4000 full-time and seasonal employees. The economic contribution of the horticultural industry has increased exponentially over the past 20 years and is only likely to increase further in the years to come. Horticulture particularly contributes to rural and regional development and as such the sustainability of the industry increasingly underpins the sustainability of many Territory communities.

There are vast opportunities for horticulture to play a significant role in indigenous economic development and contribute to healthier lifestyles in remote communities. Indigenous Territorians have a great deal to offer horticulture; through their knowledge of the land, through enterprise partnerships, as landowners and investors, as future business owners, and as a labour force. There is also value in undertaking small-scale horticultural production in remote communities solely for local consumption. The social and health benefits of community based production can override the necessity for commercial economic outcomes.
There has been much debate about the development of our unique environment, but ultimately horticulturalists provide staple food produce and there are many benefits to producing food at a local level. These benefits are likely to be highlighted in the context of environmental pressures, an expanding population and global economic instability. With domestic food security an increasing concern now is the time to start developing resilient food production systems that can meet future needs and respond to challenges. Further, as people increasingly link good health and longevity to healthy food choices the consumption of horticultural produce is likely to grow. Embracing opportunities in the horticultural sector under a ‘clean and green’ banner will contribute to economic sustainability for all Territorians.

(h) examine implications of progressing agricultural production on other enterprises reliant upon the natural environment

Consideration must be given to the preservation of our natural environment and the careful use of natural resources. However, the common debate which stages the environment and development as opposing forces is misleading. Strategic and balanced development has environmental benefits. Good land managers protect the environment and sustainable agricultural practices meet the dual needs of production and natural resource management. Environmental concerns should guide, not inhibit, expansion of the industry.

Unfortunately at present there is little forward planning for horticultural development and despite the best intentions of growers this is likely to result in negative environmental outcomes. Consideration needs to be given now to the long term needs of the horticultural industry, including the identification and preservation of suitable land and assessment of water availability. There will, no doubt, be competition for both land and water but the more these issues are examined broadly and with a long term perspective the less the likelihood of antagonism and the less room there will be for poor judgement.

The development of horticulture in the Territory depends on the industry being vibrant and resilient and fostering a strong relationship with the wider community. Generating a positive perception within the community will require the industry to respond to public concerns, not least a growing awareness of the environmental impact of development, and balance conflicting demands. The challenge is sliding horticulture into a broader picture of community development, minimising negative outcomes and maximising opportunities. More than ever it is important to create confidence amongst the general population that produce is not grown at the expense of the environment or other development. Only by doing this will the horticultural industry achieve increasing consumer demand for Territory produce.
(i) as a result of the Committee’s inquiries and analysis, recommend relevant strategies to progress agricultural production in an environmentally sustainable manner

So what is preventing the development of appropriate sustainable horticultural strategies in the Northern Territory?

- **Lack of government direction.** The Northern Territory Government has displayed little, if any, interest in developing the Territory’s horticultural industry. Somewhat more support has been received from the Federal Government but the current focus remains reactive investments in the Murray-Darling rather than proactive investments in future production areas.

- **Lack of strategic thinking.** A long-term commitment is required to tackle the considerable challenge of developing sustainable production systems relevant to Territory conditions. Collaboration between the key stakeholders - growers, industry representatives and government - will be necessary over a prolonged period of planning and implementation.

- **Lack of investment.** The foundation of sustainable agricultural production will be knowledge, skills, technology and infrastructure. Strategic investment in research and development is necessary now in order to strike the delicate balance between effective production and environmental protection.

The Northern Territory has a relatively intact and enormously valuable natural environment. It also has a unique opportunity to capitalise on our assets in the face of climate change and the impact of unsustainable production systems in Southern Australia. The challenge is to embrace the opportunity to develop our agricultural systems without paying an environmental price. With government leading a shared strategic direction supported by good science the Northern Territory could lead the way in developing sustainable agricultural systems.

**NTHA Best Practice Resources:**

*Please find the NTHA NRM Strategic Plan 2009-2013 attached.*

*Please find a link to the Sustainable Land Use Guidelines below:*  