

URBAN LANDSCAPE MAINTENANCE IN SINGAPORE: SPECIAL REPORT ON LANDSCAPE PRODUCTIVITY MANAGEMENT

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Figure 1. Singapore – A Fine Balance. (Source: IOSS Photo Database)

Landscape maintenance is often overlooked and undervalued. However, not only is maintenance the most costly activity over a landscape's lifecycle, it is also essential to the achievement of a set purpose, design intent, and user satisfaction. A study commissioned by the National Parks Board of Singapore (NParks) investigated how landscape maintenance labour productivity is influenced by environmental, social, financial and political factors. The study reviewed a number of landscape maintenance operations in Singapore, Australia and other Asian countries through qualitative and quantitative methods.

The findings indicated that a total systems approach was more beneficial than treating individual factors associated with landscape maintenance in isolation. Whilst improvements associated with contract management, continuous improvement, education, labour management, landscape design, maintenance standards, mechanisation or technology, and quality management are identified, productivity gains in the landscape maintenance sector can be best understood by considering an integrated approach to open space planning and management.

SINGAPORE'S URBAN LANDSCAPE SETTINGS

Singapore's urban landscape has had a relatively short history compared to other first world nations.¹ During the 1960s, the then Prime Minister of the fledgling nation, Lee Kuan Yew, created a vision of a tropical garden city for Singapore. This has come to fruition, along with a buoyant economy².

During the 1960s and 1970s, the importance and benefits of providing parks for recreation and tree planting on roadsides for shade and greenery were recognised to counterbalance the fast pace of urbanisation. The concept of the "garden city" was worked towards. In the 1980s, a more qualitative approach saw the introduction of colour and variegated plants, and the incorporation of flowering shrubs and trees. Fruit trees were

also planted in housing estates for educative purposes and to encourage community spirit. Singapore's Green Plan in the 1990s recognised the need to balance conservation, development and global issues. The vision was further extended to develop Singapore as a Model Green City, "A Tropical City of Excellence". Policies were also developed for nature conservation.³

Today, Singapore's parks, streetscapes and landscapes are among the best in the world. The landscape ameliorates the tropical climate, enhances the built environment, creates places for outdoor recreation and exercise, and provides natural beauty and tranquillity. The green landscape also contributes significantly to Singapore being a major tourist destination in Asia. Significant investment has gone into successfully modelling Singapore firstly as a "Garden City" and now as a "City in a Garden". More than mere play on words, this statement represents a major strategic initiative⁴.

For a small island and high-density city with severe land area constraints, Singapore has an impressive amount of quality green space: a total of 9,651 hectares of green space, which includes 2,015 hectares of parks, open spaces and park connectors, 2,517 hectares of roadside greenery, and 3,358 hectares of nature reserves.

Current and future initiatives include Gardens by the Bay; setting aside 900 hectares of land for parks within the next 15 years; the implementation of more Active, Beautiful and Clean Waters project; and the expansion of park connectors from 100 kilometre to 360 kilometre.⁵

LABOUR PRODUCTIVITY MANAGEMENT IN SINGAPORE⁶

Many of Singapore's landscape maintenance entities stemmed from construction companies which moved into the landscaping industry when green initiatives commenced in the 1960s. Then, the landscape

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workers were Singaporeans. At the time when farming was still common, landscaping was attractive to segments of the community and labour was in abundance. However, as the economy industrialised, land was lost to urban development, urban density increased and farming activities started to decline. Full employment in Singapore was achieved in 1970. By the late 1970s, there were more jobs than seekers, and labour was a constraint to economic growth. Singapore became a labour-deficit country, with a rapidly growing economy. Consequently, Singaporean workers fell away from the landscape industry. The rapid economic growth created jobs in unskilled areas which could not be met fully by the local workforce. The latter was growing more slowly due to fertility decline, but also becoming less willing to work in low status, poorly paid manual occupations, particularly “3D” (dirty, dangerous or difficult) jobs. Singapore became a destination for foreign workers⁷ from labour surplus countries (limited economic opportunities, great number of working-age population) in Southeast Asia and Asia.

Since 1987, the government has maintained stringent policies and regulations concerning the employment of foreign workers in Singapore. The foreign worker levy paid by employers and the “dependency ceiling” (which limits the proportion of foreign workers in the total workforce of any one employer) were two instruments with which the government regulated worker inflow in line with changes in the domestic labour market.

From December 2005, the Ministry of Manpower only allowed skilled foreign workers from non-traditional sources in the construction sector. All foreign construction workers had to obtain a minimum of a Basic Skills Certificate before they were allowed to work in Singapore.⁸

In March 2008, the 1 : 1 policy (foreign worker : local worker) came into effect, as a means to reduce industries’ dependence on foreign workers.

The effects of employing foreign workers in some sectors of the economy have been discussed by a number of authors. These effects include:

- a. Delays to economic restructuring and upgrading of enterprises’ operations.
- b. Hindering the adoption of technology to improve productivity.
- c. Adverse effects on operational safety as foreign workers are relatively inexperienced and may lack the necessary work discipline.
- d. Negative impact on productivity through lowering of average skill levels, as new, untrained foreign workers replace those departing on expiry of their work permits.
- e. The driving down of local wages, due to the recruitment of cheap foreign workers.
- f. The further erosion of the attractiveness of construction careers, which in turn make it necessary for even more foreign workers to be recruited to meet industries’ labour requirements.
- g. The mixture of workers from different countries speaking different languages, with different cultures, traditions and work ethics, pose managerial problems on-site. Communication between Singaporean supervisors and the largely semi-literate foreign workers from many communities, most of whom have little command of English or local languages, is difficult.
- h. Maintaining discipline, appropriate work procedures and practice, and correct worker attitudes is not easy to attain, given the diverse background of workers on each site.

STUDY RESEARCH METHODS

In order to better understand the relationship between labour, technology, mechanisation and productivity, the NParks undertook an international benchmarking study of selected landscape maintenance activities in order to identify potential for productivity increases. Of primary interest was a comparison of activities between Australia and Singapore. Components in the study include:

- Comprehensive Situation Analysis
- Stakeholder Interviews
- Workshops/ Forums
- Work Practice Observations
- Site Visits
- Literature Review
- Productivity Measurement
- Productivity Benchmarking
- Best Practice Contextualisation of the Study Findings
- Analysis of Productivity Data
- Recommendations

STUDY FINDINGS

The study findings that have affected productivity are presented in the following table:

	Singapore	Australia
Governance of Public Open Spaces	National Parks Board Town Councils	Local Government Authorities State Government Agencies Federal Government
Space Horticulture/ Landscape Settings	Very high integration of landscape settings into cityscape: “City in the Garden”. Emphasis on horticultural presentation.	Range of settings. Number of areas, emphasis on “natural design”, functionality, low/easy maintenance. Increasing emphasis on nature conservation.
Lifestyle Horticultural Research	Focused research effort.	Disjointed research effort.
Alignment with Government Initiatives	Quick to align and develop programs accordingly.	Slow to align – often many missed opportunities.
Benefits of parks and gardens	Well presented landscape (benefits recognised for tourism, economic prosperity, community wellbeing).	Less sensitive to benefits of landscape.
Maintenance Standards	Well maintained landscape. High quality outcomes/ standards: “manicured”.	Overall, lower maintenance standards than Singapore.
Single Largest Maintenance Task	Horticultural maintenance: garden beds, hedges, trees.	Grass cutting.
Landscape Design	Lower design input for lower maintenance.	High levels of design input for lower maintenance.
Labour Force	High utilisation of contractor services. Utilisation of Foreign Workers in landscape industry.	High use of in-house staff. Selective use of contractor services; often based on function rather than area.
Degree of Mechanisation	High level of manual labour. Little mechanisation – currently encouraging more use.	High levels of machinery use.
Education and Training	Recent/ Emerging system of training and qualification.	Well established system of training and qualifications.
Skill Levels	Utilises lower paid and lower skilled foreign workers.	Utilises higher paid and higher skilled local workers.
Recent Education and Training Focus	Education and training of field staff. Encouraging local workers into industry.	Specifically educated knowledge workers. Development of research bodies, parks and open space management, etc.
Career Structure	Less developed career structure.	Defined career structure in landscape maintenance.
Wages and Awards	No minimum wage. SGD\$1,000 per month for a horticultural worker. Non-unionised labour.	Minimum wage; awards. Higher level of pay. AUD\$2,500 per month for a horticultural worker. Partially unionised labour.
Field Worker Attitudes	Lower levels of staff satisfaction/ enthusiasm.	Generally, high levels of staff satisfaction/ enthusiasm.
Labour Supervision	‘Carrot and stick’ approach to contract supervision.	More partnership approaches to contract supervision.
Contract Supervision	Regular use of contractual liquidation damages.	Rare use of contractual liquidation damages.
Cultural Attitudes	Perceived low status of outdoor, manual work.	Outdoors lifestyle/ love of outdoors.
Contract vs Day Labour	All landscape maintenance activities contracted.	Internal landscape maintenance staff; some contracting firms.
Man Hour Productivity Levels	Generally lower man hour productivity levels.	Generally, higher manhour productivity levels.
Quality Management Systems	Low evidence of quality management systems.	Fairly strong evidence of quality management systems.

Table 1. Summary of Components of the Landscape Industries within Singapore and Australia.

DIFFERENCES IN LABOUR, STANDARDS, DESIGN AND TASKS

Labour Force

Nearly all Singapore's public sector landscape maintenance is undertaken by contractors, whereas the Australian public sector benchmarking participants undertake a significant proportion of maintenance in-house, with some specific activities being undertaken by contractors.

Labour

Singapore's landscape workers are lower paid, work significantly longer hours but have lower skill levels. Australia workers are better paid, and generally higher skilled.

Labour Management

Generally, the number of supervisors of labour that have horticultural, arboricultural or management qualifications and/or skills in Australia is higher than in Singapore. One exception observed is the National Orchids Garden. Australia has a higher level of regulation relating to labour management and worker's rights, which results in higher level of worker productivity, than Singapore.

Horticultural Standards

Singapore places a higher emphasis on horticultural presentation, whereas Australia places a higher emphasis on 'natural design', functionality, and low or easy maintenance. Singapore generally has higher frequency rates of maintenance, and higher standards in: grass pick-up in general mown areas, plant debris removal from site, grass weeding, garden bed weeding, and pruning plants or shrubs.

Quality Management Systems

The incorporation of quality management systems is an essential part of public sector organisations. The Australian benchmarking partners, with their high level of in-house grounds staff, were found to have a higher level of quality management systems embedded within organisations, than the Singaporean contractors.

Main Task Undertaken

The single largest maintenance task undertaken in Singapore is horticultural maintenance (garden beds, hedges, trees). In Australia, cutting grass is the single largest task.⁹

DIFFERENCES IN PROCESSES

Australia utilises systems, equipment, and machinery, which significantly reduce manhours per hectare.

Systems and Methods

In Australia, due to the higher cost of labour, the metaphor 'time is money' has resulted in the development and application of methods and logistics that substantially improves labour productivity (e.g. methods of debris collection and removal).

Shorter working hours in Australia significantly increases hourly productivity rates.

In landscape maintenance, the single tasking of monotonous, highly manual and low skilled activities, for significant periods of time, decreases the hourly productivity rates. Singapore tends to have a higher number of these activities undertaken.

Tools and Equipment

Labour saving devices which are commonly used in Australia include:

- Long handles on garden tools
- Spades
- Tools for fertiliser application
- Herbicide spraying equipment (for weeds control)

Additionally, the standard and repair of tools and equipment is often higher in Australia than in Singapore.

Machinery

Australia utilises a higher level of mechanisation across all areas of landscape maintenance. Essentially, different philosophies exist, with Australia's focus being on machinery ('if machine can do the job, get a machine'). For example, Singaporean contractor workers often walk or cycle within parks, whereas Australia's in-house staff utilises mechanised transport. Australian contract staff generally drives a service vehicle to the location of work job within a park.

DIFFERENCES IN PRODUCTIVITY

As evident in the findings of the productivity benchmark data, Australia recorded significantly lower manhours in four areas, primarily due to labour saving technologies.

- a. Mowing – up to 1,100% through the use of wide cut sportsfield mowing machines vs knapsack cutters.
- b. Weeding – up to 90,000% through the use of herbicide vs hand grass weeding.
- c. Planting – up to 800% through the use of ground preparation machinery vs hand digging.
- d. Watering – up to 12,000% through the use of automated watering systems vs hand watering.

“MANY OF SINGAPORE'S LANDSCAPE MAINTENANCE ENTITIES STEMMED FROM CONSTRUCTION COMPANIES WHICH MOVED INTO THE LANDSCAPING INDUSTRY WHEN GREEN INITIATIVES COMMENCED IN THE 1960S. THEN, THE LANDSCAPE WORKERS WERE SINGAPOREANS. AT THE TIME WHEN FARMING WAS STILL COMMON, LANDSCAPING WAS ATTRACTIVE TO SEGMENTS OF THE COMMUNITY AND LABOUR WAS IN ABUNDANCE.”

FACTORS AFFECTING LABOUR PRODUCTIVITY
Integrated Open Space Planning and Management

The design and construction of Singapore's landscape unnecessarily creates higher maintenance levels to achieve the desired horticultural standards. This is symptomatic of many open space systems around the world, which fail to consider an integrated approach to open space planning and management.

There are strong interdependencies between planning and management functions in determining the presentation of open space settings. The open space provision processes determine where open space is to be located. Once located, the landscape development processes design and construct the landscape. The landscape maintenance provides for the care and longevity of the landscape. Underpinning these direct intervention functions is the indirect intervention function of the quadruple bottom line, which considers social, cultural, environmental, financial, and governance issues associated with the sustainability of the landscape.

Each component in the system is affected by the other components and should be considered an interdependent part of the whole. Planning and managing an open space system, whilst taking into account these interdependent functions, can lead to productivity gains in landscape maintenance.

Examples of Landscape Design Elements that Affect Landscape Maintenance

Considering landscape maintenance requirements in the landscape design phase can increase landscape maintenance productivity without compromising the design intent. Some instances include:

1. Ensuring ease of access for maintenance machinery by understanding their width requirements for ease of passage.
2. Flushing hard surfaces fractionally below lawn edges to allow edge mowing by larger mowing machines (i.e. one set of front and back wheels travels on the hard surface whilst the other set travels on the grassed surface) without the requirement for edge trimming due to differences in surface height.
3. Reducing edge by integrating bins, seats or lights, among others, into hard surfaces, and thus negating the need for them to be mown under (generally, the higher the ratio of edge to overall area, the higher the level of maintenance input).

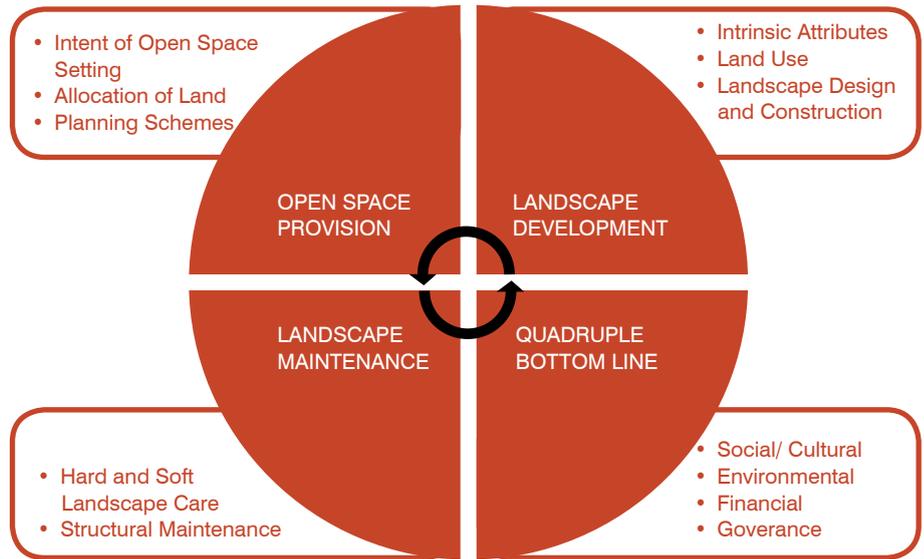


Figure 2. Interdependent Intervention Functions of the Open Space System.

4. Creating gently curved edges (as opposed to acute angular edges) for ease of turn by larger mowing machines.
5. Ensuring grades and evenness of grassed areas to allow their use by larger mowing machines.

Examples of Landscape Construction Elements that Affect Landscape Maintenance

Money saved in the construction phase may be at the expense of higher maintenance costs or loss of productivity throughout the landscape's life. Some examples of poor construction standards are:

1. Use of poor quality soils that inhibit growth.
2. Failure to establish good above and below ground drainage systems.
3. Poor plant quality and planting technique.
4. Construction machinery compacting soils around existing tree roots.
5. Burying of construction debris on site and its adverse effects on the soil profile and plant growth.

Quality Management Systems

The concept of quality management evolved in Japan in the early 1950s and has been adopted within private and public sector organisations as a framework for service delivery and improvement. At the heart of quality management is the continuous improvement cycle, which is divided into four integrated components:

- **PLANNING** through development of strategies, plans, contracts, agreements, etc., that create the road map for organisational outcome
- **DELIVERY** of products and services based on quality and cost standards
- **MEASUREMENT AND REPORTING** of the results of the product and service delivery through accurate information
- **IMPROVEMENT** through analysis, innovation, trialling, etc.

Significant productivity gains can occur through the implementation of continuous improvement cycles. However, there is little evidence suggesting that Singapore's landscape maintenance contractors deploy such systems to improve their productivity.

The reliance on very cheap and abundant foreign labour, with its subsequent negative impact on wages for local landscape workers, has significantly lessened the requirement for productivity gains in the landscape maintenance sector.

Anecdotal evidence suggests that implementation of quality management systems associated with corporate strategies, business plans, training and skills development, mechanisation, work processes, contract implementation, and financial planning would benefit many landscape maintenance contractors.

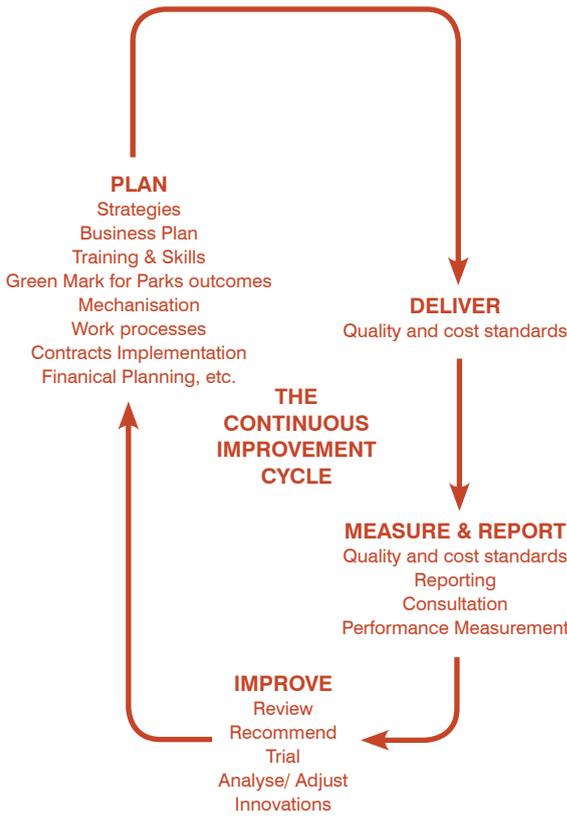


Figure 3. The Continuous Improvement Cycle.

Mechanisation and Technology

Due to the accessibility of cheap labour to undertake park maintenance activities, contractors have found it more efficient, effective and profitable to have a larger labour force than invest capital in labour-reducing equipment. Additionally, Singapore has a number of factors which can limit improvements in mechanisation and technology.

However, major technological gains can be made, particularly within the areas of grass cutting, planting, watering and weeding.

PHYSICAL SITE CONSTRAINTS

Poor Access	Poor/ difficult access limits use of machinery.
Size	Small working area.
Obstructions	Number and positions of obstructions, e.g. trees.
Topography	Very steep slopes in parks, such as Fort Canning, require a lower level of mechanisation, e.g. knapsack grass cutting.
Tree Roots	A number of parks and streetscapes contain trees with very large shallow/ surface roots; these require a lower level of mechanisation, e.g. knapsack grass cutting.
Soil/ Uneven Surface	Some parks, such as East Coast Park, containing areas of very bumpy ground due to the expansion/ contraction of clay soils, require a lower level of mechanisation, e.g. knapsack grass cutting.
Waterlogged Soils	Waterlogging of grass inhibits use of mowers.

HARD SCAPE SITE CONSTRAINTS

Surfaces	Hard surfaces not flush with grass surfaces.
Design	Inappropriate design for machinery.
Water Supply	Number of green spaces do not have water available on-site.

ENVIRONMENTAL SUSTAINABILITY

CO ₂	Increased carbon footprint associated with machine use.
Environmental Cost	Of construction, transportation and eventual disposal of machines.
Herbicide Use	Use of herbicides in Singapore's parks is not encouraged.

SOCIAL

Noise Factors	Associated with some machinery.
Users	Machinery use can inhibit user's enjoyment of space, or is visually unappealing.
Contractors	Contractor/ staff resistance.
OH&S	Increased requirement.

ECONOMIC

Cost	Initial purchase, worker training, maintenance.
Irrigation Systems	Major capitalisation costs in installation.
Damage	Accidental damage to assets due poor use.
Eco-Friendly	Expense of eco-friendly machinery options.
Availability	Availability of quality and appropriate machinery.

Table 2. Some Constraints for Increased Mechanisation Singapore Landscape Industry.

Education and Training

The skills held by employees are critical to industry productivity. Good education also fosters innovation. Inherent within the requirement for productivity gains is the requirement to educate and train workers so that they are equipped with the technical and management skills to work more effectively. If landscape workers have the skills and ability to assess situations and make decisions, without recourse to more senior managers, and are motivated to work with less intensive supervision, then greater efficiency and effectiveness can be achieved.

It was evident that Singaporean delegates, during an Australian Productivity Study Tour in November 2009, noted that ground maintenance staff in Australia operated with a higher level of autonomy and enthusiasm, as compared to their Singaporean compatriots. This was partially attributed to higher levels of education, training and multiple skill sets.

An important component to training provision is ensuring alignment with industry and worker requirements. Continual review and adaptation is necessary since the rapidly changing nature of technology and knowledge in landscape management requires continuous effort to keep abreast of new developments.

Labour Relations

Innovations within organisations are often derived from their own workforce, when there is a culture of trust, collaboration and respect.

Organisational culture has a dramatic affect on productivity. A number of experts have stated that quality management consists of 90% human relations, and 10% systems and procedures.

Labour Supervision

Observations and interviews indicated that landscape maintenance crews supervised by a competent supervisor or leading hand were demonstrably more productive than other crews. A more formal systematic training and mentoring programme, in proper procedures for contract supervision, would be beneficial.

Contract Specification

There are many viewpoints as to what are the best practices for contract specification. Some advocate specifications are highly prescriptive, leaving minimal room for variation to work practices (inputs/ resources/ methods), whilst others prefer more open-ended specifications, allowing scope for greater innovation (outputs/ performance). Many specifications, including those in Singapore, contain a combination of both prescriptive and open-ended components.

To create an environment for innovation and productivity gains, specifications that focus on outputs or performance are preferred. This is the same for the development of healthy partnership arrangements, based on continuous improvement and mutual trust, preferred for increasing productivity and innovation.

In-house versus Contract Labour

In Australia, the common use of in-house staff, over contracted labour, did not go unnoticed by the Singapore delegation during the November 2009 Australian Productivity Study Tour. Some contractor delegates became aware that a change in Government policy in Singapore may lead to greater competition if the use of in-house landscape maintenance units were re-established. Many government authorities within Australia prefer a balance of in-house and contract labour, with the proportion of the balance depending on the management, personnel, political and financial opportunities of the time.

In reality, it should not matter if an estate is maintained by contracted or in-house staff, so long as each system is functioning well. Each system of labour utilisation has its unique strengths and challenges, which are summarised in the following table:

Green Mark for Parks

The Green Mark for Parks program is a world leader in establishing sustainable park management systems. These systems provide a map to better social, economic, and environmental productivity gains. Any advancement in landscape maintenance should be aligned with Green Mark for Parks.

Industry Collaboration

Industry collaboration is an essential part of increasing productivity. The greater involvement of Landscape Industries Association Singapore (LIAS) in engaging with industry members and government on issues of mutual importance could strengthen future outcomes.

ISSUE

Flexibility/ Variation	Limited to contract agreement.	More flexible arrangements,
Cost	Generally perceived as less costly but in reality dependent on competency of contracted organisation, specification and contract supervision.	Generally perceived as more costly but in reality dependent on cost competency of organisation, management and staff.
Control over Workforce	Generally less control.	Generally more control.
Control over Outcomes	Generally less control but dependent on competency of specification and contract supervision.	Generally more control but dependent on competency of organisation, management and staff.
Capital Infrastructure	Little investment required but dependent on contracted agreement.	Greater investment required including depot and machinery capital.
Management Infrastructure	Contract administration, management, technical and supervision.	Human resource (HR), management, technical, supervisory and administrative.
Management Workload	Perceived to be less but more consideration directed to contract management.	More constant focus on HR issues but less on contract management.
Staff - General Landscape Maintenance	Usually less skilled, lower salary package, less interest in area being maintained.	Usually higher skilled, higher salary package, higher interest in area being maintained.
Organisation Memory	Lost with the changeover of contractors.	More likely to be retained by longer serving grounds staff.

Table 3. Contracted versus In-house Labour.

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- ⁵ Ms Grace Fu, Senior Minister of State for National Development and Education (speech given at 3rd Landscape Industry Association Singapore, Awards of Excellence Ceremony, Crophorne Waterfront Hotel, Singapore, 9 October, 2009).
- ⁶ Mr Albert Ong, CUGE, personal communication to author; Mr Michael Teh, Secretary, Landscape Industry Association (Singapore), personal communication to author; Dr. Lee Boon Yang, "Manpower – Our Only Resource," (speech given in 1986); Aria Ananta and Evi Nurvidya Arifin, ed., *International Migration in Southeast Asia* (Singapore Institute of Southeast Asian Studies, 2004); Maruja M.B. Asis, "Borders, Globalisation and Irregular Migration in Southeast Asia," in *International Migration in Southeast Asia*, ed. Aria Ananta and Evi Nurvidya Arifin (Singapore Institute of Southeast Asian Studies, 2004); Graeme Hugo, "International Migration in Southeast Asia since World War II," in *International Migration in Southeast Asia*, ed. Aria Ananta and Evi Nurvidya Arifin (Singapore Institute of Southeast Asian Studies, 2004); George Ofori, *Foreign Construction Workers in Singapore*, Sectoral Activities Programme, Working Paper (Geneva: International Labour Office, 2000); Diana Othman, "More locals in landscape jobs," *The Straits Times*, January 16, 2009.
- ⁷ Note on terminology: 'Foreign Worker' refers to semi-skilled or unskilled workers (and within the context of this study – within the landscape and construction industries); as the landscape industry is closely aligned with, and for the purposes of official statistics, classed within the construction industry, construction industry details are often provided.
- ⁸ Singapore Government, "Construction Changes", Ministry of Manpower – Press Release, 10 March 2005, <http://www.mom.gov.sg/publish/momportal/en/press_room/press_releases/2005/20050310-ConstructionChanges.html>.
- ⁹ This applies to all of Australia, not just the benchmarking partners.

“EACH COMPONENT IN THE SYSTEM IS AFFECTED BY THE OTHER COMPONENTS AND SHOULD BE CONSIDERED AN INTERDEPENDENT PART OF THE WHOLE. PLANNING AND MANAGING AN OPEN SPACE SYSTEM, WHILST TAKING INTO ACCOUNT THESE INTERDEPENDENT FUNCTIONS, CAN LEAD TO PRODUCTIVITY GAINS IN LANDSCAPE MAINTENANCE.”