VISIT TO AUSTRALIA TO ATTEND THE CAPACITY BUILDING WORKSHOP ON "ENABLING AGRICULTURAL POLICIES PROJECT FOR BENEFITTING SMALL HOLDERS OF CITRUS, MANGO AND DAIRY PRODUCTS IN PAKISTAN"

Introduction

This project was approved in September, 2013 with the gestation period of three years under the sponsorship of Australian Center for International Agriculture Research (ACIAR). This project is the first ASLP project on policy in Pakistan, and one of the few dedicated explicitly to improve smallholders' livelihoods. The project aims at developing options for enabling policies for removing major constraints and opening up new opportunities. The collaborating partners of this project are:

- i. Victoria Institute for Strategic Economic Studies (VISES), Melbourne.
- ii. Planning Commission, Ministry of Planning & Reforms Pakistan.
- iii. Pakistan Agricultural Research Council (PARC).
- iv. Department of Agriculture, Punjab.
- v. Department of Livestock & Dairy Dev. Punjab.
- vi. Department of Agriculture, Sindh.
- vii. Department of Livestock & Fisheries, Sindh.
- viii. COMSATSIIT Abbottabad.
- ix. University of Agriculture, Faisalabad (UAF).

As per designed project activity, the following Pakistani project partners visited Australia from 13 to 17 October, 2014:

- Dr. Aamer Irshad, Chief, Agriculture and Food, Ministry and Planning & Development, Islamabad
- ii. Mr. Ahmed Ali Zafar, Additional Secretary, Department of Agriculture, Punjab, Lahore
- iii. Mr. Khalid Mahmud Chaudhry, Deputy Secretary, Department of Livestock & Dairy, Punjab
- iv. Mr. Abdul Qadir Tareen, Additional Secretary, Department of Agriculture, Sindh, Karachi
- v. Dr. Nazeer Hussain Kalhoro, Executive Director, Department of Livestock & Fisheries, Sindh, Karachi.

[Dr Iftikhar Ahmad, Chairman, PARC was also scheduled to take part in this visit, but could not join the visiting party due to unexpected domestic commitments.]

The Australian host partners were:

- i. Professor Peter Sheehan, Research Director, VISES and Project Leader.
- ii. Professor Bhajan Grewal, Lead Researcher.
- iii. Mr. Jim Lang, Managing Director, Trade Data International Pty. Ltd.
- iv. Professor Alistair Watson, Formerly, the University of Melbourne.
- v. Dr. Prabodh Malhotra, Research Associate, VISES

The visitors arrived in Melbourne on Sunday 12 October evening and departed the following Saturday 18 October from Sydney. They attended eight capacity building sessions in Melbourne, Canberra and Sydney, which were designed to cover topics in policy making in dairy and horticulture, as well as in policy coordination in a federal system of government.

Activities on 13.10.2014

The engagements of the project partners ensued on 13.10.2014 at Conference Room of Victoria University, Melbourne. Formal welcome was given by Professor Peter-Dawkins, Vice Chancellor and President of Victoria University, Melbourne who graced the occasion in the honour of the guests. Prof. Bhajan Grewal, the Lead Researcher appraised the house regarding background, update and future strategies of the project as below:

Project Inception Workshop was held in Islamabad on 26-27 November 2013. Opening the Inception Workshop, the Deputy High Commissioner of Australia, Mr. Paul Molloy emphasized the importance of enabling policies for improving smallholder livelihoods in Pakistan. All project partners expressed strong support for the project objectives and activities.

During the Inception Workshop, Mr. Ahmed Ali Zafar, Additional Secretary, Agriculture, Punjab pointed out that agriculture remains the most significant engine of growth for Pakistan's economy. Agriculture contributes more than 21% of national GDP, employs 45% of labour force and generates nearly 64% of total value of Pakistan's exports. However, Pakistan's agriculture is dominated by small farms, which account for 86% of all farms and 47% of total area under farming. Because smallholder are also the poorest the most food-insecure sections of Pakistan's

population, improving livelihoods of smallholders is of crucial importance for Pakistan.

Following the discussion at the Inception Workshop, the partner government departments were requested to provide documentation of current agricultural policies affecting smallholders in the nominated sub sector of Punjab and Sindh. Although initially progress in receiving the request documentation was slow, good progress was made following the Planning Meetings held with the departments in February and March 2014.

These Planning meetings were held in February and March 2014 in Islamabad (with Planning Commission, Agriculture Policy Institute); in Lahore (Agriculture and Livestock and Dairy Departments of Punjab Government) and in Karachi (Agriculture and Livestock and Fisheries Departments of Sindh Government). The project progress was reviewed and the requests for documentation of current policies were followed up with further discussions.

Capacity building being an important objective of this project, the October 2014 visit included several sessions with Australian experts for discussions on the following areas of activity (Issues & Constraints):

- export market development strategies;
- public-private sector partnership models for relevant subsectors;
- agricultural research and development, and extension services;
- access to affordable credit for farmers;
- Processes for policy development, coordination, implementation and evaluation in a federal country.

For Capacity Building of the participants, presentations by relevant experts shed light on the Australian experience on these issues:

- Development of extension services and R&DE
- Access to high quality and new types of germplasm
- Access to markets and trade, both internally and externally
- Access to affordable credit for smallholders
- Input prices for smallholders
- Sectoral governance and decentralization
- Policy development, implementation, coordination, monitoring & evaluation
- Smallholders networks/cooperatives (e.g., Sindh)

- The position of women

Mr. David Harris Economic and Agri-business consultant gave detailed briefing on Dairy marketing deregulation and Dairy Cooperatives in Australia. Later on, the participants discussed the project priorities in a brain storming session.

Activities on 14.10.2014

The second day started with detailed briefing of Mr. Charles McElhone, Group Manager Trade and Industry Strategy and Manager Regulatory Affairs on the affairs, issues and achievements of Dairy Farmers Australia.

After this the Pakistani delegation visited the department of State Development, Business and Innovation of the Victoria Government where a briefing was managed at the Investment Center Victoria. Mr. Ron Harris (Special Advisor to the Department of Environment and Primary Industries and Environment), gave a presentation on:

- o The role of Department of Environment and Primary Industries.
- The policies which support Victorian Agri-business including initiatives under the Food to Asia Action Plan.

Special focus was on "Food to Asia Action Plan" which aims at putting more Victorian Food and Beverages on Asian tables. To achieve these goals, following themes have been made a base:

- Improved access
- New markets for premium products.
- o The right workforce.
- More efficient movement of products.
- o Better targeted Research and Innovation.
- Streamlined Regulation and reduced red tape.
- o Increasing Capital Investment

To increase the magnitude of supply, main focus is on "Growing Food and Fiber Plan" and to double production of Food and Fiber by 2030; through implementation of the **Murray Darling Basin Plan.** Its components are:

- Sunraysia
- Goulburn / Murray region
- Gippsland
- Reduced kms of channels, improved lining of channels, improved metering and water supply.
- Leading to increased farm water use efficiency.

Improved environment and fewer nutrient flows into rivers.

Victorian Government is collaborating with Federal Australian Government on the fora of COAG, AGMIN and FFR on the major identified realms of:

- Agriculture Research
- Bio-security
- Water
- Emergency management
- Financial Counselling
- Food safety/labeling

The quantum of supply would be consummated through 32000 products, which consist of:

- Horticulture 4,000
- Sheep and Beef 18,000
- Dairy 4,300
- Grain 5,500
- Intensive Poultry/pigs 400

The Victorian Agri. Dairy Sector has rudimentary support of almost 60,000 "small farmers" who are producers of 30% of produce around 70% of all production. DEPI runs network programs for commercial producers and has web information for small landholders.

Ms. Kate Cini (Manager Food and Beverage Trade Development), gave a presentation on the department of state development, business and innovation in which she highlighted trade programs and initiatives to encourage food and agriculture export.

Activities on 15.10.2014

On 15.10.2014, the activity started with a detail briefing on Agriculture Extension Services in Australia by Mr. Stephen Coats. After that briefing, Dr. Aamir Irshad, Chief Agriculture, Planning Commission, Islamabad briefed the participants about pre devolution modus operandi, post devolution issues and their redressal.

Mr. Ahmed Ali Zafar, Additional Secretary Agriculture, Punjab, appraised the house regarding Punjab Government's contribution in this project, potential of agriculture in Punjab, ameliorating the conditions of the small holders and Punjab Government's unflinching endeavors to promote Agriculture Sector. Later on, a

detailed brain storming session on policy coordination was heralded by Dr. Bob Smith. In the afternoon, before leaving Melbourne for Canberra, the Pakistani Partners visited the historic Melbourne Cricket Ground where Pakistan won its maiden Cricket World Cup in 1992.

Activities on 16.10.2014

An in house meeting of the Pakistani and Australian partners was held at the Clifton Suites hotel in Canberra in which it was agreed that the following nine key issues would be addressed in this project:

- Improving smallholders' access to extension services;
- Improving regulations of plant nurseries and pesticide suppliers
- Developing smallholders' cooperatives or other networks
- Addressing key constraints in relation to Germplasm/seeds/nurseries
- Improving smallholders' access to domestic & export markets;
- Improving smallholders' access to formal credit;
- Addressing the issues of quality and prices of inputs;
- Improving intergovernmental coordination for policy development, implementation and evaluation
- Improving the role and wellbeing of women, including off-farm employment

The delegation then visited the Head Office of Australian Center for International Agriculture Research (ACIAR) where Dr. Nick Austin, Chief Executive Officer (ACIAR), Dr. Evan Christen (Research Programme Manger Land and Water Resources), Dr. Muhammad Ejaz Qureshi (Research Program Manager, Agriculture Development Policy) welcomed the delegation and apprised about:

- ACIAR 2014-15 annual operational plan,
- ACIAR strategic plan, 2014-18.

Dr. Ejaz Qureshi highlighted the ACIAR's program with Pakistan and the Agriculture Sector Linkages Program (ASLP). Phase-I of ASLP commenced in 2006 for 4 years with budget of \$6.6 Million. It had three goals i.e. transfer of knowledge and expertise, contribute to poverty alleviation, enhance capacity of Pakistan, R, D &

E. ASLP (Phase-I) had four components namely market linkages (Austrade), academic linkages (AusAID), agriculture linkages (ACIAR) and linkages program review (External).

ASLP Phase-I

3 industries Mango, Dairy and Citrus were prioritized which are major employers of rural labour supply, key domestic and export markets, and needs for strengthened sector linkages. Technical capacity, enhanced productivity, marketing and sustainability were realized which contributed to economic development and poverty reduction.

ASLP (Phase-II)

In late 2009 – ACIAR asked to design ASLP Phase 2 (-\$13 million) with the following three strategic goals:

- (i) Fostering value chains that benefit the rural poor addressing both technical and social constraints.
- (ii) Enhancing agricultural capacity.
- (iii) Encouraging facilitation of well-grounded policy, codes of practice, frameworks and regulator mechanisms.

The aims of ASLP-II were to explore poverty and marginalization, gender, age and social position collaboration and communication modalities and more action and less inaction on poverty, gender disadvantage and widening benefits. ASLP Phase 2 has a value-chain frameworks focus and with additional attention to benefit the poor and marginalized. DFAT invested \$13 million and ACIAR invested \$1 million.

ASLP-II composed three components including Pro-Poor Value Chains (PPVC) Agricultural Capability (AC); and Enabling Policy (EP). Following seven projects were sponsored under ASLP-II:-

- 1. Mango value-chain improvement.
- 2. The enhancement of citrus value-chain production in Pakistan and Australia through improved orchard-management practices.
- 3. Social research to foster effective collaboration and strengthen propoor value chains.
- 4. Integrated crop-management practices to enhance value-chain outcomes for the mango industry in Pakistan and Australia.
- 5. Heat stress alleviation in summer vegetables enhancing the use of genetic diversity in central Punjab, Pakistan.

- 6. Strengthening dairy value chains in Pakistan through improved farm management and more-effective extension services.
- 7. ASLP enabling policy improving agricultural policy environment to benefit dairy, citrus and mango smallholders.

ASLP- Phase-III

ASPL-Phase-III is designed to:

- Commence with design missions in January and February 2015 and would be operational in October 2015.
- Main focus likely to remain Punjab and Sindh with linkages to KP and Balochistan
- Substantial co-investment from the Government of Pakistan
- Priorities yet to be determined.

ACIAR

It was apprised that ACIAR is commencing following ASLP Projects:

Title	Country	Budget and Duration
Agricultural market reform in Pakistan to enhance growth, productivity and employment	Pakistan	\$1.5 million 3 years
Mitigating the effects of stripe rust on wheat and barley production in the South Asian and Eastern African epidemiological zones	India, Pakistan, Bangladesh, Nepal and Ethiopia	\$1.7 million 4 years
Improving agricultural productivity and water use efficiency through farmer innovation platforms and on-farm irrigation monitoring and management in Punjab and Sindh irrigation regions of Pakistan	Pakistan	\$2 million 4 years
Reducing poverty through effective irrigation water institutions	India, Pakistan and Bangladesh	\$1.3 million 3 years

After the visit of ACIAR's Head Office, the delegation left for Department of Agriculture, Fisheries and Forestry, Government of Australia where the Senior Officials of Australian Bureau of Agricultural and Resources Economics and Sciences (ABARES) welcomed the delegation. A detailed briefing was given by Mr.

Peter Gooday (Farm analysis and bio-security) regarding agriculture in Australia "Performance Policies and ABARES Role."

About Agriculture in Australia Mr. Gooday discussed the trend towards more intensive production through:

- Mechanization,
- Genetic improvement,
- · Crops, Pastures, Livestock,
- Fewer larger farms,
- Growing natural resources pressures,
- Ageing farm population,
- Global food and fuel demand.

Reforms in Agriculture in Australia

Pre-1970s, governments maintained and stabilized farmer returns. In late 1970s, governments deregulated agriculture and reduced producer support. These reforms encouraged market responsiveness, structural change and increased agricultural productivity. Now the current focus is on:

- i. Natural resource management (e.g. water resources),
- ii. Supporting sectoral capabilities (e.g. R&D and skills),
- iii. Opportunities to increase productivity through reduce regulatory burdens, improve the efficiency of the rural RD&E system, build human capital through improving labour availability and skills, encourage more efficient resource use across farms.
- iv. Trade research:

ABARES casts a profound focus on impacts of policies in key agricultural countries like United States, European Union, Japan and China. It explores potential impacts of multilateral and bilateral trade negotiations and is undertaking long term research i.e. what Asia wants and what China wants.

<u>Activities on 17.10.2014</u>

On last day of official business, Mr. David Michalk, formerly of New South Wales Government's Department of Primary Industries, addressed the Pakistani visiting team in the Vibe Hotel, Sydney and explained, with examples from Australia and China, the importance and policy implications of developing for smallholders' greater access to domestic and external markets and credit.

In the afternoon, the visiting party took a short ferry trip to Manly Beach, and viewed from the Sydney harbor the scenic Sydney Harbour Bridge and the Sydney Opera House.

Opportunities for Punjab Agriculture in Collaboration with Australian Agriculture

During our visit to Australia, we came across the following Institutions/ Departments which are working for promotion; sustainable development and research in agriculture:-

- i. Victorian Department of Primary Industries and Environment (DPIE)
- ii. Victorian department of State Development, Business and Innovation (DSDBI)
- iii. Australian Centre for International Agricultural Research (ACIAR).
- iv. Department of Agriculture, Fisheries and Forestry, Government of Australia.
- v. Australian Bureau of Agricultural Research, Economics and Sciences.

The following were highlighted in the sessions;

- Australia is a major agricultural producer and exporter. Australian farms and their closely related sectors generate \$137 billion-a-year in production or 12% of GDP.
- Major agricultural exports include wheat, barley, sugarcane, fruit, cattle, sheep and poultry as well as an increasing amount of processed or prepared food products, such as fish products, cheese and wine
- There are 140,704 farms in Australia including those for whom farming is not their primary business. However, there are 125,594 farms solely dedicated to agricultural production.
- The major issues facing agriculture in Australia are drought, water security, global warming caused by climate change, biosecurity (biological threats from imported foods and livestock), and tariffs on Australian exports in the importing countries (particularly) in Europe and Japan), subsidies to farmers in other countries, curr4ency fluctuations and price volatility.

Punjab Agriculture Department has already ensued the Supply Chain Improvement Project worth Rs. 2024.440 million whereas a huge project on inclusive value chain and agricultural business project is being ensued with the help of World Bank. For improvement of Agri. Marketing system in Punjab, Radical Innovations in Agri. Marketing including establishment of State of Art, Fruit and Vegetable Markets, duly supported by new regulatory frame work are being established in Punjab.

There are a lot of opportunities to collaborate with each other and take best advantage of the Australian experiences, particularly in the following realms:-

Horticulture in Australia

- Horticultural production in Australia is diverse; comprising fruit, vegetables, nuts, nursery products, extractive crops, cut flowers and hurt.
- Horticulture is Australia's third largest agricultural industry after wheat and live stock
- The gross value of Australian farm production (at farm-gate) totals \$43.6 billion-a-year. Gross value of horticultural production of \$7.1 billion.
- The industry is labour intensive and mostly seasonal
- It comprises mainly small-scale family farms however; there is a growing trend towards medium to larger scale operations.
- Australia's horticulture industry has long enjoyed a domestic and international reputation for quality-primarily due to our high standards across all stages of the supply chain, from farm to consumer
- There are 59,500 people employed in Australia to grow fruit, vegetables and nuts for the domestic and export markets. A further 6,250 are employed in fruit and vegetable processing (excluding wine manufacturing)
- The value of production from annual and perennial horticultural crops are approximately equal, with the total area under production in Australia around 289,300 hectares.

Location of Horticultural Industries

- The major horticulture growing areas in Australia include the Goulburn valley of Victoria; the Murrumbidgee Irrigation Area of New South Wales; the Sunraysia district of Victoria/NSW; the Riverland region of South Australia; northern Tasmania; southwest Western Australia and the coastal strip of both northern New South Wales and Queensland.
- Nursery production generally occurs close to the capital cities
- Some horticultural produce from the southern states is directed to processing.
- Queensland vegetables typically supply the southern states during the cooler June to October period.
- Banana, pineapple, mandarin, avocado, mango, fresh tomato, capsicum zucchini and beetroot production is concentrated in Queensland; stonefruit, oranges and grapes in New South Wales, Victoria and South Australia; processing potatoes in Tasmania; fresh pears, canning fruit and processing tomatoes in Victoria; and apples and fresh vegetables in all states.

Horticulture in Punjab

For the promotion of Horticulture, Punjab Government has started the following projects:-

- i. Improvement of Fruit yield and Quality of Guava, Dates and Pomegranate worth Rs. 22.124 million.
- ii. Management of citrus Fruit fly worth Rs.227.650 million.
- iii. Development of Castor Bean varieties and Sunflower Hybrids to enhance the Oilseeds production worth Rs. 10.000 million.
- vi. Targeting malnutrition and low productivity through balanced use of fertilizer worth Rs. 152.328 million.
- vii. Rapid and Mass Multiplication of Olive and Grapes through conventional and micro propagation techniques worth Rs. 90.153 million.
- viii. Enhancing Vegetable production in Punjab worth Rs. 410.70 million.
- ix. Promotion of Pulses cultivation in Punjab worth Rs. 148.790 million.

Farm Mechanization Genetic Improvement and Bio-energy in Australia

Australian Government is mainly focusing on:-

- i. Natural resource management (e.g. water resources).
- ii. Supporting sectoral capabilities (e.g. R&D and skills).
- iii. Opportunities to increase productivity through reduce regulatory burdens, improve the efficiency of the rural RD&E system, build human capital through improving labour availability and skills, encourage more efficient resource use across farms.
- iv. Trade research:

ABARES casts a profound focus on impacts of policies in key agricultural countries like United States, European Union, Japan and China. It explores potential impacts of multilateral and bilateral trade negotiations and is undertaking long term research i.e. what Asia wants and what China wants.

ABARES is casting intensive heed on:-

- Mechanization
- Genetic Improvement
- Crops, Pastures, Livestock.
- Fewer larger farms
- Growing natural resources pressures
- Ageing farm population
- Global food and fuel demand.

Farm Mechanization Genetic Improvement and Bio-energy in Punjab

Punjab Agriculture Department is working on the following projects:-

- i. Introduction & Adaptation of Advances Technologies to mechanize various farm operations for enhancing crop production worth Rs. 46.000 million.
- ii. Feasibility study for establishment of Agriculture Technology Pak worth Rs. 5.000 million.
- iii. Establishment of Soil and Water Testing Laboratory at Chiniot and Nankana Sahib worth Rs. 16.883 million.
- iv. Upgradation Audio and Video Production Facilities in Directorate of Agricultural Information Punjab worth Rs. 10.000 million.
- v. Establishment of Sub-campus of MAS-Arid Agriculture University, Rawalpindi at Attock worth Rs.72.208 million.
- vi. Construction of Girls Hostel for 1000 Students at University of Agriculture, Faisalabad worth Rs. 491.803 million.
- vii. Detailed Soil Survey of Government Agricultural Farms and Strengthening of Soil Survey of Punjab worth Rs. 30.000 million.
- x. Revamping Agriculture Extension Services worth Rs. 113.655 million.
- xi. Feasibility study for bringing waste lands of Thal, Pothohar and Cholistan areas under cultivation through a comprehensive strategy worth Rs. 39.983 million.
- xii. Establishment of Punjab Bio-Energy Institute at University of Agriculture, Faisalabad worth Rs. 499.231 million.
- xiii. Establishment of Export oriented Floriculture Centre at Pattoki worth Rs. 15.000 million.
- xiv. Strengthening of research facilities at Fodder Research Sub-Station, Ayub Agricultural Research Institute, Faisalabad for the Development of Silage type com varieties worth Rs. 13.836 million (2013-14 to 2015-16) (to be revised).
- xv. Strengthening of Food Technology & PHRC, Ayub Agricultural Research Institute, Faisalabad worth Rs. 62.695 million (2013-14 to 2014-15).
- xvi. Up-scaling of Fibre Quality and Infrastructure Facilities of Cotton in Punjab worth Rs. 57.530 million (2013-14 to 2014-15).
- xvii. Development of genetic Engineering Facilities at Agriculture Biotechnology Research Institute, Ayub Agricultural Research Institute, Faisalabad worth Rs. 69.500 million (2013-14 to 2015-16).
- xviii. Installation of Bio-gas Supplemented Agriculture Tubewells for Irrigation purpose in Punjab worth Rs. 1876.347 million (2013-14 to 2015-16 upto February, 2016).

Water Management in Australia

Australian Agriculture keeping on view salience of global water issues putting more concentration over water management. The Australian Government is investing Billions of Dollars on water management issues which include:-

Murray Darling Basin Plan

- Sunraysia
- Goulburn / Murray region
- Gippsland
- Reduced kms of channels, improved lining of channels, improved metering and water supply.
- Leading to increased on farm water use efficiency.
- Improved environment flows and less nutrients in rivers.

Water Management in Punjab

Pakistan is presently among the water stress countries and within a decade, it is going to be a water scarce country. Keeping in view this scenario, Punjab Government is working on Punjab Irrigated land Productivity Improvement Project (PIPIP) worth Rs. 21249.997 million uptil 2017.

- i. It is going to provide the farmers 3000 laser land levelers.
- ii. High Efficiency Irrigation System i.e. (drip system sprinkler system) on 1,20,000 acres of land.
- iii. Construction of 5,000 water courses with parabolic concentrate structure and improvement of 5,000 new water channels.

Moreover, 5.5 million acres land of Potohar, 2.250 million acre of Thal Desert, 6.499 million acre of Cholistan have very close resemblance with geographical features of Australian Agricultural land. Punjab Agriculture can adopt the Australian intervention for rehabilitation of un-cultivated land.

Challenge for Pakistan's Small holder Industries:

- Analyze and understanding why farmers do what they do and identify the major constraints (e.g. credit).
- Change farmers thinking from subsistence to small business focus.
- Change emphasis from quantity to quality (more \$ from less production efficiency.
- Develop technical packages to empower producers to improve management and achieve market specification.
- Develop market specification what food products and quality does the Pakistani market want?

- Facilitate producer participation in research and extension.
- Reward producer for quality products by developing product grading and market information systems.

(AHMED ALI ZAFAR)
Additional Secretary (Planning),
Government of the Punjab,
Agriculture Department

Following rudimentary facts regarding Australian agricultural realms are attached with this report:-

- i. Agricultural business and value chain in Australia
- ii. Agriculture in Australia and NSW
- iii. Australian Agricultural potentials and challenges
- iv. Production statistics
- v. Horticultural export
- vi. Horticultural import
- vii. Market access-Challenge for Horticulture
- viii. Australian Mango Industry
- ix. Australian Mango Industry Strategic Plan

Agri. Business and Value Chain in Australia

- This raise questions of foreign ownership or capital investment in Australian agriculture
- Financial experts indicate a \$1 trillion capital investment is required to lift efficiency to the next level.

Agriculture in Australia and NSW

- Big business that generates
- \$ 45 billion Australia wide in exports
- \$9 billion in NSW
- Strong export focused for all agricultural industries
- No Subsidies
- Internationally competitive
- Highly efficient
- Highly mechanized
- High productivity per person
- Innovative in developing new technologies.

Australian Agricultural potentials and challenges:

- World's population will increase by another 2 billion.
- This means that with rising living standards and expectations food production needs to increase by 60%.
- Recent estimates indicate that Australia's capacity to produce agricultural and animal could increase to \$A1.7 trillion.
- This potential for export is due to dietary changes, particularly in China.
- This raise questions of foreign ownership or capital investment in Australian agriculture.
- Financial experts indicate a \$1 trillion capital investment is required to lift efficiency to the next level.

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Production statistics:

In 2011-12, Australian horticulture had a gross value of production of \$8,700 billion, ranking third behind the meat and grain industries. The major product groups had the following gross value of production in 2011-12 (source ABS 7503):

- Fruit and nuts \$4,090 million
- Vegetables \$3,338 million
- Nursery, flower and turf production \$1,271 million

The GVP of major individual commodities in 2011-12 were:

grapes \$1,041 million; apples \$464 million: mushrooms \$267 million: onions \$212 million;

potatoes \$626 million; tomatoes \$352 million; strawberries \$235 million; carrots \$215 million melon \$165 million;

bananas \$466 million oranges \$301 million lettuce \$ 129 million.

Horticultural exports:

- In 2011-12 Australia exported \$1.239 billion of fresh and processed fruit, nuts and vegetables.
- Export of fresh produce (particularly fruit) is limited by quarantine restrictions in a number of countries including Japan, USA, mainland China, South Korea and Taiwan.

Horticultural Imports:

- In 2011-12, Australia imported \$2.102 billion of fresh and processed fruit, nuts and vegetables.
- A wide range of fresh produce is prohibited from entering Australia on the basis of quarantine restrictions.
- Produce in imported into Australia out of season or during period of domestic shortage due to production failures an inability to produce the commodity and/or production shortfalls relative to demand.
- Overall Australia had a "trade deficit" in 2011-12 for fresh and processed fruit nuts and vegetables of \$863 million.

Market access-Challenge for Horticulture:

- Poor handling of produce lowers market quality and can substantially reduce producer returns.
- The annual value of losses for produce from NSW alone has been estimated at over \$50 million.
- In addition, large intangible losses to the community can arise from consumer dissatisfaction with poor quality.
- Postharvest technology aims to address some of these issues by optimizing quality and safety, and by reducing waste.
- Improved handling methods and the resolution of regulatory requirements allow access to more distant domestic markets and overseas markets.
- Existing horticultural industries need improved varieties and technology to compete in the marketplace and to satisfy customers.
- Improved varieties, like new products, require best practice postharvest handling.

Australian Mango Industry:

- The need to adopt and promote a strong, market-driven approach for all activity.
- Changes in structure of the protection sector to focus on activities that can benefit the whole of the industry(i.e. growers large and small) is needed.
- Much more detailed market, supply chain and production date is need to increase transparency in the supply chain and provide all with the tools for better business decisions.
- With projected production increase (based on non-plantings) feeding new markets and steadily increasing consumption are essential.
- At production level, it is imperative that all growers have a good understanding of their profitability and return on investment and how that compress with others.
- Internal division with the industry is counter-productive and districts leaders from core objective of increasing profitably.

Australian Mango Industry Strategic Plan:

- Australian Mango Industry Association (AMIA) direct engagement with growing regions is valuable and builds trust and cooperation.

- The AMIA is providing a valuable service to industry and this should be promoted more widely. This awareness does not just happen. It needs an organized and planned program of promotion and advocacy.
- There is need for a structured program of leadership development in the industry. Improve communication right along the supply chain as this will build a one-industry spirit of cooperation.
- The industry has severely inadequate levy resources to implement the plan and realize the vision. This must be addressed as a priority.

AUSTRALIAN TOUR REPORT FOR SECRETARY AGRICULTURE

AUSTRALIAN TOUR REPORT FOR MINISTER FOR AGRICULTURE

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