



Australian Government
**Australian Centre for
International Agricultural Research**

project

Vegetable value chains in Eastern Indonesia—a focus on chilli

SADI-ACIAR research report

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Australia Indonesia Partnership
Kemitraan Australia Indonesia



ACIAR's participation in the Australia–Indonesian Partnership

The Australia Indonesia Partnership (AIP), comprising \$500 million in grants and \$500 million in highly concessional loans over five years, was announced in January 2005. The partnership supports Indonesia's reconstruction and development efforts, both in and beyond tsunami-affected areas. Assistance involves long-term sustained cooperation focused on economic and social development projects and Indonesia's programs of reform and democratisation.

ACIAR is committed to the partnership through the management of a component of the Smallholder Agribusiness Development Initiative (SADI), which aims to improve rural sector productivity and growth in four Eastern provinces—East Nusa Tenggara, West Nusa Tenggara, South East Sulawesi and South Sulawesi.

This initiative will improve incomes and productivity for farmers and agribusiness in response to market opportunities, through a process that is underpinned by improved adaptive research and development capacity.

ACIAR's role in the initiative is to strengthen province-based agricultural research and development capacity that is market and client-driven, and effectively transfers knowledge to end users. A key part of this approach is delivered through market-driven adaptive projects which are priorities for smallholders, farmer groups, agribusiness, government and other supporting agencies.

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2 Executive summary

Indonesia, the fourth largest market in the world with a population of 220 million in 2005, is forecast to reach almost 250 million people by 2015, making it a large food market. Consumption of fresh food is increasing and urban based consumers are becoming more health and convenience conscious. This has opened up opportunities for the modern retail sector to expand further into fresh foods, such as the offer of hydroponic and organic vegetables.

Indonesia has over 17,000 islands and this provides a major challenge to distribute fresh products nationally. Most of Indonesia's locally produced fresh vegetables (cabbage, potato and chilli) are distributed throughout Indonesia in non refrigerated transport. However, there is increased use of airfreight for select high value fresh vegetables for inter-island trading where there is shortage of local supplies.

The traditional wet markets still dominate fresh food trade however there is an increasing trend of food purchases at modern retail outlets. Most supermarkets and hypermarkets in Indonesia have expanded their share of the retail market with the opening of new stores throughout major cities in Indonesia and with an increased emphasis on fresh food and higher value lines, such as hydroponic and organic vegetables. Both Matahari Hypermart and Hero supermarkets are now offering a full range of ingredient vegetables and other food items essential for Indonesian cooking. In the vegetable section, there is now a full range of chilli (five varieties), ginger, onions, garlic, pepper etc.

Indonesia's vegetable production has increased by an average of 8% per year since 2001 from 6.9 million tons to reach more than 9 million tons (excluding almost 31 million tons of mushrooms) in 2005, from almost one million hectares of land; an average yield of 9.6 tons per hectare. The main vegetables grown in Indonesia (besides mushrooms) are cabbages, chilli, potato, shallots/onions and tomato.

There are 33 provinces in Indonesia that produce over 20 types of vegetables; however 85% of all vegetables are grown on the islands of Java and Sumatra. The major vegetable producing provinces are: West Java (35.6%), Central Java (13.3%), East Java (11.9%) and North Sumatra (10.3%); these four provinces account for over 70% of all vegetable production.

Imported vegetables accounted for only 4% of total consumption in Indonesia in 2005.

East Indonesia accounted for only 11.6% of the volume of all vegetables produced in Indonesia in 2005 yet has 16.0% of the population; this represented an average of 28.7 kg per capita compared to an average across Indonesia of 39.8 kg per capita. Therefore Eastern Indonesia is a net importer of vegetables, with supply mainly from Java.

North Sulawesi (274,134 tons) and South Sulawesi (256,153 tons) are the main vegetable producing provinces in Eastern Indonesia in 2005 with 52% share of all vegetables from the 13 provinces in Eastern Indonesia.

The province of South Sulawesi has a topography and climate that is suitable for vegetable production and hence grows a wide range of vegetables for local consumption and inter-island trading. South Sulawesi produces about 256,000 tons of vegetables from almost 55,000 hectares of land; an average yield of 4.7 tons per hectare. The main vegetables grown in