

Peanut

Priority statement

The peanut sector represents a **MEDIUM – HIGH** priority for pro poor development.

There is considerable scope for yield improvement in Indonesia. Current average yields across Indonesia of 1.28 t/ha are lower than average yields from the top producers, such as the USA with 3.83 t/ha and China at 3.35 t/ha. With average yields of 1.1 t/ha and prices of around IDR 4 million/ton the average income is IDR 4.4million/ha.

Demand for peanuts is consistently outstripping supply in Indonesia. The opportunity for import replacement and associated employment and income gains is significant particularly if production constraints can be addressed. Productivity and profitability of peanuts are severely constrained by a number of issues including access to good quality seed, new improved varieties, awareness about seed quality, poor management practices, and lack of access to crop loans or irrigation water.

Table 1. Peanut production statistics for selected provinces in Indonesia

Basic Statistics	East Java	West Nusa Tenggara (NTB)	East Nusa Tenggara (NTT)	Indonesia
Area of Production (ha)	160,000	26,000	19,000	540,000
Volume of Production (tonnes)	210,000	38,000	24,000	690,000
Yield (t/ha)	1.28	1.44	1.22	1.28
Value of Production IDR (billion)	875.8	157.6	98.2	2,870
(USD (million) ¹)	(93)	(16.7)	(10.4)	(304)
People Employed	-	-	-	-

Source: Badan Pusat Statistik 2011 production data
¹ FAOStat 2010 - \$440/tonne

Poverty and sustainability

Is there potential to reach large numbers of poor households in production and post-production?

Across the provinces there is potential to reach significant numbers of households.

- The majority of peanuts are produced by smallholders and with an estimated 3 million rural poor in East Java alone (who are most likely to derive income from agriculture) the potential to reach large numbers of households is high.
- East Java is major peanut producing region in Indonesia. In the Tuban Regency, 65% of farmers' total income comes from peanuts.

What is the potential to increase income for producers?

There is a high potential to increase income through better agronomic practices, on-farm or community based processing and co-ordination of farmers and buyers.

- There is considerable scope for yield improvement in Indonesia. For example, in association with Garuda in 2007 farmers given seed and technical advice under contract were generating a gross margin up to IDR 3.5 million/ha. In the regular market, farmers were generating between IDR 755,000 and IDR 1.09 million.
- Premiums of up to IDR 15,000/kg are paid for bigger kernel size, which can be achieved with variety selection, input management and post-harvest grading.
- On farm processing can increase farm gate prices as shown in Table 2 below.

Table 2. The impact on farm gate prices from on-farm processing

Product Types	Moisture %	IRD/KG	Customer
Unshelled wet	50	1,500	Garuda
Unshelled wet	50	1,600	Other traders
Unshelled dried	20	3,750	Small collectors
Unshelled dried	15	4,250	Small collectors
Shelled dried	<12	6,500	Misc

Source: Nimmo-Bell and Company Ltd, 2007, IFC SADI Agri Sectors: Value Chain Analysis for the NTB Peanut Industry

Does the chain/commodity fit with the focus of Government programs and priorities?

Peanuts are not a priority of the Indonesian Government.

- Unlike rice and sugar, peanut producers have not been subsidized in Indonesia.
- Rather than a specific attention by the national or provincial programs, the support to the sector has come from external programs in association with Indonesian agencies.
- Indonesian policy makers have viewed contract farming favourably due to its potential benefits which include better access to markets, credit and technology.

How project-crowded is the sector? (To what extent are sector needs addressed by current donors?)

- ACIAR-SADI is a major player in the research arena particularly in NTB and NTT. Current research is focussing on new varieties, management practices and market development through contract growing initiatives. Partnerships have been developed between Australian and Indonesian research institutes.
- IFC has provided major input to these activities also.
- There appears to be limited other international funding programs operating in the sector.

What is the agro - ecological feasibility?

- Peanuts are currently grown in rotation with rice and in dry land areas in East Java, NTB and NTT.
- The agro-ecological requirements are similar for soybean, mungbean and to some extent maize.
- Opportunities are more apparent in East Java and NTB due to better soils and rainfall.
- NTT suffers from poorer soils and more variable rainfall. Peanut variety and management research may address some of the agronomy constraints in this region.

Sustainability (economic and environmental)

- Peanuts are a staple part of Indonesian cuisine and are consistently in high demand.
- In 2009 Indonesia had a negative trade balance, exporting 4,432 tonnes of peanuts in-shell and 236 tonnes shelled; imports of peanuts in-shell were 61,933 tonnes and 132,069 without shell.
- This indicates an unfulfilled local supply of raw peanuts in Indonesia, suggesting an opportunity for higher domestic economic returns if programs are implemented to increase production.
- Peanuts are relatively benign on the environment. When grown in rotation with rice there is the addition benefit of nitrogen fixation for the next crop rotation.
- Potential for inappropriate or excessive use of chemical weed and insect controls which is common across cropping systems.

External risk

- There is a moderate to high risk that the unequal relationship in the market chain will persist and farmers will not see the value in implementing modern techniques and varieties.
- The risk of buyer monopolisation may emerge unless more processors enter the market.
- Government policy is more heavily focussed towards other cash crops – a potential risk to further support.
- Aflatoxin contamination can be a health risk to consumers and downgrade the sale of production for farmers.

Structure of the chain

What is the potential for improving market access?

There is potential to reach higher value markets through improved processing on farm.

- Currently most farmers sell raw peanuts in shell to buyers for wet markets.
- Opportunities to increase knowledge of farmers in the benefits of drying, sorting and shelling to access higher value markets are good.

- Addressing the current production deficiencies which include the minimal use of inputs resulting in low yields may assist farmers to meet the high demand for high quality peanuts in Indonesia.

Is there potential for post-harvest productivity / value-added?

- Peanuts have a wide variety of uses and product transformations. Improvements to processing technology and infrastructure are required to increase processing capacity.
- Peanuts can be crushed for oil, processed into butter, confectionary, salted, and roasted.
- Waste meal and pods can be fed to animals as are the leaf and stem after harvest, creating an additional resource to farmers.

What is the scalability and transferability potential?

- A contract farming model implemented in previous SADI subprogram 2 projects (Garuda Food) has a high scalability/transferability potential for other areas and commodities if the right lead companies can be encouraged to participate.

Is there sufficient infrastructure availability?

- There is insufficient infrastructure in place for additional processing. Appropriate drying facilities are needed to ensure specific moisture content is achieved which will help address aflatoxin contamination and achieve higher market prices for raw peanuts.