

## Banana

### Priority statement

The banana sector is a **MEDIUM** priority for pro poor development. Whilst work in the banana sector has the capacity to reach a large number of poor households, there are a number of tempering factors to consider. There is limited policy focus by government at national or provincial level on supporting the sector, and disease management is a major limiting factor to industry expansion.

In 2010, Indonesia ranked 6th in the world in both production quantity and value of bananas. Bananas represent 35% of tropical fruit production by volume in Indonesia. East Java accounts for 15.3% of the total area harvested to bananas and 16% of production. NTT and NTB are small contributors, with only 3% and 1% of Indonesia's production respectively. Table 1 outlines some basic sector statistics for the provinces of interest in this project.

**Table 1. Banana production statistics for selected provinces in Indonesia, 2010**

Basic Statistics	East Java	West Nusa Tenggara (NTB)	East Nusa Tenggara (NTT)	Indonesia
Area harvested (Ha) *	15,510 (15.3%)	1,448 (1.4%)	2,605 (2.6%)	101,276
Volume of Production (tonnes)*	921,964	62,799	187,911	5,755,073
Yield (t/ha) *	59.4	43.4	72.1	56.8
Value of Production IDR (trillion) **	8.4	0.57	1.7	52.5
People Employed***	Philippine data suggests that: In an efficient banana production process, an average of two (2) people are employed and directly involved in the planting, growing and harvesting of the fruit for each Ha grown. In the overall exporting process -- which includes people involved in the production of packing materials, transportation, stevedoring, and distribution for every hectare of bananas, a total of about eight (8) people are engaged. The Indonesian banana sector would currently not be considered efficient (production is very non-intensive), or at an export level. Therefore it is safe to assume these figures are conservative.			
Source: * Badan Pusat Statistik 2010 ** Using \$0.97 USD/kg from <a href="http://www.mongabay.com/images/commodities/charts/banana.html">http://www.mongabay.com/images/commodities/charts/banana.html</a> *** <a href="http://www.pbgea.org/files/banaind.html">http://www.pbgea.org/files/banaind.html</a>				

## **Poverty and sustainability**

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

- Yes. This could be as high as 1.5 – 2 million households.
- Banana production in Indonesia is mostly undertaken on a non-intensive basis by smallholders. These farmers usually have other agriculture enterprises as a source of income and bananas supplement this.

### **What is the potential to increase income for producers?**

- Bananas are a cash crop that has the ability to provide a continual income throughout the year.
- Programs that focus on improving farming practices and controlling and managing diseases have the ability to increase income through improved quality and production.
- Bananas represent a sector that has the potential to increase income for female head of households.

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

- Horticulture production has been a priority of the national government however available literature is contradictory as to the importance of bananas.
- Bananas have not been identified as either a major or minor priority species for research work and investment at the Centre for Tropical Fruit Studies (CENTROFS) in Bogor.
- The GoI Director General, Horticulture's strategy and policy for horticultural sector development last decade does list banana as a key commodity to improve production.

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

- There appears to be very little donor activity in the banana sector.
- A number of research projects have engaged with the sector, including some by ACIAR, largely focussed on seeking solutions to managing the disease problems of the industry.

### **What is the agro-ecological feasibility?**

- Moderate to high. Banana production is mostly undertaken on a non-intensive basis. Unless the industry can overcome its disease problems there is little likelihood that corporate investment will be achieved.
- The production of banana is often blurred with NTFP due to the fact that many bananas are sourced (harvested) from forest communities.

### **Sustainability (economic and environmental)**

- The large scale commercial banana industry in general does not have a good environmental track record (high pesticide use, contamination of water sources, results of monoculture, health of workers) however there seems to be little focus on this in Indonesia.
- Smaller scale banana production is often within forest margins and is reasonably benign in terms of detrimental environmental impacts.
- If Indonesia seeks to participate in the banana export trade, it is highly likely there will be a requirement to sign up to Fair Trade or organic production to access markets.
- As a raw, fresh product banana is an important staple, and holds importance in traditional cooking.

### **External risk**

- The lack of market infrastructure and access to finance for farmers are key hindrances to industry development.
- The risk of disease and fungal problems is still high in Indonesia and correct management for production and post-harvest needs to be implemented to ensure a disease free sector.

### **Structure of the chain**

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

- Yes. There is little literature available to determine the extent of any banana value adding that may be occurring in Indonesia. Two banana packing houses were developed in Deli Serdang through the USAID/ARMARTA grants program in the mid-2000s.
- Beyond the farm gate, improved cold chain during transport will help industry development.

#### **What is the potential for improving market access?**

- There are three varieties, Cavandish, Argoon and Golden Banana, offering the best prospect for commercial opportunities in Indonesia. These varieties also appear to have the best disease tolerance.
- Currently most farmers are unorganised and lack the coordination to market their bananas appropriately. However demand domestically and internationally is growing. The current market demand cannot be satisfied in Bali which represents a potentially large and growing market for Eastern Indonesian suppliers.
- Unless Indonesia can sufficiently address its banana disease problems, it may find export markets are limited.

### **What is the scalability and transferability potential?**

- High. Banana represents a significant amount of Indonesia's fruit production and is practiced in many Indonesian provinces.
- Any technology or practice transfer will be hindered if disease and biosecurity management is not widely transferred and adopted.

### **Is there sufficient infrastructure availability?**

- Indonesia has poor infrastructure and a scattered fruit industry resulting in high internal distribution costs.
- There is a lack of regional wholesale markets and cool store/packing facilities for local fresh produce.
- In regional Indonesia there is a need for investment in sea ports to reduce cost of trans-shipment and post-harvest facilities.