

## Cocoa

### Priority statement

The cocoa sector has a **MEDIUM - HIGH** potential for pro poor development. Indonesia currently has a significant export market. There is significant potential for the sector to attract investment from multi-nationals to further develop the sector and support growers. Programs are in place to support the adoption of better farming practices and manage diseases. Value adding potential is high considering the multiple product creation opportunities.

**Table 1. Cocoa production statistics for selected provinces within Indonesia, 2010**

Basic Statistics	East Java	West Nusa Tenggara (NTB)	East Nusa Tenggara (NTT)	Indonesia
Area Harvested (ha)*	61,000	6,000	47,000	1,650,000
Volume of Production (tonnes)*	23,000	1,600	13,000	850,000
Yield *	850	466	534	825
Value of Production IRD billion (million USD) <sup>1</sup>	509 billion (\$53.9)	34 billion (\$3.6)	277 billion (\$29.3)	
People Employed	> 1 million smallholder growers, with approx. 50% located in Sulawesi.			
Sources: * Badan Pusat Statistik 2010 (preliminary figures)				
<sup>1</sup> USD / tonne 2329.50 at 22 Mar 2012 from <a href="http://www.icco.org/">http://www.icco.org/</a>				
<sup>2</sup> <a href="http://www.cargill.com/news/releases/2008/NA3007562.jsp">http://www.cargill.com/news/releases/2008/NA3007562.jsp</a>				

### Poverty and sustainability

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

- Cocoa is the main income source for over a million Indonesian smallholder farm families.
- Hundreds of households also benefit from the value addition occurring in the country e.g. Cargill's bean drying facility in Makassar employs 55 people and they were investigating investing in a new cocoa processing facility.

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

- There is good potential for increasing incomes through increased productivity and improved market access.

- Farmers, through good on-farm management including new variety selection, pest and disease control and harvest and post-harvest handling, can ensure the production of good quality cocoa.
  - At world prices of \$3,600 (mid 2010) farmers are getting around IDR 12 million/ha for yields of 0.5 t/ha. With new varieties and integrated pest and disease management strategies, yields could be increased by 30% and incomes would increase to IDR 16 million/ha.
  - There are also discounts of around IDR 2.3 million/t being incurred for low quality cocoa, compared to West African cocoa.
- High level farm management is lacking in the sector and currently contributing to poor yields.
- With world cocoa prices rising to around USD 2,300/t, and cocoa growers receiving around 80% of that price, growing cocoa offers the opportunity to improve farm family incomes and enhance local economies.
- Use of branding and certification could improve market access and prices.

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

- Cocoa is only produced in countries within 10°N and 10°S of the Equator where the climate is appropriate for growing cocoa trees. The largest producing countries are Côte d'Ivoire, Ghana and Indonesia.
- The cocoa tree is sensitive to a lack of water so the soil must have both water retention properties and good drainage.
- Variations in the yield of cocoa trees from year to year are affected more by rainfall than by any other climatic factor. Rainfall should be plentiful and well distributed through the year. This requirement can have the largest impact on productivity of cocoa from Indonesia.
- More than half of Indonesia's cocoa is grown in the eastern provinces.

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

- After nearly three decades, cocoa production in eastern Indonesia now faces serious challenges to its long-term sustainability, with total production starting to decline in established growing regions. Farm productivity has fallen from a high of about 1.3 t/ha/ year in 2003 to about 0.8 t/ha/year currently. This decrease is due to a number of factors, including declining soil fertility, pests and diseases and competition for land.
- Cocoa is a globally marketed commodity. It is a high value cash crop and the government is committed to supporting landholders to increase area and production through better farming practices and breeding.
- The country is attracting investment by multi-nationals at both the producer and processing levels of the value chain due to the productive potential of Indonesia and the worldwide demand for chocolate and chocolate products.
- Environmental issues are not currently considered a major concern for the sector largely due to the farming system encouraging bio-diversity with the use of shade trees and the lack of monoculture plantation production.

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

Cocoa is a key strategic crop for Indonesia and its long term sustainability is of vital interest to the country.

- A Cocoa Sustainability Partnership was established in 2006.
- In mid-2008, the Indonesian Government announced a large national program for revitalisation of the cocoa industry (known as Gernas Pro Kakao). Long term goal is to bring the total planted area to around 900,000 hectares of productive cocoa.
- The Indonesian Government has also signed up to the International Cocoa Agreement 2010.

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

There have been a number of projects to support the sector. ACIAR and AusAID have contributed funds to the national program for revitalisation of the cocoa industry, and the cocoa improvement program is part of the Smallholder Agribusiness Development Initiative in eastern Indonesia, under the Australian Indonesia Partnership. The International Finance Corporation Program for Eastern Indonesia Small-Medium Enterprise Assistance (PENSA) has an agricultural finance activity beginning for cocoa in Sulawesi.

### **External risk**

- Cocoa production is highly sensitive to changes in weather conditions: duration and intensity of sunshine and rainfall as well as soil moisture and temperature.
- There is a production risk associated with increasing pressure from pests and disease, ageing trees and declining soil fertility.

### **Structure of the chain**

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

- Export markets are significant for this sector given the limited geography globally suitable to cocoa production.
- Indonesia is the world's third largest cocoa exporter. It potentially could attain greater market access if it continues on its course to increase the quantity and quality of production. This however may be tempered by the 2010 introduction of an export tax on cocoa beans aimed to encourage more processing of cocoa beans in Indonesia so the country would benefit from marketing value-added products.

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

- Virtually every province in Indonesia grows cocoa with over half of existing production coming from eastern Indonesia.

- Programs have begun to be implemented in recent years to support the growth of the sector and assisting growers to adopt better practices to increase yield and income.
- The scalability potential is high as is the transferability potential considering the widespread production of cocoa across Indonesia.

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

There is potential for post-harvest improvements and value adding. The sector is already attracting interest from global multi-nationals such as Cargill, one of the world's largest cocoa and chocolate producers.

- Value adding through expanding drying and processing facilities would add great value to the sector and provide more employment opportunities.
- There needs to be more support to adding value to the raw cocoa so that additional benefits are retained within Indonesia.

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

- Not a lot of information is available regarding the quality of infrastructure. There is a number of processing and drying facilities already established in Sulawesi in particular where the majority of production is sourced, so there is an assumption that there is at least some infrastructure available to support this activity.
- Any future development would require additional supporting infrastructure.