

Coffee

Priority statement

This commodity presents a **LOW – MEDIUM** priority for pro poor development. The coffee sector has potential to improve incomes with increased quantity and quality of production but requires careful management to maintain the quality and reputation of the coffee. The coffee sector is increasingly consolidating into an estate cropping system with some out-growers. Private sector investment and development have been informed by comprehensive research on the development potential of the industry. There is some limited potential for value-adding at producer level.

Coffee cultivation techniques across Eastern Indonesia are rudimentary, with average yields (ranging from 15 0kg/ha to 40 0kg/ha) comparing poorly to intensive estates in Java (>1,000 kg/ha) and smallholders in Vietnam (>2,000 kg/ha for Robusta).

Table 1 outlines some basic production statistics for the study provinces.

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

| | East Java | West Nusa Tenggara (NTB) | East Nusa Tenggara (NTT) | Indonesia |
|--|----------------------------|--------------------------|----------------------------|-----------|
| Area of Production (ha) | 54,000 | 12,000 | 72,000 | 1,555,600 |
| Volume of Production ('000 tonnes) | 31,000 | 5,600 | 20,000 | 660,000 |
| Yield (t/ha) | Arabica 0.6 Robusta 0.9 | 0.7 | Arabica 0.6 Robusta 0.5 | 0.8 |
| Value of Production (IDR) | | | | |
| People Employed | 211,000 | 15,000 | 119,000 | 1,400,000 |
| <i>Source: BadanPusatStatistik, 2010</i> | | | | |

Poverty and sustainability

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

- Yes. There are 75,000 families that could benefit from a coffee initiative in Flores alone.
- Including other parts of Eastern Indonesia there is potential for reaching a large number of rural poor households, mainly involved in production and some post-production activities.

What is the potential to increase income for producers?

The potential to increase household income is moderate as cash income from coffee for farmers in Eastern Indonesia is only a minor contributor to their total income/livelihood. That is, these farmers effectively participate in a range of distinct value chains.

- Developing and adopting improved knowledge and practices in coffee cultivation techniques has the potential to increase yields to at least 600 kg/ha (thereby doubling production).
- The opportunities for price increases through quality improvements are considerable. In the case of Flores coffee, 'natural' or 'semi-washed' Arabica coffee was being sold (local factory door price) for only IDR 16,000/kg in the 2006 season, translating to roughly 20 to 25 cents below the NY 'C' price in export markets. From experiences in origins such as East Timor, it is likely that improved Flores Arabica could, however, be sold at prices of 10 to 15 cents/lb above the NY 'C'. (Toraja and Mandheling coffees are currently sold at prices 40c/lb over the NY 'C', which in a 120c/lb market equates to an FOB price of \$3.52/kg or IDR 32,000).
- Supporting efforts to create a Geographic Indication for Flores and/or West Papua coffee and supporting eco-labelling (Organic, Fair Trade, Rainforest Alliance, etc.) efforts all may contribute to increasing incomes for coffee producers.

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

- Local governments in the districts of Manggarai and Ngada in Flores give a high priority – including significant budget allocations - to the coffee sector.
- The newly released Regulation of Minister of Trade of The Republic of Indonesia Number 10/M-Dag/Per/5/2011 on the Export of Coffee (May 3, 2011) simplifies exportation procedures.
- Coffee has also been the focus of numerous donor-funded programs and private investment in the development of the industry and coffee estates.

How project-crowded is the sector?

There are a number of projects supporting small-scale coffee producers.

- The Islamic Development Bank provides about USD \$120m for small-scale coffee farmers on Sumatra Island.
- The Ministry of Agriculture works with the Indonesian Coffee and Cocoa Research Institute (ICCRI) and Nestlé Indonesia to try and improve the productivity of local coffee growers.
- Vredeseilanden (VECO) funds a coffee value chain improvement project.
- There is the Agricultural Market and Support Activity (AMARTA) Phase II (USAID-funded and implemented by ACDI/VOCA) agribusiness project investing USD \$20 million from 2011 through mid-2016 to support horticulture, cocoa and coffee sectors in West Java, North Sumatra, South Sulawesi, and Bali.
- The IFC Program for Eastern Indonesia Small-Medium Enterprise Assistance (PENSA) have an agricultural finance activity beginning for cocoa in Sulawesi which in later stages may include coffee and other parts of Eastern Indonesia.

What is the agro - ecological feasibility?

- The soils and climate in Flores and parts of West Papua are highly amenable to coffee production – both Robusta and Arabica.
- There is probably some niche low-volume opportunity for Arabica in Sumba and quite a lot of Robusta opportunities for development in other parts of NTT and NTB (Sumbawa and West Timor). Any coffee initiatives must however consider the full complexity of farming systems and farmer decision-making in this region in order to be successful. There may also be some limitations on water availability for washing of coffee during the end of the dry season.

Sustainability (economic and environmental)

- The demand for high quality specialty coffees from Eastern Indonesia is likely to remain high. The key challenges are to address the infrastructure weaknesses, poor business enabling environment (high formal and informal taxes, high port and export costs, etc.), and ensure greater share of profitability to farmers for their efforts to improve the quality of coffee.
- Forest clearing for coffee production is an ongoing concern in the Sulawesi highlands, reflecting an extensive, rather than an intensive, approach to agriculture.
- The severe thinning or clearing of forests for planting shade-grown coffee is also a major concern. Considerable biodiversity is lost both above and below ground. Microorganisms in particular are affected through clearing, soil disturbance, and exposure. Soil erosion is common in sloping areas with poor agronomic practices. Coffee pulp often is disposed of in waterways which lowers oxygen content and can kill fish.

External risk

The risks facing the sector are quite high.

- Coffee is characterised by a competitive international market with high quality demands and environmental and social concerns linked to branding. If the:
 - business enabling environment is not improved,
 - farmers are not able to meet the quality standards demanded by the market,
 - initiatives do not address the full complexity of farming systems and decision-making processes,
 - profits are not more equally distributed to producers, and/or
 - no effective extension systems are in place to address needs for improved agronomic and post-harvest practices, then the sector is unlikely to be competitive.
- There is also risk in the management of any labelling as misuse or poor quality management will erode the value of such labelling and product will fail to access markets.

Structure of the chain

What is the potential for improving market access?

Market access could be improved using Geographic Indication (GI) labelling and certifications as Eastern Indonesian coffee is favoured for its low acidity and rich flavour.

- Interaction with the international coffee roasting community has helped raise the profile of 'Bajawa' and 'Kalosi' as specialty origins in key markets. Already, this has resulted in increased demand for both coffees and increasing origin engagement by international buyers. Higher prices are now being offered at origin as a result.
- This style is different to the natural high acidity-low body coffee produced in Brazil and Central America.
- Consumers in the largest export market (USA) prefer the Indonesian style of coffee, putting the industry in a favourable position.
- GI and eco-labelling will further increase access to important niche markets.

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

There is moderate potential for post-harvest improvements and value adding.

- At the village level, the introduction of wet-processing systems requires reliable access to water supply during the harvest period (which frequently coincides with the dry season).
- Effort needs to be made to identify and then promote and provide training on those varieties of coffee and those processing methods most in demand by the market.
- Value can be added by using GI and certification to increase the price.

Is there sufficient infrastructure availability?

There are significant infrastructure challenges in NTT that could restrain any coffee sector initiative.

- Current inability to containerise coffee at a port in Flores severely limits the development of a distinct market identity for Flores coffee and contributes to the isolation of Ruteng traders from international markets.
- The administrative requirements for Flores based export activities are considerable, involving coordination with both Kupang and Surabaya.
- Insufficient formal credit appears to be available in the coffee districts for agricultural investment and upgrading.
- Road construction to remote coffee-growing villages is likely to be an issue, limiting accessibility and the ability of coffee value chains to transfer price incentives to farmers.

What is the scalability and transferability potential?

Successful initiatives in coffee growing districts in Eastern Indonesia can definitely be expanded to other areas in Indonesia.

- Successful Arabica efforts in East Java, Flores can be expanded to Arabica growing areas in other provinces in Java, in Sulawesi, Sumatra and possibly to Papua and West Papua, Sumba and West Timor.

- Efforts with Robusta can likewise be expanded to lower elevation areas with coffee sector potential in Eastern Indonesia (e.g. Sumbawa, Alor, West Timor, Lombok, etc.) and to other parts of Indonesia.
- However, the coffee sector in other parts of Java, in South Sulawesi and in Sumatra is likely to be well in advance of Eastern Indonesia.