Rapid Industry Analysis of Banana and Calamansi
Linking Small Farmers to Market (LSFM)

Based on the PAG meeting with the research team and the rapid industry analysis carried out for both commodities, calamansi is chosen as the focal commodity for this project.

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Banana (2003 data)</th>
<th>Calamansi (2005 data)</th>
</tr>
</thead>
</table>
| **Productivity**   | • Annual production=5,368,977 mt  
                     • Area planted=409,831 has  
                     • Productivity=13.10 mt/ha or 13,100 kg/ha | • Annual production= 54,882 mt  
                                                                                    • Area planted=20,022 has  
                                                                                    • Productivity=7.74 mt/ha or 7,740 kg/ha |
| **Returns to farmers** (2003 data) | • Cost = PhP2.77/kg  
                                          • Farmgate price (ave) = PhP4.99/kg  
                                          • Revenue = PhP65,369/ha  
                                          • Profit = PhP29,082/ha  
                                          • Profit-cost ratio = 0.80 | • Cost = PhP25,002/ha or PhP3.23/kg  
                                                                                    • Farmgate price (ave.) = PhP13.23/kg  
                                                                                    • Revenue = PhP102,400/ha  
                                                                                    • Profit = PhP77,398/ha  
                                                                                    • Profit-cost ratio = 3.09 |
| **Demand and supply projections** | Top producers:  
                                • Davao del Norte, Compostela Valley, Davao del Sur, North Cotabato, Lanao del Norte  
                                • 5.9% average increase in production from 2000 to 2007  
                                • 4.2% average increase in farmgate price from 2000 to 2007 | Top producers:  
                                                               • Mindoro Oriental, Quezon, North Cotabato, Agusan Del Sur, Nueva Ecija, Cagayan, Zamboanga Sibugay, Batangas, Guimaras  
                                                               • 1.5% average increase in production from 2000 to 2007  
                                                               • 7.0% increase in farmgate price from 2000 to 2007 |
| **Commodity viability** | Wholesale market as fresh fruit  
                                      • Can be processed (puree, concentrate, juice, jam, chips)  
                                      • Raw input for other products such as bread, wine, sauce, ketchup, vinegar, etc.  
                                      • Fiber can be used as raw material for handicrafts, carpets, baskets, paper, etc.  
                                      • Leaves can be used for wrapping  
                                      • 34% of total production is exported in 2006 | Wholesale market as fresh fruit  
                                                                               • Can be processed (puree, concentrate, juice, powder)  
                                                                               • Raw input for other products such as soap and other cosmetic products  
                                                                               • Food, drinks, and beverage requirements of hotels and restaurants  
                                                                               • 0.005% of total production is exported in 2006 |

<table>
<thead>
<tr>
<th>PhilDHRRA Member-NGOs</th>
<th>Mangyan Mission</th>
<th>XAES, Mangyan Mission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner Farmers Organizations</td>
<td>TriFED</td>
<td>ZASIHVAC, TRIFED, Nazareth Women’s Cooperative, SALIKA</td>
</tr>
</tbody>
</table>
The table above shows the comparison of banana and calamansi in terms of various selection criteria. Data are culled from the Bureau of Agricultural Statistics (BAS).

One must take note of the time differential of the data. The available data from BAS for banana is for 2003 and 2005 for calamansi. In this comparison, productivity is measured on the volume of production per hectare of farmland. Banana planting yields 13,100 kg per hectare while planting calamansi yields a lower volume of 7,740 kg per hectare. However, in terms of returns to farmers, calamansi yields a higher profit of PhP77,398 per hectare of production compared with banana (PhP29,082/ha). This is due to a higher farmgate price of calamansi (PhP13.23/kg) compared with banana (PhP4.99/kg), though calamansi has a higher production cost (PhP3.23/kg) than banana (PhP2.77/kg). Therefore, calamansi production will provide higher earnings for small farmers. Calamansi growing is also more profitable, given its higher net profit-cost ratio of 3.08 compared to banana (0.80).

In terms of demand and supply projections, calamansi production increased at an average of 1.5% from 2000 to 2007. Banana production, on the other hand, has a higher average increase in production at 5.9%. However, the source of the commodities should also be taken into account. Considering the provinces with the most volume of banana produced, they are all situated in Mindanao. For calamansi, the top producing provinces are situated in two island groups, Luzon and Mindanao. Therefore, production of calamansi can be sustained even if disturbances in production such as typhoons and pests occur in the Mindanao area. This is the current production trend for calamansi. For instance, Zamboanga Sibugay is one of the provinces with the highest increase in the volume of production for the past years. BAS data shows that the province has the highest percentage increase in calamansi production for all provinces from 2004 to 2005, at almost 400% (i.e. from 547 mt in 2004 to 2,745 mt in 2005). Two municipalities in Zamboanga Sibugay contribute to the province’s high production, these are Siay and Kabasalan. In addition, Zamboanga Sibugay is the only province that has a whole year-round supply of calamansi because of its favorable climate. In addition, looking at the average increase in farmgate prices, calamansi fared better at 7.0% compared to banana (4.2%). This could be an indicator that there is an increasing demand for calamansi from 2000 to 2007.

In terms of commodity viability, both calamansi and banana prove viable given their various uses as end-products or raw inputs to other processed foods. Both commodities cater to local and international markets, but a higher percentage of banana is exported (34%) compared to calamansi (0.005%). Given that the project intends to capture and provide sufficient supply to the local market rather than to the international market, calamansi is more preferred. Presence of networks/partner NGOs that specialize in the marketing and production of the chosen commodity is one of the most important selection criteria. It is important for the efficient and timely
implementation of the project in the selected areas. This is where calamansi plays an advantage. The Xavier Agricultural Extension Services (XAES) is one of the PhilDHRRA members in Zamboanga Sibugay that undertakes marketing activities for calamansi. For instance, the Productivity towards Achieving Economy of Scale and Profitability of Agricultural Production among marginal and poor farmers in the 3 Barangays of Siay (PACES PRAP), Small Farms Marketing Program (SFMP) and Optimizing Market Opportunities for Fresh Fruit and Processed Calamansi Puree for the Benefit of Farmers was carried out by XAES in the barangays of Siay, Zamboanga Sibugay. The selection of calamansi as a focal product for the project with XAES as partner organization is also advantageous given the trend in calamansi production as reflected in fluctuating farmgate prices. The figure on page 2 shows declining prices from May to October, when national production is low due to the rainy season. Prices start to increase again from November to January and reach its peak in May. It is worth noting that these are the dry months where calamansi growing is favorable. As earlier mentioned, Zamboanga Sibugay is the only province where calamansi is planted the whole year. Marketing of calamansi from Zamboanga Sibugay to other provinces will contribute to make the prices more stable. No monthly data of farmgate prices is available for banana so no comparison can be made. In addition, another PhilDHRRA member, Mangyan Mission, is based in Oriental Mindoro, which is one of the top-producer and supplier of calamansi in the country. On the other hand, partner organizations of PhilDHRRA with direct link to banana marketing include TriFed and Mangyan Mission. However, the niche of the organization in the total market for banana may not be that considerable. Using the selection criteria and the comparisons made above, the PAG selects calamansi as the focal commodity for the project.