

**COMMERCIALIZATION OF ‘MENGKUDU’ JUICE  
(*Morinda citrifolia* L.) AS HEALTHY PRODUCT\***

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**Background**

Mengkudu (*Morinda citrifolia* L.) or Noni fruit or Pace is a kind of fruit, which is very familiar in used as a raw material for traditional medicine in Indonesia that is called as ‘jamu’. A major distinctive characteristic of the fruit is that the very stinky flavour, uneven shape, yellowish colour, and all parts of the tree are assured to have benefit as medicine, some local people known the fruit as “a pain killer tree”. In Indonesia, around 20 varieties of mengkudu/noni are found and being cultivated, some are deliberately cultivated some are wildly grow. *Morinda var.* is famous as the queen of mengkudu/noni fruit; grow favourably in Bogor.

However, the very precious fruit was processed and utilized as a medicine traditionally in a quite limited area. For decades they were treated as raw material for some home industries and then they were marketed to the limited market. As a result of this situation mengkudu/noni fruit did not consider as fruit that has good economic value. In contrast to that, scientific research showed that mengkudu/noni is very rich in term of curing elements.

The processing technologies of the fruit and its commercialisation were developed in collaboration with the Agro-industrial Technology Department, Faculty of Agricultural Technology – Bogor Agricultural University (IPB), later called as TIN-FATETA, IPB.

This research was an integrated and applied research, aimed generally to create added value to the fruit. There were several phases in commercialising an innovation such as this ‘mengkudu’ product i.e. Market research; Technology Selection, Evaluation, and Adaptation; Feasibility Study (technical and financial feasibility); Development of Institutional Arrangements; Technology Transfer and Management; Commercial Pilot Operation; Adaptive Planning Process and Business Evaluation.

This paper focus mainly on the marketing aspect of the commercialisation phases, the specific objectives of the research were to reposition mengkudu/noni juice in the consumer’s mind, to identify consumer preference toward mengkudu/noni juice product and to design marketing strategies for mengkudu/noni juice product.

TIN-FATETA, IPB, through its laboratory of Business and Agro-industrial Application (BAA), entered into an agreement with the private company to jointly implement a win-win commercial collaboration. The collaboration initiated a household-based ‘mengkudu’ processing enterprise in Bogor.

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\* Paper presented at the International Symposium-Cum-Workshop, Hanoi, Viet Nam, October 14-18, 2002

## **Product Brief**

Some literatures named 'mengkudu' fruit as *Indian mulberry* or *noni fruit*. From botanical point of view, the tree is an annual plant and belongs to the family of *Rubiaceae* (Sastraprdja *et all*, 1978).

Several product categories can be produced from the fruit processing lines commercially, mostly the products are categorized as medicated product. As an example from its juice processing line, the main produce is healthy mengkudu juice; the side products from fermentation process can be processed to become medicated cosmetics such as soap, shampoo, skin powder etc. and the waste components mostly processed to become fertilizer and animal feed.

The 'mengkudu' juice which is now commercially distributed to the market claimed as an Indonesian healthy drink, provide several benefits in preventing and curing some health problem especially related to the situation of prolong exhausted.

From laboratory analysis has been proven that mengkudu/noni juice contained mostly alkaloid especially *xeronine* which has capability in increasing cell performance helping our body from getting tired so easily, *soranjidol* is a derivative of *antraquinon* functioning as *althelmintic* (asmatic problem), and other elements used as components in cosmetics formulation especially cosmetics for skin problem, and many other natural elements.

To produce high quality and hygiene 'mengkudu' juice, our processing process followed the standardisation for industry and health. Two types of final product are known in the market and consumers most prefer i.e. 'mengkudu' juice mostly consumed by the so called older and classical consumers and 'mengkudu' capsule more attracted to what is so called younger and more active consumers.

## **Market Research**

BAA adopted the commercial market research (CMR) process in obtaining the information to be used in designing the operational plan for integrated mengkudu production, processing, and marketing program for the enterprise.

The methods employed in implementing the CMR were directed toward obtaining the following critical information regarding the consumer buying behaviour, consumer perception toward the 'mengkudu' product, product awareness, consumer preferences in relation to the nature healthy products and market of the healthy products in general. Desk research, focused group discussion (FGD), and market survey were carried out. Samples were collected using combination of 'judgemental sampling' and 'quota sampling' (150 consumers respondents, entrepreneurs, experts). Then, data and information were analysed using Delphi approach or expert judgment, tabulation and SIMALTO scale (Simultaneous Multi Attribute Level Trade Off).

The result from the market survey confirmed the earlier assumption that stinky flavour, the 'non-modern' product's perception and lower quality image due to the fact that products were produced from home-industries level have resulted in limited market coverage – older generation consumers and middle to low level market segment is a major market. The results also identified possible market entry points to

wider market coverage and determined the product attributes preferred by consumers from various market segments.

As for the product awareness and consumer's preferences, results showed that 36 % of the respondents do not aware of the availability of the product, 77% of the respondents are aware of the product merit and willing to consume but they found some difficulties in getting the product as they expected. Most respondents prefer a very high quality product –hygienic and safe packaging, practical size/volume, no preservatives and chemical components added, reduce unpleasant original flavour/stinky flavour without losing its merits. With this market figure, market opportunities are wide open then to develop market is possible.

Research also suggested that if the new market –middle to upper layer market- is going to be a new target market to enter then the pricing strategy should be change. It was recommended to implement the premium pricing strategy. As the consequences of using premium price policy, all of the other 3P's strategies (**P**roduct, **P**lace and **P**romotion strategies) are affected most probably need some changes.

Recommendations towards its promotion-mix strategies were to utilize benefits from 'back to nature campaign', which had been introduced since some times ago. The company suggested to implement the 'pull strategy' the promotion activities and intensified their 'below the line' promotion category, an example: sponsoring some events that related most with the health issues. To make the promotion activities effective and efficient, they have to be supported by intensive selected-distribution especially since a new target market –middle to upper segments market- is expected to be the company's new main contributor to its revenue.

Now days, the 'mengkudu' juice has become an alternative safe and healthy product, consumed not only by lower layer market segment but also preferred by middle to upper layer market segment, and as a result that mengkudu/noni fruit is in demand then of course this has increased its price as well.

The research has produced not only a single effect but rather has multiplier effects, creating job availabilities, help to increase income or welfare of the farmers, revitalizing home industries and now mengkudu/noni juice is potential export commodity. The key success factor of our collaboration in implementing the integrated research was communicable dialog and maintains sustainable win-win networking.

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