



Republic of the Philippines  
Department of Agriculture

Upland Development Programme in  
Southern Mindanao (UDP)

**A MARKETING EFFICIENCY STUDY  
ON**

**LACATAN**

**IN SITIO ABGANG-BATO, SUFA-TUBO,  
GLAN, SARANGGANI**

MAY 2001

## PREFACE

This report is one of a series of market efficiency studies conducted in the UDP-covered areas for selected commodities. The marketing efficiency of lacatan in Sitio Abgang-bato, Sufa-tubo, Glan, Sarangani was evaluated through the deconstruction of the existing marketing margins. Recommendations to improve marketing efficiency are herein offered.

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Report data were gathered from a series of personal and group interviews with farmers and traders of lacatan in Sitio Abgang-bato, Sufa-tubo, Glan, Sarangani and General Santos City, respectively. The time and effort that the respondents have placed into this study are acknowledged. The following were the farmer- and retailer-respondents of the study:

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## DEFINITION OF TERMS

Cash costs	-	costs where actual money is involved.
Cash returns	-	the earnings, where actual money is involved, from the sale of the farm produce.
Depreciation	-	the expense brought about by the wear and tear of a piece of equipment, building or tool used in an enterprise for a given period of time.
Exchange labor	-	the value, non-monetary in nature, of the work (in man-days) put in by neighbors, friends or other laborers in exchange for the farmers help with similar farm activities in their respective farms.
Given away	-	the value, non-monetary in nature, of the farm produce given out by the farmer to others without any monetary payment.
Hired labor	-	the cash expense for engaging the services of farm laborers.
Home consumption	-	the value, non-monetary in nature, of the farm produce consumed by the farmer and his family.
Losses/shrinkage of produce	-	the value, non-monetary in nature, of the damages and spoilage sustained by the produce.
Market information	-	basic information on prices and quantities traded of major commodities, from all markets—assembly, wholesale and retail.
Marketing channel	-	the inter-organizational system composed of interdependent institutions tasked in moving the product from production to consumption.
Marketing efficiency	-	the maximization of the input-output relationship where inputs refer to resources (land, labor, capital) used in moving the products from point of consumption to the point of production and output referring to consumer satisfaction on goods and services made available in the market.
Marketing margin	-	the difference in prices between the different levels of

		the marketing system.
Marketing	-	series of services performed in moving the product from the point of production to the point of consumption.
Net farm income	-	returns of the use of capital and labor. The overall profit of the farm after all the expenses, cash and non-cash, have been paid off.
Non-cash costs	-	costs items used in the production process wherein no direct outlays occurred or the costs incurred are not monetary in nature.
Non-cash returns	-	the value, non-monetary in nature, of the farm produce consumed by the farmer and his family or those given away.
Opportunity cost of capital	-	the price of foregone opportunity in the use of the capital invested in the enterprise. It is usually pegged at the current savings interest rate.
Point of consumption	-	last sale of the product.
Point of production	-	point of first sale.
Profit margin	-	the return to the middlemen for their entrepreneurship, the risks and the cost of money.
Return on investment	-	measures the amount of cash that the entrepreneur gets from the capital investment after first paying the opportunity expenses on the value of family labor and management. It also determines how much money the producer got in return for every one peso invested.
Unpaid family labor	-	also called own labor. The value, non-monetary in nature, of work (valued in man-days) by the farmer and his family.

# LACATAN

## INTRODUCTION

1. Banana is one of the top products exported by the Philippines. It has consistently ranked next to coconut oil and prawns. The bulk of exports, which is mostly the *Cavendish* variety, come from Mindanao.
2. There are about 227 banana cultivars in the country. The most popular varieties for local consumption are *bungulan*, *lacatan*, *latundan*, *Saba* and *Cavendish*.
3. Southern Mindanao was the top regional producer of banana from 1989 to 1993. During the period, it was the only producing region to ably maintain a harvest of more than a million tons annually to sustain the market demand.
4. Of the three banana varieties being traded in Southern Mindanao, i.e., Cardava, Lacatan and Latundan, Lacatan is identified to be the most marketable.
5. Banana has various economic uses. The fruit, which is rich in vitamins, minerals, and other nutrients, serves as a dessert.
6. About 30% of the household in Sitio Abgang-bato, Sufa-tubo, Glan are into banana production. The whole barangay produce 2000 kg of Lacatan variety per week.
7. The marketing efficiency study for lacatan in Sitio Abgang Bato, Sufa-tubo, Glan was conducted in March 7, 2001.

### *Objectives*

8. The main objective of the study is to assess the impact of existing marketing systems of lacatan vis-à-vis income of the farmers.
9. Specifically, the study aims to determine the levels of participants in the marketing chain of lacatan;
10. Determine the marketing practices involved in terms of storage, handling, pricing, delivery systems and terms of payment;
11. Determine the percentage of consumer price that the producer receives through the deconstruction of marketing margins of lacatan at each level in the system, exclusive of production costs;
12. Identify strengths and weaknesses of the existing marketing system of lacatan; and
13. Determine appropriate marketing interventions needed to improve economic efficiency of lacatan in Sitio Abgang-bato, Sufa-tubo, Maitum.

## *Methodology*

14. From the initial agribusiness profile of UDP-Sarangani area, 12 lacatan farmers were identified; five of which come from Sitio Abgang-bato, Sufa-tubo, Glan. Complete enumeration was done in the sitio for the interview.
15. The farmers were asked about their production and marketing practices, production and marketing costs of lacatan. They were also asked on available market information with emphasis on how to improve their production and marketing practices to increase the farmers' income.
16. The respective buyers of lacatan from each farmer were then traced accordingly.
17. The traders were, in turn, asked about their marketing, costs, and the problems and constraints they have encountered in the marketing of lacatan.
18. The marketing margins (MM), or the total value added to the lacatan per kilogram as it moves along one marketing channel to another, were then deconstructed and the profitability of each marketing participant was also analysed. The Net Farm Income (NFI) of the farmers was determined. An NFI greater than zero (0) would mean that the production and marketing activities of the lacatan farm is profitable, whereas an NFI less than zero (0) would mean that the farm is at a loss.
19. The Return on Investment (ROI) of the traders was compared with the opportunity cost of capital, pegged at the current savings interest rate of eight percent (8%) per annum. An ROI higher than the opportunity cost of capital would mean that marketing lacatan is more profitable than just saving the trader's money in a bank. While an ROI less than the opportunity cost of capital would mean that it would be more profitable for the trader to invest his money in a bank rather than spend it on marketing lacatan.
20. The percent share to the consumer peso of each marketing participant was also determined by getting the percentage of the marketing participant's selling price (in the case of traders, less their buying price) relative to the final buying price of the consumer. This indicates the proportion of the final buying price that goes to each marketing participant for lacatan.
21. Moreover, focused group discussions (FGDs) with key informants and selected farmers were conducted to probe into the importance and the demand for market information in each province. This provided rapid feedback on the available market information and the information dissemination strategies existing in the area.
22. Also, key informants such as the Municipal Agriculturists and the Agricultural Technicians were interviewed to obtain an overview of the local agriculture industry.

### *Limitations and Constraints*

23. Upon interview, the farmers only recalled past production level, income, farm tools and equipment used, as there were no records kept of their operations. Thus the cost and return that were analyzed were only estimates. The Return on Investment (ROI) was excluded on the analysis of the farmer's income due to the ambiguity of the values arrived at, as some factors on capital investment were not quantified. For instance, land valuation was excluded because none of the farmers hold titles to the land that they cultivate. Land, therefore, was not considered a fixed investment in this enterprise and was merely considered as an expense through the credit of land cost (land tax if owned, rent if tenanted).

24. On the marketing aspect, the respondents interviewed were the middlemen identified by the farmers. Most of who also based their answers on their memories since they too do not keep records of their marketing operations.

25. On the analysis of the marketing efficiency of the farmers, only the Net Farm Income (NFI) analysis was utilized since the available data could only allow for this kind of analysis and not the more complicated input-output efficiency analyses.

26. Lastly, the size of the lacatan market, specifically, the estimation of demand was not included in the study.

#### *Margin of Error*

22. Aside from the UDP Agribusiness Profile, there are no other available data on the population size of lacatan producers in the area. The margin of error on the analysis, therefore, cannot be established since the formula requires not only the sample size, but the population size as well.

## THE MARKETING SYSTEM OF LACATAN

### *Marketing Channels*

27. The marketing participants involved in the lacatan commodity system in Sitio Abgang Bato, Barangay Sufa-tubo, Glan are as follows;

a. Farmer

Planter and owner of lacatan trees who sells to assembler-wholesaler and consumer.

b. Assembler-wholesaler

Buyer of banana from the farmers and later sell either to wholesaler-retailer or retailer.

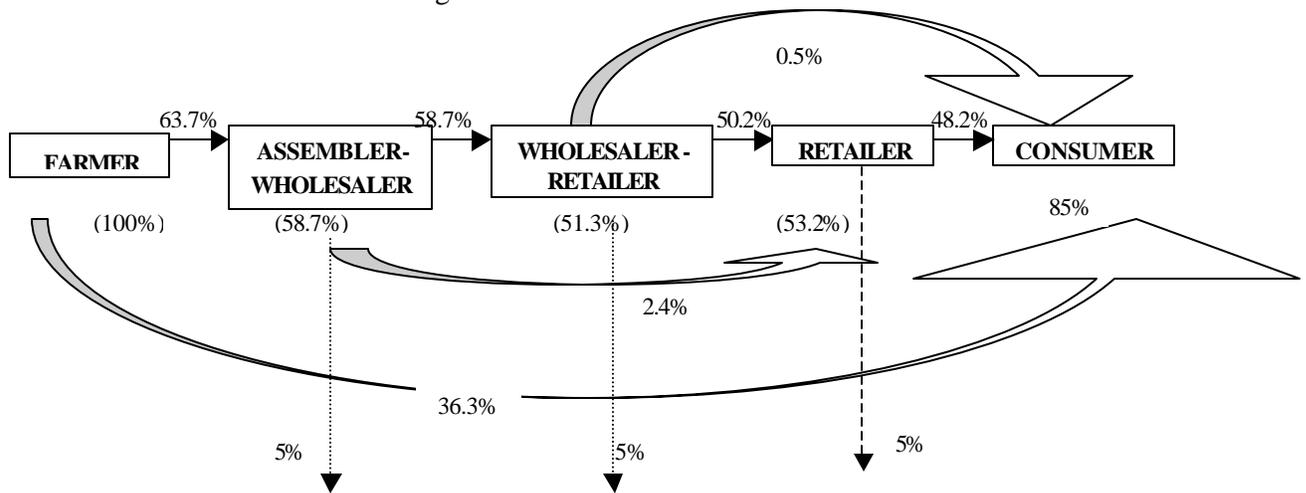
a. Wholesaler-retailer

Buyer of bulk of banana from the assembler-wholesaler and later sell to retailer and consumer.

b. Retailer - traders who buys from farmers and assembler-wholesaler and sell to the consumer.

i. Below is the product flow of lacatan.

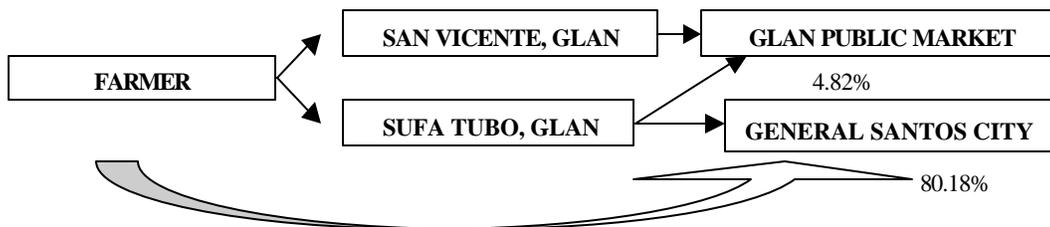
Figure 1. Product flow of lacatan



28. Based on Figure 1, it can be seen that farmer sells either directly to the assembler-wholesaler or to the retailer. The assembler-wholesaler would sell to the wholesaler-retailer or directly to the retailer while the wholesaler-retailer sell to the retailer or directly to the consumer.

29. At each level, there is a 5% loss incurred in the marketing of goods. This is mainly by transportation and storage conditions.

Figure 2. Geographical flow of lacatan.



30. Figure 2 traces the geographical flow of lacatan. Consumers from the Glan town proper and General Santos City purchased lacatan produced in Sitio Abgang Bato, Barangay Sufa-tubo, Glan.

### Marketing Practices and Costs

31. Lacatan is harvested when it is mature but still green in color. After harvesting, the farmers then clean, select and package the lacatan into sacks. They prefer selling the fruit right after harvest and avoid storing to immediately earn cash. The produce is normally sold by “hands” (*sipi*). Each hand averages around 20 fingers and weighs approximately two kilograms.

32. Farmers usually deliver their produce to the trading sites in the house of the assembler-wholesaler within the barangay, or directly to the consumer in the town market of Glan or General Santos City. Since the traders live near the area, from the farm goods are transported on foot or by horse. In transporting the product to the town market, there are *jamboleros* or agents waiting for the farmers at the bus terminal of Glan. Farmers shy away from these buyers since they usually offer minimal prices and are very persistent.

33. There are two levels of traders in the town of Glan where farmers sell their produce to: Assembler-wholesalers living in the barangay and Wholesaler-retailer in the public market. After the banana is delivered to them they would then grade the produce. They grade it either as good (attractive to the eyes, and the fingers are close together), Rx (malformed finger and too short), and rejects (inferior quality to the Rx and are usually fed to livestock).

34. The assembler-wholesaler would deliver the banana to the stalls of the wholesale-retailer. They would usually deliver using a passenger jeepney.

35. The wholesaler-retailer usually stores their lacatan for 2 days to ripen and sell the fruit at a higher price. They also stock their fruit so they may sell in larger volumes. They usually wait till most of the farmers have sold their produce before they dispose their stocks in General Santos City or to the public market.

36. Table 1 shows the marketing cost for every marketing level.

Table 1. Marketing costs for different market levels (P/kg).

MARKETING PRACTICES	FARMER	ASSEMBLER WHOLESALE	WHOLESALE RETAILER
Cleaning	0.05	<i>nil</i>	<i>nil</i>
Grading/Sorting	0.04	<i>nil</i>	<i>nil</i>
Packaging	0.03	<i>nil</i>	<i>nil</i>
Transportation	0.55	0.98	0.5
Labor	<i>nil</i>	0.25	0.38
Packaging Materials	<i>nil</i>	0.29	0.18
Fees and Payments	<i>nil</i>	<i>nil</i>	0.19
Total Cost	0.67	1.52	1.25

37. It shows that the largest marketing cost is incurred by the assembler-wholesaler due to the high transportation cost in transferring the goods to the wholesaler-retailer. Wholesaler-retailer posted a P1.25/kg cost while the farmer has a P0.67/kg marketing cost.

#### *Price Formation*

38. Being a perennial crop, prices of Lacatan are fairly stable year round. The ongoing average farm gate price in the area is P2.50 per kilogram.

#### *Marketing Margins*

39. The marketing margin for each participant in the trading of lacatan was identified and presented in Table 2. Also the Net Farm Income (NFI), established in Appendix A, is presented.

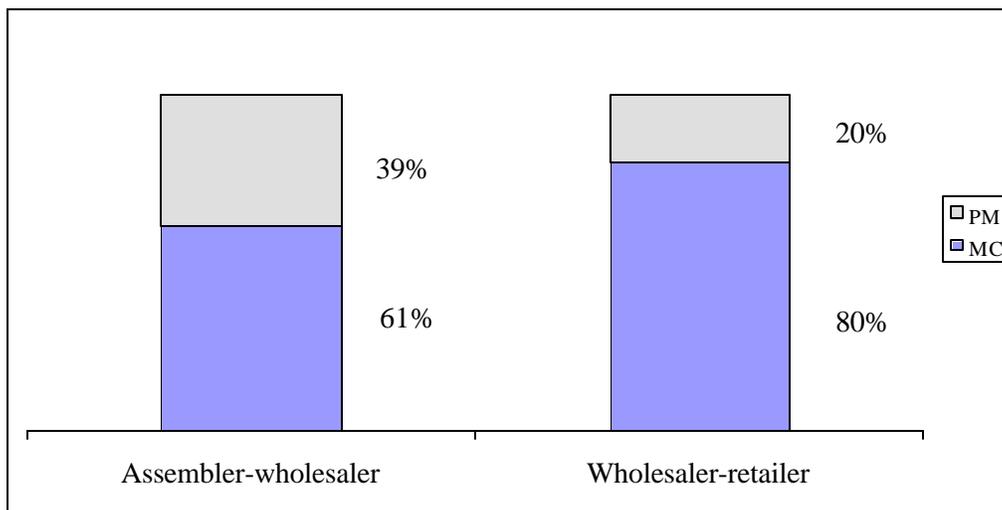
Table 2. Marketing margins and income for lacatan at different marketing levels (P/kg).

ITEM	Farmer	Assembler/Wholesaler	Wholesaler/Retailer
Selling Price	2.50	5.00	7.57
Buying Price	<i>na</i>	2.50	6.00
Marketing Margin	<i>na</i>	2.50	1.57
Marketing Cost	1.52	1.52	1.25
Profit Margin	<i>na</i>	0.98	0.32
Net Farm Income	1.53	<i>na</i>	<i>na</i>
MC as % of MM	<i>na</i>	61%	80%
PM as % of MM	<i>na</i>	39%	20%
% ROI	<i>nil</i>	1.84%	0.03%
Opportunity Cost of Capital	<i>na</i>	8%	8%

40. This shows that each level in the marketing channel enjoys a minimal profit for every kilogram of lacatan they sell.

41. Graphically, the marketing margins are illustrated in Figure 3.

Figure 3. Marketing Margins of lacatan.



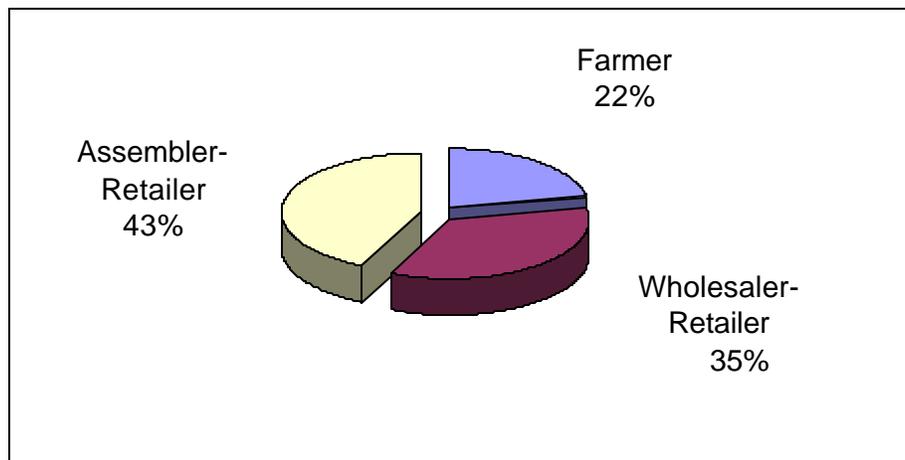
42. The marketing cost of the assembler-wholesaler covers 61% of the marketing margin while profit is at 39% (Figure 3). On the other hand, the wholesaler-retailer's marketing cost is 88%, while the profit margin is 12% of the marketing margin. Although the buying price of the traders for the lacatan is inexpensive, they also sell it at a minimal price.

Table 3. Percentage share of lacatan prices to the consumer peso.

MARKETING PARTICIPANTS	SELLING PRICE (P/kg)	% SHARE
Farmer	2.50	22
Assembler-Wholesaler	5.00	35
Wholesaler-Retailer	8.75	43

43. The breakdown of the consumer peso is presented in Table 3 and Figure 4. This shows that 43% goes to the assembler-retailer, 35 % for the assembler-wholesaler and 22% for the farmer.

Figure 4. Percentage share of lacatan prices to the consumer peso



## STRENGTH AND WEAKNESSES

44. A major strength is the established marketing system. The different marketing participants have varied choices to sell their produce to. For instance, farmers could sell either to the top assembler-wholesaler or directly to the consumer of their choice. The assemblers, on the other hand, have the choice of buyers between the wholesaler-retailer and the retailers.

45. However, several problems in the marketing system of lacatan have been identified. For example, the poor quality of the road leading to Barangay Sufa-tubo discourages passenger vehicles, thereby increasing transportation costs.

46. It was also determined that the farm-gate price of lacatan are dictated by the traders, this is largely due to the low bargaining power of the farmers as the relative volume of their production is low.

## OTHER KEY FINDINGS

47. Based on trader interviews, it was established that there is a year-round, stable demand for lacatan in the area. Because of this production is always assured of a ready market.

## CONCLUSION

48. With a P1.53 per kilogram Net Farm Income (NFI) we could say that the farmers have profit in their lacatan production, thus, producing efficiently.

49. On the trader's side, results showed that the two marketing levels namely assembler-wholesaler and wholesaler-retailer incurred a much higher cost as compared to their profit making their business perform inefficiently. Because of the traders' low ROIs compared to the opportunity cost of capital, it indicates that the traders' marketing activities for lacatan are inefficient. This means that it is more profitable to invest in a bank than to market lacatan from the area.

## RECOMMENDATIONS

50. The main recommendation is for the farmers to be taught efficient marketing activities such as proper packaging and handling of their produce, and knowing the proper grading system.

51. More passenger vehicles should also be encouraged to traverse the Sufa-tubo roads so that transportation costs could be decreased.

52. Lastly, to improve on the welfare of the farmers, an agricultural cooperative or organization should be formed to assist the farmers' production and marketing of lacatan.

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APPENDIX A. Cost and returns per unit of lacatan in Sitio Agbang-bato, Sufa-tubo,  
Glan.

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ITEM	P/kg
<b>RETURNS</b>	
Cash	
Sales	2.50
Total Cash Returns (A)	2.50
Non-cash	
Home consumption	0.32
Total Non-cash Returns (B)	0.32
<b>TOTAL RETURNS (C )</b>	<b>2.82</b>
<b>COSTS</b>	
Cash	
Hired labor	0.16
Transportation	0.51
Land cost	0.02
Total Cash Costs (D)	0.69
Non-cash	
Unpaid family and/or exchange labor	0.48
Depreciation	0.05
Losses/Shrinkage of produce	0.01
Opportunity cost of capital	0.06
Total Non-cash Costs (E)	0.60
<b>TOTAL COSTS (F)</b>	<b>1.29</b>
Net Returns Above Cash Costs (C-D)	2.13
Net Farm Income	1.53

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APPENDIX B. Breakdown of costs per unit of lacatan in Sitio  
Abgang-bato, Sufa-  
tubo, Glan

ITEM	P/kg
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I. Production Cost	
Land cost	0.02
Depreciation	0.05
Own labor	0.40
Hired labor	0.09
 Total Production Cost	 0.56
II. Marketing Cost	
A. Cleaning	
Own labor	0.03
Hired labor	0.01
Losses/shrinkage	0.01
Sub-Total	0.05
B. Grading/Sorting	
Own labor	0.03
Hired labor	0.01
Sub-Total	0.04
C. Packing	
Own labor	0.02
Hired labor	0.01
Sub-Total	0.03
D. Transportation	
Hired labor	0.04
Transportation	0.51
Sub-Total	0.55
 Total Marketing Cost	 0.67
III. Opportunity cost of capital	0.06
 TOTAL COSTS	 1.29
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