Jurnal Manajemen Hutan Tropika Vol. 6 No. 1 : 51-59 (2000) **Artikel (*Article*)**

ANALYSES OF SOCIO-ECONOMIC AND PRODUCT'S MARKETING OF SOCIAL FORESTRY PARTICIPANTS IN KPH SURAKARTA

Analisis Sosial Ekonomi dan Pemasaran Produk Peserta Program Perhutanan Sosial di KPH Surakarta

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ABSTRACT

Setiap kebijakan yang bertujuan sosial sebagaimana halnya Perhutanan Sosial (PS) merupakan salah satu bentuk terpenting dari aplikasi ekonomi kesejahteraan. Penduduk miskin adalah target utama program PS karena mereka seringkali diidentikkan sebagai agen perusak dan perambah hutan. Ada dua capaian utama yang hendak dituju program PS, yaitu: pertama, program PS harus melibatkan penduduk termiskin dari yang miskin sebagai peserta program. Kedua, program PS harus dapat meningkatkan pendapatan masyarakat peserta program.

*Besarnya kontribusi pendapatan program PS terhadap pendapatan total peserta sangat bervariasi. Program PS dapat kurang berhasil akibat kesalahan dalam memahami fenomena sosial di masyarakat dan kurangnya perhatian terhadap perencanaan produksi dan strategi pemasaran***.**

INTRODUCTION

Planning in any social policy, such as social forestry, can be looked upon as an important form of applied welfare economics (Sharma, 1996). The poor people are targeted as project beneficiaries because they are often the agent of land and forest degradation and deforestation. It is assumed that forest conservation and management can be improved to the extent that the standard of living of poor are raised through social forestry. There are two central objectives that should be met to raise the standard of living of the poor through social forestry. First, social forestry projects should involve the poorest of the poor as participants in the social forestry project. Second, social forestry projects should provide adequate income support to project participants (Sunderlin, 1997). Sometimes, the social forestry program is unsuccessful. Major reviews of social forestry

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practices, such as agroforestry, often over look the issue, or only speculate on a broad range of general underlying causes (Coomes and Burt, 1997).

A combination of scientific curiosity and practical needs justifies this study. For forest products marketing, in this case social forestry products, the two most important driving forces behind research are further implementing theories and to satisfy the information needs in everyday operation. Marketing is also considered to be extremely important to business success when the forest business moves from the production-oriented philosophy towards a market-oriented philosophy (Sinclair, 1992).

The fundamental idea behind implementing theory and theory constructs in an applied sciences, is to be able to solve the problems on a theoretical level and then operating them to be applied in everyday business. In today's complex and rapidly changing environment it seems evident that no single discipline alone can give all the solution how to cope with that environment. Combinations of different disciplines are needed. This study examines the combination of socio-economic and marketing discipline. Both of these disciplines are very important when considering how a social forestry program can flourish or even survive in today's turbulent environment.

The objectives of this research are:

1. To understand the main socio-economic conditions that influence a successful social forestry program.
2. To understand marketing operations that have been done by social forestry participants and to determine suitable products.
3. To determine marketing mix strategies that are suitable for social forestry products.

METHOD OF RESEARCH

The research has been done in Tangen forest region, located at the administrative district of Sragen, Central Java, Indonesia. The process of rational decision making in social forestry can be organized according to the following steps: classification of the objectives, listing of feasible alternative options, prediction of the main consequences of each options, and selection of those option which achieve the best result in meeting identified objectives, on the basis of the chosen criteria (Sharma, 1996). The theoretical background for the study is constructed by combining socio-economic and marketing theories. In combining these two disciplines the objectives is to develop a more extensive background than is typically used in marketing literature. A basic assumption in this study is that the social forestry program has two orientations: socio economic and marketing oriented

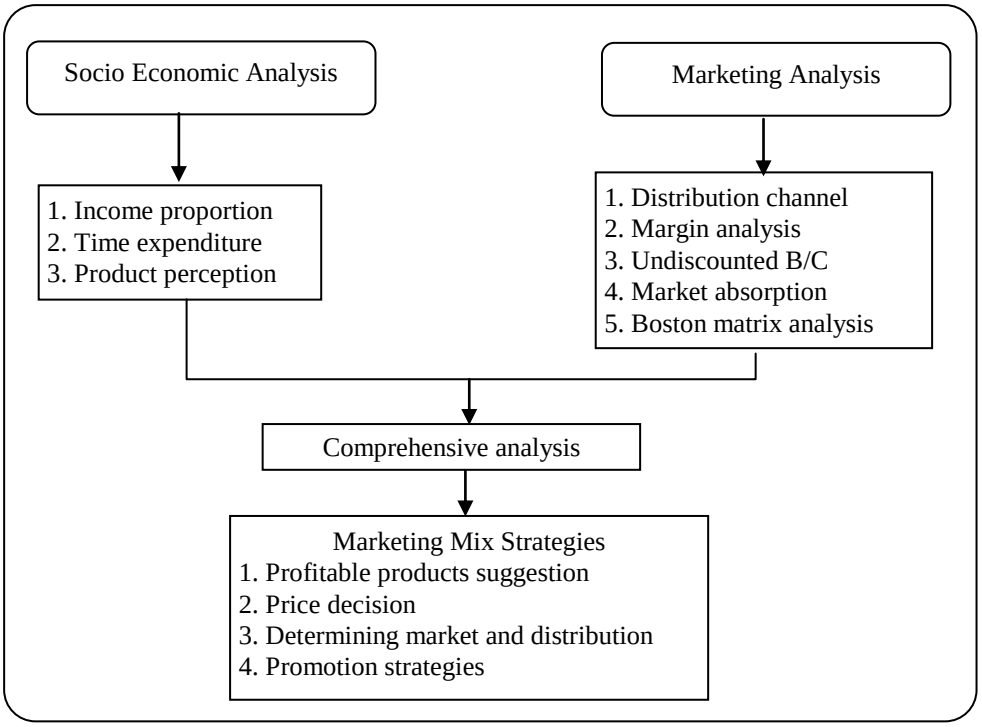

Figure 1. The General Framework of the Study

RESULT AND DISCUSSION

Socio-economic Analysis

The portion of income from social forestry contributing to the total income of social forestry participants differs greatly from place to place. In four RPHs of research sites, social forestry contribution for total income is less than the main salary

The higher the main salary tend to have a higher income from social forestry. It means the prosperous farmers tend to raise their income much more higher than the poors

It may be caused by a difference mentality behaviour. Prosperous farmers usually have a farmer's behaviour, while poor farmers tend to divide their time and energy for a multitude of income sources, inside and outside the agricultural sector. This forces them to look for work outside the village.

Marketing Analysis

The marketing channels of agroforestry products are as follows:

a. Farmer – Collector – Wholesaler – Customer (cassava, corn, peanut, chilli)
b. Farmer – Collector – Wholesaler – Retailer – Customer (cassava, corn, peanut, chilli)
c. Farmer – Wholesaler – Customer (chilli)
d. Farmer – Wholesaler – Retailer – Customer (chilli)

The marketing channels of Village Community Development Project:

a. Farmer – Collector – Merchant – Customer (cows and goats)
b. Farmer – Collector – Merchant – Retailer – Customer (duck's egg)
c. Farmer – Customer (compost)

Table 1. Proportion of Income Sources of Social Forestry Participants

Location	Average Annual Main Salary (Rupiahs)	Average Annual Additional Salary (Rupiahs)	Average Annual Social Fors. Cont. (Rupiahs)	Average Annual Income (Rupiahs)
RPH Tangen	825,000 (45%)	305,000 (17%)	694,000 (38%)	1,824,000 (100%)
RPH Bluntah	1,448,000 (54%)	152,000 (6%)	1,061,000 (40%)	2,664,000 (100%)
RPH B.Urip	1,101,000 (40%)	1,041,000 (37%)	644,000 (23%)	2,786,000 (100%)
RPH Jenar	2,985,000 (66%)	290,000 (6%)	1,241,000 (28%)	4,516,000 (100%)
Average	1,590,000 (54%)	447,000 (15%)	910,000 (31%)	2,947,000 (100%)

Table 2. Distribution and Average Percapita Income of Social Forestry Participants

Location	Under Poverty Line (%)	Higher than Poverty Line (%)	Percapita Income of SF Participant (Rupiahs)	Prosperity Level
RPH Tangen	75%	25%	441,000	Under Poverty Line
RPH Bluntah	50%	50%	662,000	Higher than Poverty Line
RPH B.Urip	70%	30%	584,000	Higher than Poverty Line
RPH Jenar	35%	65%	1,107,000	Higher than Poverty Line
Average	57.5%	42.5%	698,000	Higher than Poverty Line

Table 3. Proportion of Time Expenditure of Social Forestry Participants

Location	Main Occupation (Hours / day)	Additional Job (Hours / day)	Soc. Forestry Activities (Hours / day)	Total Time Expenditure (Hours / day)	Level of Time Expenditure*
RPH Tangen	2.4 (41%)	0.8 (14%)	2.6 (45%)	5.8 (100%)	Low
RPH Bluntah	2.9 (51%)	0.3 (5%)	2.5 (44%)	5.7 (100%)	Low
RPH B.Urip	2.3 (39%)	1.5 (25%)	2.1 (36%)	5.9 (100%)	Low
RPH Jenar	3.3 (46%)	0.5 (8%)	3.3 (46%)	7.1 (100%)	High
Average	2.7 (44%)	0.8 (13%)	2.6 (43%)	6.1 (100%)	Middle

The partial unit margin of social forestry participants for peanut is the highest Rp 867/Kg, followed by corn Rp 616/Kg, chili Rp 572/Kg, and then cassava is the lowest Rp 51/Kg. In contrast to the result of partial unit margin calculation, many farmers choose

cassava as a favorite product after corn. Observation in the field explains that the farmers in RPH Jenar could become an advanced because of presenting a good motivator. The motivator is a teacher with a high education background and also a real farmer.

Although they just have a little number of partial unit's margin, collectors and merchants tend to receive much more profit in the total margin. This is reasonable because collectors and merchants trade some amount of agricultural products in a bigger volume than farmers.

The partial unit margins of village community development program (VCDP) products for producers are consisting of: cow (Rp 400,000/individual), goat (Rp 250,000/individual), duck's egg (Rp 166/egg) and compost (Rp 27/Kg). Different with agroforestry products, the value of partial unit margin in the VCDP products cannot be compared to each other because each product has a different unit. To make a comparative analysis of margin, it is required to state a standard of unit cost for those VCDP products as in the following table.

Table 4. A Comparison of Farmer's Margin with Production Cost's Amount ca. Rp 1,000,000

	Products							
	Cow		Goat		Duck's Egg		Compost	
	No. unit (indiv)	Margin (Rp)	No. unit (indiv)	Margin (Rp)	No. unit (eggs)	Margin (Rp)	No. unit (Kg)	Margin (Rp)
	1	400,000	5	250,000	6,000	996,000	4,695	126,765
Harvesting Time	1 year		6 months		4 months		3 days	

The same production cost (assumed Rp 1,000,000) will give a different output of margin. Regarding the annual margin, production of compost is the best choice, followed by duck's egg breeding, goat breeding and cow breeding as the worst choice.

In reality, the social forestry participants chose goats and cows as their favorite investments rather than duck's egg or compost. This phenomenon cannot be explained only by economical reasons, but also by socio-cultural arguments. In Javanese village community cow and goat also symbolize a high social status. More than social status, cow also has an invaluable use as a farmer's help.

Because of a short period of harvesting time, the Benefit Cost Ratio is calculated without a discount factor. Regarding the result of B/C analysis in Table 4, it shows that all values of B/C are higher than 1. This means, all agroforestry products are feasible for production. Corn has the best B/C value and chili is the last choice according to the B/C value.

B/C analysis of the VCDP products also states that all products are feasible for production. Duck's egg has the highest value of B/C, followed by cow, goat and compost. Because of different harvesting period, those B/C values are not significant in comparison. In this condition, the harvesting period of a product is important to be considered beside the B/C value. The shorter harvesting period is the better product choice.

The following Table 5 informs that, except compost, all social forestry products are not able to be 100% absorbed by BKPH Tangen's market. Usually, most agroforestry

products are sold to merchants in the city of Sragen through a collector (*pemborong*), then these products will be distributed to other places by retailer. The role of *pemborong* in the agroforestry products marketing is very important. *Pemborong* is needed by farmers to help their product's marketing, but *pemborong* also tends to push down selling price of farmers. With local market absorption more than 65%, chili is not dependent upon *pemborong*. Although peanut has a high local market absorption, it is still dependent upon *pemborong* because of avoiding some first stage processing risks. Otherwise, corn and cassava are very dependent upon *pemborong* because of their low local market absorption which is less than 10%. It means, at least 90% of these products must be sold to *pemborong*.

Cow and goat are also very dependent upon cattle collectors (*blantik*) because their market absorption is very low. In a fact, marketing of cow and goat apparently has been never been a problem because farmers only sold these products when they needed cash

Market absorption of duck's egg in BKPH Tangen is practically zero, because all products are sold and taken by colectors to Sragen. Otherwise, compost has perfect market absorption. All of it (100%) are bought by Perum Perhutani according to purchasing order that was stated by agreement.

Table 6 explain that social forestry products that are involved to "The Star" quadrant are Peanuts and Compost. The Star is usually a newish product that has achieved a high market share and which is probably on balance more or less self financing in cash terms

Table 5. The Annual Market Absorption of Social Forestry Products in BKPH Tangen

Products	Unit	Market Absorption SF Products	Total Production SF Products	Percent Absorption SF Products
Corn	Kgs	64,714	1,058,722	6.11
Peanut	Kgs	259,717	384,470	67.55
Cassava	Kgs	79,601	1,741,149	4.57
Chili	Kgs	21,099	31,750	66.45
Cow	Individuals	0.05	13	0.38
Goat	Individuals	3.02	57	5.30
Duck's egg	Kgs	Sragen	15,930	-
Compost	Kgs	63,250	63,250	100.00

Table 6. Annual Growth and Relative Market Share of Social Forestry Products

Products	Annual Growth Rate (%)	Relative Market Share (... x)	Market Position (Boston matrix)
Corn	186.8	0.165	Question mark
Peanut	209.5	2.024	Star
Cassava	-26.1	0.151	Dog
Chili	106.3	0.052	Question mark
Cow	22.5	0.001	Question mark
Goat	47.4	0.006	Question mark
Duck's egg	0.4	3.287	Cash cow
Compost	128.6	>>>	Star

The Question Mark is a product which had not yet achieved a dominant market position, or perhaps it once had such a position and has slipped back. It will be a high user of cash because it is in a growth market. Corn, chili, goat and cow are products in the Question Mark quadrant. The cash Cows are leaders in markets where there is little additional growth, but a lot of stability. Duck's egg is the VCDP product in the Cash Cow quadrant. If the price of duck's fodder decreases, the position of duck's egg tends to shift into the Star quadrant. The dog has a small future and is often a cash drain on the company. The agroforestry product in the Dog quadrant is cassava.

CONCLUSSION AND RECOMMENDATION

Conclussion

1. The important aim of social forestry programs is to alleviate poverty among participating farmers. Applying the Sajogjo's poverty line concept, this research has shown that after increasing income from social forestry, the average per capita income of social forestry participants is higher than the poverty line. The income distribution, however, is still unequal. A large portion of social forestry participants still had households which could be categorized as "poor", even after the relative increase of income from social forestry.
2. The prosperous farmers tend to raise their income much higher than the poor. This might be caused by a difference in mentality behavior. Prosperous farmers usually have farmer's behavior while poor farmers have a behavior much closer to laborers than farmer due to landlessness.
3. Diminishing income from agroforestry (tumpangsari system) is usually recognized within the agroforestry system as well as at the research site. A canopy's shading problem is the most common reason, but it is rarely found in the research site because of the "management regime". *Management regime* is a kind of agroforestry systems which designates a specific land for agricultural crops with a relatively longer distance between forest stands. The reluctance of farmers to invest in their agroforestry plots, in terms of agricultural inputs and energy, is the most significance argument for the diminishing income of forest farmers in BKPH Tangen.
4. A highly educated motivator is needed for a success social forestry program, because he was synonymous with higher social status and a closer relationship with officials of both the village and Perhutani. The motivator is usually a village teacher with high educational background and also a real farmer, who gives an explanation not only theoretically but also by facts in the field.
5. A much practiced system in the sale of agroforestry products is the "borongan" system. In this system, crops are bought before harvesting and the harvesting costs are paid by the buyer. Although this system often pushes down the farmer's price, it is generally practiced because of cost efficiency and minimizing risks.
6. Based on the marketing vision, peanut has the highest average score, followed by corn. Chili and cassava are not so good for agroforestry, but both of them are still feasible for cultivation. Because of high risk and uncertainty, chili was produced by advanced

farmers only. Cassava tends to be chosen by most traditional forest farmers because of minimal risk, a simple technique, and a saving function. Compost is the best priority for VCDP. Duck's egg and goat have the same score in the comprehensive analysis. Duck's egg is a better choice than goat when the marketing aspects are more emphasized than social perception. Cow breeding is the last priority to be suggested for VCDP.

Recommendation

1. Serious attention should be paid to marketing as well as production aspects. The marketing mix strategy is required to raise social forestry's contribution.
2. A cropping plan should be involved in the agroforestry program by considering both value of product and suitability of forest land. Peanut and corn are suggested as a major crop while chili and cassava may be considered as to be a minor product in a combined crops.
3. Duck's egg and compost are recommended to be developed as main priority products in the VCDP. Cow and goat, however, is still possible to be bred by a limited number. Because of low market share, five products -corn, cassava, chili, cow and goat- tend to be categorized as price takers. On the other hand, peanut, duck's egg and compost are potential price makers, thus potentially enable price increase.
4. Corn, cassava, cow, goat, and duck's egg have a low local market, so that the role of the collector in the distribution channel is very important. A personal approach is much more effective than modern promotion media, because most buyers of social forestry products are collectors and the character of social forestry yields is semi-finish products.
5. To increase the price of products with a potential price maker, a strong business institution, such as cooperative or others, is needed. Institutional approaches would be suggested to extend to industrial customers when social forestry participant already has a strong business institution.

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