

# Selection of Optimum Communication Mix for Agrochemical Marketing in Ampara District

M.A.A RAZMY<sup>1</sup>, A.M.T.P ATHAUDA<sup>1</sup> and T. D.P ARATCHIGE<sup>2</sup>

<sup>1</sup>*Department of Agribusiness Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila(NWP)*

<sup>2</sup>*Agrochemical Division, Lankem Ceylon Limited, Colombo*

## ABSTRACT

Agrochemicals are widely used in all types of crop production in Sri Lanka. In paddy farming also agrochemicals are intensively used and also which is cultivated whole districts of Sri Lanka including Ampara. Ampara district is, one of the highest paddy producing districts in Sri Lanka. The farmers' awareness about the agrochemicals becomes a major problem for both farmers and the agrochemical industry. The effective marketing channels for agrochemical industry and efficient channels for farmers were studied by the survey.

Ampara district farmers were used five marketing channels out of seven in the market. The awareness of agrochemicals among the farmers is not associated with the experience and education level of farmers. Farmers are changing agrochemicals because of no answer. The channels, dealers and word of mouth became more efficient among farmers but dealer channel only can be measurable. Agrochemical companies spent more on public relation and sales promotion, posters and announcing. Farmers were suggested (48 percentage) that they prefer to aware agrochemicals through field trial application. Spent on public relation and sales promotion will lead the agrochemical firms towards the cost effective and be most efficient among the farmers of Ampara district in the long run. Spent on dealer promotion will make the firm to earn big market share in the short run.

**KEY WORDS:** Agrochemical, Announcing, Education level, Experience, Marketing channels, Posters, Public relation and sales promotion, Word of mouth.

## INTRODUCTION

Agriculture has been the most important pursuit of the people in Sri Lanka from the time of immemorial. It has greatly conditioned the socio-economic environment of the country and continued to dominate every sphere of economic. Sri Lanka is Agriculture based economic country. The agriculture sector of Sri Lanka plays a significant role by contributing 17.9 percent to the G.D.P and generating 32 percent employment opportunities. (Anon, 2005).

Government has identified the boom of agricultural sector as a key for the economic development. Therefore, they have tried to develop it from time to time. Government has given their fullest effort to develop agriculture following the closed economy in the period 1970-1977.

Insecticide herbicide and fungicide are indicated by the common word of Agrochemicals. The use of agrochemicals in paddy cultivation of Ampara district was considered in this study. The land used for the paddy cultivation in Ampara was 56,342 hectares in Yala and 56,794 hectares in Maha seasons in 2005 (Anon, 2005). Most of the farmers in Ampara district are haired by landowners. Farmers use different types of agrochemicals from the day of land preparation to harvesting.

Usually similar agrochemicals are marketed by different companies under different trade names. Most of the agrochemicals are imported as formulated products. Out of the forty (40) companies, twenty (20) including private sector companies and a government corporation are in the leading category. Any firm registered by Registrar of Pesticide (ROP) can enter into the business. Characteristic features of

the agrochemical market in Sri Lanka are very high competition among the firms which hinder the entering of new firms into the business, products are highly differentiated, firms cannot influence the overall market price and product differentiation is a prominent feature of the Sri Lankan agrochemical market. It is observed that the same active ingredient is presented in various forms including dust, granules and liquid. The depreciation of Sri Lankan rupee against foreign currencies over time has made the agrochemicals more expensive to purchase. Furthermore, there are many variations in concentration of active ingredients under different trade names. This characteristic has enabled firms to sell their products at differential prices without sacrificing their customer base, which is one of the most important features of monopolistic competitive markets and strategic interactions among companies also can be seen. The Control of Pesticides Act No. 33 (1980) amended in 1994 provides the legislative framework for importation, manufacture, distribution and sales. Currently a committee appointed by ROP is working towards revising the Act. The Registrar of Pesticide (ROP) is primarily responsible for implementation of the Act.

Agrochemical use in agriculture in Sri Lanka began in the early 1950s. Since then scope and use of these agrochemical showed a definitely positive trend. To date, Sri Lanka has no pesticide manufacturing industry. All agrochemical are imported either as formulated products (finished products) or as technical grade materials for local formulation. Agrochemical firms have assigned their distributors mostly at each district of the country and

supply chemicals through them. However, currently there is a tendency that Agrochemical firms bypass their exclusive distributors and directly supply to direct dealers as well. There is a trend that district level distributors buying from more than one supplier (i.e. Agrochemical firms). Such distributors choose their suppliers based on the attractiveness of the service package rendered, including the level of discounts offered. The main marketing problem facing by Agrochemical firms in Ampara district is to identify right channels to make aware the new products among farmers. Therefore this study was conducted to achieve following objectives.

1. To select the most efficient and cost effective communication mix to reach farmers in Ampara district.
2. To analyse the optimum channel mix in Ampara district agrochemical marketing.

**METHODOLOGY**

**Sample Collection**

This study covered paddy farmers in Ampara district and major agrochemical firms. Farmers are randomly selected from Ampara district. Agrochemical industries are purposely selected as major suppliers of Ampara district. Ampara district is selected, as it's the first largest paddy-producing region in the country.

Primary data was collected using pre-tested questionnaire by a field survey conducted from April 2006 to May 2006 among Ampara district farmers.

Expenditures on eight channels which are used in agrochemical marketing were collected from major six agrochemical companies in Sri Lanka. Farmers' experiences, educational level, marketing channels which are used by farmers to get aware the chemicals were collected from the survey among farmers.

**Statistical Analysis**

To identify the association among experience of farmers, educational level and communication channels the Pearson chi-square technique was used with Peisson hierarchical log linear analysis with SPSS statistical package.

Selected factors were categorised as follows;

**1) Experience of farmers**

Group 1 = 0-20 Years, Group 2 = Over 20 Years

**2) Education Level of Farmers**

Level 1 = Year 1-5,

Level 2 = Year 6-GCE (O/L),

Level 3 = > GCE (O/L)

**3) Communication Channels**

Television, Radio, Posters, Dealers,

Word of mouth, Announcing

Public relation and Sales promotion

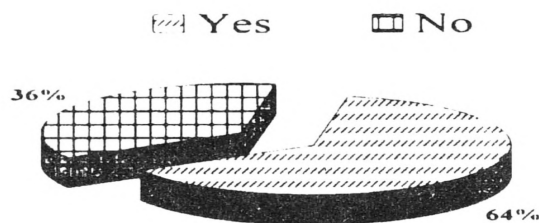
Marketing channels in the point farmers and agrochemical industries view were analysed by using descriptive method.

**RESULTS AND DISCUSSION**

**Descriptive statistic**

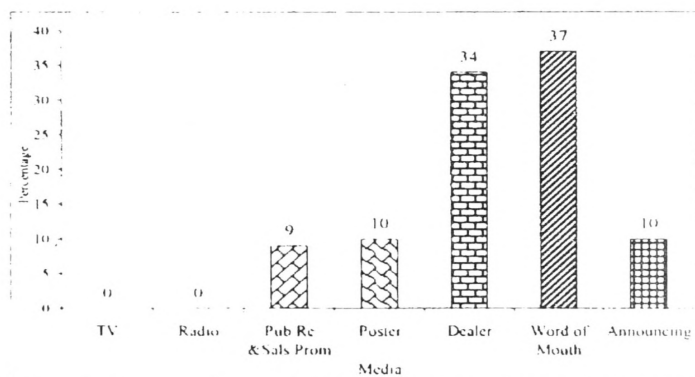
All farmers were used one or more channels in the name of awareness of agrochemicals.

Selected hundred and fifty farmers in the Ampara district were divided according to changing agrochemical during last 2 years. Out of them 64 percent were changed their agrochemicals and 36 percent of them not changed, as it is mentioned in Figure 1. The television, radio, public relation and sales promotion, posters, dealers and word of mouth and announcing channels were used by Ampara district farmers to aware the agrochemicals.



**Figure 1 - Behaviour of Changing Agro Chemicals With in Two Years:**

The main four reasons are made farmers to change the agrochemicals, such as no answer for agrochemicals, low harvest, high cost of agrochemicals and any side effects from the used chemicals. As indicated in Figure 2, out of 64 percentage of total farmers 91 percentages were changed due to no answers, 8 percentage of them in low harvest other 1 percent in high cost and non of them in any side effect.



**Figure 2 - Reasons for Changing Agrochemicals:**

Farmers' awareness on agrochemicals through different channels was identified and which were categorized as it's mentioned in Figure 3.

It is described that, out of seven marketing channels in agrochemical marketing five were used by Ampara district farmers. The channels public relation and sales promotion, posters and announcing got closely equal percentages 9%, 10%, 10% respectively out of 150 farmers but word of mouth got highest value and dealers second compare to other three. None of Ampara district farmers were used television and radio communication channels.

Ampara district farmers were used only five channels to aware the agrochemicals. The experience of farming, education level of farmers and the type of channels were selected to find out the association in the selection communication channels by farmers.

There were major six suppliers in the agrochemical market such Baur & Co Ltd., Lankem Ceylon Ltd., Mackwoods Ltd., Hayleys agro product Ltd., Harrison's (Pvt) Ltd. and CIC Ltd. Figure 04 described the percentage of each company's expenditure on its total expenditure on advertising channels.

All six companies were spent more on public relation and sales promotion, posters and announcing of their advertising expenditure except Lankem Ceylon Ltd. Only few percentages were spent companies on, television, radio and dealer promotions. All six companies were spent very few through the announcement of their total expenditure. Baur spent more on posters than other companies.

Five communication channels were used to find out the association. Likelihood ratio was tested to find out model and Pearson Chi-Square was used found out the significant value of the association.

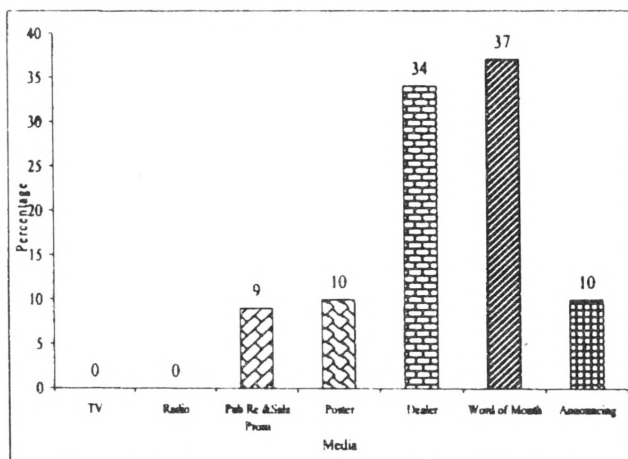


Figure 3 - Variation of Communication Channels on Farmers' Awareness on Agrochemical:

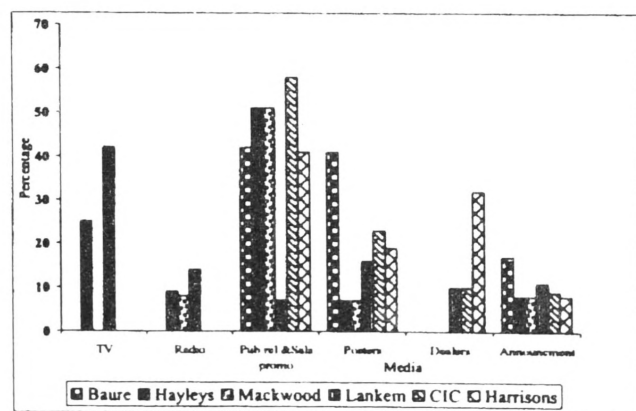


Figure 4 - Percentage of Expenditure on Advertising Channels of Major Agrochemical Companies:

The Table 1 is indicates the significance value of likelihood ratio (greater than 0.05), and the above model adequately fit the data but the probability value of the chi-square was greater than 0.05 so not significant, in other word there was no association among education level, experience, media on the selection of communication channels to aware agrochemicals.

Table 1 - Goodness of Fit:

	Value	DF	Signif
Likelihood Ratio	18.128	22	0.698
Pearson Chi-Square	18.861	22	0.654

Model = Constant + Education Level + Experience + Media

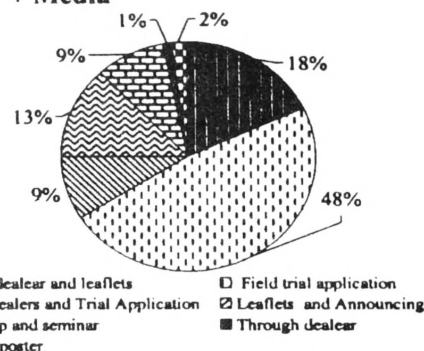


Figure 5 - Farmers Suggestion on Awareness:

Figure 5 described the farmer's suggestion in the awareness of agrochemicals of farmers. It is indicated that 48 percentages of farmers suggested to aware about agrochemicals through field trial application, only 1 percent of Ampara farmers prefer to aware through dealers only.

CONCLUSION

The results revealed that most of the farmers were changed the agrochemicals when they got no answers. The Ampara district farmers were used five channels out of seven in agrochemical marketing to seek new agrochemicals.

Through dealers and word of mouth become more efficient in the awareness of agrochemicals. They used other three channels, public relation and sales promotion, posters and announcing equally and in low amount. In the selection of communication channels of farmers their experience or education level did not associated.

The channel word of mouth was used highly among farmers and which could not be measured. So dealers were played major role in the awareness of farmers. In the point of agrochemical firms, dealer promotions would be more effective to earn more market share in short run. But the agrochemical companies mostly spent on the low efficient channels, posters and announcing. According to farmers suggestion they prefer to aware through field trial application it means through public relation and sales

promotion. Although companies spent more in the public relation and sales promotion channels that not reach farmers effectively because of dealer intervention on behalf of loan business to farmers.

It is advisable to agrochemical industries to spend more on public relation and sales promotion channel than the earlier. If the agrochemical firms use public relation and sales promotion channel that lead to become more efficient among farmers and cost effective to the firm in long term. Spent on dealer promotion will make the firm to earn big market share in the short run profit making because they are the people directly motivate the farmers towards the brand of any agrochemicals because farmers buy the agrochemicals in the basis of loan.

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