

**“STUDY OF PRESENCE, PERFORMANCE AND AWARENESS
OF WATER SOLUBLE FERTILIZER OF RCF IN AKOLA
DISTRICT OF MAHARASHTRA.”**

**PROJECT SUBMITTED TO THE
NAVSARI AGRICULTURAL UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION
(AGRIBUSINESS MANAGEMENT)**

2009-10



**BY
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(04-0421-2008)**

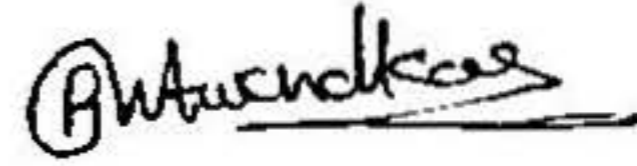
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NAVSARI – 396 450**

Declaration by Student

I hereby declare that the project entitled "**Study of Presence, Performance and Awareness of water soluble fertilizer of RCF in Akola district of Maharashtra.**" Submitted for the M.B.A. (Agribusiness) Degree is my original work and the dissertation has not formed the basis for the award of any degree, associateship, fellowship or any other similar titles.

Place: IABM, Navsari

Date: 21 / 6 / 2010



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NAVSARI-396 450



CERTIFICATE

This is to certify that the project entitled “**Study of Presence, Performance and awareness of water soluble fertilizer of RCF in Akola district of Maharashtra.**” is the bonafide research work carried out by **Awandkar Rajendra Wasudeo** (Reg. No. 04-0421-2008) student of M.B.A. (Agribusiness) during the year 2009 -2010, in partial fulfillment of the requirements for the award of the Degree of Master of Business Administration (Agribusiness) under my guidance and supervision and that the project has not formed the basis for the award previously of any degree, diploma, associateship, fellowship or any other similar title.

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(भारत सरकार का उपक्रम)

"प्रियदर्शिनी", इस्टर्न एक्सप्रेस हाइवे,

सायन, मुम्बई - ४०० ०२२.



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**RASHTRIYA CHEMICALS &
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CERTIFICATE 1

This is to certify that Mr. AWANDKAR RAJENDRA WASUDEO, student of Institute of Agribusiness Management, Navsari, Gujrat state has successfully completed his Management Internship Project " Study of Presences, Performance and Awareness of water soluble fertilizers of RCF Ltd. in Akola district of Maharashtra" under my guidance during the period from 15th Feb.2010 to 16th May,2010.

The project was done by him and found satisfactory, I wish best of luck for his bright future.

Place : Mumbai

Date : 14.06.2010.


(Dipak Deshpande)
Marketing Manager
RCF Ltd. Mumbai

ACKNOWLEDGEMENT

Sometimes words fall short to show gratitude, the same happened with me during this project. The immense help and support received from **Rashtriya Chemicals and Fertilizers Limited** overwhelmed me during the project. I wish to express my gratitude to entire **Rashtriya Chemicals and Fertilizers Limited** management for giving me an opportunity to be a part of their esteemed organization and enhancing my knowledge by granting permission to do our Management Internship project in the Company. I am grateful to **Mr. Deepak Deshpande, Marketing Manager, RCF Ltd. And Mr. A. P. Narale, Marketing officer, RCF Ltd. Akola** and others from organization for their invaluable guidance and cooperation during the course of the project. They provided me with the guidance and support whenever needed that has been instrumental in completion of this project. With a deep sense of gratitude and humble submission I would like to express my heartiest gratefulness to my Faculty **Dr. Alpesh Leua, Dr. Ruchira Shukla** and **Prof. Rahul Thakkar, IABM Navsari**, whose help, stimulating suggestions and encouragement helped me in all the times of research. I am also very thankful to my friends who helped me in the completion of the project. I am thankful to that power that always inspires me to take right step in the journey of my life.

Awandkar Rajendra W.

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PREFACE

MBA (Agribusiness) is the stepping stone to management career. In order to achieve practical, positive and concrete result, the classroom learning has to be effectively supplemented to relation of the situation existing outside the classroom for developing healthy managerial and administrative skills in a potential manager. It is necessary that the theoretical knowledge must be supplemented with exposure to the real environment.

The report comprises all the important aspects of my training and all the aspects have been presented under different headings in the forthcoming pages. An attempt had been made to present a report covering different aspects of my training.

This report would not have been possible in present form without the support and guidance that I received from various people at different stages of the project.

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EXECUTIVE SUMMARY

Rashtriya Chemicals and Fertilizers Ltd. (RCF) is a public sector undertaking (PSU) of Government of India. RCF was incorporated on 6th March, 1978 on the reorganization of erstwhile Fertilizer Corporation of India Ltd. in to five new companies. **Rashtriya Chemicals and Fertilizers Ltd** is the biggest fertilizer chemical company in Asia with 20 operating plants at Trombay and 5 plants at Thal of Super Fertilizer. RCF is only company who manufacture 100% water soluble fertilizers in India.

The project work on **“Study of Presence, Performance and Awareness of water soluble fertilizer of RCF in Akola district of Maharashtra”**. The project was carried out under the guidance of Project Guide Mr. Deepak Deshpande, Marketing Manager, RCF Ltd. and Faculty Guide Dr. Alpesh Leua, Assistance Professor, IABM, Navsari, Gujarat.

The objectives of the project were to review the fertilizer subsidy policy and study the socioeconomic status of farmers and dealers. The project also aimed to study the awareness about water soluble fertilizers of RCF, to conduct competitor analysis of water soluble fertilizer (Sujala), study Price and product differentiation and study the end customer satisfaction level for Sujala.

A survey of 200 farmers using Water Soluble Fertilizer and farmers does not use Water Soluble Fertilizer also and 40 dealers were carried out to study the objectives stated above. For the collection of primary data pretested questionnaires was used. Recent secondary data from internet, magazine, and internal record of RCF Ltd. was collected.

The major finding which came out of my study that in Akola district most of the farmers aware about the water soluble fertilizer of RCF, Close competitor of RCF is Deepak, Coromandal, Godavari and Rich Field. Majority of dealers gives third rank to RCF according to overall performance. The promotional activity about RCF water soluble fertilizer was very less in study area.

CHAPTER - 1

PROFILE OF FERTILIZER INDUSTRY

FERTILIZER INDUSTRY PROFILE

India is primarily an agriculture based economy. The agricultural sector and its other associated spheres provide employment to a large section of the country's population and contribute about 25% to the GDP.

The **Indian Fertilizer Industry** is one of the allied sectors of the agricultural sphere. India has emerged as the third largest producer of nitrogenous fertilizers. The adoption of back to back Five Year plans has paved the way for self sufficiency in the production of food grains. In fact production has gone up to an extent that there is scope for the export of food grains. This surplus has been facilitated by the use of chemical fertilizers.

The large scale use of chemical fertilizers has been instrumental in bringing about the green revolution in India. The fertilizer industry in India began its journey way back in 1906. During this period the first Single Super Phosphate (SSP) factory was established in Ranipet in Chennai. It had a capacity of producing 6000 MT annually. In the pre and post independence era a couple of large scale fertilizer units were established namely the Fertilizer Corporation of India in Sindri, Bihar and the Fertilizer & Chemicals Travancore of India Ltd in Cochin, Kerala.

The Indian government has devised policies conducive to the manufacture and consumption of fertilizers. Numerous committees have been formed by the Indian government to formulate and determine fertilizer policies. The dramatic development of the fertilizer industry and the rise in its production capacity has largely been attributed to the favorable policies. This has resulted in large scale investments in all three sectors viz. public, private and co-operative.

At present there are 57 large scale fertilizer units. These manufacture an extensive range of phosphatic, nitrogenous and complex fertilizers. 29 of these 57 units are engaged in the manufacturing of urea, while 13 of them produce Calcium Ammonium Nitrate and Ammonium Sulphate. The remaining 20 fertilizer plants manufacture complex fertilizers and DAP. There are also a number of

medium and small scale industries in operation, about 72 of them. The following table elucidates the installed capacity of each sector.

Table No. 1.1 Installed capacity and percentage share of each sector.

| Sr. No. | Sector | Capacity (LMT) | | Percentage Share | |
|---------|--------------------|----------------|-------|------------------|-------|
| | | N | P | N | P |
| 1 | Private Sector | 53.94 | 35.13 | 44.73 | 62.08 |
| 2 | Public Sector | 34.98 | 4.33 | 29.0 | 7.65 |
| 3 | Cooperative Sector | 31.69 | 17.13 | 26.27 | 30.27 |
| | Total | 120.61 | 56.59 | 100.0 | 100.0 |

The Department of Fertilizers is responsible for the planning, promotion and development of the Fertilizer industry. It also takes into account the import and distribution of fertilizers and also the financial aspect. There are four main divisions of the department. These include Fertilizer Imports, Movement and Distribution, Finance and Accounts, Fertilizers Projects and Planning and Administration and Vigilance. It makes an assessment of the individual requirements of the states and union territories and then lays out an elaborate supply plan. Though the soil in India is rich in silt, it lacks chief plant nutrients like potassium, nitrogen and phosphate. The increase in the production of fertilizers and its consumption acts as a major contributor to overall agricultural development.

Appendix - 1

Public sector fertilizer companies in India:

- National Fertilizers Limited
- Fertilizers & Chemicals Travancore Limited
- Rashtriya Chemicals & Fertilizers Limited
- Madras Fertilizers Limited
- Steel Authority Of India Limited
- Neyveli Lignite Corporation Limited
- Paradeep Phosphates Limited
- Pyrites, Phosphates & Chemicals Limited
- Hindustan Fertilizer Corporation Limited

Private sector fertilizer companies in India:

- Chambal Fertilizers & Chemicals Limited
- Ajay Farm-Chem Private Limited
- Balaji Fertilizers Private Limited
- Deepak Fertilizer and Petrochemicals Corporation Limited
- Bharat Fertilizer Industries Limited
- Coromandal Fertilizers Limited
- Gujarat Narmada Valley Fertilizer Co. Limited
- Meerut Agro Chemicals Private Limited
- Duncans Industries Limited
- Karnataka Agro Chemicals

- Godavari Fertilizers & Chemical Limited
- Shri Amba Fertilizers (I) Private Limited
- Tuticorin Alkali Chemi & Fertilizer Limited
- Gujarat State Fertilizers & Chemicals Limited
- Indo-Gulf Fertilizers & Chemicals Corporation Limited
- Southern Petro Chemical Industries Corporation Limited
- Maharashtra Agro Industrial Development Corporation
- Zuari Industries Limited- Fertilizer Limited
- Mangalore Chemicals & Fertilizers Limited

Multi-state Cooperative Societies in India

- Indian Farmers Fertilizer Cooperative Limited (IFFCO)
- Krishak Bharati Cooperative Limited (KRIBHCO)

Challenges before Indian Fertilizer Industry

The challenges before the Indian fertilizer industry relate to the incertitude in the supply of fertilizers. There has been a surge in the demand for fertilizers in the past few years. Good monsoonal showers have led to the growth in agriculture, inadvertently increasing the consumption rate of fertilizers. However, the robust growth in consumption propensity has not been met with the required surge in fertilizer production. This has widened the gap between the demand and supply of fertilizers, which has led to an increase in the dependence of the country on imports. This also reflects on the lack of realizing of the domestic capacity utilization of the reserves in the country.

Another important factor that has led to the stunted growth of the fertilizer industry is the rise in prices of the feedstock. The fertilizer industry is dependent on gas for the production of urea and phosphoric acid for the production of phosphatic fertilizers and DAP. The country imports its inputs from other countries. The overseas suppliers of raw materials realize the predicament of the Indian fertilizer industry and have started exploiting the shortage through clever pricing.

In recent years, some of the private companies, dedicated to the production of fertilizers have affectively taken stakes in the overseas sources of raw materials. Although this has aided the industry, it has however been unable to reduce the government's burden of subsidizing the rates. The fertilizer industry is remained protected under the umbrella of the Retention pricing scheme of the Indian government. The government has introduced policies to decontrol the prices but delayed the implementation of the parameters that have not augured in favor of the industry. As a result, fertilizer subsidies continue to mount and are expected to cross Rs. 50,000 crore in the year 2008. The pricing of the fertilizers are also dependent on the freight charges that are Baltic dry index.

The small size of the older plants and the low efficiency of the public sectors also pose as drawbacks of the industry. Recent policies of the government are directed towards revamping of these industries and restoring them to health.

The fertilizer industry is faced with other challenges inter alia infrastructural bottlenecks and the uncertainties in government policies. The delay in decision making and obscurity in setting parameters are among some of the major drawbacks of the government policies directed towards the industry.

To retrieve the health and growth of the fertilizer industry, the government of India is in need of long term realistic policies that would enable the industry to overcome the challenges and survive the present impasse.

The Role of the fertilizer industry

The fertilizer industry helps ensure that farmers have the nutrients they need to grow enough crops to meet the world's requirements for food, feed, fiber and energy. The nutrients supplied by the industry supplement on-farm sources of nutrients such as manure and legumes. Nutrients in manufactured fertilizers are in forms that can be absorbed by plants. All of these nutrients exist in nature, but the quantities are not sufficient to meet the needs of our growing, urbanized population.

Soil, nutrients and good agricultural practices

The fertilizer industry encourages the adoption of Fertilizer Best Management Practices (FBMPs) as part of good agricultural practices.

For efficient soil management, a farmer must improve desirable soil characteristics using good agricultural practices. To ensure sustainability and high productivity, these practices should be:

- Technically sound.
- Economically attractive.
- Environmentally safe.
- Feasible in practice.
- Socially acceptable.

The most important components of good agricultural practices are:

- Choosing high-quality, high-yield seed.
- Choosing the best time to sow and appropriate methods, with optimum seed rate and plant population.
- Choosing appropriate fertilizers with balanced rates, methods and times of application.
- Replenishing organic matter.
- Maintaining appropriate soil reaction (ph).
- Controlling insect pests and diseases with appropriate measures.
- Controlling weeds and soil erosion.
- Providing irrigation and drainage.
- Adopting appropriate management practices.



CHAPTER - 2

COMPANY PROFILE

INTRODUCTION

Rashtriya Chemicals and Fertilizers Ltd is the biggest fertilizer chemical company in Asia with 20 operating plants at Trombay and 5 plants at Thal of Super Fertilizer. RCF is only company who manufacture 100% water soluble fertilizers in India. RCF is an Rs.1200 crores PSU engaged in the manufacturing and marketing of a full range of Chemical fertilizer and a series of Industrial chemical.

RCF's operations commenced from March 1978 taking over all Mumbai based operations of the Fertilizers Corporation of India Limited, which included manufacturing facilities at Trombay, Western and Southern Marketing Divisions were also taken over by RCF. Presently RCF has Chemicals and Fertilizers plants in two locations viz. Trombay and Thal in the State of Maharashtra producing Nitrogenous, Phosphatic and Potash fertilizer and a wide range of Industrial chemicals. Commissioned in 1985, RCF's super fertilizer plant at Thal (Alibag, Dist- Raigad) marked new era of industrial progress in Maharashtra. It's the largest plant in Asia, with the capacity to produce 18 lacks MTPA (metric tons per annum) of urea. RCF also has to its credit, successful implementation of new expansion projects and marketing of various fertilizers and industrial chemicals within and outside country.

RCF has been a MOU signing Company since 1988 and has been consistently rated as **"Excellent"**. Rashtriya Chemicals and fertilizers Limited has been contributing to the progress of nation building by manufacturing and marketing Fertilizers and Chemicals to fulfill the objectives of growth, profits and sharing social responsibilities across the cross section of the Country. RCF has acquired ISO 9002 certification for its Methylamine product.

MISSION STATEMENT:-

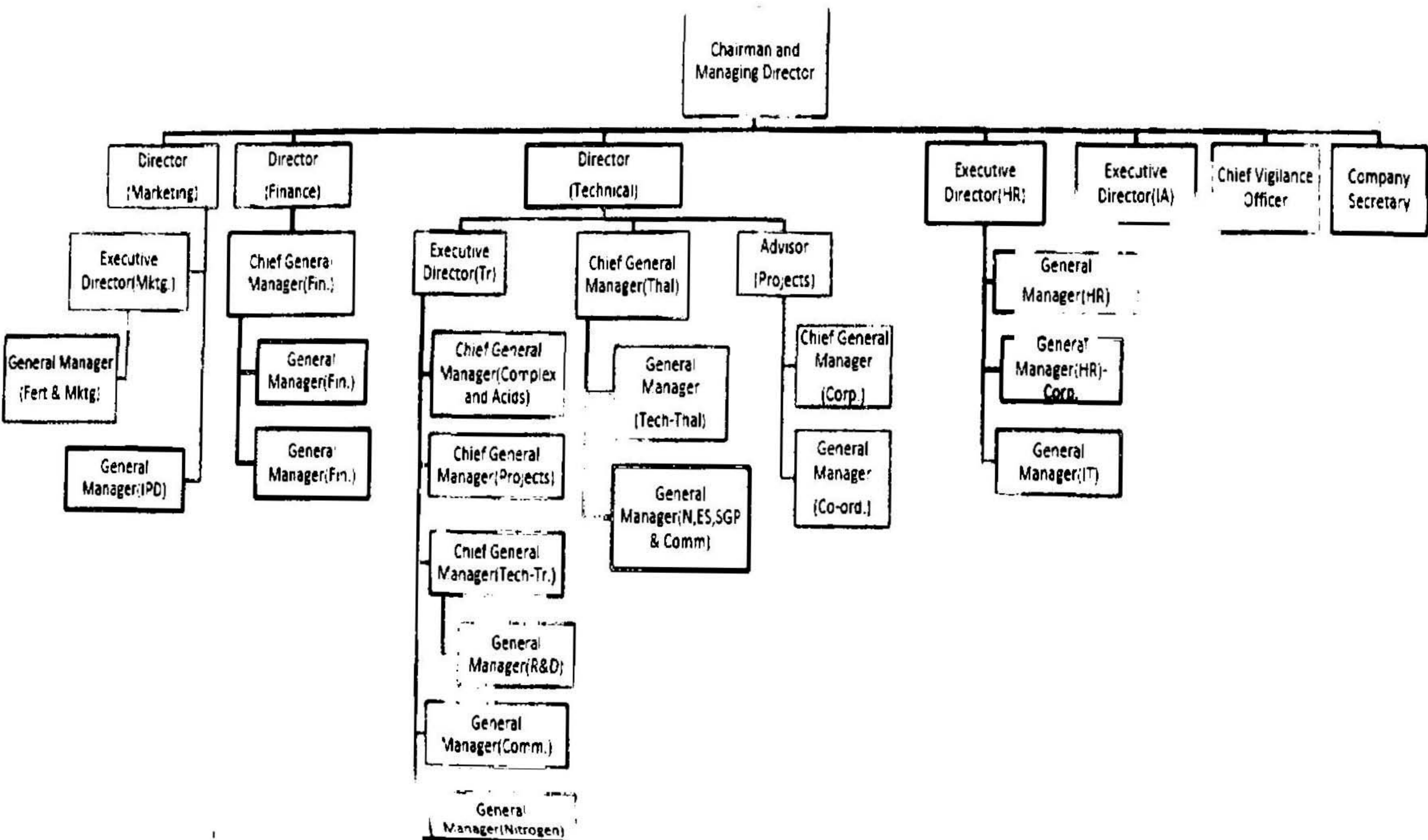
- To produce fertilizers and chemicals efficiently, economically and in environment friendly manner.
- To serve the farmers and other customers with quality products along with support services.
- To join hands in the growth of national economy.

RCF'S VISION 2010:

RCF shall be a respected world class corporate with progressive growth in core and non core areas achieving highest standards in efficiency, profitability, environment protection and corporate social responsibility through operational excellence and ethical business culture. It will strive to provide world class services to its customer and continually enhance shareholders values.

The company has set itself a vision to achieve a turnover target of Rs. 4500 Crore and profit of Rs. 535 Crore (Profit after Tax) by the year 2009-10. To achieve this requires expansion, integration, marketing of bought out products both imported and indigenous apart from improvement in work culture, frugality in our day to day activities, further reduction in the cost of production , improvement in marketing efforts and the strictest adherence to safety and environmental standards.

ORGANIZATION STRUCTURE



CHAPTER - 3

PRODUCT PROFILE

PRODUCT RANGE OF RCF:-

A) Among fertilizers

Rashtriya Chemicals & Fertilizers Ltd. manufactures 100% water soluble fertilizers containing all the three major plant nutrients i.e. Nitrogen, Phosphorus and Potash for crops grown in green houses as well as other field crops. Sujala is available in two forms:

- 1) Foliar, suitable for spraying,
- 2) Drip, for application through drip irrigation system.

SUJALA (19:19:19) FOLIAR / DRIP

Sujala(19:19:19)

Rashtriya Chemicals & Fertilizers Ltd, manufactures 100% water soluble fertilizers containing all the three major plant nutrients i.e. Nitrogen, Phosphorus and Potash for crops grown in green houses as well as other field crops. Sujala is available in two forms Foliar grade and drip grade.



1 Kg / 25 Kg Package size

FEATURES :-

- Total Nitrogen 100% soluble in water.
- Amide Nitrogen 10.5%.
- Amonical Nitrogen 4 5%.
- Nitrate Nitrogen 4.0%.
- Total Phosphorus 100% soluble in water.

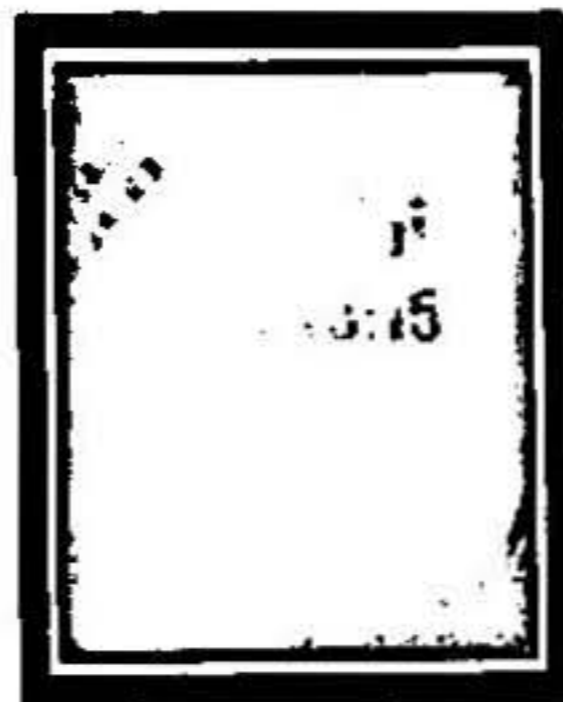
- Total Potassium 100% soluble in water.
- Free from harmful Sodium and Chlorine.

The major features of Sujala foliar and drip grades are as follows.

- Use of Sujala either through drip or foliar prevents deterioration of soil texture as soil complexion and mechanical damage to the crop is eliminated.
- Sujala reaches directly at the root zone along with required water through drip.
- Sujala is salt free; the drip system does not get clogged thus enhancing life of the micro irrigation system.
- Proportion of air, moisture and nutrients through Sujala are effectively maintained at the root zone resulting into quality and bumper yield

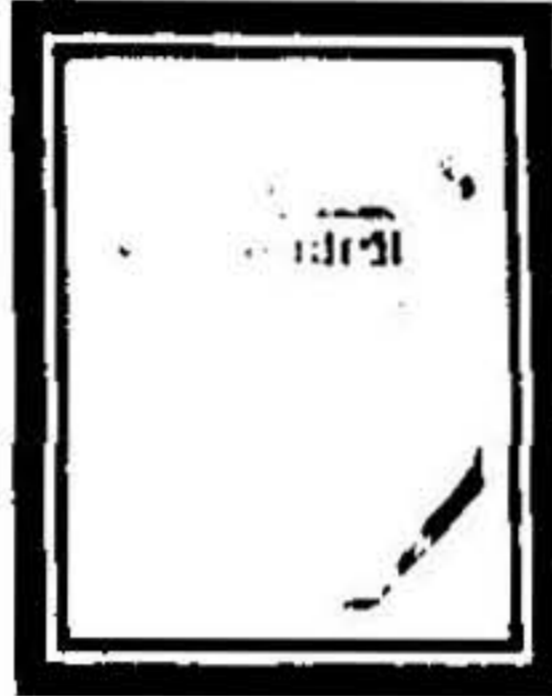
Suphala(15:15:15)

RCF produces two grades of complex fertilizers at its Trombay unit. They are commonly known as "Suphala", which has almost become a generic name for NP/NPK complexes in the farming households of the country.



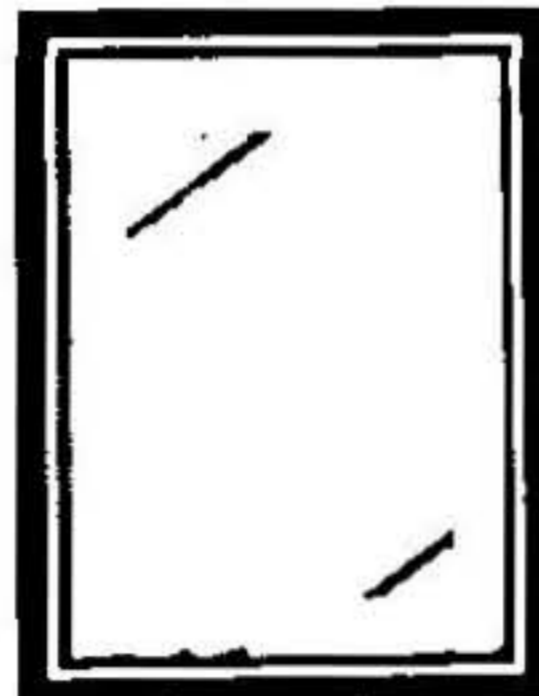
Ujwala (Urea) 46%

RCF's Ujwala urea is a chemical fertilizer produced in white round prill form containing 46% nitrogen. It is 100% water soluble and is suitable for any type of soil or crop. It can be applied through sowing, broadcasting or spraying. Ujjwala urea should be applied to different crops in two to three split doses.



Biola (PSB)

This multifaceted bio-fertilizer solublizes the fixed phosphorus in the soil and makes it available to the crops. Bacteria multiply very fast in the soil and this helps to improve the texture and structure of the soil. This also helps to enhance the growth of the crops and also induces resistance against various pests and diseases.



Microala (Micro Nutrients)

Over a period of years, we have been cultivating different crops in the field which has resulted in the depletion of essential micro-nutrients in the soil. This has in turn affected the productivity of the soil. This fact has also been validated in the soil analysis reports drawn over a period of time indicating that the micronutrients in the soils are on the decline, resulting in lowering the quality and yields of the crops.



B) Industrial Product

Table No. 3.1 Industrial products

| | | |
|-------------------------|------------------------|--------------------------|
| 1) Ammonium Bicarbonate | 2) Ammonium Nitrate | 3) Anhydrous Ammonia |
| 4) Argon | 5) Calcium Carbonate | 6) Dimethylamine |
| 7) Dimethyl Formamide | 8) Dimethylacetamide | 9) Formic Acid |
| 10) Gypsum | 11) Dilute Nitric Acid | 12) Methanol |
| 13) Monomethylamine | 14) Conc. Nitric Acid | 15) Sodium Nitrite |
| 16) Sodium Nitrate | 17) Sulphuric Acid | 18) Technical Grade Urea |

CHAPTER - 4
THE PROJECT

PROJECT TITLE

“Study of Presence, Performance and awareness of water soluble fertilizer of RCF in Akola district of Maharashtra.”

INTRODUCTION OF SURVEY:

India is the land of Agriculture 75% people are depend on Agriculture in that input industry play impotent role having fertilizer industry one of them RCF gave us nice opportunity to make familiar with this grate industry. “Study of marketing strategy for water soluble fertilizer of RCF in Akola District of Maharashtra. In this project I tried to cover all points what we have done to rich our final aim of project.

About Akola district

On 1st July 1998, Akola district was divided into two separate districts as - Akola & Washim. In the new Akola district, there are 7 blocks that are divided into two sub divisions for agriculture department-Akola and Akot. Akola subdivision includes three blocks-Akola, Barshitakli and Murtizapur while Sub Division Akot includes four block-Akot, Telhara, Balapur, Patur.

Land Use Pattern of Akola district:-

- 1) Geographical Area 5.42 Lakh. ha.
- 2) Total Area under cultivation 4.96 Lakh ha.
- 3) Average Area under Fallow land 0.18 Lakh. ha
- 4) Total no. of cultivators 290165
- 5) Total Average Area under Kharif crops 4.82 Lakh. Ha
- 6) Total Average Area under Rabi crops 0.46 Lakh. ha
- 7) Total Average Area under summer crops 0.02 Lakh. Ha

Soil Type of Akola District (Area in 000 Hectare.

Table No. 4.1 Soil type of Akola District.

| Sr. No. | Soil Type | Area (ha) | Percentage (%) |
|---------|-------------|-----------|----------------|
| 1. | Light Soil | 87.0 | 17.7 |
| 2. | Medium Soil | 149.0 | 30.3 |
| 3. | Heavy Soil | 255.0 | 52 |

Climate:-

District falls in assured rain fall zone hence receives monsoon rains during June to October. The Average annual rainfall of the district is 714.1 m.m. spread over 47 rainy days in normal condition. The district is characterized by warm and humid climate in June to October and later on from November onwards there is gradual decline in temperature. Cool and dry climate is observed during November to January. March, April, May are the hottest months. The Average, Maximum and Minimum Temperature of the District is 47.9 and 12 degree Celsius.

Sowing Period: -

In Akola District there are three seasons of crops according to sowing time

a) Kharif Season -

- Pre-Monsoon - 20th May to 31st May
- Kharif Cotton - 15 June to 30th June.
- Major crops - Cotton, Sorghum, Red Gram , Green Gram, Black Gram, Soybean, Sunflower.

b) Rabi Season -

- From 15 September to mid of November.
- Major Crops - Wheat, Safflower, Gram, Sunflower.

c) Summer Season –

- From first week of January to end of February.
- Major Crops - Summer Ground nut, Summer Green Gram.

Figure No. 4.1 Map of Akola District: -



OBJECTIVES OF THE STUDY

- ✓ To Review fertilizer subsidy POLICY.
- ✓ To study the socioeconomic status of farmers and dealers.
- ✓ To study the awareness about water soluble fertilizers of RCF.
- ✓ To study the competitor analysis of water soluble fertilizer (Sujala).
- ✓ To study Price and product differentiation.
- ✓ To study the end customer satisfaction level for Sujala.

INDIAN FERTILIZER SUBSIDY OVERVIEW

The subsidy on fertilizers is passed on to the farmers in the form of subsidized MRPs. The selling prices as notified by Government for the subsidized fertilizers are much lower than the normative delivered cost of these fertilizers at farm gate level. The difference between the normative delivered cost at farm gate level and the notified selling prices is paid as subsidy to manufacturers/importers on sale of fertilizers to the farmers at the subsidized prices.

The increase in rate of subsidy on fertilizers combined with increase in consumption of fertilizers has led to a substantial increase in requirement of subsidy. In spite of increase in cost of fertilizers, the Government has completely kept the farmers insulated from this increase in cost and have increased the subsidy allocations to meet the consumption needs of the farmer at subsidized level of prices. The subsidy on fertilizers has been increased sharply over the last few years.

Table No. 4.2 The details of fertilizer subsidy over the last few years.

| Years | Subsidy Released | | Total Subsidy disbursed/Due | Liabilities carry over to next year | Next incidence of subsidy for the year |
|-----------|------------------|-------------------|-----------------------------|-------------------------------------|--|
| | Urea | P & K Fertilizers | | | |
| 2002-2003 | 7788 | 3225 | 11013 | - | - |
| 2003-2004 | 8509 | 3326 | 11835 | 2002 | - |
| 2004-2005 | 10637 | 5142 | 15779 | 3372 | 1749 |
| 2005-2006 | 11749 | 6550 | 18299 | 5914 | 20841 |
| 2006-2007 | 15354 | 10598 | 25952 | 8788 | 28826 |
| 2007-2008 | 23204 | 17134 | 40338 | 5000 | 36550 |
| 2008-09 | 33901 | 65555 | 99456 | 17158 | 116614 |

The steady increase in fertilizer subsidies over the years has largely been the result of increasing consumption and increases in the costs of inputs of indigenous fertilizers and prices of imported fertilizers from time to time. The cost of various inputs / utilities, such as coal, gas, naphtha, rock phosphate, sulphur, ammonia, phosphoric acid, electricity, etc., as also the cost of transportation, went up significantly during the eighties.

The gas-based fertilizer units commissioned during this period also involved higher capital investment per tonne of installed capacity, necessitating constant upward revision in the retention prices. The selling prices of fertilizers to the farmers, however, remained almost at the same level between July, 1981 and July 1991. The Government affected an increase of 30% in the issue prices of fertilizers in August, 1991 after a gap of a decade. The selling price of urea, which was reduced by 10% in August 1992, was revised upwards by 20% in June 1994 followed by another increase by 10% with effect from 21.2.97. The prices of urea were again revised in February 2002 by 5% and by Rs. 240 PMT of urea w.e.f. 28.2.2003. The price

increase made effective from 28.2.2003 was, however, later withdrawn w.e.f 12.3.2003. The current price is Rs. 4830 per tonne exclusive of local levies. However, the hikes in prices of urea have not materially altered the position in terms of the absolute outgo in the form of subsidy, because of the steady growth in production to meet the growing demand and rise in the costs of inputs.

Mistaken impressions about fertilizer subsidy in India:

At this high level of subsidy two impressions have been created. First that subsidy is very high in Indian Agriculture and second that most of the subsidy goes to benefit the Industry and not the farmers.

In Indian agriculture emphasis has been laid to provide subsidy on inputs to the farmers due to small land holdings and consequent need to reduce the cost of farming. On output there is subsidy through the mechanism of Minimum Support Price only. There are some States who provide Concessional / free water, electricity for agricultural use. If we combine all these subsidies, the total subsidy in Indian agriculture is much less than what is permitted under WTO and far less than what developed countries provide.

As for the other mistaken impression that subsidy largely goes to fertilizer industry in India, it should be understood that fertilizer companies sell fertilizers to the farmers at subsidized rates and Government compensates the Companies for the same. Thus, to the Industry, it is the compensation and not the subsidy. We can say that subsidy to the farmers is routed rough the industries and that is for the ease of administering the scheme. There is serious thinking in India to evolve an alternative modality to dispense subsidy to the farmers directly through the use of Smart Cards or other IT enabled mechanisms.



Literature review

The Hindu national news paper, Monday, Feb 15, 2010

Water-soluble fertilizer introduced in market

The Indian Farmers' Fertilizer Cooperative Limited (IFFCO) has introduced in the market a new water-soluble fertilizer, NPK 19:19:19, for fertigation and precision farming.

Drip irrigation

The fertilizer is highly suitable for sugarcane, banana and horticulture field crops. Farmers adopting drip irrigation and precision farming techniques could use it for better results.

The solid nutrients of the fertilizer are fully soluble without leaving any insoluble residue. The fertilizer has nitrogen in nitrate form and entire nitrogen would be absorbed by the plants leaving no scope for leaching losses. Better absorption and lesser losses also help in reducing the fertilizer quantity needed. The fertilizer is also suited for alkaline and saline soils.

Indian Journal of Fertilizers, Vol. 2 (1), April 2006, pp. 37-43

RCF in the Service of Farmers

RCF's Sujala 19:19:19 is a 100% water soluble fertilizer produced by RCF, which contains major plant nutrients N, P and K and it is extremely useful for different crops cultivated in green houses. Application of Sujala in green houses enhances yield. Sujala can be applied by both foliar as well as through drip irrigation system.

Sujala is free from

chlorine and sodium and hence it does not harm the foliage of the crop. It also maintains the pH of the soil since it is acidic in nature.

CHAPTER – 5
RESEARCH METHODOLOGY

RESEARCH METHODOLOGY

Sources of Information

❖ Sources of Primary data:-

- Primary data was collected by survey method by through personal interviews with farmers and authorized dealers of Rashtriya Chemicals and Fertilizers Limited in Akola district of Maharashtra.
- Pre tested Questionnaires were used for collection of primary data for the study.

❖ Sources of Secondary data:-

The secondary source of data provided the insight to understand and define the nature of the problem. Secondary data was collected through various sources like company website, magazines, internet, company leaflet and other sources. Various reports and article from the internet provided the information regarding the Water Soluble fertilizers and data about usage of water soluble fertilizers in Maharashtra state.

Instrument of Data collection:-

Questionnaires were used for the collection of primary data. Both open ended question and multiple choice questions were involved in questionnaires. In open ended questions farmers and dealers were free to answer and in multiple choice questions respondents were offered various options to choose from. Two types of questionnaires were prepared one for farmers and other for dealers.

Sample Design

➤ **Location of the Survey:** - Akola district have seven Taluka's viz Akot, Patur, Barshitakli, Murtizapur, Telhara, Balapur and Akola were selected for the Study.

➤ **Sampling method:** - Convenience sampling method for farmers and purposive sampling method for dealers.

From each taluka villages were selected randomly and total 40 villages were selected based on the size of the taluka. From each village 5 farmers were selected using convenience sampling making the total sample of 200 farmers. This sample included both farmers using water soluble fertilizers and those who are not using it. In this survey, 40 dealers were selected using purposive sampling. Authorized dealers were selected purposively as asked by the Company.

The district Akola was selected purposefully.

➤ **Sample unit:** -

- Farmers using Water Soluble Fertilizer.
- Farmers does not use Water Soluble Fertilizer.
- Authorized dealers of RCF in Akola district.

➤ **Sample size:** -

- 200 Farmers in Akola District.
- 40 Authorized dealers of RCF in Akola District.

➤ **Sample frame:** - List of dealers given by company for selecting dealers.

➤ **Sampling plan: -**

Table No. 5.1 sampling plan for farmers:-

| Sr. no. | Name of Taluka | No. of villages selected | No. of farmers selected |
|---------|----------------|--------------------------|-------------------------|
| 1. | Akot | 8 | 40 |
| 2. | Murtizapur | 8 | 40 |
| 3. | Telhara | 6 | 30 |
| 4. | Barshitakli | 5 | 25 |
| 5. | Balapur | 4 | 20 |
| 6. | Patur | 4 | 20 |
| 7. | Akola | 5 | 25 |
| | Total | 40 | 200 |

Table No. 5.2 Sampling plan for dealers:-

| Sr. no. | Name of Taluka | No. of dealers selected |
|---------|----------------|-------------------------|
| 1. | Akot | 7 |
| 2. | Murtizapur | 6 |
| 3. | Telhara | 6 |
| 4. | Barshitakli | 3 |
| 5. | Balapur | 4 |
| 6. | Patur | 6 |
| 7. | Akola | 8 |
| | Total | <u>40</u> |

- **Limitations of the Study:-**

- Some dealers avoid to give information related to business fearing loss of competitive information and action by company.
- The data was collected solely on the basis of information given by farmers and dealers selected in the sample.
- Many time dealers are not able to give much more time for survey.
- Limited area was covered for the study.
- Farmers and dealers were reluctant in providing some information.

CHAPTER – 6
DATA ANALYSIS AND
INTERPRITATION

OBJECTIVE – 1

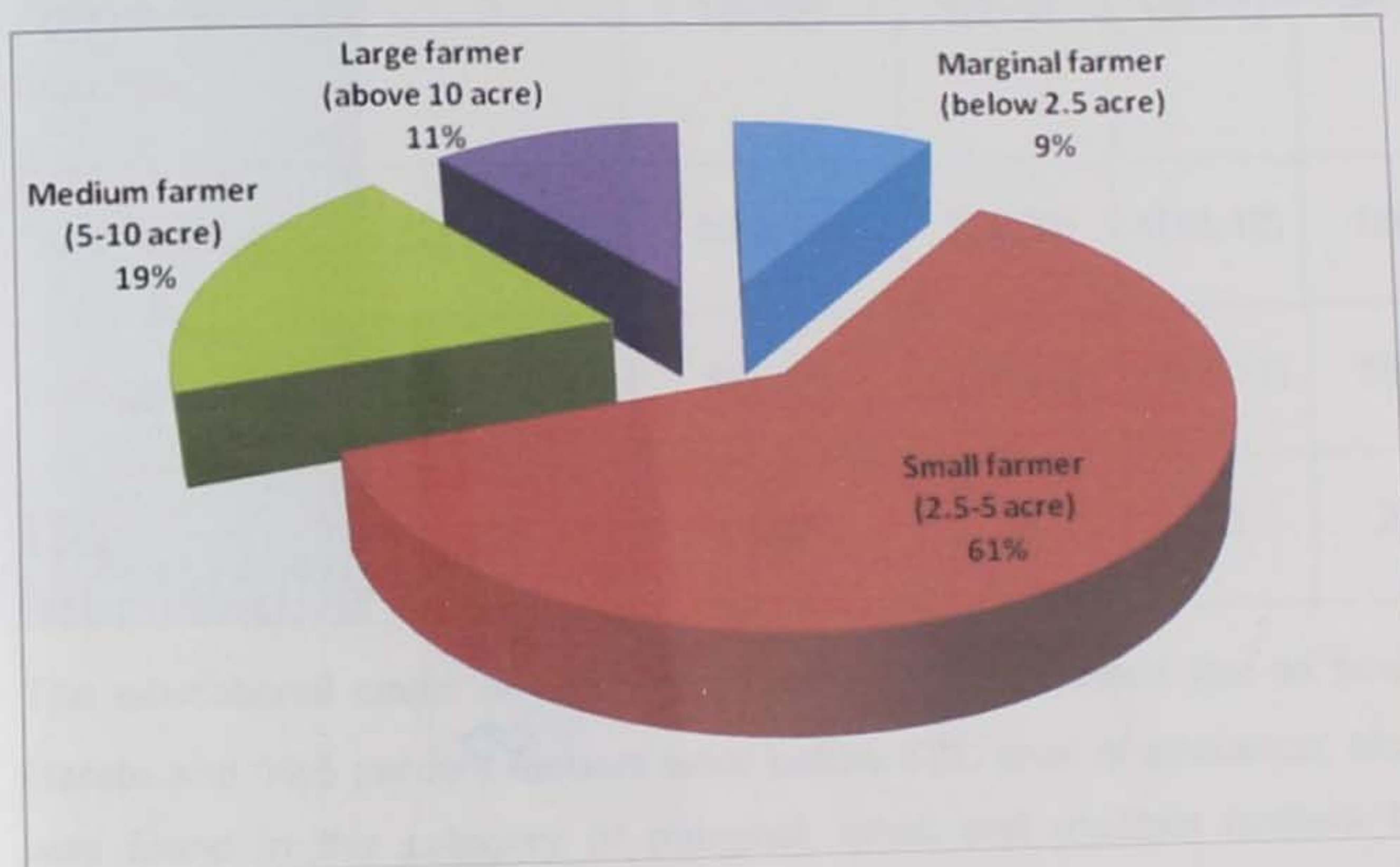
“To study the socioeconomic status of farmers and dealers.”

Socio-economic status of farmer

Table No. 6.1: - Distribution of farmer was according to size of land holding.

| Particulars | No. of Farmers | Percentage |
|----------------------------------|----------------|------------|
| Marginal farmer (below 2.5 acre) | 18 | 9 |
| Small farmer (2.5-5 acre) | 122 | 61 |
| Medium farmer (5-10 acre) | 38 | 19 |
| Large farmer (above 10 acre) | 22 | 11 |
| Total | 200 | 100 |

Figure No. 6.1 Land Holding Pattern of farmers



The distributions of farmers were on the basis of land holding. The figure no.6.1 shows that 61 percent of small farmers, followed by 19 percent were medium farmers, 11 percent large farmers and 9 percent were marginal farmers.

Table No.6.2: - Education level of farmers .

| Education | Farmers | | | | Total (%) |
|-----------------------|--------------|------------|------------|-----------|------------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Below SSC | 5(27.77) | 21(17.21) | 9(23.68) | 4(18.18) | 39(19.5) |
| SSC | 6(33.33) | 54(44.26) | 11(28.94) | 5(22.72) | 76(38) |
| HSC | 4(22.22) | 27(22.13) | 13(34.21) | 4(18.18) | 48(24) |
| Agricultural graduate | 0 | 1(5.55) | 1(2.63) | 1(4.54) | 3(1.5) |
| Other graduate | 2(11.11) | 10(8.19) | 2(5.26) | 4(18.18) | 18(9) |
| Post graduate | 1(5.55) | 9(7.37) | 2(5.26) | 4(18.18) | 16(8) |
| Total | 18 | 122 | 38 | 22 | 200 |

The educational status of farmers in table no.6.2 suggested that all farmers were literate and 19.5 percent farmers were bellow SSC level of education. More literate was found in the category of marginal, small and medium farmers than large farmers. Near about 15 percent farmers in each category were degree holders except that of medium farmers.

Table No. 6.3: - Distribution of respondent as per land holding pattern.

| Type of farming | Farmers | | | | Total (%) |
|-----------------|--------------|-----------|------------|-----------|-----------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Irrigated | 8(44.44) | 57(46.72) | 17(44.73) | 8(36.36) | 90(45) |
| Non Irrigated | 10(55.55) | 65(53.27) | 21(55.26) | 14(63.63) | 110(55) |
| Total | 18 | 122 | 38 | 22 | 200 |

Figure No. 6.2 Distribution of respondents as per land holding pattern.



The land holding pattern of surveyed farmers in figure no.6.2 shows that 55 percent farmers have not irrigation facility on their farm. Farmers with rainfed farming were

most in large farmers segment. The farmers with whole land under irrigation were more in small farmers segment.

Table No.6. 4 - Distribution of irrigated farmers.

| Particulars | Farmers | | | | Total (%) |
|-----------------------------|-----------------|--------------|---------------|--------------|------------------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Drip Irrigation | 1(12.5) | 15(26.31) | 8(47.05) | 4(50) | 28(31.11) |
| Sprinkler Irrigation | 2(25) | 20(35.08) | 5(29.41) | 3(37.5) | 30(33.33) |
| Furrow Irrigation | 5(62.5) | 22(38.59) | 4(23.52) | 1(12.5) | 32(35.55) |
| Total | 8 | 57 | 17 | 8 | 90 |

Note: - The analysis was on the basis of 90 farmer's response they have irrigated land.

The distributions of farmers in table no.6. 4 were on the basis of irrigation facility they have on their farm. The drip irrigation facility was more in the large farmers segment than marginal and small farmers. Sprinkler irrigation facilities were more in small and large farmers segments than marginal and medium farmers. Most of the farmers in marginal and small segments having furrow irrigation on their farm.

Table No. 6. 5: – Fertilizer purchases decision taken by family member.

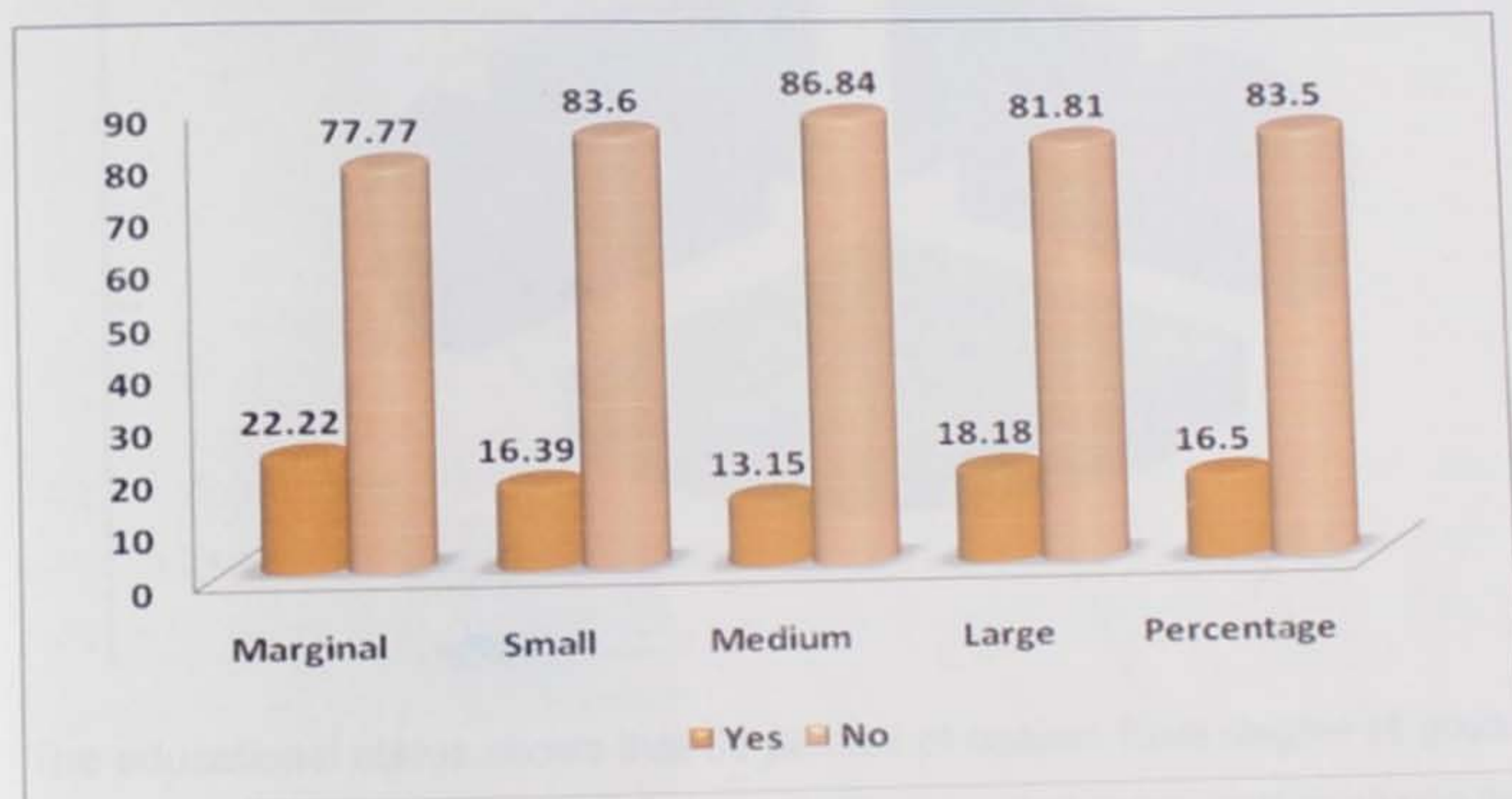
| Particulars | Farmers | | | | Total (%) |
|----------------|-----------------|--------------|---------------|--------------|--------------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Self | 10(55.55) | 87(71.31) | 19(50) | 12(54.54) | 128(64) |
| Wife | 2(11.11) | 3(2.45) | 1(2.63) | 0 | 6(3) |
| Father | 4(22.22) | 18(14.75) | 9(23.68) | 5(22.72) | 36(18) |
| Brother | 1(5.55) | 10(8.19) | 5(13.15) | 3(13.63) | 19(9.5) |
| Others | 1(5.55) | 4(3.27) | 4(10.52) | 2(9.09) | 11(5.5) |
| Total | 18 | 122 | 38 | 22 | 200 |

Above table concluded that the fertilizer purchasing decision in farmers family were all most in all segments farmers take own decision for purchasing of fertilizers. In some cases other members of family also take decision for purchasing of fertilizers.

Table No.6.6: - Soil testing done by farmers.

| Particulars | Farmers | | | | Total (%) |
|-------------|--------------|------------|------------|-----------|-----------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Yes | 4(22.22) | 20(16.39) | 5(13.15) | 4(18.18) | 33(16.5) |
| No | 14(77.77) | 102(83.60) | 33(86.84) | 18(81.81) | 167(83.5) |
| Total | 18 | 122 | 38 | 22 | 200 |

Figure No.6.3 Soil testing done by farmers.



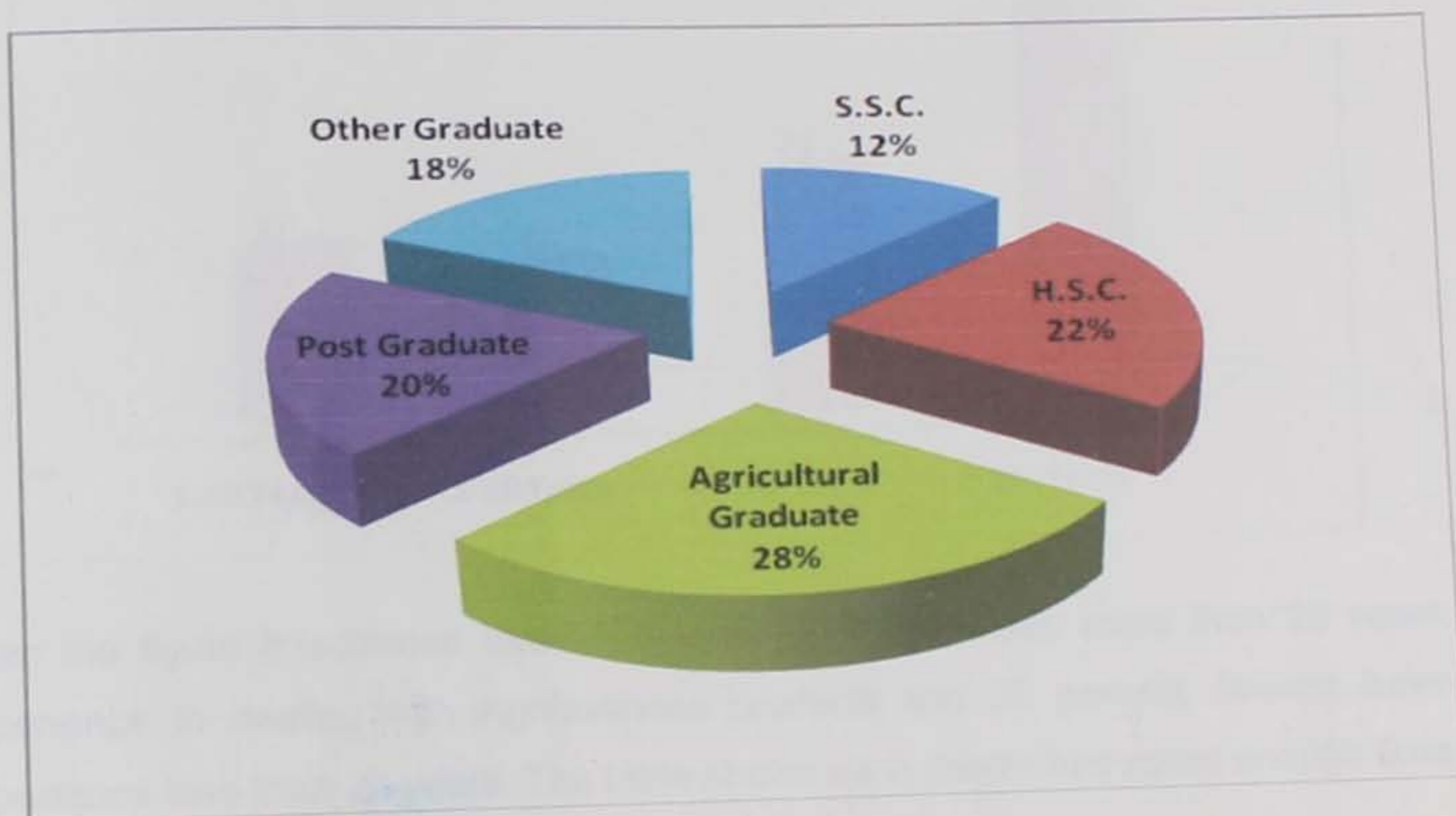
Above figure shows that 83.5 percent farmers did not interested in soil testing. Only 16.5 percent farmers were interest in soil testing out of total. The more marginal and large farmers test their soil than small and medium farmers segment.

Socio-economic status of dealers

Table No. 6.7: - Education status of dealers.

| Sr. No. | Education | No. of Respondents | Percentage |
|---------|-----------------------|--------------------|------------|
| 1 | S.S.C. | 5 | 12 |
| 2 | H.S.C. | 9 | 22 |
| 3 | Agricultural Graduate | 11 | 28 |
| 4 | Post Graduate | 8 | 20 |
| 5 | Other Graduate | 7 | 18 |

Figure No. 6.4 Education status of dealers.

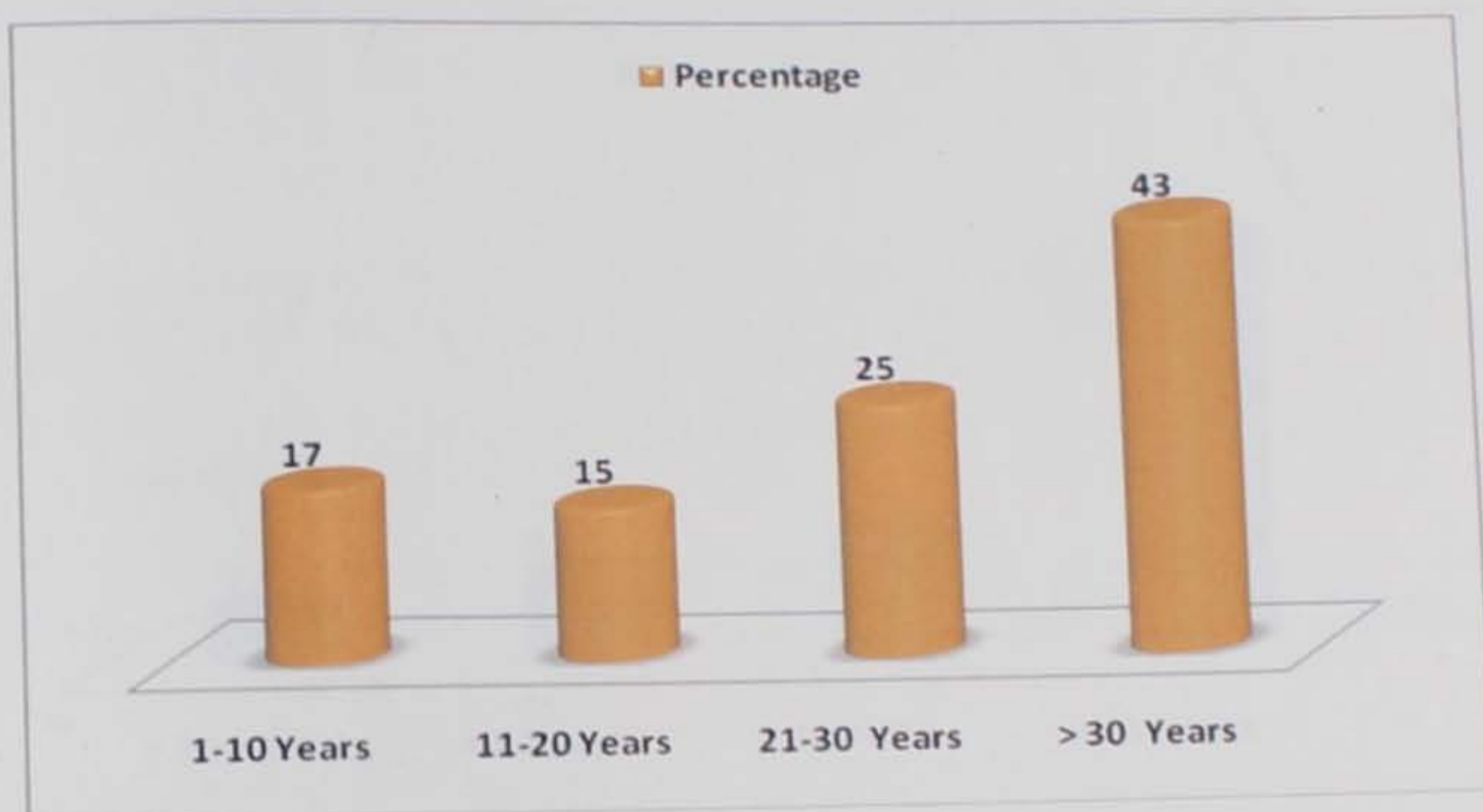


The educational status shows that 66 percent of dealers have degree of graduation out of that 28 percent in Agril. Graduate & 20 percent possess post graduate degree. No dealer found illiterate.

Table No.6.8: - Percentage of experience of dealers in business.

| Sr. No. | Years | Respondents | Percentage |
|---------|-------------|-------------|------------|
| 1 | 1-10 Years | 7 | 17 |
| 2 | 11-20 Years | 6 | 15 |
| 3 | 21-30 Years | 10 | 25 |
| 4 | > 30 Years | 17 | 43 |

Figure No. 6.5 percentage of experience of dealers in business.



From the figure it indicated that 58 percent of dealers have more than 20 years experience in dealing with Agribusiness products and 32 percent dealers have experience less than 20 years. The table shows each dealer has spent enough time to develop and understand market.

Table No.6.9: - Dealers association with RCF.

| Sr. No. | Years | No. of Dealers | Percentage |
|---------|------------|----------------|------------|
| 1 | > 2 Years | 3 | 7.5 |
| 2 | > 5 Years | 5 | 12.5 |
| 3 | > 10 Years | 7 | 17.5 |
| 4 | > 15 Years | 25 | 62.5 |

Figure No. 6.6 Dealers association with RCF.



Above figure shows that 62.5 percent dealers associated with RCF from more than 15 years followed by 17.5 percent dealers associated from more than 10 years and 12.5 percent dealers associated from more than 5 years and few dealers associate from 2 years

Conclusion: -

- ✓ The distribution of farmers according to size of land holding, most of farmer's small and medium farmers.
- ✓ The education status of farmers, all farmers were literate out of that near about 15 percent were degree holders.
- ✓ The land holding pattern of surveyed farmers shows that 55 percent have not irrigation facilities on their farm, farmers with rainfed farming were most in large farmers segment. The farmers with whole land under irrigation were more in small farmer segment.
- ✓ Distribution of farmers on the basis of irrigation facility on their farm the drip and sprinkler irrigation facility were more in medium and large farmer segment. The farmers in marginal and small segment having flow irrigation facility on their farm.
- ✓ The fertilizer purchasing decision in the farmers family most in all segment of farmers take own decision.
- ✓ The marginal and large farmer test their soil than small and medium farmers segment.
- ✓ The education status of dealers shows that 66 percent of dealers have degree of graduation out of that 28% in agriculture graduates, no dealers found illiterates.
- ✓ The percentage of experience of dealer in the business shows that each dealer has spent enough time to develop and understand market.
- ✓ The dealers association with RCF shows that from long time they were associated with RCF.

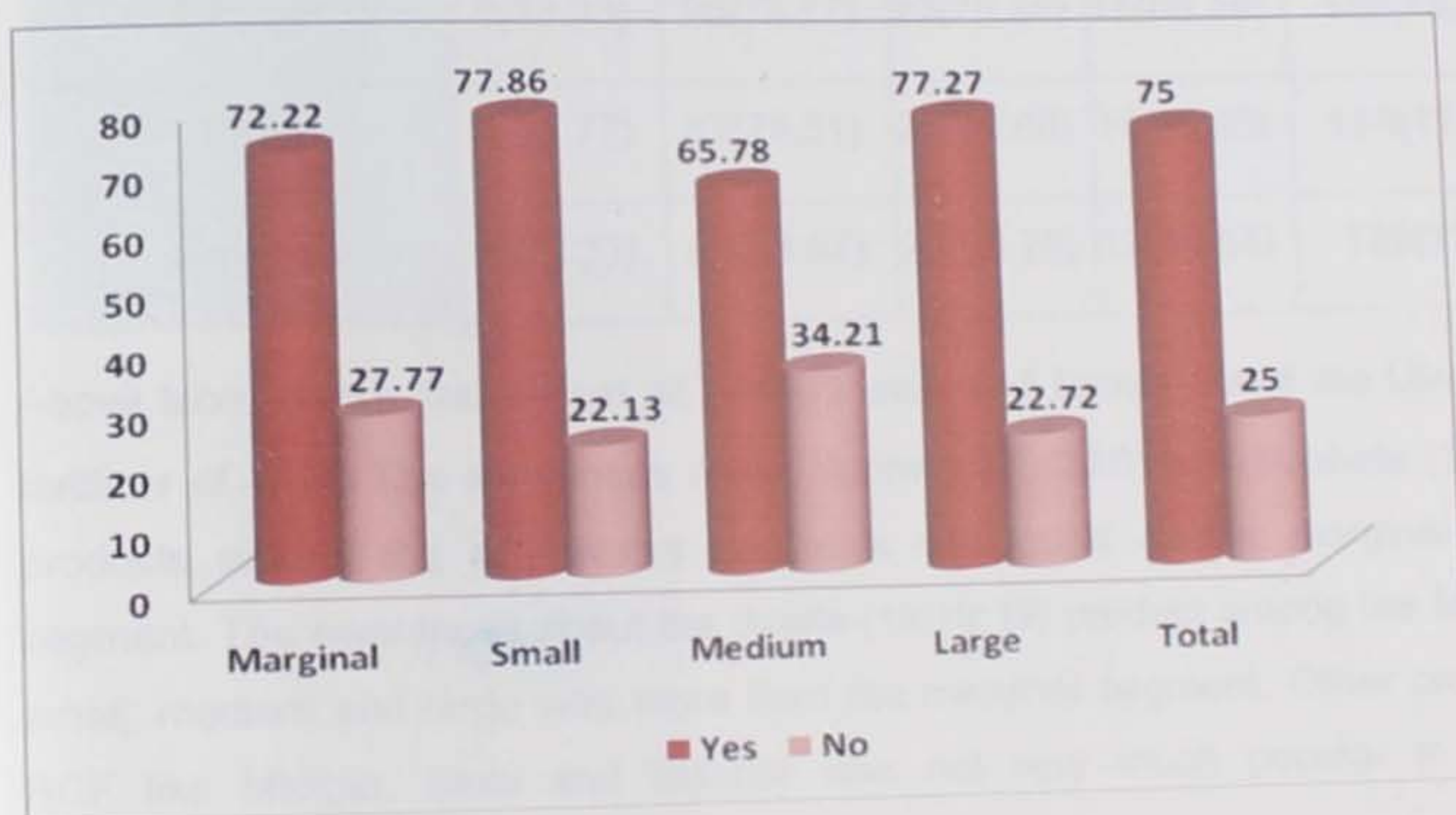
OBJECTIVE - 2

**“The awareness about RCF Water Soluble
Fertilizers.”**

Table No. 6.10: – Farmers awareness about fertigation method.

| Particulars | Farmers | | | | Total (%) |
|-------------|-----------|-----------|-----------|-----------|-----------|
| | Marginal | Small | Medium | Large | |
| | (%) | (%) | (%) | (%) | |
| Yes | 13(72.22) | 95(77.86) | 25(65.78) | 17(77.27) | 150(75) |
| No | 5(27.77) | 27(22.13) | 13(34.21) | 5(22.72) | 50(25) |
| Total | 18 | 122 | 38 | 22 | 200 |

Figure No. 6.7 farmers awareness about fertigation method.



From above figure, it concludes that awareness of farmers about fertigation method, 75 percent of farmers were aware about the fertigation method, out of total. The

marginal, small and large farmers were more aware than medium farmers. Awareness about fertigation method was less in small farmers segment.

Table No. 6.11: – Awareness about RCF fertilizers.

| Particulars | Farmers | | | | Total (%) |
|--------------------------|--------------|------------|------------|-----------|-------------------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Ujwala urea | 18(100) | 122(100) | 38(100) | 22(100) | 200(17.51) |
| Suphala(20:20:0) | 16(88.88) | 118(96.72) | 35(92.10) | 20(90.90) | 189(16.54) |
| Suphala(15:15:15) | 15(83.33) | 115(94.26) | 35(92.10) | 19(86.36) | 184(16.11) |
| Sujala(19:19:19) | 10(55.55) | 108(88.52) | 32(84.21) | 17(77.27) | 167(14.62) |
| Microla | 6(33.33) | 90(73.77) | 29(76.31) | 15(68.18) | 140(12.25) |
| Biola | 5(27.77) | 87(71.31) | 28(73.68) | 14(63.63) | 134(11.73) |
| Sulphar | 6(33.33) | 85(69.67) | 25(65.78) | 12(54.54) | 128(11.2) |

Above table shows that almost all farmers were well known about the Ujwala urea fertilizer of RCF. The awareness about Suphala (20:20:0) and Suphala (15:15:15) products among the all farmers segments was good except marginal farmers segment. The awareness about the Sujala (19:19:19) product among the farmers in small, medium and large was more than the marginal segment. Other products of RCF like Microla, Biola and Sulphar was not very much popular in farmer's community.

Conclusion: -

- ✓ Farmers awareness about fertigation method shows that 75 percent farmers were aware fertigation method.
- ✓ Most of the farmers were aware about RCF product like Ujwala (Urea), Suphala, Sujala than Microla, Biola and Sulphur.
- ✓ More farmers were aware about the Sujala from dealers where as other farmers were know from advertising, friends and exhibition some farmers also aware through demo plot by company

Table No.6.12:– Source of awareness of Sujala among the farmers.

| Particulars | Farmers | | | | Total (%) |
|-------------------------------|--------------|-----------|------------|-----------|-----------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Dealers | 6(60) | 62(57.40) | 15(46.87) | 6(35.29) | 89(44.5) |
| Friends | 1(10) | 12(11.11) | 3(9.37) | 1(5.88) | 17(8.5) |
| Advertising | 3(30) | 15(13.88) | 5(15.62) | 1(5.88) | 24(12) |
| Magazine | 0 | 4(3.70) | 2(6.25) | 0 | 6(3) |
| Exhibitions | 0 | 8(7.40) | 4(12.5) | 4(23.52) | 16(8) |
| Demo plot | 0 | 4(3.70) | 2(6.25) | 3(17.64) | 9(4.5) |
| Company Representative | 0 | 3(2.77) | 1(3.12) | 2(11.76) | 6(3) |

Note: - The analysis is on the basis of 167 farmer's response they know Sujala (19:19:19) Water soluble fertilizer of RCF.

From above table it indicated that 44.5 percent of farmers were known from dealers, where as other farmers were known from advertising, friends and the exhibitions with 12, 8.5 and 8 present respectively. Some farmers also aware through demo plot by company 4.5 percent and magazine and company representative 6 percent each.

OBJECTIVE - 3

“To study the competitor analysis of water soluble fertilizers.”

Table No.6. 13: –Farmers awareness about other different companies water soluble fertilizers.

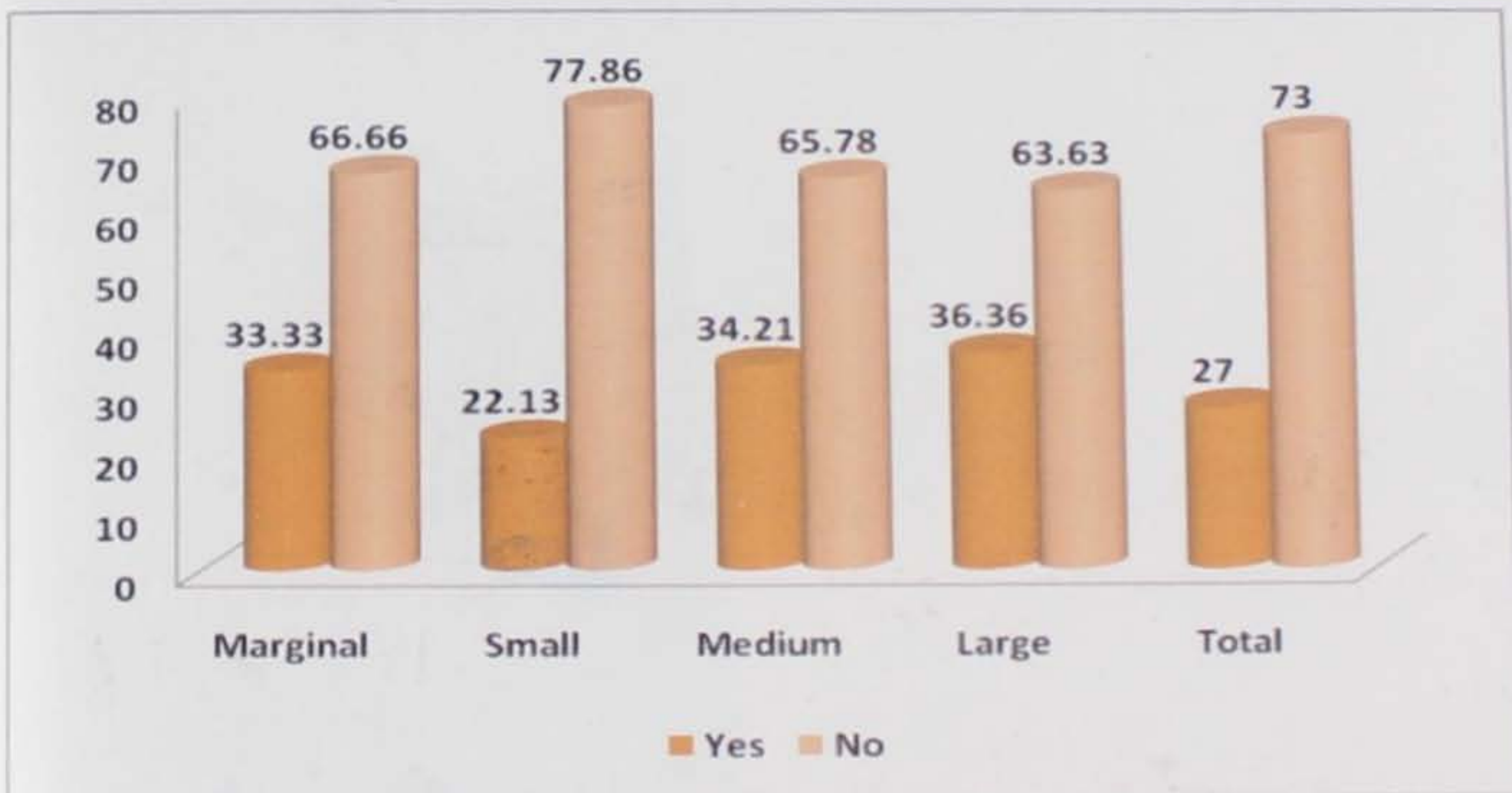
| Particulars | Farmers | | | | Total (%) |
|-------------------|--------------|------------|------------|-----------|-------------------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| RCF | 10(55.55) | 108(88.52) | 32(84.21) | 17(77.27) | 167(20.92) |
| Deepak | 15(83.33) | 112(91.80) | 33(86.84) | 19(86.36) | 179(22.43) |
| Coromandal | 14(77.77) | 110(90.16) | 29(76.31) | 20(90.90) | 173(21.67) |
| Godavari | 9(50) | 106(86.88) | 27(71.05) | 15(68.18) | 157(19.67) |
| Rich field | 7(38.88) | 81(66.39) | 22(57.89) | 12(54.54) | 122(15.28) |

The table shows that the 22.43 & 21.67 percent of farmers were more aware about Deepak & Coromandal respectively. RCF water soluble fertilizers having the third rank with 20.92 percent out of total responses. Small, medium and large farmers segment were more known about RCF water soluble fertilizer than marginal farmers segment. Godavari water soluble fertilizers 19.67 percent and Richfield water soluble fertilizers 15.28 percent out of total responses with fourth and fifth rank respectively.

Table No.6.14: - Promotional activities were doing by different companies.

| Particulars | Farmers | | | | Total (%) |
|--------------|-----------|-----------|-----------|-----------|-----------|
| | Marginal | Small | Medium | Large | |
| | (%) | (%) | (%) | (%) | |
| Yes | 6(33.33) | 27(22.13) | 13(34.21) | 8(36.36) | 54(27) |
| No | 12(66.66) | 95(77.86) | 25(65.78) | 14(63.63) | 146(73) |
| Total | 18 | 122 | 38 | 22 | 200 |

Figure No. 6.8 Promotional activities were doing by different companies.



The figure explains that the promotional activities were very less in the study area. The 73 percent of farmers have no idea about promotional activities. The 27 percent farmers said that some companies doing promotional activities in area.

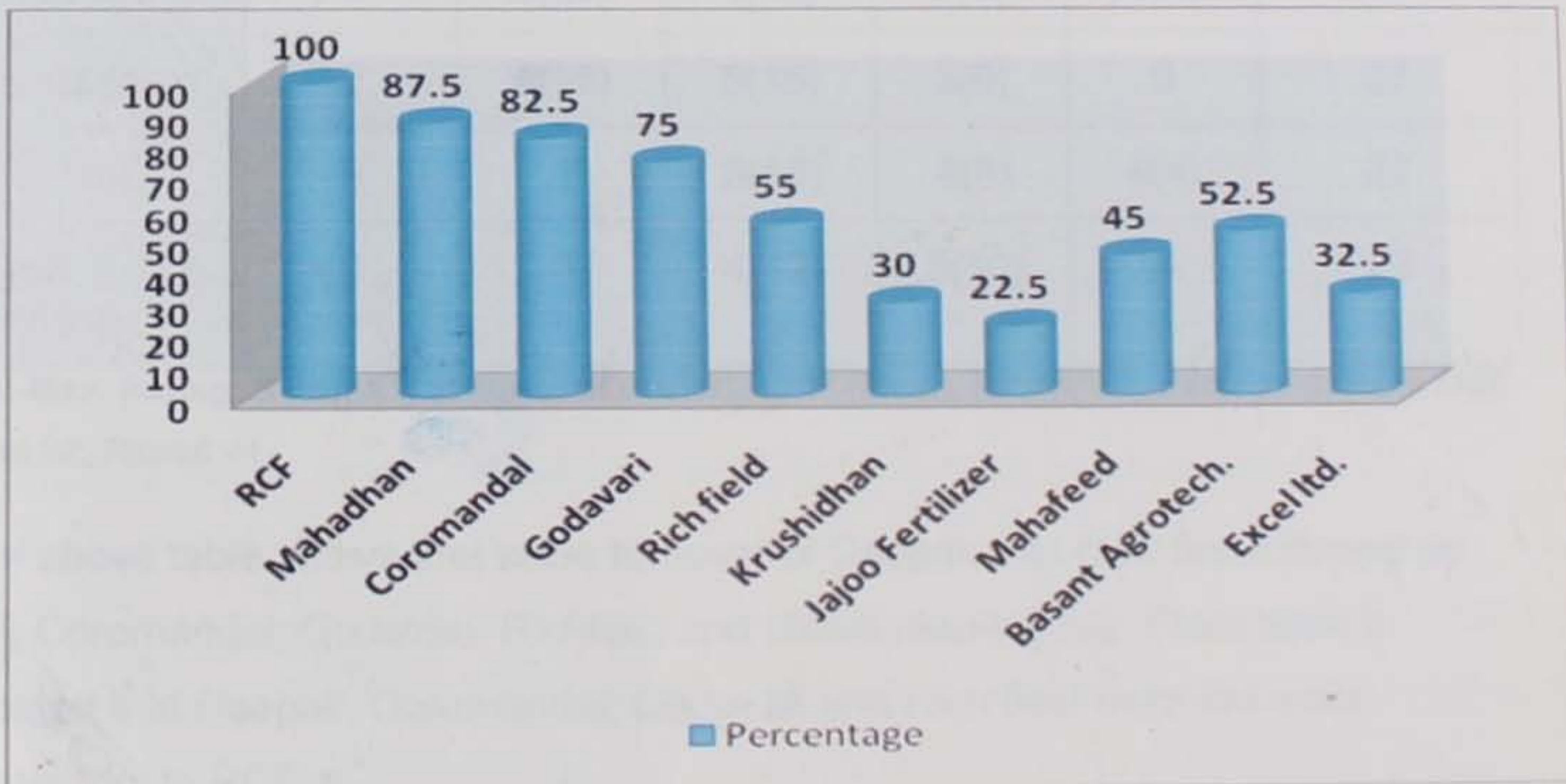
Various Companies doing promotional activities.

- Soil testing by company mobile van.
- Field demonstration.
- Farmers meeting.
- Wall paintings.
- Postering.
- Exhibition etc.

Table No.6.15: - Dealers were dealing with various companies.

| Sr. No. | Company Name | No. of Dealers | Percentage |
|---------|------------------|----------------|------------|
| 1 | RCF | 40 | 100 |
| 2 | Deepak | 37 | 87.5 |
| 3 | Coromandal | 35 | 82.5 |
| 4 | Godavari | 32 | 75 |
| 5 | Rich field | 22 | 55 |
| 6 | Krushidhan | 12 | 30 |
| 7 | Jajoo Fertilizer | 9 | 22.5 |
| 8 | Mahafeed | 18 | 45 |
| 9 | Basant Agrotech. | 21 | 52.5 |
| 10 | Excel Ltd. | 13 | 32.5 |

Figure No. 6.9 dealers were dealing with various companies.



Above figure shows that all dealers deal with RCF water soluble fertilizers followed by 87.5% dealers deal with Deepak, 82.5% dealers deal with Coromandal water soluble fertilizers and 75% dealers deal with Godavari water soluble fertilizers. Deepak, Coromandal Godavari and Rich field are the major share in market.

Table No.6.16: - Ranking by dealers to various water soluble fertilizers companies according to sales turnover

| Company Name | Rank 1 | Rank 2 | Rank 3 | Rank 4 | Rank 5 | cumulative |
|------------------|--------|--------|--------|--------|--------|------------|
| Deepak | 15(75) | 9(36) | 7(21) | 5(10) | 1(1) | 143 |
| RCF | 10(50) | 11(44) | 9(27) | 7(14) | 3(3) | 138 |
| Coromandal | 12(60) | 8(32) | 8(24) | 4(8) | 3(3) | 127 |
| Godavari | 10(50) | 7(28) | 6(18) | 5(10) | 4(4) | 110 |
| Rich field | 5(25) | 7(28) | 3(9) | 2(4) | 5(5) | 71 |
| Basant Agrotech | 0 | 7(28) | 6(18) | 4(8) | 4(4) | 58 |
| Mahafeed | 0 | 5(20) | 6(18) | 3(6) | 4(4) | 48 |
| Krushidhan | 0 | 4(16) | 5(15) | 3(6) | 0 | 37 |
| Excel ltd. | 0 | 0 | 5(15) | 4(8) | 4(4) | 27 |
| Jajoo fertilizer | 0 | 0 | 4(12) | 5(10) | 0 | 22 |

Note:-Max. Rating: 5 (Rank1) x 40(no. of dealer) = 200 (Max.), Rank1 = 5, Rank2 = 4, Rank3 =3, Rank4 =2, Rank5 =1

From above table shows that sales turnover of Deepak was rank first followed by RCF, Coromandal, Godavari, Richfield and others respectively. From table it indicated that Deepak, Coromandal, Godavari and Rich field were the main competitors to RCF.

Table No.6.17: - Performance of the Water Soluble Fertilizers company.

| Company Name | RCF | Deepak | Coromandal | Godavari | Richfield |
|--------------------------------|--------------|--------------|--------------|-------------|--------------|
| No. Of dealers | 40 | 37 | 35 | 32 | 22 |
| Parameter | | | | | |
| Price | 2.5 | 4.24 | 4.2 | 3.97 | 3.8 |
| Margin | 2.55 | 4.1 | 4.05 | 4.02 | 3.5 |
| Demand by farmer | 3.3 | 3.89 | 3.9 | 3.2 | 2.47 |
| Quality | 3.82 | 3.29 | 3.18 | 3.1 | 3.05 |
| Brand popularity | 3.9 | 3.72 | 3.6 | 3.25 | 3.02 |
| Company reputation | 4.32 | 3.81 | 3.4 | 3.15 | 3.1 |
| Timely availability | 2.52 | 3.45 | 3.3 | 3.09 | 2.95 |
| After sale service | 2.85 | 3.81 | 3.6 | 3.45 | 2.23 |
| Promotional effectiveness | 3.7 | 3.67 | 3.45 | 3.3 | 3.25 |
| Customer satisfaction | 3.9 | 3.89 | 3.5 | 3.2 | 3.05 |
| Behaviour of marketing officer | 4.2 | 3.81 | 3.71 | 3.57 | 3.27 |
| Score Total | 37.56 | 41.68 | 39.89 | 37.3 | 33.69 |

Max. Rating:- 11 (Market parameters) x 5 (Max. Scale 5) = 55 (Max.)

Note: Rating Scale: - Highly satisfied = 5, Satisfied = 4, moderately satisfied = 3, Unsatisfied=2, highly unsatisfied =1.

The performance parameters of all present companies were shows that RCF have good reputation among selected dealers because other than few parameters like price, margin & timely availability, its performance was very good. According to dealers RCF product quality brand popularity, company reputation, after sale

Table No.6.17: - Performance of the Water Soluble Fertilizers company.

| Company Name | RCF | Deepak | Coromandal | Godavari | Richfield |
|--------------------------------|--------------|--------------|--------------|-------------|--------------|
| No. Of dealers | 40 | 37 | 35 | 32 | 22 |
| Parameter | | | | | |
| Price | 2.5 | 4.24 | 4.2 | 3.97 | 3.8 |
| Margin | 2.55 | 4.1 | 4.05 | 4.02 | 3.5 |
| Demand by farmer | 3.3 | 3.89 | 3.9 | 3.2 | 2.47 |
| Quality | 3.82 | 3.29 | 3.18 | 3.1 | 3.05 |
| Brand popularity | 3.9 | 3.72 | 3.6 | 3.25 | 3.02 |
| Company reputation | 4.32 | 3.81 | 3.4 | 3.15 | 3.1 |
| Timely availability | 2.52 | 3.45 | 3.3 | 3.09 | 2.95 |
| After sale service | 2.85 | 3.81 | 3.6 | 3.45 | 2.23 |
| Promotional effectiveness | 3.7 | 3.67 | 3.45 | 3.3 | 3.25 |
| Customer satisfaction | 3.9 | 3.89 | 3.5 | 3.2 | 3.05 |
| Behaviour of marketing officer | 4.2 | 3.81 | 3.71 | 3.57 | 3.27 |
| Score Total | 37.56 | 41.68 | 39.89 | 37.3 | 33.69 |

Max. Rating:- 11 (Market parameters) x 5 (Max. Scale 5) = 55 (Max.)

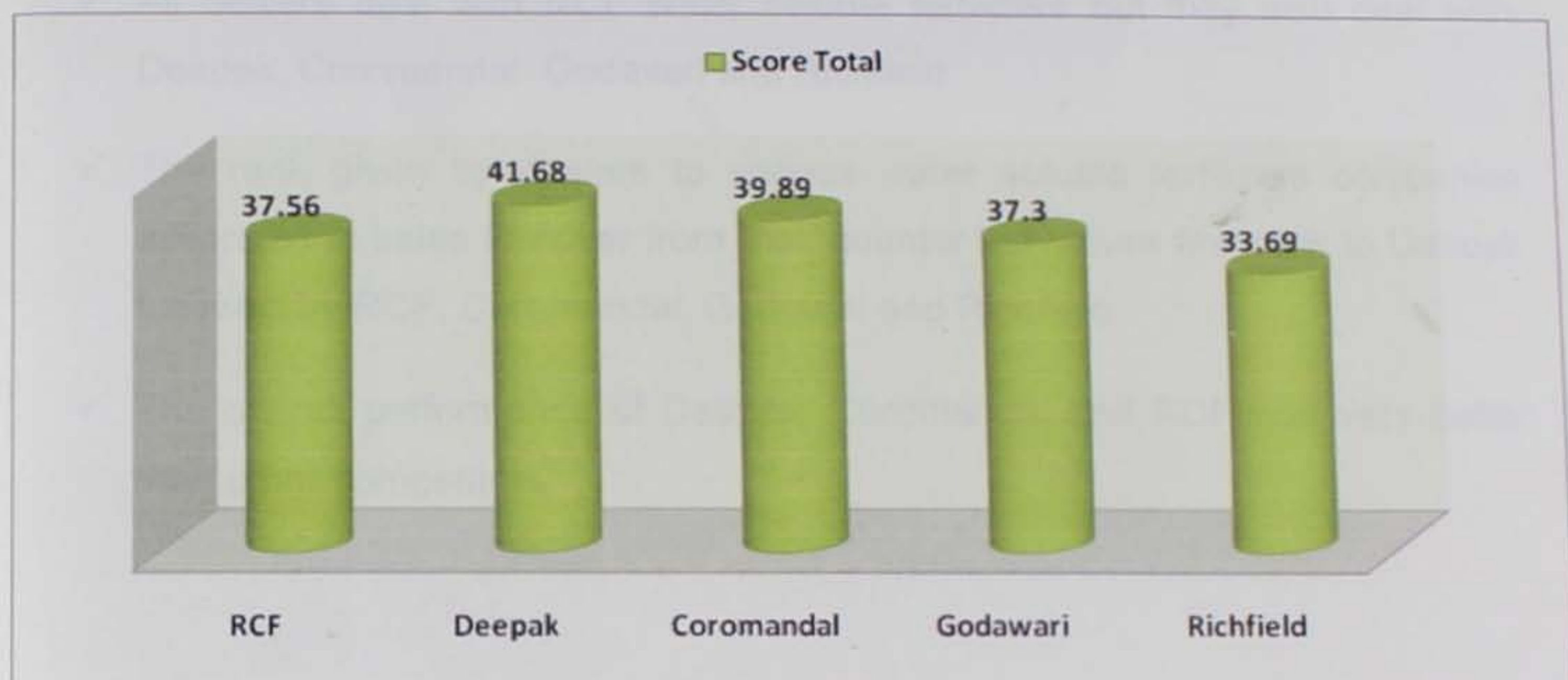
Note: Rating Scale: - Highly satisfied = 5, Satisfied = 4, moderately satisfied = 3,

Unsatisfied=2, highly unsatisfied =1.

The performance parameters of all present companies were shows that RCF have good reputation among selected dealers because other than few parameters like price, margin & timely availability, its performance was very good. According to dealers RCF product quality brand popularity, company reputation, after sale

service, customer satisfaction and behavior of marketing officer is good that results it is very popular in market. Deepak is always available on the time in market. Overall performance of Deepak, Coromandal and RCF was very better than other competitors. The Deepak and Coromandal provide high margin on MRP so their performance well in that parameters and that's why they were become major competitor with RCF.

Figure No. 6.10 Overall performance.



From above figure it concluded that the overall performance of Deepak and Coromandal was almost equal and followed by RCF, Godawari and Richfield. RCF must have to concentrate on promotional activities and provide services like assistance to farmers regarding new technology for increase production, about application of fertilizer during season to be top one.

Conclusion: -

- ✓ The awareness about the Deepak and Coromandal water soluble fertilizers was more than RCF water soluble fertilizers among the all farmers.
- ✓ The promotional activity about RCF water soluble fertilizer was very less in study area.
- ✓ All dealers deal with RCF water soluble fertilizers but they also deal with Deepak, Coromandal, Godavari and Richfield.
- ✓ The rank given by dealers to various water soluble fertilizers companies according to sales turnover from their counter they gives first rank to Deepak followed by RCF, Coromandal, Godavari and Richfield.
- ✓ The overall performance of Deepak, Coromandal and RCF was very better than other competitors.

OBJECTIVE - 4

To study price and product differentiation.

Table No 6.18: – Major factors consider by the marginal farmers while purchasing the water soluble fertilizer of RCF.

| Particulars | Always | Mostly | Oftenly | Rarely | Never | Cumulative |
|----------------------------|--------|--------|---------|--------|-------|------------|
| Quality | 5(25) | 2(4) | 2(6) | 1(2) | 0 | 37 |
| Price | 7(35) | 2(8) | 1(3) | 0 | 0 | 46 |
| Packaging | 4(20) | 3(12) | 2(6) | 1(2) | 0 | 40 |
| Promotional Strategy | 2(10) | 2(8) | 3(9) | 2(4) | 1(1) | 32 |
| Timely Availability | 5(25) | 3(12) | 1(3) | 1(2) | 0 | 42 |
| Past experience | 5(25) | 3(12) | 2(6) | 0 | 0 | 43 |
| Brand image | 5(25) | 2(8) | 2(6) | 1(2) | 0 | 41 |
| Recommendation | 4(20) | 3(12) | 1(3) | 1(2) | 1(1) | 38 |
| Good relation with dealers | 5(25) | 3(12) | 2(6) | 0 | 0 | 43 |

Rating Scale: - Always =5, Mostly =4, Oftenly=3, Rarely= 2, Never=1

Note - For Marginal farmers (10) which were aware about RCF water soluble fertilizer.

From above table it conclude that in marginal farmers segment, major factor influenced to farmers while purchasing of water soluble fertilizer were price, Quality, past experience, brand image, timely availability, packaging and good relation with dealers.

Table No 6.19: – Major factors consider by the small farmers while purchasing the water soluble fertilizer of RCF.

| Particulars | Always | Mostly | Oftenly | Rarely | Never | Cumulative |
|----------------------------|----------|---------|---------|--------|-------|------------|
| Quality | 97(485) | 5(20) | 3(9) | 2(4) | 1(1) | 519 |
| Price | 100(500) | 4(16) | 2(6) | 2(4) | 0 | 526 |
| Packaging | 8(40) | 36(144) | 46(138) | 9(18) | 9(9) | 349 |
| Promotional Strategy | 7(35) | 31(124) | 55(165) | 10(20) | 5(5) | 349 |
| Timely Availability | 72(360) | 13(52) | 12(36) | 7(14) | 4(4) | 466 |
| Past experience | 79(395) | 13(52) | 9(27) | 6(12) | 1(1) | 487 |
| Brand image | 85(425) | 12(48) | 8(24) | 2(4) | 1(1) | 502 |
| Recommendation | 42(210) | 31(124) | 15(45) | 13(26) | 7(7) | 412 |
| Good relation with dealers | 93(465) | 9(36) | 6(18) | 0 | 0 | 519 |

Rating Scale: - Always =5, Mostly =4, Oftenly=3, Rarely= 2, Never=1

Note - For small farmers (108) which were aware about RCF water soluble fertilizer.

The table explained that in the small farmer segment major factor influenced to farmers while purchasing the water soluble fertilizer were price, quality followed by good relation with dealers and brand image. In this segment farmers mostly consider

promotional strategy, packaging and recommendation. Major factors that influence the purchasing behaviour were price, quality, good relation with dealers, brand image, past experience & recommendation.

Table No 6.20: – Major factors consider by the medium farmers while purchasing the water soluble fertilizer of RCF.

| Particulars | Always | Mostly | Oftenly | Rarely | Never | Cumulative |
|----------------------------|--------|--------|---------|--------|-------|------------|
| Quality | 13(65) | 8(32) | 5(15) | 4(8) | 2(2) | 122 |
| Price | 10(50) | 5(20) | 9(27) | 6(12) | 2(2) | 111 |
| Packaging | 7(35) | 5(15) | 14(42) | 3(6) | 3(3) | 101 |
| Promotional Strategy | 6(30) | 4(16) | 15(45) | 10(20) | 3(3) | 114 |
| Timely Availability | 8(40) | 5(20) | 7(21) | 7(14) | 5(5) | 100 |
| Past experience | 10(50) | 8(32) | 9(27) | 3(6) | 2(2) | 117 |
| Brand image | 11(55) | 8(32) | 7(21) | 4(8) | 2(2) | 118 |
| Recommendation | 4(20) | 7(28) | 15(45) | 5(10) | 1(1) | 104 |
| Good relation with dealers | 12(60) | 8(32) | 6(18) | 5(10) | 1(1) | 121 |

Rating Scale: - Always =5, Mostly =4, Oftenly=3, Rarely= 2, Never=1

Note - For medium farmers (32) which were aware about RCF water soluble fertilizer.

It indicated that in the medium farmer segment major factor influenced to farmers while purchasing the water soluble fertilizer were always consider quality, good relation with dealers, brand image and past experience. In this segment farmers Oftenly and rarely consider promotional strategy, recommendation and packaging.

Table No 6. 21: – Major factors consider by the large farmers while purchasing the water soluble fertilizer of RCF.

| Particulars | Always | Mostly | Oftenly | Rarely | Never | Cumulative |
|----------------------------|--------|--------|---------|--------|-------|------------|
| Quality | 9(45) | 5(15) | 3(9) | 0 | 0 | 69 |
| Price | 3(15) | 4(16) | 8(24) | 1(2) | 1(1) | 58 |
| Packaging | 3(15) | 4(12) | 6(18) | 4(8) | 0 | 53 |
| Promotional Strategy | 2(10) | 9(27) | 3(9) | 3(6) | 0 | 52 |
| Timely Availability | 7(35) | 4(16) | 2(6) | 3(6) | 1(1) | 64 |
| Past experience | 6(30) | 3(12) | 4(12) | 3(6) | 1(1) | 61 |
| Brand image | 7(35) | 5(15) | 3(9) | 2(8) | 0 | 67 |
| Recommendation | 2(10) | 3(12) | 7(21) | 4(8) | 1(1) | 52 |
| Good relation with dealers | 6(30) | 5(20) | 4(12) | 2(4) | 0 | 68 |

Rating Scale: - Always =5, Mostly =4, Oftenly=3, Rarely= 2, Never=1

Note - For large farmers (17) which were aware about RCF water soluble fertilizer.

It indicated that in the large farmer segment major factor influenced to farmers while purchasing the water soluble fertilizer always consider quality, good relation with

dealers, timely availability and past experience. In this segment farmers Oftenly and rarely consider the packaging and recommendation.

Table No 6. 22: – Farmers take suggestion while purchase the water soluble fertilizers.

| Particulars | Farmers | | | | Total (%) |
|----------------------------|--------------|-----------|------------|-----------|-----------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Dealers | 6(33.33) | 54(44.26) | 10(26.31) | 5(22.72) | 75(37.5) |
| Media | 2(11.11) | 14(11.47) | 3(7.89) | 2(9.09) | 21(10.5) |
| Progressive farmers | 8(44.44) | 24(19.67) | 4(10.52) | 2(9.09) | 38(19) |
| Agril. Officer | 0 | 5(4.09) | 5(13.15) | 5(22.72) | 15(7.5) |
| Marketing officer | 0 | 8(6.55) | 6(15.78) | 4(18.18) | 18(9) |
| Agril. Scientist | 0 | 4(3.27) | 5(13.15) | 1(4.54) | 10(5) |
| Follow others | 2(11.11) | 13(10.65) | 5(13.15) | 3(13.63) | 23(11.5) |
| Total | 18 | 122 | 38 | 22 | 200 |

It explained that most of the farmers in small 44.26 percent, medium 26.31 percent and marginal 33.33 percent followed by large 22.72 percent take suggestion from dealers while purchasing the water soluble fertilizers. More than 15 percent farmers in the medium and large segment take suggestion from Agril. officer and marketing officer of the company. In marginal farmers segment 44.44 percent farmers take suggestion from progressive farmers. In medium segment

farmers about 13 percent farmers take suggestion from Agril. Scientist and follow other farmers.

Table No 6.23: - Farmers were thinking about the price of Sujala (19:19:19).

| Particulars | Farmers | | | | Total (%) |
|---------------|----------|-----------|-----------|----------|--------------|
| | Marginal | Small | Medium | Large | |
| | (%) | (%) | (%) | (%) | |
| High | 7(70) | 71(65.74) | 10(31.25) | 9(52.94) | 197(58.08) |
| Medium | 2(20) | 27(25) | 17(53.12) | 6(35.29) | 52(31.13) |
| Low | 1(10) | 10(9.25) | 5(15.62) | 2(11.76) | 18(10.77) |
| Total | 10 | 108 | 32 | 17 | 167 |

Note: - The analysis is on the basis of **167 farmer's** response they know Sujala (19:19:19) Water soluble fertilizer of RCF.

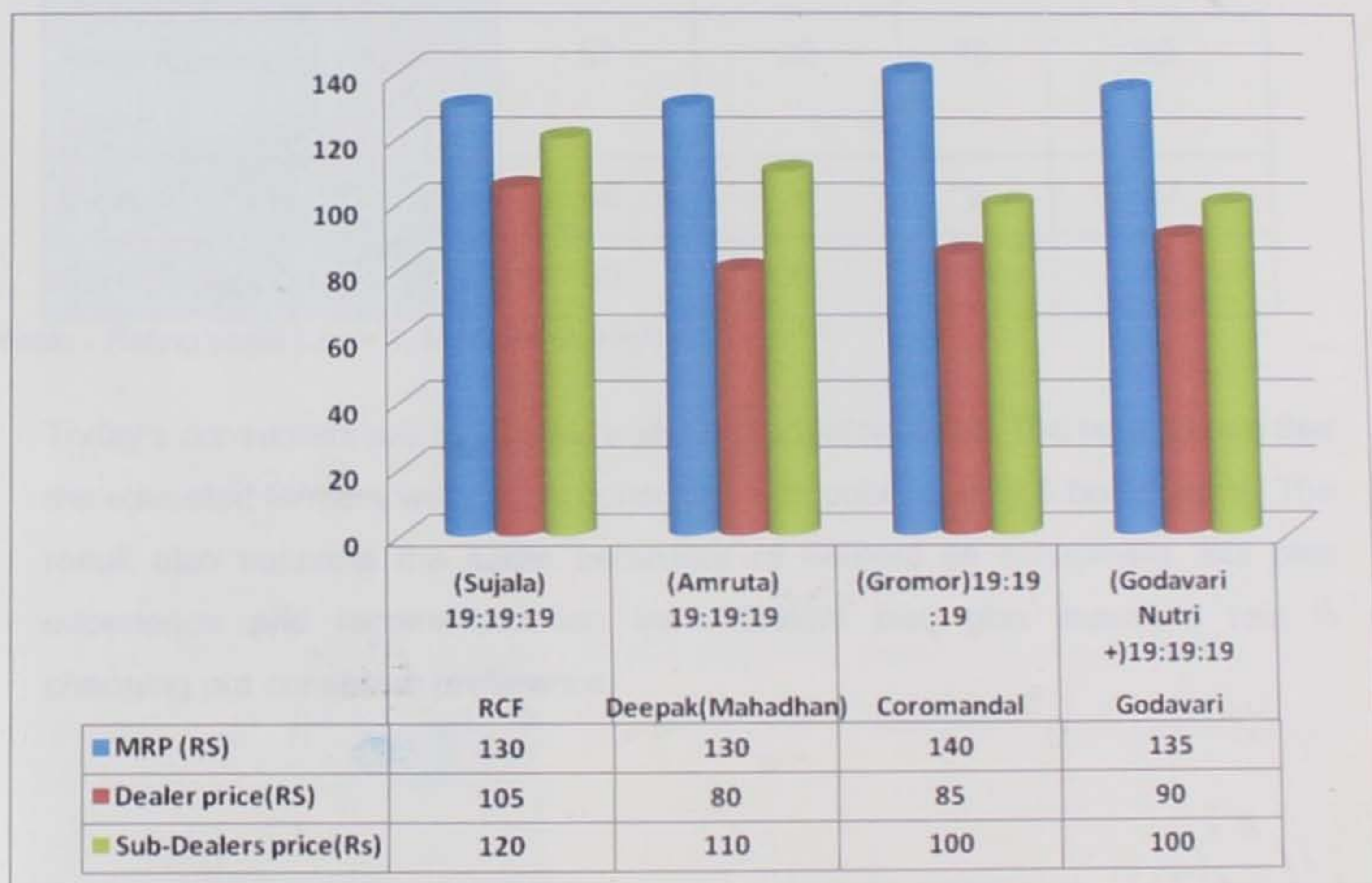
Above table shows that in marginal farmers segment 70 percent and in small farmer segment 65.74 percent farmers consider that the price was high followed by large and medium farmers. In medium farmers segment 53.12 percent farmers think that price of Sujala is medium. In large segment about 12 percent farmers think that price of Sujala is low.

Table no.6.24: - Price structure of different companies dealing with Water Soluble Fertilizer.

| Companies | Grades | MRP (RS) | Dealer price(RS) | Sub-Dealers price(Rs) |
|----------------|----------------------------|----------|------------------|-----------------------|
| RCF | (Sujala) 19:19:19 | 130 | 105 | 120 |
| Deepak(Deepak) | (Amruta) 19:19:19 | 130 | 80 | 110 |
| Coromandal | (Gromor)19:19:19 | 140 | 85 | 100 |
| Godavari | (Godavari Nutri +)19:19:19 | 135 | 90 | 100 |

Note:- For 1 Kg water soluble fertilizer

Figure No. 6.11 Price structure of different companies dealing with Water Soluble Fertilizer.



The above figure shows that the margin given to dealers was 35 to 40 percent higher in Deepak, Coromandal & Godavari Fertilizer Company as compared to only

20 percent by RCF to dealers & same with sub dealers. Thus the margin of profit was found less RCF, where other company gives higher margin of profit with MRP.

Table No.6.25:- Analyze consumer preference for water soluble fertilizers.

| Parameters | High | Moderate | Low | Cumulative score |
|-----------------------------|------|----------|-----|------------------|
| Price | 105 | 6 | 2 | 113 |
| Quality | 84 | 18 | 3 | 105 |
| Brand Name | 81 | 16 | 5 | 102 |
| Past Experience | 66 | 20 | 8 | 94 |
| Recommendation from Dealers | 57 | 22 | 10 | 89 |
| Yield | 45 | 34 | 8 | 87 |
| Service/Support | 30 | 32 | 14 | 76 |

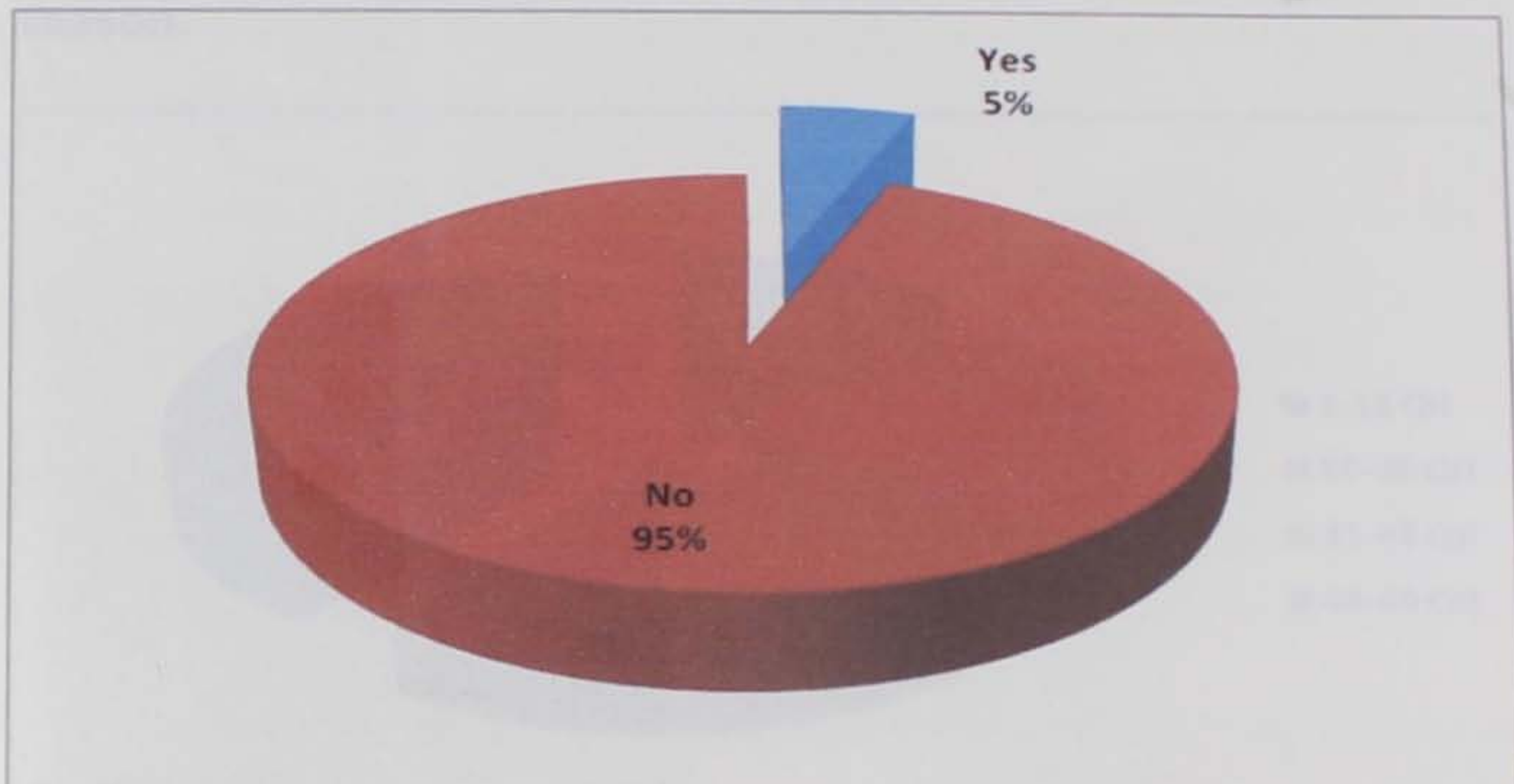
Note: - Rating scale Low= 1, Medium=2, High= 3.

Today's consumers are more aware about product he used. The table shows that the educated farmers were more conscious with price, quality & brand name. The result also supports the same behaviour of farmers as consumers. But past experience and recommendation from dealers also play important role in changing out consumer preference.

Table no.6.26: - Dealers feedback to modify the packaging of Sujala WSF.

| Sr.No. | Particulars | No. of Dealers | Percentage |
|--------|--------------|----------------|------------|
| 1 | Yes | 11 | 27.5 |
| 2 | No | 29 | 72.5 |
| | Total | 40 | 100 |

Figure No. 6.12 Dealers feedback to modify the packaging of Sujala WSF.



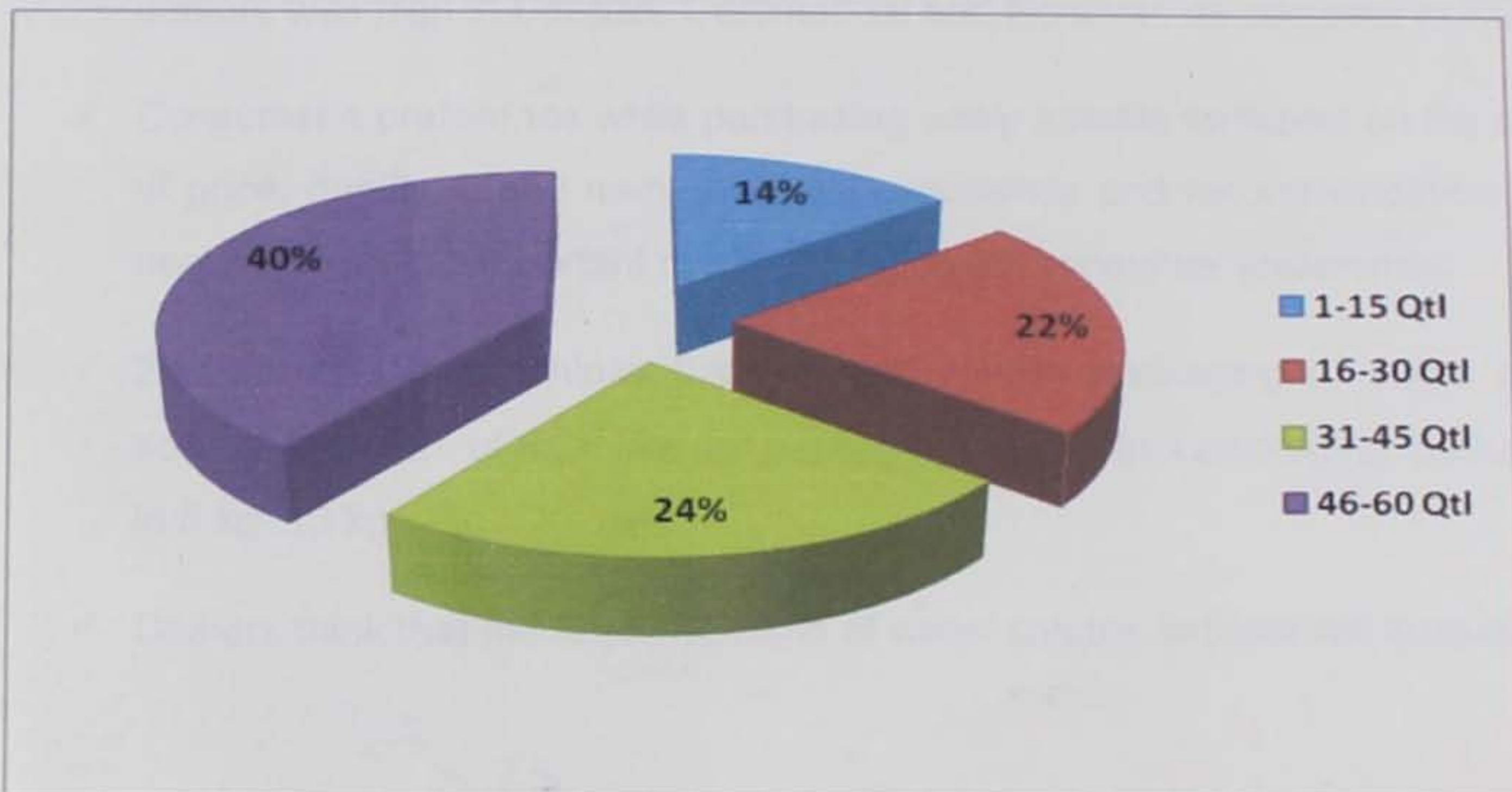
Above figure show that 73 percent dealers think that there is no any need to modify the packaging of Sujala(19:19;19) and 28 percent dealers think that to modify the packaging of Sujala(19:19;19 like

- Made attractive packaging
- Made plastic box packaging
- Packaging should be in 5kg,10kg.

Table No.6.27: - Expected demand of water soluble fertilizer in next season.

| Sr. No. | Quantity | No. of Dealers | Percentage |
|---------|-----------|----------------|------------|
| 1 | 1-15 Qtl | 7 | 14 |
| 2 | 16-30 Qtl | 11 | 22 |
| 3 | 31-45 Qtl | 12 | 24 |
| 4 | 46-60 Qtl | 20 | 40 |

Figure No. 6.13 Expected demand of water soluble fertilizer in next season.



Above figure shows that the expected future demand of water soluble fertilizers 20 percent dealers willing to sale 46-60 qtl of water soluble fertilizers it shows that in future demand of Water soluble fertilizer will increase, followed by 24 percent dealers will sale 31-45 qtl, 22 percent dealers 16-30 qtl and 14 percent dealers will sale 1-15qtl of water soluble fertilizers.

Conclusion: -

- ✓ Major factors consider by farmers in all segment were quality, price, past experience, brand image, timely availability and good relation with dealers while purchasing water soluble fertilizers.
- ✓ Most of farmers take suggestion from dealers followed by progressive farmers, follow other and media. While purchasing water soluble fertilizers.
- ✓ Most of the dealers think that the price of Sujala of RCF was high as compare to the other companies water soluble fertilizers
- ✓ Price of different companies show that the margin given by company to dealers was high in Deepak, Coromandal and Godavari as compare to RCF.
- ✓ Consumer's preference while purchasing water soluble fertilizers on the basis of price, quality, brand name but past experience and recommendation from dealers also play important role in changing out consumer preference.
- ✓ 28 percent dealers thinks that need to modify packaging of sujala water soluble fertilizers of RCF like Jar packaging, plastic box packaging, packaging in 5 kg, 10 kg . etc
- ✓ Dealers think that the future demand of water soluble fertilizer will increase.

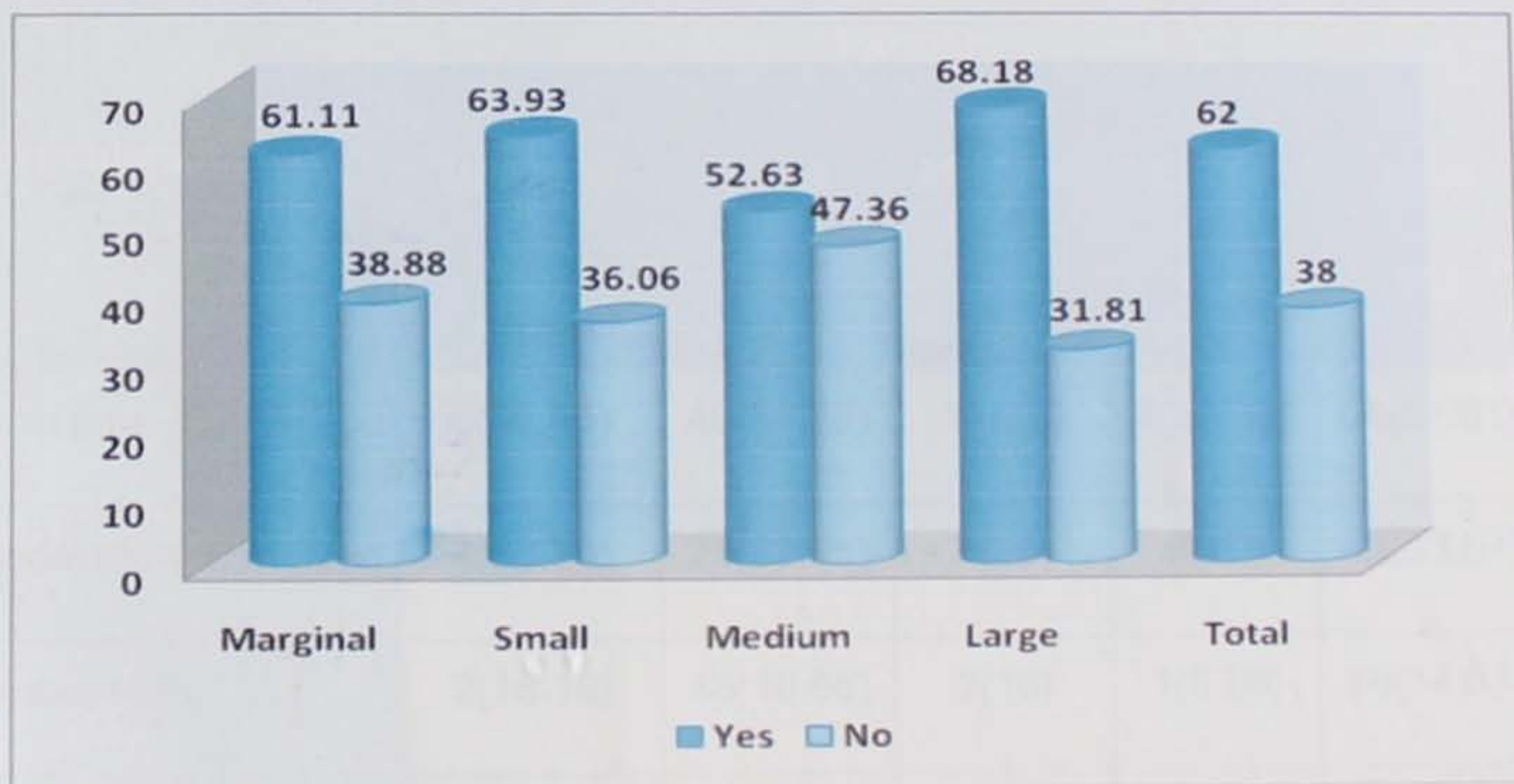
OBJECTIVE - 5

“To study the satisfaction level of Sujala.”

Table No 6.28: – Usage of Sujala Water soluble fertilizer on farmer's field.

| Particulars | Farmers | | | | Total |
|--------------|-----------|-----------|-----------|-----------|---------|
| | Marginal | Small | Medium | Large | |
| | (%) | (%) | (%) | (%) | |
| Yes | 11(61.11) | 78(63.93) | 20(52.63) | 15(68.18) | 124(62) |
| No | 7(38.88) | 44(36.06) | 18(47.36) | 7(31.81) | 76(38) |
| Total | 18 | 122 | 38 | 22 | 200 |

Figure No. 6.14 Usage of Water Soluble Fertilizer on farmers' field.



The figure shows that in large segment 68.18 percent farmers use Sujala water soluble fertilizer on the farm followed by in small farmer segment 63.93 percent, in

marginal farmer segment 61.11 percent and in medium farmers segment 52.63 percent. In medium segment 47.36 percent and in marginal farmer segment 38.88 percent farmers not yet use the Sujala water soluble fertilizer on the farm.

Why you use RCF water soluble fertilizers and in which crop.

Note: - The analysis is on the basis of **124 farmer's** response they use Sujala (19:19:19) Water soluble fertilizer of RCF.

- After the application of Sujala(19:19:19) in vegetables like onion, tomato, Brinjal, leafy vegetables the formation green leaves increase, colour development take place, quality of vegetable is increase.
- After the applications Sujala(19:19:19) on fruit crops like Orange, Mango, Banana, Watermelon that results more fruit setting, colour development, increase the quality of fruit and less fruit drop.
- By application of Sujala(19:19:19) in Cotton, Tur, Jowar that results green leaves formation and increase the size of grains and increase yield.

Table No 6. 29: – Satisfaction level of farmers with Sujala (19:19:19).

| Particulars | Farmers | | | | Total (%) |
|-----------------------------|-----------------|--------------|---------------|--------------|--------------|
| | Marginal (%) | Small (%) | Medium (%) | Large (%) | |
| Satisfied | 5(45.45) | 40(51.28) | 11(55) | 8(53.33) | 64(51.61) |
| Moderately satisfied | 4(36.36) | 25(32.05) | 7(35) | 6(40) | 42(33.87) |
| Unsatisfied | 2(18.18) | 13(16.66) | 2(10) | 1(6.66) | 18(14.51) |
| Total | 11 | 78 | 20 | 15 | 124 |

Note: - The analysis is on the basis of **124 farmer's** response they use Sujala (19:19:19) Water soluble fertilizer of RCF.

The table explains that in medium farmer segment 55 percent farmers, in large farmer segment 53.33 percent and in small farmer segment 51.28 percent farmers satisfied with the usage of Sujala followed by marginal farmer segment with 45.45 percent. In large farmer segment 40 percent and medium farmer segment 35 percent farmers were moderately satisfied with Sujala usage. In marginal farmers segment 18.18 percent farmers were unsatisfied with the usage of Sujala followed by 16.66 percent in small farmers segment.

Table No.6.30: - Dealers interest to sale Water Soluble Fertilizers of RCF.

| Parameters | No. of Dealers | Percentage |
|------------|----------------|------------|
| Yes | 40 | 100 |
| No | 0 | 0 |

Above table shows that all dealers were interested to sale water soluble fertilizers of RCF.

Conclusion: -

- ✓ Most of the farmers use Sujala water soluble fertilizers on their farm in different corps to increase the quality and yield.
- ✓ Most of the farmers satisfy from quality, good result and other parameters.
- ✓ Almost all dealers were interested to sale RCF water soluble fertilizers.

Suggestion from farmers: -

- Put competitive price of Sujala.
- Increase the field demonstration and promotional activity.
- Stop linkage system of Sujala with other RCF fertilizers.
- Timely availability of RCF fertilizers.

Suggestion from dealers: -

- Change the packaging of Sujala eg. Jar packaging, packaging in different ranges like 5kg, 10 kg ranges.
- Separate marketing officer and Agricultural field staff for each taluka.
- Compulsory purchase of Sujala rather than linkage with other fertilizers of RCF.
- Concentrate on price and margin of dealers.
- Visit of company representative to farmers and dealers.
- Put the lifelate of Sujala in the bags of various product of RCF.

Recommendation: -

- ❖ Company should concentrate on margin of dealers because dealers are the main who promotes the Sujala.
- ❖ Company should increased promotional activity like field demonstration, farmers meeting, and campaigns at the time of season.
- ❖ Consumer was very conscious towards price of Sujala so company should reduce the price of Sujala as compare to competitors.
- ❖ Most of farmers purchase the Sujala but due to less awareness they not use.
- ❖ More awareness generation programme should increase in selected area.
- ❖ Farmers need urea, Suphala (15:15:15 and 20:20:0) on time so company should give the timely availability.

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Annexure

Farmer Questioner

1. Name of Farmer: - _____

Age:- _____

Village:- _____ Taluka:- _____

District:- _____

Contact No.:- _____

2. Education:

S.S.C.

H.S.C.

Agriculture Graduate

Other Graduate

Post graduate

3. Crops taken season wise.

| Sr. no. | Kharif | | Rabi | | Summer | |
|---------|--------|---------|------|---------|--------|---------|
| | Crop | Acreage | Crop | Acreage | Crop | Acreage |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |

4. Information about land:

Irrigated

Non-irrigated

If Irrigated,

- Drip irrigation Sprinkler irrigation
 Furrow irrigation other

5. Do you know about fertigation method?

Yes No

6. Which water soluble fertilizer do you know at present?

| Fertilizer | Brand/grade | Manufacture | Price |
|------------|-------------|-------------|-------|
| | | | |
| | | | |
| | | | |
| | | | |

7. Which fertilizer of RCF do you know?

1 _____ 2 _____
 3 _____ 4 _____
 5 _____ 6 _____

8. How you know about Water soluble Fertilizer of RCF?

- Advertising (T.V./Radio) Demo plot
 Company representative Friends
 Exhibition Dealers
 Magazine

9. Is there any water soluble fertilizer company doing any promotional activity?

Yes No

If yes, _____

10. Who take a decision in your family while purchasing fertilizer?

You

Wife

Father

Brother

Other

11 Which factor you consider while purchasing RCF Water soluble fertilizers?

| Parameters | Always | Mostly | Often | Rarely | Never |
|---------------------------|--------|--------|-------|--------|-------|
| Quality | | | | | |
| Price | | | | | |
| Packaging | | | | | |
| Promotional strategy | | | | | |
| Timely Availability | | | | | |
| Past experience | | | | | |
| Brand image | | | | | |
| Recommendation | | | | | |
| Good relation with dealer | | | | | |

12. Why you use the RCF water soluble fertilizer and in which crops?

13. According whose suggestion do you purchase Fertilizer?

- | | |
|--|---|
| <input type="radio"/> Dealer | <input type="radio"/> Follow Other |
| <input type="radio"/> Agril. Officer | <input type="radio"/> Media |
| <input type="radio"/> Progressive Farmer | <input type="radio"/> Agril. Scientists |
| <input type="radio"/> Marketing Officer | |

14. Do you use the water soluble fertilizer Sujala in your farm?

- Yes No

15. What is the satisfaction level with Sujala when you used?

- Satisfied Moderately satisfied Unsatisfied

16. What do you think about price of Sujala WSF?

- High Medium Low

17. Are you doing soil testing?

- Yes No

18. Do you have any suggestion for company?

Dealer Questionnaire

1. Name of Firm:- _____

2. Name of proprietor:- _____

3. Address:- _____

4. Mob. No.:- _____ Landline No.:- _____

5. Education:-

S.S.C.

H.S.C.

Agriculture Graduate

Post graduate

Other Graduate

6. From how long you are in this business?

7. No. of village you covered in your area?

10. Give rank to WSF Companies according to sales turnover?

1. _____ 2. _____
 3. _____ 4. _____
 5. _____ 6. _____

11. How much WSF you will able to sale next coming year?

12. Performance of the following WSF Company dealing in above.

Rank the following parameters according to scale:

(1) Highly satisfied

(2) Satisfied

(3) Moderately satisfied

(4) unsatisfied

(5) Highly unsatisfied

| <u>Company name</u> | RCF | | | | |
|--------------------------------|-----|--|--|--|--|
| <u>Parameter</u> | | | | | |
| Price | | | | | |
| Margin | | | | | |
| Demand by farmer | | | | | |
| Quality | | | | | |
| Brand popularity | | | | | |
| Company reputation | | | | | |
| Timely availability | | | | | |
| After sale service | | | | | |
| Promotional effectiveness | | | | | |
| Customer satisfaction | | | | | |
| Behaviour of marketing officer | | | | | |

13. According to you which are the major factors preferred by consumer while purchasing the WSF?

| Parameter | High | Medium | Low |
|----------------------------|------|--------|-----|
| Price | | | |
| Quality | | | |
| Brand name | | | |
| Yield | | | |
| Past experience | | | |
| Recommendation from dealer | | | |
| Service/support | | | |

14. Which companies WSF are popular in your area & why?

| Sr. no. | Name of company | Reason |
|---------|-----------------|--------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |

15. Since how long you are associated with RCF?

> 2 year

5 year

> 10 year

15 year

16. Are you interested to sale WSF of RCF Company next coming year?

Yes

No

17. Is there any need to modify the packaging of Sujala WSF?

Yes

No

If Yes, _____

18. Your suggestions to RCF Company?
