## **NFCL** in the Service of Farmers

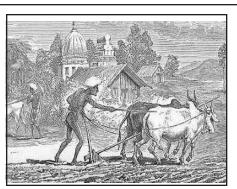
Nagarjuna Fertilisers and Chemicals Ltd. (NFCL) founded in 1985 is a company in the fertiliser industry that mandates the prosperity of farmers through superior industry interface. Apart from marketing wide-range of plant nutrients – urea, zinc products, water soluble fertilisers, water management systems, plant protection chemicals, agriculture research and IT services through kiosks, etc., it imparts great importance on technology transfer and value added services to the farmers, viz., demonstrations, adaptation of villages, education programmes, farmer training and advisory services, etc.

The paper deals in detail about various initiatives undertaken by NFCL in ensuring the well-being and prosperity of the farming community.

I NDIA IS ESSENTIALLY AN AGRARIAN country and agriculture has been a major driving force behind the growth of the economy. The most striking feature of the Indian economy is its capability to provide employment, livelihood and food to the teeming millions. Despite of its indispensable contribution to the economy, agriculture sector in India has been a neglected sector where most of the reforms went in favour of the nonagriculture sector.

It has been stated that for the Indian economy to grow at the rate of 8%-9%, the agriculture sector would need to grow at least at 5% per annum against a current rate of 1.1% per annum. Implementation of certain half hearted measures like restrictions in domestic movement of agricultural commodities, progressive reduction in food/fertiliser subsidies and partial rationalisation of exports/imports of agricultural commodities did not do any good to the industry, at this stage it would not be unjustified to state that, if the current rate of reforms continues then no one can protect the agriculture from further reeling down.

The year 2005 was a year of great developments in the field of agriculture and rural sector. Quite a few important developments took place, which are sure to make a long lasting impact on Indian agriculture. There has been a boom in cotton and sugar industries and an impressive growth in rural retailing. The seed industry recorded a growth rate of over 20% while pesticide industry showed a downfall of 20%. But, tractor and



fertiliser industries registered a growth of 10% each.

The Union Government also took many major initiatives - the launch of Rural Infrastructure Project, Rural Employment Guarantee Programme, National Horticulture Mission and several other initiatives including revision of seed bill, food bill and Mission 2007. The subsidy on micro irrigation increased to 50%, agricultural marketing reforms carried out and commodity trade boosted up. The Department of Information Technology announced establishing of one lakh Village Knowledge Centres in three years time.

The contribution of the agri input industry has also been substantial in the recent past. Agri input companies in India are currently emphasising on delivery of package of product and services to customers and helping in improving the lot of the farming community through technology transfer and value-added services.

Nagarjuna Fertilisers and Chemicals Limited (NFCL) is one company that N. SAMBASIVA RAO Nagarjuna Fertilisers & Chemicals Ltd. Nagarjuna Hills Hyderabad - 500 082

mandates the prosperity of farmers. NFCL has identified the existing gaps in the existing agri-value chain and have drafted customised services for its customers. Over years NFCL has transformed itself from a product oriented company in to a complete solution oriented company providing a balanced mix of products and services to the farmers thus assisting them in increasing their farm productivity and income. The paper discusses in detail the activities carried out in the past, the ongoing services and the new initiatives to be implemented at farmer level in near future.

## **COMPANY PROFILE**

NAGARJUNA FERTILISERS AND CHEMICALS Limited (NFCL) is a company that mandates the prosperity of farmers. Apart from marketing wide-range of plant nutrients - Urea, zinc products, water soluble fertilisers, water management systems, plant protection chemicals, agriculture research and IT services through kiosks, etc., it imparts great importance on technology transfer and value added services to the farmers – demonstrations, adaptation of villages, education programmes, farmer training and advisory services, etc.

The efforts of NFCL towards farmers have been continuous and continuously improving since the days when it started the seeding programme during 1986-87.

Nagarjuna markets its products across India through an extensive channel network of more than 10,000 direct dealers



Services

and warehouses. Professionally qualified and experienced sales forces ensure delivery of products and services. NFCL continuously adds products to its portfolio and provides innovative services to the farmers thus helping them in attaining prosperity.

Equal importance is given to field development activities; technically qualified and experienced field development officers conduct planned development activity by the use of modern tools and gadgets. The strength of Nagarjuna sales and development team can be gauged by their exposure in marketing full range of agri inputs and participation in extensive field development activities throughout the year. Technical Assistants recruited from agricultural universities and field assistants assist the development team in conducting various activities at farmer level. In addition to the above, development tools like AV vans, jeeps etc are also leveraged.

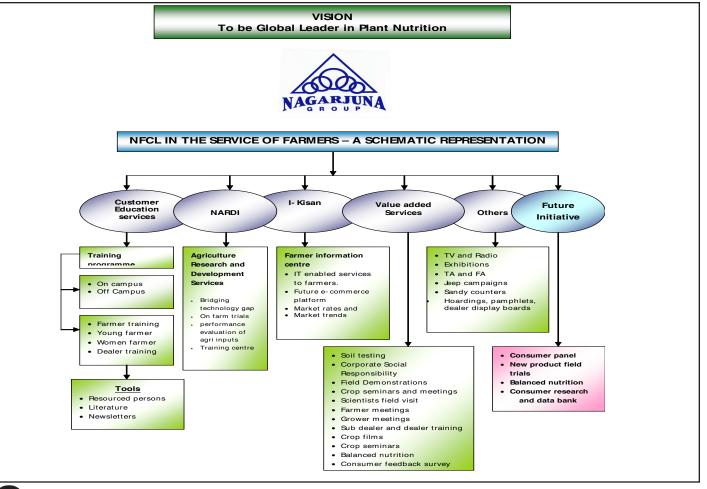
Unlike other agri-input companies, NFCL strategically places technically qualified and experienced development officers at regional office level to execute the corporate development strategy. The development activities at regional office are supervised by the regional managers and at finally the zonal managers supervise the performance of the regional offices operating under him. At division level, all activity, resources and performance is reviewed and managed by the Development Manager.

#### **PROGRAMMES UNDERTAKEN**

#### a) Customer Education Programme

**Objective :** NFCL understands that there is wide gap between the best practices in agriculture to the actual practices, proliferation of education at all level is necessary to reduce the existing gap.

Activity: Keeping the above in view, NFCL has designed customer training programmes for farmers, agri input sellers,



young farmers and also women farmers. In addition to the training programme, crop and product literature, wall paintings and hoardings, crop/product films, field demonstrations and audio visual vans are also leveraged to educate farmers. In addition to the above; NFCL draws resourced person and faculties from leading agricultural universities, industry and the department to impart training programme to the farmers.



NFCL learnt through market research that, agri input sellers are the highest point of contact to resolve crop and farming related issues. Keeping in view the above facts, NFCL educates agri input dealers and retailers on best farming practices, fertilisers and agro chemicals, water management products, specialty fertilisers etc, so that information can be disseminated to farmers at the point of purchase.

The training programmes are mostly conducted in two forms i.e. On-campus and Off-campus.

**On-campus Training** : On-campus training programmes are conducted at KVK Raju Krishi Vignana Kendram-NFCL situated at Kakinada. The objective of KVK is to transfer technology to farmers and improve their farm productivity by imparting best package of practices/IPM/ INM.



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NFCL KVK institute has trained about 5000 farmers as on date. The farmers are selected on specific criteria from villages across Andhra Pradesh for training mostly conducted during off season i.e. May - July. The farmers are given residential training in selected crops for 3 days by the eminent faculty drawn from the local research and agricultural universities. For farmers of Orissa and West Bengal where NFCL does not have a KVK institute, elaborate training programmes are conducted through qualified local resource. The KVK trained farmers act as company spokespersons for spreading their leanings to cocultivators. During the year 2004 -05, KVK Raju KVK provided training for over 700 farmers through on campus and 79 days of off campus farmer training programmes.

**Off-campus Training :** This programme is conducted during the season where resource/scientist visit the farmer fields for crop inspection and addresses the village farmers in meeting on the basis of observations/specimens the resource/ scientist made during crop inspection. This programme is done in selected progressive villages with active participation of NFCL executives.

Farmer meetings/Growers meetings/ Product seminars/Crop seminars/ Farmer contact programmes etc. are carried out throughout the year to address the farmer problems on crop husbandry as part of farmer training there by create strong relationship for brand and corporate.

Dealer/Retailer Training: This forum is aimed at training NFCL dealers and retailers on agri inputs marketing, changing industry scenario, current



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policies framework, FCO related issues etc. NFCL has improved the training curriculum by introducing new topics like operations and profitability management and logistics management etc for dealers. While the former would help the dealers in educating the farmers the later would help them manage their business and profitability.

Young Farmer and Women Farmer Training Programme: Young farmers would be the successors in an agricultural family and women farmers are of late participating actively in agricultural and allied activities and also making critical decisions for better cultivation. Considering the importance of agriknowledge we have designed special programme for young and women farmers. They are trained at KVK Raju KVK on agriculture best practices thus helping them in adopting the same in their farm. The same farmers also transmit the learning to their co-cultivators thus spreading the learning.



During 2005-06, exclusive training programme was conducted for 40 women farmers from various districts in Andhra Pradesh. A young progressive Farmers training programme was conducted for two days in KVK Raju KVK for the farmers with an objective to train them on modern agricultural practices and farm mechanisation. Training to these groups would critically change the way cultivation is done in rural areas. The women training programme of NFCL was covered by "India Today - Telugu" where they interviewed and took feedback of the success stories of KVK trained women farmers.

#### b) Balanced Fertilisers

**Objective:** A major threat that has emerged to production and productivity at farm level is continuous deterioration of soil health throughout the country on account of imbalanced fertiliser usage. As the member of the task force on promoting balanced fertilisers, NFCL has been strongly advocating the usage of fertiliser blends.

Activity : Both at National level and as an organization, NFCL has taken various measures to promote "Soil, crop stage specific" customised fertilisers. It is also promoting organic farming and micronutrient use efficiency for improving the organic carbon content thus improving the soil health. NFCL taking lead role in conducting is field trials and recording crop responses from different trials. To overcome the existing hurdles NFCL has also been representing to the government to take necessary action to relax current regulatory hurdles and facilitate the manufacturers by providing necessary subsidy on fertilisers used as inputs for manufacturing of customised fertilisers. Apart from negotiating with the government for the cause, NFCL is parallely educating farmers on the benefit of such fertilisers through training programmes, farmer contact programmes and through literatures.

**Benefits** : Market research to measure the perception of farmers on balanced fertilisers has yield highly positive results, though balanced fertilisers are largely an unknown concept for farmers but upon briefing on the product attribute and its benefits, majority of the farmers interviewed expressed their willingness to purchase and apply the balanced fertilisers. Knowing the importance of such fertilisers, NFCL would continue its endeavour in spreading knowledge and promoting balanced fertiliser at the farmer level. Farmers would be benefited by usage of balanced fertilisers through improved yield, prevent wastage, save cost and finally replenishment of soil nutrients.

#### c) Demonstrations

**Objective:** "Seeing is believing" at farmer level; with the above fact in view NFCL has undertaken several initiatives to increase the fertiliser consumption in the State of Orissa both fertiliser consumption and yield per hectare is lowest in India.



solutions for product demonstration

Activity: As a part of the initiative, the NFCL Orissa team conducted field-demo on paddy crop in selected districts with the help of the farmer and the Agriculture department officials. Starting with soil sample analysis to harvesting, the complete process was coordinated and managed by NFCL, the fertiliser usage in the demo plot was as per state fertiliser recommendation.



Director of Agriculture - Orissa visiting FLD plots to take farmer opinion -A success story

**Benefits:** The results of the field demonstration and other initiatives of NFCL were shared with Department of Agriculture officials and with the faculties of Orissa University of Agriculture and Technology-Bhubaneshwar for which they expressed

extreme satisfaction on NFCL initiative. The research data collected from the demo plot showed that the yield per acre from the demo plot has been 15 bags more than the controlled plots. Similar initiatives for zinc, water soluble fertilisers and other micronutrients are underway in our marketing area.

# d) Nagarjuna Agricultural Research and Development Institute

**Objective:** Nagarjuna Agricultural Research and Development Institute (NARDI) established in 1995 is an agricultural R&D institute. The Department of Scientific and Industrial Research (DSIR), Govt of India has recognised NARDI as a non-profit, Scientific and Industrial Research Organisation (SIRO). Eminent academicians, administrators and management professionals govern NARDI while scientists from agricultural and allied fields, guides its research.

Activity: NARDI undertakes field and laboratory testing of all agri inputs at multi location testing centre spread all over the country. Its services are available for performance evaluation of hybrid varieties, transgenics and new technology. In addition to the above NARDI provides scientific validation to help agri-input companies to market their products.

#### I-Kisan

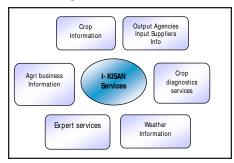
**Objective:** I-kisan is an initiative for using information technology for the benefit of agriculture. It is based on the realisation that substantial gap exist in agriculture between the actual and the potential in terms of productivity, quality and the farmer is at a disadvantage as compared to his counterpart elsewhere in the world.

Activity: I-kisan enables farmers realize the best from their farms through





knowledge based farming practices. It helps farmers realize best value in the agribusiness processes, through transparency in deals, wastage reduction in the value chain and creation of new value in the chain. I-kisan uses Internet media as a tool for efficient communication and inputoutput transaction. For this purpose Ikisan has set up Internet enabled booths across villages.



Farmers are given access to the latest information on all cultivation aspects, agronomic practices, agri-inputs (seeds, fertilisers and agro-chemicals), management of pests and diseases, market rates for the produce, etc.

**Benefits:** Currently NFCL has opened kiosks in Andhra Pradesh and Orissa and is facilitating farmers in collecting a variety of information on agriculture and allied activities. Hundreds of farmers are being benefited through the kiosks. As future endeavour, NFCL plans to open more kiosks in various states and benefit farmers.

The expertise of I-kisan along with the project management skills of NFCL has enabled us to bag the Technology Mission on Cotton project on BOT basis. I-kisan has partnered for rural e-Seva project of Government of A.P. and is disseminating services through 1200 kiosks located all over Andhra Pradesh. The rural e-Seva is currently catering to the information technology needs of thousands of farmers and providing value-added services to farmers for increasing their yields and farm income.

#### e) Soil Testing

**Objective:** Soil testing is a primary critical diagnostic technique towards management of soils and integrated nutrient management for scientific crops.

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Understanding the value of soil testing for farmers, NFCL has setup elaborate facility for testing soil samples collected from across its operating states across India and providing soil report cards to farmers on time thus helping them plan the crop schedule.



Activity: NFCL has a capacity of analysing 12000 soil samples in a year in its research lab at Kakinada. In the current year, NFCL has analysed approximately 7500 soil samples and provided the soil report cards to the farmers. Pre-sowing meetings with the farmers were conducted and the advisory services were provided to the farmers based on their soil score card. In the state of West Bengal and Orissa, where we do not have soil testing laboratory, we leverage local facility to analyse the samples and to generate report card local language.

**Benefits:** Through soil testing reports NFCL has enabled farmers to practice balanced nutrition, proper crop selection as per soil quality and finally manage productivity. Due to lack of awareness, farmers have not fully appreciated the value and benefit of soil testing. In order to promote scientific agriculture, NFCL is encouraging farmers to adopt soil testing.

## f) Crop Seminars

**Objective:** Agricultural extension involves a whole gamut of complex interactions between farmers, extensionists and researchers to empower farming community which result in enhancing productivity and profitability to the farmer of which crop seminars is a part. NFCL organizes crop seminar at farmer level on Integrated Nutrient Management, Integrated Pest Management, promotes biofertilisers etc to enable farmers realise the maximum from their farm. Activity: Seminars are conducted by drawing scientists, industry experts and by leveraging in-house resources. Crop and product literatures are distributed and technical films on various crops and micronutrient films are also screened during crop seminars. Experiences are shared and discussion done and suggestions are recorded and solutions are provided to the farmers. Through such seminars NFCL has successfully transferred technology and helped farmers in improving their socio-economic status.



A happy and prosperous farmer

## g) Exhibitions

NFCL has used exhibitions as an effective tool for displaying its products for a large gathering of farmers and give information on the usage and benefits of the same. NFCL also has successfully leveraged exhibitions to promote the usage of micronutrients viz. zinc, boron, molybdenum and sulphur and also water soluble fertilisers. NFCL leverages such platform to exhibit the products and create brand impression. These exhibitions are primarily organised in sandy days, farmer meetings, Agri Expo's, etc.

## h) Technical Films on Crops

**Objective:** It is a known fact that, paddy, cotton, maize, sugarcane, potato and tea plantations are the principle crops that account for nearly 70% of urea and micronutrient in our primary market. In order to bridge the technology gap on these crops we have developed technical films on crop husbandry which are being shown at farmer level through AV Vans.

Government of Andhra Pradesh is focusing on zinc use on various crops by giving 50% subsidy to the farming community thus encouraging the farmers

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to use. Complementing the government's initiative, NFCL developed a technical film on zinc which is being screened extensively. In similar fashion, we have developed films on paddy, cotton, chilies, maize, sugarcane in Telugu and paddy film in Oriya and film on micronutrients in Bengali.

Activity: The films cover all aspects of crop right from land preparations to harvesting, water management, fertiliser management, pests and disease management etc. For example NFCL released during sugarcane film January'06 covered all aspects of sugarcane crop mentioned above and also included better cultivation aspects that are to be followed in the sugarcane crop to get higher yields. The film has been extensively screened in sugarcane grown areas in Andhra Pradesh which was highly appreciated by the farmers and the management/field staffs of the sugar factories. The sugarcane film won the Second Best film award during annual Video Film Competition conducted by FAI during December'05. During the year 2004-05, NFCL zinc film had won the same award at FAI.

**Benefits:** Special initiative is being taken to increase the fertilisers uptake in Orissa state where fertiliser application per hectare as well as the yield is the lowest in India. NFCL Orissa team has developed a paddy crop film of twenty minutes duration to on paddy package of practices which is being extensively screened in about 700 villages across Orissa; the film would be very beneficial for Orissa farmers.

#### i) NFCL Newsletter

*Objective:* NFCL releases a quarterly newsletter titled Double OX quarterly.

The newsletter aims to keep our key customers including farmers in horticulture growing areas aware of the various technological advances in related fields such as products, services, policy related issues, advanced cultivation practices and the international environment.

#### j) Corporate Social Responsibility (CSR)

The Nagarjuna Group is a socially responsible citizen. The group supports community development programmes covering a wide range of activities like environment, health, education, income generation and community asset creation. These activities have created awareness of environment, good health and opportunities for a better life among communities it is associated with. NFCL has taken up Community Development Activities in and around Kakinada as part of its philosophy of "Serving Society through Industry".

*Village Adoption:* NFCL has adopted a village Kondelpet adjacent to the boundary.

*a) Water supply*: Treated drinking water (potable water) is being supplied to the Kondelpet village for which water tanks have been installed with a capacity of 5000 lts.

*b) Education:* Primary school is being run, in which a teacher is taking care of the primary educational needs of Kondelpet village.

*c) Health:* A full-fledged dispensary with one doctor and supporting staff being provided to extend primary medicare and first aid etc., to the villagers.

*d) Training:* Around 12 youth from the neighboring villages were sent to Bangalore for training programme on youth leadership.

Health: Care towards physically/ mentally challenged children: NFCL is extending 100% financial support to "Early Intervention Project" in coordination with an NGO "Uma Manovikas Kendra" at Kakinada. In this project, mentally challenged children below the age of 6 years are being trained to live and attend to their basic activities in addition to administering physiotherapy. Parents of the children also accompany these children and are trained in taking care of their children. This project has received National Award in 2003 from President of India for the public recognition of its' outstanding performance in the field of welfare of persons with disabilities.

*Education:* As part of our policy to develop our employees and their family members as good and knowledgeable citizens, Akshara school was established in which children of all our associates

are given subsidised education from LKG to 10<sup>th</sup> class in CBSE syllabus. For the past 3 years, Akshara school stood as a best school in Kakinada as it achieved 100% results in 10<sup>th</sup> class with 100% first classes. Akshara school has implemented number of programmes for overall development of students.

## SUGGESTIONS AND FUTURE STRATEGIES

IN LINE WITH THE VISION, NFCL WOULD continue to peruse to deliver high quality service to the farming community through existing and new activities. Thrust would continue towards technology transfer and giving value added services to the farmers. Priority would also be on farmer training, screening of technical and crop related films, IFCP campaigns and field development activities. Mass communication media would be leveraged to optimize NFCL presence and promote its products and services to the root through TV and radio advertisements and other outdoor activities.

Special initiative would be taken in Orissa where paddy productivity is the lowest in India and plans are to conducted demo plots by taking the help of State Dept. of agriculture and State Agriculture University.

In order to achieve the above objective adequate resources would be channeled towards introduction and promotion of new products. Focused development initiative would be continued for concept selling activities for specialty fertilisers and zinc products in markets like Orissa, West Bengal and Karnataka where farmer awareness and consumption is less. Brief description of future initiatives follows:

## a) Consumer Panels

A selected group of end-users, opinion leaders, scientists and dealers would constitute to form a consumer panel where advice would be sought on NFCL product and service delivery for future modifications/improvements thus benchmarking them with the industry.

It would also act as a platform to understand the problems faced by the farmers; complaints and record their expectations on products, services,



technology, programmes, tools, and image etc. Based on the feedback necessary decisions will be taken to improve the product and service portfolio, improve development activities, take new product decisions, media planning, etc. The panel would act as a forum for registering the customer complaints and also would generate necessary solution to the management for resolving the same in a proactive manner.

The initiative would be a mechanism to gauge our strength and weaknesses and plan for the improvement to ensure maximum customer satisfaction.

## b) Young Farmers Training Programme

NFCL wants to prepare young successor farmers to face future challenges by equipping them with latest farming technologies through critically designed training programmes. Young farmers are receptive towards learning and also are inclined to implement the same; keeping in view the above facts NFCL would mobilize its resources to train the young farmers through on-campus and offcampus training programmes.

#### c) Women Farmers Training Programme

In recent past, state governments are taking proactive steps towards women empowerment; current trends shows that women are not only taking active part in agriculture and allied activities but also are acting as influencers in decision making in the family. Considering the above facts we have designed programmes targeting women farmers where training programme are conducted to help them in capability enhancement. The focus is to intensify such programmes through on-campus and off-campus training programmes.

#### d) Feedback Surveys

NFCL gives great deal of importance to all kind of surveys and market researches to capture the dynamic nature of farmer preferences and expectations. In addition to regular farmer data collection on demographics and product and service usage pattern, NFCL has plans to introduce a robust system to map its customers satisfaction on the products and services delivered.

Customer satisfaction surveys would be conducted on periodical basis to map

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Summary of ongoing promotional activities				
No.	Programmes/activities	2003-04	2004-05	2005-06 (est)
1.	Farmers meetings (No. of farmers)	30256	34969	34000
2.	Farmers trainings (No. of farmers)	14135	16632	18380
	On-campus (No. of farmers)	550	656	860
	Off-campus (No. of farmers)	13585	15976	17520
3.	Demonstrations (No. of plots)	356	530	840
4.	Growers meetings/crop seminars (No. of farm	mers) 1785	1872	2416
5.	Exhibitions / sandy counters (No. of events)	250	275	305
6.	Scientist visit (No. of farmers)	3256	4526	5215
7.	Dealers/sub-dealers meetings (No. of dealers	s) 2100	3170	3850
8.	Soil samples (No. of samples)	776	1071	7500
9.	Hired jeeps (No. of villages)	450	525	1650
10.	A V van - shown films (No. of film shows)	825	1071	1286
11.	Tech assts / field assts (No. of man months)	475	640	560
12.	IFCP (No. of farmers)	25620	48228	48500
13.	Dealers training programmes - FCO related	125	175	215
14.	Expenditure (Rs. in lakh)	266	272	275

customers association with NFCL, measure their current satisfaction and to capture their expectations from NFCL. Based on the feedback, NFCL team would make necessary modifications viz. improvements in existing products, introduce new products, design customised services, decide suitable promotional channels and enhance its brand equity from current level.

#### e) Farmer Data Bank

With the view to maintain highest customer relationship and map changing customer dynamics NFCL maintains customer database through ongoing data collection in a prescribed format. During 04-05 NFCL developed a data bank of 10,000 farmers.

The data would be used to segment customers based on land holding, crops grown, agri input usage, preference of promotional channel etc, which would be used for identifying the marginal farmers and help them improve their knowledge on various aspects of agriculture that can be implemented for getting higher yields at optimal costs. NFCL also keeps the progressive farmers and opinion leaders informed about the new developments in agriculture like new products, agriculture practices, crop information, etc through mailers.

### **Ongoing Programmes**

The above table is a summary of the ongoing promotional and rural develop-

ment activities. The table represents the work undertaken during last three years.

NFCL developmental activities are more inclined towards field oriented programmes which are conducted by wellqualified development and sales personnel. Currently at NFCL about fifty post graduates and more than hundred graduates are employed to carry out planned sales and development activity.

#### CONCLUSIONS

TO SUMMARISE, NFCL BELIEVES IN marketing its products and services through extensive field work and building relationships with the endusers. This approach has proved fruitful in case of the flagship brand Nagarjuna Urea and leading brands of Agrochemicals, Specialty Fertilisers and Micronutrients. Some of these brands have become household names in NFCL's marketing territory. Farmers find NFCL's products and services trustworthy and find reason behind the various activities undertaken by NFCL. This is a direct outcome of years of field work and relationship building exercise carried out by NFCL and the same has been validated by a leading market research agency (M/s Metric Consultants Limited), where NFCL has been rated superior in product and services delivery. NFCL envisages continuous improvements in its endeavor towards its customers.

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