Indian Journal of Fertilisers, Vol. 2 (1), April 2006, pp.139-142 (4 pages)

Indo Gulf in the Service of Farmers

Fertiliser marketing without promotion and extension is merely a selling activity. In the vibrant and competitive market scenario, service to customer/ consumer is turning out to be the critical success factor. Demand-supply gap in the fertiliser industry has reduced substantially and the farmers today have the option to select from various brands available in the market. It now requires a consistent effort to make the brand a front runner in the multi-brand environment. With increased awareness about plant nutrition, it is likely that the farmers will also demand after-sales service in today's market. There is also an opportunity to leverage the large network of dealers and the fertiliser manufacturers who are dealing directly with the farmers for this purpose.

VISHNU S. SHARMA
and
S.P. SINGH
Indo Gulf Fertilisers Ltd.
14-A, Park Road
Lucknow - 226 001

EXTENSION EDUCATION HAS BEEN A dynamic concept in the fertiliser industry. It has kept up with the times to cater to the needs of the farmers and their aspirations. Going beyond plant nutrition, the extension education is now addressing all topics related to agricultural technology. Thus, the current strategy of extension education aims not only at keeping the farmers within the fold of balanced fertiliser use but also to equally care for the maintenance of soil productivity.

INDO GULF FERTILISERS AT A GLANCE

INDO GULF FERTILISERS LIMITED manufactures/markets fertilisers and other agri-inputs (seeds, pesticides and micro-nutrients), under the umbrella brand Birla Shaktiman. Its main product, Birla Shaktiman urea, a nitrogenous fertiliser, is manufactured at Jagdishpur factory district Sultanpur in Uttar Pradesh. The total current production capability is about 9.95 lakh tonnes, which is about 05% of all India urea consumption. However, all India market share is a misnomer, since urea being a bulk product, marketing is limited to states in the near vicinity of the plant location and for Indo Gulf, Uttar Pradesh, Bihar and West Bengal are the primary markets.

The marketing activities started way back in April 1987, through a unique seeding programme which was done by sourcing urea from other manufacturers and branding/marketing the same as Shaktiman Urea. The objective was to create brand awareness and also to set up the marketing/ distribution infrastructure much ahead of commercial production which started in October 1988. The brand Shaktiman was positioned as a premium brand in the market on the pivots of "Gun-vatta-quality" and *sewa*-service". It was a conscious strategy not to sell urea as a commodity by using discounts as a selling tool but as premium brand. This brand equity has been built up over the years by conducting various above and below the line activities specifically focused on creating economic value for the consumers – *The Farming Community*.

SHAKTIMAN KRISHI SEWA KENDRA

IN 1987 INDO GULF OPENED A CHAIN of Shaktiman Krishi Sewa Kendras a one-stop multi-input service centres, at selected locations throughout the marketing territory. Popularly known as "SKSKs", these centres are run through selected wholesalers and are manned by 'field assistants'. These field assistants are graduates/post graduates in agriculture and are technically qualified and trained. Each SKSK cover 20 villages within a radius of 10 kms and the field assistants covers each and every village on a fixed periodicity based on his daily travel plan.

The efforts of field assistants are further multiplied by the "Shaktiman Farmer" (selected one Shaktiman farmer each from 20 villages of the command area) who is the most progressive and influential person, albeit a role model for each village. The Shaktiman farmers are also the company spokesmen for their villages.

These kendras are well-equipped with a meeting place, magazines and journals on latest agriculture practices and is a nucleus for knowledge dissemination. Various extension education programmes are regularly undertaken through these SKSKs and the details are same as given under the SKSRK.

SHAKTIMAN KRISHI SWAYAM ROZGAR KENDRAS (SKSRKS)

AFTER SUCCESSFUL IMPLEMENTATION OF Shaktiman Krishi Sewa Kendras (SKSKs), it was felt desirable to expand the network of these types of Krishi Sewa Kendras for providing better services to farmers at more locations in rural areas. It was with this objective that a new scheme has been introduced for involving unemployed agriculture graduates as entrepreneurs to run similar Krishi Sewa Kendras to provide services to rural farmers. This also helps in generating employment in rural areas. In order to ensure viability of this project, the locations for these SKSRKs (Shaktiman Krishi Swayam Rojgar Kendra) were limited to the economic zone i.e. within a radius of 200 km from the plant so that material is made available within short notice directly from our plant by road.

These SKSRKs are exclusive Shaktiman outlets run by agriculture graduates under the supervision of company agronomist. Each SKSRK has a command area of 20 village around it, i.e., 10 villages in 5-km radius, which is the primary command areas, and another 10 villages within the radius of 6 to 10 km, which is the secondary command area.

These SKSRKs act as a focal point for carrying out extension education programmes and provide all agriculture inputs and advisory services through a Single Window. In addition to agri-inputs, agriculture implements such as sprayers, dusters are also made available to farmers on a token rent of Re.1 per day.

The following activities are organised through these SKSRKs:

1. Soil testing and fertility mapping.

2. Farmers training camp.

3. Shaktiman farmers meeting.

4. Field days.

5. Distribution of literatures.

6. Farmers tour (farmers tour to universities/agriculture exhibitions/*melas*).

Benefits for the entrepreneur

1. An opportunity of employment and self-development as an entrepreneur.

2. Material is received at the SKSRK directly from the plant at company rate.

3. Opportunities for further development and growth as a prominent local trader.

4. Technical and product support from the company.

5. A service to local farmers further brings in respect and better image in the community.

CHANGE AGENT

RETAILERS ARE THE MOST IMPORTANT LINK between the company and the farming community and they play a critical role in dissemination of information. Change agents are selected primarily from the high performing multi agro-input retailers from our supply chain who are self motivated and have a service oriented approach. On selection, they are given initial training to equip them with the modern agricultural practices. Retailer's performance in term of participation in our extension education programmes is also given significant weightage for their selection as change agent.

Apart from providing material directly from our plant by road to selected change agents we are also conducting following extension education programmes through the change agents on a cost sharing basis:

1. Soil testing.

2. Distribution of literature.

3. Farmers training camp/farmers group meeting.

At present, we are having 21 nos. of change agents in UP.

Benefits for the change agents

1. Operating as a direct dealing point of the company.

2. Material is received by some of the change agent directly from the plant at company rate.

3. Opportunities for further development and growth as a prominent local trader.

4. Technical and product support from the company.

5. A service to local farmers further brings in respect and better image in the community.

SIX SIGMA IN VILLAGES

SIX SIGMA IS A RENOWNED MEASURE OF quality that strives for near perfection. Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects in any process – from manufacturing to transactional and from product to service. The statistical representation of Six Sigma describes quantitatively how a process is performing. To achieve Six Sigma, a process must not produce more than 3.4 defects per million opportunities. A Six Sigma defect is defined as anything outside of customer specifications. A Six Sigma opportunity is then the total quantity of chances for a defect.

Six Sigma… the Indo Gulf Way

The implementation of a measurement-based strategy on the field with the farmers, that focuses on yield improvement and variation reduction through the application of Six Sigma improvement processes. The goal is to have the farmer maximum and best quality yield.

Objectives of the Six Sigma Project

To maximise the yield for the farmer's field by applying the modern techniques based on soil testing reports with zero defects. This can be further scoped to –

- Help farmers become more profitable
  - ♦ Grow revenue
  - ♦ Cut costs
  - ♦ Improve delivery time
  - ♦ Manage/reduce inventory
  - ♦ Increase customer satisfaction/ end-product
- Develop skills such as
  - ♦ Decision making on cropping patterns
  - ♦ Problem solving on soil related issues
  - ♦ Working as a team for better yields and monetary gains
  - ♦ Finding sustainable partners to buy the end-product
- Making their own fields work better

A calendar of activities for every farmer is made. This will record the

- ♦ Survey of the village
- ♦ Selection of the plot
- ♦ Soil testing
- ♦ Preparation of the land
- ♦ Date of sowing
- ♦ First irrigation
- ♦ Application of weedicide
- ♦ First top dressing of urea
- ♦ Application of micronutrients
- ♦ Plant protection measures
- ♦ Second irrigation
- ♦ Second top dressing
- ♦ Harvesting
- ♦ Threshing
- ♦ Field data day – yield – *Krishak Divas*.

The project started from 12 plots of 6 villages during *Rabi* 03-04 and average gain yield was found to be from 23% in soil test based. After success of this process the technique process was replicated in 96 plots of 48 villages during *Kharif* 04. Average gain yield was from 10-25% in soil test base dose plots as compared to farmers own practice.The technique process was further explored in 164 plots of 121 villages during *Rabi* 04-05 we found that the average grain yield was from 11-20% **(Tables 1 and 2)** and **(Figures 1 and 2)**.

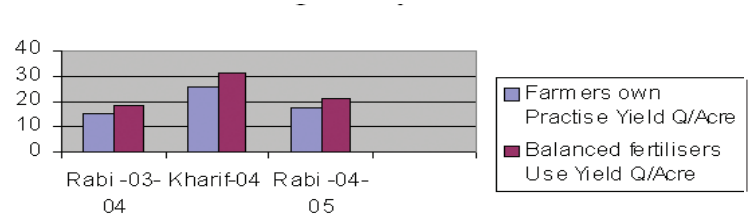

Figure 1 - Yield data - Six Sigma project – yield q/acre

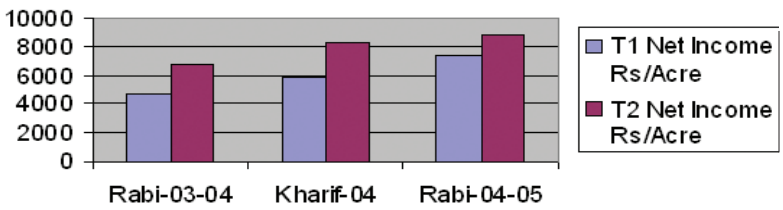

Figure 2 - Yield data – Six Sigma project – net income Rs/acre

Table 1 - Six sigma project : yield q/acre

Season/crop	Yield q/acre farmers own practice (T1)	Yield q/acre balanced fertilisers use (T2)
Rabi-03-04/wheat	14.99	18.46
Kharif-04/paddy	24.76	30.93
Rabi-04-05/wheat	18	21

Table 2 - Six sigma project : net income Rs/acre

Season/crop	Net income Rs/acre (T1)	Net income Rs/acre(T2)
Rabi-03-04/wheat	4649	6735
Kharif-04/paddy	5820	8351
Rabi-04-05/wheat	7296	8654

The details of the above-discussed activities are given in **Table 3**.

NEEM COATED BIRLA SHAKTIMAN KRISHIDEV UREA

DURING 2004-05, INDO GULF strategically decided to bring in radical innovation as a differentiating factor. This was done by providing the farmers with neem coated Birla Shaktiman KrishiDev urea, a discontinuous leap in the value proposition to them. A full scale launch of the brand Birla Shaktiman KrishiDev neem coated urea was done during *Kharif* 2004.

The initial market seeding exercise was done in *Rabi* 03-04 where only about 250 mt was placed in the market with the basic objective of conducting crop demonstrations to establish the agronomic efficacy of coated urea.

During the trial phase extensive crop demonstration trials were conducted on selected plots of farmers where the incremental efficacy of the neem coated urea vis-a-vis normal urea was statistically, successfully validated. As benchmarked with competition this was a significant product/brand differentiation as no other competitor was able to match the quality and volume capability as done by Indo Gulf during 2004-05. The full scale launch encompassed all aspects of the marketing mix and an innovative brand logo was designed to differentiate the brand visibly at the point of purchase.

Advantages of Neem Coated Urea to Farmers

The primary reason for coating the Birla Shaktiman urea prills with neem oil emulsion was to prevent leaching and volatilisation losses of N. But during field trials and subsequent full scale launch it was evidenced that the farmers were being benefited with other collateral incremental product features, namely,

1. Pest Repellant: Birla Shaktiman neem coated urea was found to be repelling pests and insects from the fields where they were applied. The strong pungent smell of the natural neem oil was producing such an effect.

2. Prevent marauding of crops by bovine animals (Blue bulls – Nilgai). The strong and pungent smell was found to drive away wild bovine animals. This is an endemic problem in our country and contributes to about 20% of the total crop loss.

SHAKTIMAN FARMERS

SHAKTIMAN FARMER IS THE MOST progressive and influential person, albeit a role model for each village. These Shaktiman farmers are also the company spokesmen for their villages.

The SKSKs and SKSRKs organize the extension education programme through these farmers. In each village in the command area (10-km radius of SKSKs/ SKSRKs), one Shaktiman farmer and nine contact farmers are selected for implementation of various extension education programmes conducted through SKSKs /SKSRKs.

For motivating these selected farmers, we are conducting 'Shaktiman farmers meeting' once in every season through the SKSKs /SKSRKs wherein suggestions and the problems of the village farmers are discussed and solutions/remedial measures are given for further implementation/knowledge dissemination in the next season.

SHAKTIMAN KUTUMB GOLD CLUB

1. Segmentation of 'A' and 'B' category farmers.

2. Dissemination of knowledge through focussed 'extension education programmes' to increase their income and prosperity.

3. To convert them as our "Brand Ambassadors/opinion leaders for Shaktiman, ultimately.

♦ Agriculture department of UP has also started a similar scheme in the name of *kisan mitra* for implementation under each *gram sabha* throughout the state. Recently one of our Shaktiman farmers, Mr. Dharam Singh Yadav has received first prize, a most coveted award of *Krishi Pandit* from Hon'ble Agriculture Minister of Uttar Pradesh for the year 2004-05. He has also been given a cash award of Rs 3000/- for his outstanding contribution to agriculture. District

Magistrate, Lucknow has also recognised his efforts by awarding a cash prize for his contribution to modern cultivation techniques. Mr. Yadav belongs to village Bajgiha, district Lucknow. This village is under the command area of our SKSK Gangaganj.

Birla Shaktiman Farmer Recognised for Exemplary Growth of Medicinal/Cash Crops under 'Six Sigma Process'

Mr. Dev Narayan Patel, Birla Shaktiman farmer of village Bachan Kheda under Shaktiman Krishi Sewa Kendra, Gangaganj, district Lucknow, Uttar Pradesh, participated in the state level competition on fostering growth of medicinal crops organised at Governor House, UP on 20th February 2005. On the basis of the various medicinal/cash crops as displayed by him, he was awarded 04 category 01st prizes on *Aswagandha, Isabgol, Satawari and Baghee* (medicinal crops) and cash award on cauliflower, ratalu (sweet potato) and french beans (cash crops). He was awarded and felicitated by the Hon'able Governor of Uttar Pradesh, Mr. T. Rajeshwar Rao.

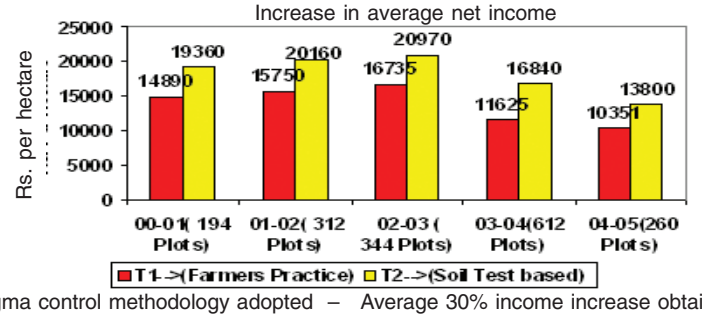

Figure 3 - Impact of balanced fertiliser usage

CROP DEMONSTRATION ON BALANCED FERTILISER USAGE

FOR PROVIDING IMPETUS AND TO ATTRACT large scale participation, a demonstration plots is laid out on the field of progressive farmers where all the package of practices are personally supervised by the field assistants/agronomist of the SKSKs. Simultaneously, reference plots are selected as per package of practice actually followed by the farmers for comparing at a later date, the value additions in real terms on maturity of the crops. This process has had a startling effect and electrifying impact on customers who have realised the additional real value generation within the same land and other resources (**Figure 3**).

Agri-extension services / CRM activities

Sl No	Activities	03-04(Act), No.	04-05(Act) No.	05'-06(Plan) No.
1	BIRLA SKSK	45	72	90
2	BIRLA SKSRK	35	48	60
3	Soil testing	49472	74307	50000
4	Soil fertility map	192	233	278
5	Crop demonstration	622	1250	1500
	a- Six sigma	12	259	500
	b- Non six sigma	610	991	750
	c- Third crop	0	0	200 Nos
	d- Medicinal crop	0	12 Nos	50 Nos
6	Farmers training camp	174	238	260
	a- Farmers participation	13920	24202	20800
7	Field days	75	121	242
	a- Farmers participation	6000	14450	19360
8	Farmers conducted tour	2	15	20
	a- Farmers participation	70	1120	1000
9	Farmers group meeting/chaupals	635	784	1060
	a-Farmers participation	50800	91174	106000
10	Veterinary camp / medical health checkups	0	136	400
	a- Farmers participation	0	23604	3200
11	No of Shaktiman farmers	1600	2540	3000
12	Shaktiman kisan gold club	0	0	250

CONCLUSIONS

AS PER THE 10TH FIVE YEAR PLAN (2003-2008) formulated by the Planning Commission, Government of India, total population of India will be about 120 crores and total requirement of fertiliser nutrients will be 23 millions tonnes by 2011-12. The need of the hour is to optimise the use of our resources so that foodgrain requirement can be met to feed the ever-growing population. With limited resources at our disposal the only solution is to educate our end-users of new and modern agri-techniques through all our means wholeheartedly. The only solution is extension education with demonstration.

Besides it is our sacred duty to look into the following factors also:

1. More emphasis on R&D is to be given.

2. Dissemination of knowledge quickly from lab-to-land essential.

3. Adverse effects of excessive exploitation of our soils must be nullified through innovative cropping patterns.

4. Package of practices (recommended dosage) should be directly related to the inputs available to the farmers rather than standardising them.

5. Cooperative and mechanised farming for small and marginal farmers can help improve the living standards of our rural population.

6. Optimum utilisation of land is essential along with cash crops and high yielding varieties. (To put third/fourth in-between paddy-wheat crop rotation).

7. There should be a mix of traditional and innovative farming and the farmers will have no longer to follow the legacy of their ancestors.