

## CFCL in the Service of Farmers

The promotional, and extension programmes of Chambal Fertilisers and Chemicals Limited (CFCL) started way back in the 90's, before its actual commercial production. CFCL since its inception was engaged in extension education/rural development activities like any other agri-input company with a prima facie objective of its brand building and social responsibilities. A spectrum of field activities across its marketing area was taken up to build on the Chambal brand and its corporate equities. Over the period CFCL has established its credentials through multiple offerings along with consistent quality of products and services. Although the programme touched millions of families, it was felt that the benefit could not be quantified in view of an unknown face of beneficiary, a dispersed range of services and diffused focus. CFCL soon realised that any extension plan has to be necessarily a part of the business strategy rather than only service orientation, since the programme needs to be scalable, replicable and measurable. Hence, the focus shifted from generic services to focused activities, based upon the changes in market place, new opportunities, liberalisation, increased competition, etc. With an overall objective of enhancing farm income, employment generation and farmers' access to latest technology to improve quality of life, Uttam Bandhan came into existence in 2002. CFCL since then has made a humble beginning, wherein the income of 75000 selected farmers have increased substantially through intervention at different levels of the agriculture process such as soil, seed, water, plant, market intervention, animal husbandry and human health. CFCL plans to take this initiative to over 3 lakh farm families in the next 3 years.

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INDIAN AGRICULTURE HAS EXPERIENCED a phenomenal growth in the past two decades. Though the nation has crossed several milestones like foodgrain production exceeding 200 million tonnes, increase in disposable income, increase in fertiliser consumption, still there exists a wide gap between the productivity and the yield across areas and across crops. The country is yet to cross the foodgrain production barrier of 215 million tonnes. Despite overall GDP growth by more than 8%, agriculture is still growing at below 2.5%. This gap needs to be filled to take the growth of Indian agriculture to a minimum of 4% per annum. Fertiliser industry has played a crucial role in making fertiliser available to over 5 million distribution centres. The industry has been successful in popularising latest technology at grass-roots level, thereby acting as a catalyst between traditional and modern farming in collaboration with universities, extension workers, agri-inputs retailers and marketing professionals. The tandem growth in fertiliser consumption and Indian agriculture including the allied sectors over the last 50 years is proof enough for the efforts put in by different

stakeholders. With an objective to meet the requirements of nutrition, it is necessary to break the stagnation in agricultural production, which can only be possible by breaking the barriers of production system and result oriented extension / promotional programmes. The growing competition in the market place in view of multiple players, multiple sales channels, multiple products and services, new/replicable products, high exposure to information and communication technology, diversifications, liberalisation, etc., has necessitated the fertiliser marketers to give a fresh look at the current agri-extension programmes.

Fertiliser industry as stakeholders to agriculture development has played its role for the extension process in collaboration with other agencies. With the limited resources available with the industry, it has played its role in disseminating appropriate information besides respective brand building and corporate social responsibilities. With the present and the future trends of various models, be in the form of CFCL's Uttam Bandhan, Shriram's Hariyali, Tata's TKK or ITC's Choupal Saagar, precision of delivery is still a far-fetched

dream with respect to value addition at the grass-roots level. However with availability of multiple technologies, marketers have to evolve innovation in the existing extension models in such a way that it delivers the desired benefit in appropriate cost and time to the farming community.

### ABOUT CHAMBAL

CHAMBAL FERTILISERS AND CHEMICALS LTD (CFCL) was promoted by M/s Zuari Industries Ltd (erstwhile ZACL). CFCL, operates from its two hi-tech plants at Gadepan and Kota. It started commercial production in 1994 and since then has established major presence in northern and western Indian states. The company markets urea under the brand name of Uttam Veer. With ten Regional Offices, Chambal has a 1,100-strong dealer network and 15,000 village level retail outlets to make the products available well within the farmers' reach. CFCL is one of the few companies in the country to have attempted an entire farm solution package under one roof. Besides urea, other agri-inputs such as neem coated urea, DAP, MOP, SSP, zinc sulphate, gypsum, bio-fertilisers, composts, pesticides and seeds

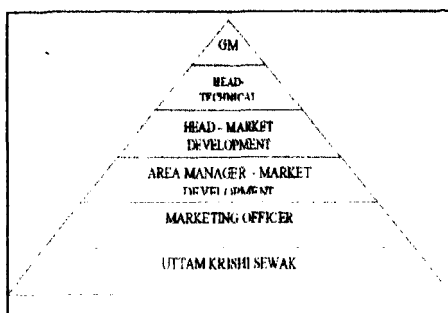
are marketed thereby providing convenience, to the trade as well as to the **farmers**. CFCL has also initiated pilot-marketing for animal nutrition and agricultural insurance to explore the possibilities for **entering** into these business segments. These products are sourced from national and overseas suppliers which have a strong thrust on quality and delivery across various crop and market segments. Annual sale volume for different products is as under:

Products	Volume (lakh tonnes)
<b>Fertilisers</b>	
Urea	19
DAP	2.5
SSP	1
MOP	1
<b>Biofertilisers (in tonnes)</b>	2000
<b>Micronutrients (in tonnes)</b>	12000
<b>Other inputs( Rs in crores)</b>	
Pesticides	55
Seeds	12

### MARKET DEVELOPMENT ORGANISATION

MARKETING ORGANISATION OF CFCL consists of 3 major responsibility centres. They are Sales, Distribution and Market Development. Apart from the sales function, every marketing person of the company is responsible for extension and market development activities. The impact level is well defined with respect to delivery, monitoring and control. Each regional office has a Manager Market Development, who is a fairly senior level officer to provide effective direction and leadership for these activities. At the grass-roots level CFCL has successfully demonstrated creating capacity and delivery system. Also CFCL has been successful in creating entrepreneurs through empowerment of 300 Uttam **Krishi Sewak**, who act as the key driver of the extension programme and the interface between the company and the farmers, thereby ensuring effective execution and feedback. Besides the above, inputs are also provided through agricultural experts placed at hello Uttam centres and subject matter specialists at marketing head office. CFCL has also created state-of-the-art knowledge centres

"Agricultural Development Laboratory" at Sriganganagar and Agra. The market development organisation is given as under:



CFCL has a team of 170 agricultural graduates/post graduates to effectively carry on these activities across 10 states. CFCL has realised long back the role to be played by information and communication technology and one of the first to establish a Customer Relationship Programme and agricultural knowledge kiosks "Uttam **Krishi.com**".

### CFCL'S DEVELOPMENT PROGRAMMES IN THE 90'S

IN THE 90'S CFCL WAS ENGAGED IN extension education/rural development activities like any other agri-input companies. However focused work in this area was carried out through a specialised task force in its home state Rajasthan in the year of 1997 to 2001, with the objective to:

1. Promote balanced fertiliser use
2. Increase crop productivity by increased fertiliser use
3. Improve overall socio-economic conditions of farming community

The project was implemented in 12 districts of Rajasthan namely Alwar, Sawaimadhopur, Bundi, **Jhalawar**, Ajmer, Chhittorgarh, Banswara, Udaipur, Sriganganagar, Jaipur and Nagaur with a team of 12 agricultural graduates and in collaboration with state agricultural universities, **KVKs** and government departments. Innovative strategies were adopted in providing soil and water based farming practices and allied activities to create awareness about quality inputs and promote efficient input use. In order to fulfill socio economic responsibilities

integrated village development programmes were undertaken in 45 villages on the basis of a benchmark survey conducted prior to the action plan. Numerous **agri-development** programmes were undertaken in other CFCL territories to improve the bottom line and top line of target audience by keeping the 'fertiliser and agriculture' at the centre stage to make an impact on the socio-economic condition of farmers.

Summary of activities carried during these years are given in **Table 1**.

### EVALUATION OF ACTIVITIES

THE PROGRAMMES WERE CONDUCTED ON an annual operating plan basis and the results were visible in terms of enhanced awareness about quality of inputs, improved methods of input use, improved package and practices, post-harvest technology and empowerment of rural youth. However direct evaluation could not be made with respect to benefits reaped by the beneficiaries through CFCL's intervention. Also details of beneficiaries and competitive advantage of these interventions over others could not be capitulated. Moreover since the extension activities were carried out by different agencies in the similar areas it could not be established that the subject beneficiaries were benefited due to CFCL's above programmes. Thus for such diffused extension activities, assessment remained elusive.

Another matter of concern was to make such a process self-sustaining and replicating. Although Chambal's credentials had been established through the Uttam brand with consistent quality offerings and a wide-range of services, to strengthen this bond, it was imperative to look at the basket of services and inputs required by the farmers. The focus was to shift from generics to specifics in terms of extension services, offerings and delivery methods. It was strongly felt that there was a need to introduce new products, to insist on balanced use of fertilisers, to provide exclusive services to individual farmers **looking** at their needs. Therefore, a farmer with an identifiable face became the focus.

Table 1 - Activities carried out during 1997-2001

Activities	1997-2001	No of beneficiaries
<b>Farmer education programmes</b>		
Farmer meetings	3159	157950
Farmers training	264	9504
Crop seminars	148	31080
T and V officials meet	117	2925
Farmers' visit to <b>re.st/plant</b>	52	2600
<b>Fertiliser</b> orientation programmes	51	2550
Crop competition	43	1548
Intensive farmer <b>contact</b> programmes	797	117956
Agro retailer <b>meeting/training</b>	236	8496
Soil sample collection <b>days</b>	358	19690
<b>Village adoption activities</b>		
Village adoption	45	11250
Women self help group	18	1505
Mini kit distribution	750	75000
Village visits	14840	593600
Animal care camp	84	12600
Tree planting village	45	9000
Rural sports	33	1386
Women's training	46	8050
Health care camp	31	7781
Adult education	18	50
Pathway construction	5	2000
Pulse polio campaign	9	1332
Watershed development programmes	2	644
Drinking water supply		150000
Village youth training	12	266
<b>Demonstrations</b>		
<b>Regular/</b> result demos.	1308	47088
Spot demos.	14	504
Demonstration day	743	26748
<b>Field</b> day	117	4212
Film shows - soil testing	1837	157982
<b>Technical literature</b>		
Crop literature	291500	10494000
Product specific literature	204000	7344000
<b>Outdoor publicity</b>		
<b>Technical/social message</b> wall paintings (no of location)	112	
<b>Dealer</b> meeting/training	19	684
Dealer/sub-dealer visit to plant	126	4536

This necessitated a re-look at the extension **process** from a "way of living" to "ways of business". Looking at the individual's resources availability and the expectation of the business, any action at the **grass-roots** was to shift from a generic approach to self-entrepreneurship form. Therefore need of the hour was shifting from the concept of subsistence **farming** to the concept of farming as a business. The key indicator would be the increase in farm income from farming as well as other **farm** related options. Hence the **total** extension **process** was visualised from an expenditure model to a revenue model. With the changing market conditions, developmental activities was perceived to be a necessary condition rather than a governing condition for the future involvement of agri-based businesses.

Resource team was put into operation with a clear mandate to draw out the fallacies of the previous model and recommending future actions. The processes adopted by the **team** were:

- ◆ Identify and understand farmers needs
- ◆ Prioritise and **map** the needs for intervention
- ◆ Decide on the intervention process and the level of intervention
- ◆ Monitor that the intervention **have** a positive impact on the farmer's **bottom line**
- ◆ Keep in place a proper diagnosis tool to measure the impact of intervention
- ◆ Make the intervention visible, replicable and measurable

The objectives were many folds but the ultimate goal was to incrcasc the **income** and or to provide additional avenues to enhance the earning capacity.

Farmers were short listed for a pilot study after taking down **details** of not just their **farming** details and land holdings but also of other assets like water, animal resource, and available resources for possible income. The pilot study was conducted in 7 districts of **Rajasthan** and **Punjab** in 2001. And thus a new approach was adopted, which was later named **Uttam Handhan** during the year 2003.

## UTTAM BANDHAN - PROCESS

**THE UTTAM BANDHAN JOURNEY STARTED** with selection of farmers, classification of their present needs, use of technology, delivery methods for services, communication to the target groups and evaluation of offerings.

### Selection of Farmers

The Pilot study indicated that all offerings are to be necessarily planned after a careful segmentation of the farmers. The farmers are selected not merely on the basis of their **land** holding and assets but more importantly on their attitude to accept that **Chambal** is there to help them to improve their farming and help them earn more, thus ensuring that various segments of farmers participate in the process.

The process started with identification of districts with reasonable CFCL presence and further cascading down to tehsil and villages with the help of channel partners and thus locating individual farmers desiring to participate in the programme. It started by talking to the farmers on one to one basis about the programme plans and value proposition. Those farmers who were convinced about the process and delivery mechanism, were invited to enrol in the programme. The enrolment was the starting point to jointly have the onus for successful participation and implementation of the programmes. An annual fee of Rs 20 was kept to ensure active participation of farmers as well as commitment of the company to deliver the offerings.

### Identification of Needs

The services provided during 1997-2001 were classified in different categories and compared with the level of participation from the farmers. The different type of needs at various levels of requirements were thus identified for furthering the value chain. The need level was classified into tangible and non-tangible, so as to quantify the benefits through the intervention (**Table 2**). The same was also felt necessary to convert the intervention by either an increase in income or reduction in cost.

However in view of dynamics of the needs, the same is reviewed from time to time to come up to the aspiration level of the participating members.

### Service Customisation

The farmer needs were mapped across farmer groups and intervention territories were put into a framework to evaluate the preference level. **Customised** services were planned according to individual needs.

### Identification of Services

After **analysing** the mapped data for, **preference**, four services are planned for each farmer, which is estimated to be on the top 4 priority list. Two of which, Soil testing and *Chambal Ki Chithi* (a quarterly agricultural news magazine) supported by regular mailers on soil health, crop practices, plant protection measures, animal husbandry, etc., are provided as compulsory services for all farmers. **Two** more services are decided based on area specific mapped requirements. One of these two services is decided at **regional/state** level which is common to a particular **state/region** while the other service is planned at district level taking preference and operational details into consideration.

### Capacity Building

Providing customised services to the **member** farmers was a daunting task in view of the vast geographical territory,

various interest groups. preference of delivery mode, diversified information, infrastructural constraints and inappropriate communication. For effective implementation of the programme, various modes were studied and evaluated so as to create an appropriate infrastructure within the reach of the individual member farmers. This included deployment and empowerment of suitable manpower, skill development, use of information technology, capacity expansion of existing infrastructures, addition of new products, creation of knowledge centres, monitoring tools for various impact levels and continuous process evaluation.

### Uttam Krishi Sewaks

During various discussions with member farmers, experts, competitors and extension officials, this was realized that the key to the successful implementation would be availability of dedicated manpower and partners for periodic interactions and delivery to member farmers. Therefore to provide personal attention and customised services to the farmers, Chambal put in place nearly 300 Uttam Krishi Sewaks (UKS). These UKS were unemployed rural youth from participating areas, who had agricultural knowledge both traditional and modern. and had entrepreneurial bent of mind. UKS received a monthly remuneration and incentive based on performance. The

Table 2 - Classification of need level

Classification of need	Individual need	Need type
Agricultural and allied activities	Soil/water/plant testing and adoption, CKC, information, demonstration, availability of different Inputs, minikits.	Tangible
	Crop diversification, soil conservation, horticultural and government schemes	Intangible
Animal/ human health	Health camp, health supplements. medicines vaccination, hygiene programmes	Tangible
	Advise on husbandry practices	Intangible
Other-subsidiary	Social welfare activities, creation of employment	Tangible
	Advise on income generating activities, forestry consultancy, post-harvest technology, composting, crop diversification, etc.	Intangible

incentive **gives** the UKS a sense of pride, financial **gain** and an avenue for self-**employment**. UKS acts as an extended arm of the company at the grass-roots level and not just the interface between company and the farmer but provides a very personal reference to the member farmers.

### **Empowerment anti Skill Development of UKS**

These UKS upon induction for the programme were provided training at CFCL development centres and agriculture universities on various subjects in order to sufficiently equip them to deliver the **products/services** at an optimum time and cost to the member farmers. During the last year itself 19 training programmes were conducted in various places aggregating to a total **man-training** days of 5982. A total number of 23 specialists have been created so far on animal vaccination, artificial insemination, mushroom cultivation, exotic crop farming, goateries and food processing. These UKS further act as trainers to other peers as well as to the farmers

### **Soil Testing**

CFCL had one agricultural development laboratory at Sriganganagar with an annual testing capacity of 25000 soil samples. This was a certified laboratory by the Government of Rajasthan in the state. Second laboratory was established at Agra in 2001 with an annual capacity of 50000 soil samples in order to meet the higher **requirements**. Till now nearly 4 lakh samples have been analysed since 2001. Based on these analyses, soil fertility maps for 3 states, **i.e.**, Rajasthan, **Punjab** and Haryana in addition to fertility mapping and underground water quality of Panchyat samiti, Sriganganagar have been prepared. Besides providing soil testing service, emphasis is given to implement the findings of the soil testing report as per recommendation of agricultural universities pertinent to a particular area and agro-climatic conditions. Additional inputs like gypsum and zinc **sulphate**, compost, etc., are also provided for reclamation and maintenance of soil health. In order to facilitate timely

availability of recommendations, soil **test** reports are made available online through internet.

### **Information Dissemination**

In order to provide **information** on farm and farm related services, CFCL has launched its web site dedicated to **farmers** in the name of **www.uttamkrishi.com**. Various information (both static and dynamic in nature) ranging from package and practices, weather, mandi rates, government schemes, avenues for additional income generating activities, etc.. have been provided. The web site provides the user real time information on various aspects. Most recently new features have **been** added like on line chat with agricultural scientists, on line help on various agricultural problems, frequently asked questions, etc.. to make the site user friendly. As of now 24 company owned and operated kiosks are operational in various **states**. Maximum of 70 hits have been achieved so far in a day.

### **Hello Uttam**

CFCL established kissan help line named Hello Uttam in 1999. Dedicated lines have been set up at 5 places at Hissar, Bhatinda, Sriganganagar, Kota and Agra. These **centres** are being managed by experienced extension professionals having more than 15 years of experience in extension and agricultural technology. Personal visits are also made by the experts to resolve the queries, which could not have been addressed by telephone. Wide-range of topics ranging from crop improvement, plant protection, reclamation, organic **farming**, animal nutrition and bee keeping, etc., Queries received on various centres during 2005 are given as under:

Hello Uttam Centre	Calls received
Bathinda	42
Hissar	2807
ADL - Agra	156
ADL- Sriganganagar	4959
<b>Total Calls</b>	<b>7964</b>

We have received more than 52000 calls since inception of Hello Uttam. The **help**-line offers solutions on various subjects ranging from **crops** to non-farm

**enterprises**. More than 1 lakh farmers have **been** benefited from the programme so far. Fifteen more Hello **Uttam** centres **are** expected to be operational during the **next three** years covering a **farmer** base of **nearly** 6 lakh.

### **Use of Technology**

In order to provide the desired service levels to the participating members, different technologies were evaluated. We decided to go for web based software to enhance customer relationship management (CRM). This has ensured optimum **utilisation** of resources and effective monitoring. The tool has helped to record all the pre-intervention data. intervention requirement, service level promised and delivered and overall impact on intervention with reference to increase in **farmer** income.

Recently, Via-SMS, an online research tools has been established at marketing head office as well as regional offices to communicate with **UKS/MO**, objective market research, collection of data for market intelligence, etc.

### **Delivery Methods for Services**

To strengthen the delivery mechanism, self-help groups were encouraged for sustainable development. One such example is SR seed growers cooperative in Bundelkhand, which started with a member base of 20 in 2004. The cooperative **has** produced so far 4000 qtl of wheat seed and is expected to produce around **20000** qtl.

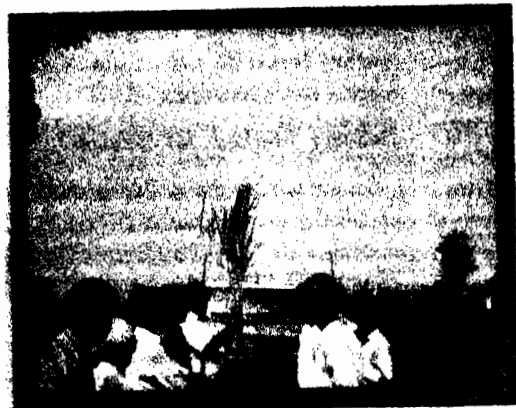
Another example is **kinnow** growers association in Sriganganagar, wherein 25 members have been reaping the benefits of modern growing. In Haryana, crop diversification project was taken up to showcase effect of modern agriculture and **income** enhancement through exotic crops. Similarly there are numerous success stories of such **self** help groups across the marketing territory. Some noteworthy self-help groups are wheat growers group in Jhansi, sweet corn growers in Rudrapur, potato growers in Sadabad, flower group in Karnal and water harvesting group in **Nimbaheda**.



**ANIMAL HEALTH CHECK UP CAMP AT BANSWARA**



**HUMAN HEALTH CARE CAMP AT HARSOYA**



**FIELD DAY AT KARNAL**



**Farmer Muting at Gad ( Distt. : Alwar, Rajasthan)**



**Puja Ceremony before dispatch of First Truck Load of Gypsum ( Rajasthan)**

**Figure 1 - Pictorial presentation of CFCL's extension activities**

The experiments have provided an opportunity for empowerment of people at the grass-roots level to enhance their income, which led to an improved standard of life.

### Communication with the Target Groups

In Uttam Bandhan, CFCL has been able to establish 360° communication with all stakeholders which comprise of CFCL, trade chain, research station and the farmer. Innovative medias like technical/extension films, crop tabloids, focal group discussions, farmer help line, communication meeting with randomly selected farmers with the senior executives, circulation of stories of successful farmers, vernacular language based mailing system and net based communications to farmers on soil testing report, etc.

### Publications

CFCL has published three books which covers frequently asked questions (FAQs) on different crops, *Krishi unnat ki aur* and plant protection guide, which have been highly appreciated by experts and farmers. The books are based on real field situations with experts advice. In addition to these, over 1 lakh crop hooklets have been circulated on improved practices during the intensive farmer contact programmes. Pictorial presentation of some of the activities are given in Figure 1.

### PUBLIC PRIVATE PARTICIPATION (PPP) PROJECT

CHAMBAL IS THE FIRST PRIVATE SECTOR company to get involved in the implementation of the Agriculture Technology Management Agency (ATMA) project at Sangrur in Punjab. It has showcased a perfect step towards Public Private Partnership. Concerted efforts were made to empower the farmers through reforms on the delivery module, augment media/IT application, address issues that related to gender through extension. The idea was to reduce the expenses on administrative cost and to spend money on a self-evaluative model on farmer oriented activities and information dissemination. Wide area of

activities from fisheries, poultry, animal husbandry, soil reclamation, vermi compost, etc., were taken up in association with government departments and PAU. Nearly 700 farmers have benefited so far.

To make the balance sheet for an individual farmer, his assets, investment and return are taken into account (Table 3). Costings are done crop-wise and then aggregated for the total farm return in a year.

To achieve a farmer's annual income and likely net income, the following methodology is adopted:

*Total expenditure and return is calculated for individual crop*

**Expenditure:** X (cost of all the inputs + cost of pesticides + cost of credit)

**Note:** 'X' is a factor which is assigned as per area which includes approx. cost of labour, electricity and other overheads for the cultivation of a crop (this is based on survey and practices of the area).

**Revenue:** (G/100)XAXI

**Net Income for the crop:** (Revenue) – (Expenditure)

This methodology is carried out for each crop. Revenue and expenditure of each

Table 3 - Balance sheet of an individual farmer		
S. No.	Assets/investment	Objectives
a.	Land (total and irrigated) holding (of the farmer) and scope of	Evaluating assets in terms of total land investment
b.	Crops sown (major 2-3) contribution (scope for improvement)	To analyse major crops that give major
c.	Land under each crop	Each crop balance sheet is made and acreage is recorded (scope for improvement)
d.	Total seeds used (own and purchased)	Total seeds used gives seed rate and quality of seeds (scope for improvement)
e.	Fertilisers used : Urea DAP MOP SSP Others as zinc, compost, etc.	All fertilisers used in the crop is recorded (scope for improvement)
f.	Total expenditure on crop protection	It is taken in terms of monetary investment in value terms (scope for improvement)
g.	Credit/loan for the crop and source The source of credit is also recorded.	Credit/loan for the crop is taken. Even when inputs are taken on credit, it is recorded. (scope for improvement)
h.	Yield	Measured in kg/acre (scope for improvement)
i.	Selling rate of the produce	Actual selling rate is taken in Rs/qty (scope for Improvement)
Along with the above information other information is also collected		
Other information		Remarks
Other farm subsidiary activities		Animals, orchards, etc. (scope for improvement)
Age Education status		To gauge the likely receptiveness for new ideas.

Table 4 - Achievements of Uttam Bandhan efforts

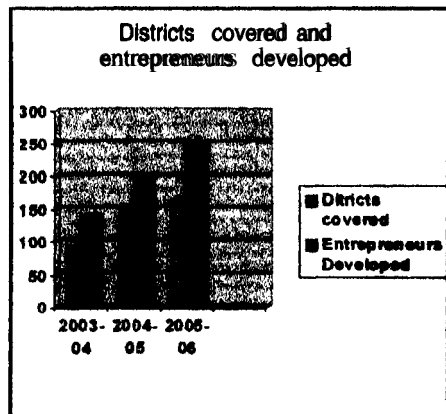
Particulars	2003-04	2004-05	2005-06
Soil samples analysed (nos)	38455	55591	75000
Soil health improved (lakh acres)	5.53	7.8	10.8
Animal health check up done (no of animals)	25898	40815	84500
Human health check up (families)	7017	15246	20000
Fanner benefited by trainings (crop specific) nor	32070	45957	77500
Farmer income increase	Rs. 500-700	Rs. 800-900	Rs. 1000-1200
Entrepreneurs developed	140	200	251

crop is assessed. They are then clubbed to arrive at the total farm income in a year.

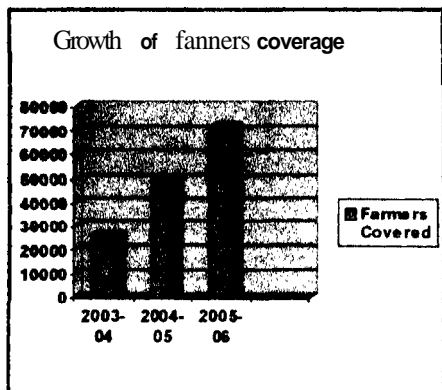
**Achievement of Uttam Bandhan Efforts**

The progress of this initiative has been commendable and has produced significant results. Impact and reach of the programme are summarised in Table 4.

List of activities from 2001-2005 are given in Table 5.



Nearly 50% of the districts have been covered so far. The objective is to cover maximum districts so that the model can be replicated in a wider form.



Nearly 72000 farmers have been benefited from the programme so far. Although the number is low with reference to the nation's agrarian's base, we are making reasonable progress and CFCL wishes to cover at least 3 lakh farmers in the future.

Another such initiative was Uttam milestone project.

**Uttam Milestone** Project was conceived in the year 2002 first as a corporate social responsibility of the company in and around its plant. Later the programme was extended to cover more area and help increase prosperity of farmers in general and as per the need gap perceived by the company. The programme in its present

shape broadly encompasses the following:

**Agriculture** - It covers activities as under:

a) **Soil and water testing:** This facility aims at propagating balance use of fertilisers on the basis of soil and water testing in the area. It has also helped improve productivity of crops in the area.

b) **Crop diversification:** Breaking the traditional cycle of rice-wheat-rice other commercial crops were successfully introduced. Soybean and pulses in *Kharif*, mustard in *Rahi* has now replaced good areas which cultivated only traditional crops. Medicinal crops are being promoted among farmers of the area as some of the medicinal crops are ideally suited for low moisture conditions and also provide better returns to farmers. Training programmes have also been organised to train farmers on these new generation crops as the existing pool of knowledge available with farmers is insufficient for these crops.

c) **Horticulture:** Fruit tree plantations are being encouraged in the area as it proves remunerative to farmers and can be easily taken up alongside the main field. Interested farmers have been supplied with saplings of high quality papaya, aonla, lemon and guava. Some of the activities that have been undertaken are in association with the horticulture department of Kota.

d) **Field demonstrations:** To compare and observe the effects on yield attributes, crop based demonstration are organised to highlight improved agricultural practices to farmers. Seed treatments, balance use of fertilisers, application of pesticides are just some of the techniques that are being demonstrated to farmers.

e) **Uttam krishi clinic** - A clinic was set up at Tathed, district Kota in the year 2005 to disseminate information and improved agricultural practices among farmers. An experienced consultant has been appointed at the centre to take care of the queries of farmers and also visit their fields to solve problems on-site. The centre has also developed itself as a soil



Table 5 - List of activities from 2001-2005

Activities	2001-2005	No of beneficiaries
<b>Farmer education programmes</b>		
Farmer meetings	6870	326,700
Farmers training	614	20,554
Crop seminars	541	126,565
T and V officials meet	173	4,888
Farmers' visit to re.st./plant	117	6,558
Fertiliser orientation programme	90	6,200
Crop competition	89	3,509
Intensive farmer contact programme	2377	1,071,601
Agro retailer meeting/training	544	22,058
Soil sample collection days	891	46,274
<b>Village adoption activities</b>		
Village adoption	3895	85,750
Women self help group	57	5,065
Miniklt distribution	2330	150,000
Village visits	34796	1,380,045
Animal care camp	9185	32,478
Tree planting village	103	24,841
Rural sports	67	15,485
Women's training	105	19,173
Health care camp	374	32,949
Adult education	47	165
Pathway construction	9	4,100
Pulse polio campaign	25	3,187
Watershed development programme	2	644
Drinking water supply	0	150,000
Village youth training	30	655
<b>Demonstrations</b>		
Regular/result demos.	7019	63,670
Spot demos.	123	4,016
Demonstration day	1358	48,291
Field day	259	10,032
Film shows - soil testing	4660	348,543
<b>Technical literature</b>		
Crop literature	801370	12,072,456
Product specific literature	819000	9,329,752
<b>Outdoor publicity</b>		
Technical/social message wall paintings (no of location)	201	8,915
Dealer meeting/training	235	8,834
Dealer/sub-dealer visits to plant	271	12,361

and water testing unit and a nursery for seedling distribution.

f) *Farmer training camps:* Various training programmes are being organised for farmers to update them on latest technology and to inculcate a scientific approach in them. Specialists in relevant subject matter and scientists from local agriculture research centres are invited to share their knowledge and practices with the farmers of the particular area.

#### **Veterinary Services**

*Animal health care camps :* Major activities undertaken during the camp include vaccination, infertility check-ups, minor surgeries, treatment for parasites by qualified doctors from veterinary department of the state government. Experts also deliver lecture on proper keeping of milch animals, nutritional requirements of animals based on their age and diagnosis of simple diseases. Intensified PPR vaccination drives have been undertaken in the area to take care of sheep and goats that may be infected by deadly PPR viral disease.

*Breed improvement programme:* Keeping in view the low milk yield of milch animals in the area, a breed improvement programme was undertaken in the belt to improve the local livestock population by cross-breeding with high quality cow, buffalo and goat that were made available to farmers.

#### **ENTREPRENEURSHIP DEVELOPMENT PROGRAMME**

IT ENCOMPASSES ACTIVITIES THAT ARE aimed at imparting training and skill development in the village youth to enable them to start their own job or become eligible for job. Many activities that have been taken up under this programme include training on driving that includes issue of license and certificate of learning. Rural men and women have also been trained on basic tailoring to take up stitching of clothes at village level. There have been quite a few success stories where women entrepreneurs were encouraged to open their own shops and earn their livelihood.

Papad making project has also been taken up with "Jan Sansthan", Kota and more than 50 women have been encouraged to learn papad making. By this additional skill, women are making an additional Rs.800-Rs.1000 per month. Women are also being trained in pickle and spices making that are being sold in the local markets. Apart from additional income to their families, it has empowered the women in their respective villages to take on various issues of social interest.

## CONCLUSIONS

SINCE THE PERIOD OF ITS EXISTENCE CFCL has made an effort to intervene at different stages of a farmer and his farming cycle which include soil, water, plant and animal as well as human health, post-harvest technology, animal husbandry practices, etc., In some of the areas, the result has been remarkable. CFCL has been at the forefront not only offering intangible advisory services but also tangible offerings thereby changing the quality of life at grass-roots level. The results can be apparent in creating an awareness about soil health, improved package and practices, crop diversifications, maintaining soil health through offering tangible solutions like biofertilisers, micronutrients, reclaiming products, etc. However much is still to be done in the areas of market intervention for outputs, agricultural finance and crop assurance. The prospects are being studied at micro and macro level to take these benefits to the farming community. CFCL has already made a beginning in these areas by taking pilot-tests on weather insurance, animal health cares, market support for horticultural crops in parts of Rajasthan, Haryana, Punjab and UP.

Thus CFCL has embarked on the path of farmer's prospects and it truly believes that it is the end result that really counts from seed to seed level. CFCL is in the process of building a capacity in order to customise interests of different interest groups like wheat growers, orange growers, seed growers, and farmers

having waste land, marginal farmers on a wide-range of subjects from inputs to outputs. The model has been proved to be replicable and self-sustainable. The effect of the programme has also found to be equally synergetic in sustaining and enlarging company's business interest.

Therefore this can be truly said that CFCL has mentored itself as a farmer's true friend, philosopher and guide.

## FUTURE STRATEGY

IT IS TIME NOW TO THINK BEYOND THE legacy of green revolution and transcend the process to an evergreen green revolution. This will not be possible unless the benefit of technology is transferred to the masses across the geographical expanse, crops and sections of farmers. CFCL has realised this long back when it embarked on a campaign to sustain the process by enhancing farm income. A multi-pronged action has to be in place to achieve this objective.

**1. Need gap analysis:** CFCL's Uttam Bandhan (UB) programme started with the initial study of farmers' needs and preparing a balance sheet for individual farmers for identifying the intervention level required to enhance the farm income. However, the need gap analysis must be continued on regular interval and the need gap must be mapped across territory to formulate a long-term extension plan.

**2. Collaborative approach:** CFCL is one among the few to take up extension customized for farmers needs, which is a clear example of collaborative approach. All the stakeholders like the farmer himself, government agencies, extension workers, University officials are brought to a common platform, wherein clarity in role, delivery, results brought about a change in the farming community with respect to farm productivity and farm income. CFCL plans to enlarge and intensify this initiative in their marketing territory.

**3. Enhancing capacity at grass-roots level:** Modern agriculture cannot take place without creating capacity through

knowledge, training, infrastructure, IT, etc. CFCL has been successful in crating 300 trained manpower, knowledge kiosks and marketing network for transferring technology to the grass-roots level in addition to existing capacities.

**4. Mapping area for hi-tech/organic farming:** We plan to map our entire marketing territory in the next 3 years for mapping of areas based on fertility status, land holding, crop suitability, adoption to modern farming, which would form the basis of further intervention on a macro level.

**5. Crop diversification:** Fragmentation of land is inevitable for the times to come. With reduced size of land and growing pressure of population, modern agriculture has to be more focused to deliver higher productivity and quality per unit area on a given time. We have conceived a unique programme named Do beegha to showcase modern agriculture on a small piece of land. The technology would encompass scientific practices on agriculture and related activities, which would be customer friendly, economically viable, socially acceptable, widely replicable and environmentally friendly. It is primarily meant to showcase as to how the small and marginal farmers can improve their livelihood through modern agricultural techniques and practices.

**6. Wasteland development:** CFCL is exploring possibilities to draw actions plan for wasteland development in parts of Rajasthan.

CFCL as a responsible corporate citizen has played and would continue to play its role in contributing towards sustainable development. This is just a beginning towards an effort in changing lives of people. There still is a long way to go. The objectives cannot be achieved till economical means to convert the extension from intangible to tangible solutions is achieved in its true sense in order to strengthen the value chain and enhance the farm income. CFCL is geared up to take this journey forward in a phased manner. ●