REVIVAL OF GRANULAR FERTILIZER FACTORY OF MARKFED, BARGARH

DISSERTATION SUBMITTED TO

ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR AWARD OF THE DEGREE OF

MASTER OF BUSINESS ADMINISTRATION

(AGRIBUSINESS MANAGEMENT)

BY

Rojalin Behera

DEPARTMENT OF AGRIBUSINESS MANAGEMENT
Orissa University of Agriculture and Technology
BHUBANESWAR-751003

2013

University Guide -

Dr. A. K. Parida
Head of the department of
Agricultural statistic

OM SHRI ASHUTOSHAYA NAMAHA

THE PROJECT IS DEDICATED
TO
SHRI ASHUTOSH MAHARAJ JI

REVIVAL OF GRANULAR FERTILIZER FACTORY OF MARKFED, BARGARH

DISSERTATION SUBMITTED TO

ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR AWARD OF THE DEGREE OF

MASTER OF BUSINESS ADMINISTRATION

(AGRIBUSINESS MANAGEMENT)

BY

Rojalin Behera

APPROVED BY THE ADVISORY COMMITTEE

Chairman:

Dr. A.K Parida

Head Of the Department of Agricultural Statistic,

College Of Agriculture, O.U.A.T. , BBSR .....

Members:

1. Dr. Samarendra Mahapatra

   Head , Department of Agribusiness Management ..... 27-6-13.

2. Dr. Debdutt Behura

   Assistant professor

   Department of Agribusiness Management 27.6.13

   External Examiner 28/6/13

Department of Agri Business Management
Centre for Post Graduate Studies
Orisaa University of Agriculture and Technology
Bhubaneswar-751003

CERTIFICATE

This is to certify that the dissertation entitled "Revival Granular Fertilizer Factory, of MARKFED,Bargarh, submitted in partial fulfillment of the requirements for the degree of Master in Business Administration in Agribusiness Management of the Orissa University of Agriculture and Technology (OUAT), Bhubneswar is a record of research work done by Miss. Rojalin Behera during the period of her study in this University under my guidance and supervision. This dissertation has not previously formed on the basis for award of any Degree, Diploma or other similar titles. The assistance and help received as well as sources of information availed during the course of investigation have duly acknowledged.

Dr.A.K.Parida
Head of the dept.
of Agricultural-Statistics

Date 28/06/2013

MARKFED - ODISHA

OLD STATION ROAD
BHUBANESWAR-751006

Ref. No. :..... Date : 3.7.

CERTIFICATE

This is to certify that Ms. Rojalin Behera, student of Orissa University of Agriculture and Technology, Bhubaneswar has done her major project in Orissa State Co-Operative Marketing Federation Ltd. (MARKFED) at Bhubaneswar from 27th Feb 2013 to 27th June 2013.

She has worked on the project on "Revival of Granular Fertilizer Factory of MARKFED, Bargarh". Her performance and conduct during this stint has been very satisfactory. I wish her all the best for her future endeavours.

3/7/13

Ashwini Ku. Mishra, O.A.S(S)
Managing Director of MARKFED,
Bhubaneswar

MANAGING DIRECTOR
MARKFED - ORISSA
BHUBANESWAR

ACKNOWLEDGEMENT

I avail this opportunity to express my deep sense of reverence to Dr. A.K. Parida, head of Agricultural Statistics, College of Agriculture, Orissa University of Agriculture and Technology, Bhubneswar for his Scholastic Guidance and constant efforts at every stage of investigation and preparation of this research study.

My esteemed teacher and suppoter Dr. S. Mahapatra, Head of the Department, Agribusiness Management Department, Centre for Post Graduate Studies, Orissa University of Agriculture and Technology, Bhubaneswar, Mr. Ashwani Ku. Mishra, managing director of MARKFED, and Mr. Damodar Ojha, (D.O, MARKFED) were also very supportive and cooperative. I reckon with all gratitude for their kindly help, cooperation and scholarly suggestions.

I extend my hearty thanks to my friends-Reshma, Shashwati, Pratima, Jyoshna, Mamuni, Tiki for their help during my research work.

At the nib but ineptitude, I wish to express my to express my deep sense of honour, love, heart regards to my family members for their constant help, support blessing and love that became a part of my life and made each and every step of my life beautiful and pleasant. Without my parents' blessings and care it would not be possible to complete this thesis and achieve another success in my academic career.

Apart from the blessings of my parents, I must bow my head down in front of Shri Asutosh Maharaj ji for making me feel their presence in every step and situation of my life and helping me as well as providing me patience and faith to achieve this goal.

Rojalin Behera

Date: 28/06/2013

Name-Rojalin Behera

Bhubaneswar

Adm. No.-21ABM/11

DECLARATION

I do hereby declare that dissertation entitled "Revival of Granular rtilizer Factory of MARKFED, Bargarh" being submitted by me in partial lfillment of the requirements for the degree of Master of Gushiness dministration in Agribusiness Management of the Orisaa University of griculture and Technology(O.U.A.T), Bhubaneswar under the guidance of . A. K. Parida has not previously formed on the basis for award of any egree, Diploma or other similar titles.

Rojalin Behera

Rojalin Behera

Roll. No - 21ABM/11

ate: 28/06/2023

EXECUTIVE SUMMARY

Agriculture is the main source of livelihood of India. Maximum gross profit is coming to Indian economy from agricultural sector. There are many people live in India who only depends on agriculture. So to increase the production level of agriculture sector there is a strong need of plant nutrient that is chemical fertilizer. MARKFED (Marketing Federation Limited) is supporting farmer by providing fertilizer in minimum support price through Primary Agricultural Cooperative Society(PACS) and dealers.
MARKFED has a Granular Fertilizer Factory at Bargarh which was started from 1974.

The fertilizer named Shyamala was the product which had a great demand in Bargarh area. Farmers preferred that fertilizer, as it was contain N, P, K in a ratio of 15:15:15. But now due to some reason it is in a nonfunctioning condition.

MARKFED has many branches through out India. It has to main business one is fertilizer supply to PACS and dealer and the second one is paddy procurement. It seen many up and down in its functioning period but the failure of Granular Fertilizer Plant strongly affect the MARKFED economy.

CONTENTS

LIST OF TABLES

LIST OF FIGURE

Chapter-I

Introduction

INTRODUCTION

Agriculture is the back bone of our country. There are about 70% people of India depend on only agriculture. About 67% cultivable land present in India. The climate of odisha is suitable for paddy cultivation. There is a need of good supply of plant nutrient to get a satisfied yielding. Fertilizer is the main requirement of agriculture as it is the food of plant. Proper supply of required fertilizer enhances the growth of plant that result in to high yielding of crops.

MARKFED is a cooperative society supply fertilizer to primary agricultural cooperatives society (PACS) and dealers in minimum support price. MARKFED has a Granular fertilizer plant at Bargarh. Bargarh is famous for rice cultivation because of the availability of good irrigation facility, labour availability and suitable land and climate of the area. So a great demand of fertilizer is seen always in that area. The Granular fertilizer plant is running from 1974.The plant manufacture particularly the fertilizer named "Shyamala" which had a good brand image in Bargarh area as the fertilizer is a mixed fertilizer having 15:15:15 N:P:K. This plant had contributed a good economic support to the farmers of Odisha. But due to some reasons the plant is nonfunctioning from 2007 and now it is in paralyzed condition.

Adequate supply of chemical fertilizer is very much necessary to increase the agriculture production level of Odisha. As agriculture is the back bone and main livelihood fashion of Odisha and to meet the need of farmer, it is very much necessary to enhance the production and supply of fertilizer. So according to the requirement and present demand of chemical fertilizer the Revival of Granular fertilizer plant of MARKFED, Bargarh is chosen for the research study.

1.1 A BRIEF OVERVIEW OF MARKFED

The MARKFED i.e., Odisha State Co-operative Marketing Federation Ltd. was previously known as Odisha State Co-operative Marketing Society. It was registered in the year 1949 under Bihar-Odisha Co-operative Societies Act, 1935. Agricultural farmers are the main client of MARKFED because it market agro-chemicals to farmers in minimum support price (MSP). It has the agency for distribution of chemical fertilizer, the major quota of the state as per essential commodity Act, to manage proper distribution system. MARKFED is having quality buffer and godown with a net work of experienced personnel in all most every district of Odisha. The net work starts from the railway point to the doors of farmers.

The MARKFED Started functioning since 11.6.1949. The objectives are to market/distribute chemical fertilizers, pesticides, agricultural implements to the farmers of the State and procurement of surplus agricultural commodities under Price Support Scheme to help farmers to get fair price of their produces. The business turnover during 2011-12 was Rs.768.18 corers and planned for 843.00 crores during 2012-13.

BUSINESS OPERATION OF MARKFED-ODISHA:-

(i) Performance on sale of Chemical Fertilizers

Primary business of MARKFED is distribution of chemical fertilizer to the farmers through the Cooperative Societies under 'B' component and private dealers having valid fertilizer license. The total sale of fertilizer has been increased from 1.44 lakhs MT during 2001-02 to 3.22 lakhs MT during 2011-12.

Table 1. Sale position of fertilizers during last 4 years

Year	Kharif	Rabi	Achievement (MT)	'B' Component sale (%)
2009-10	245270	94211	339481	36
2010-11	260048	94212	354260	41
2011-12	247065	75462	322527	39
2012-13 (As on 30.09.12)	254141	---	254141	49

Source: MARKFED headquarter, Bhubneawar

Figure 1.'B' Components Sales projection in % through 2009-13

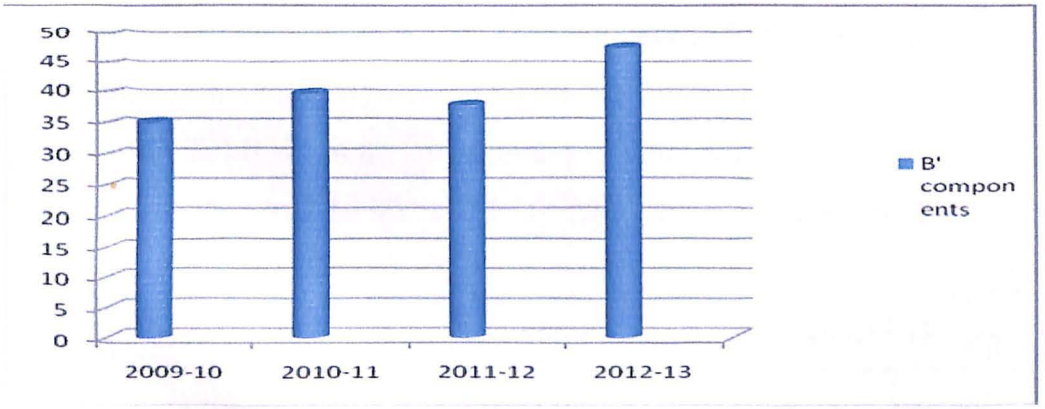
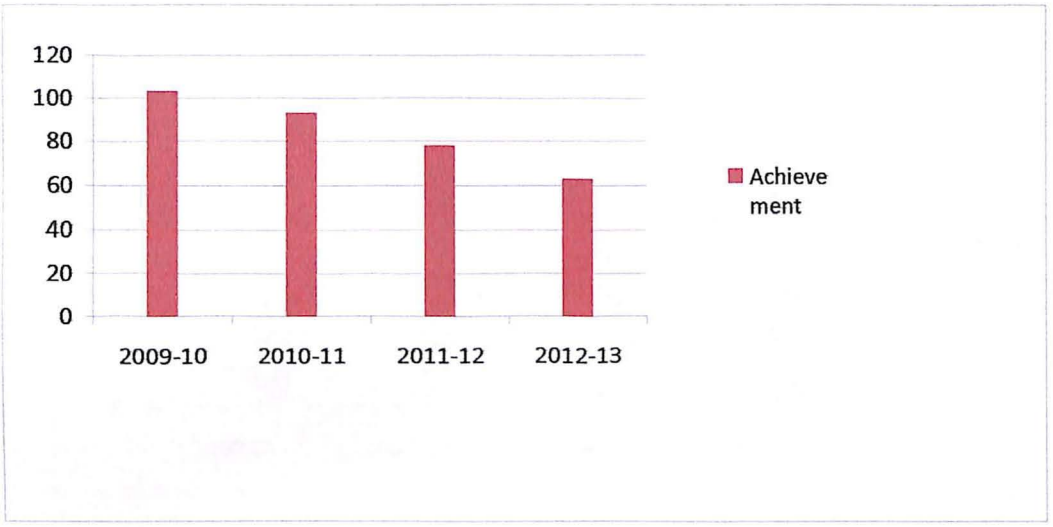


Table 2. Percentage of achievement in sale of fertilizers during last 3 years.

Year	Target (MT) fixed by Federation.	Total achievement(MT)	Achievement (%)
2009-10	330000	339481	103
2010-11	381000	354260	93
2011-12	412000	322527	78
2012-13 (As on 30.09.12)	405000	254141	63

Source: activity report of MARKFED

Figure 2.Achievement in fertilizer selling during last 3 year



(ii) Performance on Paddy Procurement

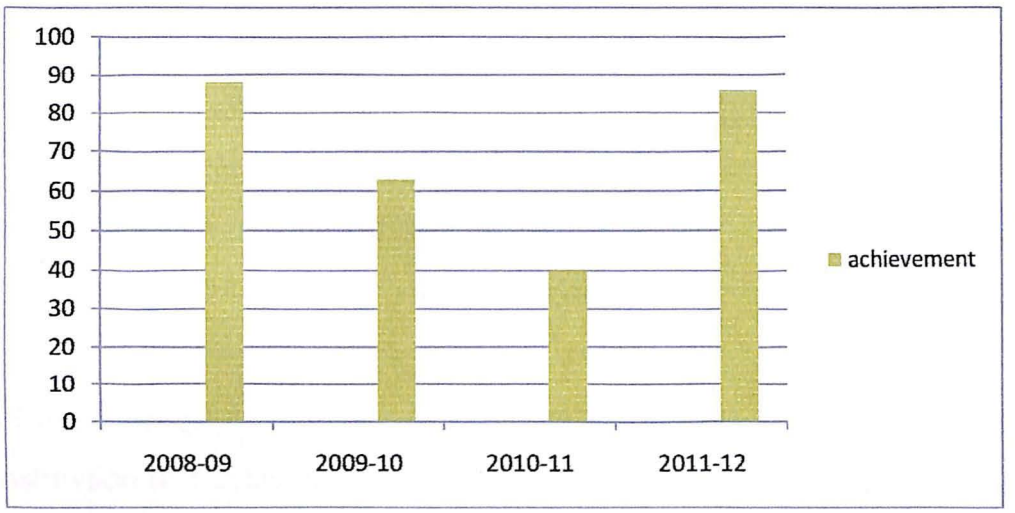
MARKFED acts as State Government agency to procure paddy from farmers at MSP ince KMS 2004-05 through custom milling mode. During the current Kharif Marketing eason (KMS 2011-12) State Government has allotted procurement target of 3.22 lakhs MT f paddy equivalent to 2.19 lakhs MT of CMR from 15 districts to MARKFED.

Table 3. Paddy procurement target by MARKFED

Sl. No.	KMS YEARS	Numbers. of District alloted	Target(MT) alloted for of rice	Achievement for rice		
				Qty. (MT)	Value (Rs. in crores)	% of achievement
5	2008-09	20	450000	395925	639.22	88
6	2009-10	17	206700	129238	231.62	63
7	2010-11	9	400000	158910	290.81	40
8	2011-12 (As on 30.09.12)	15	219000	188879	375.97	86

Source : MARKFED activity report

Figure 3.Achievement of Rice sale during 2008-12



(iii)Warehousing

MARKFED has 1.00 lakh MT capacity godown of its own inside the state for conducting fertilizer and paddy business. At times it used to hire godown from co-operative and private bodies as well for our business purposes.

MARKFED provides storage space to the fertilizer manufacturers in the godown for storage of fertilizers on hire basis and this is also a good source of income. Usually MARKFED earns about Rs.100 lakh per annum from godown rent towards warehousing account and Rs.88 lakh on let-out to other parties.

Shopping Complex: MARKFED has rented out shopping complex having 31 shops in the premises of head office at Bhubaneswar and earns around Rs.12 lakh per annum.

MARKFED earns around Rs.200 lakhs towards rent per annum.

v) Working of Cold Storages of MARKFED

MARKFED has 3 no. of multi-commodity cold storages at Bhubaneswar, Rayagada, agatpur of 5000 MT, 5000 MT and 4000 MT capacity respectively. Advertisement has been nade in odia and english daily news papers for leasing out of those cold storages. One party M/s Indo Arya Central Transport Ltd., New-Delhi has offered to take the cold storage at

Bhubaneswar and Jagatpur on lease @Rs.1,78,000 and 1,36,000 /- per month respectively. The proposal of the party has been communicated to the RCS (O) vide office letter no.1319 dt.23.07.12 to accord necessary approval for onward execution of agreement. The D.R.C.S(Mktg.) vide directorate letter no.13930 dt.13.08.2012 has intimated to follow the procedure as laid down in P.W.D code for leasing out the Co-operative Cold Storage at agatpur and Bhubaneswar Cold Storage. Accordingly, the matter was approved by the Committee of Management on 18.08.2012 and on being resolved the said proposal submitted to the R.C.S (O) for necessary accordance.

Rayagada Cold Storage

The construction of Rayagada cold storage at Rayagada with a capacity of 5000 MT was onstructed in March 1998 with an estimated cost of Rs.230.00 lakhs. The purpose of onstruction of the cold storage was to store Tamarind of the tribal. But due to want of funds nd other difficulties, the refrigeration, insulation and electrical could not be taken up for vhich the cold storage was left only after construction of the building. Now at the nstructions of Govt., MARKFED has already taken up the work through open tender for ompletion of the cold storage with the funds amounting to Rs.122.00 lakhs provided out of LTAP scheme and for balance amount of Rs.85.84 lakh sanctioned fund under RKVY. Vork order for completion of balance civil works of the building, painting, approach road nd electrical work has also been issued in this connection. The job is progressing at fast ace and likely to be completed soon.

v) Computerization of MARKFED

The present status of computerization work of MARKFED is as follows:

- ISL have completed the development of software and an amount of Rs.4,05,696/- have been paid against their bill on dt 01.06.2011.The experts of CSM Technologies have imparted operational training to the Area Manager Puri and Cuttack on 27.06.2011 at Bhubaneswar. More over the said firm made one demonstration on

utilization of the software to the functional field staffs on 08.08.12 at CYSD, Bhubaneswar

- E mail-id and Pass Word for 30 revenue districts have been created and communicated to Area Managers to make the system functional as well as for entry of data in the system.

- In the mean time purchase order has been placed to M/s Hewlett Packard India sales pvt. Ltd, Haryana for supply and installation of

a) 25 Computers and Peripherals at field level as well as at headquarters. Out of his, 16 computers with peripherals have been installed. The Area Managers were also advised for availing Broad-band connection in their office premises for facilitating data transfer to H.O. As a result of which the efficiency of the field staff will be improved and the transparency in business can be achieved.

b) Presently, the Area Managers are to be instructed to make data entry through AGRISNET soft ware developed by DA and FP, with support from NIC, till installation of new computers in their offices.

c) The State information officer o/o NIC, Bhubaneswar has been moved vide this office letter no.835 dt.27.06.12 for designing and hoisting of website of MARKFED. The Technical Director of NIC, Bhubaneswar has been contacted for early completion of the work.

(vi) Action plan for 2012-13

Table 4. Action plant for 2012-13

		Fig in Crores
Proposed Purchase	Fertilizer	391.75
	Paddy	325.00
	Others	1.95
	Total :	**718.70**
Proposed Sale	Fertilizer	400.00
	Rice	378.76
	Others	2.08
	Total :	**780.84**
Proposed	Fixed Income	95.83
Proposed	Fixed Expenditure	69.19
	Variable Expenditure	9.49
Interest on Loan and Borrowings including provision interest of Govt. Loan		15.42
	Total Expenditure :	**94.10**
	Net Surplus :	**1.73**

Source : MARKFED headquarter, Bhubneswar

utilization of the software to the functional field staffs on 08.08.12 at CYSD, Bhubaneswar

- E mail-id and Pass Word for 30 revenue districts have been created and communicated to Area Managers to make the system functional as well as for entry of data in the system.

- In the mean time purchase order has been placed to M/s Hewlett Packard India sales pvt. Ltd, Haryana for supply and installation of

a) 25 Computers and Peripherals at field level as well as at headquarters. Out of his, 16 computers with peripherals have been installed. The Area Managers were also advised for availing Broad-band connection in their office premises for facilitating data transfer to H.O. As a result of which the efficiency of the field staff will be improved and the transparency in business can be achieved.

b) Presently, the Area Managers are to be instructed to make data entry through AGRISNET soft ware developed by DA and FP, with support from NIC, till installation of new computers in their offices.

c) The State information officer o/o NIC, Bhubaneswar has been moved vide this office letter no.835 dt.27.06.12 for designing and hoisting of website of MARKFED. The Technical Director of NIC, Bhubaneswar has been contacted for early completion of the work.

(vi) Provisional Balance sheet for 2011-12

The Provisional Balance Sheet for 2011-12 has been prepared basing on the business activities of MARKFED **(Annexed at Annexure - I).**

Table 5. Provisional Balance Sheet for 2011-12

(ix)	**Business Development plan for coming 3 years**			
			Fig. in crores	
Sl.no	**Particulars**	**2012-13**	**2013-14**	**2013-14**
1	Purchase of fertilizer	391.75	430.93	474.02
2	Purchase of paddy	325.00	422.50	549.25
3	Purchase of SAP and others	1.95	2.54	3.30
4	Sale of fertilizer	400.00	440.00	484.00
5	Sale of rice	378.76	492.39	640.10
6	Sale of SAP and Others	2.08	2.70	3.52
7	Fixed Income	95.83	110.20	143.27
8	Fixed Expenditure	69.19	79.57	103.44
9	Other expenses	9.49	10.91	14.19
10	Interest on loan and borrowings	10.06	11.57	15.04
11	Provision for Interest	5.36	5.36	5.36
12	**Net Surplus**	**1.73**	**2.79**	**5.24**

Source: MAKFED headquarter, Bhubneswar

(vii) Action plan under RKVY

There are godowns in 91 locations spreading over the entire State with storage capacity of 1.14 lakhs MT, out of which 1.00 lakh of its own. Besides utilizing the godown for storage of fertilizer, MARKFED provides storage facility to the fertilizer manufacturers as and when required. At times pre-positioning of fertilizer is required to bridge the gap between demand and supply of fertilizer at nook and corner of the state as a whole.

- In order to overcome the bottlenecks and to achieve the target fixed for MARKFED proposes to construct 14000 MT new godown under RKVY scheme and to repair 52500MT existing old godown constructed during NCDC phase (I and III) i.e., in the year 1981-87.

- Requirement to have more scientific godown has increased hand-in-hand with increased paddy procurement and fertilizer distribution to PACS / LAMPCS. The commitment to ensure uninterrupted availability of qualitative products to the targeted farmers has led MARKFED-Odisha to focus more on construction of scientific godown particularly in backward areas which can be used for long term storage of food grains and fertilizer as well. The advantages are as under; The State Govt. has drawn up a plan of action to sale 9.66 lakh MT which is around 2.50 lakh more than that of last Kharif. Basing on which MARKFED has planed for sale of 3.05 lakh MT of fertilizer.

Similarly the major bottle neck in achieving the target for Paddy Procurement allotted by the Govt. is due to non-supply of CMR to Rice receiving Agencies for want of adequate storage space in the state. It is pertinent to mention here that MARKFED has also provided storage space to them at places. As such, we propose to create additional storage space of 20,000 MT for storage of CMR and surplus Agril. Produces. In this context, the Federation proposed to construct 14,000 MT at 13 locations at a cost of Rs.10.19 crores in the first phase on availing financial assistance under RKVY from Govt. in Agril. Department. The Co-operation Department has also been requested to move the above

- Chemical fertilizer
- Pesticides
- Agricultural implements
- Procurement of Paddy
- It is the stage agency for distribution of chemical fertilizer, the major quota of the state as per essential commodity act.
- To manage proper distribution system MARKFED is having quality buffers and godown with a net work of experienced personnel in all most every districts of ODISHA. The net work starts from the Railway point to the doors of farmers.
- MARKFED has also entered into another service oriented business for the protection of farmer's in terms of "procurement of paddy". The paddy is purchased directly from the farmer by payment of cost in implementing the price support scheme of the Govt. There by the cultivators are the best beneficiaries.
- MARKFED has established 3 cold storages to provide preservation facilities of the perishable products of the farmers of the state.
- It is also another era of service that is provided by MARKFED to protect the economy of farmers of Odisha.

1.4 ORGANIZATION STRUCTURE

The typical hierarchical arrangement of authority of lines authority communication, rights and duties of an organization. Organizational structure determines how the roles, power and responsibilities are assigned, controlled, and coordinated, and how information flows between the different levels of management. The organization structure of MARKFED is given bellow.

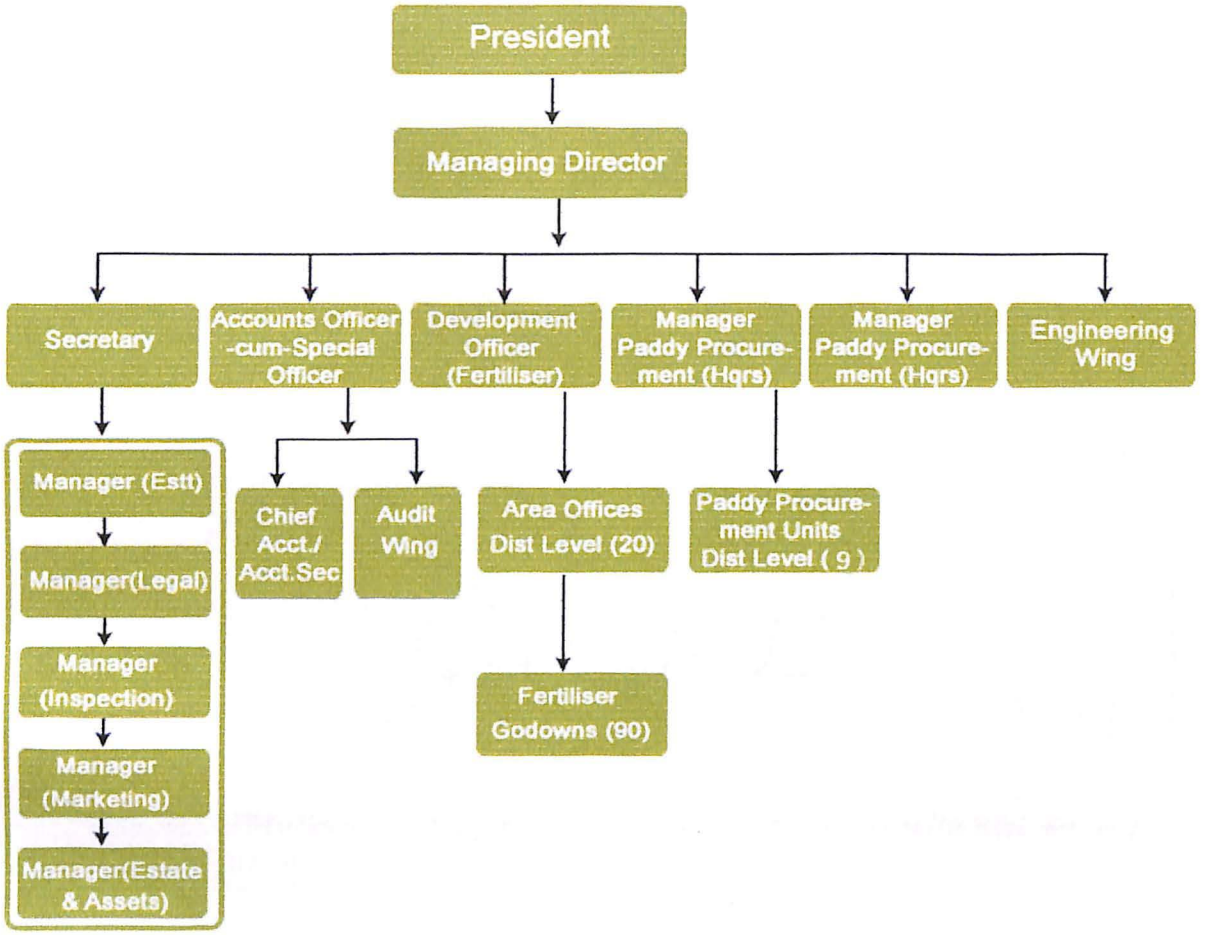


Figure 4. Organization Structure

Source: Internet

Chapter-II

GRANULAR FERTILIZER FACTORY

GRANULAR FERTILIZER FACTORY BARGARH(G.F. PLANT)

Figure 5. G.F. Plant

Source: by physically taking photo

MARKFED is a cooperative society. This organization has many branches in various district of Odisha. The main client of MARKFED is farmer. One branch of MARKFED is present in Bargarh. It was a Granular fertilizer manufactory plant. Now it is only a fertilizer supply unit. The plant is situated at Bargarh near the village Dang having plot no. 325/593. The plant is spread about 4.805 acre of area. The Granular fertilizer factory started from the year 1974. But due to some problem the plant is nonfunctioning from 2007.

The idea of having a G.F. Plant at Bargarh was visualized for proper utilization of damaged fertilizer that was generated while importing different variety of fertilizers through Paradeep Port. The project was sanctioned by N.C.D.C in January, 1969. After receiving final assistance from the N.C.D.C through the State Govt., the construction of the Unit was taken up on 10.07.1971 at Bargarh at a cost of Rs.32.60 lakhs started functioning since 19.02.1974.

When import of fertilizer was discontinued from Paradeep port in the year late Nineties ,the plant was used to utilize the damaged, lie-over and unsold fertilizer of different out-lates of the MARKFED all over the state as its raw-materials. Other raw-materials like Rock-Phosphate. SSP and MOP produced from different Agencies are also mixed to make the ratio of N.P.K in the grade of 15:15:15.

The composition of different type of fertilizer used as raw-material per 1(one) M.T. are as follows:

DAP	-	240Kg.
MOP	-	250kg.
Urea	-	235kg.
SSP	-	110kg.
RRP	-	120kg.
Dolmite	-	45kg.
Colour	-	3kg.

The above fertilizers are mixed and granulated and marketed in the brand name of "SHYAMALA" (NPK) 15:15:15.

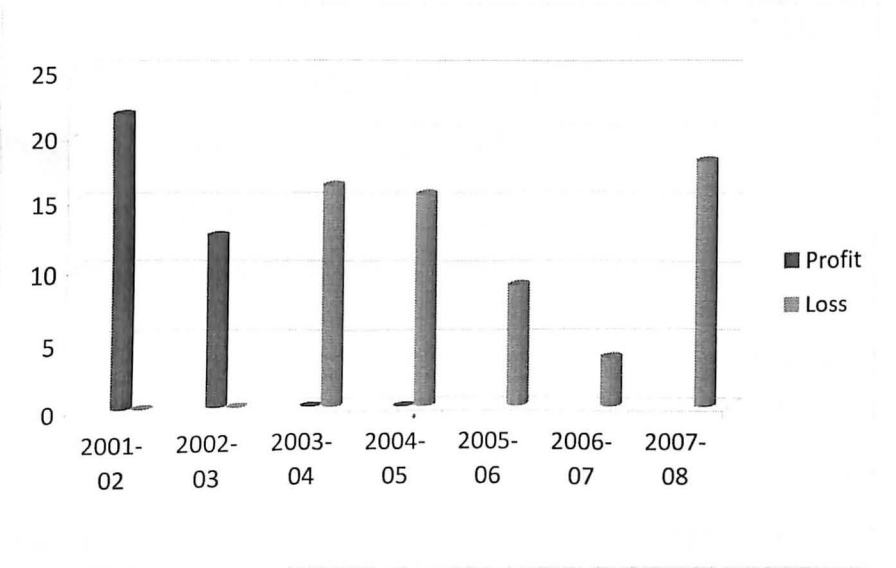
In view of available of the unavailability of SSP and higher cost of production, it may be decided to lease out the available godown apace to any of the fertilizer manufacturers like IFFCO so that MARKFED will be able to earn a constant income over years. The staff of the plant may continue to work on deployment in fertilizer and paddy business in view of the shortage of staff in those fields.

Table 6.Amount of loss during last 7 years

YEAR	PROFIT	LOSS
2001-02	21.69	-
2002-03	12.46	-
2003-04	-	16.19
2004-05	-	15.53
2005-06	-	8.87
2006-07	-	3.61
2007-08	-	18.03
-	-	-

Source : MARKFED activity report

Figure 6.Profit and Loss of last 7 years



2.1 AREA OF PLANT

Area study

Bargarh is a district head quarter it is situated at the bank of river Jeera. So here people cultivate two times in a season. Irrigation facility is also very good. It is situated on NH-6. There is a good transportation facility in Bargarh area. It is directly linked to Bombay and Kalcatta by road. There is also train transportation facility to Delhi. Many types of small

scale industry are present in Bargarh such as bread, biscuit, spices etc. there is also present sugar, cement, cotton, rice and Kamco cold drink factory.

2.2 HISTORY

The granular fertilizer plant is situated near Vatli Chhak. The plant was started in 1974.Actually this was a mix fertilizer unit. Here several types of fertilizer mixed in a specific ratio and formed shyamala fertilizer. There was a big demand of this fertilizer in Bargarh area. The factory was running from 1974-2007.This plant brought a big profit to MARKFED. Now this is a nonfunctioning unit of MARKFED and only supplies fertilizer. The granular fertilizer factory was started on 1974 and it was functioning up to 2007. It was a mixed fertilizer unit means here only the mixture of different fertilizer in a proper ratio in a particular uniform size was took place. Many employ were working at that time. About 50 numbers of staff and 100 numbers of labours worked together in this plant. The timing of work schedule of the plant was divided in to 3 shifts that were A, B, C respectively. A and B considered under day shift and C was night shift.

2.3 SUCCESS STORY

The name Shyamala fertilizer itself had a brand. The farmer prefers shyamala as Gromor fertilizer. Shyamala content N, P, K in the ratio of about 15:15:15. The quality was excellent so a big demand of shyamala fertilizer was raised at that time. It was a big competitor in the fertilizer market at that time. Some time the demand raised in such a way the plant could not supply the fertilizer to the market in proper quantity. As it was a Granular fixed fertilizer farmer had a good interest to purchases it. Price of each sacs of fertilizer was about 400rs.The granular fertilizer plant brought a hansom profit to MARKFED. It was help to contribute economic support to Odisha and help in social development by giving employment to many people.

The capacity of the plant at the time of installation was 7.5 M.T. per hour and annual production capacity was The 15,000 M.T.

The plant was earning gross profit. How ever towards the end of 2007, the raw materials like SSP/Rock Phosphate and MOP are not available timely from the manufacturer, which hampers production of Shyamala. The plant stopped production mainly due to non-availability of super phosphate. The cost of production is also increased due to higher price of the inputs because of non-availability in the market resulting increase in mrp of the product in comparison to other or complex fertilizers available in the market.

2.4 PROCESS OF MANUFACTURING

The manufacturing plant consists of a big room which contains a large number of machinery for the production of fertilizer. It comprises volumetric feeder, conveyer belt, big Furness, cooling container etc. The Fertilizer named MOP, Dolomite, SSP, DAP, RRP, Urea used to prepare Shyamala fertilizer. At first all the above fertilizer applied or entered to the manufacturing unit through volumetric feeder. Then these fertilizers go to the next phase through conveyer belt. The fertilizer goes up ward to mix with water. Then the mixed fertilizer comes to Furness for heating to remove the water content of fertilizer. It results in to dry and separate the fertilizer particle. At this time it creates a high sound and goes to cooling unit. After this the fertilizer is treated for it uniform shape. Here the oversize, undersize form of fertilizer particles is separated and all the uniform granular fertilizer comes to the finish product room. Here packaging of fertilizer takes place. The rest oversize particles go to reprocessing system through belt. Before cooling the dust goes to other part and rest fertilizer are collected and send to feeder part. The finishing product was sent to the testing lab where the trained chemist were tested its quality. After that it was ready for packaging.

2.4 REASON OF FAILURE

There may be many reasons for the failure of a running plant. Many area or elements affect the functioning of a plant. Those are area of plant, availability of raw material, power supply, man power, capital, demand, and proper maintenance of machinery, quality and

price of the product. So a plant becomes nonfunctioning due to lack or unavailability of any element which are mentioned above.

In case of Shyamala fertilizer plant there are many reason of its failure. Those are mention bellow.

1. Shortage of raw materials.

The fertilizer Shyamala produced from mainly combination of six fertilizers. One of these fertilizers named Single super phosphate was not available in proper amount and proper time.

2. Cost of production was very high.

As it require six type of fertilizer for it manufacturing its cost of production lead high. It also requires many labors for processing and manufacturing.

3. Granulation took high price.

Granulation of fertilizer took time and power which increase price. The high price of fertilizer decreases the selling rate of the fertilizer.

2.5 PRESENT CONDITION OF FACTORY

The Shyamala plant at Bargarh, MARKFED Odisha was started from 1974.

It was a plant and also a fertilizer supply unit. The plant was nonfunctioning from 2007. The machinery condition of the plant is very pathetic. The machinery is rusted now. It is in a condition that any time its part may fall. Approx two year ago the crash value of the machinery was 5lakhs.but now it is in such a condition which will not be sold. The plant room was in a very danger condition. Due to lack of maintenance a huge capital investment goes in to lose. The labor were lost there job. The testing lab is closed.

There is no function taking place at the factory. Now the other part of organization i.e., fertilizer supply unit is functioning. Now the staff strength of fertilizer supply unit is 15. One

area manager, five godown manager, five peon and four attendants are working in the office now.

2.6 REVIVAL STRATEGY FOR GRANULAR FERTILIZER FACTORY

There are three options for the revival of Plant.

1. Reestablishment of the Granular Fertilizer factory

The present condition of the machinery available in plant is very worst. Even it can not be sold. So it require new establishment of the machinery which require a high amount of capital. But it can not produce Shyamala due to the scarcity of SSP. The granular fertilizer which is not containing SSP can be produced.

Granular fertilizer

Granular or dry fertilizer is a type of fertilizer which comes in a dry pelleted form, as opposed to spikes, a liquid, or powder. Most garden stores carry several different types of granular fertilizer, along with an array of formulations which are designed to address specific soil conditions. This type of fertilizer has both advantages and disadvantages which gardeners have to consider before use.

The key advantage to granular fertilizer is that it acts as a time release capsule, allowing nutrients to flow out over time, rather than flooding the plants with nutrients like liquid fertilizers do. However, the fertilizer can also lose or leach nutrients in heavy rainfall, or in poor drainage conditions, in which case the plants may not get the full benefit of the fertilizer. Granular fertilizer can also be difficult to manage in an established garden, as it needs to be applied with care to avoid damage to the plants.

To start the factory again requires a number of elements.

equirement for advanced fertilizer plant

- Developed engineering equipment
- Auto controlled machinery

- Controlled power supply
- Hygienic and advance packaging system
- Hygienic store room
- Advanced testing lab
- Good transporting system
- Trained engineer team
- Good management team

If capital is available, it is not difficult to start the factory. Because the organization has the license of plant. But in this case there is a problem. There are many house, colony and school constructed which may create problem to start the factory again. The people live at the plant area may make objection of running of plant. The problem will sort out through the adoption of new advance technology for the starting of plant which will help to reduce sound and environment pollution.

2. Manufacture of SSP fertilizer.

Single super phosphate is a highly demanded fertilizer mostly used at the time of preparation of land. It comprises of 16% water soluble phosphate which is readily accepted by the crops.

The fertilizer named Single Super Phosphate has a grate demand in agriculture. Farmer always prefers this fertilizer. So according to the angle of demand the manufacturing of SSP may lead to increase of profit to the MARKFED. But regarding to this case the problem and its solution will same as mention above for the Shyamala fertilizer.

Process Description

Manufacturing of Single Super Phosphate is based on the simplest chemical reaction among chemical fertilizer. The major raw materials require are rock Phosphate and Sulphuric acid. The rock phosphate contains tri calcium phosphate which is insoluble in water and hence and hence can not be taken by the plant. The rock phosphate is reacted with dilute Sulphuric acid. The product of reaction is mono calcium phosphate which is soluble in water. This soluble phosphate can be easily consumed by the plant.

Rock phosphate is ground very fine (93% passing through 100 mesh). The measure quantity of Rock phosphate is fed in to lead lines and AHR tiles mixer, where it is neutralized with dilute Sulphuric acid. For making TSP the Rock is neutralized with 54% Sulphuric acid. The reaction is very fast at the beginning and the material is fine slurry which thickens quickly. The material is discharge in the den where the material slowly solidified. The den discharge is fitted with den cutter which cuts the solid cake to powder. The fluorine based gases are sucked by ID fan and scrubbed in multi stage conventional scrubbers and venturi scrubbers. The materials cured in a few days time. The material is screened for lumps and the powder is packed as PSSP. The product is granulated in the granulation plant.

Components of Single Super Phosphate manufacturing plant

- Bucket Elevator
- Ball mill
- Weight feeder
- Belt conveyer
- Screw
- Conveyer mixer
- Reciprocating den and Den
- Den cutter
- EOT Crane
- Vibrating screen
- Conventional scrubbers
- Venturi scrubbers

3. Construction of godown for storing of fertilizer.

Fertilizers can cause harm if they reach surface or ground water. Excessive nitrate concentrations in drinking water can cause health risks, especially in young children. Phosphorus can be transported to surface waters and cause algae blooms and eutrophication;

sulting in poor water quality. Storing fertilizers separate from other chemicals in dry nditions can minimize these risks. Extra care needs to be given to concentrate stock lutions. Secondary containment should always be used.

The area of plant with the branch office is spread about 4.805 acre of area. There is already 'e godown are available for fertilizer storage purpose. Among those two rooms have the pacity of 1000MT and other three have the capacity of about more than 1500MT As per : space available in the factory area, five store room of about 1000sqft can be constructed.

At the area of Bargarh, both labour class and educated people are live. So the labour arges are comparably minimum than other area. There is also cement factory in Bargarh nich is another advantage for construction of godown. As the plant is situated at the road int transportation for construction purpose also cost low.

ome criteria for a good and advanced storage system which may increase the efficiency of : godown.

Storage Location

Risks in storage areas include release through broken, damaged, or leaking containers; ss of security leading to irresponsible use; accumulation of outdated materials leading to cessive quantity of fertilizer thus unnecessarily raising risk level; and combustion of idizing compounds in fertilizer (e.g., nitrates) caused by fire or another disaster event.

The least amount of risk involves having a building or area dedicated to fertilizer rage; separated from offices, surface water, neighboring dwellings and bodies of water; parate from pesticides and protected from extreme heat and flooding. The storage area ould have an impermeable floor with secondary containment, away from plant material d high traffic areas. Clean-up equipment should be readily available. Storage areas should t contain pesticides, storage areas may contain general greenhouse supplies; there should no food, drink, tobacco products, or livestock feed present. Provide pallets to keep large ums or bags off the floor. Shelves for smaller containers should have a lip to keep the

resulting in poor water quality. Storing fertilizers separate from other chemicals in dry conditions can minimize these risks. Extra care needs to be given to concentrate stock solutions. Secondary containment should always be used.

The area of plant with the branch office is spread about 4.805 acre of area. There is already five godown are available for fertilizer storage purpose. Among those two rooms have the capacity of 1000MT and other three have the capacity of about more than 1500MT As per the space available in the factory area, five store room of about 1000sqft can be constructed.

At the area of Bargarh, both labour class and educated people are live. So the labour charges are comparably minimum than other area. There is also cement factory in Bargarh which is another advantage for construction of godown. As the plant is situated at the road point transportation for construction purpose also cost low.

Some criteria for a good and advanced storage system which may increase the efficiency of the godown.

(i) Storage Location

Risks in storage areas include release through broken, damaged, or leaking containers; loss of security leading to irresponsible use; accumulation of outdated materials leading to excessive quantity of fertilizer thus unnecessarily raising risk level; and combustion of oxidizing compounds in fertilizer (e.g., nitrates) caused by fire or another disaster event.

The least amount of risk involves having a building or area dedicated to fertilizer storage; separated from offices, surface water, neighboring dwellings and bodies of water; separate from pesticides and protected from extreme heat and flooding. The storage area should have an impermeable floor with secondary containment, away from plant material and high traffic areas. Clean-up equipment should be readily available. Storage areas should not contain pesticides, storage areas may contain general greenhouse supplies; there should be no food, drink, tobacco products, or livestock feed present. Provide pallets to keep large drums or bags off the floor. Shelves for smaller containers should have a lip to keep the

containers from sliding off easily. Steel shelves are easier to clean than wood if a spill occurs.

(ii) Containment

There should be no floor drain; the floor should provide containment in the event of a spill; there should be secondary containment routinely used for most open containers; damaged or leaking containers should be repaired and/or replaced as soon as possible; all spilled material should be cleaned up upon discovery; and cleanup materials should be discarded promptly and properly.

(iii) Fire Prevention and Suppression

Fire detection and alarm system should be present; oxidizers and flammable materials should be stored separately; fire extinguisher should be immediately available; the fire department should be notified at least annually of current inventory.

(iv) Inventory and Recordkeeping

Inventory should be actively maintained as chemicals are added or removed from storage; containers should be dated when purchased; outdated materials should be removed on a regular basis; inventory should be controlled to prevent the accumulation of excess material that may become difficult to use.

(v) Lighting

Electrical lighting should allow view into all areas and cabinets within the storage area.

(vi) Monitoring

There should be monthly inspection of storage for 1) signs of container corrosion or other damage - leaking or damaged containers should be repackaged as appropriate, 2) faulty

ventilation, electrical, and fire suppression systems – problems should be reported and corrected.

(vii) Security

The storage room should be locked and access restricted to trained personnel.

(viii) Signage

There should be signs posted; warning signs should be used as needed; emergency contact information should be posted.

(ix) Temperature Control

There should be active mechanical temperature control and no direct sources of heat (sunny windows, steam pipes, furnaces, etc.).

(x) Ventilation

Mechanical ventilation should be working and used.

(xi) Storage and Record Keeping

Fertilizer stock tanks should be labeled with fertilizer formulation and concentration; records should be kept of fertilizer formulation, concentration, date, and location of application; records should be kept of media nutrient analyses.

(xii) Containment of Concentrated Stock

Concentrated stock should be stored near the injector in high density polyethylene or polypropylene containers with extra heavy duty walls; secondary containment should be provided.

ventilation, electrical, and fire suppression systems – problems should be reported and corrected.

(vii) Security

The storage room should be locked and access restricted to trained personnel.

(viii) Signage

There should be signs posted; warning signs should be used as needed; emergency contact information should be posted.

(ix) Temperature Control

There should be active mechanical temperature control and no direct sources of heat (sunny windows, steam pipes, furnaces, etc.).

(x) Ventilation

Mechanical ventilation should be working and used.

(xi) Storage and Record Keeping

Fertilizer stock tanks should be labeled with fertilizer formulation and concentration; records should be kept of fertilizer formulation, concentration, date, and location of application; records should be kept of media nutrient analyses.

(xii) Containment of Concentrated Stock

Concentrated stock should be stored near the injector in high density polyethylene or polypropylene containers with extra heavy duty walls; secondary containment should be provided.

(xiii) Disposal

Sufficient planning should be made to eliminate the need for disposal; empty fertilizer containers should be discarded based on latest advice from environmental protection authorities.

(xiv) Precipitate and Residue Disposal

Fertilizer systems should be cleaned. Solids and rinse solution should be composted.

Pros and Cons for construction of new ware house

- The state Govt. has also planned for sale of 10.03 lakh MT of fertilizer during Kharif and around 4.0 lakh MT during Rabi. Thus totaling to 14.03 lakhs MT of fertilizer.
- MARKFED-ODISHA has chalked out an ambitious plan and programme for sale of 4.50lakhs MT of fertilizer during the current financial year.
- MARKFED has so sold 56,000MT of fertilizer out of total sale of 86,000MT in the state.
- MARKFED is committed to supply fertilizer at Right time, Right price and Right place to the farmers.
- Since Govt. of Odisha has no ware house of their own; it depends upon institutional agencies for storing of fertilizers to affect supply. Out of all agencies involved in fertilizer business, MARKFED is the only agency having only 100 lakh MT of storage space.
- Moreover, the private players are reluctant to provide space to the fertilizer companies for storing of nitrogen fertilizers as it will have an effect on the godown due to its corrosiveness.

- Fertilizer is mainly required during July to September during Kharif and December to February during Rabi. In order to streamline the distribution of fertilizer pre-positioning of products is required. So Govt. of India is insisting through their counter part to store/pre-position fertilizer during lean season, So that companies can be able to supply their goods and fertilizer can be made available at the time of need.

- Considering the land available, MARKFED-ODISHA proposed for construction 52,000 MT of ware house mainly in the KBK region to cater the need of the local farming community and to fulfill the commitment of the Govt.

Chapter-III

CASE STUDY

CASE STUDY ON REVIVAL OF GRANULAR FERTILIZER PLANT

Introduction

Organization : MARKFED

Industry : Granular fertilizer Factory

Brand : Shyamala

Origin : 1974-2007

Consumer class: All class

Costumer level : Prefer more then normal

Demand : Big demand

Price : 400/- per 50kg of bag

Product : Shyamala fertilizer

Present status : the factory is in nonfunctioning condition

Facts and figure

- The factory was running from 1974 and it was nonfunctioning from 2007. The Shyamala fertilizer plant is situated at Bargarh district near the village Dang having plot no. 325/593. It is spread on an area of about 4.805 acre.
- It was mainly a mixture fertilizer unit which prepared granular fertilizer of 15:15:15 N:P:K.
- There is a good demand of this fertilizer in market which increased the profit level of MARKFED.
- There was about 50 officer and technical staff and 100 labourers working in that factory.
- The plant contributed economic support as well as helped the society by providing employment.

Key Problem Area

- Unavailability of SSP fertilizer stopped the plant.
- Cost of the fertilizer was very high.
- Granulation took high price.

3.1 OBJECTIVE

The objective of the study is to revive the Granular fertilizer factory, which include analysis of its success and reason of failure. Its objective is to suggest suitable strategy according to the present condition of Plant, expert opinion and area survey report for the revival of Shyamala plant.

3.2 SCOPE

- The fertilizer Shyamala has a big demand in Bargarh area. It had created a brand image which brought a considerable profit to MARKFED.
- Farmer had a good interest to wards Shyamala fertilizer.
- The market demand of it was very high as it contain equal ratio of N, P, K.
- The local labour class people were benefited from the plant by getting job.
- The area of plant is already known to Shyamala so it will easy to market new granular fertilizer in that area.

3.3 RESEARCH METHODOLOGY

Research is the pursuit of truth with the help of study, observation, comparison and experimentation. In other words, the search for knowledge through objective and systematic method of finding solution to a problem/answer to a question is research.

METHODOLOGIES

The main research methodologies are summarized below and can be linked to positivistic and phenomenological research positions or approaches. However, as mentioned earlier,

research often contains both positivistic and phenomenological approaches, e.g. a survey that also contains qualitative work from participant observation.

(i) Positivistic

- Surveys
- Experimental Studies
- Longitudinal Studies
- Cross-sectional Studies

(ii) Phenomenological

- Case Studies
- Action Research
- Ethnography (participant
- observation)
- Participative Enquiry
- Feminist Perspectives
- Grounded Theory

POSITIVISTIC METHODOLOGIES

a) SURVEYS

Surveys involve selecting a representative and unbiased sample of subjects drawn from the group you wish to study. The main methods of asking questions are by face-to-face or telephone interviews, by using questionnaires or a mixture of the two.

There are two main types of survey: a descriptive survey: concerned with identifying and counting the frequency of a particular response among the survey group, or an analytical survey: to analyse the relationship between different elements (variables) in a sample group.

b) EXPERIMENTAL STUDIES

Experimental studies are done in carefully controlled and structured environments and enable the causal relationships of phenomena to be identified and analysed. The variables can be manipulated or controlled to observe the effects on the subjects studied. For example, sound, light, heat, volume of work levels etc can be managed to observe the effects. Studies done in laboratories tend to offer the best opportunities for controlling the variables in a rigorous way, although field studies can be done in a more 'real world' environment. However, with the former, the

Phenomenological Approach

Phenomenological approaches however, approach research from the perspective that human behaviour is not as easily measured as phenomena in the natural sciences. Human motivation is shaped by factors that are not always observable, e.g. inner thought processes, so that it can become hard to generalize on, for example, motivation from observation of behaviour alone. Furthermore, people place their own meanings on events; meanings that do not always coincide with the way others have interpreted them.

This perspective assumes that people will often influence events and act in unpredictable ways that upset any constructed rules or identifiable norms – they are often 'actors' on a human stage and shape their 'performance' according to a wide range of variables. Phenomenological approaches are particularly concerned with understanding behaviour from the participants' own subjective frames of reference. Research methods are chosen therefore, to try and describe, translate and explain and interpret events from the perspectives of the people who are the subject of the research.

Research methodology include data collection.

Data collection is of two types

(i) Secondary data collection

(ii) Primary data collection

(i) Secondary Data collection

The data collected from books, research reports, official document is called secondary. The secondary data is collected from main head office of MARKFED, branch office of MARKFED Bargarh and from web side.

(ii) Primary data collection

The data which is never collected before is called primary data.

Research project should include empirical research (i.e. primary research) data. The ways that data can be gathered include:

- One-to-one interviews with key informants in an organization (these might be face to face or by telephone)
- Focus groups: discussion and interviews
- Participant observation in a relevant social situation, e.g. supermarket

A questionnaire survey, e.g. of relevant people in an organization, or of consumers, customers etc. This can be done using printed or electronic questionnaires

The primary data is collected from staff of Bargarh office, area survey, farmers, and expert person.

Methods of data collection for this study are

- The data are collected by physically visiting the plant.
- Face to face interaction and discussion with the in charge employee of plant and other staff who were working during the running period of plant gives relevant data to this research study.
- Survey of the Bargarh area gives important data to this study
- Interaction with expert and experienced persons also enable more important data.
- The people of that plant area also give their suggestion and remark to this case.

3.4 QUESTIONER

INTERVIEW SCHEDULE

A research study on Granular fertilizer plant is being undertaken for the revival of this factory. The study is exclusively for academic purpose and no part will be used for other purposes. Please provide your valuable opinion for completion of the study.

:Sl. No._____

Name of the Respondent:-

Village:_____

Block:

Socio- Economic Profile.

1.Age:_____(completed Years)

2.Cast: General/OBC/SC/ST.

3.Education:-
(i) Illiterate
(ii) Up to primary School
(iii) Up to middle school
(iv) Up to secondary School
(v) College and above

4. Type of family. Joint / nuclear

5. Number of family members :_____ male .female .children

6. House type (a) Kutcha

(b) Semi Pucca

(c) Pucca

7. Occupational Status :

(i) Primary occupation

(ii) Secondary Occupation

(iii) Tertiary Occupation

How many of your family members are engaged in occupations other than agriculture.

*Service

*Business

*Independent profession

*laborer

8. Land holding size (Acre)

(i) a--- MF (Up to 2.5 Ac)

(ii) b--- SF (2.51- 5 Ac)

(iii) c--- BF (5.01 and Above)

9. Social participation

(i) Cooperative society

(ii) Village panchayat

(iii) Farmers club.

(iv) Gaon kalyan Samity

(v) Educational Institution

(vi) Any other

10. Sources of information on agriculture

11. Average annual income

Chapter-IV

ANALYSIS REPORT

ANALYSIS REPORT

4.1 METHODOLOGY AND ANALYSIS

There is a number of methodology or techniques to analyze a case. Swot analysis, pest analysis, 5ps analysis etc.

1. Analysis for revival strategy for Granular fertilizer and manufacturing of SSP.

SWOT Analysis (Strength, Weakness, Opportunity, Threats)

SWOT analysis (alternatively SWOT Matrix) is a structured planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. A SWOT analysis can be carried out for a product, place, industry or person. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective. Setting the objective should be done after the SWOT analysis has been performed. This would allow achievable goals or objectives to be set for the organization.

ANALYSIS

Strength

- The area office of MARKFED, Bargarh has the license to run the fertilizer plant.
- The factory has a Brand image for granular fertilizer.
- There was a increased demand for granular fertilizer as well as SSP.
- Transporting facility is very good as the plant is situated as road point.
- It is area of labour class people which may easily available for the operation of the factory.

Weakness

- A large investment is required to setup the plant newly.
- Advanced machinery plant cost very high.

Opportunity

- There is a opportunity to make a big profit to MARKFED through the production of fertilizer.
- It also create number of placement cell in society.
- It also bring the opportunity to make strong the economic level of labour class.

Threats

- There may be an objection to starts the plant again, as there is a number of house, colony are build. Near the plant a high school is also present.
- There may be raised of social objection regarding environmental pollution.

2. Analysis for the construction of godown for storing of fertilizer.

5ps Analysis (Product, Price, Place, People, Promotion)

The 5 Ps are a set of recognized marketing tactics, which can be used in any combination to satisfy customers in target market. The 5 Ps are controllable, but subject to its internal and external marketing environments. Combining these different marketing tactics to meet the customers' needs and wants is known as using a 'tactical marketing mix'.

Product

The other branch of MARKFED, Bargarh is of supply of fertilizer. As Bargarh is a rice cultivation area the need of fertilizer is always in a high state. Due to the good irrigation facility double cropping is possible in Bargarh which needs fertilizer.

Price

There is a number of fertilizers available in the market. The price is differ according to the types of fertilizer. MARKFED gives fertilizer to the Primary agricultural cooperative society (PACS) low price with a margin of 1%.

Place

The fertilizer supply unit is situated at road point side. So the location factor regarding the construction of godown is very good. It is suitable for transportation of fertilizer.

People

People refer to the staff and labour who work for fertilizer business, including the owner. Here the target customers are farmer. There main aim to provide excellent service to meet the need of dealer and PACS at right time and right quantity.

Promotion

The promotional activity plays an important role in case of starting a new business. There are many types of promotional activity which are done through electronic media, news paper, leaflet, poster, word of mouth etc. Here word of mouth will suitable for its advertisement. As the dealers and loony members at PACS level are the main client, here the word of mouth media works more effectively.

4.2 MAJOR FINDINGS

- The need of fertilizer in Bargarh area is very high.
- People have a good interest towards Granular fertilizer.
- The plant brought a good profit to MARKFED.
- The fertilizer named Shyamala create a good brand image in society.
- The availability of large area may act as good location to start a new business.
- The nonfunctioning of G.F. Plant strongly affect the economic status of MARKFED.

Chapter-V

Suggestion

SUGGESTION

5.1 EXPERT OPINION

According to expert opinion, when an organization goes to start a new business it must gather information about the demand of that business in the specified area where it want to starts it. The payback period should be small, which help the organization to gain profit. It is not easy to setup a new plant. To revive this Granular factory a large amount of investment is needed. There is a need of crores of rupees to build such a new plant. Once the factory is build up then it take a long time to get its return on investment. So the construction of fertilizer godown is more preferable idea from setup a newly developed plant. Because it cost will lower than the construction of factory and the return on investment is also quicker.

5.2 NEW BUSINESS IDEA

There are also other business ideas which can be adopted.

- The organization should create new product line like supply of sprayer, duster, power tiller etc. There is a good demand of those equipments.
- The space available in that area may use for the construction of market complex.

Chapter-VI

conclusion

CONCLUSION

From the study of the revival of G.F plant it is concluded that the plant act as a big source to earn profit for MARKFED. The fertilizer business is such a business which will never down in market. MARKFED enable farmer to purchases fertilizer in MSP with a small margin of 1%. It gives value to the farmer interest and need rather than try to making profit. It had also a considerable participation to contribute economic support to Odisha, so it is necessary to revive the plant again. MARKFED have the availability of land to starts new business, but it need economic support. If government contributes its support towards it construction then MARKFED will able to start the factory again or increase its product line. Adaptations of new product line of agricultural equipments help the organization to get subsidiary support from government. The proper utilization of the available space of plant and money may help MARKFED to bring a change on its economic. A good and important step is needed to reform the MARKFED.

PHOTOS OF G.F PLANT