

Final Report

On

Mid Day Meal (MDM)

AT

ANGUL, GAJAPATI & PURI

For



***P&C DEPARTMENT, GOVT. OF ODISHA
ODISHA SECRETARIAT***

by



NATIONAL PRODUCTIVITY COUNCIL

A/7, Surya Nagar, Bhubaneswar-751003

Table of Contents

1.0	INTRODUCTION:	1
1.1	Objective of the Study:	2
1.2	Scope of the Study:	2
2.0	SUPPLY CHAIN OF MDM:	2
2.1	Management of Rice Stock:	2
2.1.1	Gajapati:	2
2.1.2	Angul:	4
2.1.3	Puri:	4
2.2	Management of Grocery and Fuel (Cooking Cost):	5
2.2.1	Gajapati:	5
2.2.2	Angul:	6
2.2.3	Puri:	6
2.3	Management of Records:	8
2.3.1	Gajapati:	8
2.3.2	Angul:	8
2.3.3	Puri:	9
2.4	Management of MIS and Reports:	9
2.4.1	Gajapati:	9
2.4.2	Angul:	10
2.4.3	Puri:	10
2.5	Management of Kitchen & Food Quality:	10
2.5.1	Gajapati:	10
2.5.2	Angul:	11
2.5.3	Puri:	11
2.6	Availability of Kitchen shed:	12
2.6.1	Chendipada:	12
2.6.2	Gumma:	12
2.6.3	Nimapara:	12
2.7	Monitoring & Inspection:	13
2.7.1	Gajapati:	13
2.7.2	Angul:	14

2.7.3	Puri:	14
3.0	SWOT Analysis:	15
3.1	Strength:	15
3.2	Weakness:.....	15
3.3	Opportunity:.....	15
3.4	Threat:.....	16
4.0	RECOMMENDATION & POLICY OPTION:.....	16

LIST OF TABLES

Table 1:	Rice Status in Sample Schools of Gumma	3
Table 2:	Cooking cost of three blocks (Jan-Aug 2015)	7

LIST OF FIGURES

Figure 1:	Status of Rice Stock in schools of Gumma (April- Sep 2014)	4
Figure 2:	percentage of schools having negative or zero balance of rice	5
Figure 3:	Cooking cost Status of Three Block	7
Figure 4:	Cooking Fund Availability status in Gumma Block	8
Figure 5:	School basic Amenities in three block as on 2015-16	12
Figure 6:	Status of Utensils of Kitchen devices in Schools	13
Figure 7:	No. of inspection of Schools of Gajapati	15

1.0 INTRODUCTION:

'Mid-Day-Meal (MDM) Programme and its concept regarding nutritional support to Primary Education is not new in India because way back in 1925 when Madras Municipal Corporation started a school lunch Programme and first time Mid-Day-Meal Programme' was introduced for disadvantaged children in Chennai (Madras) Municipal Corporation. However it was only in 1995, Mid-Day-Meal Programme was launched at the National level in order to provide nutritional support to students in Primary schools. The objective of Mid-Day-Meal Scheme was to give boost to universalization of Primary Education and to impact the nutrition of students in primary classes.

It is true fact that MDM exerts a positive influence on enrolment and attendance in schools. A hungry child is likely to attend school irregularly. Chronic hunger can lead to mal-nutrition and with a view to enhancing enrolment retention and attendance and simultaneously improving nutritional levels among children. In order to boost school attendance and support the dietary requirements of children, the Government of India launched a national programme for nutrition support to education institutions nationwide – the MDM scheme. Since its inception in 1995, the MDM scheme has developed into the world's largest school feeding programme, which is now reaching out to about 12 core (120 million) children in over 12 lakhs (1.2 million) schools across the country. Under the scheme, freshly cooked mid day meals with a minimum content of 450 calories and 12 grams of proteins for lower primary school children and 700 calories and 20 grams of protein for upper primary school children are provided during the school day to children in classes one to eight in Government and Government aided schools. The aim is to address malnutrition among school children while creating a strong incentive - particularly for poorer families - to send their children to school. Since inception of National Programme of Nutritional Support to Primary Education (NP-NSPE) i.e. way back in 1995, only free food grains of 3 kilograms per child/month were given till 31st March 2002.

1.1 Objective of the Study:

- To evaluate the entire supply chain of MDM Programme and to identify the gaps in various stages of the supply chain.
- To replenish the demand with guaranteed and timely delivery with low cost and minimal time.
- To streamline the supply of resource in improving the efficacy of the supply chain.
- To study the various resource requirement, infrastructure etc. for effective management of the supply chain.
- To study the inventory management of Rice stock, timely supply of cooking cost, and effective management of the cooking.

1.2 Scope of the Study:

The scope of the study includes the evaluation of the entire supply chain management of MDM at sample schools of Chhendipada, Nimapara and Gumma Block.

2.0 SUPPLY CHAIN OF MDM:

A typical supply chain of the Mid Day Meal (MDM) covers the

- Management of Rice Stock
- Management of Grocery & Fuel
- Management of Kitchen and Food Quality

2.1 Management of Rice Stock:

2.1.1 Gajapati:

- The pilot project taken up at Gajapati district by the WFP supplies the fortified rice to the schools, hostels under school and mass education. The same is managed by an agency who supplies the rice once in every 2-3 months.
- It has been observed from the sample 8 schools visited during the study which reveals that, in 3 schools the rice is stocked out quite frequently and the schools borrow rice from the nearby schools and return them after recoupment.

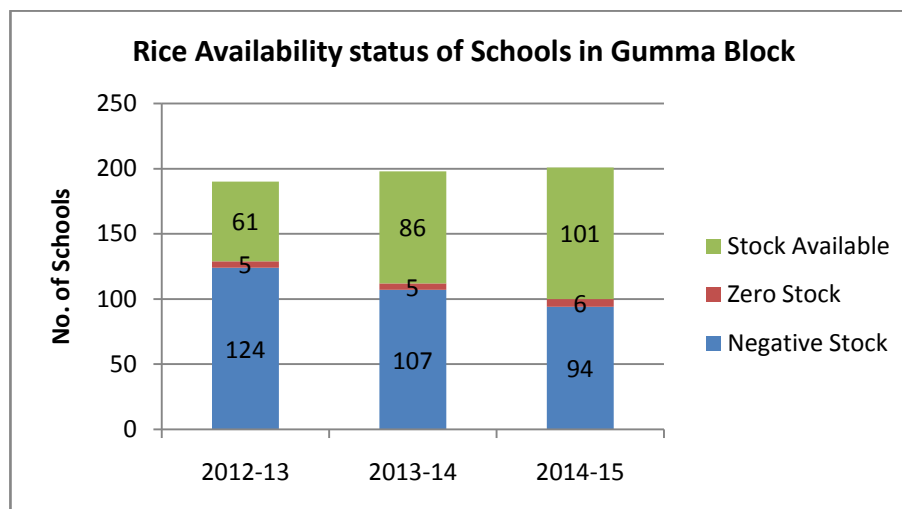
- The scheduled supply of rice with no real time MIS of rice stock at school level causes a stock out before the recoupment in certain school and surplus at other schools.
- It's also observed that there is no central MIS available on the inter school borrowing of rice.
- Detail of the stock out of rice in schools is mentioned in Table 1 of the report. The Graph confirms that during the year 2014-15, 47 % of the schools have negative stock and may be managing the MDM programme by borrowing from the nearby schools and 6% of the schools have zero stock (as on September 2014) . And the last 2 years figure is also not so appealing.

Table 1: Rice Status in Sample Schools of Gumma

INSTITUTIONS	DATE	STOCK (OB)	RECOUPED	BORROWED
SCHOOL 1	23-01-14	500 kg		
	24-02-14	0 kg		200 kg
	01-03-14		800 kg	
SCHOOL 2	01-01-14	337.3 kg		
	11-01-14		300 kg	
	22-01-14		700 kg	
	13-02-14			250 kg
	25-02-14			200 kg
	06-03-14		2000 kg	

Institutions	Date	Stock (OB)	Recouped	Borrowed
SCHOOL 3	Jan-14	64 kg		
	07-01-14			50 kg
	11-01-14		500 kg	
	Feb-14	270 kg		
	14-02-14			50 kg
	18-02-14			50 kg
	21-02-14			100 kg
	Mar-14	51.5		
	03-03-14			50 kg
	06-03-14		500 kg	
	Apr-14	241.5		
	24-04-14			75 kg
	Jun-14			
	24-06-14			75
	Jul-14	13.65		
	01-07-14			50 kg
	04-07-14			50 kg
	10-07-14			1000 kg

Figure 1: Status of Rice Stock in schools of Gumma (April- Sep 2014)



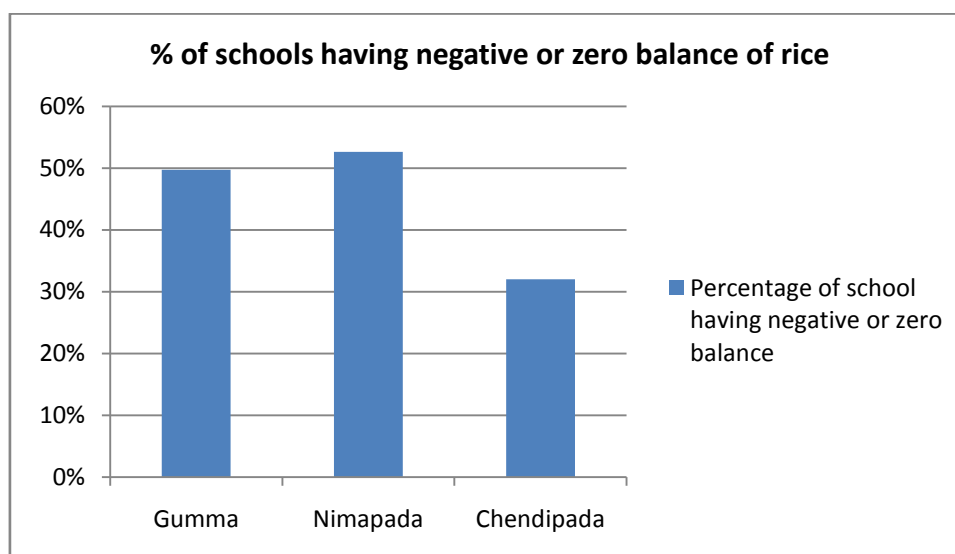
(Source: Secondary data from District Administration)

2.1.2 Angul:

- During the study it's observed that among 25 schools of Chhendipada block 8 schools have reported negative balance and/or rice stock out.
- The major reason being the non availability of rice in time is the improper monitoring mechanism of schools and timely updation of MIS.
- Some schools manage the requirement by borrowing from the nearby schools, which is temporary relief, however the school which lend rice may also face stock out in a later stage.

2.1.3 Puri:

- During the field study in sample 38 schools, we observed that 20 schools have reported negative and/or zero balance out of 8 months of negative balance obtain from out of 34 schools.
- This is due to the improper monitoring and distribution of rice. The MIS is also not regularly updated which does not provide the real time rice stock status of schools.

Figure 2: percentage of schools having negative or zero balance of rice

(Source: Secondary data from Field Study)

2.2 Management of Grocery and Fuel (Cooking Cost):

2.2.1 Gajapati:

- As per practice each school is supplied with Cooking cost towards the cost of ration, Vegetables, Eggs and Fuels. The same is purchased from the local market as per convenience, and also the frequency of purchase is also as per the requirement.
- It is understood during the study that the cost of egg is variable across various places, as this costs Rs. 4.50 at urban areas and/or at Block Head Quarter, the same is comparatively higher at schools in interior and hilly areas.
- The study also reveals that schools are supplied with the cooking cost in periodic intervals to the bank accounts managed by a committee; and the expenditure is managed from the bank account, so any delay in recoupment of money leads to the delay in procurement of ration on loan basis from the local merchant.
- It was seen during the study, the variable cost of vegetables across various locations of the block sometimes pose a cost overrun in managing the day to day ration.

- The graph confirms that in 70% of the schools (2014-15 till sep-14) have negative balance and may be managing the ration with loan from the local ration stores, the figures during two preceding years were also not so appealing.
- The detail of the Cooking Fund availability across various schools of Gumma is mentioned in Figure 3 of the Report.

2.2.2 Angul:

- During the study we collected information of about 25 schools respectively PS, UP, and HS, 17, 5, 3. Out of 17 nos. of primary school, 7 nos. of school (40% of school) have either negative or zero balance. The sample study also reveals that 30% of the schools also maintain zero balance towards cooking cost including 8 months form Jan-Aug and 10% school have no funds available for managing the MDM for consecutive three months or below.
- The same trend continues for UP and High School with 40 % and 66% of the sample confirms the non availability of cooking cost for managing the MDM.

2.2.3 Puri:

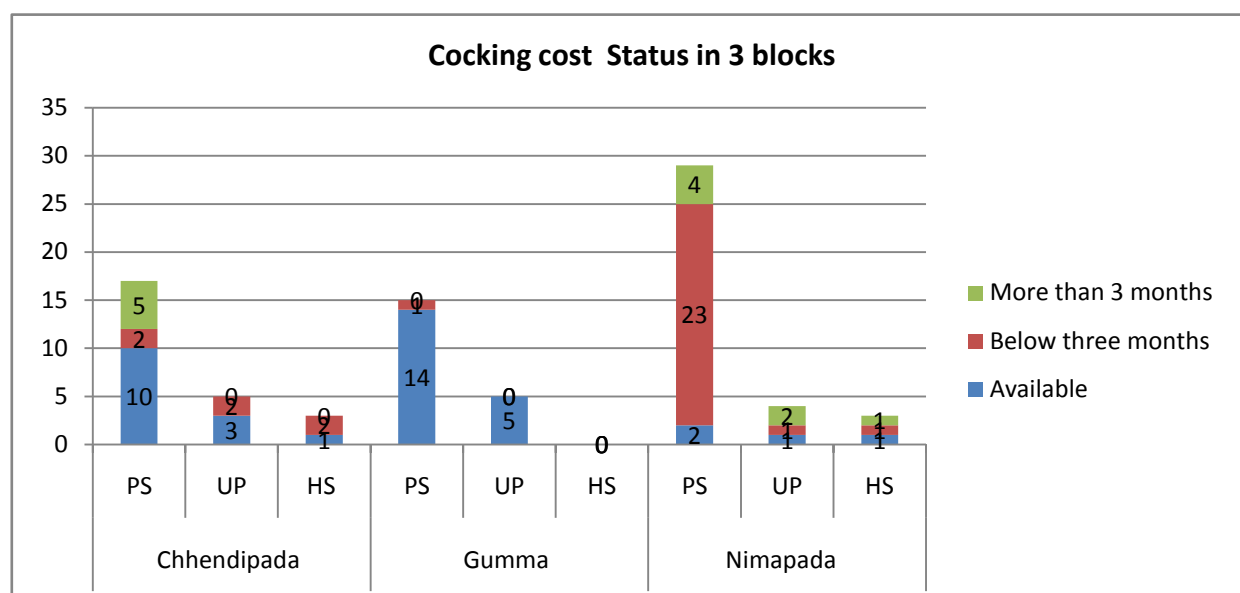
- During the field study, we found that, out of 29 primary schools, 7% of schools have reported the availability of funds. 80% schools have reported non availability of funds for 3 consecutive months or below and 13% of the schools have no funds available for more than 3 months.
- Amongst 4 UP schools only 1 school have the availability of funds where as the other 2 schools have reported a negative balance in the cooking cost.
- It is understood that out of three high schools, only one high school have the funds available while the other two had shortage of funds.

- It's observed that there is a weight shortfall in the sealed rice packet in certain schools, which lead to a shortage of rice as against the planned distribution.

Table 2: Cocking cost of three blocks (Jan-Aug 2015)

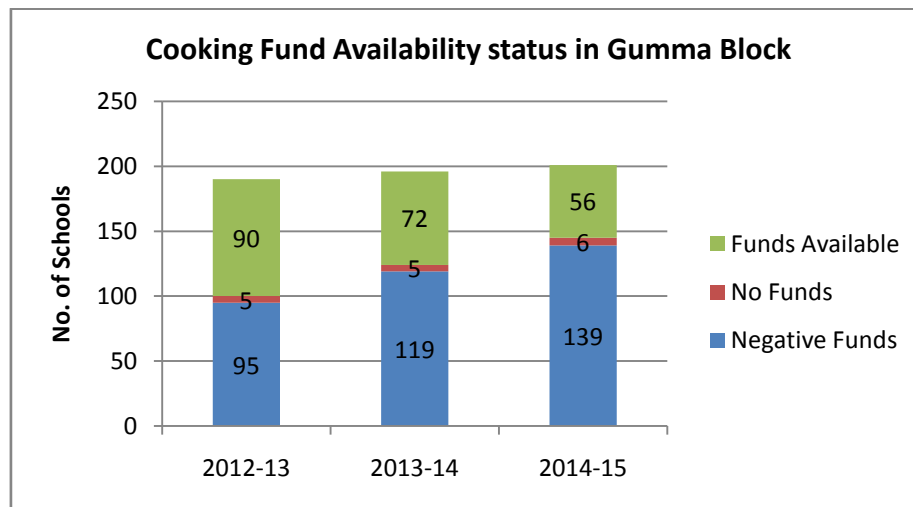
Funds availability status	Number of Schools								
	Chendipada (Angul)			Gumma (Gajapati)			Nimapara (Puri)		
	PS	UP	HS	PS	UP	HS	PS	UP	HS
Available	10	3	1	14	5	0	2	1	1
Three consecutive months (-ve balance)	2	2	2	1	0	0	23	1	1
More than 3 months (-ve balance)	5	0	0	0	0	0	4	2	1

Figure 3: Cooking cost Status of Three Block



(Source: Secondary data from District Administration)

Figure 4: Cooking Fund Availability status in Gumma Block



(Source: Secondary data from District Administration)

2.3 Management of Records:

2.3.1 Gajapati:

- During the study it's observed that out of the sample 8 nos. of schools visited, 6 nos. of school have no updated records of either of the cashbook, bank book, rice stock register, ration register, cooking cost register etc. or all of the records.
- Some of the schools maintain record in erroneous manner where the record management is improper.
- It's understood that the teachers are the custodian of the stock and the records, thus with the academic workload they failed to update the MDM registers in time, and many of them also had shown their incapability in updating the records of MDM.

2.3.2 Angul:

- During the study period, we observed that out of 12 nos. of schools, 3 were unable to produce the records, as they were not updating the cash book along with other registers also.
- Around 5nos. of schools had not updated the bank pass book which is the sole record of the funds availability.

- Many of the school (around 3-4 nos.) depend on other school teachers to prepare cash book as they lack the required competency for managing the records pertained to MDM.
- Two nos. of schools had no cash book in school premises, so were unable to provide any information during the visit.

2.3.3 Puri:

- During the study, out of ten numbers of sample schools, we found that one school had no cash book updated for last four years and 3 nos. of schools have not updated their cash book as on the date of field visit. 3 nos. of schools also have reported a mismatch of cash book with the bank pass book.
- Many schools were unable to provide the vouchers and/or bills of expenditures in connection with grocery.

2.4 Management of MIS and Reports:

2.4.1 Gajapati:

- From the MIS and records, it's understood that there is a huge backlog of data entry at the Block & District level which generates an erroneous MIS on Rice Stock, Cooking Cost, and Students attendance etc.
- During the study, it's revealed that the Block do not have skilled Data Entry Operators who can regularly update the data accurately, however the present Data Entry Operators lacks the required skill set and competency to update the data in the MDM module and generate the reports.
- The poor and erroneous data entry leads to the generation of wrong MIS and thus affects the real time monitoring of MDM programme and in turn misdirect the decision making process.

2.4.2 Angul:

- It is understood that regarding MIS and records, there is huge inefficiency to record all cooking cost, rice stock and student attendance at block level.
- From the MIS and records it is observed that non availability of skilled data entry operator at block level.
- We observed that no such formative information on Rice stock, Cooking cost, and relating to kitchen shed or other relevant data available.
- The infrastructure like computer and other physical asset are not available at block level to facilitate the record keeping of data.

2.4.3 Puri:

- The MIS and data management system is better as compared to Gumma and Chendipada Block; however there is further strengthening is also required.
- The data entry operator at block level may be imparted training on various modules of MDM for regular updating of record.

2.5 Management of Kitchen & Food Quality:

2.5.1 Gajapati:

- Govt. of Odisha has a financial provision for the construction of kitchen cum store with chimney facility for MDM programme.
- However during the visit to the sample 8 nos. of schools, only 2 nos. of schools have the chimney facility in their kitchen cum stores and rest of the schools are operating at old buildings having no chimney facility and no specific store room for storage of ration and other inventories.
- An accelerated implementation of the construction of kitchen cum store would help in improving the hygiene and inventory management under the MDM programme.
- The details of the basic amenities available at various schools of Gumma are mentioned in Figure 3 of the Report.

- The chart shows that 86% of the schools have no electricity facility and 100% of the schools have no provision for cooking using the LPG Gas.
- Status of utensils under the Mid Day Meal Programme in schools in mentioned in **Figure-5** of the report.

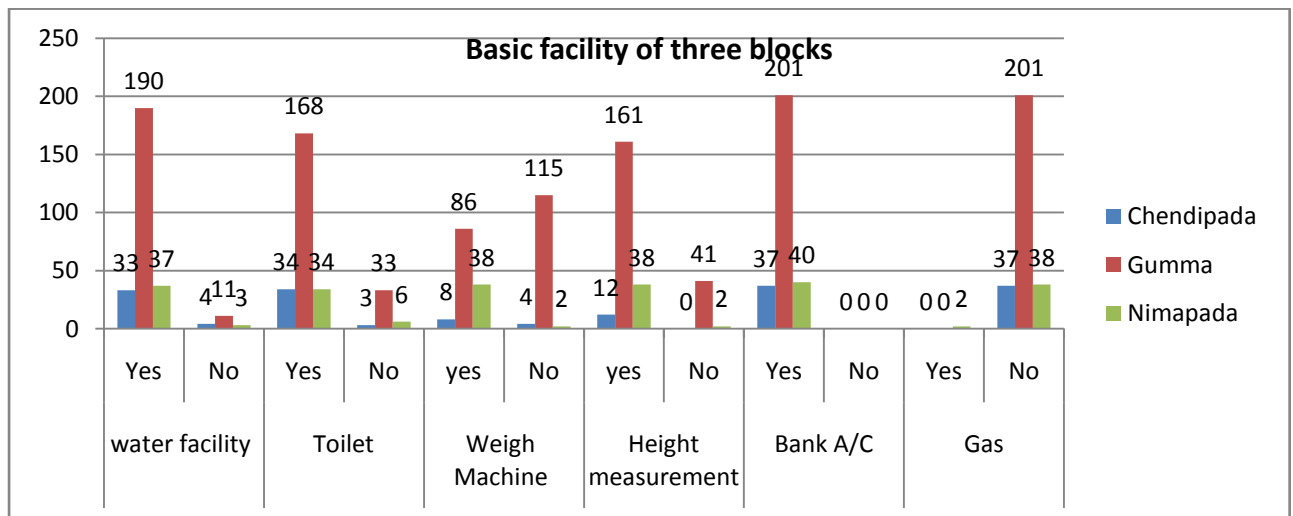
2.5.2 Angul:

- During the field study an attempt was made to evaluate the infrastructural facilities like water supply, weigh machine. Height measurement, Bank A/C and LPG connection. We found that out of 12 schools, 8 nos. have their own source of water supply and the other four nos. consume water from the nearby village.
- Out of 12 schools, 4 nos. of school have no toilet facility and those are other having toilet facility have no water supply.
- Four more school has no weigh machine and face problem to measure the rice and other ingredient. Except two schools, all school has the height measurement scale scribed on wall.
- We found that all school having bank A/C for MDM purpose. But out of total 12 nos. of schools, no school is having LPG connection.

2.5.3 Puri:

- Amongst 15 nos. of school visit, we found that two schools have no proper water facility for MDM purpose.
- Among forty sample schools studied; it understood that 10% of the schools have no proper toilet facility at school.
- It is understood that both the weighing machine and height scale are available in all school excluding two nos. of schools.
- All schools have opened bank A/C and only 2 nos. of schools have provision for LPG in Nimapara block.

Figure 5: School basic Amenities in three block as on 2015-16



(Source: Secondary data from District Administration)

2.6 Availability of Kitchen shed:

2.6.1 Chendipada:

- From the field study of 25 schools, 22 schools having kitchen sheds and 3 nos. are requiring the kitchen sheds.
- 100% school obtain serving utensil for preparation of MDM.
- Out of 25 nos. of schools 5 schools do not have the eating utensil.

2.6.2 Gumma:

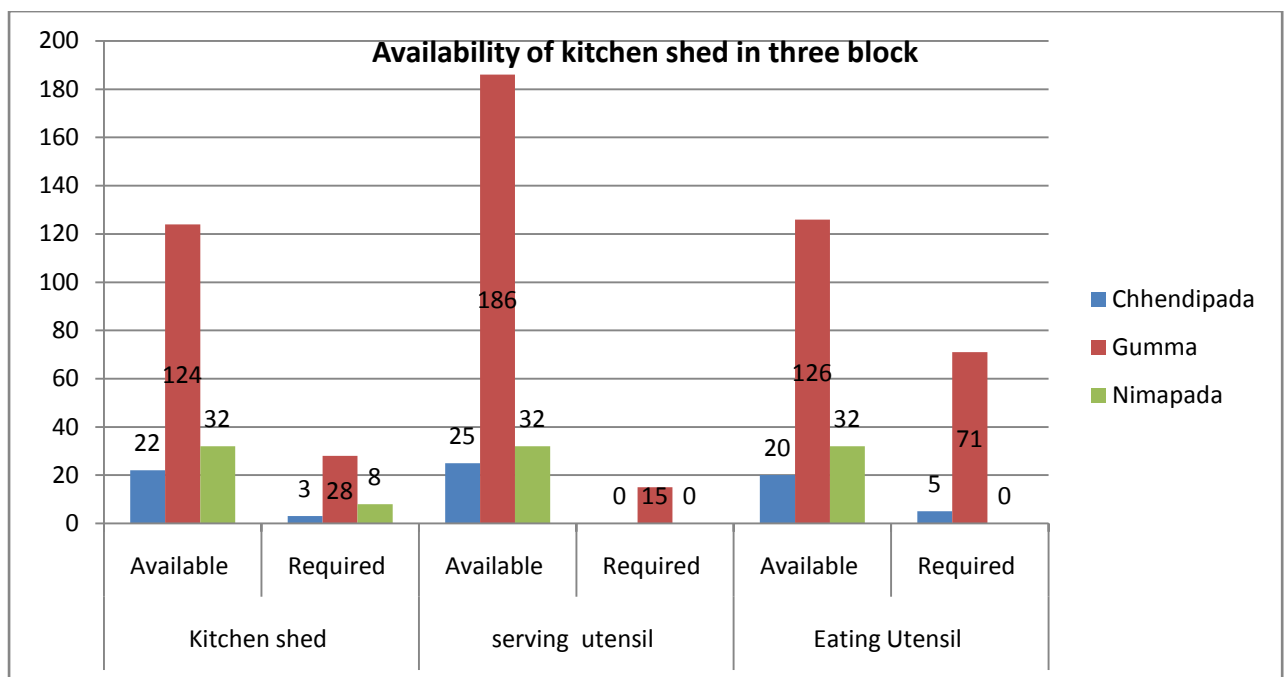
- The evaluation of the kitchen shed construction status reveals that 124 nos. of Kitchen-cum-shed were constructed and 28 nos. are yet to start.
- The serving utensil status reveals that 186 schools have the required utensils for the MDM purpose where as 15 schools does not have the required utensils.
- 126 nos. of schools have the eating utensils and 71 nos. of schools do not have the eating utensils.

2.6.3 Nimapara:

- The sample study at Nimapara reveals that out of 40 schools, 32 have kitchen shed facility where as the other 8 nos. of schools are yet to construct the kitchen shed.

- During ten numbers school visit and collecting data from officials, it's understood that availability of kitchen shed at all school except 8 schools. And these eight schools kitchen shed conditions are very poor which are not in useable condition.
- In case of serving utensil, including all school has the same facility. In other way all school occupied the eating utensil to serve MDM to student.

Figure 6: Status of Utensils of Kitchen devices in Schools



(Source: Secondary data from District Administration)

2.7 Monitoring & Inspection:

2.7.1 Gajapati:

- During the study it's understood that the monitoring and inspection at Gumma is not regular which pose a threat for necessary future course of action.
- On verification of the monthly monitoring mechanism i.e. SAMIKSHYA (Performance Tracking and Monitoring Process), which are done by the CRCC, it's understood no such analysis nor any improvement initiatives are planned taking into the observation of the report.
- The SAMIKSHYA would provide insight and identify various opportunities for improvement if the same is analyzed regularly.

- The study of the inspection and visits record available at the district, it's understood that there is no inspection and visit made under the Gumma Block during 2014-15 till September 2014.
- The detail status of the inspection of schools is in Figure 5 of the report.

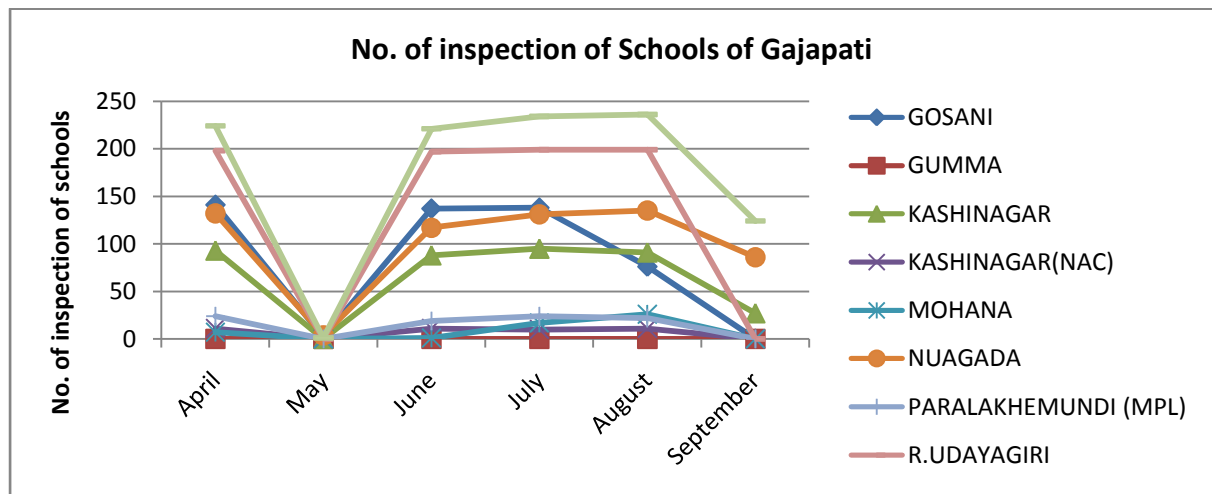
2.7.2 Angul:

- We found that the monitoring and inspection of MDM is too neglected in schools under rural area than schools near to the Block Head Quarter.
- During the financial year 2015-16 no such record exist at the block level which confirm the visit of the officials for MDM.
- Due to irregularity and poor decision making process, during the field visit, we found that one school the fund problem was persistent for more than 6 months.
- Due to non availability of proper MIS and monitoring the construction of kitchen shed is delayed.
- The SAMIKSHYA report analysis is also not done regularly.

2.7.3 Puri:

- The analysis and action taking on SAMIKSHYA report is not done which spoils the objective & spirit behind the implementation of the of the Samikshya mechanism. .
- No such monitoring of the weight of the rice packets which leads to underweight of rice packets.
- The MIS and regular inspection is not systematic which leads to the delay in the supply & distribution of rice.
- Due to irregular monitoring and non-updation of the cash book, the block and district administration have no real time status of the fund position of the schools.

Figure 7: No. of inspection of Schools of Gajapati



3.0 SWOT Analysis:

3.1 Strength:

- One square meal gets available to poor children where scheme is implemented with honesty.
- Higher enrollment in government schools registered.
- A meaningful use of buffer stock of grains getting ensured.
- Community participation in the nutritional programme meant for the school children.
- Ensure the supply of nutrition to the poor and economic backward children with upliftment of literacy.

3.2 Weakness:

- Extra workload on the teachers
- Reduction in time-on-teaching
- Lack of mechanism of quality control on food grains and cooked food quality.

3.3 Opportunity:

- Enhancement of social and gender equity in schools
- Reduction in child labour
- School-community links

3.4 Threat:

- Disenchantment of teachers from professional work
- Pilferage and corruption at school and community levels
- Compromise with hygiene and fire safety norms

Unless the scheme is implemented properly and with honesty, in the light of this SWOT analysis, it will bring more harm to children. The incidents of dishonesty and improper hygiene are in abundance.

4.0 RECOMMENDATION & POLICY OPTION:

- A standard and reliable MIS system may be developed, for real time monitoring of Rice stock at schools and the same can be useful for planning of supply & distribution of rice. **(Refer 2.1)**
- Similarly the MIS system may also address the cash position towards the cooking cost disbursed to schools; which would give an indication to the decision makers for recoupment of money in right time. **(Refer 2.2)**
- Monitoring & Inspection system may be streamlined for understanding the system gaps and the same may be analyzed regularly for identifying the scope for improvement. Presently there is no record is updated and/or maintained systematically. **(Refer 2.3)**
- To mitigate the price fluctuation of vegetables during the year; schools may take up Gardening Activities as part of their extracurricular activity for plantation of vegetables which not only ensure a cleaner & greener environment but also supply fresh vegetables to the Mid Day Meal Programme and can provide a cushion to the price sensitivity of vegetables.
- The school teachers may be sensitized on managing various records pertained to MDM and may be trained on various areas of stock keeping, Cash Book management and Hygiene practices in cooking and service of MDM.**(Refer 2.3)**
- The Data Entry Operators at Block Level may be sensitized on data updation in the MDM Module which would enhance the efficiency of the system to many folds.

- The infrastructure as sanctioned for the construction of Kitchen cum store may be accelerated for achieving the same by end of 2015; a specific committee may be constituted for monitoring the progress of construction of the same. **(Refer 2.5.3)**
- Each school may have facility for Multi-Tap Water system so as to reduce the overcrowding of children at single water source.
- Provision and initiatives may be made for personal hygiene of the Cook and the work place during the cooking of the MDM.
- School Management committee should not interfere with MDM process because this interference may sometimes create problem in the management of MDM at school.
- LPG connection should be installed at school for smooth running of MDM which can reduce over burden on firewood collection and consumption. The LPG also would ensure a uniform price towards the fuel cost, as presently the price of firewood is varying across the state.
- Provision may be taken up for supply of clean and hygiene water as the students may sometime consume water from various contaminated sources.
- Proper monitoring mechanism may be developed and the same may also be properly reviewed for physical verification of rice stock, cooking cost, cooking assets. **(Refer 2.1, 2.2)**
- Regular verification of cash book, rice stock and cash balance for proper function of MDM at school verification. **(Refer 2.3)**
- It's observed during the field study that in certain cases sealed rice packets are delivered which are underweight as against the weight mentioned. Thus provisions may be made for random checking of rice packets to control the misappropriation
- Weigh machine may be provided to all school so far in case of rice shortfall can check in receiving time.
- Regularly the SAMIKSHYA report analysis may be done to identify the areas and opportunity for improvement. **(Refer 2.7)**