Performance Audit Report on the Supply of Fertilizer on Subsidy for Paddy Cultivation Programme - 2012



2014

Performance and Environmental Audit Unit

Report No. YS/PA/Fertilizer/2012/02



1. Executive Summary

The Paddy Lands Fertilizer Subsidy Programme launched in the year 2005 with 90 per cent of the cost of fertilizer used for paddy cultivation met by the Government for the sustainable maintenance of the agricultural economy of Sri Lanka in a better improved level has completed 07 years by the year 2012. The expected objectives of the Programme are as follows.

- i. Minimizing the cost of paddy cultivation
- ii. Encouraging Farmers for Paddy Cultivation
- iii. Enhancement of paddy production
- iv. Enhancement of income from paddy cultivation
- v. Converting paddy cultivation to an economically profitable activity
- vi. Creation of food security and elimination of scarcity of rice.
- vii. Sale of traditional varieties of rice in the international market at a higher price

With the above objectives in view, plans had been made for the distribution of fertilizer at a very low price of Rs.350 a 50 kilogramme bag of chemical fertilizer fetching about Rs.2,750 in the market.

The objective of the audit was to assess whether the public funds allocated for the implementation of the Fertilizer Subsidy Programme have been used effectively, efficiently and economically and to assess the environmental impact resulting from the use of chemical fertilizer over a long period.

The overall situation revealed from the audit carried with those objects is that the extent of the lands under paddy cultivation, the quantity of chemical fertilizer and the acreage tax had increased together with the increase of paddy production as a result of the fertilizer subsidy while the import or rice had not decreased. Even though an increase in the paddy production had been reported, the lack of an improvement to the paddy crop per acre was a notable feature. The major observations for this situation are as follows.

- * Problems in estimating the fertilizer required.
- * Problems relating to the request for the estimated quantity of fertilizer, supply and storage.
- * Failure to use fertilizer as recommended.
- * Lack of sufficient variance in the extent of paddy lands not cultivated with paddy.
- * Increased trends in the use of chemical fertilizer and lack of interest in the use of carbonic fertilizer.

- * Existence of damaged cultivations and environmental problems due to lack of proper maintenance of the irrigation systems.
- * Continuation of overall cost of paddy cultivation at a higher level.
- * A large amount of foreign exchange is being further utilized for the import of rice.
- * Problems existing with regard to the adequacy of the contribution of the Agricultural Research and Production Assistants and other officers involved in the Programme activities.
- * Problems relating to the standards of the imported fertilizer and the Procurement Procedure.

In this connection discussions were held on the environmental impacts that could arise from the long term use of chemical fertilizer in the country. Certain reports of the Agricultural and the Environmental Sectors and the Universities which had carried out research studies as well as information obtained from the internet were also taken into consideration. Other than the matters relating to the expansive distribution of water-born plants and the death of fish, there was no evidence that an adequate environmental study of the environmental impact arising from the use of chemical fertilizer had been carried out in Sri Lanka.

In view of the above major observations, proper attention should be paid to the following courses of action.

- * Introduction of appropriate procedures to all levels of officers related to activities such as recommending fertilizer, estimating (planning), requesting, distribution, supervision and carrying out researches on paddy cultivation.
- * Immediate updating of the Register of Paddy Lands.
- * Establish the importance of using carbonic fertilizer and taking into consideration the environmental impact resulting from the long-term use of chemical fertilizer.
- * Urgent reconstruction of the irrigation systems by making aware the institutions concerned about the important contribution of the irrigation systems to the paddy cultivation.
- * Take action for the improvement of the storage capacity of the Agrarian Services Centres and the companies importing fertilizer.

- * Ensure that all the vacancies of officers of the Department of Agrarian Development who are required to supervise the entire process from the import of fertilizer up to the application of fertilizer to the cultivation are filled and that the other required resources are acquired.
- * Proper follow of the Procurement Process applicable to the import of fertilizer.

It is possible to make this nationally important programme a success by drawing attention to the above mentioned observations and recommendations made in audit as well as the other matters related to the programme.

2. Introduction

2:1 Background

The agricultural industry is considered as the basis of the economy of Sri Lanka due to the reasons such as its contribution of 12 per cent of the Gross Domestic Product, participation of over 30 per cent of an overall Labour force, being the major source of livelihood of the rural community and being the source of rice which is the staple food of the people of the country. The need for a rapid development of the agricultural industry has arisen for the achievement of objectives such as the food security, equality in income distribution, poverty eradication and ensuring the self-supply level at the national level.

The availability of adequate sunlight, a proper irrigation system and fertile earth are the basic factors needed for successful paddy cultivation. The fertility of a cultivation land is determined according to the mineral salt content of the land. When the quality of mineral salt in the earth deficient, fertilizer has to be applied as a preventive measure. Out of the total extent of lands in Sri Lanka used for food production, a larger percentage is set apart for paddy cultivation. Different methodologies such as major irrigation systems to rainfed systems are used to supply water for paddy cultivation. In addition to water which is the basic factor needed for paddy cultivation, greater interest is shown to use chemical fertilizer for achieving better harvests. But, due to the escalation of the prices of fertilizer in the world market, it had become very difficult for the farmer to bear the high cost of fertilizer. As such the primary objective of the Programme is minimizing the cost of paddy cultivation through the grant of 90 per cent subsidy on the cost of fertilizer to the farmer by the Government.

In the year 2012, during which the audit of the nationally important Fertilizer Subsidy Progamme was undertaken, the programme was being implemented by a group of institutions which consisted the National Fertilizer Secretariat and the Department of Agrarian Development under the Ministry of Agrarian Services and Wildlife, and two Government Companies importing fertilizer. The assessment of the fertilizer needs of the country, Import and distribution of fertilizer are handled by the National Fertilizer Secretariat which is mainly responsible for the Fertilizer Subsidy Programme.

2:2 Authority for Audit

The audit was carried out under my direction on pursuance of provisions in Article 154 of the Constitution of the Democratic Socialist Republic of Sri Lanka

2:3 Objective of Audit and Selection of Fertilizer Subsidy Subject

The agricultural industry providing the staple food requirements of the community which spread with the creation of settlements after the arrival of Vijaya chronicled in he recorded history of this country for more than 2,500 years receives a very important place in the present day economy of Sri Lanka. Paddy Cultivation occupies an unparalleled position in the agricultural industry which is the livelihood of a large majority of the rural community and the main source of rice which form the staple food of the people of this country. The need for providing a subsidy had arisen due to the rapid increase of cost of cultivation of paddy consequent to gradual increase of the cost of chemical fertilizer in the World Market as well as the increase in the cost of labour, agriseeds, chemicals, etc., required for the paddy cultivation. In view of this situation, the Government had commenced the grant of 90 per cent of the cost of fertilizer from the year 2005 with the objective of maximizing the Local Paddy Cultivation at a stable level. Since then the Government incurs a huge cost for the fertilizer subsidy. The cost so incurred from the year 2005 to the year 2011 amounted to Rs.146,186 million is shown below.

Year	Cost incurred by			
	the Government			
	(Rs.Millions)			
2005	6,285			
2006	10,699			
2007	10,998			
2008	26,450			
2009	26,935			
2010	22,278			
2011	42,541			
Total	146,186			

(Source : National Fertilizer Secretariat)

The objectives of the performance audit was the examination of the economy, efficiency and effectiveness of the Distribution of Subsidized Fertilizer under the Programme implemented at a huge cost by the Government, whether there was a saving in the foreign exchange spent on the import of rice as well as the environmental impact caused by the use of chemical fertilizer.

2:4 Scope of Audit

In view of the limitation of the factors such as the staff, other resources and time available, this performance audit was carried out through test based field inspections of the Anuradhapura, Polonnaruwa and Kurunegala Districts utilizing the data on the supply of fertilizer and paddy cultivation relating to past six years.

2:5 Audit Approach, Objectives and Criteria

Audit Approach

- i. Study of the policy statements, Acts, circulars and other documents relating to the grant of fertilizer subsidy.
- ii. Collection of data from the institutions directly connected with the fertilizer subsidy and analysis of such data.
- iii. Review of other connected documents and making enquiries from the connected officers.

Primary Objectives of the Audit

- i. Evaluation of the effectiveness, efficiency and economy in the use of Government funds for the implementation of the Fertilizer Distribution Programme on a subsidy to the paddy cultivators.
- ii. Determination of the savings of foreign exchange spent on rice imports and the benefits accrued after the implementation of the Fertilizer Subsidy Programme.
- iii. Evaluation of the environmental impact arising from the use of chemical fertilizer.

2:6 Limitations

Efforts were made in the planning of this audit for minimizing the limitations. Nevertheless, the audit was carried out under the following limitations.

- (i) It was not possible to obtain information whether the Central Environmental Authority, the Rice Research and Development Institute at Batalagoda and the Department of Agriculture responsible for the evaluation of the impact on the soil and other environmental aspects from the use of chemical fertilizer had evaluated the impact of the use of chemical fertilizer on the environment.
- (ii) Searches of the Internet to ascertain whether the Faculties of Science and Agriculture of the State Universities of Sri Lanka had carried out such researches failed to reveal information on such researches. In view of this situations, the evaluation of the use of chemical fertilizer on the soil and other environmental aspects had to be limited.
- (iii) As the information on the procurement of fertilizer called from the Ministry of Agrarian Services and Wildlife on 13 January 2013 had not been furnished to audit even by 31 July 2013, observations whether the Procurement Procedures had been duly followed could not be made.

3. Detailed Findings, Recommendations and Comments of the Institutions

3:1 Increase of the Extent of Lands under Paddy Cultivation in Sri Lanka Concurrently With the Implementation of the Fertilizer Subsidy Programme.

Out of the objectives of the supply of fertilizer subsidy, one objective was the achievement of a methodical improvement in the extent of paddy lands in the country suitable for paddy cultivation. The data on the paddy lands in Sri Lanka under cultivation during the years 2005 to 2011 are given below.

Year	Extent of Paddy Lands under Cultivation Yala-Maha	Increase/ (Decrease) as compared with the preceding year
	(Hectares)	Percentage
2005	937,175	
2006	910,493	(2.8)
2007	816,716	(10.28)
2008	1,052,990	28.92
2009	977,145	(7.2)
2010	1,065,281	8.3
2011	1,217,929	14.3

Source : Hector Kobbekaduwa Agrarian Research and Training Institute

According to the data on the extent of paddy lands cultivated, the cultivated paddy lands in the years 2006 and 2007 as compared with the preceding years had shown a decrease. Nevertheless, an increasing trend, though not methodical was observed since the year 2008. Nevertheless, the overall extent of the cultivable extent of paddy lands in the country as compared with the extent of the actual cultivated lands in each of the seasons in the year, it was observed that a considerable percentage of the lands remain as uncultivated paddy lands in each season.

The variance between the extent of cultivable paddy lands during the Maha Season and the extent of paddy lands actually cultivated with paddy in the years 2005 to 2010 is given below.

Year	Extent Paddy Lands Cultivable			Extent of Uncultivated Lands as a Percentage of the Extent of Cultivable Lands
	(Hectares)	(Hectares)	(Hectares)	
2005	703,250	580,562	122,688	17.5
2006	708,738	591,297	117,441	16.6
2007	711,746	525,340	186,406	26.2
2008	716,803	581,597	135,206	18.9
2009	719,078	632,130	86,948	12.1
2010	768,639	646,037	122,602	15.9
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Source : Hector Kobbekaduwa Agrarian Research and Training Institute

According to the above data, it is apparent that despite the supply of fertilizer subsidy, even during the Maha Season during which a larger extent of paddy lands are cultivated in Sri Lanka, a larger extent of the cultivable paddy lands remain without being cultivated. In addition, an annual fluctuation of the extent of lands not cultivated with paddy is indicated.

Implication

Even though the major objective of the supply of fertilized subsidy is the increase of the extent of cultivated paddy lands, the objective had not been achieved due to the existence of an extent of uncultivated cultivable paddy lands during all seasons.

Recommendations

- i. Obtain the accurate data on the extent of cultivable lands through the revision and amendment of the Register of Paddy Lands and encouraging the farmers for the maximum utilization of those uncultivated lands through every means available.
- ii. Increase the extent of cultivable lands by carrying out improvements to the irrigation systems.
- iii. Proper enforcement of regulations introduced for the limitation of earth filling of paddy lands.

Comments of the Institutions Ministry of Agriculture

" In the cultivation of paddy in the country normally a minimum 700,000 hectares in the Maha Season and 500,000 hectares in the Yala Season are cultivated. To meet the rice requirement of the country the cultivation of 1,000,000 (sic) hectares in each year is sufficient. As 1,200,000 (sic) hectares of paddy lands are cultivated at present, a surplus paddy crop is available in the country. As such there is no need to encourage farmers for the further increase of the lands under paddy cultivation. Accordingly action has been taken for the cultivation of other field crops during the Yala Season in the dry zone and for the cultivation of vegetables and yams in the wet zone".

Department of Agrarian Development

- i. "There was no revision of agricultural lands after 1995. Action has been initiated in the year 2013 for the creation of a database that could be used for the island-wide revision of agricultural lands and the classification of agricultural lands of agricultural lands running parallel to that. The Project Report on that is annexed. In addition a Pilot Project for the accurate computation of the area of the paddy lands owned by each person by using the satellite technology is being implemented in the Gampaha District".
- ii. "A stage by stage plan for the upgrading of all minor irrigation systems in the Island has been submitted to the Ministry of Economic Development and the proposals for the repair of the tanks destroyed due to natural disasters as well as the suitable tanks abandoned over a long period have been prepared. Similarly, a series of Training Programmes for the awareness of the Agricultural Research and Production Assistants of this Department as well as the Farmers' Organizations for the proper maintenance of all minor irrigation systems of the Island have been planned. A copy of the Handbook prepared for that purpose is attached for information. The proposals for the commencement of Farmer Training Programmes for the introduction of water conservation strategies under minor water conservation strategies under minor irrigation systems have been included in the budget proposals for the year 2014."
- iii. "Plans for launching of a special programme have been made for the protection of the paddy lands identified accurately as needing further protection through the revision of the Register of Paddy Lands. Similarly, efforts are being made at the pilot level for the use of maps prepared by utilizing the satellite technology for this purpose in the future".

3:2 Estimating Requirements of Subsidized Fertilizer, Import, Distribution and Usage

3:2:1 Inducement for the usage of Chemical Fertilizer

One of the objectives of this Programme is the inducement of the farmers engaged in paddy cultivation burdened with economic hardship to use chemical fertilizer through the supply of chemical fertilizer under the subsidy scheme. An examination of this aspect revealed that on the overall the usage of fertilizer for paddy cultivation had increased.

Year	Total Quantity of Fertilizer issued to Farmers	Percentage of Increase/ (Decrease) of Supply of Subsidy as compared with the preceding year		
	Metric Tones			
2006	302,113			
2007	352,637	16.72		
2008	451,231	27.96		
2009	403,752	(10.52)		
2010	466,836	15.62		

(Source : Department of Agrarian Development and Fertilizer Importing Companies)



3:2:2 Government Expenditure on Import of Fertilizer

Consequent to the increase in the usage of fertilizer, it was observed that the expenditure incurred by the Government on the import of fertilizer as well had increased annually. If this expenditure is to be an effective expenditure, the livelihood of the farming community should improve along with the improvement of paddy cultivation in the country in addition to the creation of the environmental friendly position in the country through the usage of chemical fertilizer. The information on the expenditure on the import of fertilizer during several past years had been as follows.

Year	Expenditure Import	
	Rs.Millions	
2005	551.7	
2006	10,052.7	
2007	19,224.9	
2008	44,097.6	
2009	14,710.9	
2010	25,152.9	
F	T I G	

Source : Fertilizer Importing Companies

3:2:3 Estimating

In view of the huge expenditure incurred by the Government for the import of fertilizer as an input requirement, action should be taken from the initial stage for the accurate estimating of the quantity of fertilizer required. The quantity of fertilizer required for each season is estimated based on the information received by the National Fertilizer Secretariat. That observation in this connection are as follows.

(a) According to the circulars issued by the Secretary to the Ministry in connection with the distribution of subsidized fertilizer for paddy cultivation in respect of each season, the reports on the progress of the fertilizer used for the cultivation season, should be sent to the National Fertilizer Secretariat within two weeks after such distribution by the Agrarian Development Regional Officers. Nevertheless, it was observed that there were instances of the failure to submit reports on the due dates or the non-submission of the reports at all. An examination of the receipt of these reports for 04 cultivation seasons from the Yala Season 2009 to the Maha Season 2010/2011 revealed that out of 553 Agrarian Services Centres, 166 Centres in respect of Yala Season 2009, 216 Centres in respect of the Maha Season 2009/2010, 134 Centres in respect of the Yala Season 2010 and 98 Centres in respect of the Maha Season 2010/2011 had not submitted the reports even by 04 April 2012.

- (b) An examination of the progress of the receipt of the reports of 106 Agrarian Services Centres in the Anuradhapura, Polonnaruwa and Kurunegala Districts for the 06 cultivation Seasons from the Maha Season 2008/2009 to the Yala Season 2011 on test basis revealed the receipt of a lesser number of reports and non-submission of reports on the due dates by three Centres in respect of the Maha Season 2008/2009, by 81 Centres in respect of the Yala Season 2009, by 20 Centres in respect of the Maha Season 2009/2010, by 32 Centres in respect of the Yala Season 2010, by 65 Centres in respect of the Maha Season 2010/2011 and by 71 Centres in respect of the Yala Season 2011. As such the National Fertilizer Secretariat had not been able to determine the specific fertilizer requirement for the subsequent season.
- (c) The fertilizer requirements of each District for the respective season should be determined by the District Fertilizer Co-ordinating Committee based on the relevant reports and should be submitted to the National Fertilizer Secretariat before a strictly specified date. Nevertheless, it was observed that the Colombo District Fertilizer Co-ordinating Committee had not taken action for holding the Committee meetings for the Yala Season 2012 and the Maha Season 2011/2012 and that action had not been taken to submit the reports for Yala Season 2012 by the Ampara and Anuradhapura Districts and that had caused obstructions for the proper planning of the fertilizer requirement. It was also observed that in this connection 21 Districts in respect of the Maha Season 2011/2012 and 15 Districts in respect of the Yala Season 2012 had not submitted the reports before the specified dates.

3:2:4 Procurement of Subsidized Fertilizer

The rights for the import of the fertilizer had been assigned by the National Fertilizer Secretariat to the two State Companies, at 65 per cent and 35 per cent respectively. An examination of the import of fertilizer by the two companies revealed the following matters.

(a) The information relating to the Procurement Procedure on the import of subsidized fertilizer called for from the Ministry of Agrarian Services and Wildlife had not been furnished to audit up to 31 July 2013 and as such it was not possible to establish in audit whether the Procurement Procedure had been followed properly.

- (b) The Treasury had not released the money required for the import of the subsidized fertilizer by March 2012 and as such a total sum of Rs.8,596 million comprising a sum of Rs.3,226 million to one company and a sum of Rs.5,370 million to the other company remained payable.
- (c) The Government had to pay interest totaling Rs.2,017 million comprising a sum of Rs.883 million to one company for the period January 2011 to March 2012 and a sum of Rs.1,134 million to the other company, for the period March 2011 to April 2012 in connection with the liabilities referred to in paragraph (b) above.
- (d) Several problems arising from the deficiencies in the procurement procedure between one of the companies importing fertilizer and the contractor companies importing fertilizer had been referred for arbitration. A sum of Rs.8,784,356 had been paid as lawyers' fees and other expenses up to 17 May 2012, the date of audit and a final decision had not been reached yet.

3:2:5 Maintenance of Registers and Books

The matters revealed in relation to the records and other registers for the activities of the Fertilizer Subsidy Programme are as follows.

- (a) According to the circulars issued annually by the Secretary to the Ministry in connection with the implementation of the Fertilizer Subsidy Programme, the Agrarian Services Committees which are responsible for the sale of subsidized fertilizer to the farmers and all institutions which have received prior approval for that activity should maintain updated registers on daily basis for recording the categories and quantities of fertilizer obtained, places of storage, names of farmers to whom fertilizer was distributed including the numbers of the National Identity Cards and the addresses, the quantity of fertilizer issued to farmer and the extent of the related paddy lands. Nevertheless, the following deficiencies in those records maintained by the Agrarian Services Centres were observed in audit.
 - Even though certain Agrarian Services Centres had, during the initial years, recorded the National Identity Card numbers in the Registers of Fertilizer Distribution, subsequently the column for recording the National Identity Card number had been eliminated from the registers.

- (ii) The application for fertilizer had not been recommended by the Farmers' Organizations.
- (iii) The applications had not been recommended by the Agricultural Research and Production Assistants.
- (iv) Person's entitled quantity of fertilizer had not been included in the application.
- (v) Applications had not been approved by the Agrarian Services Regional Officer.
- (vi) The signatures of the farmers were not available in the Registers.
- (vii) The Division, the National Identity Card number, receipt number, etc. had not been included.
- (viii) Failure to file application in the numerical order.
- (ix) Clear difference in the signatures of the farmers appearing in the Register of Fertilizer Issues and the applications for fertilizer were observed.
- (x) Instances where the farmers had not signed the applications made for fertilizer were observed.
- (b) As the Government imports the paddy fertilizer given on subsidy to the farmers, incurring heavy expenditure, it is the responsibility of all the institutions entrusted with the custody of fertilizer to maintain a good control of the stocks. According to the "Schedule No. 05" reports on the stocks of fertilizer obtained, the issues to the farmers and the stock in hand as at the end of the cultivation season sent by the Agrarian Development Centres, the balances at the end of each season of most Agrarian Service Centres do not reconcile with the opening stock in hand shown in the report for the next season. As such it was observed that a proper stock control is not in operation on the stocks with the Agrarian Service Centres.

(c) Register for Identifications of Paddy Lands for determining the Fertilizer Requirements

The number of paddy lands identified for the determination of the fertilizer requirements of each Agrarian Service Centre is the Schedule 5 Format certified and sent direct by the Agrarian Development Regional Officers on the information on the number of lands certified by them and sent by them to the respective District Commissioners.

Nevertheless, in terms of Section 53 of the Agrarian Development Act, No. 46 of 2000, every Agrarian Development Council should prepare a Register of Paddy Lands in the area of authority of the Council and maintaining it by revising and amending as an when necessary. The original register should be prepared by the Office of the Commissioner General. Nevertheless, the Register of Paddy Lands of the Agrarian Service Centres in the Anuradhapura, Polonnaruwa and Kurunegala District inspected, had not been revised over a period of about 10 years.

(d) According to the information furnished to audit, though two Multipurpose Cooperative Societies and a Janatha Company had issued 3,278,161 kilogrammes of fertilizer from the Maha Season 2008/2009 to the Yala Season 2012 (information of all seasons not furnished) performance reports thereon had not been furnished.

Implications

- i. Inability to forecast the fertilizer requirement accurately.
- ii. Import of fertilizer unnecessarily due to non-identification of requirements correctly creating an unwanted excess of fertilizer in the country and incurring heavy costs on such imports.
- iii. Government compelled to incur unnecessary expenditure due to the non-operation of the process of fertilizer subsidy flowing to the farmers properly as well as the subsidy irregularly made use of by those not entitled to the fertilizer subsidy.

Recommendations

i. The District Fertilizer Co-ordinating Committees should obtain data on fertilizer from the farmers through the Agrarian Service Centres and carrying out an awareness programme for all the parties responsible.

- ii. Ensure strict compliance with the circular instructions issued on the fertilizer subsidy.
- iii. A regular evaluation process should be in operation and the operation and control of all stages through a process of supervision and monitoring carried out by the National Fertilizer Secretariat and the District Agrarian Officers.
- iv. Specific assignments and a proper reporting process are essentially required. Rectification of the above deficiencies through implementing a systematic Internal Audit Process.
- v. Updating of the Register of Paddy Lands.

Comments of the Institutions

Department of Agrarian Development

"The officers are regularly informed by letter to maintain the records on ordering for subsidized fertilizer, obtaining and distribution, and to take action in accordance with the instructions to supply that information to the respective institutions. Action is being taken at present to avoid these shortcomings caused mainly due to the shortage of staff at the Centres."

Ministry of Agriculture

- i. Fifty three Assistant Directors of the Ministry of Agriculture have already initiated action to examine the extent and the accuracy of the paddy lands identified at the Agrarian Service Centre level and the proper supervision of the distribution of fertilizer to examine the accuracy of the number of paddy lands through test checks. Awareness programmes for the representatives of the Agrarian Organizations have also been commenced."
- ii. "A special duty for the quantities of fertilizer distributed in the field and the regular observation of the stocks of fertilizer in the stores had been assigned to the field level Assistant Directors of the National Fertilizer Secretariat. A process of regular evaluation of the distribution of fertilizer by obtaining that information to the Head Office has been commenced."
- iii. "It is proposed to assign the distribution of fertilizer in the field to the Farmers' Organizations and the supervision of that process at the Agrarian Services Centres through the officers of the Department of Agrarian Development and to carry out the District level and national level supervision through the Assistant Directors of the National Fertilizer Secretariat."

iv. "The National Fertilizer Secretariat issues all circulars required for the distribution of fertilizer before the commencement of each season. The fertilizer is distributed by the Agrarian Service Centres based on the relevant circulars. The Schedule No. 05 Format should be filled as stated in the circular and sent back to the National Fertilizer Secretariat. The fertilizer required for the next season is distributed based on the number of paddy lands in the area of authority, the existing stocks and other matters.

Instructions have been issued for the District Assistant Directors to examine the registers with deficiencies pointed out by you in audit"

3:3 Applications for Fertilizer

3:3:1 The Role of the Agrarian Development Centres in applying for Fertilizer

The fertilizer requirement of an Agrarian Service Centre should be determined on the fertilizer requirements of all farmers of such Agrarian Service Centre. An examinations to ascertain whether the above process has been followed correctly revealed that in view of the following matters applications for fertilizer are made by Centres without taking into consideration the fertilizer requirements of the farmers.

(a) Lack of Specific Criteria for Determining the Fertilizer Requirement

- Examples : (i) The applications for fertilizer for the Yala Season 2010 in respect of 17 Divisions of Agricultural Research and Production Assistants attached to the Agrarian Service Centre, Wellawa in the Kurunegala District, had been made based on the total of paddy lands that can be cultivated instead of being based on the requirements of the farmers.
 - (ii) The application for fertilizer for the Yala Season 2012 in respect of 41 Divisions of Agricultural Research and Production Assistant attached to the Dambulla Agrarian Service Centre had been made by deciding on the expected acreage based on the acreage cultivated in the preceding seasons and holding discussions with the Agricultural Research and Production Assistants.

(b) Unrealistic Requirements determined

Example : An examination of the Schedule 05 Formats of Anuradhapura, Polonnaruwa and Kurunegala Districts in respect of the Maha Season 2010/2011

revealed that though 74,812.52 metric tonnes of fertilizer had been applied for 163,716.18 hectares of paddy lands in the 03 Districts though there had been only 141,497.97 hectares cultivated and the quantity of fertilizer used had been only 59,904.40 metric tonnes. As such 14,908.20 metric tonnes of fertilizer imported for 22,218.21 hectares (19.9 per cent of the quantity applied for) remained as an excess in that season.

3:3:2 Application made for Fertilizer exceeding requirements

It was observed that the following situations had arisen due to making applications for fertilizer exceeding the requirements.

- (i) Leaving balance stocks of fertilizer in the Regional Stores/ Centres due to the quantity applied for being more than that required.
- (ii) As revealed during the examination of the files of the National Fertilizer Secretariat, 62,023 kilogrammes of urea, 80,446 kilogrammes of Muriate of Potash and 50,107 kilogrammes of Triple Super Phosphate valued at Rs.67,401,600 imported for distribution to farmers under subsidy could not be distributed to the farmers during the specified periods due to Courts action taken based on complaints made regarding various frauds.
- (iii) A reconciliation of the total quantity of subsidized fertilizer imported by the two companies from the commencement of fertilizer subsidy in the year 2006 in each year (Urea, Triple Super Phosphate and Muriate of Potash) with the total quantity of subsidized fertilizer issued to the farmers in the respective years, it was observed in audit that the quantity of fertilizer remaining in the country in the respective years had been increasing gradually. (In this case, the total quantity of fertilizer remaining in the country means the quantity of fertilizer remaining with the Agrarian Development Centres and the Fertilizer Companies at the end of the two seasons.) Details are as follows.





	Year	Quantity of Fertilizer Imported (Two Companies)	Quantity of Fertilizer issued to Farmers	Balance of Fertilizer at the end of the each year (opening stock+ import - issue to Farmers)	Balance Stock of Fertilizer as a percentage of the Stock Imported
		Metric Tonnes	Metric Tonnes	Metric Tonnes	
2006		349,878	302,113	47,765	13.65
2007		404,206	352,637	99,334	24.57
2008		582,168	451,231	230,271	39.55
2009		341,615	403,752	168,134	49.21
2010		502,366	466,836	203,664	40.5
2011		547,104			
		Source : Fe	rtilizer Import Comp	panies and	

Department of Agrarian Development

(iv) According to the above data it was observed that the quantity of fertilizer remaining in the country is gradually increasing and that stocks exceeding the requirements are remaining in the country in every year. As an example, the overall subsidized paddy land fertilizer input for the year 2010 had been 466,836 metric tonnes while the stocks of fertilizer with the two companies as at the end of the year had been 203,664 metric tonnes. As a further stock of 547,104 metric tonnes had been imported in the year 2011 the overall fertilizer reserve amounted 750,768 metric tonnes. This represents and increase of 283,932 metric tonnes exceeding the fertilizer input for the year 2010. As such it was observed that the National Fertilizer Secretariat had deviated from its own fertilizer import methodology for annual import and maintaining a stock of fertilizer at any given

time as a buffer stock avoiding any shortage or excess for use in emergency situations by taking into consideration the stock handling capacity of the two companies.

Taking into consideration the opening stock, the input of fertilizer and the issues to the farmers in the year 2010, it appears that a stock of fertilizer exceeding such requirement by 156,980 metric tonnes had been maintained in the county unnecessarily. Details appear below.

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	Fertilizer
	Metric Tonnes
Opening Stock 2010	168,134
Add : Imports 2010	502,366
Total quantity of Fertilizer in the Country	670,500
Less : Issue of Fertilizer 2010 466,836	
+ Buffer stock 10 per cent 46,683	
Total Requirement	(513,519)
Balance stock maintained unnecessarily	156,981

Implication

- i. Unnecessary stocks of fertilizer remaining in the country.
- ii. Large amount of foreign exchange held in the unnecessary stocks.
- iii. Increased impact on stocks becoming outdated and damaged according fertilizer storage methodology of fertilizer importing companies.
- iv. Possibility of misuse of fertilizer.
- v. Possibility of wrong interpretation made in taking decisions on the development process and measuring the performance of the fertilizer programme.

Recommendation

- i. Formulation of the fertilizer supply methodology allowing for estimating the quantity of fertilizer required for the season or the year accurately as far as possible (Computation of the land that can be cultivated specifically and accurately as far as possible).
- ii. Allocation of imports to each company in quantities adequate for issue for paddy cultivation purposes and for the maintenance of a buffer stock of fertilizer.

Comments of the Institutions

Department of Agrarian Development

" In order to avoid the existing shortcomings in the accurate computation of the fertilizer requirement, it has been made compulsory to increase or decrease the fertilizer requirements determined at season meetings on the land area and dates of the ensuing season should be made only on guidance of the District Fertilizer Co-ordinating Committees. The officers are regularly informed by letter that they should act in accordance with Fertilizer Circular instructions and the Departmental Circular instructions in connection with the need for maintaining records of ordering, obtaining and distribution of subsidized fertilizer and for the supply of information to the relevant institutions. Action is being taken at present to avoid these weaknesses mainly in the Centres resulting due to the shortage of staff."

Ministry of Agriculture

" The District Assistant Directors of the National Fertilizer Secretariat have been assigned the duty for the accurate computation of the extents of lands under paddy and other crop cultivation at the District level and at present they are in the process of correctly identifying the extent of lands in each district under paddy and other crop cultivation.

In addition, based on the data on paddy cultivation of the past years action has been taken to compute the fertilizer requirement by limiting the extent of paddy cultivation to 700,000 hectares in the Maha Season and 500,000 hectares in the Yala Season. This has been commenced from the Maha Season 2013/2014.Similary, the National Fertilizer Secretariat assesses the fertilizer requirement based on the number of hectares of paddy lands cultivated according to the irrigations system obtained from the Agrarian Service Centers and the fertilizer recommendation applicable to that area. According to the information revealed by your audit, the main reasons for the large balance stocks of fertilizer from the year 2006 to the year 2011 had been due to the following.

(i) Due to the lack of proper updating of the Register of Paddy Lands in those areas, the applications made for fertilizer for all paddy lands in the area of authority is the major reason.

- (ii) In view of the inadequacy of the capacity in the Main Stores of the Government, the utilization of the Regional Stores at the Agrarian Service Centers is also a reason for the existence of excess of fertilizer reserves in the Regional Stores.
- (iii) As fertilizer is not produced in countries such as Sri Lanka, it is necessary for the import of the total fertilizer requirement to Sri Lanka before commencing the season. In view of the climatic factors affecting Sri Lanka, the Yala and Maha Seasons do not commence during the relevant periods, it is essential to retain an exceed stock of fertilizer in the Regional Stores.
- (iv) The existence of different climatic factors in countries such as Sri Lanka such as heavy rainfall, floods, drought, etc. farmers tend to abandon cultivation. That is also a reason for the existence of excesses stocks of fertilizer in the Regional Stores.

3:4 Fertilizer Recommendations

3:4:1 Implementation of Fertilizer Recommendations

The matters observed during the course of the examination carried out in relation to the Maha Season 2010/2011 whether the recommendations made for the quantity of chemical fertilizer made by the Paddy Research and Development Institute under the Department, based on the respective agricultural climatic zones and the irrigation system for achieving an optimum harvest from paddy cultivation is being utilized as recommended, are given below.

- (a) According to the 3 districts subjected to the audit test check to ascertain whether the fertilizer recommended for the actually cultivated extent of land is used as recommended, it was observed that 59 Centres in those districts had not used the recommended quantity of fertilizer.
- (b) According to the circulars on the distribution of subsidized fertilizer the Agricultural Research and Production Assistants should ensure that the quantity of fertilizer is used in the specified standard and dosage in the right time for the right crop, and that process should be regularly supervised by the Agricultural Instructors and the Regional Agrarian Development Officers. Nevertheless, enquiries made from those officers revealed that they do not have a procedure to ensure whether the farmers obtain the specified quantity of fertilizer and that the fertilizer is used for their paddy lands.

(c) Lack of a clear methodology for the regular evaluation of the chemical composition of the respective climatic zones and the soil.

Implications

- i. Inability to achieve the expected optimum harvest and environmental impacts.
- ii. Duties of Agricultural Research and Production Assistants are not performed properly.

Recommendations

- i. Make the farmers aware of the need for suitable use of fertilizer recommended as specified through the Agricultural Research and Production Officers and implement a suitable supervision process thereon.
- ii. Carry out an analysis of the chemical composition of the soil at the level of the Agrarian Services areas of authority and maintain updated data thereon and decide on the fertilizer recommendation based on such data.

Comments of Institutions

Department of Agrarian Development

"Action has been taken to create an awareness among the farmers with regard to the proper use of the fertilizer recommendations through the Committees. Instructions have been given to maintain the supervision whether the fertilizer recommendation is properly applied as far as possible despite the prevailing shortages of staff."

Ministry of Agriculture

" Implementation of Fertilizer Recommendation. Awareness Training Programmes for the farmers on the correct usage of fertilizer are being conducted in every district under the supervision of the Assistant Directors of the National Fertilizer Secretariat in charge of the districts. In addition to that, the Agricultural Research and Production Assistants and the Graduate Trainees attached to the Ministry as Development Officers also are conducting awareness programmes on the usage of fertilizer at present.

3:4:2 Problems arisen from the Implementation of Fertilizer Recommendation

According to the extent of lands cultivated in the Maha Season 2010/2011 in the Anuradhapura, Polonnaruwa and Kurunegala Districts, the quantity of fertilizer to be used according to the fertilizer recommendations amounted to 74,812 metric tonnes whereas the actual usage of fertilizer had been 59,904 metric tonnes. As such it was observed that the quantity of fertilizer used had been less by 14,908 metric tonnes or 20 per cent. The different reasons attributed to the inability to use the recommended fertilizer are as follows.

(a) The Regional Agrarian Development Officers, the Agricultural Research and Production Assistants and the Committee Clerks who are directly connected with the distribution of fertilizer had not been attached to the Agrarian Services Centres in adequate numbers. Deciding the fertilizer requirements of the Agrarian Service Centres, obtaining fertilizer from the stores and the distribution of the fertilizer obtained among the farmers according to their quotas are a process operating around the Agrarian Service Centre and the such, the Department of Agrarian Development should have an adequate staff for the successful operation of the process. The actual staff and the vacancies in 557 Agrarian Service Centres in the Island as at 01 April 2012 had been as follows.

			Approved	Actual	Number of	Percentage
			Cadre	Number	Vacancies	
Agrarian Development Officers		610	465	145	23.7	
Agricultural	gricultural Research and		9,600	8,869	731	7.6
Production As						
Committee Clerks		557	440	117	21.0	
Source : Department of Agranian D			avalonmont	-		

Source : Department of Agrarian Development

The vacancies in the posts of these officers in the Anuradhapura, Polonnaruwa and Kurunegala Districts subjected to test based physical inspections are as shown below. It was observed that such situation is one of the main reasons for the failure to achieve the overall process of deciding the fertilizer requirement, obtaining from stores, proper distribution among the farmers and the supervision of the usage for the paddy lands, as expected. In addition, instances where certain Agricultural Research and Production Assistants had to cover duties of several Divisions were observed.

District	Number of Centres	Required Number of Officers	Actual Number of Officers	Number of Vacancies
Anuradhapura	40	718	636	82
Polonnaruwa	11	296	203	93
Kurunegala	55	1,490	1,400	90
C D		Deresternet		

Source : Department of Agrarian Development

Implication

Effective utilization of the fertilizer subsidy had not been possible due to the inability to carry out the activities such as the correct determination of the fertilizer requirements of the respective Centres, obtaining the fertilizer on the due dates, issue to the farmers and supervision of the applications of fertilizer to the paddy lands efficiently and effectively.

Recommendation

Taking action as early as possible to fill the existing vacancies in accordance with the approved laws, rules and regulations.

Comments of the Institutions

Department of Agrarian Development

" Applications have already been called for the recruitment of 1,583 Agricultural Research and Production Assistants required and due to the minimization of covering up duties prevailing at present from the filling of the vacancies it is expected that the timely submission of reports, maintaining updated reports and the proper supervision of the usage of fertilizer recommendation in the specified dosage will be solved."

Ministry of Agriculture

"Duties have been assigned to the District Assistant Directors of the National Fertilizer Secretariat for the accurate computation of the land areas cultivated with paddy and other crops at the district level and at present they are in the process of accurately identifying the land areas cultivated with crops in the respective districts. In addition, action has been taken for the computation of the fertilizer requirement by limiting the land area cultivated with paddy as 700,000 hectares in the Maha Season and 500,000 hectares in the Yala Season based on the data on paddy cultivation of the preceding years. This has been commenced from the Maha Season 2013/2014."

(b) The Agrarian Services Centres had not been able to obtain the recommended quantity of fertilizer as the fertilizer requirement had not been correctly estimated. Even though the fertilizer requirement for each season should be assessed after obtaining the data on the fertilizer requirements of the farmers according to the extent of land expected to be cultivated in each season, import the fertilizer based on such assessment and issued to each Agrarian Services Centre, it was observed in audit that certain Agrarian Services Centres had obtained a quantity much lesser than the quantity of relating to the Centres which should be used according to the estimate. It was observed that this was one of the reasons for the gradual increase annually of the unused quantity of subsidized fertilizer in the country. Such excess of fertilizer occurs in every season due to the assessment of the fertilizer requirement on the assumed and the approximate data of the extent of lands cultivated in the preceding year instead of obtaining the data on the correct extent of lands cultivated. The number of Agrarian Services Centres which had obtained less than 60 per cent of the fertilizer estimate from the fertilizer sold by one fertilizer importing company from the Maha Season 2009/2010 is given below.

Maha Season 2009/2010				Yala Season 2010			
Number of Agrarian	Fertilizer	Fertilizer	Difference	Number of Agrarian	Fertilizer	Fertilizer	Difference
Service Centres	Estimated	Purchased		Service Centres	Estimated	Purchased	
which obtained				which obtained			
fertilizer less than				fertilizer less than 60			
60 per cent of the				per cent of the			
Estimate				Estimate			
	Metric	Metric	Metric		Metric	Metric	Metric
	Tonnes	Tonnes	Tonnes		Tonnes	Tonnes	Tonnes
22	19,705	8,134	11,571	37	20,657	7,115	13,542

Source : Fertilizer Companies and Department of Agrarian Development

Implications

Fertilizer exceeding the required quantity had been imported due to the failure to collect the correct extent of lands cultivated in each season and prepare accurate estimates. As such the performance of the Fertilizer Subsidy Scheme is reduced due to the gradual increase of the balance stocks of fertilizer in each year.

Recommendations

Accurate estimating of the fertilizer requirement by obtaining data as accurate as possible on the extent of lands cultivated in each season (obtaining more accurate data on the extent of lands cultivated in each season meetings) and importing according to such estimates.

Comments of the Institutions

Department of Agrarian Development

"Action had been taken through the Committees to make the farmers aware of the need for the proper use of the relevant fertilizer recommendation and instructions have been issued to carry out the supervision as far as possible to ensure that the fertilizer recommendation is properly applied, despite the existing vacancies in the staff".

(c) Complaints regarding the non-supply of the specified quantity of fertilizer by the officers of the Department of Agrarian Services/ Farmers' Organization and the frauds committed in making applications for fertilizer, recommending and distribution had been forwarded to the Secretary to the Ministry of Agriculture and the Minister of Agriculture and in certain instances to His Excellency the President. It was revealed in audit that the National Fertilizer Secretariat had not maintained a register to records such complaints and only the files were produced for audit. An examination of the files revealed that 16 complaints had been received from the year 2009 up to 24 April 2012. The letters addressed to the Director of the National Fertilizer Secretariat and the Director (Investigation) of the Ministry of Agriculture Development and Agrarian Services for referring those to them had been filed therein. No steps whatsoever had been taken to investigate those and mete out justice to the aggrieved farmers.

Implication

- i. Increase in the extent of idle lands
- ii. Non-receipt of the expected optimum crop from the cultivation.
- iii. Further escalation of the poverty level of the aggrieved farmers.

Recommendations

Immediate action should be taken on the receipt of complaints to investigate and take appropriate action according to the laws if there are offenders and the formulation of a methodology to provide relief to the aggrieved parties.

Comments of the Institutions

Department of Agrarian Development

" Action is being taken regularly on the complaints received through the intervention of the District Deputy/ Assistant Commissioners and, the Services the Human Resources and the Internal Audit Divisions of the Department to identify offenders and to take disciplinary action as well as for providing relief to the aggrieved parties."

Ministry of Agriculture

"The following methodology is followed for the prompt investigation of the complaints on fertilizer received. Immediately on the receipt of a complaint regarding fertilizer, a preliminary investigation on that is held through the Assistant Director of the District, of the National Fertilizer Secretariat for obtaining observations. According to the impact of the observation on the formal regulatory process of fertilizer the information is communicated to the Internal Audit Division to carry out an investigation of the appropriate level."

(d) Significant differences were observed between the quantities of fertilizer sold by the fertilizer companies and the quantities of fertilizer obtained by the Agrarian Services Centres. Accordingly significant differences were observed between the quantities of fertilizer issued according to the data provided by the companies and the quantities of fertilizer purchased by the Agrarian Services Centres of the districts according to the data obtained from the Department of Agrarian Development. The reasons for the difference between the quantities of subsidized fertilizer sold by the companies and the quantities of fertilizer purchased by the Agrarian Services Centres had not been furnished to audit. In view of the availability of numerous complaints of irregularities committed by the Agrarian Services Centres and the Fertilizer Stores during the course of the issue of subsidized fertilizer, the existence of a situation where the Agrarian Services Centres had purchased lesser or higher quantities of fertilizer than the quantities of fertilizer sold to the district by the fertilizer companies was observed in audit.

According to the information relating to the Yala Season 2009 from one company, the quantities of fertilizer sold to 11 districts (Urea, Triple Super Phosphate and Muriate of Potash) had been 27,813 metric tonnes and according to the records maintained by the Agrarian Services Centres of those districts the quantities purchased from that company had been only 25,368 metric tonnes.

In addition, the quantities sold by that company to 12 districts for the Maha Season 2009/2010 and the quantities purchased by the Agrarian Services Centres had been 52,957 metric tonnes and 45,857 metric tonnes respectively. As such a difference of 9,545 metric tonnes was observed between the quantities of fertilizer for the 02 seasons purchased by the Agrarian Services Centers from the company and the quantity sold by the Company.

Implication

The fertilizer distribution mechanism is weak either due to the farmers not receiving the fertilizer issued by the companies as subsidized fertilizer to the Agrarian Service Centres or the existence of opportunities for other malpractices.

Recommendation

- i. Strengthening of the distribution network in order to ensure that the quantity of fertilizer issued through the Agrarian Services Centre is directly issued to the farmers and preventing any misuse and ensure that the fertilizer obtained by the farmers is used for the paddy lands as recommended.
- ii. Issue instruction to the fertilizer companies to maintain updated data on the fertilizer issued to the Agrarian Services Centres.

Comments of the Institutions Ministry of Agriculture

"Proposals have been made for the assignment of fertilizer distribution activities to the Farmers' Organizations, the Agrarian Service Centre level supervision to be carried out by the officers of the Department of Agrarian Development and for carrying out the district and national level supervision through the Assistant Directors of the National Fertilizer Secretariat. In addition, the collection of the data on monthly basis on the stock position of the main stores of the Government fertilizer companies and the regional stores has already been assigned to the Assistant Directors in charge of districts."

3:5 Use of Carbonic Fertilizer

The importance of the use of carbonic fertilizer is conspicuous due to the need for the adoption of environmental friendly methods for the development of agricultural industry for the survival of the humankind and the prevention of numerous environmental problems created at present.

The improvement of the use of carbonic fertilizer has been emphasized in the Mahinda Chintana Policy Statement .

The observations made at the examination of the use of carbonic fertilizer are as follows.

(a) According to the provisions in the circulars on the distribution of subsidized fertilizer, taking action to induce the farmers to use straw and carbonic fertilizer for increasing the harvest in environmental friendly manner is an essential function of the Agricultural Research and Production Assistants and they should ensure that every action is taken to enable the use of straw and carbonic fertilizer before the supply of chemical fertilizer. Nevertheless, according to the information obtained from the Agrarian Services Centres and according to the physical examinations it was observed that the most instances the farmers burn and destroy the straw and that the quantity of chemical fertilizer requested by them had been issued to them in the same quantities without ensuring in advance whether arrangements had been made by them to apply carbonic fertilizer to the paddy lands.

- (b) Researches have confirmed that a better harvest can be achieved by using both carbonic and chemical fertilizer. According to the circulars issued by the National Fertilizer Secretariat in connection with the distribution of subsidized fertilizer for each season, the number of kilogrammes of chemical fertilizer to be used per hectare to achieve the optimum harvest had been shown separately under the respective climatic zones and irrigation systems. As the quantity of carbonic fertilizer to be used per hectare to achieve optimum harvest had not been clearly stated in the circulars, it was observed that such omission had been a reason for the poor attention paid to carbonic fertilizer.
- (c) Even though the Department of Agriculture had emphasized the importance of the use of carbonic fertilizer with chemical fertilizer for achieving an optimum harvest the farmers are not encouraged to produce carbonic fertilizer by spending time and labour as chemical fertilizer is available under the subsidy scheme at a very low price as revealed from the examination of information obtained from the Agrarian Services Centres and during field inspections.



Straw stacked in the paddy lands in the Polonnaruwa District after the Maha Season 2011/2012 harvest without being used as carbonic fertilizer revealed at the field inspection.

Implications

- i. Non-achievement of the optimum harvest.
- ii. Lack of a trend to cultivate in the environmental friendly manner.
- iii. Adverse impact on the soil from long term use of chemical fertilizer could result in pollution of groundwater, danger of destruction of the aquatic organisms in the internal reservoirs culminating in the threat to the overall living beings.

iv. Opinions have emerged according to the reports of specialists, the World Health Organization and the National Science Foundation that the Rajarata Kidney Disease is caused due to the use of chemical fertilizer, insecticides and weed killers.

Recommendations

- i. Before the issue of chemical fertilizer to the Farmers' Organizations ensure through supervision by officers that they have made arrangements for the use of carbonic fertilizer for their cultivation and issue fertilizer thereafter.
- ii. Include the quantity of carbonic fertilizer to be used along with the chemical fertilizer for the achievement of the optimum harvest specifically in the circulars issued in connection with distribution of fertilizer for each season and create an awareness of that among the farmers.
- iii. Emphasize to the farmers of the economic and environmental importance of carbonic fertilizer in addition to the optimum harvest concept.
- iv. Take necessary courses of action to ensure whether there is any impact from the use of chemical fertilizer on the Rajarata Kidney Disease to assist in arriving at correct determination on the causes of the disease treating the Kidney Disease spreading in the Rajarata as a national problem.

Comments of the Institutions

Ministry of Agriculture

" Activities such as the training of farmers to popularize the importance of the use of both carbonic fertilizer and chemical fertilizer, field models, media programmes and training of Field Officers are being implemented from the year 2008 and a Progress Report is annexed. Action has been taken for the implementation of the Carbonic Fertilizer Programme in every district in the year 2013."

3:6 Raising the Expected Crop of Paddy Lands through the Subsidized Fertilizer Programme

The Fertilizer Recommendation Committee of the Department of Agriculture had provided the fertilizer recommendations initially to achieve a crop of 100,120 and 140 bushels per acre according to the respective Climatic Zones for the purpose of achieving the maximum harvest from the paddy cultivation. (From the year 2001 to the Maha Season 2008/2009). Nevertheless, an examination of the data obtained from the Department of Agriculture and the Hector Kobbekaduwa Agrarian Research and Training Institute revealed that the paddy harvest had not reached the expected levels. Subsequently, the fertilizer recommendation had been revised as 100 bushels per acre under the irrigation fed condition in the wet, dry and intermediate zones and a harvest of 80 bushels per acre under the rain fed conditions. Nevertheless, it had not been possible to achieve even the revised harvest and it was observed that the overall average harvest in Sri Lanka remained at 80 to 90 bushels of paddy per acre.



Source : Hector Kobbekaduwa Agrarian Research and Training Institute

According to the reports presented in this connection and the matters expressed by the Agrarian Development Officers and Farmers during field inspections and the observations made by the audit, the following reasons had impacted this issue.

i. Non-application of carbonic fertilizer that should be used with the chemical fertilizer recommendations.

- ii. The farmers not being aware of the correct extent of lands held by each owner or the failure to disclose the extent, thus resulting in the failure to use the fertilizer recommendation as specified.
- iii. Most farmers lacking the correct understanding of the variety and age of the paddy cultivated.
- iv. Inability to use the basic fertilizer at the specified time due to the delay in the supply of fertilizer. Even though the quantity of the recommended fertilizer for the achievement of the maximum harvest should be applied to the paddy land at the correct time, according to the information obtained from the Agrarian Service Centres, even after deciding on the date of commencement of Cultivation Season at the Cultivation Committee meeting, the farmers do not apply for their fertilizer recommendation until the elapse of one or two weeks after that decision and that practice results in delays in the overall fertilizer request process of the Decision of the Agriculture Production and Research Assistant. In view of the delays in requests made for fertilizer and the delays in the supply of fertilizer, the overall process of application of the basic fertilizer (Triple Super Phosphate) to the cultivation is not at the expected level.
- v. As the farmers engaged in the traditional paddy cultivation accustomed to their own systems and prefer to use Urea and Muriate of Potash only and as such Triple Super Phosphate is used only minimally.
- vi. A few of the farmers use a portion of their fertilizer entitlement to other crops such as vegetables without using the entire quantity for the paddy land.

Implications

- i. Non-achievement of the expected harvest per acre through the application of chemical fertilizer.
- ii. Due to the non-achievement of the expected harvest per acre results in the nonachievement of the maximum benefit from the fertilizer subsidy provided.
Recommendations

- i. A course of action should be introduced to test the chemical content of the soil through soil testing carried out from season to season continuously at the Agrarian Service Centre level and provide the appropriate fertilizer content by revising the fertilizer recommendation based on such tests.
- ii. Specify the ratio of carbonic fertilizer used with the chemical fertilizer and make such use compulsory.
- iii. Supply of the quantity of fertilizer for the extent of the paddy lands only after the accurate identification of the extent of paddy lands owned by each farmer.

Comments of the Institution

Department of Agrarian Development

" A series of Pilot Projects have been planned for implementation in the year 2013 in collaboration with the Hector Kobbekaduwa Agrarian Research and Training Institute of the Department of Agriculture for carrying out soil testing of paddy lands and the issue of a Soil Health Card to the farmers and the possibility of the revision of the fertilizer recommendation will be experimented by testing the soil nutrients through that process. Nevertheless, the need for the implementation of a National Programme in the future for this purpose is proposed."

Ministry of Agriculture

"Application of fertilizer has a direct impact on the harvest and in addition the climatic factors and water usage also have an impact on the harvest. The average harvest of 74 bushels per acre of paddy lands achieved during the period 2000-2005 had reported an increase up to 82 bushels or by 12 per cent during the period 2006-2011. According to the Annual Report of the Central Bank of Sri Lanka, the Annual Report of the Ministry of Finacne for the year 2012 and in the Study on the Evaluation of the Impact of the Fertilizer Subsidy, the average productivity as compared with year 2005 had increased by 9 per cent in the Maha Season 2006/2007 and 15 per cent in the Yala Season.

Even though it is recommended that the use of the Carbonic fertilizer should be made compulsory, it appears that it is difficult to implement it practically. Making the farmer community knowledgeable in taking correct decision rather than making it compulsory would be more productive."

3:7 Lack of Adequate Storage Facilities

3:7:1 According to terms and conditions 3 of the Schedule of Section 2(2) of the Fertilizer Regulation Act, No. 68 of 1988, the licence holder for the import of fertilizer should provide evidence in support of the availability of adequate warehouse facilities and storage facilities.

Nevertheless, an examination of the manner of storing of fertilizer by the importer who imports 65 per cent of fertilizer revealed that stocks of fertilizer had been stacked in the open and exposed to sun and rain This is evidenced by the following photographs.





Fertilizer stacked in the open air outside the stores of the Importer

3:7:2 **Removal of Existing Storage Facilities**

An examination of the above situation revealed that stores building of the company of 106,766 square feet with capacity for storage of 70,000 metric tonnes had to be demolished in the year 2009 due to the construction of an expressway close to the fertilizer company. Even though a sum of Rs.61 million from the Road Development Authority and Treasury Bonds valued at Rs.75 million had been received in this connection during the years 2005 and 2009, action for the construction of a building for the storage of fertilizer had not been commenced even by 18 May 2012, the date of audit.

Nevertheless, a large number of stores of the Janatha Fertilizer Enterprise under the purview of this Ministry are being rented out to private institutions. Even though the fertilizer company had made requests for stores buildings to the Ministry no action on that request had been taken even by the date of audit.

Implication

- i. Lack of a co-ordination of the activities of two Enterprises under one Ministry pursuing one objective.
- ii. Lack of effective utilization of the resources of the Enterprises for the achievement of the expected objectives.

Recommendations

- i. Effecting improvements to the stores facilities under the Janatha Fertilizer Enterprise.
- ii. Build systematic communications and co-ordination between the institutions to fulfill the requirements of subsidized fertilizer.

Comments of the Institutions

Reply not furnished

3:7:3 Maintenance of Stores Facilities at the Agrarian Services Centres Level

Even though the policies relating to the supply of fertilizer subsidy are implemented, it was observed during the course of audit that the supply or the development of the infrastructure facilities needed for the successful operation thereof had been lacking. The lack of adequate storage facilities with the Agrarian Services Centres for the storage of fertilizer in the respective districts can be cited as an example. Even though large quantities of fertilizer are in circulation in the districts, action had not been taken for providing new storage facilities or for the utilization of the stores already available. The stocks of fertilizer awaiting distribution to the farmers had been stored in unprotected stores, decayed stores and compounds of houses exposed to elements.

According to the observations made during discussions held with representatives of Farmers' Organizations and the Agricultural Research and Production Assistants and the examination of the data collected from them, it became evident that the existing storage facilities are not at all adequate for the effective implementation of the Fertilizer Subsidy Scheme and that the supply of new stores to the rural areas is essential.

Implications

- i. The expected objectives of the fertilizer subsidy are not achieved due to the inability to supply the fertilizer for paddy cultivation at the right time in the correct quantities.
- ii. Possibility of destruction or misuse of fertilizer.
- iii. Inability to take disciplinary action in the event of failure to follow the circular instructions on storage of fertilizer.

Recommendations

- i. Carry out improvements to decayed stores in the regions and carry out a survey of alternate buildings available that can be used as stores and take necessary action to use those buildings.
- ii. Encourage the farmers to make storage arrangements at the Farmers' Organization level.
- iii. Take action for the use of community halls of the Farmers' Organizations and the buildings of other societies temporarily as stores.

Comments of the Institutions

Department of Agrarian Development

"Amidst the existing financial constraints, expenditure of Rs. 11 million was incurred in the year through the provision allocated for the rehabilitation of fertilizer stores and new constructions for 14 fertilizer stores in the year 2012 in the Anuradhapura, Kurunegala, Matara, Puttalam, Hambantota, Kegalle, Matale and Galle Districts.

Provision of Rs. 14 million was made for the construction of new fertilizer stores in the year 2013 and under that 07 fertilizer stores had been constructed and two fertilizer stores had been repaired in the Monaragala, Badulla, Kurunegala, Polonnaruwa, Anuradhapura, Matale, Hambantota and Galle Districts."

3:7:4 Destruction of Stocks of Subsidized Fertilizer

It was observed during the course of audit that the agricultural and economic objectives expected from the Fertilizer Subsidy Programme had not been achieved in the following instances.

i. Stocks of subsidized fertilizer of the stores of one company had been damaged due to seepage of rain water. The particulars of the damaged fertilizer are as follows.

Store	Year	Quantity of Fertilizer	Value
		50 Kilogramme Bags	Rs.
Meetotamulla	2011	602	1,967,669
Pandulagama	2011	874	1,793,625
			3,761,294
			=======

- ii. Even though insurance indemnity for the damage caused to the stocks had been claimed, that had been rejected.
- iii. A stock of 1,500 metric tonnes of fertilizer in the main store of the other company at Hunupitiya had been damaged in the year 2011 due to inundation by floods.

Implication

The fertilizer imported with Government money had been wasted due to the lack of adequate protective arrangements for the stocks of fertilizer.

Recommendations

The National Fertilizer Secretariat should satisfy itself of the availability of adequate storage facilities with the fertilizer companies before permitting the import of fertilizer.

Comments of the Institutions

Ministry of Agriculture

"The stocks of fertilizer in the Pandulagama Store in the year 2011 had been destroyed due to the floods caused by overflowing tanks resulting from the heavy rains in the Anuradhapura District at that time. Those rains were an unusual feature caused after several years. Even though area of the store is not affected by the normal pattern of rain, this is an accidental incident and as such it could not be prevented. Even though an application was made for obtaining indemnity from the insurers, it was rejected on technical grounds.

As fertilizer was imported in excess of the requirements of the relevant season in consideration of the requirements of the ensuing season as well, fertilizer was stored in a store belonging to the Paddy Marketing Board at Meetotamulla due to the inadequacy of storage facilities for storage of fertilizer. Due to be heavy rainfall in July 2011 in the Colombo City., the outlying areas of Colombo were inundated by rain water causing damage to the stocks. Even though an application for indemnity was made to the insurer, that was rejected on technical grounds."

3:8 Water Management for Paddy Cultivation

An examination of the data on irrigation systems of the Department of Agrarian Development carried out to ascertain the extent of the effective utilization in view of the direct contribution made by the irrigation industry for the paddy cultivation in Sri Lanka revealed that 30 per cent of about 30,000 small tanks and 50 per cent of the anicuts and canals are in need of repairs and that situation had aversely affected the economical use of water.

An examination of the difference between extent of the lands that can be cultivated in the Anuradhapura, Polonnaruwa and Kurunegala Districts in which field inspections were carried out and the maximum extent cultivated in several preceding seasons (2011/2012 Maha Season, 2011 Yala Season and 2010/2011 Maha Season) revealed that the lack of water resources had been the major impact. Even though paddy had been cultivated, the destruction of cultivations due to lack of adequate water supply was observed in the field inspections carried out in the Anuradhapura, Polonnaruwa and Kurunegala Districts in the Yala Season 2012.

Even though fertilizer is supplied on subsidy basis, the impact of the lack of water for the non-achievement of self-sufficiency in rice by obtaining the maximum benefits from the lands can be observed from an examination of the rice import data of several past years.





Parched Paddy Lands due to lack of water" Polonnaruwa District

Parched Channels carrying Water to Paddy Lands" Polonnaruwa District

The Department of Agrarian Development itself had pointed out that the decrease of the capacity of tanks due to the failure to reconstruct the tanks and the floods caused due to the failure to reconstruct the tank bunds could result in the destruction of paddy cultivation. A large scale wastage of water due to the lack of proper maintenance of irrigation systems was observed.



Obstruction caused to main channels by Water Hyacinth observed at field inspections in Polonnaruwa District

Implications

The maximum benefits from the fertilizer subsidy had not been achieved in both Yala and Maha Seasons from the lack of adequate water for cultivation and damage caused to cultivation due to the drastic decrease of water capacity of tanks and inability to maintain maximum capacity during rainy season, cultivation destroyed due to breach of tank bunds, drying up of tanks in the Yala season with lesser rainfalls causing inadequacy of water for cultivation.

Recommendations

- i. Supply of all infrastructure facilities for the supply of water for paddy cultivation as and when required.
- ii. Creation of a course of action for the modernization of tanks and reservoirs in the areas under paddy cultivation.
- iii. Prevention of wastage of water by repairing the defects in canals and bunds and ensure maximum use of water from the existing water capacity.
- iv. Carry out improvements to the existing canals and bunds in creating new cultivation lands.
- v. Taking action on proper management of irrigation and rain water.

Comments of the Institutions

Replies not furnished

3.9 **Increase of Paddy Production and Import of Rice**

A primary objective of the Fertilizer Subsidy Programme is the achievement of selfsufficiency in rice in Sri Lanka. The further encouragement of farmers for the paddy cultivation through the supply of fertilizer at a subsidized price under the Subsidy Programme and the increase of the overall production of rice was expected therefrom. An examination of this matter revealed the following.

3:9:1 Recent Trends in Paddy Cultivation

Since the implementation of the Fertilizer Subsidy Programme and taking the year 2005 as the base year, the following table and the graph indicate that a considerable progress in the overall rice production in the county has been reported.

The production of 3,246 metric tonnes of paddy in the year 2005 had increased by 32.5 per cent to 4,301 metric tonnes in the year 2010.



Source : Hector Kobbekaduwa Agrarian Research and Training Institute

3:9:2 Foreign Exchange for Import of Rice

Even though an increase in the production of rice in the country was observed, the objective of retaining in the country the foreign exchange flowing out of the country for import of rice had not been achieved.

It was observed that the quantity of rice imported from the year 2005 and the annual expenditure incurred thereon had been gradually increasing. The quantity of rice imports and the cost of imports in year 2010 as compared with the year 2005 had increased by 143 per cent and 334 per cent respectively. Details appear below.

	Quantity of Rice Imports	Annual Cost		
	Kilogrammes	 Rs.'000		
2005	51,728,643	1,554,201		
2006	11,516,400	576,509		
2007	88,002,848	4,261,099		
2008	84,044,529	4,726,775		
2009	52,299,504	2,615,681		
2010	125,775,929	6,741,365		

Source : Hector Kobbekaduwa Agrarian Research and Training Institute

Impliction

- (i) Non-achievement of the expected objectives of the Fertilizer Subsidy.
- (ii) Existence of a gradual increasing trend in the foreign exchange spent on the import of rice.
- (iii) Decrease in the Foreign Exchange Reserves of the country.

Recommendations

- I. Improvement of the other infrastructure facilities, required, (Irrigation systems, stores facilities, fair guaranteed price for paddy taking into account the cost of paddy cultivation)to encourage farmers to engage in paddy cultivation in order to achieve a harvest adequate to meet the quantity of rice for the internal consumption.
- II. Identify the new varieties of rice with a high demand in the local market and encourage the farmers to cultivate such varieties.

Comments of the Institutions

Ministry of Agriculture

"Rice imports have increased due to the increasing demand for the imported Bhasmathi rice. The expenditure on the import of rice has increased due to the high prices payable in the World Market for that rice. A cost of Rs.30.05 had been incurred for the import of a kilogrammes in the year 2005 and that had increased by 78 per cent to Rs.53.60 in the year 2010."

"A study on the Impact of the Fertilizer Subsidy in minimizing the Poverty of the Rural Community carried out by the University of Rajarata has pointed out that the indebtedness of the farmers had been reduced due to the Fertilizer Subsidy. In view of the elimination of credit purchase of fertilizer resulting from the Fertilizer Subsidy, the sale of paddy at the threshing floor itself had been reduced leading storage and sale and the study pointed out that it had resulted in the strengthening of bargaining power. According to the study, the sale of paddy at the threshing floor itself had decreased from 34 per cent to 2 per cent and that the storage of paddy had increased from 20 per cent to 64 per cent."

3:9:3 Impact on Income Status of Farmers

Even though the expectation of the supply of Fertilizer Subsidy is the improvement of farmer economy by increasing the paddy crop through the Fertilizer Subsidy and upgrading the community life, problems such as the inability to use fertilizer on time for the next season due to the inability to cover the investment expenditure resulting from the decrease of the income of farmers due to difficulties faced in the sale of paddy. As an example, this situation had caused a severe impact in the Polonnaruwa District in the year 2012 and the economy of the farmers in areas such as Manampitiya and Welikanda had taken a downturn due to the difficulties in the sale of red-long and red-short varieties of paddy.

Implications

- (i) Decrease in the paddy production due to the adverse impact of the deterioration of income on the input and as such non-achievement of the expected objectives of the Fertilizer Subsidy.
- (ii) Increasing indebtedness of farmers.
- (iii) Farmers moving away from paddy cultivation.
- (iv) Inadequacy of Government intervention for purchase of paddy.

Recommendations

- (i) Fixing a guaranteed price for paddy and maintained it continuously.
- (ii) Encouraging farmers to cultivate paddy with a demand in the market.
- (iii) Government intervention to provide facilities to enable farmers to sell paddy at the guaranteed price easily when required.
- (iv) It is essential to make the paddy purchase mechanism of the Paddy Marketing Board systematic and formal.

Response of the Institution

Replies not given.

3:10 Cost of Paddy Production

Reduction of cost of production in the paddy cultivation sector had been one of the primary objectives of the Fertilizer Subsidy. Nevertheless, a study of the data on the cost of paddy production in each season per acre under different systems of water supply in the three districts during the years 2005 to 2010 selected as the sample revealed that even under the Fertilizer Subsidy the cost of production of paddy per acre had increased gradually. Such situation was observed as contrary to the primary objective of the Supply of Fertilizer Subsidy.

Cost of Paddy Cultivation per Acre (Irrigation Fed) (Cost per Acre in Rupees)

	•	-	-	· · · —		-	
	Kuru	<u>Kurunegala</u>		<u>Anuradhapura</u>		<u>Polonnaruwa</u>	
	Maha	Yala	Maha	Yala	Maha	Yala	
2005	21,453	21,849	21,568	22,864	22,954	24,190	
2006	21,919	23,626	22,535	23,888	22,175	23,491	
2007	22,766	26,019	25,929	24,351	22,989	25,455	
2008	26,450	29,134	28,151	30,179	28,566	29,997	
2009	30,419	30,988	33,495	33,180	31,295	34,737	
2010	33,333	34,397	34,644	35,750	35,022	35,198	

Source : Hector Kobbekaduwa Agrarian Research and Training Institute

The cost of cultivation per acre in the Kurunegala, Anuradhapura and Polonnaruwa Districts where irrigation fed cultivation is done, taken separately under Maha and Yala Seasons, the following graph clearly indicates that the average annual cost of cultivation in the three districts had increased during the years 2005 to 2010.



According to the above data, the average cost of irrigation fed paddy cultivation in the Kurunegala, Anuradhapura and Polonnaruwa Districts as compared with the year 2005, had increased by 56 per cent, 58 per cent and 49 per cent respectively in the year 2010 and due to the non-increase of price of paddy in relation thereto had impacted on the increase of poverty and the decrease of their living standards.

Cost of Paddy Cultivation per Acre (Irrigation Fed) Kurunegala District (Cost per Acre Rupees)

	Maha Season	Yala Season	Percentage Increase of Cost Compared with the Year 2005		
			Maha Season	Yala Season	
2005	18,662	20,851			
2006	21,190	21,342	13.55	2.35	
2007	20,453	23,518	9.6	12.79	
2008	26,927	28,371	44.29	36.07	
2009	30,214	31,716	61.9	52.11	
2010	31,819	32,849	70.5	57.54	
Source · Hector Kobbekaduwa Agrarian Research and Training Institute					

Source : Hector Kobbekaduwa Agrarian Research and Training Institute

According to the above data, the cost of paddy cultivation per acre in the Kurunegala District where irrigation fed cultivation is largely done, the cost of paddy cultivation per acre in the Maha and Yala Seasons as compared with the year 2005 had increased by 70 per cent and 57 per cent respectively in the year 2010.

Implication

Even though the primary objective of the supply of Fertilizer Subsidy had been minimization of cost of production in the paddy cultivation sector, the gradual increase of the cost of production indicates that the other costs (excluding fertilizer) had increased. The end result of it is the decrease of new entrants to the sector and the moving away of the existing farmers from the sector.

Recommendations

- (i) Paying attention to a methodology which could provide facilities for the other basic requirements of paddy cultivation such as weedicides, insecticides, ploughing, harvesting, etc. in addition to the Fertilizer Subsidy.
- (ii) Take action to minimize the adverse impacts arising from lack of an adequate increase in the price of paddy as compared with the cost of production and the frequent price fluctuations. Fixing and systematic maintenance of a fair guaranteed price for paddy can be cited as an example.

Response of the Institutions

Ministry of Agriculture

"Paddy Cultivation is a labour-intensive agri-business. The overall expenditure on paddy cultivation increases due to the heavy expenditure on labour in Sri Lanka. As such the objective of the Ministry of Agriculture is the introduction of mechanized farming for paddy cultivation. Discussions are in progress for implementation of programmes for mechanization of paddy cultivation in the year 2015.

3:11 **Productivity of Fertilizer Subsidy**

According to the circulars issued by the Secretary to the Ministry of Agrarian Services and Wildlife in connection with the distribution of the Subsidized Fertilizer in respect of each cultivation season included instructions to the District Co-ordination Committees to take action to carry out an evaluation of the impact of the distribution of fertilizer under the Subsidy Scheme to the crop productivity, living standards of the farmers and the national economy within one month after the conclusion of the each cultivation seasons and forward their observations.

The total expenditure incurred on the import of subsidized fertilizer to Sri Lanka from the commencement of the Fertilizer Subsidy in the year 2005 to the year 2010 amounted to Rs.113,790,916,415. The fact that certain District Co-ordiantion Committees had not taken action to evaluate the impact on the living conditions of the farmers and the national economy is evident from the failure to hold meetings of those Committees or holding meetings, as observed in audit; (after the expiry of the period of one month specified in the circular) without carrying out a formal evaluation. The overall position is that a proper evaluation of the impact of the Fertilizer Subsidy on the crop productivity of the national economy and the farming community had not been carried out.

Implications

- (i) The parties concerned with the import and distribution of subsidized fertilizer had not performed their duties as expected of them.
- (ii) The objectives of the Fertilizer Subsidy Programme have not been achieved as expected.

Recommendations

- (i) The District Co-ordinating Committees should evaluate the productivity of fertilizer distribution process at the end of each seasons in accordance with circular instructions and report results to the parties concerned.
- (ii) On the receipt of the above reports, the parties responsible should take action to rectify deviation from objectives.

Comments of the Institutions

Reply not furnished

3:12 **Recovery of Acreage Tax**

A reconciliation of the targets of recovery of Acreage Tax with the actuals to ascertain the progress of recovery during the years 2007 to 2010 revealed that the actual progress had been at low percentages.

Year	Annual Targets	Recoveries	Percentage
	Rs.	Rs.	
2007	30,473,419	10,570,981	35
2008	40,526,425	29,146,977	72
2009	44,133,317	11,354,553	26
2010	55,658,952	37,644,794	67

Source : Department of Agrarian Development

The annual target for the year 2010 had been computed with the arrears of preceding years and as the recoveries had been shown together with the arrears of preceding years recovered, the percentage of recoveries in respect of the year is incorrect. It was observed in audit that the correct data on the annual targets of acreage tax and the recoveries thereof for the year 2010 of certain districts had not been obtained. A comparison of the annual targets of recovery of acreage tax with the percentages of recovery indicated that the recoveries in the districts with higher cultivation of paddy had been at a low level as shown below.

District	<u>2007</u>		<u>2008</u>		<u>2009</u>	
	Annual	Recovery	Annual	Recovery	Annual	Recovery
	Target	Percentage	Target	Percentage	Target	Percentage
	Rs.		Rs.		Rs.	
Hambantota	1,524,554	8	2,042,235	33	3,115,918	2
Kurunegala	2,927,551	27	7,839,621	99	9,942,462	19
Anuradhapura	3,521,331	41	4,489,422	73	4,734,621	21
Polonnaruwa	2,409,652	42	2,409,652	67	2,472,190	15
Ampara	2,959,396	5	3,969,675	35	3,199,410	8

As the extent of lands cultivated with paddy has increased due to the fertilizer subsidy provided, the percentage of acreage tax recoverable should increase by a very high percentage. But the percentage of recovery of acreage tax had been at a low level.

Implication

 Annual non-recovery of Acreage Tax receivable by the Government results in the loss of revenue which should be credited to the State Revenue. (ii) The duties of the Agricultural Research and Production Assistants not being performed effectively.

Recommendation

- Make the payment of the Acreage Tax on the extent of land (According to the Register of Paddy Lands) owned by the farmers compulsory for the entitlement for fertilizer subsidy.
- (ii) Revision of the Register of Paddy Lands for the accurate computation of the collection of new cases of Acreage Tax equal to the extent of fallow paddy lands brought into cultivation.
- (iii) Updating of the database of the Department of Agrarian Development to enable the timely capture of Acreage Tax targets and progress of recovery.

Comments of the Institution

Department of Agrarian Development

"According to the Agrarian Development Act, the Acreage Tax recovered is considered as an income of the Agrarian Services Committees and that is deposited in the accounts of the respective Committees and utilized for the employees salaries and operations of the Centers.

According to the above Act, the Acreage Tax is recovered from the owners of agricultural lands as well as from those who enjoy the tenure of lands and as such it is not a condition to determine the land ownership. Taking into account the payment of Acreage Tax as a condition for supply of fertilizer subsidy has its own policy problems.

As the Acreage Tax is recoverable by 31 March of each year in terms of the Agrarian Development Act, the Field Officers are made aware of it regularly. Specially "Acreage Tax Week "pragrammes are held for the recovery of Acreage Tax. Such Programmes were held during this year and the targets for Acreage Tax had been prepared by taking into account the land reservations, and large

extents of lands such as those of Estate Companies. But, due to the decisions taken in accordance with various Acts and from time to time, problems exist in the recovery of the tax from those agricultural lands. Even though a large improvement is not shown between the targets and the tax recovered, the recovery of Acreage Tax in the year 2009 relating to the Kurunegala, Anuradhapura and Polonnaruwa Districts, referred to in the report had increased as at 31 September 2013. Departmental Data show increase from 19 per cent in the year 2009 to 75 per cent in the Kurunegala District, 21 per cent to 50 per cent in the Anuradhapura

4. Conclusion

The objective of the National Fertilizer Programme had been the supply of fertilizer to the farmers at a lesser price with a subsidy for the maintenance of the agricultural economy of Sri Lanka sustainably and continuously on a better footing. Despite the different shortcomings experienced, the overall paddy production sphere has achieved a certain progress. The matters relating to further improvement or rectification discussed at lenth in the report are given below.

Accurate Estimation of Fertilizer Requirement

Even though the National Fertilizer Secretariat had brought to the notice of the District Fertilizer Co-ordination Committees to furnish the purchase requirement of the respective Districts before the specified date in order to estimate the fertilizer requirement for each cultivation season accurately, instances failure to inform the fertilizer requirement before the specified date were observed. The District Fertilizer Co-ordinating Committees take into account the fertilizer requirements of the Agrarian Services Centers for estimating the Fertilizer requirement of the Districts. But any evidence of the Agrarian Service Centers following a proper methodology for estimating their fertilizer requirements was not observed. That was observed as an obstruction for the accurate forecast of the fertilizer requirement of the Country .As such an overestimation of fertilizer requirement of the country in all cultivation seasons was observed.

According to Section 53 of the Agrarian Development Act,No.46 of 2000 maintenance of the Register of Paddy Lands accurately would help in the correct identification of the correct extent of the paddy lands and accurate estimation of the fertilizer requirement in accordance therewith.

Achievement of the expected production through the Fertilizer Subsidy Programme.

The production expected by the Fertilizer Recommendation Committee of the Department of Agriculture under the Fertilizer Subsidy Programme through the different methodologies of supply of water in the different climatic zones had not been achieved during the preceding period. In such instances the fertilizer recommendations of the three kinds of fertilizer should be revised.But there were instances of revision of the Paddy harvest. This requries action to be taken on matters having an impact on the decrease in the harvest, such as the decrease in the use of carbonic fertilizer and weaknesses in the fertilizer distribution process and the water management.

Improvement of the Extent of Paddy Lands Cultivated Under the Fertilizer Subsidy Programme

One of the objectives of the Fertilizer Subsidy Programme is the improvement of the extent of lands that can be cultivated with paddy.As compared with the seasons of the preceding years the extent of lands cultivated in the years 2006 and 2007 had decreased. Nevertheless an improving trend but not regular , was indicated from the year 2008. But a satisfactory improvement of paddy lands cultivated out of the extent of the cultivable lands available was not observed. As such a course of action should be taken to improve the situation.

Non-decrease of Cost of Rice Imports as expected

One of the objectives Fertilizer Subsidy Programme was the saving of foreign exchange from the overall increase of rice production through an improvement in the trend of farmers resorting to paddy cultivation .Nevertheless the quantity of rice imported and cost of imports from the year 2005 had gradually increased and this trend should need attention.

Non-decrease Cost of Paddy Cultivation as expected

Even though one of the primary objectives is minimizing the cost of production in the paddy cultivation sector, the cost of production in each season in the selected districts where paddy cultivation is extensive had gradually increased. That situation is contrary to that primary objective. That increase had resulted from the increase of the cost of other inputs.

Irrigation Management

According to the information of the selected areas of paddy cultivation obtained in audit, timely reconstruction of most of the Irrigation systems had not been carried out. This had resulted in the large scale decrease of the capacity, inability to store water during the monsoon rains of the Maha Season and the possibility of cultivation destroyed due to breaches of the systems due to heavy rains. In view of this situation action should be taken to avoid damage to cultivation, storage of maximum capacity of water to prevent water shortages in the Yala Season as well as damage to cultivation from water in the Maha Season.

Procurement of Subsidized Fertilizer

In view of the importance of the standards of the subsidized fertilizer imported, the procurement should be done by paying greater attention to the standards. Nevertheless the information relating thereto called for by audit from the Ministry of Agrarian Services and Wildlife had not been furnished even by 31 July 2013. As such it was not possible to make observations whether the procurement procedure had been followed as prescribed .But in view of the other matters observed in this connection such as the regular increase of the liabilities payable by the Government to the two fertilizer companies, delays in the release of money for the letters of credit, liability to pay large sums of money as interest and the additional expenditure arising from the procurement problems referred for arbitration, greater attention should be paid to minimize such incidents.

Adequate Storage Facilities

Even though adequate storage facilities should be available with the fertilizer companies and the Agrarian Services Centres and the Agricultural Research and Divisional levels, adequate Production Assistant facilities for storage have not been established. This had posed problems in the storage of fertilizer well as the destruction of fertilizer in certain instances. collected as Improvement of storage facilities also needs greater attention.

Use of Carbonic Fertilizer

Plans had been made at the inception of the programme for the implementation and maintenance of a Programme for Expansion of the use of Carbonic Fertilizer concurrently with the Chemical Fertilizer Subsidy Programme and the objective of that was to develop the agricultural industry in an environment friendly manner. As the Carbonic Fertilizer Project had not been implemented as expected, the use of chemical fertilizer could not be minimized. As such adequate attention should be paid to the problems relating to environment and health arising in the long-term as well as large outflows of foreign exchange for the import of fertilizer.

The recommendations for the prevention of the above weaknesses observed in the audit conducted on sample basis are given below. In addition the comments, observations and other matters of the institutions connected to the programme should also be taken into account in the operation of the programme.

Recommendations

As the primary reason for the inability to compute the fertilizer requirement accurately is due to the unavailability of an updated data base of paddy lands an accelerated course of action should be introduced for the on site identification of paddy lands with the assistance of the farmers at the Agrarian Service Centre Level, survey and determine the correct extent.

- Carrying out soil tests covering large extents of paddy lands for chemical content, examination of other criteria needed for paddy cultivation and revise the current fertilizer recommendation where necessary.
- The need for a proper course of action for the modernization of tanks and reservoirs in the areas of paddy cultivation to ensure the success of the Fertilizer Subsidy Programme is a noticeable feature in this connection. In addition, prevention of water wastage due to defects in canals and bunds as well as improvements to canals and bunds in the areas where new lands for cultivation are opened are essential .As such, adequate attention should be paid for the rain water management and the improvement of the irrigation systems needed for irrigation and rain water management.
- > Encouraging the use of carbonic fertilizer for increasing the productivity in an environment friendly manner and the expansion of the production of carbonic fertilizer are compulsory components of the duties of the Agricultural Research and Production Assistants. The production of carbonic fertilizer should be made a primary requirement for the entitlement for obtaining the Fertilizer Subsidy and recommendation of subsidized chemical fertilizer should be based on that condition. As such, the quantity of Carbonic Fertilizer to be used with chemical fertilizer should be determined and make the farmers aware of such use with a view to gradually reducing the use of chemical fertilizer.
- The above deficiencies observed were due to the inadequacy of the supervision and intervention by the Agricultural Research and Production Assistants as well as the officers in the Senior levels. As such adequate attention should be paid for filling vacancies and providing them adequate facilities needed.

> Attention should be paid to the import of fertilizer conforming to the required standards in order to prevent any damage to the climate and the quality of the soil. Assistance of the Research Institutions should be obtained to ascertain the veracity of the public opinion that the use of chemical fertilizer had caused adverse impacts and the prompt implementation of the recommendations of such institutions.

Attention should be paid to the above matters relating to this pragramme described at length in order to make it a success.