Date: 24th November, 2014

Last date for submission of views/ comments/ suggestions extended upto 10th December 2014

On

EXPOSURE DRAFT Guidance Note on Internal Audit of Plantation Industry

The last date to submit the views/ comments/ suggestions has been further extended from 23rd November 2014 to 10th December 2014. Please submit the views/ comments/ suggestions preferably by email at <u>pd.budhiraja@icmai.in</u> or <u>pd@icmai.in</u> latest by 10th December, 2014.

The comments/ suggestions on any aspect of this Exposure Draft would be most helpful if they <u>indicate</u> the specific paragraph or group of paragraphs including page number to which they relate, also contain a clear rationale and, where applicable, provide a suggestion for alternative wording.

Comments should be addressed to:

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Date: 24th October, 2014

EXPOSURE DRAFT Guidance Note on Internal Audit of Plantation Industry

The following is the Exposure Draft of Guidance Note on Internal Audit of Plantation Industry issued by the "Professional Development Committee" of the Institute of Cost Accountants of India, for comments and suggestions. The comments/ suggestions on any aspect of this Exposure Draft would be most helpful if they indicate the specific paragraph or group of paragraphs including page number to which they relate, also contain a clear rationale and, where applicable, provide a suggestion for alternative wording.

The proposed Guidance Note may be modified in light of comments/ suggestions received before the same is being issued as Guidance Note on Internal Audit of Plantation Industry by the Institute.

Please submit your views/ comments/ suggestions preferably by email at <u>pd.budhiraja@icmai.in</u> and <u>pd@icmai.in</u> latest by **November 14, 2014.**

Comments should be addressed to:

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Note:

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EXPOSURE DRAFT

GUIDANCE NOTE ON INTERNAL AUDIT OF

PLANTATION INDUSTRY



PROFESSIONAL DEVELOPMENT COMMITTEE



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Chapter 1 Introduction to Internal Audit

Introduction

Shocking revelations of failures of the Management of renowned enterprises across the Globe to run the enterprise in a manner that would serve the interest of the stake-holders shook the business world time and again over the past decade. More importantly, many of these enterprises were the ones which once struck the imagination of the business world through their phenomenal growth, riding on their aggressive policies. Investigation for the causes of the failures brought to the fore certain aspects which were highlighted as the primary causes of the failure, viz.

- 1. Aggressive business policies, which ignored the regular policies and practices of the entity and which could not be sustained
- 2. Lack of financial discipline and
- 3. Lack of transparency in the functioning of the Management which prevented timely detection of the early signals of failure that if known and corrective actions taken, could prevent a complete debacle.

Thus, the need for improved Corporate Governance which would be in line with the principles of prudence, sustainability and transparency, were felt necessary. The initial emphasis on Corporate Governance subsequently gave way to Enterprise Governance with more focus on performance analysis rather than mere compliance.

Now, even the best business models backed by the best Corporate Governance practices need perpetual monitoring and critical appraisal of its activities, which is accomplished through "Internal auditing".

While earlier internal audit focused on the arithmetical accuracy of the accounting records, in finding out whether there is any material misstatement and safeguarding the assets of the entity, with increased emphasis on 'Enterprise Governance', internal audit additionally encompasses the efficacy of the internal control system to churn-out the correct, relevant and timely information, effectiveness of the decisions taken towards implementation of the policies and plans, adherence to the statutes, regulations and norms, optimum utilization of the resources and the evaluation of perceived risks and the effectiveness of the internal control system to identify and mitigate these risks.

Failure to provide good governance and ensure financial discipline is not limited to the private or public enterprises. Even the Indian Government has over the years failed to control its fiscal deficit and the major cause of which can be assigned to failure for the government to control its non-plan expenditure and lack of prudent and sustainable models for successful execution of projects under the Five-year plans.

Any well-organized enterprise, whatever may be its objective, has different types of functions which are assigned to different departments and each type of function involves several activities. Internal audit depending on its Scope and Terms of Engagement can and should ideally encompass all the functions of an Enterprise. Thus, Internal Audit generally is a multi-disciplinary audit which might require the services of professionals from various disciplines depending on the nature of the activities of the Enterprise.

An internal audit does not ensure discovery of all material misstatements, deliberate



misrepresentation by the management or fraud committed because the audit does not involve exhaustive examination of all transactions and activities and is based on selective verification, the nature and extent of which depends on the judgment of the auditor of what would constitute sufficient appropriate audit evidence.

The extent of verification of individual transactions depends primarily upon the auditor's appraisal of the internal control system, adequacy of its design and structure and the effectiveness of its functioning. If the auditor is satisfied with this appraisal then he may decide on 'auditing in depth', selectively; using 'statistical sampling techniques' for selection.

'Auditing in depth' involves tracing a transaction through its various stages from origin to conclusion, examining the supporting records at each stage and ascertaining whether all the requirements laid down in the system of internal check have been complied with.

On several occasions the auditor has to exercise his judgment on 'Materiality'. 'Materiality' in audit depends on the size and nature of the item and is judged in the particular circumstances of its misstatement. Thus while the amount of an item is significant in judging the concept of 'Materiality' (e.g. the amount of an expenditure compared to the total expenditure or the value of an item of fixed asset compared to the total value of fixed assets), whether it could influence the economic decisions of the user of the information, needs to be judged as well.

Defining Internal Audit

Internal Audit can be defined as "an independent, objective assurance and consulting activity which involves a continuous and critical appraisal of the functioning of an entity designed to add value and improve an organization's internal control system, risk assessment and management mechanism and overall governance mechanism".

The definition brings to the fore the following points:

1. Independent and objective assurance.

The internal audit activities should be free from any interference and the auditor should not be influenced by anything that might hamper his objectivity thus ensuring that the findings of the audit are free from any bias. Therefore, the auditor needs to be insulated from the auditee. The appointment of the internal auditor and determination of the internal audit is made by the Audit Committee working under the Board of Directors. The auditor should instantly report any occurrence of his authority and rights as an auditor being curtailed to an extent which would prevent him from carrying out his duties.

2. Continuous and critical appraisal of the functioning.

The internal audit is a perpetual exercise and involves critical assessment of the activities of the entity. For critical appraisal the auditor needs to gather sufficient, relevant information of the organizational structure, statutory and regulatory requirements, policy, plans, practices and procedures of the entity along with live information about how the entity carried out its activities in adherence with the organizational, statutory and regulatory requirements.

3. To improve the effectiveness of the risk management, control and governance process.

The primary objective of the internal audit exercise is to ascertain the scope for continual improvement in the operations of the entity by assessing the shortcomings and thereby ensuring value addition. Improvement can be achieved in the internal control system, the inbuilt system of identification, assessment and mitigation of the risks and overall corporate governance. The



auditor's assessment of the existing internal control system and risk management framework brings to the fore the adequacy of the existing framework and auditor while pointing out the lapses or shortcomings in the existing framework, is required to give suggestions for its improvement whereby the entity is fortified to maximize value to its stakeholders.

Necessity of Internal Audit

The emergence of the corporate governance culture has witnessed paradigm shift in the way today's companies operate. Organizations of today are more system dependent than people dependent. It is necessary that the systems are robust and flexible enough for the organizations to be responsive and effective. Hence, today's audit focus is more on whether the systems are performing than on whether people are performing. The audit function has changed to reflect this phenomenon over time.

During the 20th century, the necessity of internalizing the audit function was felt to tackle the issues related to non-compliance or non-adherence to the internal operating procedures. It was essential to observe whether the operating processes and procedures in the organization are efficient and effective.

In the current parlance, the need for the internal audit has become more comprehensive and has definitely scoped beyond mere compliance. The organizations of today look at the internal audit function to provide the assurance on the following aspects of the business:

- To comment on the accuracy and reliability of the financial and other information generated within the organization
- To assess and suggest whether the internal policies & procedures and the external laws are properly complied with
- To identify and assess the risks associated with the assets and comment whether they are providing a fair return to the company
- To critically evaluate whether the operational resources are used efficiently and economically

It is necessary for every company to continuously ensure authenticity and reliability of data generated and used for decision making and also to avoid duplication of data. It is necessary to verify the source, the quantum and the reliability of all records. The Internal Audit function will primarily concentrate on the system for collection, collation and analysis of data to go into final cost compilation and decision making. The main objective of Internal Audit of Accounts is, to ensure implementation of Control and continuous monitoring of systems being followed.

When Internal Audit is carried out for the first time, the ground rule for Internal Audit needs to be laid down, inter alia, including;

- The Internal Audit will primarily concentrate on flow of data and justification of basis instead of vouching.
- The materiality of cost and product under consideration would always be borne in mind during Internal Audit process.
- Objectivity in approach would be a consistent feature in Internal Audit.
- Main thrust would always be on deviations and significance of deviations with impact of the same on the performance of the organization.



As the Internal audit cycle stabilizes, it will help companies in the following areas:

1. Assess Compliance

The organization needs to adhere to rules, regulations, laws, codes of practice, guidelines and principles as they apply individually and collectively to all parts. The Internal Audit cycle periodically checks such compliances and reviews their adequacy.

2. Monitoring Controls

The Internal Audit function must clearly understand the quality and risk management philosophy of the organization before evaluating or reporting on the efficiency and effectiveness of the implementation of management policies.

3. Analyze Operational Performance

Internal Audit function works closely with lower and middle level managers to review daily operations then report their findings. The strategic objectives of the organization play a significant role in understanding how the operations of any given part of the organization fit into the macro level picture.

4. Evaluation on Risk based approach

Internal Audit function identifies key accomplishments and relevant risk factors while evaluating their significance. Any important change in business, economic, political or social conditions impact the way the internal audit function must assess risk. The role of internal auditing has changed from being a reactive and post mortem form to a more proactive and risk based approach. This enables the internal auditor to anticipate possible future threats and opportunities while simultaneously identifying current concerns and providing their preventives.

The increased interaction between the evolving internal audit function and the management is an important area for organizations to focus on and develop for both short and long term benefits. Once risk factors are identified by the management based on data generated from Internal Audit, it is utmost necessary to assess the quantum and seriousness of risk. For example, various Companies started manufacturing in Hilly States like Himachal Pradesh, Uttarakhand, and Jammu & Kashmir and of late in Sikkim and North Indian states. These units will enjoy benefit of exemption from Excise Duty, VAT and Income Tax. Further, past experience had shown that the incentives offered can get diluted half the way causing losses and some times, viability of the new unit. Under such, circumstances, the function of Internal Audit has to be proactive instead of reactive. The Internal Audit should go beyond the records available within the Company.

Objectives and Principles of Internal Audit

Internal audit primarily serves the following objectives:

- 1. Reviewing compliance with
 - (a) The policies and plans of the entity being audited
 - (b) The relevant statutory and regulatory requirements
 - (c) The internal and external norms, guidelines, financial and cost accounting standards and procedures
- 2. Ascertaining to what extent the existing internal control system is being adhered to, assessing the efficacy of the internal control system and suggesting improvement in the



The Institute of Cost Accountants of India internal control system.

- 3. Reviewing the management information system to ascertain the adequacy, relevance, reliability and timeliness of the system and security of the information flowing through the system.
- 4. Assessment of the risks confronting the entity and the effectiveness of the risk management system to mitigate the risk and suggesting means for the improvement of the system. The auditor may also identify risks and suggest ways to mitigate the same.
- 5. Ensuring optimum utilization of the resources of the entity which include both tangible resources and intangible resource like time.
- 6. Providing a reasonable assurance that the financial statements and the cost statements are free from material misstatement
- 7. Safeguarding the assets of the entity.
- 8. Timely identification of a liability of the entity, including contingent liability.

Basic Principles

Proper conduct of the internal audit requires that the following principles be adhered to:

- 1. Independence of the auditor is a primary requirement for any audit which aims at ensuring that the outcome of the audit is not prejudiced. While there have been serious efforts to ensure "independence" by laying down in the Indian Companies Act, certain relationships between the auditor and the auditee, existence of which will deter a person from being the auditor, these cannot be the only test for lack of independence of the auditor. Accordingly it is more important for the auditor to act professionally, maintaining the highest levels of ethics and competence and not to give in to any interference in performing his duties. The auditor should refrain from getting himself involved in any activity which might be construed as affecting his impartial attitude or objectivity. He should also not judge an activity in which he is involved.
- 2. The internal auditor should be professionally competent and exercise care, diligence and skill necessary for discharging his responsibilities, the extent of which depends on the scope of the assignment and auditor's assessment of the environment in which he is discharging his duties. Audit environment is determined by the nature of the organization, its internal control system and the complexities of its activities.
- **3.** The internal auditor should ensure confidentiality of the information received by him in the course of the audit. Unless he is otherwise required by any legal, regulatory or professional pronouncement, he shall not divulge any information without the express consent of the management.
- 4. The internal auditor is primarily responsible for expressing his opinion on the areas subjected to audit and therefore he has to take sufficient care to be satisfied that he can adequately rely on the work performed by other professionals/experts, before he uses the work done by others in forming his opinion. Similarly, if he delegates any portion of the audit-work to his assistants he should carefully supervise and review the work.



- 5. Like any other audit, documentation is very important in internal audit as it provides evidence of the audit having been conducted in accordance with the applicable standards and substantiate that his findings are based on sufficient appropriate evidence which forms the basis of his opinion. It also helps in current and future planning of the audit-work, supervision and review of the audit functions.
- **6.** Effective and timely conduct of any activity depends largely on the efficiency of the planning which precedes the performance of the activity. Internal audit is not an exception. It is imperative for the auditor to carefully plan his work which shall primarily focus on the selection of skilled personnel in accordance with the degree of complexity and materiality involved extent of work to be done for obtaining sufficient and appropriate evidence and the time frame for completion of each activity. The planning process shall start with understanding the legal and regulatory framework within which the entity operates, the hierarchical structure of the organization, the organizational policy and plans, the activities and the processes carried out, the design and efficacy of the financial and cost accounting systems, internal control system and risk management system and above all the terms of engagement. Like every other plan, internal audit plan needs to be reviewed and altered from time to time to meet the changing circumstances.
- 7. The final output of the internal audit is the audit report which shall be carefully drafted to ensure lucid communication of the findings of the audit relating primarily to the shortcomings of the internal control system, risk management system and the governance processes and the measures required for correction and improvement. The audit report shall also highlight on other issues which in the opinion of the auditor should be brought to the notice of the management. A discovery of fraud or misappropriation of assets should be brought to the notice of the management instantly without waiting for the delivery of the formal audit report.

Internal Audit Strategy and Approaches

There are several different approaches to Internal Audit. International best practice suggests that systems audit is the most effective way that Internal Audit can add value to an organization. However, it is considered necessary for Internal Audit to complement systems audit with a preaudit approach. If a pre- audit approach is adopted the Head of Internal Audit, the Audit Committee and the CFO/CEO should discuss the extent that this is necessary. They should also consider suitable means of reducing the proportion of time that Internal Auditors spend on preaudit work.

The systems approach to Internal Audit seeks to assess and improve the effectiveness of the organization's internal control system.

The prime purpose of a systems Audit should be to evaluate the extent to which the system may be relied upon to ensure that the objectives of the system are met.

Where internal controls are not adequate and reliable Internal Audit should make practical recommendations to ensure that these controls are improved.

Internal Audit evidence should be adequate to meet the objectives of Audit assignments.



Internal Auditors should be satisfied with the nature, adequacy and relevance of Audit evidence before placing reliance on that evidence. Information should be collected analyzed and documented by the use of appropriate Audit techniques.

The production of Audit evidence should be supervised and reviewed by the Head of Internal Audit. To meet an acceptable standard the evidence should be sufficiently adequate and convincing to the extent that a prudent, informed person would be able to appreciate how the Auditor's conclusions were reached.

Internal Audit may also complement its systems approach with other techniques, for example:

- Performance auditing;
- Control self assessment;
- Advice and assistance on control issues;
- Helping with risk management.

Conclusions are the Internal Auditor's evaluations of the effects of the findings on the particular system reviewed. They should:

- Put the findings in perspective based on the overall implications and significance of the weaknesses identified;
- Identify the extent to which the system's control objectives are being achieved and the degree to which the internal control systems should ensure that the goals and objectives of the organization are accomplished efficiently.

Management should be required to respond in writing to each Internal Audit report.

Management and Internal Audit should agree officer responsibility and target dates for implementation of agreed recommendations. The responsibility for final editing of Audit reports should remain with the Head of Internal Audit who should always retain the right to issue reports without further editing.

Follow-up activity is the process by which Internal Audit confirms that agreed recommendations have been implemented by line managers. Internal Audit should periodically follow up Audit reports to review and test the implementation of agreed Internal Audit recommendations.

The Head of the Internal Audit should submit to the CFO/CEO and Audit Committee, at agreed intervals, a report of Internal Audit activity and results. The report should compare actual Internal Audit activity against the annual Internal Audit plan and should clearly indicate the extent to which the total Internal Audit needs of the public sector organization have been met.

In the annual Internal Audit report the Head of the Internal Audit should give a formal opinion to the CFO/CEO and Audit Committee on the extent to which reliance can be placed on the organization's internal control system. The attention of the CFO/CEO and Audit Committee should be drawn to any major Internal Audit findings where action appears to be necessary but has not been undertaken.

Terms of engagement of Internal Auditor

Unlike a statutory audit where the scope of the audit and the authority and responsibility of the auditor is guided by the statute under which the appointment is made, in case of internal audit



these and several other aspects are ascertained specifically for each audit engagement and decided and agreed upon jointly by the internal auditor and the auditee. Thus in case of an internal audit the audit engagement letter assumes special significance. The letter may be drawn up by the auditor but it needs to be approved by the Board of Directors or the Audit Committee or any person officially authorized for this purpose. The drawing up of the letter is preceded by extensive discussion on the terms of the internal audit which shall include:

- 1. Scope: The broad areas which should be covered by the audit and what is expected from the auditor should be clearly laid down in the engagement letter. Internal audit generally serves the "objectives" mentioned in the previous chapter but the functions of the auditor and what is expected as the output of the audit e.g. observations, suggestion and recommendations in general or on a specific function of the entity, should be outlined. It shall also mention that the internal auditor is not required to express an opinion or issue any sort of assurance on the financial statements.
- 2. Responsibility: While most of the auditor's responsibilities arise from the scope of the audit and the statutory and professional pronouncements, the responsibility of the auditee which plays an important role in the effective completion of the audit needs to be mentioned in the engagement letter along with the responsibility of the internal auditor. The auditor's responsibility includes timely intimation of material weakness or other major issues related to the internal control system and material misstatements in the cost and financial information to the management and others to whom the auditor is required to intimate. The auditee's primary responsibility is to extend fullest co-operation to the audit team and provide correct and precise data, information and records in time.
- **3. Authority:** The auditor should be authorized to have unhindered access to the data, information, records, properties and personnel. He should have the authority to call for information from the concerned department/personnel and to carry out audit procedures using his technologies, hardware and audit tools.
- 4. Confidentiality: The engagement letter shall mention that the auditor will ensure full confidentiality of the data, information and records accessed in the course of the audit subject to any statutory obligation to share the same with any authority. While the audit working papers are the sole property of the auditor, he may share non-proprietary information with the auditee and the engagement letter shall mention the modalities for sharing of information with the auditee and third parties like the external auditor or for the purpose of 'peer-review'.
- **5. Limitation:** The audit engagement letter should mention any limitation on scope, coverage and reporting requirement if there is any. For example, the letter may state that the internal auditor or any of its team members shall not be liable for any claim, damage, liability or expense relating to the engagement more than the aggregate amount of compensation agreed between the auditor and the audited.
- **6. Reporting:** The manner of reporting, the periodicity of reporting and the intended recipients of the report should be clearly mentioned in the letter.
- 7. Compensation: The remuneration payable for the audit assignment and what expenses



incurred in connection with the audit will be reimbursed to the internal auditor and to what extent, shall be mentioned in the audit engagement letter.

8. Compliance with the standards: The audit engagement letter shall contain a statement that the auditor will comply with the applicable professional pronouncements.

The terms of audit engagement shall be reviewed from time to time jointly by the auditor and the auditee in relation to the changing circumstances or requirements and the addition or alteration in the terms shall be documented in form of the audit engagement letter.

Independence of Internal Auditor

From the definition of internal audit, it is quite evident that the internal auditor's opinion has to be independent. This would mean that the opinion is free from any biases. The independence could be ensured that the person performing the duties as an internal auditor is in no way participating in any of the activities of the organization.

The Institution of Internal Auditors defines independence as "the freedom from conditions that threaten the ability of the internal auditor to carry out internal auditing responsibility in an unbiased manner". It is essential to understand potential impairment threats to the objectivity and independence of the internal auditor.

The auditor should ensure that the staff that engaged is not connected with the business of the auditee company in a manner that would potentially lead to any conflict of interest. E.g. in case of a bank audit, no audit team member should be a major borrower or investor with the bank.

Further, Independence of an Internal Audit team helps to distinguish it from all other internal controls, systems and procedures. The Internal Audit function is not subject to the authority of the areas of the organization that it audits. Thus, 'operational independence' is ensured and the entire exercise is objective, impartial and free from any conflict of interest, inherent bias or undue external influence. Although the internal audit function is independent in its working, it provides a service to the management, reports to the Audit Committee and is ultimately accountable to the Chief Executive or the Board for the achievement of its set objectives and the utilization of resources.

The independence presupposes that the internal auditor would have a direct access to the information, the systems, and also a communication link with the management. Without this support the independence will remain only on paper thus hampering the quality of the audit.

It is required that the work of internal auditor should be free of any undue influence. This would ensure that there won't be any significant hindrance or restriction of his/her work and also on the contents of the report. Of course, the internal auditor should be able to use professional judgment and should not ignore materiality when reporting matters.

A general list is given below:

- a) The internal audit function must report directly to the Audit Committee
- b) The lead internal auditor must have direct access to the Chairman of the Audit committee and the Board of Directors
- c) Regular meetings must be held between the lead Internal auditor and the management



- d) Any external consultants approached by the internal audit function must be validated by the management
- e) The internal audit charter should not include any activity which may be or lead to a conflict of interest

The above mentioned steps helps the internal audit function maintain objectivity and undertake judgment based purely on tangible evidence devoid of influence.

Pronouncements on Internal Audit

The compliance with the laws of the home country as well as the laws of the foreign country land for existence of businesses in India and abroad is a critical factor. As per the legal obligation / requirement under different statutes in India and abroad a Company shall have internal audit of its accounts carried out, at such interval and in such manner as may be specified.

Clause 49 of Listing Agreement: Corporate Governance (SCRA)

In case of the listed companies as per the Clause 49 of Listing Agreement the audit committee should be reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure, coverage and frequency of internal audit.

Under Section 177 of the Companies Act 2013 the internal auditor, if any, shall attend and participate at meetings of the Audit Committee of the company.

The provisions for constitution of the Audit Committee under Section 292A of the Companies Act 1956 has been replaced by Section 177 of the Companies Act 2013, which are as follows:

- **177.** (1) The Board of Directors of every listed company and such other class or classes of companies, as may be prescribed, shall constitute an Audit Committee.
- (2) The Audit Committee shall consist of a minimum of three directors with independent directors forming a majority:

Provided that majority of members of Audit Committee including its Chairperson shall be persons with ability to read and understand, the financial statement.

- (3) Every Audit Committee of a company existing immediately before the commencement of this Act shall, within one year of such commencement, be reconstituted in accordance with subsection (2).
- (4) Every Audit Committee shall act in accordance with the terms of reference specified in writing by the Board which shall, *inter alia*, include,—
 - (i) The recommendation for appointment, remuneration and terms of appointment of auditors of the company;
 - (ii) Review and monitor the auditor's independence and performance, and effectiveness of audit process;
 - (iii) Examination of the financial statement and the auditors' report thereon;
 - (iv) Approval or any subsequent modification of transactions of the company with related parties;



- (v) Scrutiny of inter-corporate loans and investments;
- (vi) Valuation of undertakings or assets of the company, wherever it is necessary;
- (vii) Evaluation of internal financial controls and risk management systems;
- (viii) Monitoring the end use of funds raised through public offers and related matters.
- (5) The Audit Committee may call for the comments of the auditors about internal control systems, the scope of audit, including the observations of the auditors and review of financial statement before their submission to the Board and may also discuss any related issues with the internal and statutory auditors and the management of the company.
- (6) The Audit Committee shall have authority to investigate into any matter in relation to the items specified in sub-section (4) or referred to it by the Board and for this purpose shall have power to obtain professional advice from external sources and have full access to information contained in the records of the company.
- (7) The auditors of a company and the key managerial personnel shall have a right to be heard in the meetings of the Audit Committee when it considers the auditor's report but shall not have the right to vote.
- (8) The Board's report under sub-section (3) of section 134 shall disclose the composition of an Audit Committee and where the Board had not accepted any recommendation of the Audit Committee, the same shall be disclosed in such report along with the reasons therefore.
- (9) Every listed company or such class or classes of companies, as may be prescribed, shall establish a vigil mechanism for directors and employees to report genuine concerns in such manner as may be prescribed.
- (10) The vigil mechanism under sub-section (9) shall provide for adequate safeguards against victimisation of persons who use such mechanism and make provision for direct access to the chairperson of the Audit Committee in appropriate or exceptional cases:

Provided that the details of establishment of such mechanism shall be disclosed by the company on its website, if any, and in the Board's report.

Section 138(1) of the Companies Act provides that such class or classes of companies as may be prescribed shall be required to appoint an internal auditor, who shall either be a chartered accountant or a cost accountant, or such other professional as may be decided by the Board to conduct internal audit of the functions and activities of the company.

Under SEBI Circular No. MRD/DMS/Cir-29/2008, October 21, 2008 in partial modification of SEBI circular No. MIRSD/ DPSIII/ Cir-26/ 08 dated August 22, 2008 on the above subject, the SEBI has mandated that stock brokers/trading members/clearing members shall carry out complete internal audit on a half yearly basis by chartered accountants, company secretaries or cost and management accountants who are in practice and who do not have any conflict of interest.

Under Circular of SEBI No. SEBI/MIRSD/CRA/Cir-01/2010 dated January 06, 2010 Internal Audit for Credit Rating Agencies (CRAs) has been prescribed under Regulation 22 of the SEBI (Credit Rating Regulations), 1999, which shall be undertaken on a half yearly basis and shall be



conducted by Chartered Accountants, Company Secretaries or Cost and Management Accountants who are in practice and who do not have any conflict of interest with the CRA.

Under IRDA (Investment) (Fourth Amendment) Regulations, 2008

- i. An Insurer having Assets under Management (AUM) not more than Rs.1000 Crore shall conduct a Quarterly Internal Audit to cover both Transactions and related Systems.
- ii. The Audit Report of the company shall clearly state the observation at transaction level and its impact, if any at System level. The Audit Report shall be based on Exception Reporting.

Corporate Responsibility for Financial Reports (Under Section 302 of Sarbanes Oxley Act of 2002)

- (a) Regulations Required: The Commission shall, by rule, require, for each company filing periodic reports under section 13(a) or 15(d) of the Securities Exchange Act of 1934 [15 U.S.C. 78m, 78o (d)], that the principal executive officer or officers and the principal financial officer or officers, or persons performing similar functions, certify in each annual or quarterly report filed or submitted under either such section of such Act that—
- (1) The signing officer has reviewed the report;
- (2) based on the officer's knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading;
- (3) based on such officer's knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition and results of operations of the issuer as of, and for, the periods presented in the report;
- (4) The signing officers—
- (A) Are responsible for establishing and maintaining internal controls;
- (B) have designed such internal controls to ensure that material information relating to the issuer and its consolidated subsidiaries is made known to such officers by others within those entities, particularly during the period in which the periodic reports are being prepared;
- (C) Have evaluated the effectiveness of the issuer's internal controls as of a date within 90 days prior to the report; and
- (D) Have presented in the report their conclusions about the effectiveness of their internal controls based on their evaluation as of that date;
- (5) The signing officers have disclosed to the issuer's auditors and the audit committee of the board of directors (or persons fulfilling the equivalent function)—
- (A) all significant deficiencies in the design or operation of internal controls which could adversely affect the issuer's ability to record, process, summarize, and report financial data and have identified for the issuer's auditors any material weaknesses in internal controls; and
- (B) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal controls; and



- (6) The signing officers have indicated in the report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.
- **(b)** Foreign re-incorporations have no effect: Nothing in this section 302 shall be interpreted or applied in any way to allow any issuer to lessen the legal force of the statement required under this section 302, by an issuer having reincorporated or having engaged in any other transaction that resulted in the transfer of the corporate domicile or offices of the issuer from inside the United States to outside of the United States.
- **(c) Deadline:** The rules required by subsection (a) shall be effective not later than 30 days after the date of enactment of this Act.

Management Assessment of Internal Controls (Under Section 404 of Sarbanes Oxley Act of 2002)

- (a) Rules Required: The Commission shall prescribe rules requiring each annual report required by section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) to contain an internal control report, which shall—
- (1) State the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting; and
- (2) Contain an assessment, as of the end of the most recent fiscal year of the issuer, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting.
- **(b) Internal Control Evaluation and Reporting:** With respect to the internal control assessment required by subsection (a), each registered public accounting firm that prepares or issues the audit report for the issuer shall attest to, and report on, the assessment made by the management of the issuer. An attestation made under this subsection shall be made in accordance with standards for attestation engagements issued or adopted by the Board.

Any such attestation shall not be the subject of a separate engagement.



Chapter 2 Documentation and Working Papers

Documentation refers to an comprehensive record of the internal audit activity and includes the terms and conditions of the audit engagement, audit plan, audit program, checklists, details of the nature, extent and timing of the audit procedures carried out, documentary evidences obtained including abstract or copies of entity's records, letters of confirmation and representations, notes on significant matters, analysis of the data collected in the course of the audit procedures, the outcome of the periodical review of the audit work by the auditor and actions taken thereon, conclusion drawn from the evidences obtained in the course of the audit, response of the management on the audit findings, draft and the final audit report and the corrective actions taken by the management on the suggestions and recommendations contained in the audit report of the previous period.

The internal audit documentation should cover all the important aspects of an engagement viz., engagement acceptance, engagement planning, risk assessment and assessment of internal controls, evidence obtained and examination/ evaluation carried out, review of the findings, communication and reporting and follow up. In case the internal audit is outsourced, the documentation should include a copy of the internal audit engagement letter, containing the terms and conditions of the appointment.

Internal audit documentation should be designed in accordance with requirement of specific audit and properly maintained to meet the requirements and circumstances of each audit. All significant issues which require special attention, together with internal auditor's observation thereon should be appropriately included in the internal audit documentation.

The form, contents and the extent of coverage of documentation depends on the judgment of the internal auditor based on the requirement of a particular audit but the documentation should be designed and organized properly and contain sufficient information so as to enable an internal auditor not previously associated with the entity, to obtain a complete understanding of the audit. The documentation shall be signed by the preparer and reviewer of the documentation.

Documentation helps in the following manner:

- 1. Planning and performing the internal audit
- 2. Supervision and review of the internal audit work
- 3. Establishing that the opinion expressed in the audit report is based on the inference drawn from the audit evidences obtained in the course of the internal audit procedures performed
- 4. Makes possible review of the audit activity by third party where necessary
- 5. Establishing that the internal audit procedures conform to the terms of audit engagement and the relevant professional pronouncements. The professional pronouncement of a institute of which the internal auditor is not a practicing member is not binding on the internal auditor but he can still abide by them whereby he can follow certain standardized audit practices and which might immune him from legal actions in case the question of the auditor being biased or ineffective is raised.



The ownership of the internal audit documentation lies with the internal auditor and the auditee can have access to the documentation with prior approval of the internal auditor and the client. The documentation cannot be accessed by a third party without the approval of the client unless any legal or regulatory requirement or any professional pronouncement permits such access.

The auditor shall decide on the retention period for the internal audit documentation within the frame work of the overall policy of the entity in relation to retention.

Use of Working Papers as evidence

Internal audit documentation covers the internal audit charter, the internal audit plan, the type and extent of audit procedures performed, timings and the conclusions drawn from the evidence obtained. Proper documents act as basis for the planning and performing the internal audit. Documents provide the evidence of the work of the internal auditor. Internal audit documentation should be detailed and comprehensive to obtain an overall understanding of the audit.

The internal auditor should document the issues that are important in providing evidence and support his findings or in preparation of the report. In addition, the working papers also help in planning and carrying out the internal audit, review and control the work and most importantly, provide evidence of the work performed to support his observations/ findings in the report.

The internal audit Documents provide the evidence of the work of the internal auditor and are important in providing evidence to his opinion or the findings. Following are the advantages of having sufficient and properly maintained working papers:

- i. Assistance in the performance of the audit.
- ii. Forming basis of the auditor's observations/ findings in his report.
- iii. Providing information for the report.
- iv. Aiding the review and evaluation of the work done.
- v. Aiding cross referencing between audit evidence and decision taken by the internal auditor.
- vi. Providing record of work done.

The internal auditor should formulate policies as to the custody and retention of the internal audit documentation within the framework of the overall policy of the entity in relation to the retention of documents and in accordance with the practices prevailing in the profession.

Note: For more details, the readers may refer to Cost Audit and Assurance Standard (CAAS 102) on "Cost Audit Documentation" issued by the Institute of Cost Accountants of India



Chapter 3 Planning an Internal Audit and Audit Programme

Planning

Internal audit is a management function and therefore the audit plan has to be drawn in consultation with the management i.e. the people in charge of governance which shall include the audit committee where there is one. The audit plan helps in timely and efficient conduct of the audit in accordance with the scope of the audit and terms of engagement.

The internal audit plan is a comprehensive document which shall lay down the areas to be covered by the audit, the manner in which the audit will be conducted, the extent of assessment or verification to be done, the resources to be employed and the distribution of total available time among different activities, so that the overall objective of the internal audit is fulfilled and the audit is conducted in accordance with the terms of the audit engagement.

The internal audit planning shall begin with understanding:

- 1. The business of the entity, its policy, plans and procedures
- 2. Its hierarchical structure
- 3. The statutory and regulatory framework within which it operates
- 4. The existing accounting and internal control system
- 5. The prevalent management information system
- 6. The entity's risk perception and risk management plan
- 7. The level of assurance to be obtained for different facets of the entity's activities which shall depend on the efficacy of the accounting system, internal control system and risk management system of the entity
- 8. The degree of complexity and materiality of the activities covered by the terms of audit engagement.

For obtaining the above mentioned understanding of the entity the auditor shall:

- 1. Examine the Policy document and the procedural manual (e.g. the management policy manual, accounting manual and the internal control manual)
- 2. Study the organizational chart, job descriptions, authority and responsibilities of various positions and delegation of the responsibilities
- 3. Study the significant legislations and regulations that affect the entity
- 4. Study the minutes of the General meetings, Board meeting and important Committee meetings
- 5. Study the previous statutory audit reports, management audit reports and internal audit reports
- 6. Refer to external sources of information about the entity like newspaper, trade journal and third party sources
- 7. Visit the production units and various departments for hands on experience about their functioning



- 8. Engage in discussion with the management and personnel of the entity
- 9. Study the type of information and reports generated through the accounting system, internal control system and the management information system
- 10. Study the security of the information generated and the policy for their safe custody and destruction, when no longer required.

The findings from the above actions shall be documented which shall help in deciding the nature, extent and timing of the audit procedures to be conducted.

The internal audit plan *inter alia* shall include:

- 1. The detailed program for review of different areas under audit
- 2. The audit procedures to be employed
- 3. The frequency and extent of the audit procedure
- 4. The criticality and complexity of specific areas requiring special attention
- 5. The significant risk associated with a specific area requiring special attention
- 6. The engagement of personnel in accordance with the requirement of knowledge and skill for different audit procedures
- 7. The allotment of time for different audit procedures

The internal audit plan needs to be changed with the changing audit environment, resulting from changes within the organization, external changes affecting the organization and new findings from the audit procedures and the resultant major changes in the internal audit plan shall be discussed with the management. The changes in the audit plan shall be documented mentioning the circumstances warranting such change.

Audit Programme

The internal auditor should device a documented internal audit programme describing the processes essential to meet the objective of internal audit plan. Internal audit programme to be drawn before the start of the audit in consultation with relevant stake owners.

The internal audit programme identifies, in appropriate details:

- the objectives of the internal audit in respect of each area,
- the staff responsible for carrying out the particular activity,
- the time allocated to each activity as also the sufficiently detailed, and
- Sufficiently detailed instructions to the staff as to how to carry out those procedures.

The internal audit programme may also have provision for information such as:

- The procedures actually performed,
- Reasons for not performing the originally identified procedures,
- Actual time consumed in carrying out the relevant procedure, and
- Reasons for deviations from budgeted time etc.



A well prepared, comprehensive audit programme helps proper execution of the work as well as of the proper supervision, direction and control of the performance of the engagement team.

Sample-Information requisition

Description of Information/Data

- Copy of existing process flow charts, operating procedures and policies including specifically the following:
 - a. Schedule of authority for expense and payments.
 - b. User manual and process flows used for Oracle.
 - c. Valid circulars/ mails on policies.
- Summary of active projects Project Description, Nature of Project (commercial/ residential), Location, Project Size (Budget, Duration), Current Completion status, Project Head etc.
- Details of management review committees (Composition, Role, Responsibilities, Frequency of meetings, Agenda, Minutes of meeting for last 1 year etc)
- Copies of internal audit reports/ management audit reports for last 2 years.
- Copy of Information presented to the Board as part of the Board Agenda (last two months) and copy of Minutes of the meetings (Board, Audit Committee and Executive Committee if any) for last two years.
- Summary of agreements with main service providers and business associates
- Copies of existing statutory and legal compliance checklists and procedures
- Listing of existing MIS Reports by Function/ Company as a whole (Daily/ Weekly/ Monthly/ Quarterly) and copy for last 3 consecutive months
- Details of IT Applications currently in use as follows:
 - a) Name of the application
 - b) Purpose of the application
 - c) Integrated with main financial application yes / no, (if no is it proposed to be integrated yes / no)



Chapter 4 Audit Sampling

Sampling refers to selection of a portion (sample) of the total (population), on a certain basis so that the portion is representative of the total. Therefore one has to be careful about deciding on the size of the sample and the manner of selecting the items from the population to ensure that the sample actually represents the characteristics of the population.

The selection can be done using both statistical and non-statistical methods. The statistical methods are those which use the random number table or the theory of probability for selection of a sample. In case of test of controls where the auditor is trying to ascertain the effectiveness of the internal control system, the auditor's analysis of the nature and cause of error is more important than the statistical analysis of mere presence or absence of error and therefore in such situation, non-statistical sampling approach is preferred. However, in case of a test of details where the auditor is trying to ascertain the occurrence of material error or misstatement, statistical sampling approach is preferred because that eliminates the risk of bias creeping into the selection of sample.

Now, in audit it is neither possible nor desirable to examine all the transactions or activities of an entity within the time-frame of an audit. Therefore the auditor has to decide upon samples from the classes of transactions covered by the audit on which the audit procedures are applied to obtain sufficient appropriate audit evidence that would enable the auditor to have reasonable assurance about the characteristics of the class of transactions. However, it is not necessary that selective verification will be done in respect of all classes of transactions and the auditor might decide on examination of the total population in respect of a particular type of transaction, where in his opinion there is a high risk of drawing an incorrect conclusion based on selective verification and he requires a higher level of confidence about that class of transactions. The size of audit samples shall largely depend on the level of confidence the auditor has on the efficacy and actual performance of the internal control system and the auditor's acceptance of the tolerable error (maximum possibility of the sample not representing the population) in sampling. In order to lower the sampling error and thus the risk of drawing an incorrect conclusion, size of the sample should be bigger.

The internal auditor shall first decide upon what would be the appropriate population for deriving a particular audit assurance and whether the population is complete. For example to derive a assurance about the balances of debtors the complete list of sales invoice, debit/credit notes and complete details of receipts from debtors shall constitute the appropriate population. The internal auditor may classify an appropriate population meant for a certain audit procedure into various categories (or strata) based on certain criteria (e.g. monetary value) and then decide on different sample size for different categories. As for example, for checking of sales invoices, the invoices may be grouped into three categories (high, medium and low) based on monetary value and the auditor may decide to go for 100% verification of the high value invoices and no sampling is involved, for verification of the medium value invoices the auditor may go for a sample size of 60% of the population of medium value invoices and for verification of the low value invoices the auditor may go for a sample size of 30% of the population of low value invoices.

After selection of samples and conducting audit procedures on them the auditor shall evaluate



the findings to determine whether the assessment of the relevant characteristics of the population is confirmed or whether it needs to be revised.

The internal auditor shall document the issues related to the sampling process which will help the auditor to substantiate his decisions.



Chapter 5 Audit Evidence

The primary objective of internal audit is to enable the auditor express his opinion on the efficacy and performance of the systems, procedures and controls and the financial, cost and other statements generated by the entity. For this purpose, the auditor carries out audit procedures to derive sufficient appropriate audit evidence and draws conclusion there from which forms the basis of his opinion. Now, "sufficiency" refers to the quantum of the audit evidence and "appropriateness" refers to the relevance and reliability but what constitutes "sufficient appropriate audit evidence" depend on the professional judgment of the auditor.

The internal auditor's judgment as to "sufficient appropriate audit evidence" is influenced by the nature and materiality of the item, nature and size of the business, efficacy and functioning of the controls and his assessment of the risk of a material misstatement.

The source of the audit evidence which can be internal or external and in whose custody it is being kept, decides the level of reliability of the evidence, to a great extent. The main types of audit evidence in order of their reliability are:

- (a) Documentary evidence originated from and held by third party
- (b) Documentary evidence originated from third party and held by the entity
- (c) Documentary evidence originated from the entity and held by third party
- (d) Documentary evidence originated from and held by the entity.

The internal auditor obtains the audit evidences through:

- (a) Compliance procedures which are tests of control and are intended to obtain reasonable assurance that the controls on which audit reliance are to be placed are in effect
- (b) Substantive procedures which are performed to obtain satisfaction about the completeness, validity and accuracy of the data on which the audit procedures are carried out. The substantive procedures are of two types:
 - (i) Tests of details of transactions and balances and
 - (ii) Analysis of significant ratios and trends and resultant enquiry into unusual fluctuations and items.

The majorities of the audit evidences are indicative of the occurrence or non-occurrence of a certain event or existence or non-existence of a certain state of affairs and are not conclusive in nature. Therefore, such audit evidence has to be corroborated by evidence of another nature or from another source and in case of inconsistency between the two evidences; further audit procedures are to be carried out to obtain reliability.

The internal auditor obtains evidence by performing one or more of the following procedures:

- (a) Inspection of records or tangible assets
- (b) Observation of a process or activity being performed by others
- (c) Inquiry whether formal written inquiry or informal oral inquiry, seeking relevant information from competent persons whether within or outside the entity and



- confirmation received in response to the inquiry
- (d) Checking the arithmetical accuracy of the records and doing independent calculations and
- (e) Analysis of significant ratios and trends and resultant enquiry into unusual fluctuations and items



Chapter 6 Analytical Procedures

The internal auditor carries out the analytical procedures initially to understand the functioning of the entity, its environment and the risk of material misstatement in the information on which the audit procedures will be carried out and based on this understanding he plans the nature and extent and timing of the audit procedures. The analytical procedures are applied again to corroborate the conclusions drawn from the evidence arising out of the tests of details, based on the findings of which the auditor might decide to apply further audit procedures to derive higher level of assurance about the evidence.

Analytical procedures include but are not limited to probing into the significant deviations and fluctuations in ratios and trends between that derived from the financial and non-financial records of the entity and the corresponding results from previous period or industry sources and expectations of the entity or the auditor, which deviation and fluctuation may result from error, fraud, unusual and non-recurring transactions and events etc. Analytical procedures also involve establishing relationships between various elements of the financial data or non-financial data or both and drawing conclusion from there.

Where the result of the analytical procedures show significant deviations or fluctuations or establish relationships that are inconsistent with the results of other audit procedures or the expected results the auditor shall obtain sufficient explanation from the management to remove the doubt about any irregularity or obtain appropriate corroborative evidence or apply further audit procedures until the auditor is satisfied with the results. Where the deviation, fluctuation or relationship is not satisfactorily explained or where the auditor is not satisfied with the results of further audit procedures it might be indicative of possible irregularity which should be brought to the notice of the management and suitable course of action may be suggested.

For finding out the similarity or divergence, comparison of the derived ratio and trends is generally done with:

- (a) the documents and reports of the previous periods
- (b) projections or budget of the entity
- (c) information from the industry like the industrial standard or comparable data from a similar entity within the same industry
- (d) the estimates of the internal auditor based on his study of the ratios and trends of the entity The methods and extent of application of analytical procedures depends on the judgment of the internal auditor based on:
- (i) Nature of the entity
- (ii) Availability, reliability and relevance of the information available
- (iii) Source of the information e.g. internal or external
- (iv) Comparability of the information
- (v) Efficiency and effectiveness of a particular procedure to achieve a particular objective
- (vi) Experience from the previous internal audits conducted at the entity
- (vii) Effectiveness of the controls over the preparation of the information



However, the extent of reliance the internal auditor shall place on the results of the analytical procedures will depend on the judgment of the internal auditor based on:

- (a) Materiality of the items involved
- (b) Outcome of the other audit procedures
- (c) The extent to which the outcome of the analytical procedure can be relied for deriving assurance about a particular item
- (d) Whether the systems, procedures and controls as a whole are efficient and functioning effectively.



Chapter 7 Accounting System and Internal Control

An entity carrying on any commercial activity needs to have certain system of documentation of its activities and transactions, assets and liabilities accompanied by a system of checks and controls, depending on the nature of business and size of the entity. Existence of these systems enables the management and the stake holders to have information about its functioning and the state of affairs and assurance about the reliability of this information. Thus, an entity maintains the accounting system, management information system and the internal control system. The efficacy of the design of these systems has a significant bearing on effective Corporate Governance and Enterprise Risk Management.

While the cost and financial accounting systems together with the management information system generate the information the internal control system ensures the orderly and efficient conduct of the business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable cost, financial and other quantitative information, so far as feasible.

Internal control system consists of all the policy and procedure instituted by the management to obtain reasonable assurance about:

- 1. Execution of transaction in accordance with management's general or specific authorization
- 2. Prompt and accurate recording of all transactions
- 3. Safeguarding of assets and records from unauthorized access, use or disposition
- 4. Physical verification of assets with the records at reasonable intervals and appropriate action for any difference
- 5. Efficacy of design of the systems and procedures and their efficient operation
- 6. Timely identification of risks and their mitigation to a reasonable extent.

Internal control system is implemented by human being and so the existence of control manuals or forms cannot by itself ensure absolute assurance mainly because of the following inherent limitation in the internal control system:

- 1. Reluctant of the management to establish a control if the benefit derived does not exceed the cost incurred
- 2. Failure to understand the instructions, wrong judgment and lackadaisical approach towards the work fail to achieve the desired result
- 3. Possibility of evasion of a control procedure either in collusion with other employees or outside parties
- 4. Management overriding a control procedure to get certain immediate convenience

Internal control activities include prior approval of an activity or transaction, post activity authorization in agreement of the proper conduct of an activity or transaction, verification to establish the correctness of a data or information or to ascertain the existence of an asset,



document or record, reconciliation between records to obtain corroborative evidence about their authenticity, review of a performance, security of assets, separation of duties and controls over assets and information system.

The Management of an entity is primarily responsible for designing, implementing, maintenance and documentation of the internal controls.

The Internal auditor's responsibility lies in examining the continuing effectiveness of the internal control system through evaluation of the system and intimating the management of its significant deficiencies and material weaknesses together with making recommendations for improvement of its effectiveness.



Chapter 8 Control and Risk Assessment

Internal audit exercise to assess the efficacy of the control aspects and to evaluate the enterprise risk begins with the auditor's understanding of the internal environment of the entity in which the control procedure works. In understanding the control environment the auditor shall look into the following aspects:

- 1. The entity's organizational structure and methods of assigning authority and responsibility, including segregation of duties and supervisory functions
- 2. The function of the board of directors and its committees, in the case of a company or the corresponding governing body in case of any other entity
- 3. Management's philosophy and operating style
- 4. Management's control system including the internal audit function, personnel policies and procedures
- 5. Integrity and ethical values
- 6. Commitment to competence
- 7. Human resource policies and practices

The next step is to obtain an understanding of the existing business processes, accounting and internal control system by performing tests like a "walk through" test which is testing a few transactions through the accounting system. The internal auditor shall document the design and operations of internal controls through narrative details, drawing flow charts and obtaining answer to questionnaires developed by the auditor.

The Internal auditor shall then carry out tests of control to make preliminary assessment of the adequacy of the accounting and internal control systems and decide on the likely nature, timing and extent of the internal audit procedures. This will also help the auditor to develop the internal audit plan and chalk out an effective audit approach.

Tests of control may include:

- 1. Inspection of documents supporting transactions and other events to gain audit evidence that internal controls have operated properly, e.g., verifying that a transaction has been authorized
- Inquiries about and observation of internal controls which leave no audit trail, e.g., determining who actually performs each function and not merely who is supposed to perform it
- 3. Re-performance of internal controls, e.g., reconciliation of bank accounts, to ensure they were correctly performed by the entity
- 4. Testing of internal control operating on specific computerized applications e.g., control on access, editing or changing the program.



Risk is a threat of the occurrence of an event or action which is likely to adversely affect the entity's ability to maximize the value of the stake holders and to achieve the business objectives. Magnitude of the risk depends on the probability of the occurrence of the event or action and the adverse financial impact on the entity.

Risks can be internal or external and are broadly categorized into:

- 1. Strategic Risks associated with long term objectives and direction of the business.
- 2. Operational Risks associated with day to day operations of the entity.
- 3. Financial Risks related to the processes, techniques and instruments utilized to manage the finances of the entity and those processes involved in sustaining effective financial relationships with customers and third parties.
- 4. Knowledge Risks associated with the management and protection of knowledge and information within the enterprise.

Enterprise Risk Management is a structured, consistent and continuous process of risk identification, prioritization and reporting, risk mitigation, risk monitoring and assurance. Management is responsible for establishing and operating the risk management framework.

The internal auditor should review the maturity of an enterprise risk management structure by considering whether the framework so developed, inter alia:

- a) protects the enterprise against surprises;
- b) stabilizes overall performance with less volatile earnings;
- c) operates within established risk appetite;
- d) Protects ability of the enterprise to attend to its core business; and
- e) Creates a system to proactively manage risks



Chapter 9 Internal Audit in ERP Environment and Systems Audit

ERP (Enterprise Resource Planning) environment is signified by extensive use of Information Technology (IT) to process, retrieve and report data (financial, quantitative, statistical and others) in an environment where data arising from all the processes and activities are integrated through a network of nearby or remote computers and server with in-built security system to protect the data through a hierarchy of the right to enter or alter data and authorization of the entries. Thus in an ERP environment nothing different are done but are done in different ways.

Therefore, auditing in an ERP environment does not change the scope and the objective of an internal audit but since the methods of collection, recording, processing, storing, retrieval and reporting data changes the procedures adopted by the internal auditor in carrying out the internal audit functions for obtaining sufficient appropriate evidence necessary to assess the efficacy and appropriateness of the internal control system and the entity's preparedness to encounter and mitigate perceived risks. One of the peculiarities of auditing in an ERP environment is that the audit trail is not comprehensively visible, as is available in a manual system.

Auditing in an ERP environment requires the auditor to familiarize himself with the environment and for that purpose the auditor primarily need to obtain the following understanding:

- 1. The reliability of the data flowing into the "Central Processing Centre" or the "ERP System Server" .
- 2. The processing and analysis that takes place within the processing centre.
- 3. The reports that are generated from the system.
- 4. The structure of authority for entering data, approval and accessing the data.
- 5. The impact the ERP system has on the audit trail which is otherwise available in a manual system.

The auditor needs to have specialized skills for auditing in an ERP environment, at least a fair idea of operating in a specialized ERP system which will enable the auditor to design and perform appropriate tests of control and substantive procedures and to determine the effect of the ERP environment on assessment of overall audit risk. However, in this regard the auditor can take the assistance of experts who may or may not be an employee of the auditor in accordance with the general sanction for 'using the work of an expert'.

In planning the internal audit the auditor should consider the following aspects of an ERP environment:

- 1. Information Technology infrastructure consisting of a structured and documented IT Policy, the hardware (Computers, File Servers, Printers, Modems, Switches, Routers, Hubs, etc.) and software (both system and application software). In case of any change in hardware and/or software since the last audit, whether the procurement has been done from reliable and authorized vendors and the software has valid license and serial number.
- 2. The absence of audit trail or the trail being in a machine readable form makes it difficult to obtain sufficient assurance about the correctness of processing of data particularly where a large amount of data are processed through a large number of complex steps. Thus



- existence of programming or system related errors resulting in inappropriate processing and incompatible information might go undetected as it is generally difficult to detect them manually, on a timely manner.
- 3. Transactions or entries are automatically generated by the System without specific authorization for such transactions or entries, individually and which cannot be Validated independently.
- 4. Existence of systems like the EDI (Electronic Data Interchange System) whereby transactions are electronically exchanged with other entities without verification of their correctness and appropriateness.
- 5. Although unauthorized access and alteration of data is not normally possible in an ERP environment due to the existence of elaborate security controls embedded in any ERP, the distribution of ERP related activities (like programming, processing and data sourcing) within the entity and coordination among the various functionaries assumes vital significance. Several functions which may be done by different individuals in a manual control environment may be carried out by a single individual in an ERP environment thus increasing the control risks.
- 6. The lesser possibility of human errors in processing data which is done uniformly by the use of software takes care of some of the control risks but emphasis needs to be given on the effectiveness of the general computer information systems control.
- 7. The risks and controls associated with an ERP environment create a potential impact on the internal auditor's assessment of risk and the nature, timing and extent of audit procedures. The various reports generated by the ERP system may assist the auditor in performing substantive tests. The use of computer assisted audit techniques provides the auditor with several analytical tools that increases the efficiency of the performance of the internal audit procedures.

In evaluating the internal control system in an ERP environment the following aspect should be looked into:

- 1. That there is a structured and documented IT Policy and the personnel are well conversant with the same.
- 2. That authorized, correct and complete data is made available for processing.
- 3. That the errors are detected and corrected timely.
- 4. That in case of interruption in the working of the ERP environment due to power, mechanical or processing failures, and the system restarts without distorting the completion of the entries and record.
- 5. That the output is complete and accurate.
- 6. That sufficient data security is available against unforeseen calamities, errors and frauds.
- 7. That there is sufficient protection against unauthorized amendments to the programme and provision is made for safe custody of source code of application software and data files.



For conducting internal audit in an ERP environment, the auditor has to depend primarily on the information generated by the IT systems. Accordingly it is necessary for the auditor to obtain sufficient assurance about the proper safeguarding of the IT assets, maintenance of data integrity and effective operation of the systems which would ensure valid, reliable, timely and secure input, processing and output at all levels of a system's activity.

The internal auditor can obtain this assurance from a 'Systems Audit' which evaluates the system's internal control design and effectiveness and includes efficiency and security protocols, development processes, and IT governance or oversight.

'Systems audit' shall be carried out by independent and qualified persons having special skills and training (e.g. persons having 'SISA' qualification).

Accordingly, the internal auditor should review the strength and effectiveness of the ERP environment and consider any weakness or deficiency in the design and operation of any control within the entity, by reviewing:

- 1. System Audit reports of the entity, conducted by independent Information System auditors;
- 2. Reports of system breaches, unsuccessful login attempts, passwords compromised and other exception reports;
- 3. Reports of network failures, virus attacks and threats to perimeter security, if any;
- 4. General controls like segregation of duties, physical access records, and logical access controls;
- 5. Application controls like input, output, processing and run-to-run controls; and
- 6. Excerpts from the IT policy of the entity relating to business continuity planning, crisis management and disaster recovery procedures.



Chapter 10: Relying on External Opinion and Reference of Auditor Expert

Internal audit is a multi-disciplinary audit and it is not likely or expected that the internal auditor shall possess all the necessary knowledge and skills which the internal auditor might require to handle all parts of the internal audit engagement. Accordingly, the internal auditor is entitled to avail the services of experts at his discretion to ensure proper conduct of the audit.

The Internal auditor has to decide on the need to obtain the opinion and advice of an Expert on the following basis:

- 1. Whether the matter or issue on which opinion is to be sought is material enough to seek an opinion or advice of an expert
- 2. The element of risk involved in forming an erroneous opinion by the internal auditor in the absence of an opinion or advice of an expert
- 3. The other evidences available with the internal auditor in respect of the matter or issue, which could enable the auditor to form an opinion without seeking the opinion or advice of an expert.

The internal auditor should take into consideration the following factors in deciding on the expert to be engaged:

- 1. The competency of the expert as represented by professional qualification or membership of an appropriate professional body
- 2. The experience of the expert in the relevant field and reputation to handle similar type of engagement

The expert should not have any personal, financial or organizational relationship with the entity which might affect his objectivity. His opinion and advice should be free from any prejudice or bias. If the internal auditor has any reason to doubt the objectivity of the expert he should perform more detailed audit procedures to obtain sufficient appropriate evidence or might refer to another expert.

To ensure that the work of an expert serves the desired objective, the internal auditor should gain sufficient insight into the terms of engagement of the expert, to establish the objective and scope of his work and the access the expert can have to the records, personnel and physical properties of the entity. The auditor shall also seek reasonable assurance that the conclusions drawn by the expert is backed by appropriate evidence, by referring to the source data used by the expert and the assumptions made and methods employed by the expert.

In exceptional cases, where the opinion of the expert is inconsistent with the overall findings of the auditor, the auditor should attempt to resolve the inconsistency through deliberation with the auditee and the expert. The auditor may also contemplate performing more detailed procedures or engage another expert.

It is not normal for the internal auditor to draw reference to the opinion or advice of an expert on which he has relied to express his opinion but if the auditor feels that such reference shall



promote a better understanding of the conclusions drawn by the internal auditor he may state the conclusions drawn by the expert in his report but in doing so, he should mention the assumptions made and the broad methodology adopted by the expert.

Where the internal auditor considers it necessary to disclose the identity of the expert he should obtain a prior, written consent from the expert.



Chapter 11 Audit Conclusion and Corrective Measures

The definition of internal audit refers to internal audit as "consulting activity which involves a continuous and critical appraisal of the functioning of an entity". The goal of an audit is to form and express an opinion on financial statements. The audit is performed to get reasonable assurance on whether the financial statements are free of material misstatement. An audit also includes assessing the accounting principles used and the significant estimates made by the management. Audit conclusions and reporting are one of the principles governing an audit.

Steps Involved

Following are the steps involved in audit conclusion:

a. Gathering of audit evidence

An auditor should be thorough in his efforts to gather the audit evidence, and be impartial in its evaluation. Substantive procedures such as enquiry, information, confirmation, observation, compilation, verification and valuation, etc. are used to substantiate the transactions. Carrying out such procedures on a reasonable number of transactions provides a basis for drawing a conclusion on a particular head of account (line item). Having gathered the audit evidence by substantive procedures, the auditor should ensure that the entity has complied with the necessary requirements such as requirements of law, applicable Accounting Standards issued by the ICAI/ NACAS, accounting policies adapted by the entity from time to time, and internal control systems.

b. Evaluation of audit evidence

Having gathered the audit evidence, the auditor goes through the evidence with a fine-toothed comb to properly evaluate it, judge their reliability and draw logical conclusions. He has to document the reasons for accepting or rejecting certain replies and reports.

c. Analysis of evidence

The auditor uses analytical procedures such as accounting ratios, analyses; intercompany comparisons, comparing the industry norm with the data of the unit, etc. to analyze the data.

d. Audit conclusion

Such analyses help the auditor to draw conclusions regarding various aspects of the line items of the financial statements. These conclusions should be independent and factual, and not based on assumptions. A set of such conclusions leads to forming an opinion.

Reporting is the last procedure of the process of an audit. Therefore, while the internal auditor's report lays down the observations and comments of the auditor, the audit findings and put forth suggestions for improvement, the auditor shall facilitate meaningful communication with the auditee to ensure that there is an agreement between the auditor and the auditee in respect of the observations and suggestions and these are capable of being implemented.



Internal auditor should present the draft report before the auditee for review and discuss with the auditee the audit findings to arrive at a consensus, before the final report is issued. The final report shall take into consideration the revision or modification done in the draft report in consequence of the discussions with the auditee.

The auditor should also check the status of the compliance with the points mentioned in the previous audit report and where corrective action has not been taken by the auditee, the reason for such non-action should be enquired into and reported suitably along with the revised timeline and fixation of responsibility on the concerned process owner.



Chapter 12: Report Writing and Audit Report

Internal Audit Report

The final output of the internal audit exercise is a written expression of the opinion of the internal auditor on the internal control system, risk management system and the overall governance process of the entity and his suggestions for improvement, based on the inference drawn from the analysis of the evidences obtained through the internal audit procedures and the management's reply to the audit findings.

The report shall have a lucid but brief presentation, free from ambiguity and narrate all material facts and findings and prepared timely, before the report would lose its utility. Though there is not any specific format for internal audit report the auditor should standardize the report so far as possible which will benefit the user of the report to understand and relate similar items within the same report and between reports of different periods.

The essential items of the internal audit report shall ideally be arranged in the following manner:

- 1. The report shall begin with a "Title" which can simply be "Internal Audit Report".
- 2. The internal audit report should normally be addressed to the appointing authority i.e. the authority signing the audit engagement letter, unless the terms of engagement require otherwise.
- 3. The report shall state the period covered by the report.
- 4. The report shall contain a list of recipients of the report; that is the persons or designations to whom the report shall be distributed. It shall also mention that the distribution of the report shall be limited to the persons mentioned in the list.
- 5. Thereafter the report shall contain a statement about the responsibility of the management of the entity which primarily is to ensure proper functioning of the systems and processes and to safeguard the assets of the entity and the responsibility of the auditor which primarily is to express an opinion on the efficacy of the internal control system, risk management system and the over governance procedures, highlighting any failures and recommend improvements therein.
- 6. The report shall give an outline of the systems, processes and other management feature audited, the audit methodologies adopted and procedures performed.
- 7. The report shall state the scope of the audit and shall mention that:
 - (a) The audit was conducted in accordance with the generally accepted audit practices
 - (b) The terms of engagement were followed in letter and spirit
 - (c) examination of evidence on selective basis were carried out for obtaining reasonable assurance that the systems, controls and processes operated efficiently and the financial and cost statements are free from any material misstatement
 - (d) Ascertainment of the efficacy of the internal control system and the risk management



system was done and weaknesses and risks therein were identified

- (e) Any limitation in the scope of the internal audit work caused by situations beyond the control of the internal auditor shall be stated
- 8. A paragraph shall be dedicated for a summary of the major audit findings, observations and recommendations by the internal auditor
- 9. Management's response to the observations and recommendations which can be a clarification or an action plan to rectify the shortcoming or effecting an improvement suggested by the report. The action plan shall mention the time frame for such action, the person responsible and the resources required.
- 10. Corrective action taken by the entity on the observations and recommendations contained in the previous internal audit report shall also find a place in the audit report.
- 11. The report shall state that it shall be used only for the purpose agreed upon and narrated in the audit engagement letter.
- 12. The report shall conclude with the date and place of signing the report, the auditor's signature and his membership number

Before the final internal audit report is issued, the auditor shall discuss the initial draft audit report with the management and come up with the final draft report, after incorporating the changes/ modifications necessitated by the response of the management to the initial draft audit report. Once the management agrees to the final draft report, the final internal audit report shall be submitted.

However for general guidance the structure of an Internal Audit Report shall cover the following contents with an Executive summary.

1: Brief Summary of Internal Audit Report

A) Name of the Unit audited :

B) Audit Period Covered as per approved

IA Schedule

C) Department/Area Covered under IA Scope :

D) Audit Risks Suggested areas (With quantified, if any)

i) High : ii) Medium :

iii) Low :

1. Introduction

- 1.1Name of the Auditee (unit audited)
- 1.2Period covered under current audit
- 1.3Brief description of duties/functions of Auditee

2. Objective and Scope

The objectives of this internal audit engagement were

a) (Objective)



- b) (Objective)
- c) (Objective)

3. Methodology

The methodology adopted by the Internal Auditor needs to get changed from time to time based on the Scope/subject and type of audit assignment and urgency of the requirement of the Management. Accordingly the checking tools like observation, obtaining sample evidence, the principle records to be checked.

This section should refer to the methodology adopted for conduct of Internal Audit engagement viz. interview, Observation, Sampling, Sample size used for checking records, the number of records checked, and type of records checked. It should also include checklists (if any) used during the engagement etc.

4. Results and Observations for action:

- a) Strengths observed during the audit engagement,
- b) Weaknesses observed in the functioning of office, maintenance of records etc. observed during the audit engagement.

The very objective of Reporting shall be kept in mind while giving the Results and Findings in the Report. The summary should be as brief as possible and draw on the observations under the Para on Consequence/Effect /Impact of each Audit observation. It should also include a summation of outstanding statutory and Internal Audit observations.

5. Opinion

It is equally important that the Opinion of the Internal Auditor shall be communicated to the auditee in a lucid manner.

6. Audit Recommendations

The recommendations of Audit Team on the observed weaknesses shall be stated here.

This could be presented in a box of highlighted print. (To grab the attraction and immediate attention)

7. Acknowledgement

It is customary to state that the carrying of the task is possible with the Co-operation extended by the management and to express the acknowledgement of the help.

An Audit Report shall contain the data of Previous Audit points raised, closed and pending points that needs attention and rectification, before submission of the Present Report for action.



Chapter 13 Introduction to Plantation Industry

Plantation Industry plays an important role in Indian economy both in terms of addition to economic value as well employment generation since the Indian economy is still predominantly an agrarian economy. Plantation Industry is very vast and represented by many crops such as tea, coffee, rubber, coconut, cardamom, cashew, cinnamon, cloves, cocoa, tobacco, mango, oil palm, pepper etc. Further, the following three industries constitute a major share of the total plantation industry:

- (i) Tea plantation
- (ii) Rubber plantation
- (iii) Coffee plantation

In terms of turnover, these three industries contribute maximum to Plantation Industry. Besides this, plantation industry, particularly, Tea and Coffee are also the two major foreign exchange earners of the country.

Plantation Industry is the employment provider to a large mass of people, particularly, in the areas inhabited by backward classes and tribes whose level of skill is much lower in comparison to the skill of urban industrial labour. In some part of the country, for example, North-Eastern Region, economy mostly revolves around the plantation industry.

1.1 Unique features of Plantation Industry:

- 1. Plantation Industry is the only Industry where the total activities, starting from the agricultural activities involving the production of raw-materials to the manufacturing activities for finished products are located at the same place under the umbrage of the single management. In case of most of the organisations engaged in plantation industry, the organization handles all activities pertaining to production of raw-materials, production of finished products and marketing of the finished products also.
- 2. There is considerable time lag (sometimes many years) between the time of planting and being ready for commercial harvesting, for example:

Tea: 3-5 years Coffee: 3-4 years Rubber: 6-7 years

3. The Commercial harvesting may be for many years, for example:

Tea: 30-35 years Coffee: 20-25 years Rubber: 25-32 years

4. At the Estate level, the strength of the managerial staff is much less as compared to the total number of workers engaged. Also the total number of managerial staff as compared to total number of workers is much lower than the other industries. At the Estate level, most of the managerial staff has to handle multiple operational functions like overseeing the agricultural activities, manufacturing, labour management, office administration etc.



- 5. Plantation Industry is highly labour intensive. Majority of the workforce directly attached with the plantation industry reside in the labour quarters situated within the Estate. As a result, the Management has to look after the total maintenance of the labour quarters, maintenance of law and order situation as well as general administration of labour and smooth provisioning of the entitlements to which workers are entitled to statutorily.
- The plantation products pass through a single or a few intermediate marketing points for the purpose of further processing, standardization or bulking/storage before they reach to end consumer.
- 7. The plantation industry requires large amounts of fixed capital investment in tree crops, processing/packaging, transportation facilities or special port facilities.
- 8. The output in plantation industry is also highly dependent on the climatic condition.

Commercial Plantation in India

In India, plantation crops occupy merely 2-3 percent of the total area under cultivation in India but contribute to about 75% of the total export earnings from agriculture based industry. This highlights the importance of commercial plantation in India.

While several plantations like Jatropha plantation for bio-diesel, plantation of trees for pulp production in paper industry, teak plantation, beetle nut plantation, macadamia plantation or spices plantations are gaining importance in India, Tea, Coffee and Rubber continue to be the major plantations in the organized sector. Plantation industry, particularly, Tea and Coffee, are also the two major foreign exchange earners of the country.

India occupies a prominent place in the World both in terms of quantity and quality of the <u>tea</u> produced. India for long held the first position as the largest producer of tea in the World but has lost his position to China in the last 7-8 years. However, so far as the aroma (or flavor) is concerned, 'Darjeeling Tea' of India continues to be the most sought after tea in the World, recording the highest market price.

So far as **coffee plantation** is concerned, India ranks sixth in the World Coffee and has about 90 different spices out of which 5 to 6 are commercially important. Cultivated coffee is mainly derived from two spices Coffea Arabica (Arabica coffee) and C. canephora (Robusta coffee) and is grown primarily in the South Indian states of Karnataka, Kerala and Tamil Nadu. In recent years, new areas have developed in the states of Andhra Pradesh, Orissa and the 'Seven Sister States' of Assam, Manipur, Meghalaya, Mizoram, Tripura, Nagaland and Arunachal Pradesh.

In <u>rubber production</u> India ranks fourth in the World. Rubber cultivation in India has been traditionally confined to the hinterlands of the southwest coast, mainly in Kanyakumari District of Tamil Nadu and Kerala. However, over the years several other areas have taken up rubber cultivation as a commercial proposition. These are hinterlands of coastal Karnataka, Goa, Konkan Region of Maharashtra, hinterlands of coastal Andhra Pradesh and Orissa, the northeastern states, Andaman and Nicobar Islands etc, where rubber is now being grown.

Tea Plantation

Tea industry consists of two parts, viz. one part involves agricultural activity and is engaged in the production of tea leaves in the tea plantations and the other part involves manufacturing activity where the final products (also known as 'Made Tea') like black tea, green tea etc. which are ready for consumption are produced in the factory. In India, majority of the tea plantations are managed by large growers but there are small growers and self-help groups and others who sell their produce to the large growers for processing into 'Made Tea'. Dooars area in the state of West Bengal, Assam, Munnar and Nilgiri Belt in the state of Tamil Nadu and certain areas on Kerala and Karnataka account for maximum production of tea in India.

Tea plants are propagated from seed and cutting. Outside the three botanical varieties of 'Assam', 'China' and 'Combod', there are many strains and modern Indian clonal varieties.

It takes about 4 to 12 years for a tea plant to bear seed, and about three years before a new plant is ready for harvesting. Tea plants require at least 127 cm (50 inches) of rainfall a year and prefer acidic soils. Many high-quality tea plants are cultivated at elevations of up to 1,500 m (4,900 ft) above sea level; at these heights, the plants grow more slowly and acquire a better flavour.

Only the top 1-2 inches of the mature plant are picked. These buds and leaves are called flushes. A plant will grow a new flush every seven to 15 days during the growing season, and leaves that are slow in development tend to produce better-flavoured teas.

A tea plant will grow into a tree of up to 16 m (52 ft) if left undisturbed, but cultivated plants are pruned to waist height for ease of plucking.

The factors affecting tea quality apart from those involved in processing can be distinguished in 3 groups viz. genetic, environmental and cultural as detailed below:

- (a) Tea quality is primarily determined by the genetic properties of the tea planting and those of the tea bush in particular.
- (b) Both soil and climate are influencing the quality of tea. Climatic conditions including temperature, humidity, sunshine duration, rainfall are important in determining quality.
- (c) Field operation like pruning, fertilizing, shading, plucking round and plucking standard are also playing the important role in determining the quality of tea.

The major activities of the tea plantations can be classified into the following:

1. Maintenance of Nursery: Tea plantations maintain nursery for tea saplings and shade tree saplings for being planted in the fields. Separate nurseries are maintained for tea saplings and shade tree saplings. At the tea sapling nursery the saplings are grown either from the seeds sown on the nursery bed (seed nursery) or from the cuttings taken from a tea bush known as the 'mother bush' (propagation nursery). The seeds used in the nursery may be taken from the tea bushes or purchased from the market. The seeds are sown in different sections in the 'seed nursery' according to the grades. Growing tea saplings from cuttings, also known as vegetative propagation or 'clonal planting', is preferred to seed plantation because of the uniform growth of the tea bushes in case of 'clonal planting'. Tea saplings grown in the nursery



require adequate care until these attain suitable growth when these are planted in the field. Similarly, in shade tree nursery, shade tree saplings are maintained from where these are planted in the field as and where necessary.

- 2. Tea planting: Planting is done under following circumstances –
- (a) New plantation is done in vacant land (which may be reclaimed) never used earlier for plantation. In this connection it may be noted that many tea estates in India which came into existence in the pre-independence period have large areas which have not been brought under tree plantation for various reasons.
- (b) Re-plantation is done by clearing a section, by up-rooting aged trees, which are no longer suitable for growing satisfactory quantity and quality of tea leaves and thus are not commercially viable (tea bushes gives the optimum production between 10 and 30 years but can be plucked upto 80 years or more but the productivity goes down), or
- (c) Planting to fill gaps in various sections of the tea estate, resulting from occasional uprooting of tea bushes, necessitated by death or destruction of individual bushes. The plantation area in tea estates are divided into various sections and in each section tea of the same grade or variety (determined by the seed or clone) are planted which enables better maintenance and administration of the plantation. In each section a specific distance between the tea plants are maintained referred to as 'spacing', during plantation and when some of the tea trees are uprooted gaps are created which are sometimes filled by plantation of younger trees.

New plantation or total re-plantation in a section starts with ground preparation which involves:

- (i) Uprooting of old plants using heavy machinery which is normally hired. The uprooted tea bushes may be used for 'mulching' to reduce the soil erosion, to maintain soil moisture and check weed growth. These tea bushes over a period of time decompose and serve as manure.
- (ii) Ploughing, harrowing and leveling the ground are done using implements and tractors.
- (iii) During this time the PH factor of the soil is tested at the Government approved laboratories (Tea Research Association Lab or others) and if the PH factor is high (PH factor between 4.5 and 5.5 is ideal for tea cultivation) gypsum or aluminum sulphate is applied to make the soil less alkaline. When the PH factor is less than the ideal, then dolomite is applied to make the soil less acidic.
- (iv) Subsequently, citreonela grass or Guatemala grass may be planted and kept for 18 to 20 months to improve the soil fertility (to increase the soil nutrients and carbon status and micro organism and to reduce the oil toxicity caused by years of using inorganic fertilizers.
- (v) Thereafter saplings from the nursery are planted. The planting can be done in two ways, one by shifting the plant along-with the roots and soil, from the bed of the nursery and another by shifting the sapling without the soil. Moreover, depending on the spacing to be maintained between the tea plants, plantation is done by either of the two methods of 'Pit



planting' or 'Trench planting'. Spacing between plants depend on the type of plants being planted (some types grows upwards and are less bushy while some spreads side-wise requiring more space) but normally, 15000 to 18000 plants are planted per hectare. Saplings from seed are preferred in geographical areas where there is more gravel in the soil or the ground water level is low because these plants will have stronger roots, where as in most area of Assam clones are used. Seeds variety gives tea which will be blacker and clones are fibrous and brownish in color.

- (vi) The planting is followed by 'mulching' which is an activity of covering the ground with green vegetative matter, like tea leaves, twigs and bark of tea plants, leaving a gap of 10cm from the collar of the plant. Mulching helps in maintaining the moisture of the ground improves soil fertility and prevents growth of weeds.
- (vii)These saplings are to be nurtured for at least three years before the tea bushes are matured for plucking. During this period along with the normal activities of weeding, manuring, pest and disease control, irrigation and drainage, efforts are to be made to ensure that the tea plants attain the desirable frame once it is ready for plucking. The proper frame signifies uniform, radial, all-round growth of the tea plant which is achieved by periodically removing the main stem beyond 20 cm from the ground and other methods.
- 3. Shade for tea plants: Another important feature of tea plantation are the 'shade trees' which protect the tea bushes from direct sunlight and ensures that the moisture in the leaves are not lost easily and provides scores of other benefits for the tea plants. Shade trees once matured, do not require as much attention as the tea bushes but when new shade trees are to be planted (with the samplings being nurtured in the shade tree nursery), these are to be reared till they are full grown.

The shade trees also help in preventing soil erosion and increasing soil fertility while providing for timber and fire woods, once it's utility as shade tree is lost.

- 4. Irrigation and Drainage: Tea plantations require adequate supply of water and during dry seasons when there is not sufficient spells of rain (ideally between 2000 to 3000 mm per annum, in Assam) irrigation becomes necessary. Even during winter season when rainfall is less, irrigation becomes necessary. Irrigation is done by pumping water from nearby water sources like river or water bodies, rain water storage tanks, boring well (it is expensive to bore a well which may give water upto 11 years) etc. However, stagnation of water in tea plantations is harmful for proper growth and therefore proper drainage system should be maintained to drain out surplus water.
- 5. **Manuring:** The depletion of nutrients in the soil occurs with repeated cultivation as the plants draw nutrition from the soil. In some cases the soil is inherently deficient in nutrients. In either situation the soil is to be provided with nutrients on regular basis for healthy growth of the tea plants, which is done through manuring.
- 6. **Pest and Disease control:** The tea plants are prone to various types of diseases and attacks by pests (the most common and dangerous among them being 'blights'). The plants are kept under regular watch for any indication of disease or attack by pests and chemicals and



pesticides are sprinkled or sprayed either as a preventive measure or to cure any disease or ward-off any pest attack.

- 7. **Weeding:** Growth of weeds around the tea bushes is a natural phenomenon which needs to be controlled. This is done either by hand-picking the weeds or by use of chemicals/herbicide.
- 8. Plucking: Plucking refers to the harvesting of the tea leaves produced for manufacture of 'Made Tea'. There are different type of plucking on which depends the quantity and quality of the green leaves plucked and also the shoots that come out after plucking. The common types of plucking are 'Janam' (scale leaf plucking), standard plucking and Black plucking. Ideally two leaves and the terminal bud are picked by hand periodically and the frequency of the plucking rounds depends on the pruning type (discussed below), regeneration of the leaves and bud, plucking type and the management policy. Plucking is generally done when the plant has buds and leaves at the terminals which are commonly known as 'flushes'. Flushes refer to the top 1-2 inches of a mature plant that contains the bud and the leaves. A plant will grow a new flush every seven to 15 days during the growing season, and leaves that are slow in development tend to produce better-flavoured teas. In India the flushing period is divided into the early flush, between ends of March to May, the Main flush, between mid-June to mid September and the back end flush, between mid-September to the end of the season, beyond which the tea bushes are pruned and allowed to grow again, till the next flush. Plucking is a labour intensive activity and due to shortage of labour in several tea estates timely plucking is affected which results in lesser number of plucking rounds having a bearing on both the timely availability of green leaves and quality of the leaves. To tackle this situation, plucking by machines has been carried out on experimental basis by many tea estates but has not turn out to be successful.
- 9. Pruning: This is a vital activity in tea plantations which has two main objectives, namely, to control the vertical growth of the tree within manageable limit and to stimulate vegetative growth resulting in horizontal expansion with vigorous branching pattern. The quantity and quality of tea leaves largely depend on the pruning-routine and constitute a major part of management of tree plantation. Pruning is done with pruning shears and is primarily of the following types, each type having different objective, bringing in different benefits and necessitated under different situations:
 - (a) Collar prune
 - (b) Heavy prune
 - (c) Medium prune
 - (d) Light prune/Top prune/Cut across prune
 - (e) Skiff prune/Lung prune

Skiff prune is again classified into:

- (a) Deep skiff [DSK]
- (b) Medium skiff [MSK]
- (c) Light skiff [LSK]
- (d) Level off skiff [LOSK]



(e) Unpruned [UP]

The pruning cycle (the interval between two prunes) and the type of pruning are decided by the Management of the tea estate depending on the following and other factors:

- (a) Crop & yield required
- (b) Growth time required
- (c) Rest period required
- (d) Nutrient status
- (e) Damage done by sun scorch, blister, pest etc.

10. Soil rehabilitation:

The yield of the tea bushes which have crossed the prime gradually falls and these old tea bushes are uprooted for re-plantation. But due to years of growing tea, physio-chemical as well as the biological properties of the soil deteriorates. To recover from this situation, after uprooting of old tea bushes, the land is put under rehabilitation crop for a period of 18-24 months. Some of the most common rehabilitation crops are Guatemala grass and citronella grass. Rehabilitation crops require manuring with cow dung. Soil rehabilitation program is followed by ground preparation for re-plantation.

Other prominent activities ancillary to tea production that is witnessed in the Tea Estates in India involves:

- 1. The <u>majority of the tea estates have large areas of vacant land</u> which are not used for tea plantation for various reasons. The Management of several tea estates uses these areas for different type of cultivation with commercial proposition. Several tea estates have got into cultivation of spices like black pepper and cardamom. Even rubber and other trees are also planted. These small scale parallel activities ensure productive use of vacant land with limited use of other resources.
- 2. Another trend in tea plantation is <u>'Tea Tourism'</u> which has gained immense popularity, particularly in the Dooars region. Under this concept, well furnished and beautifully designed bungalows are built with kitchen garden, overlooking lush green tea gardens, which are offered to tourists for stay. Superior hospitality and tours of the tea gardens and manufacturing facilities provide for added attraction in 'Tea Tourism'. This new concept has caught up with foreign tourists and helps the tea estates to earn additional revenue while providing additional opportunity for marketing their brand of tea.

Tea Manufacturing

After picking, the tea leaves soon begin to wilt and oxidize, unless they are immediately dried. The leaves turn progressively darker as their chlorophyll breaks down and tannins are released. This enzymatic oxidation process, known as fermentation in the tea industry, is caused by the plant's intracellular enzymes and causes the tea to darken. In tea processing, the darkening is stopped at a predetermined stage by heating, which deactivates the enzymes responsible. In the production of black teas, the halting of oxidization by heating is carried out simultaneously with drying. Without careful moisture and temperature control during manufacture and packaging, the tea



may become unfit for consumption, due to the growth of undesired moulds and bacteria. At minimum, it will make the taste unpleasant.

The tea manufacturing process depends on the type of tea to be produced. The different varieties of tea that are manufactured include:

- 1. Black Tea
- 2. White Tea
- 3. Oolong Tea
- 4. Green Tea
- 5. Organic Tea
- 6. Instant Tea

However, in India, the black tea is produced in maximum quantity, while green tea is also produced, which may or may not be blended with different grades of tea or differently flavoured by use of additives (to create scented and flavored variants like Earl Grey, caramel etc.).

Black Tea Manufacturing:

Black tea is either of the orthodox variety or CTC variety which requires slightly different manufacturing activities. The primary processes for manufacturing either Orthodox tea or CTC tea are:

- 1. Withering
- 2. Sifting and conditioning
- 3. Rolling
- 4. Fermentation
- 5. Drying
- 6. Sorting & Grading
- 7. Winnowing
- 8. Packing

1. Withering:

After the tea leaves are plucked and brought to the factory they are checked and graded for the quality of leaves and weighed before putting it for withering. The tea leaves, beside the entity's own production can be bought from other gardens (bought leaves). Withering is the process during which the excess water in the leaves are removed and change in chemical composition of the leaves by breaking down of chlorophyll and release of tannin is allowed to take place. The leaves are spread in long troughs in a cool breezy atmosphere for the leaves to loose surface moisture. Large industrial (heavy duty) fans are often used to create the breeze. During rainy season when the humidity is high, heated air may be circulated to speed up the process of withering. Induced withering although helps the leaves to loose moisture speedily, reduces the time for chemical withering and can have a bearing on the quality of the final product. This process of trough-withering which is the most common takes about 18 hours under normal atmospheric condition without induction of heat or induced air circulation. Alternatively, the leaves can be spread on 'tats' (on tightly stretched jute fabric or on wire netting) where the rate of withering is controlled by the thickness of the spread and the length of time allowed for withering. The leaves sometimes lose more than a quarter of their weight in water during withering.



2. Sifting and conditioning:

The tea leaves brought from the garden normally contain stones, soil and metal bits which are cleared at this stage so that these do not get carried into the machines in the subsequent processes and the leaves are fed uniformly into the machines. The green leaf sifter is a power driven wire mesh or perforated tray which vibrates continuously and feeds the withered leaves to the next process. The sifter contains powerful magnet to catch iron pieces remaining in the withered tea leaves. The process of sifting is accompanied with conditioning which is directed at giving the right curl to the withered leaves. This is done to ensure that flat leaves are not fed into the CTC machines which will prevent proper fermentation of the leaves, causing poor liquor quality of the 'Made Tea'. The conditioning is done by using a combination of leaf shredder and rotor vane machines. The chopped and mashed leaves from the shredder are minced and crushed in the rotor vane machine before it is taken for rolling.

3. Rolling:

This process as is suggested by the name of the process twists and turns the leaves thus breaking the leaves and consequently releasing the enzymes and substrates, thereby starting fermentation. While the process of rolling is done by 'Orthodox-roller' machines, in case of very high grade tea it can be rolled by hand as well. The output from the rolling process has an appearance of lumps of leaf mass which is separated and sorted into uniform size so as to have the same rate of fermentation.

The above process of rolling used for Orthodox tea is different from the rolling process for CTC tea. CTC stands for <u>Crush</u>, <u>Tear and Curl</u> and during the rolling process, the leaves are crushed, torn and curled thereby getting granulated and considerably reduced in size and the cells getting ruptured facilitating more intensive and speedy fermentation. As a result the CTC tea produces thicker liquor than Orthodox tea.

4. Fermentation:

This is a process of oxidation triggered by breaking down of the 'chlorophyll' and the release of the enzyme 'tannin' thus causing the leaves to turn blackish from green. This process begins during rolling and the leaves are spread out on flat surfaces (may be perforated trays) in thin layers to enable the enzymic oxidation to continue. Alternatively, the leaves are put into large rotating drums through which fresh air is passed. The constant movement of the leaves ensures that the every bit of the leaves is exposed to fresh air and oxidation is uniform and thorough. Moreover, the leaves rub with each other whereby the juices present in the micro cells of the leaves are uniformly coated on the exterior of the leaves. The aroma of the tea is developed during this process. The period for which the fermentation is done has a major impact on the colour and aroma of the 'made tea'.

5. Drying:

The fermentation process is stopped at a predetermined stage by 'drying' the leaves. In case of Green Tea, fermentation is stopped at an early stage as compared to Black Tea.

Drying can be done using the following methods and in either case heat is generated by combustion of fuel (HSD or coal) which raises the temperature of the ambient air:

(a) The conventional method is to move the leaves repeatedly through a series of moving



- perforated trays while subjected to a continuous flow of hot air circulated by using industrial (heavy duty) fans run by electricity.
- (b) Another method is known as 'fluidized bed drying' in which the leaves on reaching the drying chamber initially gets a blast of hot air which evaporates the maximum moisture contained in the leaves. Thereafter the flow of air gradually reduces as the tea passes through the chamber and at the end of the chamber the dried tea is shifted into a cooling chamber where normal air is introduced by a fan.

6. Sorting and Grading:

After drying the black tea is ready which are sorted and graded before packing. Sorting is done by machine where meshes in automated motion act like sieves and separate the tea on the basis of the size. Bigger sizes fetch better price in the market. The tea-fibers and flakes of coarse leaves etc. which are separated at this stage, called the 'tea waste', are mostly used for either making 'instant tea' or as manure in the tea garden.

<u>'Tea Waste'</u> as defined by the 'The Tea Waste (Control) Order, 1959' means tea sweepings, tea fluff, tea fiber or tea stalks or any article purporting to be tea which does not conform to the specification for tea laid down under the Prevention of Food Adulteration Act, 1954 (37 of 1954) but does not include green tea or green tea stalks.

The removal of tea-fibers and flakes of coarse leaves is done by PVC rollers which are induced with static electricity by bringing in contact with 'felt' and when the dried leaves are passed through the electrically charged PVC rollers, the fibers and flakes which contain more moisture than quality tea get removed from the bulk. This process can be effective only if it is done immediately after the drying process and before the dried tea absorbs moisture by coming in contact with humid atmosphere thereby reducing the difference of moisture content between the tea and the fibers and flakes.

Grading is generally done into four main sizes namely, Whole leaf grades, Broken, Fanning and Dust which are further classified into grades of various qualities. The grading into the four main sizes is done in case of Black Tea and Green Tea and in case of CTC Tea, the 'Whole leaf' is not available.

7. Winnowing:

This is a further cleaning process before packing which is a routine and during this process stalks, fibrous residue and other foreign matter are removed.

8. Packing:

Packing is done as per requirement into air tight packets of various sizes and ensuring that the 'made tea' does not catch moisture which can result in loss of flavour of the tea. Before packing several batches manufactured during the day of similar grade are mixed to ensure uniformity in the quality. Traditionally, tea was packed in plywood chests lined with aluminum foils. While packing is also done in corrugated cardboard boxes lined with aluminum foils and polylined jute bags, the present trend is to pack tea in HDPE woven sacks with HMHDPE inner liner. Packing is done by machines during which magnets fitted in the packing machine take out any iron bits lying in the tea. Black tea may be further processed with the help of tea bagging machine to manufacture 'tea bags'. "Filter papers" is used as packaging material for manufacture of tea bags.



Types of Tea

Tea is known by the terms Green, Oolong and Black. The types are references to processing and oxidization. The simplest explanation is to think of leaf that is picked or falls from any bush. The leaf turns stages of colors until it is finally black. In the case of tea, oxidization is stopped at various stages.

1. Green Tea

Green tea is nothing more than the leaves of the camellia sinensis that have been processed a certain way. Green tea skips the oxidizing step. It has more delicate taste and is light green or golden in colour. They are also lower in caffeine and have higher antioxidant properties.

2. Oolong Tea

The best way to describe oolong tea is that they are somewhere in between green and black tea. This is because they are only partially oxidized during the processing. Oolong tea is popular in China.

3. Black Tea

Black teas are the most consumed of teas and accounts for 83% of the world tea trade. They are the highest in caffeine. Black tea is the most popular tea in the world. It is the tea most widely used in making iced tea and English tea. There are two types of Black Teas:

- 1. Orthodox Tea It accounts for 44% of the world market
- 2. CTC Tea- It accounts for 39% of the world market.

It is tea that has been fully oxidized or fermented and yields a hearty flavored amber brew. Some of the popular black teas of India origin include Assam, Darjeeling and Nilgiri.

Manufacturing of Tea:

White Tea manufacturing:

White Tea processing is much simple compared to that of black tea. The two leaves and a bud at the terminal of a shoot, the most prized part of the tea plant are steamed and dried either under the sun or fried in large steel pans which resemble huge woks. The leaves are rotated by hand to ensure uniform drying. White tea has high medicinal values but is not commonly consumed.

Oolong Tea manufacturing:

The consumption of this variety of tea is mostly confined to China and involves intricate processing. Oolong tea is a whole leaf tea which is partially fermented and is highly aromatic.

Green Tea manufacturing:

This manufacturing process is signified by controlled fermentation and arrested enzymatic oxidation. Heat is not applied for drying and thus the leaves retain the green colour instead of turning black. Green tea is known for its therapeutic values.

Organic Tea manufacturing:

The primary requirements for being identified as Organic Tea are -

(a) The unit growing the tea should have a self-sustaining system with facilities like cattle



- farming and the animal droppings can be used as organic manure and as fuel for generating gas to be used for heating, thus using environment friendly techniques.
- (b) The farm/product should be certified as 'Organic' in accordance with the 'National Standards of Organic Products'.

Over the years the demand for organic tea has risen globally, which has encouraged the Indian tea manufacturers to go for the manufacture of organic tea which though is a more expensive proposition can command a premium of about 35%, thereby making it more remunerative.

Instant Tea:

Instant tea refers to a variety of tea which is instantly soluble in water and does not leave behind residual tea leaves after these are soaked in water to prepare the beverage. The manufacturing process is capital intensive and uses a different technology.

The process begins with selection of tea leaves as per the requirement of the specific market and the restrictions attached to its manufacture. Tea leaves taken for instant tea manufacturing are partially fermented and not dried thus black tea from an intermediate stage of manufacturing when the tea leaves have been partially fermented and not put to drying can form the raw material for instant tea manufacturing. Similarly, oolong tea and green tea can also be used.

An important process in manufacturing of instant tea is extraction of the solids and concentrated solution from the leaf which is done by a technique called the 'Counter current extraction' technique. At this stage chemicals and enzymes are applied to enhance the percentage of solids in the extracts. However, during concentration of the tea extract, the aroma of the tea is lost to a great extent and so before concentration, the extract is stripped off the aroma by exposing the extract to the stripping gas, which is subsequently added back to the concentrated solution.

On cooling down of the concentrated solution, a material is obtained which mainly consist of caffeine, theaflavins and thearubigins and is termed as the 'cream'. The quality of the tea is characterized by the amount of the cream. Solubilisation of the cream is the next step in the process. Cold soluble tea is produced by separating the cream from the tea extract and oxidizing under specific temperature, maintaining specific PH and by addition of enzyme. The cold soluble tea is concentrated before passing to the drier. However, exposure to high temperature damages the product and so concentration is often done by evaporation under low pressure without exposing to high temperature. The tea extract is now spray dried while ensuring that the flavor is not lost under high temperature and the concentrated dried powder is packed as per requirement.

Flavoured Tea:

Beside the pure variety of tea, the flavor in some teas is enhanced through additives or special processing. Tea is highly receptive to inclusion of various aromas; this may cause problems in processing, transportation, and storage, but also allows for the design of an almost endless range of scented and flavoured variants, such as Earl Grey, vanilla, and caramel.



In order to prevent tea from any possible adulteration, the Prevention of Food Adulteration (PFA) Act, 1954 is in existence. Tea therefore shall conform to the following specifications as indicated in the PFA Act, 1954.

a) Total ash determined on tea dried to a constant weight at 100° C	4.0 to 8.0 percent by weight	
b) Total ash soluble in boiling distilled water	Not less than 40.0 percent of total ash	
c) Ash insoluble in HCL	Not more than 1.0 percent by weight on dry	
	basis	
d) Extract obtained by boiling dry tea (dried to constant weight at 100° C) with 100 parts of distilled water for one hour under reflux	Not less than 32.0 percent	
e) Alkalinity of soluble ash	Not less than 1.0 percent and not more than	
	2.2 percent expressed as K2O on dry basis	
f) Crude fiber determined on tea dried to constant weight at 100° C	Not more than 17.0 percent	

Note:-

- 1. It shall not contain any added colouring matter or added flavouring matter.
- 2. Provided that tea for export may contain added flavour under proper label declaration.
- 3. Provided further that the tea used in the manufacture of flavoured tea shall conform to the standards of tea.

Coffee Plantation

The coffee industry of India is the sixth largest producer of coffee in the world, accounting for over four percent of world coffee production, with the bulk of all production taking place in its Southern states.

Coffee Plantation in India began with planting of 'Seven seeds' of 'Mocha' during 1600 AD by the legendary holy saint Baba Budan, in the courtyard of his hermitage on 'Baba Budan Giris' in Karnataka. The plants remained as a garden curiosity for long and spread slowly as back yard plantings. The commercial plantations of coffee were started during British India in 18th century in the hostile forest terrain in south India.

Since then, Indian coffee industry has made rapid strides and earned a distinct identity in the world. Coffee in India is grown under a canopy of thick natural shade in ecologically sensitive regions of the Western and Eastern Ghats. This is one of the 25 biodiversity hotspots of the world. Coffee contributes significantly to sustain the unique bio- diversity of the region and is also responsible for the socio-economic development in the remote, hilly areas.

In India, coffee is traditionally grown in the Western Ghats spread over Karnataka, Kerala and Tamil Nadu. Coffee cultivation is also being expanding rapidly in the non-traditional areas of Andhra Pradesh and Odisha as well as in the North East states comprising the states of Assam, Manipur, Meghalaya, Mizoram, Tripura, Nagaland and Arunachal Pradesh.

Coffee is predominantly an export oriented commodity and 65% to 70% of coffee produced in the country is exported while the rest is consumed within the country. Indian coffee has created a niche for itself in the international market and the Indian Coffees are earning high premium,



particularly Indian Robusta which is highly preferred for its good blending quality. Arabica Coffee from India is also well received in the international market.

Not only Coffee is an export product with low import intensity but also provide high employment content. More than six lakh persons are directly employed and an equal numbers of individuals get indirect employment from this sector.

Varieties of coffee

The two main varieties of coffee viz., *Arabica* and *Robusta* are grown in India. Arabica is mild coffee, but the beans being more aromatic, it has higher market value compared to Robusta beans. On the other hand Robusta has more strength and is, therefore, used in making various blends. Arabica is grown in higher altitudes than Robusta. The cool and equable temperature, ranging between 150c to 250c, is suitable for Arabica while for Robusta, hot and humid climate with temperature ranging from 200c to 300c is suitable. Arabica requires more care & nurture and is more suitable for large holdings whereas Robusta is suitable irrespective of size of the farm. Arabica is susceptible to pests & diseases such as White Stem Borer, leaf rust etc., and requires more shade than Robusta. The harvest of Arabica takes place between November to January, while for Robusta it is December to February.

Growing Conditions

India cultivates all of its coffee under a well-defined two-tier mixed shade canopy, comprising evergreen leguminous trees. Nearly 50 different types of shade trees are found in coffee plantations. Shade trees prevent soil erosion on a sloping terrain, they enrich the soil by recycling nutrients from deeper layers, protect the coffee plant from seasonal fluctuations in temperature, and play host to diverse flora and fauna.

India's coffee growing regions have diverse climatic conditions, which are well suited for cultivation of different varieties of coffee. Some regions with high elevations are ideally suited for growing Arabica of mild quality while those with warm humid conditions are best suited for Robusta.

Factors	Arabica	Robusta
Soils	Deep, fertile, rich in organic matter, well drained and slightly acidic (Ph6.0-6.5)	Same as Arabica
Slopes	Gentle to moderate slopes	Gentle slopes to fairly level fields
Elevation	1000-1500m	500-1000m
Aspect	North, East and North- East aspects	Same as Arabica
Temperature	150 C – 25 0 C; cool, equable	200 C – 300 C; hot, humid
Relative humidity	70-80%	80-90%
Annual rainfall	1600-2500 mm	1000-2000 mm
Blossom showers	March- April (25-40mm)	February – March (25-40 mm)
Backing showers	April-May (50-75 mm) well distributed	March-April (50-75 mm) well distributed



The major activities of the Coffee plantations can be classified into the following:

1. Planting

A coffee bean is actually a seed. When dried, roasted and ground, it is used to brew coffee. But if the seed is not processed, it can be planted and will grow into a coffee tree.

Coffee seeds are generally planted in large beds in shaded nurseries. After sprouting, the seedlings are removed from the seed bed to be planted in individual pots in carefully formulated soils. They are watered frequently and shaded from bright sunlight until they are hearty enough to be permanently planted. Planting generally takes place during the wet season, so that the soil around the young trees remains moist while the roots become firmly established.

2. Harvesting the Cherries

Depending on the variety, it takes approximately 3 to 4 years for the newly planted coffee trees to bear fruit. The fruit is called the coffee cherry and when it turns bright, deep red after ripe, it is ready to be harvested. In most countries, the coffee crop is picked by hand but where the landscape is relatively flat and the coffee fields immense, the process is mechanized. Whether the coffee crop is picked by hand or by machine, all coffee is harvested in one of two ways:

Strip Picked - all of the cherries are stripped off of the branch at one time either by machine or by hand.

Selectively picked – In this case, only ripe cherries are harvested and individually picked by hand. This process of harvest is labor intensive and costly. It is used primarily to harvest the finer Arabica beans.

3. Processing the Cherries

Once the coffee has been picked, processing should begin as quickly as possible to prevent spoilage. Depending on location and local resources, coffee is processed in one of two ways as follows:

The Dry Method

Under this method, the freshly picked cherries are spread out on either on large concrete or huge surface or brick patios to dry in the sun. To prevent the cherries from spoiling, they are raked and turned throughout the day and covered at night and to prevent them from getting wet. It may take up to 4 weeks before the cherries are dried to the optimum moisture content, depending on the weather conditions. On larger plantations, machine-drying is sometimes used to speed up the process after the coffee has been pre-dried in the sun for a few days. When the moisture content of the cherries drops, the dried cherries are moved to warehouses for storage.

The Wet Method

In the wet processing method, the fruit covering the seeds/beans is removed before they are dried and washed. Coffee processed by the wet method is called wet processed or washed coffee. As to the wet processing, the beans are subject to cleaning to segregate defective seeds. The wet method requires the use of specific equipment and substantial quantities of water. The beans of different varieties and sizes are then blended to derive the best flavour.

Next they are passed through a series of rotating drums which separate them by size. After



separation, the beans are transported to large, water-filled fermentation tanks. The fermentation process has to be carefully monitored to ensure that the coffee doesn't acquire undesirable, sour flavors. Depending on a combination of factors -- such as the condition of the beans, the climate, thickness of the mucilage layer and concentration of the enzymes and the altitude -- they will remain in these tanks for about 12 to 48 hours. When fermentation is complete the beans will feel rough, rather than slick, to the touch. At that precise moment, the beans are rinsed by being sent through additional water channels. They are then ready for drying.

4. Drying the Beans

If the beans have been processed by the wet method, the pulped and fermented beans are to be dried to soak moisture and properly prepare them for storage. These beans, still encased inside the parchment envelope (the endocarp), can be sun dried by spreading them on drying tables or floors, where they are turned regularly, or they can be machine dried in large tumblers. After drying, these beans are referred to as 'parchment coffee'.

5. Milling the Beans

Milling the beans process involves removing the last layers of dry skin and remaining fruit residue from the dry coffee or parchment coffee, and cleaning and sorting it. The parchment coffee is processed in the following manner:

Hulling

The first step in dry milling is the removal of entire dried husk from the bean. Hulling is done with the help of machines, which can range from simple millstones to sophisticated machines that gently whack at the coffee.

Polishing

This is an optional process in which any silver skin that remains on the beans after hulling is removed in a polishing machine. Polished beans are considered superior to unpolished however, in reality there is a little difference between the two.

Grading & Sorting

Coffee beans are sorted out based on size, weight, altitude, tastes etc. They will also be closely evaluated for color flaws or other imperfections.

Next defective beans are removed. This process can be accomplished with the help of sophisticated machines and also can be done by hand. Beans of unsatisfactory size, color, or that are otherwise unacceptable, are removed. This might include over-fermented beans, those with insect damage or that are un-hulled.

6. Tasting the Coffee or Coffee cupping

This is a practice of observing the tastes and aromas of brewed coffee. At every stage of production, coffee is repeatedly tested for its quality and taste. This process is also referred to as 'cupping' and usually takes place in a room specifically designed to facilitate the process. Samples from a variety of batches and different beans are tasted daily. Coffees are not only analyzed this way for their inherent characteristics and flaws, but also for the purpose of blending different beans or determining the proper roast.



7. Roasting the Coffee

Roasting coffee transforms the chemical and physical properties of green coffee beans into roasted coffee products. The beans are kept moving throughout the entire process to keep them from burning and when they reach a particular degree of temperature, they begin to turn brown and the caffeol, or oil, locked inside the beans begins to emerge and expand to change in colour, taste, smell, and density.

8. Grinding Coffee

The flavor of coffee depends on how the coffee is coarse or ground and on the method by which the coffee is to be brewed. Generally, the finer the grind the more quickly the coffee would be prepared.

Rubber:

Rubber is a prominent plantation crop of considerable significance to the Indian economy. A native to Brazil, rubber was introduced to India in 1873 and its commercial cultivation started in 1902. Natural Rubber tapped from the bark of the tree *Hevea brasiliensis* is the raw material for an industry manufacturing the products with rubber. India is one amongst the top ten rubber producing countries. Kerala is leading rubber plantation state in India. The first commercial rubber plantations in India were established at Thattekadu in Kerala in 1902. But wide cultivation of rubber started after 1940 in Kerala. The places in Kerala where rubber is grown are Malanaadu, Idanaadu, Kottayam, Palakkad.

India's northeast has the potential to transform itself into the world's largest natural rubber producing region, and the country's second rubber-based industrial park has been set up in Tripura to boost the industry.

The rubber industry had passed through a great depression during the World War and had become dearer. This had led to intensive research on synthetic alternatives world over. During post-war period, the rubber industry in India gained the patronage of the Government, and both plantation and manufacturing industry achieved spectacular development. Reclamation of rubber which was initiated during the World War also developed into a robust industry in India.

With the invention of the automobile in the late 19th century, the rubber boom began. The demand for rubber is soaring due to huge production of passenger and commercial vehicles in India. A huge quantity of rubber goes into automobiles for various usages. Further, globalization has evolved the world markets into a single market. Only those players could survive in the market whose products are competitive both in terms of cost and quality.

1. The Rubber Tree

Many plant species produce natural rubber. However, in view quality and economics, it is limited to natural rubber, one of species, namely *Hevea brasiliensis*. The young plant shows characteristic growth pattern of alternating period of rapid elongation and consolidated development. The leaves are trifoliate with long stalks. The tree is deciduous in habit and winters from December to February in India. The rubber tree may live for a hundred years or even more. But its economic life period in plantations is only around 32 years – 7 years of immature phase and 25 years of productive phase.



2. Plant Development

Rubber tree seeds complete germination 10-15 days after sowing and produce hypogeal seedlings.

3. Natural Rubber

Natural rubber is a solid product obtained through coagulating the latex (milky secretion) produced by Hevea brasiliensis. This is also known Pará rubber and is a quick growing, fairly sturdy, perennial tree of a height of 25 to 30 metres.

4. Propagation of Rubber

In India, *Hevea* seeds normally ripen during July-September when the seeds are collected and seedlings raised. All earlier plantations were raised from unselected seeds. Selection work on *Hevea* with a view to improving the planting materials and the introduction of vegetative propagation by budding led, in course of time, to the establishment of numerous valuable clones.

5. Seedling Production

Different approaches are available for producing rubber tree seedlings. It is common to use seeds produced in native areas but the quality of material is lower, so crop growth and yield are affected. In order to produce vigorous rubber tree, it is essential to use high quality seeds. Further, the selection and production of high quality clones contributes to high crop yields. Rootstocks from seeds of hybrid cultivars are generally more vigorous in comparison to seeds from the native areas. Rubber tree seedling production often involves rootstock growth in nurseries, stalk formation and grafting operations.

6. Nursery Establishment

Nurseries are established and maintained for raising various propagation materials for planting. These include seedling stumps, budded stumps and advanced planting materials like polybag plants, stumped budding and soil core plants. Mother plants or source bushes for the multiplication of bud wood are also grown in nurseries. Raising of plants is easier and cheaper in nurseries than in the main field. Moreover, nurseries offer an opportunity for selection of vigorous and uniform plants.

Types of Nursery

Planting materials for establishing rubber plantations are generated in seedling, bud wood and polybag nurseries:

- Seedling Nursery: Seedling nurseries are established for the production of budded stumps, stumped budding and bud wood.
- **Bud wood Nursery:** Buds required for bud grafting are collected from bud wood obtained from plants raised specifically for this purpose. Bud wood nurseries are of two types, namely brown bud wood nursery and green bud wood nursery. The former produces brown buds while the latter, green buds.
- Polybag Nursery: Planting materials in polybags can be prepared by two different methods.
 Budded stumps can be planted in polybag and the scion allowed to develop till they are ready for planting in the field. In the other method, germinated seeds are planted in polybags and bud-grafted when five to six months old. The former gives greater opportunity for selection



of the most vigorous plants and avoids wastage of bags containing poor seedlings and budding failures. The roots of budded stumps can be treated with indolebutyric acid (IBA), a hormone which enhances root growth. Dipping root in cow dung slurry before planting enhances root development.

7. Nursery Management

Nursery Management is required for the purpose of rapid and economic production of good quality of rubber plants. In India, seed fall occurs generally from July to September and hence the period available for nursery growth is about 10 months. Therefore, efficient nursery management should aim at production of the maximum number of buddable or transplantable seedlings at the end of the 10 month period. Unhealthy and weak seedlings are removed. The ideal time for this culling is three to four weeks after the first fertilizer application, by which time the vigorously growing and stunted plants can easily be distinguished.

8. Field Planting

The success of rubber planting depends on the prevailing weather conditions, quality of the planting materials used and the care with which the planting operation is done. Continuous wet weather can be expected during June-July in the major rubber growing areas in India and hence this period is considered to be ideal for planting rubber. Different types of planting materials used are seeds, seedling stumps, budded stumps and polybag plants.

9. Planting of Rubber Trees

For planting the Rubber Trees, some special type of labourers is employed. Rubber is planted from the seedlings, and becomes ready for tapping in 6 or 7 years. For making the rubber plants high-yielding, its seedlings are grafted. The graft is, then, kept bound and left for a few weeks. After a few weeks the grafted buds sprout. Then, the old tree is cut off just above the point of union. The grafted seedlings are, then, planted in row 5 or 6 metres apart from each other. In order to conserve the soil and its fertility, some crop covers (leguminous creepers etc.) are planted in between the seedling trees. During the period of its growth, planters take all the measures against pest and diseases. Manure and fertilizer are regularly added.

10. Rubber Tapping

This is the process by which latex is collected from a rubber tree. Rubber tapping is done by wounding the bark of the rubber trees by cutting through the latex vessels to collect the flows of liquid in vessels. Tapping of the trees is usually done on alternate days. Timing for this process is to be planned within the planting cycle to optimize the latex yield.

11. Crop Collection

The main crop from rubber plantation is latex, a milky white dispersion of rubber in water, which is harvested by the tapping process. Two to three hours after tapping, the latex collected in the vessel/cup is transferred to a clean bucket. About 70-80 per cent of the crop from a rubber plantation is in the form of latex. The latex which gets solidified in the tapping panel (tree lace) and the collection cups also form the part of the crop. The latex split and overflowed to the ground (earth scrap) when gets dried is also collected as scrap once in a month. These are collectively called coagulum.

Latex and field coagulum is highly susceptible to bacterial action and therefore it is essential to



process them into forms in order to storage safely and for marketing.

Latex can be processed into any of the following forms:

- 1. Preserved field latex and latex concentrate.
- 2. Sheet Rubber.
- 3. Block rubber.
- 4. Crepe rubber.

Field coagulum can be processed only into crepe or block rubber. Presently, a major quantity of natural rubber produced in India is marketed in sheet form, which is the oldest and the simplest method of processing latex into a marketable form.

Climatic Conditions for Optimum Growth of Rubber Tree

The climatic conditions for optimum growth of rubber trees are:

- 1. Rainfall of 2000 to 3000 mm evenly distributed without any marked dry season and with 125 to 150 rainy days per annum
- 2. Maximum temperature of about 29°C to 34°C and minimum of about 20°C or more with a monthly mean of 25 to 28°C
- 3. High atmospheric humidity of the order of 80%
- 4. Bright sunshine amounting to about 2000 h per annum at the rate of 6 h per day through all the months
- 5. Absence of strong winds

Only a few regions in India meet all these requirements. Rubber can also be grown successfully under moderately deviating conditions. The rubber tree may live for a hundred years or even more. But its economic life period in plantations, on general considerations is, only around 32 years – 7 years of immature phase and 25 years of productive phase.

Legal and Regulatory Framework

There are many Acts and Rules which regulate Planation Industry. These Acts/ Rules are given below in two parts one relating to specific Plantation Industry and general laws as applicable to Plantation Industry under "General Laws and Regulatory framework for Plantation Industry".

Legislative Enactments on Tea

An entity engaged in production of tea leaves and manufacture of 'made tea' have to abide by the following:

1. <u>Tea Act, 1953, Tea Rules, 1954 and Investigation of Tea Undertaking/ Tea Units (Procedure)</u> <u>Rules, 1981</u>

The preamble to the Act refers to this as an Act to provide for the control by the Union of India, on the tea industry, including the control, in pursuance of the International Agreement now in force, of the cultivation of tea in, and of the export of tea from, India and for, that purpose to establish a Tea Board and levy a duty of excise on tea produced in India. This Act deals with:

(i) the constitution, functioning, dissolution and other issues related to the Tea Board of India;



- (ii) permission to be taken by a tea unit for bringing new land under cultivation of tea;
- (iii) the authority of the Government to make investigation into the functioning of a tea unit under certain circumstances;
- (iv) winding up of a tea unit;
- (v) control over the export of tea and tea seeds;
- (vi) levy of cess on tea;
- (vii) control of the Central Government over the price and distribution of tea and tea waste;
- (viii) licensing of the tea estate and the tea brokers; and
- (ix) other matters.

2. Tea Waste (Control) Order, 1959

This is an order issued in exercise of the powers conferred by subsections (3) and (5) of section 30 of the Tea Act, 1953 and provides for:

- (a) Definition and treatment of tea waste before sale or export except when to be used as raw material for manufacturing instant tea, bio-nutrient and bio-fertilizer;
- (b) Minimum quantity of tea waste that shall be generated during manufacture;
- (c) Restriction on possession of stock of Tea waste and manner of disposal of tea waste;
- (d) Mandatory license for purchase, sale, import, export and storage of tea waste, rules for application, grant, renewal, amendment, suspension and cancellation of such license, period of validity, conditions associated with it, requirements attached with it and mandatory maintenance of records and submission of returns;
- (e) search and seizure; and
- (f) other matters.

3. Tea Warehouses Licensing Order, 1989

This is an order issued in exercise of the powers conferred by subsections (3) and (5) of section 30 of the Tea Act, 1953 and provides for:

- (a) Mandatory license for the Warehouse owners, its applicability, rules for application, grant, renewal, amendment, suspension and cancellation of such license, period of validity, conditions associated with it, requirements attached with it and mandatory maintenance of records and submission of returns;
- (b) search and seizure; and
- (c) other matters.

4. Tea (Marketing) Control Order, 2003

This is an order issued in exercise of the powers conferred by subsections (3) and (5) of section 30 of the Tea Act, 1953 in suppression of the previous Tea (Marketing) Control Order, 1984. This order provides for:



- (i) mandatory registration of manufacturer and producer of tea and tea buyers with the right of Central Government to suspend or cancel the registration under certain grounds;
- (ii) maintenance of records and filing of returns by the manufacturer, producer and buyers;
- (iii) mandatory licenses for organizers of tea auctions and brokers participating in tea auctions together with rules for renewal, suspension and cancellation of license;
- (iv) issuance of directions for the license holders, maintenance and submission of accounts etc. by the licensee;
- (v) regulate price and purchase and sale of tea through public auction or otherwise;
- (vi) provides for search and seizure at the premises of the registered authority and licensed authority;
- (vii) direct adherence to the standard of tea manufactured and sold; and
- (viii) other matters.

5. Tea (Distribution and Export) Control Order, 2005

This is an order issued in exercise of the powers conferred by subsections (3) and (5) of section 30 of the Tea Act, 1953 in suppression of the previous Tea (Distribution and Export) Control Order, 1957. The order provides for:

- (i) Mandatory business license for the tea Distributors and Exporters, its applicability, rules for application, grant, renewal, suspension and cancellation of such license, period of validity, conditions associated with it, requirements attached with it and mandatory maintenance of records and submission of returns;
- (ii) Rules regarding application, issuance of certificate of origin for tea designated as geographical identification and refusal thereof, period of validity and suspension or cancellation of the certificate;
- (iii) Rules regarding issuance of non-preferential certificate of origin, refusal thereof, period of validity and suspension or cancellation of the certificate;
- (iv) Regulation and restriction of distribution and export of tea;
- (v) restriction on distribution on imported tea;
- (vi) empowering the licensing authority or the Board to issue directives and carry out search and seizure;
- (vii) empowering license authorities to approve independent inspection agencies and to suspend and cancel the approval; and
- (viii) other matters.

Legislative Enactments on Coffee

Coffee Act 1942

The preamble to the Act states that it is expedient in the public interest that the Union should take under its control the coffee industry.



Act provides for constitution of a Board by the name of the Indian Coffee Market Expansion Board under section 4 of the Indian Coffee Market Expansion Ordinance, 1940.

Every owner of land planted with coffee plants, whether such land is comprised in one estate or in more than one estate and whether it is situated wholly or only partly in India, is required to register under the Act.

The State Government may, by notification in the Official Gazette, make rules to carry into effect the provisions of section 14.

The Central Government may, by notification in the Official Gazette fix the price or prices at which coffee may be sold wholesale or retail in the Indian market.

Legislative Enactments on Rubber

Rubber Act 1947

The preamble to the Act states that it is hereby declared that it is expedient in the public interest that the Union should take, under its control, the rubber industry.

Provides for constitution of Rubber Board to promote by such measures, as it thinks fit, the development of the rubber industry.

The Central Government may fix the maximum price or the minimum price or the maximum and minimum prices to be charged, in the course of a business of rubber.

The selling and buying by any person shall be in accordance with the terms of a general or special licence issued by the Board.

The Board is authorized to levy such fees as may be prescribed for the issue and renewal of special licences under Section 14 or Section 15.

Rubber (Production and Marketing) Act, 1947

The Rubber (Production and Marketing) Act, 1947 provided for the overall promotion and development of the sector. The Rubber (Production and Marketing) Act, 1947 has been superseded by the Rubber Rules, 1955.

Rubber Rules, 1955

The Government of India notified Rules vide S.R.O 1662 in supersession of the Rubber (Production and Marketing) Rules, 1947. The Rubber Rules, 1955 lay down the guidelines for the Board to follow in carrying out the purposes of the Act. The Rules have been amended by the Rubber (Amendment) Rules 2010.

General Laws and Regulatory framework for Plantation Industry

1. Plantations Labour Act, 1951

The Plantation Labour Act, 1951 provides for the welfare of plantation labour and regulates the conditions of work in plantations. As per Act, 'Plantation' means "any plantation to which this Act, whether wholly or in part, applies and includes offices, hospitals, dispensaries, schools, and any other premises used for any purpose connected with such plantation, but does not include any factory on the premises to which the provisions of the Factories Act, 1948 apply".

The aim of the Act is to improve the institutional framework for dispute settlement and amending labour laws relating to industrial relations to ensure that the country gets a stable, dignified and efficient workforce, free from exploitation and capable of generating higher levels of output.



This is a special Labour Act for plantations using or which intends to use land measuring 5 hectares or more and employing 15 or more employees at any time during the preceding 12 months.

2. Factories Act, 1948.

It applies to factories covered under the Factories Act, 1948 engaging ten (10) or more than ten workers on any day of the preceding twelve months and are engaged in manufacturing process being carried out with the aid of power or twenty or more than twenty workers are employed in manufacturing process being carried out without the aid of power, are covered under the provisions of this Act.

- (i) Grant of Licences and to take action against factories running without obtaining Licence.
- (ii) Renewal of Licences granted;
- (iii) Inspections of factories for investigation of complaints, serious/fatal accidents as well as suo moto inspections to check compliance of provisions of this Act relating to:
 - Health
 - Safety
 - Welfare Facilities
 - Working Hours
 - Employment of Young Persons
 - Annual Leave with wages etc.

3. Industrial Disputes Act, 1947.

The Act is to secure industrial peace and harmony by providing machinery and procedure for the investigation and settlement of industrial disputes by negotiations.

The laws apply only to the organized sector. The Act requires firms employing 100 or more workers to obtain government permission for layoffs, retrenchments and closures.

The Act also lays down:

- (a) The provision for payment of compensation to the workman on account of closure or lay off or retrenchment;
- (b) The procedure for prior permission of appropriate Government for laying off or retrenching the workers or closing down industrial establishments;
- (c) Unfair labour practices on part of an employer or a trade union or workers.

The Act also lays down provisions for making enquiry into and settlement of any dispute in connection with the compliance or not of the terms and conditions of employment.

4. Employees Provident Fund & Miscellaneous Provisions Act, 1952.

As per Preamble to the Act, the EPF Act is enacted to provide for the institution of provident funds, pension fund and deposit lined insurance fund for employees in factories and other establishments. The Act covers three schemes i.e. PF (Provident Fund scheme), FPF (Family Pension Fund scheme) and EDLI (Employees Deposit Linked Insurance scheme).

The EPF Act contains basic provisions in respect of applicability, eligibility, damages, appeals, recovery etc.



- (i) The Act is applicable to every establishment which is a factory engaged in industry specified in Schedule- I to the Act and in which 20 or more persons are employed; and
- (ii) any other establishment or class of establishment employing 20 or more persons which may be specified by Central government by notification in official gazette.

5. Employees State Insurance Act, 1948.

The ESI Act is a social welfare legislation enacted with the object of providing certain benefits to employees in case of sickness, maternity and employment injury. Under the Act, employees will receive medical relief, cash benefits, maternity benefits, pension to dependents of deceased workers and compensation for fatal or other injuries and diseases. The Act is applicable to workers covered under Factory Act 1948. The act also applies to shops and establishments.

6. Payment of Wages Act, 1936.

The Payment of Wages Act, 1936 is a central legislation which has been enacted to regulate_the payment of wages to workers employed in certain specified industries and to ensure a speedy and effective remedy to them against illegal deductions and/or unjustified delay caused in paying wages to them. It applies to the persons employed in a factory, industrial or other establishment or in a railway, whether directly or indirectly, through a sub-contractor.

7. Minimum Wages Act, 1948.

This Act has been enacted to safeguard the interests of workers, mostly in the unorganised sector by providing for the fixation of minimum wages in certain specified employments. It binds the employers to pay their workers the minimum wages fixed under the Act from time to time.

Under the Act, both the Central Government and the State Governments are the appropriate Governments to fix, revise, review and enforce the payment of minimum wages to workers in respect of 'scheduled employments' under their respective jurisdictions.

Minimum wage and an allowance linked to the cost of living index is to be paid in cash, though payment of wages fully in kind or partly in kind may be allowed in certain cases. The minimum rate of wages consists of a basic wage and a special allowance, known as 'Variable Dearness Allowance (VDA)' linked to the Consumer Price Index Number. The allowance is revised twice a year, once in April and then in October.

8. Workmen's Compensation Act, 1923.

The Act provides for payment of compensation to workmen and their dependents in case of injury and accident (including certain occupational disease) arising out of and in the course of employment and resulting in disablement or death. The Act also includes persons employed in factories, mines, plantations, mechanically propelled vehicles, construction works and certain other hazardous occupations.

The amount of compensation to be paid depends on the nature of the injury and the average monthly wages and age of workmen. The minimum and maximum rates of compensation payable for death (in such cases it is paid to the dependents of workmen) and for disability have been fixed and is subject to revision from time to time.

9. Payment of Bonus Act, 1965.

The Act was enacted to provide for the payment of bonus to persons employed in certain establishments on the basis of profits or productivity and for the matters connected therewith.



The Act applies to:-

- (i) every factory as defined under the Factories Act, 1948; and
- (ii) every other establishment in which twenty or more persons are employed on any day during an accounting year.
- (iii) all the workers except apprentices.

Minimum bonus as per Act is 8.33% on Basic and DA and eligibility being—workers drawing salary upto Rs.10,000/- p.m. (Basic & DA) and worked for minimum 30 days. There is a maximum ceiling for the bonus— Rs. 3500 (Basic & DA)

10. Payment of Gratuity Act, 1972.

The Act was enacted to provide for a scheme for the payment of gratuity to employees engaged in factories, mines, oilfields, plantations, ports, railway companies, shops or other establishments employing ten or more persons and for matters connected therewith or incidental thereto.

- Gratuity shall be payable to an employee on the termination of his employment after he has
 rendered continuous service for not less than five years:- (i) on his superannuation; or (ii) on
 his retirement or resignation; or (iii) on his death or disablement due to accident or disease,
 provided that the completion of continuous service of five years shall not be necessary where
 the termination of the employment of any employee is due to death or disablement.
- The employer shall pay gratuity to an employee at the rate of fifteen days' wages based on the rate of wages last drawn by the employee concerned for every completed year of service or part thereof in excess of six months.

11. The Fatal Accidents Act, 1855.

The Act provides for compensation to the families of employees who have been fatally injured by accidents resulting from actionable wrong doings.

12. <u>Prevention of Food Adulteration Act, 1954 and Prevention of Food Adulteration Rules 1955</u> To ensure non-violation of the provisions of this Act, the tea estate should have stringent quality control measures for establishing that:

- (a) The nature, substance or quality demanded by the purchaser is actually been delivered.
- (b) The tea does not contain any other substance or the tea being supplied is not substituted wholly or partly by any inferior or cheaper substance, which affects the substance or quality thereof
- (c) The preparation or packing of the tea has not been done in a manner that could contaminate the tea and render it injurious to health.

Laws on Land and Land Revenue of the State where situated

Every state has laws relating to holding of land, land revenue and other issues related to land holding which have to be abided by the Tea Estate and necessary payments, filing of returns etc. have to be done.

13. Law relating to Agricultural Income Tax of the State where situated

Agricultural income tax is a state subject and the states have their own laws regarding tax to be paid and its administration.



14. Law relating to irrigation and water cess of the State where situated

State laws on this have to be abided with and default in this regard can attract penal provisions.

15. Any other state level Act, like the Assam Tea Plantations Provident Fund and Pension Fund and Deposit Linked Insurance Fund Scheme (Amendment) Act, 2005

State Governments have special laws which relate to the plantations and these should be abided by the planation industry. (Are these common for Planation Industry)

16. Central Excise Tariff Act, 1985.

While exemption from additional duty has been accorded to tea and tea wastes under the Act, manufacture of tea is chargeable under the Central Excise Tariff Act, 1985.

17. CENVAT credit Rules.

Where an entity is taking credit in its books for central excise duty, service tax or VAT paid on input material or service or capital goods purchased it has to abide the above mentioned rules.

18. State Level VAT Act and Central Sales Tax Act.

The States have their own 'Value Added Tax' Act and impose various rates of tax on sale or transfer of tea whereas when the tea is sold or transferred to a place outside the boundary of the state the provisions of the Central Sales Tax Act shall apply.

19. Income Tax Act, 1961.

The Provisions of the Income Tax Act and Rules apply to the Plantation Industry in same way as these provisions apply to any other Industry but there are few special provisions for the Plantation Industry which are mentioned below:

Rules 7A and 7B have been inserted in the Income Tax Rules 1962 by the Income Tax (Second Amendment) Rules, 2001, w.e.f. 1-4-2002 (i.e. assessment years 2002-03 and onwards):

(a) Income from the manufacture of rubber

Rule 7A. (1) Income derived from the sale of centrifuged latex or cenex or latex based crepes (such as pale latex crepe) or brown crepes (such as estate brown crepe, remilled crepe, smoked blanket crepe or flat bark crepe) or technically specified block rubbers manufactured or processed from field latex or coagulum obtained from rubber plants grown by the seller in India shall be computed as if it were income derived from business, and thirty-five per cent of such income shall be deemed to be income liable to tax.

(2) In computing such income, an allowance shall be made in respect of the cost of planting rubber plants in replacement of plants that have died or become permanently useless in an area already planted, if such area has not previously been abandoned, and for the purpose of determining such cost, no deduction shall be made in respect of the amount of any subsidy which, under the provisions of clause (31) of section 10, is not includible in the total income.

(b) Income from the manufacture of coffee

Rule 7B. [(1) Income derived from the sale of coffee grown and cured by the seller in India shall be computed as if it were income derived from business, and twenty-five per cent of such income shall be deemed to be income liable to tax.

(1A) Income derived from the sale of coffee grown, cured, roasted and grounded by the seller in India, with or without mixing chicory or other flavouring ingredients, shall be computed as if it



were income derived from business, and forty per cent of such income shall be deemed to be income liable to tax.

Explanation: For the purposes of sub-rules (1) and (1A) "curing" shall have the same meaning as assigned to it in clause (d) of section 3 of the Coffee Act, 1942 (7 of 1942)

(2) In computing the incomes referred to in sub-rules (1) and (1A), an allowance shall be made in respect of the cost of planting coffee plants in replacement of plants that have died or become permanently useless in an area already planted, if such area has not previously been abandoned, and for the purpose of determining such cost, no deduction shall be made in respect of the amount of any subsidy which, under the provisions of clause (31) of section 10, is not includible in the total income.

(c) Income from the manufacture of tea

Rule 8. (1) Income derived from the sale of tea grown and manufactured by the seller in India shall be computed as if it were income derived from business, and forty per cent of such income shall be deemed to be income liable to tax.

- (2) In computing such income an allowance shall be made in respect of the cost of planting bushes in replacement of bushes that have died or become permanently useless in an area already planted, if such area has not previously been abandoned, and for the purpose of determining such cost, no deduction shall be made in respect of the amount of any subsidy which, under the provisions of clause (30) of section 10, is not includible in the total income.
- (d) Section 10(30) of the Income Tax Act, 1961 exempts from income tax any subsidy received from the Tea Board for replanting or replacement of tea bushes or for rejuvenation or consolidation of areas used for cultivation of tea in India.
- (e) Section 10(31) of the Income Tax Act, 1961 exempts from income tax any subsidy received by planters who carries on the business of growing and manufacturing rubber, coffee, cardamom or such other commodity in India. The amount of any subsidy would be as received from or through the concerned Board (Tea/Rubber/Coffee Boards) under any such scheme for replantation or replacement of rubber plants, coffee plants, cardamom plants or plants for the growing of such other commodity or for rejuvenation or consolidation of areas used for cultivation of rubber, coffee, cardamom or such other commodity as the Central Government may, by notification in the Official Gazette, specify.
- **(f)** Section 33AB (Tea/Coffee/Rubber Development Account) provides for deduction from income of an amount equal to the least of the following:
 - (i) a sum equal to the amounts deposited with National Bank for Agriculture and Rural Development (NABARD) or in a Deposit Account opened by the assessee, in accordance with or for the purpose specified in a scheme approved by the Tea/ Coffee/Rubber Board with the previous approval of the Central Government or
 - (ii) 40 percent of the profit of the business computed in accordance with the provisions of the Act before making any deduction under section 33AB and before adjusting brought forward business loss under section 72, subject to certain conditions specified in the Act.



Chapter 14: Special transactions peculiar to the industry

Regulation of Plantation Industry by Respective Boards The activities of plantation Industry are regulated by the respective Boards with respect to rendering financial and technical assistance for cultivation, manufacture, marketing; research and developmental activities for augmentation of production and improvement of quality of the products. The functions of respective Boards are discussed very briefly as under:

Tea Board of India

The Tea Board was set up under the provision of Tea Act 1953 and it started functioning in April 1954. The Tea Board of India is an autonomous body, functioning under the Ministry of Commerce and Industry, Government of India. Its headquarters are in Kolkata with seventeen offices across India. The primary functions of tea board include rendering financial and technical assistance for cultivation, manufacture, marketing of tea; promoting tea exports; registering and licensing of manufacturers, brokers, tea waste dealers and persons engaged in the business of blending tea, aiding research and developmental activities for augmentation of tea production and improvement of tea quality as well as encouraging and assisting small growers sector financially and technically. Apart from various developmental and regulatory functions, the Tea Board of India undertakes direct promotional activities, which include organizing joint participation in international fairs and exhibitions, arranging buyer-seller meets and sending and hosting trade delegations. The Board also undertakes various market development activities such as market surveys, market analysis, tracking of consumer behaviour and dissemination of all relevant information to exporters/importers.

Coffee Board

The Coffee Board is a statutory body constituted under Coffee Act 1942, functioning under the Ministry of Commerce and Industry, Government of India. The core activities of Board are primarily directed towards research & development, transfer of technology, quality improvement, extending development support to growing sector, promotion of coffee in export and domestic markets.

Rubber Board

The Rubber Board is a statutory body constituted by the Government of India, under the Rubber Act 1947, for the overall development of the rubber industry in the country. Board functions under the administrative control of the Ministry of Commerce and Industry. Board is assisting and encouraging scientific, technical and economic research; supplying technical advice to rubber growers; and training growers in improved methods of plantation and cultivation, improving the marketing of rubber, collection of statistics from owners of estates, dealers and manufacturers, securing better working conditions and the provision and improvement of amenities and incentives to workers.

Cess on Tea, Coffee and Rubber

- **Tea Cess** is levied on all teas produced in India under Section 25(1) of the Tea Act, 1953 at the rate decided by the Government from time to time. The Cess at present is collected by the Central Excise Department and credited to the Consolidated Fund of India after deducting the expenses of collection.
- Coffee cess: Cess on Coffee was regulated by the Indian Coffee Cess Act, 1935, which was repealed by the Coffee Act 1942.
- Rubber Cess: At present there is zero paise per kg as the rate of cess on rubber produced in



India or procured for export production by the Export Oriented Units (EOUs), Units in the Export Processing Zones (EPZs) and Units in the Special Economic Zones (SEZs) and zero paise per kg as the rate of cess on Natural Rubber produced in India and procured for export by the exporters of Natural Rubber. The duty of excise levied under Sub-section (1) shall be collected by the Board in accordance with rules made in this behalf either from the owner of the estate on which the rubber is produced or from the manufacturer by whom such rubber is used or from the exporter by whom such rubber is exported.

Welfare of Workforce engaged in Plantation

The Plantation Act 1951 makes the provisions of wholesome Drinking Water to workers by the employers, provisions of latrines and urinals separately for female and male and these should be manned in a clean and sanitary condition, provisions of medical facilities for the workers and their families should be made readily available.

Also, it provides for setting up of canteens, crèches for the use of children who are below the age of six years, recreational facilities, suitable accommodation and educational facilities for the benefit of plantation workers in and around the work places in the plantation estate and provisions of necessary housing facilities for every worker and his family residing in the plantation estate.

Nurseries

Nurseries are established and maintained for raising various propagation materials for planting. These include seedling stumps, budded stumps and advanced planting materials like polybag plants, stumped budding and soil core plants. Mother plants or source bushes for the multiplication of bud wood are also grown in nurseries. Raising of plants is easier and cheaper in nurseries than in the main field. Moreover, nurseries offer an opportunity for selection of vigorous and uniform plants. The following activities are involved in Nurseries:

- Establishment of Nursery: Nursery is developed gradually. The mother plants planted for vegetative and seed propagation. Seed propagated plants are Tea, Coffee, and Rubber etc. Some important aspects of propagation are: Raising from seeds, Vegetative Propagation such cutting, layering, division, separation, budding and grafting.
 - A number of structures may be necessary for raising a nursery such as Work shed, Polyhouse, Store-cum-office, Fencing etc. Land preparation or the land development for nursery is very important. In nursery, the land may be divided into minimum four parts viz. (a) area for mother plant, (b) area for seed production, (c) area for raising seedlings and area for storing of seedlings or vegetatively propagated perennial plants.
- 2. **Management of Nursery:** For rapid and economic production of good quality planting materials, very efficient and careful management of the nursery is necessary. This would lead to higher productivity. Unhealthy and weak seedlings are to be removed. The Management of Nursery involves the following activities:
 - (a) Seedbed and nursery beds
 - (b) Collection and planting of mother plants
 - (c) Storage of dried, cleaned soil and compost manure
 - (d) Production of seeds
 - (e) Storage of propagated plants in nursery beds
 - (f) Manuring
 - (g) Watering
 - (h) Drainage



- (i) Plant protection
- (j) Harvesting
- (k) Packing and handling
- (I) Storage
- 3. **Cost of development of Nursery:** cost of development of nursery depends on the products for which it being developed. The cost of development is in respect of planting materials i.e. cost of preparation of land for raising plants, cost of seeds, manuring, weeding, polythene bags, budding, spraying, irrigation etc. Indirect costs like interest on borrowings, depreciation of fixed assets etc. are also part of cost of development.



Chapter 15 Activities/ Services of the industry

Tea Tasting

Like many other agricultural product tea is not a uniform product. Tea has various characteristics which are finally manifested in the liquor and flavor of the tea, giving rise to various grades with varying demand and commanding a wide range of prices. The characteristics depend on the geographical location of the tea estate, the manufacturing process and several other factors.

The ascertainment of the grade of the tea and consequently the prices is done through evaluation of the characteristics of the tea by a process called "Tea Tasting". Tea tasting has established standard procedure but is subjective in nature due to the dependence on intangible characteristics of 'liquor' and 'flavor'. Tea tasting is done by trained professionals who possess a natural talent of an encyclopedic palate memory so that the taster can compare the flavor with that of a number of samples tasted over the years, which are not presently available. The natural talent cultivated through years of training and experience gives the tea tasters a keen sense of smell that make them proficient tea tasters. The tea tasting cannot be done in laboratories.

Coffee tasting

Coffee tasting or coffee cupping is done to determine the characteristics of a particular coffee blend. A coffee taster judges coffee based on appearance, aroma, body, and flavour by first smelling and then tasting the coffee. He or she will taste the coffee at various temperatures to discover all the complexities of the blend or bean.

Marketing

Tea Marketing

Tea is mainly sold through Indian and International Tea Auction Centers although sale takes place in other modes as well. The various modes of tea sales are:

- 1. Public auctions (Both physical and on-line auctions)
- 2. Direct domestic sale from Tea Estates
- 3. Direct sales through Exporters (C& F Agents)
- On-line trading.

While the tea producers decide on the mode of sales, out of the above modes, sale through public auction finds maximum favour among the tea producers.

Process of Sale through Public Auction

The process of sale through public auction starts with the arrival of the tea at a warehouse registered with a particular Tea Auction Centre (through which the auction will take place) who intimates the date of the arrival and the quantity of tea received to the registered brokers (auctioneers) through issue of "Arrival and Weighment Report". The Brokers then draw out sample of size varying between 8 Kg. and 11 Kg. from the lot. The sample thus drawn is divided into different sizes and is sent to the registered tea buyers along with the catalogues and valuation reports. Where the registered buyer is a commission agent, the samples are again sent to the real buyers. On the basis of the feedback from the buyers the broker prepares itself for the auction. This process might take several weeks.

The tea lots are auctioned in a sequential order and the auction is held on different dates at different auction centers. The buyers (or their commission agents) may bid jointly for the same lot but the lot can be bought jointly by maximum of three buyers.

If a particular lot is not sold during a particular auction the lot can be presented again for sale through auction but not before two weeks.



The sales proceed after deduction of any advance and/or commission shall be paid to the seller by the end of two weeks from the date of the sale if the sale has taken place during first presentation. However, if the sales take place during second presentation, the payment will be made to the seller by the fifth week from the date of the first presentation.

Coffee Marketing

Prior to liberalization of economy in 1991, the Coffee Board of India was having the powers to regulate the marketing of the entire coffee produce under a unique pooling system. However, consequent to de-pooling in the early 1990s, the Coffee Board of India had withdrawn from the direct marketing activities and now the Board is focusing in the areas of research, extension, development and market development programmes.

Rubber Marketing

Rubber Board of India is rendering Marketing and Export Promotion Services to Rubber Manufacturers with the aim to develop new markets for the products, maintain and improve them for better marketing and export. The Board provides a wide range of services like Market survey reports, Trade Directories and information, export promotion, export training etc. The information provided by the Board is highly useful to improve the marketability of the products and to increase exports in the country.



Chapter 16: Audit of Plantation Industry

Internal Control System

The basic nature of Plantation Industry and its unique features demand the existence of a strong internal control and internal audit systems in Plantation Industry for the following reasons:

- (i) The field productivity of the raw materials vis-à-vis the quantum of output is highly dependent on the condition of the weather. The input-output ratio cannot be fixed rigorously and at the same time, the total quantum of output of final product cannot also be forecast with substantial accuracy many a times;
- (ii) The total operation of the Estate is controlled by a few managerial staff as compared to the vastness of the area of the estate and variety of operational functions involved;
- (iii) Because of this vastness of the total area of any Estate being looked after by a small number of managerial staff usually, it becomes very difficult to exercise personal managerial supervision in all cases;
- (iv) Sometimes, it becomes difficult to exercise the managerial supervision on the workers, to the fullest extent considering the low ratio of managerial staff and the number of workers and the Estate Management has to depend on the supervisory staff for most of the operations.

In view of above factors, the existence of an integrated and well-organized Internal Audit System is very important in Plantation Industry because a structured Internal Audit system will continuously assess the existence and effectiveness of the internal control system in all the operational areas. Internal Audit will point out any gap found in the Internal Control system in all the operational areas and will also facilitate the continuous improvement in the Internal Control System and procedures. To achieve these objectives, Internal Auditors have to take a pragmatic and practical approach while framing the Internal Audit Programme.

Internal audit in Plantation Industry

The major Tea/Coffee/Rubber producing and manufacturing organizations in India are registered under the Companies Act, 1956 (replaced by Companies Act 2013). Some estates work under the legal systems of Partnership/ Proprietorship/ Trust/ Society. The Internal auditor's audit plan needs to cover all the tea estates, the corporate and registered office.

General Internal Audit Functions:

- 1. Internal audit shall start with understanding the legal structure and the organizational structure of the Entity. It is useful to obtain a diagram of the organizational structure with the authority-responsibility relationships embedded in it. If it is not readily available, the internal auditor can draw one for himself which will be of immense help in conducting the audit.
- 2. Next step is to understand the internal control system (which encompasses the financial and cost accounting system) existing in the entity and to what extent it is in place. A flow diagram of the internal control system with sequence of the activities, the procedures to be followed, generation of documents, maintenance of records, authorization at each stage and the flow of information, may be developed for better understanding of the internal control system. With the help of this diagram the internal auditor shall proceed to review the efficacy of the entity's policies, plans, systems and procedures, identify any sign of failure of the system and find ways of improving the control mechanism to make it more efficient and cost effective.
- 3. The internal auditor having assessed and established the level of efficacy of the internal control



- system shall proceed to measure the performance-efficiency through various parameters like financial and other ratios.
- 4. The internal auditor shall review the existing system of identification of risks and their mitigation and assess its efficacy.
- 5. The Internal auditor shall refer to the internal audit report of the previous year and also to the report of the statutory auditor to find out areas in which greater emphasis needs to be given during the current year's audit.

Internal Audit Functions at Estates:

The Internal auditor should inter alia focus on the following aspects of the plantation activities while planning and conducting the internal audit functions:

- 1. Administration of the landed property held by the estate: Many of the estates own land measuring several acres and administration of the land is an important activity which involves the following:
- (a) Proper maintenance of records: The land held by an estate may be owned or taken on long term lease from the State Government or others. In either case the legal documents needs to be stored with utmost safety and security. A proper record documenting the important information contained in these legal documents should be maintained along with details of actions to be taken and the date of such action taken e.g. renewal of the lease agreement. Entries in the record shall be signed by the person responsible for maintaining the record and counter signed by the Estate Manager.
- (b) Detailed map and record of the estate: At every estate a detailed map should be available showing the location and measurement of the total area under control of the estate. The map shall present the area under cultivation with identification (number or alpha-numeric) for the various sections, area not under cultivation, area used for nurseries & other plantations, the buildings, labour hutments and other structures, network of roads, culverts, bridges, water bodies etc. This map should be reviewed from time to time and changes in character of land should be incorporated. Record of changes made from time to time should be maintained with signature of the persons involved and the Estate Manager. The various sections under plantation shall have placards/boards mentioning the number assigned to that section in the map for easy identification. Records shall also be available of the plantation, of the number of tea plants (bushes) in each section with dates for original plantation and refilling if there has been any.
- (c) Regular inspection of the estate: This is of utmost importance to ensure that the area not under cultivation is free from encroachment and precautionary measures can be taken for any early signal of possible encroachment or illegal felling of tree (e.g. by construction of fences) or natural disaster (e.g. by construction of embankment required to prevent erosion of soil or overflow of water from a river or canal running through or in the vicinity of the estate). Record for such inspection carried out should be maintained along with the report of the inspector who conducted the inspection, action planned and action taken duly signed by the person who conducted the inspection and the Estate Manager.
- (d) Review of the land and its utilization: The Estate Manager along with concerned officials should periodically review the following and keep record of the decisions taken and executed, duly signed by the reviewer:
 - (i) Whether any litigation exists, to free any land from encumbrance, the status/progress of the court case.



- (ii) Whether any unutilized land is being vested to the State Government and if so, steps to be taken to recover the land or to avail compensation as per law.
- (iii) Scope for bringing more land under plantation or for setting up of seed nurseries or shade tree nurseries with commercial prospect thus ensuring optimal utilization of the land and steps to be taken in that direction.
- (e) Land owned for cultivation attracts land revenue and other rates and taxes as per State laws and requires submission of information/returns. This activity should be carefully monitored so that these are done in timely manner and necessary and proper records are maintained.
- 1. Management of agricultural activity: Agricultural activity is the largest activity in an estate in terms of involvement of time and other resources. Normally the land in an estate is segregated into zones, areas and sections which are depicted clearly in the map/plan which helps better administration. The management at the estates in consultation with the Corporate Office/Head Office periodically reviews the programmes for production of tea/coffee/rubber which is aimed at better compliance of the corporate policies that revolve around the primary objective of maximization of the earning of the shareholders. The earnings from the plantation products depend *inter alia* on the quantum of sales and the quality of the products sold. The quantity and quality of the tea/coffee/rubber may also depend on the variety of seeds or clones planted to grow the bushes/rubber trees. Any change in the programme leads to change in the timing and the procedures to be adopted for activities like pruning/tapping and plucking/crop collection, utilization of resources and ultimately the expenditure to be incurred. The major activities involved are:
 - (a) Providing proper irrigation as per the garden inspection report and for that arrangements have to be done. Where motor pumps with supply pipes and generator to run the pumps (where connection for electricity is not available) are required, necessary arrangements for the same either through new purchase or hiring, has to be made, if these are not already available or are engaged elsewhere. Requisition for issue of pump, generator and HSD is to be made under proper authorization. On receipt of the requisition the availability of pump and generator shall be looked into by referring to the asset control register and if not available requisition shall be given for procurement through hiring or purchase. In case of hiring the capacity and the hiring charges shall be approved by the Estate Management.
 - (b) Treating each section with manure, timely and regularly, ascertainment of labour required for that purpose and to plan for labour while intimating the requirement for manure to the stores.
 - (c) Ascertaining the need for spraying pesticide and then to estimate the quantity required. To estimate the number of manual spraying machines required and place requisition for the same. To make assessment for labour required and arrangement for the labour.
 - (d) Ascertaining the sections where 'weeding' is required along with the manner of weeding (manually or by spraying 'weedicide'). Necessary arrangement for the weedicides, spraying machine and the labour required for either manual weeding or by spraying 'weedicide' is to be planned in advance and requisition/arrangement to be made.
 - (e) Determine the pruning/tapping policy for different sections, arrange for the number of labour required and issue requisition for the implements.



- (f) To decide on the policy for plucking during the different flushes and for different sections and adherence to the same. The arrangement of labour in accordance with the plucking/ tapping schedule is to be done. The quality of plucking (ideally two leaves and one bud is to be plucked but during plucking some leaves immediately below the two leaves and the bud are also torn off and if the proportion of such leaves is higher the quality of 'made tea' deteriorates and generates higher percentage of tea waste) and quantity of the plucked leaves is to be monitored and necessary actions to enhance quantity and/or quality is to be taken because this has a direct bearing on the quantity and quality of tea manufactured.
- (g) Ensure proper care of the shade trees and to ascertain whether new shade trees are required to be planted for which arrangement is to be made for saplings of shade trees which may come from the shade tree nursery or may be purchased.
- (h) Ensure that drains and slopes are present for proper drainage of excessive water and labour required to make the drains or to do the sloping.
- (i) Regularly review the policy for uprooting old plants and re-planting or fresh planting by reclamation of unused/barren land. Once a section is identified for re-plantation or fresh plantation the ground needs to be prepared which is an extensive activity and is followed by planting and then nurturing the plants till they are matured enough to start plucking. The whole activity needs to be properly planned and arrangement made for the resources required.
- (j) Any tea/coffee/rubber estate maintains a plant nursery where the tea/coffee/rubber plants and the shade tree plants which are either from seeds or are clones developed from research, are nurtured. The plant nursery needs manures and pesticides, supply of water, gardening implements and labour.
- (k) Where a section of the estate is not being used for growing any one of the plantation products then it may be used for other crops like cinnamon, vanilla, banana etc. having commercial value, the materials and labour utilized to maintain and the revenue earned needs to be traced.
- (I) Production and other quantitative and statistical records shall be analyzed to ascertain whether the resources have been optimally utilized and cost effectiveness has been achieved.
- 2. Upkeep, repairs and maintenance of assets: An estate needs to make efforts for the upkeep of the internal roads, culverts and bridges, all-around the estate, the labour hutments and the plant nursery beside the repairs and maintenance of the Civil structures, electric installations, machineries and motor vehicles. An estate can have an annual maintenance programme (which might be periodical, based on hours/KMs run or some other appropriate aspect) or contingent plan for maintenance might be made based on necessity. Plantation crops are seasonal, for some time of the year, the production of tea/coffee/rubber and accordingly manufacturing activities remain either low or nil. During this lean period keeping the plant and machineries in working condition require special attention. When there is no production overall repairs and maintenance is carried out. Repairs and maintenance may be done inhouse with material from the stores and using own labour. Alternatively, the work can be



assigned to external agencies. While every such work needs to be properly authorized, for inhouse job, requisition for issue of stores, implements etc. along with the labour engaged and paid for, should be co-related with the work authorized. Where external agency is engaged, to verify whether their selection has been done in accordance with the established procedure and the management approved terms and conditions of such appointment, have been adhered. The propriety of the expenditure incurred, the quantum of expenditure booked and paid for needs to be examined. The maintenance activities are generally of the following types:

- (a) The roads, culverts and bridges connecting every nook and corner of the estate are subject to wear and tear and may also be damaged by unforeseen incidents.
- (b) The labour hutments, arrangement for potable water and sanitation facility provided to the labourers need to be maintained as per the established internal standards or the requirement of legislation.
- (c) To arrange for upkeep of the nurseries: the shades made of bamboo and polythene.
- (d) The buildings within the estate like factory building, warehouse, garage, office building, quarters of the staff and other civil constructions along with their electrical and mechanical installations require regular repairs and maintenance.
- (e) The mechanical and electrical tools and implements including motors, pumps and generators used for various plantations, manufacturing and other activities need to be repaired and properly maintained to keep these functional. Measuring equipments like weighing scales need to be similarly maintained and also periodically calibrated by accredited agencies.
- (f) The machineries at the factory and the motor vehicles need regular repairs and maintenance.
- 3. **Materials Management:** Procurement/Purchase of material whether centralized or local, their storage and management, assumes high importance since the amount of fund involved is considerable. The materials primarily required in an estate having both plantation and manufacturing activity include:
 - (a) Samplings and seeds and shade tree samplings for plantation in the estate.
 - (d) Manure, pesticide, weedicide/herbicide and chemicals for direct application in the estates.
 - (e) Fuel like petrol, HSD, Furnace oil, Coal and fire wood.
 - (f) Mechanical and electrical equipment/implements, their spares and spares for plant and machinery used in agricultural and manufacturing activities and also for household of the resident staffs and labour.
 - (g) Sundry consumable items used for production and manufacturing activities and also for household of the resident staffs and labour.
 - (h) Food items provided to the staff and labour free of cost or at concessional rate.
 - (i) Medicine and medical consumables.
 - (j) Packing materials.



Check List

A. General understanding and evaluation

General understanding and evaluation of the existing accounting and control systems and ascertaining their application on a continuous basis:

- (i) Studying the organizational structure of the entity together with the authority-responsibility relationships.
- (ii) Studying the internal control manual and accounts manual (if any) and ascertain the existing accounting and control systems: the flow of information, authorization procedure, documentation of transactions, records maintained and reports/statements generated and judge their efficacy.
- (iii) Verify whether proper records required by the accounting and internal control system are being maintained and whether the entries are being counter-checked and authorized.
- (iv) Verify whether adequate and timely information is reaching the Management through properly designed MIS system.
- (v) Verify whether adequate and timely returns on revenue and capital expenditure incurred, cash flow statements, are being sent to the Corporate Office.
- (vi) Verify whether adequate security exists for the accounting and other data maintained manually or through electronic systems, where the data is being maintained in standalone computers whether proper backup is being kept.
- (vii) Verify whether there is a policy for retention of record and their destruction beyond the retention period and whether the same is being followed.
- (viii) Verify whether there exists a mechanism for continual improvement in the functioning of the different departments with specific performance indicators and whether these are being reviewed periodically.

Verify whether regular meetings are being held between the departments and the management to resolve doubts and differences and to improve the performance of the internal control system. Whether actions are being taken on the decisions made in the meetings and being followed up.

B. Land Matters:

- i. Review the status of Land holdings of the Estate
 - a. Whether free hold land; or
 - b. Grant obtained from Government for plantation.
- ii. In case of Grant obtained from Government for plantation, to check whether it is
 - a) Simple Grant; or
 - b) Special Cultivation Grant;
- iii. Whether the documents of freehold land and Grant in the form of Leasehold Land (Patta) obtained from Government or copies thereof (where original documents are preserved at H.O.) are available at the Estate;



- iv. Review the status of payment of Land Rent or Leasehold Rent -whether payment of rent is up-to-date;
- v. To verify whether the statutory payments have been made and necessary information/returns have been submitted timely to the authorities;
- vi. Whether Grant Map produced by Govt. approved Surveyors from the Govt. Cadastral Survey are available and boundaries are properly marked;
- vii. To check whether the Estate lands are periodically surveyed by Government approved Surveyors to update Estate's maps showing boundaries, estate facilities and areas under plantation (with area statement) this is required to prevent encroachment and unauthorized occupation of Estate's land by outsiders as well as by the Estate workers;
- viii. To verify whether legal documents are kept in safe and joint custody of the Estate Manager and at least another person and whether record of legal documents is maintained and entries updated with proper authorization;
- ix. Record of regular inspection of the Estate is to be viewed and verified whether action wherever necessary, has been taken on the basis of such inspection and also whether the changes in the character of the land, wherever necessary, has been incorporated in the map of the Estate under proper authorization;
- x. Record of review of the status of the land and decisions taken on such review are to be seen and steps taken for execution of the decision are to be verified.

C. Agricultural activity:

- (i) To verify whether optimum utilization of the resources by minimizing wastage/idle time and preventing pilferage/manipulation in payment, has been achieved;
- (ii) Whether the programme and written instructions have been referred to.
- (iii) Whether actual activity (as per the records like "Cultivation Book" and "Kamzari" register) has been correlated with the consumption of material resources and labour payment made;
- (iv) Are material consumption and labour efficiency comparable with the industry and organization standard, with the previous periods and the budget/projection for the period.

Review the efficacy of the following activities:

I. Irrigation:

- (i) Requirement of irrigation mentioning section of the garden and the area covered;
- (ii) Actual running hours of the pump should be compared with the technical estimate of its capacity to pump water;
- (iii) Where generator used, capacity of the generator and actual running hours should be compared with the HSD requisitioned for and issued from the stores and consumed;
- (iv) If pump and/or generator is hired, the terms of hiring and approval from proper authority;
- (v) Check fixed asset register for pump/generator owned and their utilization, necessitating hiring;
- (vi) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register.



II. Application of Agricultural Inputs:

(a) Manuring Application:

- (i) Whether requirement for manuring is based on annual and contingent plans with written instructions mentioning section of the garden and the area covered;
- (ii) Whether quantity of manure requisitioned for has been issued by the store;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register;
- (iv) Review the report by the authorized person on actual performance of the work;
- (v) Whether Section/ Field No. wise programme for ground application of manure/ fertilizer has been drawn;
- (vi) Whether soil testing has been carried out before preparing the Section / Field No. wise manure application programme;
- (vii) Whether record is maintained for actual application of manure incorporating following information:
 - (i) Section/Field No.;
 - (ii) Area & Hectare;
 - (iii) Date of application;
 - (iv) Names of the manure/ fertilizers applied;
 - (v) Quantum of application of each category of manure;
 - (vi) Manpower deployed.
- (viii) Compare actual application with the programme;
- (ix) Whether quantity of different manures applied as per application record with the quantity issued on the respective dates as per Stores record;
- (x) Whether number of man-days recorded in the application record with the corresponding figure of daily deployment record under the head "Manure/ Fertilizer Application";
- (xi) Review the reasonability of man-days deployed with reference to the task fixed for manure application;
- (xii) Whether any foliar application programme has been drawn (for Tea cultivation only);
- (xiii) Whether any permanent record for foliar application is maintained which should contain the following information:
 - Date
 - Section/ Field No(s). where foliar applied
 - Area
 - Fertilizer used
 - Dose
 - Total quantity of each of the fertilizers used
 - Total volume of diluted fertilizers (either in terms of 200 Ltrs Drums or in Ltrs.)
 - No. of man-days used.
- (xiv) Whether the above records have been verified with reference to basic records like Stores Issue records, Daily Manpower Deployment records, etc.;
- (xv) Whether Register is regularly checked and signed by the Asst. Manager In-charge of Cultivation:



(xvi) Whether any fertilizer issued from Stores but remained unused (may be in full quantity or partially) either due to any disruption caused by rain or because of any other reasons, has been returned to Stores at the end of the day and also it is recorded in the Application Register.

In case of the Estates where any Sub-Store is not maintained for the Division(s), it should be checked that the Application Register has the provision for recording the quantum of chemicals which remain unused at the end of the day and it should also be checked and reconciled that the same is applied on subsequent dates.

(b) Application of pesticide:

- (i) Whether requirement of pesticides of different types is based on annual and contingent plans and written instructions;
- (ii) Quantity of pesticide requisitioned for and issued by the store;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register;
- (iv) Report by the authorized person on actual performance of the work shall be scrutinized;
- (v) Whether any annual budget is prepared for Pest Control of the Estate;
- (vi) Whether budget is prepared in totality at least containing the following particulars:
 - a) Estimates of different insecticides/ pesticides to be used;
 - b) Cost of materials based on estimate of quantum of different insecticides to be applied;
 - c) Estimated Number of man-days to be required and total cost of manpower;
 - d) Other expenditure like cost of petrol to be used in Sprayers, expenditure on maintenance of sprayers;
- (vii) Whether any programme has been drawn for application of Pesticides specifically for prophylactic spraying with special emphasis that
 - a) Whether any calendar followed;
 - b) Whether No. of rounds for different chemicals to be sprayed mentioned;
- (viii) Whether any Application Register is maintained for spraying of insecticides also in the same line as mentioned in case of spraying of weedicides;
- (ix) Verify from Application Record whether programme for prophylactic spraying has been followed or not;
- (x) Examine the expenditure on application of Insecticides to find out the quantity of chemicals applied per Hectare vis-à-vis Cost per Hectare;
- (xi) Check the actual expenditure with the budget and to report if any variation is found;
- (xii) Carry out analysis of the comparative expenditure for a period of 3 / 4 years and report thereon;
- (xiii) Examine the garden records to find whether any loss of crop reported due to pest infestation;
- (xiv) Check action taken for such pest infestation correlated with the quantum of application of Pesticides;
- (xv) Review the Stores record to find out whether any stock out situation occurred due to which timely curative spraying could not be carried out owing to non-availability of Pesticides in the Estate's Stores;



(xvi) For Tea cultivation, to check whether Fungicides has been sprayed within 24 hours of hail damage – if not, to check the reasons thereof and report.

(c) Weed Control:

- (i) Whether the requirement of weeding is based on annual and contingent plans with written instructions on manual weeding and application of weedicide;
- (ii) Whether the quantity of pesticide requisitioned for and issued by the store are as per the standards and any variation is duly authorized;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register;
- (iv) Report by the authorized person on actual performance of the work shall be scrutinize;
- (v) Review the budget to find out whether the Budget provides for the amount to be spent for weed control and the same is trifurcated into the following categories:
 - (a) Manual weeding;
 - (b) Mechanical weeding like Sickling, Cheelhoeing;
 - (c) Chemical Weeding.
- (vi) Whether the budget is prepared in totality at least containing the following particulars:
 - (a) Estimates of different chemicals to be used;
 - (b) Cost of materials based on estimate of quantum of different chemicals to be applied;
 - (c) Estimated Number of man-days to be required for the respective categories of weed control, as mentioned above, and total cost of manpower;
 - (d) Other expenditure like cost of petrol to be used in Sprayers, Cost of maintenance of mechanical implements etc.
- (vii) Whether detailed programme has been chalked out for different types of weed control depending upon different seasons of the year;
- (viii) Review the programme for chemical weed control to see that separate spraying programme is drawn for pre-emergent period of weeds and post-emergent period of weeds;
- (ix) Whether the programme is drawn for blanket spraying of different varieties of weedicides like Paraquat, 2-4-D Sodium Salt, Glyphosate, etc. specifying each section/ Field No. and number of rounds to be sprayed on each section/ field;
- (x) Check the actual expenditure with the budget and to report if any variation is found;
- (xi) Compare the actual application of different chemicals with the budgeted quantity as per application programme;
- (xii) Whether any permanent record for spraying weedicides is maintained which should contain the following information:
 - a) Date
 - b) Section/ Field No. where weedicides applied
 - c) Area
 - d) Names of weedicides/ herbicides used
 - e) Dose
 - f) Total quantity of each of the weedicides/ herbicides used
 - g) Total volume of diluted weedicides (either in terms of number of 200 Ltr Drums or in terms of Ltrs.)
 - h) No. of man-days used.



- (xiii) Check the quantity of chemicals shown as applied in the Application record with the Stores record and also with reference to the man-days utilized as recorded in the Application Register based on task fixed for spraying;
- (xiv) Check the inventory of Sprayers;
- (xv) Whether appropriate record is maintained for Sprayers incorporating therein 'Issue of Sprayers to the field workers and subsequent return to Field Office at the end of the day after completion of spraying;
- (xvi) Whether sprayers are returned by the workers to the Field Office after use and no Sprayers is retained by them for next day's use;
- (xvii) Whether the Estate has adequate number of Sprayers, so that Spraying operation is not hindered due to lack of Sprayers;
- (xviii) Check the inventory of sprayers physically with reference to the record and to report if any discrepancy is found;
- (xix) Whether the inventory of sprayers of the estate includes considerable number of unusable /defective Sprayers;
- (xx) Examine the expenditure on the repair / rectification of sprayers caused by wear and tear due to daily use and to review the Cost Benefit Analysis of purchasing new sprayers vis-à-vis repairing the old Sprayers.
- (xxi) Whether any weedicides issued from Stores remains unapplied (may be in full quantity or partially) due to any disruption caused by rain or because of any other reasons, the same is returned to Stores at the end of the day and recorded in the Application Register.

In case of the Estates where any Sub-Store is not maintained for the Division(s), it should be checked that the Application Register has the provision for recording the quantum of chemicals which remain unused at the end of the day and it should also be checked and reconciled that the same is applied on subsequent dates.

(d) Pruning (applicable for Tea cultivation only):

- (i) Whether the requirement of pruning of different types based on annual and contingent plans and written instructions;
- (ii) Whether the requisition is made for issue of implements and whether the same has been returned to the stores;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register;
- (iv) Report by the authorized person on actual performance of the work is to be scrutinized;
- (v) Whether proper pruning programme mentioning Section/ Field Nos. and type of pruning to be carried out for each section/ field No. is drawn specifying the time frame for commencement and completion of the job;
- (vi) Whether actual pruning has been carried out according the programme;
- (vii) Check the actual deployment of man-days in pruning with reference to standard task fixed per man-day for each type of pruning and total area pruned under each type of pruning.

(e) Other Cultivation Operations:

I. <u>Fixation of Task for different agricultural operations</u>:

(i) Whether standard task has been fixed for all the major cultivation operations;



- (ii) Examine the process of fixation of task;
- (iii) Compare the standard task fixed for different operations with the task fixed for similar operations in the neighboring Estates or the Estates in the same Circle or area;
- (iv) Whether the payment of a part of wages is linked to fulfillment of task.

II. Other agricultural operations:

- (i) Whether any programme is drawn for other agricultural operations like fencing, manual weeding including Sickle weeding, infilling of Plants /shade plants, forking, Sulphur dusting (for rubber plantation), or these operations are undertaken as and when needs arise;
- (ii) Whether records are maintained for recording actual work done;
- (iii) Whether the following information are recorded therein:
 - (a) Date,
 - (b) Area,
 - (c) Section No./ Field No.,
 - (d) Name of the operation,
 - (e) Quantum of work done viz. area covered, no. of plants infilled, length of the fencing done, etc.
- (iv) Whether above records are maintained for individual operations;
- (v) Check the records with reference to the actual man-days deployment record and to see that correlation can be done between volume of work done and number of man-days deployed.
- (vi) Where crops other than tea/Coffee/rubber are being grown to fruitfully utilize the vacant sections, the expenditure incurred needs to be compared with the revenue earned from such activity to assess the benefit of such activity.

III. Fresh and Extension/ re-plantation:

- (i) The section of the estate is selected as per Management decision and written instructions have been issued;
- (ii) Whether the requisition of stores, tools and implements and issue of the same has been in accordance with written authorization;
- (iii) Labour engagement has been done in accordance with the instructions (with subsequent modifications if any) and matches with attendance and payment made;
- (iv) Report by the authorized person on actual performance of the work shall be scrutinized;
- (v) Whether all the costs incurred for uprooting of trees, shrubs, weeds etc., preparation of the ground for new plantation, sowing new plants and their nurturing till they are matured for plucking (normally upto three years) are being capitalized.
- (vi) Whether the Company has any extension planting programme;
- (vii) Whether the Estate has any land available for extension planting and the extension planting programme has been prepared on the basis of the soil testing report of such available land;
- (viii) Examine that the Estate has the long term uprooting and replanting programme;
- (ix) The uprooting and replanting programme should be examined to find that
 - (a) Selection of the section/ field for uprooting and re-plantation is made on the basis of yield analysis reports of sections/ fields;
 - (b) Whether actual / potentially sick sections or fields are identified for uprooting / replantation;
- (x) Examine whether the detailed budget has been prepared (simultaneously sections/ field-wise



& year-wise) for extension planting/re-plantation;

- (xi) Whether the budget contains the following major elements of expenditure :-
 - (a) Land clearance (in case of extension) or uprooting (in case of re-plantation) expenditure;
 - (b) Land leveling for Cover Crop & Cover Crop expenditure;
 - (c) Land Survey Expenditure;
 - (d) Land preparation expenditure;
 - (e) Soil rehabilitation;
 - (f) Cost of planting material;
 - (g) Planting expenses;
 - (h) 4 years' maintenance expenditure.
- (xii) Examine the Estate's plan for sourcing planting materials whether to use Plant from own nursery or to source Plants from external sources;
- (xiii) In case the Estate plans for sourcing the planting materials from own nursery, to check whether the plan and budget for building up the nursery within the Estate has been chalked out for meeting current requirement as well as future requirement;
- (xiv) Whether the extension planting/ uprooting and re-plantation programme is being implemented as per plan;
- (xv) Whether the detailed records are maintained in the Estate in respect of extension planting/uprooting and re-plantation planting in respect of individual sections/ field Nos.;
- (xvi) Whether the following details are maintained in the records:
 - (a) Area covered under extension planting;
 - (b) Area covered under uprooting and re-plantation;
 - (c) Date of commencement of uprooting and date of completion of uprooting;
 - (d) Date of commencement and completion respectively for Land Clearance/ Preparation for Green Crop Cover;
 - (e) Green Crop cover used for soil rehabilitation;
 - (f) Date of commencement and completion of land preparation for planting;
 - (g) Date of commencement and completion of planting;
 - (h) Type of Plants used for planting;
 - (i) Spacing of Plants;
 - (j) No. of Plants planted (after physical verification)
 - (k) Date of survey after Planting.
- (xvii) In case of re-plantation, the following points are required to be checked;
- (xviii) Examine the expenditure on uprooting (in case of re-plantation) and compare the same with the Budget;
- (xix) Check the records maintained for uprooting Tea Bushes/ Coffee Plants/ Shed Trees and Rubber Trees:
- (xx) Measurement of quantity of timber & firewood obtained after lopping and chopping;
- (xxi) Check the records for internal utilization of fire wood where fire wood are issued either as fuel for production or for issue to labour as fuel;
- (xxii) In case fire wood and timbers are sold, to check the process of selling, fixation of price and realization of sale proceeds;
- (xxiii) Examine the reconciliation between the generation of fire wood/ timber and use/ sale of



- such fire wood/ timber;
- (xxiv) Whether the Estate maintains record in respect of each section/ field newly planted or replanted, the total actual expenditure incurred for planting/ replanting which includes all items of expenses as mentioned in Budget including the expenditure on maintenance till harvesting begins;
- (xxv) Check the expenditure incurred on plantation/ re-plantation on the basis of such record with reference to the Estate's Accounts to compare between budget and actual expenditure;
- (xxvi) Analyze the total cost per hectare for plantation/ re-plantation including expenditure on maintenance in respect of individual section/ field and compare per Hectare Cost among different sections/ field Nos.;
- (xxvii) Examine that the Estate has complied with all necessary formalities for availing incentives from Tea Board/ Rubber Board for extension plantation/ re-plantation;
- (xxviii) Carry out year-wise Yield Analysis for sections/ fields which have come into bearing in last 5 to 7 years for comparison of yield among different sections and comparison of yields of the same sections among the successive years;
- (xxix) Compare the yields of those sections with average yield of the estate.

b) **Production and other records:**

I. Weighing of Raw Materials at Field:

(a) Green Tea Leaves:

- (i) Green leaf produced per hectare in respect of various sections of the estate, for the current year are to be compared with the previous years and variance analyzed;
- (ii) Whether green leaf production as per weighment records is properly authorized and are to be compared with the quantum of leaves as per the "Crop Book", the factory "Green leaf weighment register" and the "Excise records";
- (iii) The quantum of manure, pesticide and weedicide issued per hectare is to be compared with the previous years and variance analyzed;
- (iv) The various categories of labour hours utilized per hectare for manuring, applying pesticide, weeding, ground preparation etc. are to be compared with the previous year;
- (v) Check how many times i.e. sessions, green leaves collected are weighed in the field;
- (vi) Whether Green Leaves plucked are weighed at the field itself or brought to factory for weighing;
- (vii) Check the system of weighing Green Leaves whether green leaves plucked by individual pluckers are recorded manually in a register or the weight is recorded through computerized logger where individual pluckers swipe the magnetic cards given to them;
- (viii) In case of weighing of green leaves at the field, it should be checked whether it is carried out under the supervision of any managerial staff or any other senior supervisory staff;
- (ix) In case of recording the weight of green leaves manually in the green leaf register, it should be checked how the deduction of tare weight i.e. the weight of green leaf in the basket or nylon bag is made from the gross weight;
- (x) In case of manual recording the weights of Green Leaf, it should be checked whether the weights of green leaf plucked by each worker in each session recorded separately;



- (xi) Separate recording is required to keep a check on the chances of manipulation and also to keep a track of attendance of each worker in each session;
- (xii) In case of weighing green leaf through computerized logger, the process of adjustment for tare weight should be checked it should be reviewed that whether any responsible management staff is authorized for adjustment of the logger for deduction of tare weight and it should also be checked whether there is any Pass-ward protection for such adjustment in order to ward off any subsequent unauthorized adjustment;
- (xiii) Internal Auditor should carry out surprise check while the process of weighing green leaves is in progress at the field;
- (xiv) Check how many number of sessions i.e. twice or thrice, green leaves are weighed in a day;
- (xv) Whether any Slip indicating the total weight of green leaves collected in a session at each point of weighing is prepared for sending the green leaves from field to factory;
- (xvi) Whether the Estate has system of preparing Green Leaf Challan accompanying each vehicle coming to factory from the field;
- (xvii) Check whether there is any system of weighing green leaf at factory at the time of receiving from the field;
- (xviii) If the Green Leaf is weighed at factory, the weight according to green leaf slip prepared at field is required to be compared with the weight of green leaf recorded in course of weighing at factory;
- (xix) Comparison should be made between the total of the quantity of green leaves as mentioned in the Pay Sheet against individual pluckers and weight of green leaf plucked and paid by Cash i.e. extra plucking and the total quantity of green leaves recorded in the green leaf register. Discrepancy, if any found, should be analyzed and reported;
- (xx) Whether the quantity of green leaf is recorded in the Raw Material Register maintained at the factory for the purpose of Excise, on the basis of the weighing done at the factory or on the basis of weighing done at the field;
- (xxi) Whether there is a system of inspecting the Fine Leaf Count of the green leaf plucked by each plucker every day and whether there is any system of recording the same;
- (xxii) Whether the payment of incentives for additional quantity plucked above the standard task fixed is linked to fine leaf count.

(b) Coffee Seeds:

- i) Whether Coffee Seeds picked are weighed at the field itself or brought to factory for weighing;
- ii) Check the system of weighing Coffee Seeds whether Coffee Seeds picked by individual workers are recorded manually in the Register or the weight is recorded through computerized Logger where individual workers swipes magnetic cards given to them;
- iii) Where Coffee Seeds picked are weighed at the field itself, it should be checked whether it is carried out under the supervision of any Management Staff or any senior supervisory staff;
- iv) In case of recording the weight of Coffee Seeds manually in the Register in respect of individual workers, the process of deduction of tare weight from the gross weight should be checked;
- v) In case of weighing Coffee Seeds through Computerized Logger, the process of adjustment of tare weight should be checked;
- vi) Internal Audit should carry out surprise check while the process of weighing the Coffee Seeds peaking is in progress in the field;



- vii) Whether any Slip indicating total Coffee Seeds collected at the field is prepared for sending the Coffee Seeds from field to Pulp house;
- viii) Whether there is any system of weighing Coffee Seeds at Pulp house at the time of receiving from the field;
- ix) If there is a system of weighing Coffee Seeds at Pulp house, the weight of Coffee Seeds as per the Slip prepared at the field and the weight of Coffee Seeds recorded at factory should be compared and reasons for variation, if any, should be analyzed;
- x) Comparison should be made between total quantity of Coffee Seeds, as mentioned in the Pay Sheet against individual workers and the weight of the Coffee Seeds as per Slips prepared at the field vis-à-vis weight recorded at the Pulp house. Discrepancy, if any, found should be reported.

(c) Field Latex:

- (i) Whether Field Latex is weighed at the field itself or brought to factory for weighing;
- (ii) Check the system of weighing Field Latex at the field whether Field Latex collected by individual Tappers are recorded manually in the register or through Computerized Logger where individual Tappers swipes magnetic cards given to them;
- (iii) Whether weighing Field Latex at the field is carried out under the supervision of any managerial staff or any other senior supervisory staff; the system of collection of samples from the Field Latex collected by individual Tappers to compute the Dry Rubber Content (DRC) percentage and system of keeping the record thereof;
- (iv) In case of weighing Field Latex through Computerized Logger, the process of adjustment of tare weight should be checked;
- (v) Internal Auditor should carry out surprise check while the process of weighing Field Latex is in progress at the field;
- (vi) Compare the weight of Field Latex recorded in the register maintained at field with the corresponding weight recorded at factory;
- (vii) Check the process of collection of sample of daily receipt of Field Latex at the factory for computation of DRC percentage and to review the system of keeping record thereof.

II. Yield Record Vis-a-Vis Examination of Vacancy Percentage:

- (i) Whether the sections/ field No. wise yield records are maintained in respect of every year;
- (ii) Examine the yield trend of the Estate as a whole vis-à-vis individual Section/ Field Nos. for a span of 10 to 15 years' period;
- (iii) Compare the current year's yield with past years;
- (iv) Identify the perennially low yielding sections as compared to overall yield of the garden;
- (v) Carry out analysis of section-wise pruning style-wise yield record (in case of Tea) and to report on sections which are constantly low yielding sections irrespective of pruning style;
- (vi) Carry out study of sectional yield records with reference to the corresponding age of the sections or field No. and to report on sections where yield is lower than the Estate's average in spite of their younger age;
- (vii) Compare the Estate's average yield with the average yield of the Circle/ District/ Region to which the Estate belong;
- (viii) Whether section/ field No. wise vacancy record is maintained;
- (ix) Examine the section/ field no.-wise vacancy percentage with reference to the corresponding yield of the sections/ field;



- (x) Examine whether the vacancy has any bearing on the yield;
- (xi) Report specifically where comparatively young sections/ fields have higher vacancy percentage than the garden average vacancy percentage and having yield lower than the yield of older section/ fields;
- (xii) Review the actions taken for reduction of the vacancy infilling programme and actual implementation to such infilling programme;
- (xiii) Review the action Plan of the Estate Management for improvement of yield and to report on the actions taken by the Estate Management with reference to Plan of action;

c) Upkeep, repairs and maintenance:

(a) Upkeep of nursery:

- (i) Annual and contingent plans and corresponding instructions (with subsequent modifications if any) are to be looked into.
- (ii) Material issued from the stores like manure, polythene sheets, bamboo etc. are to be as per requisition and in accordance with written authorization.
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register.
- (iv) Report by the authorized person on actual performance of the work is to be scrutinized.
- (v) Review the budget for requirement of plants in next 3 years for planting and infilling;
- (vi) Examine the Estate's plan for meeting the future requirement of plants whether through purchase of plants from external nursery or exclusively from own nursery or partially from external sources and partially from own nursery;
- (vii) Examine the Estate's plan for raising the nursery with reference to its budgeted consumption of plants;
- (viii) In case of Tea plantation, to check whether the Estate has also the plan for Shade Nursery whether the Estate's requirement of shade plants are planned to meet from the Estate's own Shade Plant Nursery;
- (ix) Check the Estate's plan for the type of nursery to be raised whether fully clone or fully seedlings or partially clone and partially seedling;
- (x) Examine the budget for nursery expenditure whether all materials (both in terms of physical quantity and cost) and labour cost (in terms of man-days and corresponding wage cost) are estimated;
- (xi) Whether the cost of man-days required for maintenance of the nursery till the plants become mature for planting is also included in the budget;
- (xii) Whether the budget has been framed in detail on the basis of standard consumption of item of expenses i.e. different materials and labour required at different operations for raising the nursery and its maintenance;
- (xiii) Whether separate budget is prepared for each block of nursery depending on the years of maturity of the plants for planting;
- (xiv) Examine that in each budget, year of commencement, size of the nursery beds, number of plants planned to be raised are clearly mentioned;
- (xv) Compare the budgeted cost per plant with the prevailing market price for outright purchase



of plants;

- (xvi) Check whether the Estate maintains separate register both in respect of Plant Nursery and Shade Plant Nursery (in case of Tea and Coffee Plantation) wherein the following details are maintained:
 - a) Year of Commencement of the nursery;
 - b) Projected year of plantation;
 - c) Bed Number;
 - d) Bed size;
 - e) Variety of seeds (in case of seedling nursery) used/ clones (in case of clonal nursery) raised:
 - f) Total weight of seeds purchased / used and approximate total number of seeds set in polythene sleeves for seedling nursery;
 - g) For clonal nursery No. of cuttings set into rooting beds;
 - h) No. of rooted cuttings transferred to soil filled polythene sleeves or the number of cuttings put into soil filled polythene sleeves;
 - i) No. of matured plants reared as per physical count of plants carried out before commencement of planting / infilling;
 - j) Date-wise utilization of number of plants in different sections or Field Nos.;
 - k) Physical balance available at the end of the year or after plantation is complete;
- (xvii)Check whether separate records of expenses incurred in respect of each nursery are maintained;
- (xviii) To check that all expenses incurred on inputs required for rearing the nursery, fertilizers and insecticides used for the nursery and the man-days utilized for different operations pertaining to the nursery are recorded in the Cost records chronologically indicating physical quantity utilized and the corresponding expenditure;
- (xix) Check that all input materials like Bamboo, Polythene sleeves/ polythene bags, Thatch, etc. and other materials like chemicals/ fertilizers issued from Stores are issued through proper issue requisition slips and that the respective nursery where those will be utilized are also mentioned in the Requisition;
- (xx) Check that all man-days deployed for the preparation and maintenance/ upkeep of nursery are properly documented in the daily man-days deployment record and the corresponding figures are also recorded in the Nursery Register;
- (xxi) Check that all expenses incurred in respect of nursery are booked in a separate Account Head in the Estate Accounts on the basis of actual quantity of material and man-days used;
- (xxii)Check that the cost of inputs and labour cost recorded in the Nursery Register are periodically reconciled with the accounting records;
- (xxiii) Whether the physical count of plants are carried out in the nursery periodically before commencement of planting/infilling and that a final physical verification is also carried out at the end of financial year for each nursery;
- (xxiv) Whether every periodical verification of plants in the nursery are authenticated by the managerial personnel of the Estate;
- (xxv)Compare the actual utilization of inputs and man-days with the budgeted quantities of the respective materials and man-days required for nursery operation;
- (xxvi) Cross-check the physical utilization of number of polythene sleeves or bags consumed (to



- be computed on the basis of standard quantity of sleeves available per Kg. of the polythene sleeves / bags of the respective gauge consumed) with the total number of seedlings or number of clones set in polythene sleeves/ bags as recorded in the Nursery Register.
- (xxvii) Examine the computation of cost per plant on the basis of the nursery cost records;
- (xxviii)Examine the computation of survival or success percentage on the basis of results of physical verification;
- (xxix) Examine whether such survival or success percentage remains within the normal limit;
- (xxx)Compare the survival or success percentage of nursery in respect of different years;
- (xxxi) Whether the cost per plant is computed on the basis of actual number of plants survived i.e. on the basis of cumulative figure of the total number of plants utilized and the number of plants physically available in the nursery at the end of the year;
- (xxxii) Check the utilization of plants and shade plants (in case of Tea & Coffee plantation only) as recorded in the nursery register with the Estate's periodical report on plantation and infilling;
- (xxxiii)Whether the nursery reconciliation statement prepared by the Estate indicating the following information:
 - a) No. of plants/seeds rooted in the Polythene Sleeves;
 - b) No. of good plants available for planting as per physical verification carried out before commencement of planting;
 - c) No. of plants utilized for planting / infilling;
 - d) No. of plants available physically at the end of the year;
 - e) No. of plants damaged in course of planting
- (xxxiv) Check the percentage of damage of plants over the total number of good plants available, whether such percentage is within normal limit;
- (xxxv) Examine the method of charging the nursery expenditure in the Accounts it should be ensured that the expenditure of nursery is not charged to the Revenue Expenditure until the plants are utilized in planting/ infilling and proper charging in the Accounts shall be made on the basis of actual utilization of Plants reared for the purpose of planting/ infilling of the respective areas;
- (xxxvi)Whether the cost of abnormal damage in course of planting are charged separately in the Accounts and cost of plants are computed considering the cost of damaged plants within the normal limit;

(xxxvii)Examine the method of valuation of closing stock of plants.

(b) Upkeep of roads, culverts and bridges:

- (i) Annual and contingent plans and corresponding instructions (with subsequent modifications if any) are to be looked into;
- (ii) Material issued from the stores as per requisition is to be in accordance with written authorization;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register;
- (iv) Where external agencies are engaged, their engagement (terms and conditions) are to be authorized by the Management and payment is to be as per the Management approval;
- (v) Report by the authorized person on actual performance of the work is to be scrutinized.



(c) Upkeep of the labour hutments, potable water supply and sanitation facility:

- (i) Annual and contingent plans and corresponding instructions (with subsequent modifications if any) are to be looked into;
- (ii) Material issued from the stores as per requisition is to be in accordance with written authorization;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register;
- (iv) Where external agencies are engaged, their engagement (terms and conditions) is to be authorized by the Management and payment is as per the Management approva;
- (v) Report by the authorized person on actual performance of the work is to be scrutinized.

(d) Upkeep of tools and implements:

- (i) Annual and contingent plans and corresponding instructions (with subsequent modifications if any) are to be looked into;
- (ii) Material issued from stores like machine oil, grease etc. is to be as per the bill of material for routine repairs & maintenance and should have been authorized in other cases;
- (iii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity;
- (iv) Where external agencies are engaged, their engagement (terms and conditions) is authorized by the Management and payment is as per the Management approval;
- (vi) Report by the authorized person on actual performance of the work is to be scrutinized.

(e) CTC Roller Sharpening in Tea Estates:

In Tea Estates, a substantial expenditure is incurred on sharpening of CTC rollers as the pairs of CTC Rollers are regularly replaced for sharpening. Unless the garden has their own full-fledged infrastructure of machine shop for sharpening, the full job of sharpening of CTC Rollers are mostly done through outside workshops. For movement of CTC rollers as well as passing of the workshop's bills for payment, the following points should be looked into in course of Internal Audit:

- (i) Whether the garden maintains a CTC Sharpening Register (Roller pair-wise and segment wise) in other words, whether separate pages are earmarked in the register for each set of segments and pair of roller in respect of sharpening of CTC Rollers from outside workshop;
- (ii) Whether separate pre-printed challan book is used in respect of movement of the CTC Rollers for sharpening through outside workshop;
- (iii) Whether on the face of the book copy of the Gate Pass or the Challan used for movement of CTC Segments, the date of receipt are recorded;
- (iv) Whether the satisfactory completion of sharpening or repair of CTC Segments are certified by a responsible executive of the Estate;
- (v) Check the bills for CTC sharpening are correlated with the respective challan/gate pass used for movement of CTC for sharpening and also with the entries in CTC Sharpening Register before the bills are passed for payment. It should also be checked that the person certifying completion of job and the person authorizing for bills for payment are not the same person;



(vi) Whether the bill nos. are recorded against the respective entries in the CTC Sharpening Register after the bills are passed for payment.

(f) Maintenance of drainage system etc.:

- (i) Whether the Estate has the system of drawing the programme for upkeep and development of its drainage system in the lean/ Dry season;
- (ii) Review the implementation of the drainage programme;
- (iii) Check the records maintained for measurement of actual work done in respect of the drainage programme (Section/ Field No -wise, date) with reference to the actual man-days deployed as per deployment record vis-à-vis task fixed for different types of drains;
- (iv) Whether the Estate's drainage system are periodically (i.e. once in 2 years or 3 years) are examined by the TRA experts;
- (v) Whether the updated land drainage map are available at the garden;
- (vi) Labour and implements issued for maintenance of drainage are to be compared with the requirement of such activities as per the garden inspection report and written instructions.

d) Vehicle Log Book:

In the plantation industry use of vehicle(primarily tractor with carrier) for movement of pump, generator, manure, weedicide, green leaves plucked, Coffee seed, latex and for various other activities is used.

- (i) Whether the Log Books are properly and regularly maintained in respect of each of the vehicles used by the Estate containing the following information:
 - (a) Date;
 - (b) Destination or nature of job done(for tractors, Trucks);
 - (c) KM run for each destination/ job in case of all vehicles other than tractor (opening & closing Milo-Meter reading to be recorded) or hour run in case of Tractors (starting time & closing time to be recorded);
 - (d) Fuel issued;
 - (e) Signature of the user.
- (ii) Whether the Milo-Meters of the vehicles (Hour- Meter in respect of the Tractors) in respect of each of the vehicle is operational;
- (iii) Check the quantity of fuel issued as shown in the Log Book with the corresponding issue records of the Stores;
- (iv) Whether the fuel consumption report is prepared for each month containing the following information:
 - (a) Name of the vehicle;
 - (b) KM/ Hour run during the month;
 - (c) Fuel consumed;
 - (d) KM/ Hour run per Litre;
- (v) Comparison of yearly fuel consumption figures (in terms of KM/ hour run per Ltr) in respect of each vehicle for a period of 3 /4 years.



Chapter 17 Audit of Special Areas with reference to peculiar transactions

A. **DEPLOYMENT**:

As the Plantation Industry is highly labour intensive, wages and other allied costs pertaining to labour accounts for anywhere between 55% and 60% of the total cost of operation. Besides this, the Plantation Industry is governed by a number of labour related legislations and is under the surveillance of intense Government inspection also. Therefore, planning & utilization of labour in plantation industry warrants a hardcore management for optimization of cost of operation which in turn requires the existence of a strong internal control system for the issues relating to manpower deployment. Therefore, while carrying out internal audit in Plantation Industry, due importance has to be given to the labour related areas.

I. Daily Deployment Planning:

- ✓ Whether the Estate plans for deployment for the next day in all operations classified into the following categories:
 - i) Field operations;
 - ii) Factory operations;
 - iii) Establishment including different types of repair/maintenance, hospital & sanitation, transport and other miscellaneous areas;
- ✓ Review the format used for planning whether it is drawn to plan deployment of both permanent and casual daily rated workers in various field as well as non-field operations in detail on daily basis;
- ✓ Whether the list of operations included in the daily planning is exhaustive i.e. no operation is left out from the list;
- ✓ Whether the Estate is first planning deployment of its permanent strength in all the
 operations and thereafter planning the deployment of casual workers in each operation to
 meet the shortfall, if any, so as to match the manpower required to carry out the planned
 operations for the day;
- ✓ Whether before estimating the manpower requirement for deployment planning both for permanent and casual man-days, the Estate has quantified total job content (may be in terms of area or any other physical measure, as applicable) in respect of each of section No. / field Nos. where the specific field operations are planned to be carried out and such section No. / field Nos. are mentioned in the deployment plan;
- ✓ Whether different operations planned to be carried out in different sections /field has been quantified with reference to individual section no/ field no;
- ✓ Whether the Estate has fixed any standard task per man-day for each field operation
 either in terms of area to be covered or in terms of quantum of work to be done; for
 example, for Pruning operation, task may be fixed on the basis of number of bushes to be
 pruned by each worker in a day depending upon the type of pruning i.e. MP (Medium
 Pruning), LP (Light Pruning), DS (Deep Skiff) etc.; for spraying of herbicides/ insecticides,
 task may be fixed on the basis of number of drums; for manual weeding, task may be fixed
 per man-day on the basis of area etc.;
- ✓ For spraying, it should be checked whether separate task has been fixed for blanket spraying and spot spraying;



- ✓ To check while planning for deployment in different field operations the standard task fixed for each such operations are applied on the quantum of job estimated in respect of each individual cultivation and manufacturing operation for manpower deployment planning;
- ✓ Whether the records for daily deployment planning are kept as permanent record for the purpose of future reference.

II. Actual Deployment:

- ✓ Check the system of recording daily deployment of the workers in different operations whether it is recorded by the supervisory staff manually in a rough book at the time of recording attendance or it is recorded separately from the Attendance Record after actual allocation of the workers among different operations;
- ✓ Review the system of recording daily deployment of workers where attendance is recorded through a computerized system i.e. through swiping the ID Cards of the individual workers or through a biometric system— whether deployment in different operations i.e. Cost Centers are recorded at the time of attendance recording or it is recorded manually following the same system as mentioned previously;
- ✓ Check the system of maintenance of final deployment record whether through computerized system or manually;
- ✓ In case of recording deployment of workers by the supervisory staff manually, then check the system of recording data of deployment from the rough book to the final record;
- ✓ Review the process of reconciliation between the rough book and the final record of deployment –whether the reconciliation is done daily/ weekly or monthly (the most preferred system is daily reconciliation);
- ✓ In case the initial recording of daily deployment is done through a computerized system, the program used for the system should be checked and the process of uploading the data from initial record to final record should also be examined;
- ✓ Whether the total number of workers, as per the final daily deployment record, is reconciled with the daily attendance record maintained for the purpose of calculation of wages;
- ✓ Check that the system used for recording deployment of workers allows for identification and quantification of the following three individual categories of workers deployed in different operations/ cost centers:
 - (i) Permanent;
 - (ii) Casual paid through Wages Book;
 - (iii) Casual workers paid directly through Cash Vouchers.
- ✓ To verify the deployment records with reference to the attendance record, different agricultural input application register and other cultivation records;
- ✓ Study the actual pattern of deployment of labour—both permanent and casual in different cultivation operations, manufacturing, plucking/ tapping/ picking, stripping & gleaning of Coffee Seeds and other operations including establishments. The study should be carried out with the periodicity of monthly/ quarterly and yearly both in terms of absolute numbers and percentage component of deployment in each operation as well as the



- percentage of deployment under main group heads with reference to the total manpower deployed;
- ✓ Compare the deployment figures under audit with the respective figures of deployment for the previous 3 /4 years both in terms of absolute numbers as well as in terms of percentage component. In course of this comparison, the base may be taken any of the suitable parameters as denominator like the total area under cultivation, total yield of crop or simple absolute numbers depending on the type of operations/ area of deployment;
- ✓ Whether actual manpower deployed in each operation is compared daily with the manpower planned and reason for variation, if any, between the two are analyzed for fixing the base of planning for next day;
- ✓ Review the deployment (both in terms of absolute number and percentage component of the total deployment) in different non-productive/ indirect cost centers like Fencing, Cleaning Jungle around the field, Chowkidar or Field Guards, Water Carriers to the field, Cleaning factory, Repairs & Maintenance of Building/ Machinery/Vehicles, Roads & bridges, Transport, Labour Welfare, Hospital & Sanitation and Establishment;
- ✓ Compare the deployment figures of the non-productive operations/ indirect cost centers with deployment figures of the respective areas for the previous 2 / 3 years in order to check the trend of deployment in these operations and also to review the reasons for variation, if any;
- ✓ Whether regular reconciliations are carried out between the total wages as per final deployment book and the wages as per monthly Accounts;
- ✓ Check the deployment of casual workers paid through Cash Vouchers whether proper record is maintained for such deployment and whether such deployment is pre-approved by the Manager of the Estate;
- ✓ Check the deployment of such workers with reference to different agricultural input register and other cultivation records;

(a) Tea - Plucking Activity:

- (i) Whether the requirement of plucking of different types based on annual and contingent plans and written instructions.
- (ii) Whether optimum number of labour are engaged and whether payment made is commensurate with the actual labour employed for the activity as per "Kamzari" register.
- (iii) Where payment is not made on the basis of time (hours/days) but on the basis of quantity of leaves plucked (as per the green-leaf weighment register), then the report at the factory on the quantity and quality of leaves received from individual labour needs to compared with the amount paid.
- (iv) Report by the authorized person on actual performance of the work is to be scrutinized.
- (v) Check the number of rounds plucked and days of round in different periods of the season and make a comparative analysis of figures for consecutive 2 –3 years including the year under audit in respect of total number of rounds plucked and average days of round for the year as a whole;
- (vi) Examine the percentage of plucking man-days over the total man-days deployed for the full season and make a comparative analysis in respect of deployment figures for plucking for consecutive 2 − 3 years with reference to the respective total quantity of green leaf harvested,



- (vii) Make a year to year comparison in respect of average number of pluckers per hectare plucked and examine the pluckers' productivity overall productivity, productivity of permanent and casual workers separately comparative analysis of figures for 2 3 years;
- (viii) Carry out a comparative analysis for the percentage component of permanent and casual workers in the total plucking man-days for consecutive 2 3 years and their impact on average pluckers productivity;
- (ix) Compare the overall pluckers' productivity for 2 3 years consecutive years with reference to land productivity of the respective years;
- (x) Check the minimum task fixed for different periods/ months in the season and examine whether fixation of task for plucking is guided by any Wage Agreement or it is fixed by the Estate Management;
- (xi) Compare the fixed task with the average pluckers' productivity of the respective months of the season whether the task fixed was lenient;
- (xii) Whether there is any system of monitoring individual pluckers' productivity and if any action is taken in respect of the workers whose productivity is consistently below par.
- (xiii) Examine the rate of incentives paid to the Pluckers for plucking above the minimum task fixed .Whether the rate of incentives is fixed according to any industry-wise agreement or it is fixed by the Estate Management according to their own scheme;
- (xiv) Where the incentive is fixed by the Estate management at a rate higher than the rate fixed through industry-wise agreement , to check that this has the approval of the corporate management;
- (xv) Examine the impact of incentive on Wage Cost of plucking per Kg. of green leaf where the incentive is paid according to the Estate's own scheme as compared to the rate of incentive as fixed by industry-wise agreement; (should be under HR or incentive scheme)

(b) Coffee - Picking of Coffee Seeds:

- (i) Check the average number of workers deployed in picking coffee seeds per hectare comparison among different months of the season and also comparison among yearly figures for consecutive 2 – 3 years;
- (ii) Examine the percentage of picking man-days over the total man-days comparison among monthly figures for different months of the season and also the yearly figures of the year under audit with that of previous 2 3 years;
- (iii) Check the percentage component of man-days of permanent workers and casual workers respectively of the total man-days deployed in picking comparison among figures for different months of the season as well as among yearly figures of the year under audit and of the previous 2 3 years;
- (iv) Check the computation of average productivity (in terms of weight of Coffee seeds picked per man-day).
- (v) Examine the comparative figures of productivity of labour deployed in picking for consecutive 2 3 years including the year under audit overall productivity, productivity of permanent and casual workers separately;
- (vi) Compare the figures of overall labour productivity with reference to land productivity of the respective years for consecutive 2-3 years;



(c) Rubber - Tapping Activity:

- (i) Check the daily minimum task fixed for tapping i.e. the number of trees to be tapped per day and examine whether the minimum task fixed by the Estate is at par with the industry-wise agreement with the workers' union or otherwise. If minimum task fixed is lower than the industry norm, to check whether the approval from the Corporate is available;
- (ii) Examine the average number of trees tapped per Tapper per day for different individual months of the season and for the total season as well and to compare the average figure with the minimum task;
- (iii) Examine the average productivity of tappers per month (i.e. weight of field latex in terms of DRC, tapped per tapper) up to the month of September;
- (iv) Compare the figures of productivity among different months and also with the respective months of previous 2 3 years;
- (v) Carry out the comparison of overall labour productivity with reference to the land productivity of the respective years for consecutive 2 3 years including the year under audit;
- (vi) Whether there is any system of monitoring the productivity of individual tappers and examine the action taken in respect of tappers whose productivity are consistently below par;
- (vii) Check the rate of incentives paid to the Tappers and whether such rate is at par with the industry-wise agreement. In case the rate of incentive fixed by the Estate Management is higher than the rate fixed for the industry as a whole then to examine the approval of Corporate Management;
- (viii) Examine the impact of incentive on wage cost of tapping per Kg of field latex (in terms of DRC) where incentive is paid according to estate's own scheme as compared to the rate of incentive fixed through industry-wise agreement.

B. Purchase of Raw-materials:

Under the present circumstances due to all-round cost escalation in different manufacturing processes, labour cost in particular, break-even point is attainable at a much higher production level than it was previously. As a result, most of the manufacturers make an effort to increase their production capacity by processing raw-materials e.g. green tea leaves, field latex, etc. sourced from external producers in addition to processing of raw-materials cultivated in their own estate. Therefore, it is imperative to have a strong internal control over the whole process of procurement of raw-materials including fixation of price, quality control, receipt of actual quantity of green leaf in the factory, etc. In order to exercise such internal control, following points are required to be covered by Internal Auditor:

(a) Green Leaf:

- ✓ Review the method of selection of sources of supply whether local small growers of green leaves are tapped for selection of sources or local market (i.e. Mundis) are explored for sourcing green leaf as and when requirement arises;
- ✓ Where local small growers are selected as sources of green leaf, it should be checked
 whether a long term rate contract with an assured quantity of green leaf to be purchased is
 made or the Purchase Price varies depending upon the demand and supply in the local
 market;
- ✓ Whether it is a rate contract or contract with variable price, the method of fixation of price should be examined to check that how it is co-related with the prevailing market price;



- ✓ Whether regular feedback on trend of prices of green leaves is obtained from the local market and record is maintained for that;
- ✓ In case of open market purchase from the local market, i.e. Mundis, the method of purchase should be examined to ensure that purchases are made at the best price and price paid is linked to Fine Leaf Count of the consignment;
- ✓ In case of fixed price contract, it should be examined that overall price paid over the full season does not exceed the prevailing market price;
- ✓ Check the system of weighment of Bought Leaf whether the Estate has its own weighment system where every consignment is weighed and recorded. Where the factory of the Estate has not its own Weigh Bridge, it should be checked how weighment is done for each consignment whether it is done in nearby Weigh Bridge or the Suppliers' certify the weight;
- ✓ When the supplier certifies the weight, it should be checked how such weight is certified by the supplier is verified as to its correctness;
- ✓ Check the method of deduction of Tare Weight i.e. both weight of the vehicle and weights of the bags containing the green leaves from Gross Weight to arrive at the Net Weight of the consignment;
- ✓ Verify that weighing of purchased Green Leaves is carried out in presence of Managerial personnel of the estate;
- ✓ Check the methods of recording the weights of consignments of purchased green leaves received whether permanent record in the form of a Register is maintained containing following information:
 - (i) Name of the Supplier;
 - (ii) Challan No. & Date;
 - (iii) 'In' & 'Out' time of the vehicle;
 - (iv) Vehicle No. carrying the Green Leaf;
 - (v) Gross Weight;
 - (vi) Tare Weight;
 - (vii) Net Weight;
 - (viii) Fine Leaf Count
- ✓ Whether each entry in the register is verified and authenticated by Managerial personnel of the estate;
- ✓ Examine the Register to cross-check the entries therein with the Raw Material Register maintained in the factory for the purpose of Excise records and also with the Log Book maintained for Withering Trough;
- ✓ Whether there is a system of keeping record for 'Exit' & 'Entry' of the vehicles carrying of Bought Leaf at the gate of the factory and examine the Gate Entry Register with the Register maintained for recording the weights of the consignments of purchased green leaf.

(b) Field Latex:

There are a number of rubber estates who purchase either Field Latex or Single Centrifuged Latex to convert the same into Double Centrifuged Latex i.e. Cenex to increase both the utilization of their production capacity and the profitability. In order to exert control over these purchases of raw-material, the following points need to be taken care of in course of Internal Audit:

✓ Review the system of selection of local growers from whom the Field Latex or Single Centrifuged Latex is purchased and examine the method of fixation of Price – whether it is a rate contract for a particular period or linked to prevailing Market Price;



- ✓ Where local small growers are selected as source of Field Latex, it should be checked whether a long-term rate contract with an assured quantity of Field Latex to be purchased is made or the purchase price is fixed depending upon the demand and supply situation in the local market;
- ✓ The contracts with the suppliers are required to be checked to ensure that the price contracted to be paid to the suppliers is paid for the Dry Rubber Content (DRC) of the gross quantity received;
- ✓ Check that the records maintained relating to receipt of consignments contain the following information:
 - a) Date of receipt;
 - b) Name of the supplier;
 - c) Challan No.;
 - d) Gross Quantity and Net Quantity of receipts for each consignment;
 - e) DRC percentage;
 - f) Quantity of DRC;
- ✓ Whether separate Registers are maintained for receipt of Field Latex and Single Centrifuged Latex and check the system followed for weighing the receipt of consignments of the Latex;
- ✓ Whether the consignment-wise DRC percentage is tested at the Estate's Laboratory and the same is properly recorded both in Laboratory and the register maintained for receipt of consignments;
- ✓ Examine the registers for receipt of the consignments of purchased Latex with reference to the Laboratory record and check that each entry in the above registers are regularly vouched and signed by the Estate's Managerial personnel;
- ✓ Examine the records pertaining to the consignment-wise measurement of DRC percentage maintained at the Factory;
- ✓ Verify the bills raised by the suppliers with reference to the registers maintained for receipt of consignments.

SLAUGHTER TAPPING:

When the economic life of any Rubber Tree in a specific field no. ends, Slaughter Tapping is resorted to extract Latex to the extent possible from those trees. Thereafter these rubber trees are felled and sold as timber. Generally, Slaughter Tapping activity is outsourced to the contractors who pay fixed price for the rubber trees handed over to them for Slaughter Tapping. In turn, the Latex extracted from those trees is bought back by the Estate at a price fixed for the Field Latex. For applying internal control, the following issues should be given special attention:

- ✓ Examine system followed for selection of the contractor and fixation of price to be paid by the contractor whether it is fixed through open bidding system or through negotiation with the contractor:
- ✓ Whether system followed by the company ensures realization of best price for handing over the trees for Slaughter Tapping;
- ✓ Examine the relevant contracts regarding terms for payment of sale proceeds by the contractors;



- ✓ Whether the terms of payments are complied with by the contractors ,whether the sale proceeds are realized from the contractors before commencement of the Slaughter Tapping;
- ✓ To examine the process of fixation of price for buy-back of field latex collected through Slaughter Tapping whether it is a fixed price or prices are linked to the prevailing market price for purchase of field latex. In case of fixed price, it should be examined that overall price paid does not exceed the prevailing market price;
- ✓ Whether the proper records are maintained for receipt of field latex through Slaughter Tapping from the contractors (in the same line as in the case of purchase of Field Latex);
- ✓ Examine the records maintained at Laboratory for measurement of DRC percentage of daily receipt of field latex through Slaughter Tapping;
- ✓ Verify the payments made to the Contractors for field latex with reference to the records maintained for receipts of daily consignments of field latex through Slaughter Tapping as well as with the relevant Laboratory records for DRC percentage.

C. Production:

(a) Tea manufacturing:

Tea:

- ✓ Whether the Green Leaves received from field are again independently weighed in the factory or the field weight is taken as weight of raw material;
- ✓ Check the system of weighing green leaves at Factory whether there is a Weigh Bridge or green leaves are weighed batch by batch in the Weighing Scale;
- ✓ Check the records kept at factory in respect of weights of green leaves taken, compare the weight of green leaves as per field records with the corresponding weight as per factory records;
- ✓ whether the weights of green leaves are recorded daily in the raw material register on the basis of field weighment or on the basis of factory weighment;
- ✓ Examine the system of weighing Black Tea at the Drier Mouth Register whether manually or through Batch Weighing Machine;
- ✓ Where the weight of finished product i.e. Black Tea is measured at the Drier Mouth through Batch Weighing Machine, following points are required to be examined:
 - a) Whether Drier Mouth weighing is done after screening of bolder particles of Black Tea in the Pre-sorter or weighing is done including the bolder particles which are subsequently screened in the pre-sorter for reprocessing;
 - b) The system of preserving the data of weights recorded in the Batch Weighing Machine

 whether any print of the weights recorded is possible to be taken or the weight is recorded in the Drier Mouth Register only viewing the weights at the Monitor of the Computer;
 - c) Where print is taken, the print of the weights recorded are possible to be taken only at the completion of manufacturing for the day or any interim print is possible to be taken;
 - ✓ Where the weight of Black Tea is measured at the Drier Mouth manually, the following points are required to be checked:
 - a) Whether any permanent record in the form of register is maintained for recording (i.e. Rough Drier Mouth Register) for recording each actual weighment;



- b) Whether the tare weight of the container used for collecting and weighing is deducted from the gross weight using the actual weight of the containers or a standard weight is taken for such deduction;
- c) Comparison between the standard weight and actual weight of the containers used;
- d) Whether Drier Mouth weighing is done after screening of bolder particles of Black Tea in the Pre-sorter or weighing is done including the bolder particles which are subsequently screened in the pre-sorter for reprocessing;
- ✓ Compare the final entries in the Drier Mouth Register with the data of reading recorded in Batch Weighing Machine or with the noting in Rough Drier Mouth Register (in case of manual weighing);
- ✓ Examine the system of keeping records of weights of bolder grades of Black Tea pre-sorted at Drier Mouth for further processing whether actual weight is recorded or estimated weight is kept;
- ✓ Examine the system of reprocessing the bolder grades after screening in the pre-sorter and breaking in the Ball Breaker whether those black tea are reprocessed mixing with green leaves in Rotorvane or those are reprocessed exclusively;
- ✓ Where the weight at the drier mouth is recorded after screening of the extra bolder grades, it needs to be ensured that the weight of such tea after reprocessing is included in the final weight of the tea manufactured;
- ✓ Where the weight at the Drier Mouth is recorded before the bolder tea particles are screened for reprocessing, it is required to be ensured that the weight of reprocessed Black Tea is not again included in the final weight of Tea manufactured;
- ✓ Whether Log Book is maintained for recording daily total factory running hours containing the following information:
 - a) Time of starting and finishing the processing of green leaves at the factory;
 - b) In case of any interruption/ stoppage of running of the factory, period of interruption/ stoppage; and
 - c) Reasons for interruption in running of the factory;
- ✓ Whether separate Log Books are maintained for the following individual production centers:
 - a) Withering Trough;
 - b) Rolling Room both for Orthodox manufacturing and CTC manufacturing;
 - c) Fermenting;
 - d) Drying;
 - e) Sorting
 - f) In case of green tea manufacturing for Roaster, Roller Boiler and Drier;
- ✓ Whether such Log Books contain the following information:
 - (a) For Withering Trough Date, Trough No., Time of first charging of green leaves and time of taking out the last batch of weathered green leaf, total quantity of green leaves charged for withering in the respective trough, withered leaf taken out in each batch and total quantity of withered leaf taken out; percentage of withering for each day;



(b) Rolling Room –

For orthodox manufacturing -

- i) Date
- ii) Rolling table- wise running time i.e. starting time and closing time,
- iii) Vibro-shifter running time,
- iv) Shifter running time;
- v) Progressive cumulative quantity of withered leaf rolled.

For CTC manufacturing (CTC machine-wise) -

- i) Shift wise running hour,
- ii) Total progressive cumulative running time of each set of roller
- iii) Progressive Date
- iv) Cumulative quantity of withered green leaf cut by each set of roller,
- v) Any change in the set of roller.

Note: It is required to be checked that for each stage of cut, SI. No. of roller set used is mentioned and when there is any change of roller set, SI. No. of rollers replaced is also mentioned.

(c) Fermenting Trough

For each fermenting trough -

- (i) Date,
- (ii) Starting and finishing time of the Fermenting Trough;
- (iii) Total quantity of Leaf fermented in the Trough for the day.

(d) Drying Room:

For each drier –

- (i) Date;
- (ii) Starting and finishing time for each batch;
- (iii) Weight of output for each batch i.e. Drier Mouth Weight for the batch;
- (iv) Total running time during the day;
- (v) Total quantity of Black Tea manufactured for the day;

(e) Sorting Room:

- (i) Date;
- (ii) Starting & Finishing Time;
- (iii) Total time of operation during the day;
- (iv) Total quantity of tea sorted during the day.
- ✓ Check the productivity of different production centers at the peak season and whether there is any bottle-neck in the capacity or productivity of any production center which hinders the overall productivity of the factory;
- ✓ If there is any interruption in the operation of any of the above production centers, the period of stoppage of production and reason thereof are mentioned in the respective Log Book;
- ✓ Examine the records pertaining to sorting and packing;
- ✓ Check the accumulated stock of unsorted or unpacked stock of tea on different days during the season to review the day-wise percentage of unsorted and unpacked tea and to find the reason when such percentages cross the normal limit;
- ✓ Examine the gap between manufacturing, sorting, packing and dispatch;



- ✓ Check the Invoice Register and examine the system of control exercised over the marking of Invoice No. on tea bags;
- ✓ Review the system of dispatch of tea including the system of internal control over the loading of tea in the vehicle;
- ✓ Check the weight as per Way Bridge at the time of tea dispatch and cross-check it from Packing Register and report if there is any abnormal variation;
- ✓ Whether periodical (i.e. fortnightly or monthly) physical verification of finished tea is undertaken by the Estate Management and whether documentary evidence for such physical verification is maintained;
- ✓ Examine the frequency of declaration of excess weight found on physical verification of finished tea, in the Excise records;
- ✓ Examine the records for stock of finished tea unsorted finished tea, sorted but unpacked finished tea and packed tea;
- ✓ Review the system and status of store-keeping of finished tea;
- ✓ Carry out physical verification of stock of finished tea in course of internal audit;
- ✓ Check that bags/ chests packed tea marked with Invoice Nos. are kept in a separate bonded area;
- ✓ Compare the recovery percentage of different months and also to compare the total recovery percentage during the year with previous 3 / 4 year, report if any abnormal recovery percentage is observed on any day;
- ✓ Check the percentage of orthodox and CTC tea manufactured to total production and compare the same with the budget fixed by the Corporate;
- ✓ Study the percentage of primary and secondary grades of the total quantity of tea manufactured and to compare the same with the company's manufacturing policy, in case percentage of production of secondary grades is observed to be high report it to management;
- ✓ Examine the percentage of Tea Waste generated at the end of the season and make a comparative analysis of percentage of primary and secondary grades as well as Tea Wastes for 3 / 4 years figures;
- ✓ Whether the grade-wise packing register maintained by the estate and check the dispatch records with reference to the packing register;
- ✓ Whether the purchased green leaf is processed separately and separate records thereof are maintained and examine the records pertaining the processing of purchased green leaf including checking of the system of weighing Black Tea at the Drier Mouth in respect of purchased green leaf making a distinction with the Black Tea processed out of own leaf only.

(b) Coffee:

- ✓ Whether Green Coffee Seeds picked daily from the field are again weighed at the Pulp House;
- ✓ Check the record kept at the factory in respect of weight of Green Coffee Seeds and compare the field weight and the weight taken at the Pulp House for Green Coffee Seeds;
- ✓ Whether separate records for weight of Green Coffee Seeds are kept at the Pulp House in respect of ripe seeds and green seeds are kept;



- ✓ Examine the record kept in respect of weight of dry coffee seeds whether parched and cherry are weighed separately;
- ✓ Check the records for dispatch of dry coffee seeds for grinding, fuel consumption at Pulp House for coffee drying and final out-turn report in respect of clean coffee received out of the dry coffee seeds sent for grinding;
- ✓ Compare the percentage of Cherry and perched coffee respectively in the clean coffee received;
- ✓ Compare the figures of consecutive 2 3 years in respect of final out-turn percentage of clean coffee as well as percentage of perched and cherry in different areas.

(c) Rubber:

- ✓ Examine the system of weighing the receipts of field latex at the factory and records thereof and compare between the weight of field latex as per the field record and that as per factory record;
- ✓ Examine the records maintained for measurement of DRC percentage for daily receipts of field latex at the factory;
- ✓ Check the method of measuring the quantity of field latex at the receiving tanks at the
 centrifuging process whether the method of Dip Stick measurement or any other
 method of volumetric measurement deployed;
- ✓ Check the system of daily receipt of Crumb or Cup-lumps at factory -- including system of weighting at factory, records of factory weighment, comparison between factory weighment and field weighment records;
- ✓ Whether Log Books are maintained for different machines/ production centers e.g. –

<u>Machine</u>		<u>Production Centre</u>
(i) Centrifuge		 Centrifuged latex (or Cenex) processing;
(ii) Skim Crepe Milling (iii) Skim Crepe Press	}	Skim Crepe Processing
(iv) Crumb Milling(v) Crumb Press(vi) Crumb Drier	}	Crumb production – Estate Brown Crepe (EBC)

- ✓ Examine the system of maintenance of those Log Books including examination of entries made therein and check whether the following basic information are recorded in those Log Books:
 - (a) Total Hour run every day i.e. record of starting time and finishing time;
 - (b) Idle time, if any;
 - (c) Reason for idle time;
- ✓ Whether the Log Book maintained for the Drier for production of Crumb (Estate Brown Crepe) contain the following information:
 - (a) Consumption of HSD indicating Opening Stock, Receipt during the month, Closing Stock;
 - (b) Consumption of Castor Oil (in the same line as in the case of HSD);
 - (c) No. of bales produced;
 - (d) Batch No. of bales;
 - (e) Diesel consumption per bale during the month;
- ✓ Compare the consumption of HSD for Drier among different months of the same year and also of the current year with that of previous 2 / 3 years;



- ✓ Whether the Log Book maintained for Skim Crepe Press contains the following additional information:
 - (a) Record for each day's run;
 - (b) No. of bales produced;
 - (c) Batch No. of bales;
 - (d) Weight of total production during the day.
- ✓ Check the production records as to the following aspects:
 - (i) Whether Dip Stick measurement is taken at the Cenex Storage Tank at the end of every day after completion of production;
 - (ii) When production in shift is prevalent, whether Deep Stick measurement is taken at the Cenex Storage Tank at the end of each shift;
 - (iii) Recording of the Deep Stick measurement of storage tank for Cenex;
 - (iv) Maintenance of records for DRC percentage of Cenex i.e. final centrifuged latex;
 - (v) Records maintained for daily production of Cenex;
 - (vi) Method of weighing production of Crumb (EBC), Skim Crepe and Smoked Rubber Sheets, etc.;
 - (vii) Records maintained for the weights of the finished products, as mentioned above.
- ✓ Check the method of computation of monthly and yearly production of Cenex and Skim Crepe and the Processing Loss;
- ✓ Compare the cumulative daily production recorded with the final monthly production computed in respect of Cenex;
- ✓ Check the monthly reconciliation of Opening/ Closing Stock, production and dispatch in respect of Cenex and Skim Crepe;
- ✓ Check the monthly reconciliation among the receipt of field latex, production of Cenex, Skim Crepe and manufacturing loss and compare the percentage of manufacturing loss in respect of Latex centrifuging among different periods say, among different months of the same year and among consecutive 3 / 4 years;
- ✓ Examine the Stock Register maintained for finished products like Skim Crepe, Crumb (EBC), Smoked Rubber Sheets, etc.;
- ✓ Examine the system of checking and recording DRC percentage of each consignment of Cenex dispatched;
- ✓ Check the record for dispatch register of finished products with the corresponding challans and invoices;
- Check the system of verification of WIP and finished goods at the end of each month.
- D. Sale
- (a) Tea & Coffee:
- I. Domestic Sale Auction Sale & Private Sale:
- ✓ Examine the routes selected for domestic sale whether 100% Auction sales or 100% private sales or partially Auction sale and partially private sale;
- ✓ In case of auction sale, study the average realization for different grades in each sale;



- ✓ Whether the organization has identified any benchmark garden(s) in the Circle to which the
 Estate belongs for comparing its performance as to the average price realization in each
 auction sale;
- ✓ Compare the auction average in each sale with that of the benchmark garden(s), as identified find the reasons for variation and to report to the management of the variations;
- ✓ Compare the sales average for each auction sale with the respective average of the Circles to which the Estate belongs;
- ✓ Examine the garden's batting order in the perspective of the current year's auction sale and compare the current years' batting order with that of the previous year;
- ✓ Check the out-lot quantities in respect of different auction sale Nos. with reference to the corresponding Invoice Nos.;
- ✓ Examine the subsequent disposal action of such out-lot quantities whether through private sale or again put to auction and the ultimate price realization of such out-lot quantities and compare the same with the comparable price realization of the auctions from which such quantities have been withdrawn;
- ✓ Examine the basis of allocation of quantities between auction sale and private sale;
- ✓ To compare between the net price realization in private sale and the price realization in auction sale in respect of comparable quantities of tea after considering all comparable sales related expenses of private sale and auction sale respectively (i.e. Broker's Commission, Selling Agents Commission, Warehousing Charges, Transportation charges, etc.);
- ✓ Test check the auction sale with reference to all basic documents like Auctioneers Sales Statement, Delivery Order, etc.;
- ✓ Examine the Crop Book with reference to basic documents like Garden's Invoice, etc.;
- ✓ Examine the private sale with reference to the related basic documents like Contract agreement, sales bills, etc.
- ✓ Verify the Broker's Account Sale with the Broker's Sales Advice;
- ✓ Cross-verify the Auction sales with the Estate's Invoices;
- ✓ Examine the realization of sales proceeds both in respect of private sale and auction sale and check that sales proceeds have been realized according to the terms of agreement in respect of private sale;
- ✓ If any deduction is made from the Sale proceeds of auction sales verify all supporting documents for deductions ;
- ✓ In respect of consignment sale, to compare the consignment price with the actual price realization vis-à-vis contemporary auction average and examine the Profit Volume Ratio on the basis of net realization after considering all expenses incurred at sale point;
- ✓ Examine the Debtors Ledger whether any amount remains outstanding beyond the credit period allowed as per terms of corresponding sales agreement;
- ✓ In respect of auction sale, to check whether any quantity was lifted by the buyer after the stipulated period and all recoverable expenses like Warehousing Charges, etc. have been realized from such buyers.



II. Export Sale:

- ✓ Examine the process of fixation of price in respect of export sale and export contract regarding terms of price, approval of samples;
- ✓ Compare the export price realization with the comparable price realization in the domestic auction;
- ✓ Examine the process of booking foreign exchange whether judicious decision has been taken between the option of Forwarding Booking and Spot Booking considering the condition in foreign currency market;
- ✓ Verify the actual exports with reference to the export contracts, invoices, shipping documents, etc.;
- ✓ In respect of SAS (subject to approval of Sample) contract, to check whether any sales have been cancelled due to rejection of sample;
- ✓ Whether any export has been rejected due to variation between the initial sample taken immediately on packing and the corresponding large out-turn sample taken on reaching the consignment at the port of dispatch;
- ✓ Whether all shipping documents are deposited with the Bank for negotiation of documents, without any delay;
- ✓ Scrutinize the realization of sale proceeds in respect of total export sale to check whether any delay in realization has occurred due to defect in shipping documents or for any other reasons;
- ✓ Whether all formalities are complied with for availing applicable export benefits. If any export benefit has been denied find out the reasons thereof and corrective actions have been taken in such cases:
- ✓ Whether the organization has their own Department for handling shipping of the export or the services of any Clearing & Forwarding Agent is hired for handling the export;
- ✓ Where the services of any Clearing & Forwarding Agent is hired, to examine the process of selection of agents - to check whether the background and experience of the Clearing & Forwarding Agent has been scrutinized before selection;
- ✓ Examine the process of fixation of the rates of services and other expenses payable to the Clearing & Forwarding Agent whether current market rate for such services are checked through obtaining competitive quotations from different agents having experience of handling Tea/ Coffee export;
- ✓ Examine the export contract as regard Freight & Insurance whether it is a c.i.f. contract or f.o.b. contract;
- √ Where the contract is a c.i.f. contract, to examine the selection of the shipping Company vis-àvis fixation of freight rates;
- ✓ Whether the shipping Company has the experience of handling Tea Cargo and proper Insurance coverage has been obtained for the Cargo.

(b) Rubber:

- ✓ Whether statutory requirement of the Rubber Board as well as VAT Act of the respective State are properly complied with;
- ✓ Review the profile of the customers for different grades of rubber like Cenex, Crumb (Indian Standard Natural Rubber or INR), Skim Crepe, Sheet Rubber, etc.;



- ✓ Check the broadness of the customer-base for each grade of rubber sold;
- ✓ Examine the process of fixation of Sales Price and extent of control of the Company over the fixation of Sales price .Whether the cost of production is considered while fixation of price;
- ✓ Review the process of preparation of Invoice and dispatch documents .Check entries in the Sales Register with reference to Sales Invoice & Challans, customers' Purchase Orders and Dispatch Register;
- ✓ Whether the realization of Sale Proceeds are with reference to terms of payment specified in the customers' Purchase Orders;
- ✓ Review the Debtors Ledger whether any amount remains outstanding beyond the contractual credit period.

E. Tea Waste:

- ✓ Whether the Tea Board License for holding the stock of tea waste is renewed regularly;
- ✓ Whether the stock of tea waste is denatured at the end of the season or sold;
- ✓ In case tea waste is denatured, to examine whether necessary Excise formalities have been complied with;
- ✓ Where tea waste is sold, to check whether it is ascertained before sale that the buyers have proper Tea Board License for purchasing tea waste;
- ✓ Whether necessary formalities as per Central Excise Act has been complied with before commencing the process of sale and dispatch of the tea waste from the Tea Estate;
- ✓ Examine the method of fixation of selling price whether through competitive bidding or through negotiation with a particular buyer and check the records pertaining to sale of Tea Waste.

F. SCRAP:

In course of operation of any Estate whether engaged in Tea plantation, Coffee plantation or Rubber plantation, a substantial quantum of scrap of different items like, damaged / broken machine spares ,vehicle spares, CTC segments, replaced bearings etc. are generated which has a considerable realizable value. Therefore, it is important to exert proper internal control over the method of collection of scrap, stores keeping of these scrap materials, maintaining records of these stock and the system and method followed for scrap disposal.

(a) Scrap Records:

- ✓ Whether the Estate maintains item-wise and category-wise Scrap Register in respect of different types of Scrap generated out of different operations in the estate;
- ✓ Whether the scrap generated in the Estate are accounted for and recorded mandatorily under the following broad categories:
 - a) Replaced and worn-out Bearings;
 - b) Scrapped CTC segments;
 - c) Other replaced and worn-out machinery parts;
 - d) Worn-out agricultural implements;
 - e) Scrapped Machinery items;
 - f) Replaced Electrical items;
 - g) Metal & Plastic Containers of Weedicides, Insecticides and Foliar Nutrients applied;
 - h) Plastic Bag of Manures;
 - i) Food Stuff Gunny Bags;



- j) Replaced Vehicle parts, tyres & tubes.
- ✓ Whether the instructions have been issued to the Stores Clerk that no electrical items, bearings, machinery parts, vehicle parts ,tyres & tubes, etc. will be issued unless the wornout/ damaged materials against which the fresh items are being issued from Stores are returned to the Stores;
- ✓ Whether the Machinery spares, vehicle spares, worn-out agricultural implements, etc. are recorded in the Scrap Register immediately on return of those items and other scrap items like Food Stuff Gunny Bags, Metal/ Plastic Containers, etc. are regularly recorded in the Scrap Register;
- ✓ Cross-check the entries in the Scrap Register as to the generation of Scrap of machinery Spares and the purchase and fitting of any new set of segments in the CTC machine with the corresponding entry in the Scrap Register;
- ✓ To reconcile the generation of Food Stuff Gunny Bags, Metal & Plastic Containers for different types of chemicals used with the Stores record of issue/ consumption of those items;
- ✓ In case of repair of machinery, vehicles, etc. from external workshops, to check the return of scrapped spare-parts with the bills for new spares and other items for which payments are made;
- ✓ If any Scrap material is used for internal consumption in the Estate, it should be checked that no such Scrap material is issued without proper Requisition Slip authorized by the Estate Management;
- ✓ Examine the Scrap Records that all disposals of scrap are properly recorded in the Scrap Stock Register.

(b) Physical Stock of Scrap – its Maintenance and Security:

- ✓ Check condition of maintenance of physical stock of scrap and security of such stock, in particular the scrap with high realizable value, e.g. Stainless Steel CTC Segments, Brass & other Cast Metal broken spares, broken Bearings, etc.;
- ✓ Whether separate Scrap Store is maintained. Examine the system security of the Scrap Stores –whether it is kept under lock & key so that there is no or little possibility of pilferage;
- ✓ Whether costly spare-parts are kept in loose condition or in properly secured packing box/ gunny bags;
- ✓ Check security of the Scrap Store Whether periodical physical verification of the accumulated Scrap is conducted by the Estate Management and such physical verifications are properly documented;
- ✓ Internal Audit, in course of their audit in the Estate, should carry out the physical verification of Scrap on test basis.

(c) <u>Disposal</u>:

- ✓ Examine the procedure for Scrap disposal and process of selection of Scrap buyers whether through advertisement in local newspaper or through website or through contacting local traders who are known to be dealing with scrap materials (mode of selection should depend upon the volume and value of scrap considering the cost of advertisement vis-à-vis benefit of realization of higher price through competitive bidding);
- ✓ How the rates of sale of scrap items have been fixed whether through competitive bidding or at a negotiated price with the buyers;
- ✓ Whether Rate Contracts which is valid for a certain period are entered into with the scrap buyers or rates are decided every time scraps are disposed (again, feasibility of entering into



Rate Contract is required to be judged on the basis of volume and value of Scrap generated and frequency of disposal also);

- ✓ Whether Earnest Money Deposits are obtained from the Scrap buyers;
- ✓ Check the method of collection of the money realizable through Scrap disposal whether by Cash or Demand Draft/ Pay Order or through Cheque. It is required to be ensured that no scrap material is allowed to leave the premises of the Estate without prior receipt of the amount realizable i.e. value of Scrap including Sales Tax, if any chargeable;
- ✓ In case of payment by Cheque, it is required to be ensured that Scrap material is not released before encashment of the cheque;
- ✓ Whether Gate Passes have been prepared for taking out the Scrap materials from the premises of the Estate and proper Invoices are prepared for sale of Scrap and applicable VAT/ Sales Tax have been charged in the Invoice;
- ✓ Check the quantity of Scrap materials mentioned in the Invoices with reference to the Scrap Stock records;
- ✓ Whether the measurement of quantity of different items of scrap actually sold and lifting of such scrap have been carried out in presence of any responsible Management staff.

G. Warehousing and Storage:

This area includes the physical safeguarding of assets from theft and sabotage as well as logistics over shipping and receiving. Internal auditor has to check:

- ✓ Examine the process of selection of warehouses and fixation of warehousing charges, whether the aspects of safety and proper storage facilities have been taken into consideration before selection of the warehouses;
- ✓ Whether the warehouse is easily accessible by unauthorized personnel;
- ✓ Whether the inventory items are in a controlled environment that would allow proper safeguarding from theft, sabotage or damage such as a fire sprinkler if activated;
- ✓ Whether the insurance coverage over inventory value is adequate;
- ✓ Whether there are written shipping and receiving policies and are they adhered to;
- ✓ Whether the company is using bar coding and cycle counts to organize the warehouses. Whether obsolete inventory is eliminated to free up space in the ware house.
- ✓ Whether selected warehouses are registered with the respective Auction Committees and warehousing charges payable as per contract with the warehouse owners are at par with the relevant guidelines issued by the respective Auction Committees;
- ✓ Whether in the contracts with the warehouse owners, following salient points are covered :
 - i) Proper safety and storage of Tea/ Coffee in the warehouses;
 - ii) Responsibility and liability of the warehouse owners in case of any damage of the stock of Tea/ Coffee stored and mode of recovery of cost of damage from the warehouse owner;
 - iii) Documentation i.e. preparation of Arrival Weighment Report (AWR) , amendment of AWRs on short receipt at the warehouses;
 - iv) Terms of payment;
- ✓ To verify that AWRs are prepared promptly on the basis of Garden's Invoice and copies of AWRs are sent to the Auction Committee, Brokers and manufacturer;
 - (i) Stock of made tea/coffee received at the warehouse shall be verified by referring to the weighment Report and corresponding entry in the registers at the warehouse.



- (ii) The quantity received at the warehouse as per the weighment register and the quantity as per the corresponding delivery orders shall be compared and any shortage in weight shall be reconciled under proper authorization.
- ✓ If any discrepancy is found on actual weighment at the warehouses after arrival of the consignments from the Tea/ Coffee Estates , AWRs are amended promptly and copies of AWRs are sent to Auction Committee, Brokers and manufacturer;
- ✓ Whether Arrival Weighment Register is verified regularly with deliveries shown in formal Delivery Orders issued by the Brokers and/ or authorized Delivery Orders issued by the Sales Dept.;
- ✓ Whether warehouse records relating to Brokers' samples, floor sweeping and other losses are verified regularly with reference to the Warehouse Register;
- ✓ Physical stock shall be verified periodically with the stock records and any difference after adjustment for samples issued to brokers, recovery from floor sweeping and other losses shall be explained and adjustment made in the stock records;
- ✓ Whether Brokers' Damage Report are received timely;
- ✓ Check that the calculations in the Service Bills raised by warehouse owners in respect of chargeable rent/ handling charges, warehousing charges are verified with reference to the Delivery Orders issued by the Sales Dept;
- ✓ To check that the adjustments for warehousing charges by the brokers from A/c Sales , wherever made, are properly reconciled with the respective Service Bills of the Warehousing owners;
- ✓ Verify the amount of warehouse charges, handling charges etc. by referring to the delivery orders.
- ✓ Where the stock has been hypothecated, the hypothecation statements shall be verified.
- ✓ Verify whether the necessary licenses as required by various authorities have been taken and are in force.

H. Transportation Contract:

- ✓ Whether the entity under audit has any laid down procedure for selection of transporters and method followed for selection is in conformity with the laid down policy and procedure;
- ✓ Examine the method of selection of transporters whether through open tender or through limited enquiry;
- ✓ Where the selection is made through limited enquiry, to check the data-base used for making such enquiry and basis of choosing the data-base;
- ✓ Where the transporters are selected through open tender, to examine whether all the criteria
 for selection and conditions for minimum eligibility are clearly specified in the tender
 documents;
- ✓ Whether while selecting the transporters, their extent of experience of handling finished products of respective plantation industry, i.e. Tea, Rubber or Coffee is given the prime importance;
- ✓ Examine the credentials of the selected transporters and to check that their credentials are conformed to the eligibility criteria fixed for the purpose;



- ✓ To check that the rates are fixed for Full Load / Part Lorry Load/ Small consignments and Tankers (for transporting Latex) for different destinations;
- ✓ Examine the method of fixation of the rates of transportation and check that the fixed rates are at par with the prevailing market rates;
- ✓ Examine the terms of contract with the transporters and to check that the following points are specifically covered in those contracts;
 - (a) Rates of carriage of finished products and other stores materials for all known destinations;
 - (b) Other related expenses like, loading/unloading, detention charges, incidental charges etc.;
 - (c) Price variation clause in case of increase/ decrease of fuel price;
 - (d) Maximum allowable delivery time between two destinations for different types of consignments;
 - (e) Incentive/ Penalty Clause applicable in case of early / delayed delivery;
 - (f) Time limit for placement of Lorries on receipt of requisitions by the transporters;
 - (g) Method of billing in case of consignments of weight less than full Lorry Load;
 - (h) Mode of certification of weight of consignments at the loading point;
 - (i) Preparation of Consignments Notes;
 - (j) Transporters' liability in respect of shortage / pilferage/ damages of the consignments in course of transportation;
 - (k) Consignee's right and mode of recovery of cost of consignments in case of short-delivery or partial damage or total loss in course of transportation, subject to realization of claims on insurance company;
 - (I) Carriers' Risk in course of transportation of finished goods and other stores;
 - (m) Documentation required to be done by the transporters for processing the Insurance Claims by the Consignee in case of any accident, theft, pilferage in transit or for any other claim;
 - (n) Precautionary measures to be taken by the carrier for protection, safety and security of the consignments;
 - (o) Proportionate extra freight to be paid in case of any unavoidable de-tour due to dislocation of traffic because of any natural calamities or diversion of lorries from one warehouse to another or from one destination to another;
 - (p) Recovery of Cost of consignments from transporters in case of short /damaged delivery, where the amount of loss is below the minimum amount qualified for claims on Insurers;
 - (q) Documents to be attached as supporting with the transporters' bills;
 - (r) Terms of payment;
 - (s) Risk Purchase Clause in case of transporters' failure to place lorries/ tankers;
 - (t) Validity of the Contract
- ✓ Whether before obtaining offers from transporters, all the known destinations i.e. Estates, warehouses, auction centres, regular customers' places, ports (for export) are taken into consideration and offers are obtained for all such destinations;



- ✓ Examine that for the convenience of logistics and selection of transports, destinations are grouped into several routes and for each route/ destination more than one transporters are empanelled to keep alternative sources;
- ✓ While fixing the rates, other incidental charges are included in the rates or those charges are separately reimbursable to check whether any Cost-Benefit Analysis has been made between the two options before choosing the basis of rates fixed;
- ✓ Whether security deposits (either in the form of Cash or Bank Guarantee) have been obtained from the transporters for the period of validity of contracts and the amount of security deposit covers the average value of a single consignment handled by each transporter;
- ✓ Whether there is a system prevalent in the estates, of checking at the loading point that the vehicles / staff of transporters have necessary permits (Inter-State Permit/ State Permit or any other permit, as applicable) along with other relevant transit documents;
- ✓ Whether the loads at different loading points on the same route are clubbed together to make a full truckload (normally 9 MT) as far as practicable, where a single consignment from one loading point cannot make the full truckload;
- ✓ Examine the formula incorporated in the transportation contracts for escalation/ deescalation of transportation rates on price increase/ decrease of fuel — whether it is at par with norms used in the industry;
- ✓ Whether there is system of placing the transport requisition on the transporters in writing and whether those requisitions are preserved for a certain period of time;
- ✓ Whether any cross-reference is kept on the requisitions regarding the date and time of placement of lorries in order to assess the performance of the transporters;
- ✓ Whether the movement of vehicles and transportation of materials are planned in such a way that movement of materials from/ to the destinations on the same route can be combined in a single vehicle, within the limit of maximum lorry load;
- ✓ Examine the system of verifying the transporters' bills with reference to the documents relating to receipt of materials, like copies of delivery challis acknowledged by the recipients of materials with the noting of date and time of delivery, consignment notes, AWRs etc.;
- ✓ Check that gross weight and tare weights are clearly mentioned in the consignment notes;
- ✓ Scrutinize the bills passed for payment on test check basis
 - (i) Whether the standard practice of verification of bills has been followed,
 - (ii) Whether the cost of short receipts/ damages of goods in transit have been deducted from the transporters' bills, subject to realization of Insurance Claims,
 - (iii) whether the penalty has been deducted from bills in case of delivery beyond the maximum delivery period stipulated in contracts for respective destinations,
 - (iv) Whether any additional amount has been allowed beyond the terms of contract.
- ✓ In case of occurrence of any accident, high jacking, theft or damage in transit, to check whether the following documents have been furnished by the transporters
 - i) Copy of final Police Investigation Report of the concerned Police Station;
 - ii) Photographs, if any, taken at the site of accident or theft;
 - iii) Copy of the Consignment Note;
 - iv) Damage Certificate/ Non-delivery Certificate from the consignee about the consignment;



- ✓ Whether the services of all the selected transporters are available equitably (provided there is no difference in rates);
- ✓ Whether the organization follows the system of continuous performance evaluation of the transporters on the following service levels:
 - i) Placement of Lorries;
 - ii) Transit time;
 - iii) Claim Ratio (shortages and damages).

I. Insurance:

- ✓ Examine the Insurance Policy coverage taken;
- ✓ Whether the Company is over or under insured. There is risk for being under insured or a wasting of funds if the company is over insured;
- ✓ Whether the insurance policies cover all locations under the ownership of the organizations for which risks are required to be covered;
- ✓ Cross-check the sums insured under different policies with books of Accounts and other relevant operational records;
- ✓ Whether the policies are renewed in time;
- ✓ Whether the insurance policies along with the endorsements are being kept in safe custody;
- ✓ Whether the following risks at least have been covered under the policies taken –

(i)	Money Insurance Policy	-	Cash in Safe wherever the cash is kept in safe;
		-	Cash in Transit covering all points of movement.
(ii)	Standard Fire & Special	-	Buildings, i.e. Bungalows, Labour Quarters, Factory
	Peril Policy covering		Building, Office Building, Stores & other
	Flood & Earthquake		constructions.
		-	Plant & Machinery
		-	Furniture & Fixture including Office equipments,
			Computers, etc.
		-	Inventory of Raw-materials, Finished products &
			Stores materials.
(iii)	Burglary Insurance	-	Inventory
(iv)	Crop Insurance	-	Crop at field against natural calamities like hail, flood
			as well as finished crop in transit.
(v)	Elephant Damage	-	Estate Buildings*
(vi)	Fidelity Insurance	ı	In respect of personnel handling cash

^{*} This is required for Tea Estates in North-East & Dooars where impact of damages to labour quarters and other constructions by elephant herd is significant.

✓ In respect of Crop Insurance Policy for crop-in-transit or Marine Policy, it should be examined whether the policy taken is for a fixed annual value with the coverage of a maximum value of individual consignment or the sum insured is based on declaration of details of consignments in each month during the validity period of insurance policy;



- ✓ Internal Auditor has to evaluate the insurance on property and equipment compared to their value.
- ✓ Internal Auditor has to physically determine if property and equipment are still in the company's possession.
- ✓ Whenever any asset is disposed off or any new asset (high value asset in particular) is acquired, the same is excluded from or included in the sum insured;
- ✓ Examine the claims made on the Insurance Company whether the claims have been made promptly after the occurrence of any event covered under the risks insured; if not, to review the reasons;
- ✓ Examine the records maintained in respect of insurance claims whether any comprehensive record is maintained which facilitates smooth follow-up of insurance claims;
- ✓ Check the status of settlement of claims
 - (i) Whether regular follow-up is made with Insurance companies regarding survey of loss/damage;
 - (ii) Whether follow-up is made with Insurance for settlement of claims where survey is complete;
- ✓ Review the reasons for old claims remaining unsettled for a substantial period of time and to report thereon;
- ✓ Where the claims have been short-settled for a substantial amount or have been turned down, to examine the reasons for short settlement or denial.



Chapter 18 Audit of Functional Areas

I. Administration Department

Before the internal audit is taken up it is necessary to obtain and examine the organizational chart to find out how the company is organized, who reports to whom and the geographical location of the company spread over various places including marketing offices, delivery points, loading points, quality control etc. The general system of administrative set up is required to be understood by the internal auditor for the effective understanding and functioning. In many companies administration department may be combined with HR or accounts depending upon the size of the organization. The checklist given below is based on the assumption of a separate Administration department:

- ✓ Define the audit objective and scope of the work
- ✓ For each administrative process, study the SOPs, schedule of authorities etc.
- ✓ Decide the sample size and obtain sample data as an audit evidence
- ✓ Observe the variations with respect to the SOPs
- ✓ Assess the risks and value impact on the organization
- ✓ Arrive at the audit findings and conclusions
- ✓ Areas to be checked in administration
- ✓ Office routine procedures for authorization and approval
- ✓ Office maintenance and utilities
- ✓ Office rental agreements and compliance
- ✓ Health, safety and environmental aspects
- ✓ Administrative purchases and policies thereof
- ✓ The total administrative expenses analysis v/s budgets
- ✓ Administration expenses as a percentage of total cost of sales and the trend over a period of time
- ✓ MIS generated periodically on the administrative matters
- The Budgetary Control in operation in the Company and the Comparison of Administrative budget broken down for various administrative functions like Recruitment, HR Training, Watch and ward, Safety, Health, Environment, Office and General maintenance etc to Actual expenditure and deviation reports for management action, if any.
- Check the administrative offices located at various parts and their linking with the cost centre, if any, for Control purpose through collection of a system on administrative costs.

Beside general administrative functions, administration of Insurance policies, legal compliance, monitoring of subsidies received from Boards are required to be carried out.

- (i) Allocation of responsibilities among the supervisory staffs and reports submitted by them shall be referred to, to assess their performance and actions taken on the reports submitted.
- (ii) Whether meetings at regular intervals have been held by committees and sub-committees formed to look into various functions and activities and whether decisions taken in those meetings, as documented in the minutes, have been executed.
- (iii) Frequency of meetings between the Estate Management and the Corporate Office to assess and improve the performance at the Estate and the quality of the output should be viewed



along with the 'action taken' report.

(iv) The frequency of visits by officials from the Corporate Office and the reports submitted by them should be viewed to verify the actions taken.

II. HRD and Personnel Department

Human Resource Management: Human Resources Management covers a wide variety of workforce activities, including labour law issues, compensation and benefit plan design, employee hiring and termination procedures and the handling or administrating of many corporate policies. This function consists of Recruitment and training, Complying with the laws related to staff/labour, Payroll functions and Staff Welfare which are to be reviewed as detailed below:

Recruitment and training:

(a) Recruitment, record maintenance and training:

Ascertaining the requirement of various types of work-force, skilled, semi-skilled and unskilled in consultation with the management, selection, recruitment, maintenance of details of each staff/labour and training of the personnel.

- (i) Verify the records to find out whether periodical meetings have been conducted to ascertain the need for additional work-force.
- (ii) Verify the records to ascertain whether the selection process as necessitated by law or company's policy has been followed. Verify whether recruitment has been done following the statutory requirement and company policy
 - ✓ Whether there are written procedures on interviewing candidates;
 - ✓ Whether best practices are used in the hiring process;
 - ✓ Whether the HR staff is adequately trained, there are certain positions that need certification and special training.
 - ✓ Administrative policy of the company and its adherence and the treatment to be given to the new employees with reference to the benefits including the permissible benefits.
 - ✓ Induction Programmes to the new entrants of the Organization and Training Programmes (including quiz, elocution competitions etc) to the employees on a continuous orientation scheme.
- (iii) Verify whether detailed records of the employees are being maintained on a regular basis;
- (iv) Verify whether the need for training has been ascertained periodically and whether training has been done in-house or elsewhere. Whether the training procedure has been designed to meet the requirement of the company and approved by proper authority, in-house training has been imparted by authorized persons and for training outside the training programme and the institute has been approved by the authorized persons.

Review the system for complying with the provisions of various laws applicable to the entity, whether proper steps are being taken, whether proper records/registers are being maintained, statutory payments are being made and returns are being submitted in time to avoid penal provisions.

- ✓ Whether there is a code of conduct or business ethics policy;
- ✓ Whether company is in compliance with Labour laws. Whether the company has concerns with safety issues of worker?
- ✓ Whether the company has a sexual harassment policy.



✓ Whether there are termination procedures, including the use of a checklist, to avoid missing a step such as terminating access to the company's network.

Wages:

Checking of Attendance Record, Wage Sheets, Wage Disbursements, etc:

- ✓ Check the mode of Wage Administration whether fully computerized or partially computerized or fully manual. Where the Wage Administration is managed through computerized system, Internal Auditor should study and examine the total computer program in order to ensure that there is proper internal control and check at each and every step of the program and all the related module like Master Roll, Attendance Recording System, Pay Roll Accounting, Computation of leave with wages, Sick Leave Recording, etc. are properly inter-linked;
- ✓ To check whether the Estate maintains a Master Roll of all the workers which should contain the following information:
 - (i) Employee Code;
 - (ii) PF SI. No.;
 - (iii) Name;
 - (iv) Date of Birth;
 - (v) Date of Joining;
 - (vi) Grade/ Category;
 - (vii)Scale of Pay;
- ✓ Check the details recorded in Master Roll with reference to the basic records like employee/
 workers' personal information file, declaration to PF authority in respect of date of joining &
 date of birth of individual workers, etc.
- ✓ Examine that the Muster Roll is updated regularly in respect of Superannuation, Resignation, Death or Termination of employment;
- ✓ Examine the procedure for revision of the Muster Roll and to check that any amendment in the Muster Roll is properly authorized by the Estate Management;
- ✓ Whether Pay Roll is linked to Muster Roll (in case of computerized system);
- ✓ Cross-check the number of workers as per Muster Roll with the number as per Pay Roll vis-àvis number of workers in the list prepared for actuarial valuation of Gratuity liability to
 report, if any discrepancy found among these three records;
- ✓ Ensure that the Muster Roll does not contain the name of any superannuated or deceased employee or the name of any employee who have left the service;
- ✓ Examine all cases of new appointment of workers
 - whether those appointments are replacements for the superannuated workers / workers who have left service or these appointments results in increase in permanent workforce;
 - where new appointed have resulted in increase in the number of permanent workforce to check whether such appointments have been made with the approval of the Corporate Management;
 - whether such new appointments impacts the Land-Labour Ratio adversely i.e. beyond the norm of the industry;



- ✓ Examine the system of recording attendance for staff/ sub-staff and workers whether it is recorded through computerized system i.e. swapping the magnetic ID Cards or through biometric system or the attendance is recorded manually;
- ✓ Where the attendance recording system is computerized to check whether the attendance of all the workers i.e. field workers, factory workers and workers deployed in miscellaneous other work (i.e. Establishment, transport, transport, etc.) and also staff and sub-staff are recorded through computerized system;
- ✓ In case of computerized attendance recording system, Internal Auditor should witness and observe live attendance recording in order to find whether there is proper Internal Control in the system;
- ✓ Check the system of uploading the data of attendance daily (particularly for the field workers) into the computerized system used for daily deployment recording and wage computation;
- ✓ In case of computerized attendance recording system, to check whether the attendance of field workers (i.e. workers engaged in plucking, tapping, picking of Coffee Seeds and other field operations) are recorded directly in the field itself through Logger or attendance are recorded in the Field Office first and then workers are sent to the field;
- ✓ Where attendance is recorded directly in the field itself, Internal Audit should witness and observe the recording system of attendance at the field;
- ✓ In case of recording attendance of workers & sub-staff manually, to examine the system and method followed for recording the attendance at different points of deployment i.e. field, factory, office, bungalows, workshop, etc.
- ✓ Scrutiny the primary attendance record i.e. Pocket Book used by the field staff for recording the attendance of field workers and cross-check the same with the final attendance record maintained at the Estate Office for wage calculation. For workers engaged in plucking, tapping or peaking Coffee Seeds, to check the primary attendance record with the record maintained for daily harvesting by individual workers which is also used for computation of incentive for fulfillment of target;
- ✓ Whether the attendance are recorded by the concerned field / factory/ office staff specifically assigned with the responsibility for this purpose;

Casual Worker

- ✓ Check the method of recording the attendance of casual workers i.e. whether through computerized system or manually.
- ✓ If the attendance of casual workers is recorded through computerized system, as in the case of permanent workers, following points need to be checked:
- ✓ The system followed for issue of Magnetic ID Cards to the workers, system of allotment of Employee Code to the workers, maintenance of basic employment data;
- ✓ System followed for keeping control over the issue of Cards whether it is issued daily and returned at the end of the day or it is issued at the beginning of harvesting season and taken back at the end of harvesting season, etc.
- ✓ Check the system of recording attendance of casual workers who are paid through Cash Vouchers instead of Wage Book;
- ✓ Scrutiny the attendance record of the field staff, factory staff and office staff where it is maintained manually in the form of Attendance Register, whether attendance register is signed by the respective staff himself or any Management personnel records their daily attendance in the Attendance Register to check that the above system is followed properly;



- ✓ Whether there is any alteration in the attendance record subsequent to the primary recording;
- ✓ Examine such cases of alterations in the attendance record to find whether there is any unauthorized alteration;
- ✓ Check that total attendance of permanent and casual workers together for a day as per Pay Roll is tallied with the total man-days as per the deployment record for the same day;
- ✓ Verify the total number of workers present as per daily attendance record with the total number of workers attended as per final deployment book vis-à-vis field record i.e. Rough Deployment Book;
- ✓ Check the wage sheets with the daily attendance record where attendance is recorded manually;
- ✓ In case of computerized record, to check the program used for computation of wages and linking of attendance record with the Wage Sheet preparation;
- ✓ Check the computation of wages in the Wage Sheet with reference to other basic records like Estate record for respective workers/ sub-staffs' grade/ category, corresponding wage rate & other allowances payable as per Industry-wise agreement;
- ✓ Verify the wage payment vouchers for disbursement of wages to casual/ contractual workers who are directly paid through Cash Vouchers instead of Wage Sheets with reference to the basic records maintained for recording their attendance;
- ✓ While checking the records in respect of payment of wages to the Tappers in Rubber plantation, the following points are required to be checked:
 - 1. Records for daily collection of Field Latex (In terms of DRC) by individual workers;
 - 2. Classification of the field where deployed;
 - 3. Piece Rate payable per Kg. of field latex collected, depending on the classification of the field in terms of yield per hectare;
- ✓ Where the workers are paid on the basis of piece rate for plucking Green Leaf or picking Coffee Seeds, the following areas are required to be checked while checking the records of payment of wages;
 - 1. Records maintained for harvesting by individual workers control system followed for such recording;
 - 2. Piece Rate paid to individual workers in terms of agreement with the workers;
- ✓ Check the system and procedures followed for recording of harvesting by individual workers daily whether such recording is carried out in the presence of any Management Staff or any other responsible senior staff members of the Estate. This checking is required to be carried out for all the three types of plantations, i.e. Tea, Rubber and Coffee;
- ✓ Examine the computation of incentives to the workers engaged in plucking, tapping or picking of Coffee Seeds with reference to the records maintained for their daily harvesting, the minimum target for incentive earning fixed for different periods of harvesting season and industry-wise agreement on rate of incentives payable;
- ✓ Check computation of various deductions made in the Wage Sheets from the wages like Contribution to PF, Contribution to Deposit Linked Insurance (DLI), recovery of cost of electricity provided to workers' houses, recovery of price of food stuff issued to workers, recovery of advances paid to staff/ sub-staff and workers, etc.;
- ✓ Examine the procedure followed for disbursement of wages whether disbursement of wages are made from the Estate Office itself or wages are disbursed from different points i.e. Field



- workers at the field, factory workers at the factory and the workers and Sub-staff deployed in the Office.
- ✓ In case disbursement of wages are decentralized, to check that disbursement of wages at each point are made under the supervision of senior staff/ management staff;
- ✓ Examine the process of identification of the workers at the time of disbursement of wages to check the method of obtaining acknowledgement of workers/ sub-staff for disbursement of wages;
- ✓ Check the Wage Sheet in respect of computation of Wages for paid holidays whether the wages has been paid to any worker/ employee who is absent from work for a long period or the worker who was not present both days preceding and succeeding to the holiday:
- ✓ Check the procedure followed for recovery of price of food stuff issued to workers whether the cost deducted from the Wages through Wage Sheet or the Cost is collected at the time of issue of ration articles;
- ✓ Where the cost of food stuff is deducted from wages through Wage Sheet, to check the computation of deduction with reference to the attendance record, dependant's muster and the industry norm for per head issue quantity.

Cash Plucking (i.e. plucking on piece rate basis) – for Tea cultivation only:

- ✓ Check the timing and the sections where cash plucking was resorted to during the season;
- ✓ Examine the reason behind resorting to cash plucking whether the plucking round was behind the schedule or it was resorted to after a long holiday when the leaf became longer;
- ✓ Whether cash plucking and plucking during normal working hour is simultaneously carried out – if that practice is carried out, to report whether any adverse effect of cash plucking on plucking during normal working hours has been observed;
- ✓ Examine the system of field supervision of cash plucking;
- ✓ Whether permanent workers are deployed for cash plucking or cash plucking is carried out with the help of casual workers only;
- ✓ Examine the records maintained in respect of cash plucking e.g. date and time of plucking, section / field no, name of the workers deployed, weight of green leaf plucked by individual workers etc;
- ✓ Examine the per Kg. rate paid for cash plucking and compare the same with the average plucking cost;
- ✓ Examine the system of disbursement of wages for cash plucking to the workers;

Leave with Wages:

- ✓ Examine the mode of computation of wages for the paid leave whether through a computerized system or manually;
- ✓ To check the method and system of recording leave earned by each worker, staff and substaff;
- ✓ In case of computerized system followed for both recording the leave earned and the computation of wages of earned leave, to check the programme used for this purpose;
- ✓ In case of manual recording of leave earned, to check the leave record with reference to basic attendance record/ wages sheet/ pay sheet;
- ✓ In case of manual computation of wages for the earned leave, to check the computation;
- ✓ Check the record for payment/ disbursement of wages for earned leave.



Record for Absenteeism of Workers:

- ✓ Whether any worker-wise record is maintained in order to find the number of days absent by each worker over a particular period say month or year;
- ✓ Whether any percentage of absenteeism for a specified period say, month or year, is computed for individual workers' absenteeism as well as for total absenteeism;
- ✓ Whether any permanent record is maintained for percentage of absenteeism;
- ✓ Internal Audit should make a comparative study of the absenteeism percentage both worker-wise and total workforce-wise among different periods of the same year as well as with past years to see the trend of absenteeism and discuss with the Estate Management regarding the action taken for improvement of status of absenteeism.

System of payment of Overtime Wages:

- ✓ Whether any overtime work is carried out in the estate;
- ✓ Whether the estate follows the practice of obtaining approval before the OT work is undertaken or post-facto approval is taken after the OT work is done;
- ✓ Examine the method followed for recording Overtime Hours worked by the workers whether manual or through computerized recording system;
- ✓ Check the Overtime Work Register maintained in the factory where manual system is followed for recording overtime work;
- ✓ Where the attendance for overtime work is recorded manually, to check whether 'In'/ 'Out'
 timing is recorded, whether Overtime Hours is recorded for individual worker-wise and daywise;
- ✓ Whether the job/ operation/ function where the respective workers are deployed, is also recorded;
- ✓ Whether OT Register is regularly checked by the Managerial personnel, who is In-charge of the factory operation;
- ✓ Whether any blank space is kept in the OT Register between the last entry in a particular Page and the approval signature by the Estate Manager. The checking is required to ward off possibility of any unauthorized entry in the blank space;
- ✓ In respect of overtime work on any day in the factory, to carry out a comparative study which is more cost effective working of an extra shift or working OT hours;
- ✓ In case computerized system is followed for recording OT work, to scrutiny the system whether all necessary information, as mentioned above, are recorded in the system;
- ✓ Where computerized system is followed for recording OT work, to check the system of recording the attendance of OT hours;
- ✓ Examine the system of recording the Overtime work in areas other than manufacturing, like Hospital, Bungalows, Vehicle running & maintenance, Office and Estate premises, etc and also to examine the method of obtaining approval for OT work in those areas;
- ✓ Where the record for attendance of OT work is maintained manually, it should be checked whether there is any unauthorized alteration in the OT work record;
- ✓ Check the computations of the OT wage payment sheets with reference to the OT work attendance record and rate of wages of the respective workers/ employees.

Pay roll functions:

Maintenance of proper record of attendance, hours worked (normal and overtime), production achieved etc. to ascertain the salary/wages and bonus payable, maintenance of record of leave,



maintenance of record of payments and deductions made from the amount payable. Internal auditor has to ascertain that controls are in place to prevent fictitious employees, unauthorized rates or bonuses.

- ✓ Whether internal controls exist to prevent creation of fictitious employees or inappropriate and unauthorized pay rates.
- ✓ Whether adequate automated computer controls exist to prevent payroll errors such as having minimums and maximums on cheque amounts.
- ✓ Whether Human Resources have the knowledge and experience to keep in compliance with labour laws.
- ✓ How bonuses and commissions are paid. Whether the payment of Bonus is in accordance with the decision of the Board of Directors.
- ✓ Check salary charts with the payments in cash book / bank book or journal.
- ✓ Check attendance with time card or master register maintained by the company.
- ✓ Check overtime (OT) payments with the relevant registers and company's rules.
- ✓ Check incentive payments with its basics. Ad hoc incentives should be listed out.
- ✓ Whether the employees are paid for leaves on which they have worked as per their agreement.
- ✓ Tally the staff advances accounts with their salary accounts and see that the adjustments have been made on time.
- ✓ Check increments with approvals / relevant agreements, if any.
- ✓ If the payroll function is outsourced then the third party administration is to be reviewed.
- ✓ Review the employee payroll process to check whether taxes is calculated and deducted as per applicable income tax limits.
 - (i) Whether payment to labourers, permanent or casual, has been made on the basis of attendance, except where the piece-rate wages with or without minimum wages is the basis of payment, after any deduction for Provident Fund, unpaid leave etc., whether leave register has been verified for earned leave and maternity leave and maternity register has been referred to, to identify false entry and whether the entry for earned and maternity leave have been made under proper authorization.
 - (ii) Whether proper identification of the labourers have been made at the time of payment of wages.
 - (iii) Whether the salary sheets on the basis of which payment is to be made to the executives and office staffs has been prepared correctly (as per the attendance record and calculation has been done by taking the correct scale of pay) after proper deductions for absence without leave, PF, ESI, P. Tax, TDS etc.
 - (iv) Correlation of deductions made shall be done with the leave register and attendance record, Provident Fund ledger and Employee State Insurance records (for PF and ESI deduction) and tax returns (For Tax deductions).
 - (v) Payments made for overtime, earned leave encashment, workmen's compensation etc. shall be verified with the corresponding records for ascertaining the correctness of the amount and whether proper authorization for such entitlement exists.



(vi) Verify whether any inclusion/exclusion in the names, increments etc. are properly authorized, inclusion/exclusion compares with the appointment and resignation or termination respectively and increment has been correctly calculated.

LABOUR WELFARE FUNCTION:

Providing welfare as mandated by the statutes and as required by the Company policy namely providing proper housing, medical facilities, ration of food-grains and health care items and providing crèche etc.

- (i) Whether the right quantity of grains, tea and other things like healthcare items, fuel etc., to be distributed as weekly ration has been issued from the stores and the undistributed quantity returned to the stores, whether distribution is being made as per entitlement (on the basis of type of labour i.e. permanent or casual and the attendance during the week), at the designated day every week, whether proper identification of the beneficiary is being done at the time of distribution, the amount to be recovered from the beneficiaries on distribution is being properly recovered and whether the recovered amount has been deposited in cash.
- (ii) Whether proper housing, sanitation, water supply (both drinking and for other purposes) and lighting are being provided to the resident staffs and labourers as per the statutory requirement and company's policy, whether there is a system of periodical supervision by the managerial staffs and report of such supervision is being maintained properly.
- (iii) Whether the hospital (if any) are being properly maintained with proper stock of medicines and consumables, proper equipments, proper staff, whether a record of patient attended, treatment made and medicine issued is being kept, whether any patient had to be referred to another hospital for treatment, whether payment being made for his/her treatment is to be borne by the management and if so, whether correct amount is being paid under proper authorization, whether a system of monitoring by the managerial staffs is in place and report of such monitoring is being kept.
- (iv) Where a crèche exists, whether it is being maintained properly with items necessary for keeping children of the labourers and whether a stock register is maintained for these items, whether proper staff has been engaged, whether record of the children being attended to is being maintained and whether a system of monitoring by the managerial staffs is in place.

Miscellaneous Labour Welfare Expenses:

- ✓ Examine the nature of expenditure on different labour;
- ✓ Whether the nature of welfare expenditure incurred in the Estate is at par with the norms of the Industry;
- ✓ Whether such labour welfare expenses are provided in the Budget;
- ✓ Make a comparison between the Budget and actual examine to find out whether any Labour Welfare Expenses has been incurred extraneous to the Budget, whether such expenditure is incurred with the approval of the Corporate Management;
- ✓ To check To carry out the study of the trend of expenditure under individual head of labour welfare expenditure for a period of consecutive 3/4 years.

Distribution of firewood and other form of fuel to Staff & Workers:

- ✓ Examine the system followed for procurement of firewood including selection of vendors, fixation of rate & quantity of purchase;
- ✓ Check the documents pertaining to purchase and procurement of firewood and records pertaining to receipt and issue of firewood in the concerned Stores record;



- ✓ Examine the system of measurement of the receipt quantity including certification thereof;
- ✓ Check that a permanent record i.e. Register is maintained for distribution of firewood incorporating the following information:
 - 1) House No./ Family Code;
 - 2) Entitlement;
 - 3) Date of distribution;
 - 4) Period to which the issue of firewood pertains;
 - 5) Actual quantity of issue;
 - 6) Acknowledgement of the recipients.
- ✓ Where the total entitlement for a particular year/ period is issued in installments, to check whether the acknowledgement of recipients are obtained for each installment.
- ✓ To check that Firewood Issue Register is regularly examined by the Labour Welfare Officer;
 - i) Check the stock record of the firewood;
 - ii) Where issue of firewood is made from uprooted tea bushes and shed trees, the following points need to be checked:
 - a) Whether the job of uprooting will be done by the Estate's own worker or the job is being entrusted to any contractor;
 - Where the job is contracted out ,fixation of norms for conversion of lopped and chopped tea bushes/ shed trees to standard stack (colloquially called as 'Pills' in Assam and West Bengal tea gardens);
 - c) Records for section-wise daily generation of timber for issue as Firewood;
 - d) System of checking such record by Estate's Managerial personnel regarding authenticity of records;
 - e) Physical supervision of the operation;
 - f) Checking of bills of the contractors;
 - g) Reconciliation of the bills submitted by the contractors with the Estate record for generation of firewood from uprooting vis-a-vis the records for issue of firewood;
 - iii) Where LPG cylinders are issued to the staff and sub-staff as fuel, the following points are required to be examined:
 - 1) Check the number of consumers with the Pay Roll for staff and sub-staff;
 - 2) Check the receipts for Security Deposit with the Gas Supply Agency and records thereof;
 - 3) Check the issue of Gas Cylinders with reference to per employee entitlement as per Industry norms;
 - 4) Maintenance of permanent record for issue of Gas cylinders and checking of the record with reference to the accounting record i.e. payment vouchers in respect of bills of Gas Supply Agency;
 - 5) Ensure that in the issue record, the name of the employees to whom the cylinders are issued are recorded and acknowledgement of the recipients are obtained;
 - 6) It should be ensured that the records for issue is maintained in such a way that total receipt of cylinders by individual employees during a year can be easily determined.



Distribution of Labour Welfare Items like Umbrella, Blankets, Chappal and other protective clothing:

- ✓ Examine the system of procurement and fixation of rates for purchase, whether samples of the respective items to be purchased are obtained from the prospective vendors before fixation of rates;
- ✓ Whether competitive offers are obtained for fixation of rates of procurement;
- ✓ Check that the approved samples are preserved in Stores and actual supply made is checked with reference to the approved sample;
- ✓ Check the records for issue/distribution of these items contain the following information:
 - 1) Worker Code No.;
 - 2) Name of the Worker;
 - 3) Period to which the issue is related;
 - 4) Acknowledgement of the recipients;
- ✓ Examine the stock record with the basic records of receipts and issue of these items and carry out physical verification of these items with reference to the stock record;

Daily Issue of Black Tea for the purpose of preparation of Liquid Tea at the field: (in case Tea Plantation only):

- ✓ Check the system followed for daily issue of black tea from factory for the purpose of serving Liquid Tea at the field;
- ✓ Whether any per head consumption is fixed for issue of such tea;
- ✓ Whether there is any co-relation between the quantity of issue in a day and the number of workers present in the field for that day;
- ✓ Whether any separate stock is maintained in the Stores for issue of ration of black tea to the workers, staff and sub-staff or the issue is directly made from the factory;
- ✓ Check the system of keeping records for daily issue of black tea for distribution of Liquid Tea;
- ✓ In case any separate inventory of black tea is maintained at the Stores for this purpose, to check whether any record is maintained at the Stores for such stock of black tea;
- ✓ In case any separate inventory of black tea is maintained at the Stores for this purpose, to check whether any record is maintained at the Stores for such stock of black tea;
- ✓ Where the issue is made directly from factory, to check the Excise records for such issue to quantify the volume of black tea issued for the purpose of distribution of Liquid Tea during a year and to study the percentage of such issue with reference to the total quantity of tea manufactured:
- ✓ Examine the quantum of quota of black tea to be issued to each permanent worker, staff and sub-staff;
- ✓ Compare the quota of actual quantity issued with the entitlement fixed by industry-wise agreement with the Workers' Union for the respective region, if any;
- ✓ Whether the quantum of issue per worker for married and unmarried employees are same;
- ✓ Whether any black tea is issued to adolescent workers and if any such issue is made, whether the same is allowed as per the agreement with the Workers' Union, as mentioned above;
- ✓ To check the issue of black tea to the temporary workers it should be examined whether this issue is made according to the guidelines of the Industry Association in respect of each of the workers and minimum number of days worked in a month;



- ✓ Check issue quantities recorded in the Stores Records with reference to the records maintained for issue of black tea to individual workers, staff and sub-staff;
- ✓ Examine the quantum of issue of black tea from Stores for other miscellaneous labour welfare purposes;
- ✓ Whether such issues are made with the approval of the Estate Manager;
- ✓ Compute the total quantity of issue of black tea for miscellaneous purposes during a year as a percentage of total quantity of tea manufactured during the year to compare this figure with the corresponding figures of previous 3 / 4 years;
- ✓ Carry out the physical verification of the stock of black tea kept in the Stores for this purpose and compare the same with the balance as per the stock record, as mentioned above;
- ✓ Where the issue is made directly from the factory, to scrutinize factory Excise records for such issue and to compare the factory records with the records maintained for issue of black tea to individual workers, staff and sub-staff;
- ✓ In case of direct issue of black tea from factory, to examine the system of handling unissued tea at the end of the day and keeping records for stock of such unissued tea;

FOOD STUFF (Ration)

For Internal Audit of Food Stuff (Ration), the following points/ parameters are required to be reviewed/ checked:

a) Receipt:

- ✓ Whether action for procurement of ration is taken at HO level or at estate level in case, procurement is made locally, method of selection of source of purchase and fixation of price needs to be examined;
- ✓ Whether there is system of weighment at the Estate at the time of receipt of food- stuff consignments and of comparing the results of such weighment with the weights mentioned in the corresponding invoices;
- ✓ In case of short receipt, the system of dealing with such short receipts;
- ✓ Existence of any system of checking of quality of food stuff whether those are fit for human consumption;
- ✓ Procedure for dealing with the complaints regarding receipt of substandard quality of consignment or receipt of any water-soaked or otherwise damaged consignments;
- ✓ System of checking the Invoices for supplies of food stuff with reference to the receipted Stores Challans;
- ✓ Whether the weight of empty food stuff sacks/ bags are periodically checked on sample basis to check the correctness of deduction of tare weight in the Suppliers' Challans;
- ✓ System of payment to the suppliers of food staff whether payments are made at the Estate's level or at H.O. level;
- ✓ In case payments to the suppliers are made at H.O. level, system of bill passing as well as the system of preservation of the records for the passed bills at the Estate for future reference in case of any dispute, needs to be reviewed;

b) Issue:

- ✓ System of preparation of Ration Issue Register whether it is computerized or prepared manually;
- ✓ In case of Ration Issue Register processed through computerized program, it should be checked whether such program has provision for auto-correction and up-gradation in case of any birth,



- death of the dependant linking the same with Dependants' Muster whether the names of the dependants will get automatically deleted once he/ she attains the maximum age of entitlement of ration;
- ✓ In case of computerized Ration Issue Register to examine whether the program used for processing the Issue Register is directly linked to the program used for processing the Wages Sheets:
- ✓ In case of Ration Issue Register prepared manually, to examine the system followed for ensuring the correctness of the register. The internal auditor should test check the register substantially;
- ✓ Check the procedure of deduction from weekly entitlement of ration due to absenteeism whether it is in line with the Industry's standard guidelines;
- ✓ Whether the quantity of issue of food stuff per head is in line with the norms fixed for the Industry;
- ✓ Check the system of issue of food stuff for miscellaneous purpose i.e. Hospital, etc.;
- ✓ Compare the Ration Issue Register with the Census Book as regards the number of dependents shown in the census book against the number of dependents entitled to ration as per Ration Issue Book in respect of each worker to report if any discrepancy is found;
- ✓ Examine the system of updating Ration Issue Register as to the death and birth of the recipients of ration with reference to the Estate's Hospital records/ certificates;
- ✓ Whether there is a system of due authorization by the Garden Management before any modification of the number of dependents in the Ration Issue Register;
- ✓ In case of computerized Ration Issue Register, administrative level of access to the main database and also the system of password protection of such database should be reviewed in order to prevent any unauthorized modification of the database;
- ✓ In case of issue of ration to workers' dependent children above 16 years, whether school going certificates have been obtained from the respective Head of the Institution;
- ✓ Whether any ration is issued to workers' dependent children above the age of 18 years;
- ✓ Whether the working spouse have been segregated from the list of dependents in order to prevent the double issue of ration;
- ✓ System of recovery of sale proceeds of ration to workers whether through direct deduction from weekly/ fortnightly wages or recovery in the form of cash at the time of issue of ration;
- ✓ In case of recovery of cash, whether such recovered amounts are timely deposited to the Estate's Cash;
- ✓ In case of deduction from wages in respect of sale value of ration, it should be checked the amount credited in the Accounts Book are tallied with primary records I.e. computation as per Ration Issue Register;
- ✓ Check the system of obtaining acknowledgement in the Ration Issue Register for issue of ration.

c) Inventory of Food Stuff:

- ✓ Checking the inventory records with primary documents of receipts and issue;
- ✓ Whether there is system of regular physical verification of stock of food stuff (fortnightly/monthly) and system of keeping records thereof;



- ✓ Review of the system of recording handling loss in the stock record whether it is recorded after each issue i.e. weekly/ fortnightly and whether such recording is made on the basis of physical verification of stock or on an estimated basis;
- ✓ Comparative analysis of handling loss percentage for past 3/4 years to review the trend –in case of abnormally high percentage(more than 0.5%)the reasons should be assessed;
- ✓ Review the system of adjustment of value of handling loss in the Accounts;
- ✓ Physical verification of food stuff is required to be carried out by the Internal Auditors in course of Internal Audit in order to check the correctness of the records;
- ✓ Internal Audit should review and make comments on the storage facility of the food stuff as to quality of storage facility as well as space;
- ✓ Review the holding of stock of foodstuff in terms of number of days' consumption stock holding should not be more than the quantity required for one issue.

CENSUS:

- ✓ Check the census records maintained by the Estate;
- ✓ Review the system of maintenance of census records whether through computerized system or in the form of permanent register maintained manually;
- ✓ Check that the census records contain the following information:
 - i) Name & of the workers,
 - ii) Sex,
 - iii) Age,
 - iv) Family/ Employee Code,
 - v) No. of dependants,
 - vi) Name of the dependants,
 - vii) Age of the dependants,
 - viii) Relationship of the dependants with the worker.
- ✓ Whether the census is conducted every year and every inclusion/ exclusion of the members of the family of a worker due to death, birth or exodus from the garden is documented and authenticated by the Garden Management with reference to the Hospital records /estate's personnel record;
- ✓ Whether the census records also contain labour house No. in which the labour and workers are residing, so that the same can be co-related with the census records;
- ✓ In case of non-resident workers , whether details of the dependents included in the census records are made on the basis of certificate issued by the Gram Panchayat or other appropriate authority;
- ✓ Check that the workers' family code is also incorporated in the Census Register, check that the date of birth for dependents as per Census Register matches with the records as per Dependants Muster;
- ✓ Compute the Land-Labour Ratio and compare the same with reference to the norms of the Industry;
- ✓ Compare the Land-Labour Ratio for the current year with the same for the last 3 / 4 years and to find whether any change in the ratio has taken place;
- ✓ In case of any change in the Land-Labour Ratio, to examine whether this change has created any excess permanent labour force as compared to the norms of the Industry and to find out the reasons for such change.



MEDICAL BENEFIT & EXPENDITURE:

Estate Hospital:

(i) Record Keeping:

- ✓ Whether the Garden's Indoor Patient Register are maintained in compliance with the provisions of Plantation Labour Act;
- ✓ Check the Hospital's Indoor Patient Register with reference to Sick Leave Register and Garden's Dependents Muster in order to ascertain that no outsiders are admitted unauthorized in the Hospital;
- ✓ Whether the Inpatient Registers are updated regularly;
- ✓ Whether permanent record is maintained for daily expenses on foods and provisions consumed for in the Indoor patients of the estate hospital;
- ✓ Examine the following aspects of such Daily Expense Register
 - a) Details of expenses are recorded therein,
 - b) Whether this Daily Expense Registers are checked and signed regularly by the hospital medical officer;
 - c) Whether daily expenses are commensurate with the numbers of inpatients.
 - d) In case, there is any per Head Budget for the daily expenses on food and provisions it should be examined that the actual expenses remain within such budget;
- ✓ Test check daily purchases with the diet chart prescribed by the hospital medical officer and examine that the registers are checked and signed regularly by the hospital medical officer.

(ii) Medicine Stock Register/Drug Register:

- ✓ Whether the medicine Stock Register/ Drug Registers are updated regularly and every Receipt/ Issue and balance after every transaction are recorded therein;
- √ Whether any Sub-Stock Register is maintained at Out-patient Dept (OPD);
- ✓ Examine the Sub-Stock Register maintained at OPD whether the receipt from main stock and issue of medicines to the patients are recorded daily indicating the medicines issued to the individual patients;
- ✓ To reconcile issue of medicines shown in the Drug Register or in the Sub-Stock Register for OPD (wherever maintained) with the medicines prescribed as per the Treatment Register maintained at OPD on test basis;
- ✓ Whether a separate register is maintained at the Hospital for receipt and utilization of the medicines and other medical assistance received by the Estate Hospital free of cost under any Government Scheme;
- ✓ Examine the medicine stock register whether this is regular checked and signed by the Medical Officer;
- ✓ Conduct a physical check for medicine stock both of the main stock and stock at OPD with reference to medicine stock registers and report if any discrepancy is found.

(iii) Record for Treatment at Out Patient Dept. (OPD):

- ✓ Whether the register specified under the Plantation Labour Act for the treatment of Garden workers and their dependents in the Hospital OPD is maintained properly;
- ✓ Examine this register with reference to Garden Muster Roll for permanent/ casual muster and dependent muster;



✓ Whether any person other than staff and workers and their dependants is given treatment – if any person other than the staff/ workers and their dependants is given treatment, it should be checked how the cost of treatment is recovered.

(iv) Stock Register for Hospital Instrument, Linen, Utensils, etc.:

- ✓ Whether for items other than medicines i.e. for Linen, medical equipments/ gadgets etc. a Stock Register is maintained and also updated regularly;
- ✓ Conduct a physical check of those items with reference to such register and report, if any, discrepancy is found;

(v) Treatment at External Hospitals:

- ✓ Whether any record is maintained for referral cases to external hospitals like district hospitals, specialty hospitals etc.
- ✓ Examine how many such cases have been referred to external hospitals , total expenditure incurred on treatment and reasons for referring to external hospital;
- ✓ Examine how frequently the cases are referred to external hospitals;
- ✓ Review the mode of payment to such external hospitals- whether direct payment to hospitals or reimbursement to the employees and record maintained for those payments in order to keep control on such expenditure;
- ✓ Whether any limit of expenditure is fixed beyond which the workers have to bear the extra expenses;

Hiring of Vehicles for carrying patients:

In the estates where any ambulance is not maintained or when the estate ambulance is not available for any reason, vehicles are hired for transporting patients out of the estates to nearby town either for pathological tests or for check up by specialist doctors at hospitals or in other specified clinic. In that case, following aspects are required to be examined by Internal Audit to keep control over such hiring of vehicles:

- a) Fixation of rates for hire charges;
- Records maintained for recording the particulars of hiring of vehicles i.e. date, destination, number & names of the patients, name of the provider of the vehicle, vehicle no, bill no & amount of hire charges etc.;
- c) Reasons for hiring whether justified or not;
- d) Certification of the bills by the medical officer;

Bonus:

- ✓ Cross-check the names appearing in the Bonus Register with the names appearing in the Pay Roll for the period to which such computation of Bonus is related;
- ✓ Where the Bonus is computed through computerized system, to check the computer program used for computation of Bonus as regards linking of the Bonus Sheet with the Wage Sheet and the formula followed for computation of Bonus;
- ✓ Check that the agreed percentage of Bonus is used for computation of Bonus;
- ✓ Where the computation of Bonus is done manually, to check the Bonus Sheet with the Wage Sheet of the corresponding period, percentage of bonus used and the computation of Bonus;
- ✓ Check the records for disbursement of Bonus including records of acknowledgement of the receipt of Bonus and same procedure is followed for disbursement of Bonus as is followed for Wage.



Unpaid Wages & Bonus:

- ✓ Whether any wages which remains unpaid at the end of the day of wage payment, the
 undistributed amount is refunded to the Estate's Cash after completion of disbursement of
 wages;
- ✓ Whether any record is kept for the unpaid wages for the respective days of wage payment;
- ✓ Check that disbursement of unpaid wages are made through the Unpaid Wages Register only and the respective workers' acknowledgement for receipt of wages is obtained in that Unpaid Wage Register;
- ✓ Check that in respect of unpaid Bonus, the same procedure as in case of unpaid wages is followed;
- ✓ Scrutinize the Accounting records in order to cross-check the amount of unpaid wages on a particular day with the corresponding entry in the Accounting Records.

Maternity Leave:

- ✓ Whether the maternity leave record is maintained in compliance with the provisions of Plantation Labour Act and that in the register at least the following information are available against each beneficiary worker:
 - a) Date of expected confinement,
 - b) Date of commencement of absence from work,
 - c) Amount of maternity benefit paid to individual worker,
 - d) In whose presence the amount is paid etc.;
- ✓ Check that no beneficiary worker gets more than 12 weeks' benefit;
- ✓ Reconciliation of amount of payment shown in accounting record and amount of payment according to maternity leave register.

Sick Leave:

- ✓ Whether the Sick Leave Register is maintained in the hospital according to relevant provisions of Plantation Labour Act:
- ✓ Test check the Sick Leave Register with respect to hospital records;
- ✓ Whether the Sick Allowances are paid complying with the rules of the respective State made under The Plantation Labour Act;
- ✓ Check that while paying sick allowances first day of sickness is excluded;
- ✓ Check the sick allowance payment register and reconcile the same with the accounting records.

PAYMENT OF GRATUITY:

- ✓ Review the status of unpaid Gratuity to the retired employees/ dependants of expired employees to check the reasons for Gratuity remaining unpaid;
- ✓ Whether notices are sent to the retired employees or to the nominee of expired employee for payment of Gratuity copying with the Payment of Gratuity Act within the time stipulated in the Act;
- ✓ Whether the Gratuity Register is maintained properly and all payments are recorded up to date therein;
- ✓ Check the mode of payment whether by cheque or by cash in case of payment by cash, to check whether the disbursements are made after proper verification of identity of the payee;
- ✓ In case of death , whether copies of succession certificate have been obtained before disbursement of gratuity;



- ✓ Whether monthly returns are submitted in time;
- ✓ Review the system of obtaining the nomination forms from the employees.

III. Materials Management:

Materials Management function includes various sub-functions like purchase, storage and management of the stored items, which is to be reviewed, as detailed below:

Purchase - General:

Internal Audit of Purchase function requires the following aspects to be covered:

- ✓ To begin with it should be checked that the business entity to be audited has any well defined Purchase Policy covering all items of purchase including capital items ,items to be purchased locally at the estate level , different types contract to be awarded in connection with the operation of the estate etc.;
- ✓ The Purchase Policy of the business entity is required to be reviewed in order to ensure that the same is adhered to while making purchase —both at H.O. and Estate level;
- ✓ Whether there is clear demarcation of broad group of items which are to be procured at H.O. level and items which are to be procured at Estate level;
- ✓ Whether there is any system of placing indents/ Purchase Requisition on Purchase Dept. being approved by appropriate level of authority and purchasing actions are taken only on the basis of such indents;
- ✓ It should be examined that
 - (i) The Policy and procedures for selection of vendors, placement of orders and monitoring the movement, inspection, receipt and return of goods is to be reviewed for improvement of the same or to remove any deficiency. Normally there are separate procedures for local and centralized purchases;
 - (ii) Where a purchase committee exists, whether meeting of the committee has taken place at regular intervals and recommendations have been acted upon;
 - (iii) Whether the established system for purchase has been adhered to for placing orders etc.;
 - (iv) Whether documentation of the actions taken has been done, as per the existing system of record maintenance;
 - (v) On receipt of the purchased item, whether entry has been made in the stores ledger, after proper inspection and the invoice has been sent to the finance department for payment.
 - a) Whether procurement of major items like agricultural inputs i.e. manures, weedicides, pesticides, different types of micro-nutrients, different chemicals required for rubber processing, packing materials, major machinery spares, etc. are centralized at H.O. or decentralized at Estate level;
 - Whether any item-wise/ product-wise approved Vendors' Lists are prepared and methodology followed for preparing such Vendors' Lists. It should be seen that such Vendors' Lists are broad-based;
 - c) Whether agricultural inputs, major rubber processing chemicals and other branded items including spare-parts of different machines, vehicles, electrical goods are procured directly from the respective manufacturers of such items or from their authorized dealers to check that list of authorized dealers are maintained;



- ✓ To examine the pending Purchase Indents in order to find whether there is any abnormal gap between placement of indents and initiation of Purchase Procurement action and to report the reasons for indents pending for abnormally long time;
- ✓ In case of policy of decentralized purchase, method of selection of sources at the Estate level needs to be examined whether any policy or procedure has been formulated by the Corporate for preparation of list of vendors at Estate level in order to maintain internal control over the purchases;
- ✓ Reviewing the system of deciding the specification/ brands of different items to be purchased

 both at H.O. level and Estate level;
- ✓ For purchase of HSD, Insecticides, Weedicides, Chemicals used in rubber manufacturing process, consumable stores of bulk consumption, to check whether any minimum and maximum stock level is fixed and maintained;
- ✓ Whether the vendors' lists are reviewed from time to time with a view to inducting new sources of purchases i.e. specifically manufacturers or their authorized distributors/dealers and deleting the non-performing/ redundant sources;
- ✓ Whether enquiries are sent to multiple sources to ensure competitive prices;
- ✓ To check that in the enquiries sent to prospective vendors, detail specification, name of the manufacturers or Brand name (in case of purchase of branded items) of the item(s) to be procured are specifically mentioned;
- ✓ It should also be examined that in the enquiries, following commercial points are also included:
 - 1) Last date of submission of offer;
 - 2) Schedule of delivery;
 - 3) Taxes & duties to be indicated by the vendor;
 - 4) Terms of payment;
 - 5) Warranty Clause;
 - 6) Penalty Clause;
- ✓ Examine the method of fixation of price for all major items or items of regular purchase whether on the basis of last purchase rate or rate contract based on one-time quotations or on the basis of quotations obtained at the time of purchase or on the basis of manufacturers' price list;
- ✓ Where the same branded items like electrical & mechanical items, insecticides, different consumable stores, etc. are purchased frequently from the local Dealers/ Distributors of the manufacturers and P.O.s are placed on the basis of manufacturers' Price Lists, it should be checked that copies of the manufacturers' Price Lists prevailing at the time of purchase are available with the Estate;
- ✓ Whether offers regarding discount available on manufacturer's Price List have been obtained from the Dealers/ Distributors;
- ✓ In case of procurement of any item of a particular brand in bulk, it should also be checked whether availability of multiple sources are explored and offers are obtained from them;
- ✓ Whether the organization being audited follows the system of referring to the last rate of purchase before finalizing the current purchase price;
- ✓ Whether the organization being audited has the system of checking the current market rate where any item is procured at an old rate for a considerable period of time say, for a period of more than a year;



- ✓ Whether Purchase Orders are numbered manually or numbers are generated through computer or pre-numbered Purchase Order Forms are used;
- ✓ If P.Os are prepared manually and P.O. forms are not pre-numbered, a register is maintained for recording the particulars of all the P.Os chronologically and P.O. Nos. are assigned chronologically;
- ✓ To examine that P.Os placed on vendors include in addition to rates, standard terms like rates of taxes, point of delivery, delivery schedule, terms of payment, LD Clause (wherever possible), freight, Insurance, mode of transport, price variation clause (if any), advance (if any), inspection clause (if required), guarantee/warranty (in case of machinery spares, etc.), earliest date of manufacturing and minimum shelf life of pesticides, weedicides, chemicals, etc. and in case of rate contract, validity period of such rate contract;
- ✓ Where the purchases are made on the basis of manufacturer's Price List, to check whether the
 rate of discount is clearly mentioned in the Purchase Orders; it should also be checked whether
 the prices mentioned in the P.O. are inclusive of VAT, and if not, whether rate of VAT is
 mentioned;
- ✓ Whether the validity of rate contracts are mentioned in the P.Os. in case of purchases made on the basis of rate contracts;
- ✓ Whether any purchase has been made at a price more than rates approved by Head Office;
- ✓ Review the cases of purchases made without obtaining any quotation or Price List;
- ✓ Whether the same item has been purchased at different rates from different vendors at the same point of time or within short span of time without any valid reason;
- ✓ Scrutinize the cases of procurement of materials from single sources and report on the reasons thereof including the methodology followed for ensuring the reasonableness of the prices;
- ✓ Whether multiple P.Os have been placed on the same vendor for the same item within a short span of time and to examine the reason thereof;
- ✓ Examine the pending Purchase Orders for reporting the cases of overdue orders along with the reasons thereof; to examine the system of monitoring the status of completion of supply against individual purchase order;
- ✓ Whether P.Os have been placed on the vendor for item (s) even before completion of delivery against earlier P.Os placed on the same vendor for the same item (s);
- ✓ Whether the delivery of materials have been made by the suppliers as stipulated in the
 respective POs in general; it should also be examined that whether any delay in delivery has
 caused urgent purchase of materials at higher price to meet the shortfall caused by such delay
 or any loss of crop in case of delay in delivery of agricultural inputs like insecticides and
 manure in particular;
- ✓ Make a sample checking of actual delivery of materials with reference to terms and conditions of the respective Purchase Orders and whether Liquidated Damages, if applicable, have been recovered from the vendors;
- ✓ Whether the materials procured on the basis of urgent indents have been consumed immediately on receipt of the same;
- ✓ Make a sample checking of the Purchase Orders for finding whether the procurement actions are in compliance with the formulated Purchase Policy;
- ✓ Check the cases of local purchases whether such purchases are made in line with the policy and procedure formulated by the Corporate for such purchases;



- ✓ Whether any purchase have been made on the basis of verbal order; In case any purchase is made on verbal order, circumstances under which such purchase has been made should be examined;
- ✓ Examine that materials required to be purchased from H.O. only as per Company's policy has not been purchased locally; in case such items are purchased locally due to any exigency, to examine that such purchases are made on obtaining approval from H.O. and cost of procurement is not higher than the H.O. approved rates;
- ✓ Compare the consumption pattern of agricultural inputs ,chemicals, packing materials, consumable stores with the quantum of purchase in order to find out whether any excess procurement is made which may result in carrying a dead stock or blockage of working capital;
- ✓ Review the policy and procedure for handling the vendors whose performance is unsatisfactory or who have failed to perform.

Stores function:

- (i) The Policy and procedures for stores management shall be reviewed;
- (ii) Whether issues have been made only on the basis of properly authorized (as per established policy) requisitions and the issues have been properly receipted. Similarly whether receipts have been done after proper inspection and authorization. Whether the tools and implements issued for a particular work has been returned in good condition and recorded in the stores ledger, needs to be verified and any delay in returning shall be enquired into;
- (iii) Whether the minimum and maximum stock levels are regularly monitored to prevent stock out or excess stocking;
- (iv) Whether orders have been placed for the economic order quantity, unless an order for a higher or lower quantity has been authorized with proper justification;
- (v) Whether the storage space is optimally utilized and the stores are systematically organized with items and their locations identified by unique codes (may be alpha-numeric), which are also mentioned in the stores ledger for their easy identification;
- (vi) Whether a priced stores ledger is maintained at the stores and updated after every movement;
- (vii) Whether the utilities for measurement (weighing scales etc.) are maintained properly and calibrated at regular intervals by accredited agencies;
- (viii) Whether proper house-keeping is being done (to maintain cleanliness, sufficient lighting and ventilation, proper protection of the stored items from moisture, heat etc., easy accessibility of the stored items, minimizing the chances of poisonous reptiles and insects entering the stores, regular inspection for out-of-date items and their removal from the storage space with proper authorization and recording in the stores ledger and spoilage, leakage etc. are being properly reported and recorded in the stores ledger);
- (ix) Whether periodical physical verification of stock is being made and adjustment for shortage and excess has been done under proper authorization;
- (x) Whether slow and non-moving items are being periodically identified and treated in accordance with an established policy or under proper authorization;
- (xi) Whether fire fighting arrangement exists and is effective;
- (xii) Whether sufficient security is provided against theft (like restricting entry to the storage area and placement of security guards);
- (xiii) Stock of tea plants and shade tree plants are kept at the nursery. Record of samplings purchased, died, issued and balance shall be verified. The purchase and issues shown in



- these records shall be verified by cross-reference with purchase records and utilization at various sections and if an abnormal number of tea plants have died, justification shall be obtained and steps taken;
- (xiv) Stock of green leaves: Although the green leaves do not remain in stock for long, the weighment record at the garden, the quantity received at the factory, the quantity sold, quantity issued for production should be reconciled;
- (xv) Stock of tea waste and scrap: Review the management control and verify whether the control procedures have been complied with.

INVENTORY CONTROL:

To examine the system maintenance of inventory records – whether it is fully computerized or maintained manually or partially computerized and partially manual. In case the system of maintenance of inventory records in computerized form, computerized system and the computer program followed need to be examined whether proper internal control exists;

- ✓ Examine the method of receipts of materials at Stores –
- (i) Whether the copy of the relevant Purchase Order reaches Stores before receipt of material or the Stores receives the material even without obtaining concerned Purchase Order;
- (ii) Whether every receipt of material is recorded in a Log Sheet or in a Daily Material Inward Register or logged in the computer in case of computerized system before preparation of the receipt documents;
- (iii) Examine that the quantity of each receipt of material (be it number, volume or weight) is verified as mentioned in the Supply Challan or Invoice before accepting the material;
- (iv) Whether there is a system of inspection before accepting the material at Stores;
- (v) Whether the suppliers' challans / Invoices are treated as document for receipt of material or there is a system of preparation of Goods Receipt Note (GRN);
- (vi) Where there is no system of preparation of GRN, it is required to be verified that the copies of suppliers challan/ Invoices are chronologically filed and chronologically assigned serial number (according to the date of receipt) and linked to the Material Log Sheet/ Inward Register;
- (vii) In case of short receipt of material, it should be checked that the suppliers' challan/ Invoices are corrected immediately;
- (viii) whether receipt of materials are recorded in the respective copies of Purchase Orders received by the Stores before receipt of the material to keep a track over the status execution of orders or the status of supply is monitored through the computerized system used:
- ✓ In case of chemicals, it should be checked that the date of expiry of the materials supplied are examined at the time of receipt of material;
- Check the methods of dealing with the supply of defective materials whether the materials is returned accompanied by the suppliers challan/ invoice or the challan/ invoices are kept on 'HOLD' till the defective/ rejected materials are replaced by the suppliers;
- ✓ Check that all materials are issued against properly authorized Stores Issue Requisition(SIR);
- ✓ Whether separate Stores Issue Requisitions (SIR) are prepared for materials to be used by different Cost Centers like Field/ Factory/ Laboratory/ Office/ Hospital/Repair & Maintenance (Electrical, Mechanical, Civil separately), Vehicles, Capital, etc.



- ✓ Whether all Issue Requisitions are checked by the respective Asst. Manager in Charge and sanctioned by the Manager of the Estate;
- ✓ Check that all SIRs are pre-numbered and examine the method of control over the issue of SIR books to different Cost Centers and ensure that all unused SIR books are kept in safe custody;
- ✓ To check that records for issue of blank SIR books with a specified range of pre-printed serial numbers to respective Cost Centers are kept;
- ✓ Whether there is a system of maintaining the Bin Cards or quantitative Stores Ledger in the Stores either through manual system or through computerized system and ensure that all receipts and issue documents are promptly recorded in the respective Bin Card/ Quantitative Stores Ledger;
- ✓ Verify the postings/ entry in the Bin Card/ Quantitative Stores Ledger with reference to the receipt and issue documents;
- √ Whether there is any backlog in postings/ entry in the Bin Card/ Quantitative Stores Ledger;
- ✓ Check the methods of valuation used for valuation of receipts and issues in the Valued Stores Ledger in order to ensure that all related cost of procurements are considered in the cost;
- ✓ Whether the receipts of all direct materials and packing materials are valued net of VAT paid where input credit on VAT is available;
- ✓ Physical verification of Stores and stock are carried out in a phased manner covering all the materials;
- ✓ Check the frequency of physical verification of high value materials like agricultural inputs, chemicals, machinery spares, etc.;
- ✓ Check that the shortage/ excess found in course of physical verification are properly reconciled and recorded in the Stores record:
- ✓ Examine the Bin Cards for verification of utilization/rate of consumption of different stores;
- ✓ Examine whether there is any system of regular review of the stock holding of different materials to ensure that neither there is any over-stocking nor there is any Stock-out situation, particularly of agricultural inputs, production chemicals, etc.;
- ✓ Whether there is any proper system of regular assessment of status of slow-moving/ non-moving items;
- ✓ Review that regular check is maintained on the expiry dates of shelf life of insecticides, weedicides and other chemicals;
- ✓ Whether unconsumed agricultural inputs returned to the Stores from Field at the end of the day are recorded in the Bin Card/ Quantity Stores Ledger;
- ✓ Whether any Sub-Store is maintained in the Division/ Factory for materials consumed at those point or materials are issued from the main Stores only;
- ✓ In case any Sub-Store is maintained, to check the records of receipt and issue of materials at Sub-Store and reconcile the same with the records at the main Stores;
- ✓ To examine the state of the physical stores keeping of different items in the Stores whether there is any possibility of damage to different items of stores either due to moisture from the floor (particularly in case of fertilizer) or from seepage of water through the roof, etc;



- ✓ Examine the lay-out of the Stores whether different class of materials are kept properly segregated with proper identification;
- ✓ Check the system and procedures followed for the security of the Stores;
- ✓ Examine the system and method of measurement followed for issue of different materials, particularly of chemicals, petrol, HSD, etc.

Coal - for manufacturing of Tea:

- Check the Stores record pertaining to receipt, issue and stock of coal;
- ✓ Whether periodic physical verification of the Stock of Coal is carried out;
- ✓ Whether calorific value of each consignments of coal received is tested for comparison with the calorific value of the grade of coal to be supplied as per the corresponding Purchase Orders;
- ✓ Examine the average consumption of Coal per Kg. of Made Tea and to make a comparative study for consecutive 2 3 years including the year under audit;
- ✓ Whether any quantity of Coal has been required to be written off due to poor quality due to high mud content or due to containing stones.

Gas – for manufacturing of Tea only:

- ✓ Whether any record is maintained for daily consumption of Gas in the factory for running the Drier and for heating air for Withering Trough;
- ✓ Compare the consumption of Gas as shown in the monthly bills sent by Gas supply agencies with the consumption record maintained in the factory, if any;
- ✓ Analyze the comparative figure for consumption of Gas per Kg. of Made Tea for consecutive
 2 -3 years;

IV. Finance & Accounts Function

At the outset, it is required to be examined both at Estate and Corporate Office whether accounting records are processed and maintained through computerized system or partially computerized system or fully manual. Depending on the extent of computerization, the methodology and extent of checking by Internal Auditor have been decided.

In the organization where the total accounts and finance function are fully computerized i.e. from originating stage of processing payment vouchers (be it through Cash or Bank) and the vouchers for booking of expenditure or the liability for expenditure to the end i.e. maintenance of various records and various reports, Internal Audit function begins with the examination of the computerized system and the program used for this purpose and for this, the following aspects are required to be checked:

- ✓ Whether Internal control exists at all stages;
- ✓ Check the program used, modules for Finance and Accounts function is inter-linked to other modules used for Manpower deployment record, Wage administration, Inventory management, Sales invoicing including record for dispatch of finished goods, Purchase etc.;
- ✓ To check that there is no provision for unauthorized manual intervention in the system;
- ✓ Check the security of the system.

Budgetary control system:

(i) Whether a budgetary control system is being followed, if so, the budgets (including cash budget) and forecasts prepared for the year is to be reviewed by comparing with the previous year;



- (ii) Whether there has been any variation between the budgeted and forecasted amount and actual amount;
- (iii) Whether the variance has been analyzed in depth and sanction has been obtained for the variance.

Working Capital management:

The operating cycle of Tea /Coffee/ Rubber plantation and manufacturing is larger than many other industries, thus requiring large working capital. This working capital is primarily funded by the revenue receipts, working capital/short term loans, and delaying payment to sundry creditors and other liabilities. In this context the internal auditor needs to check:

- (i) Fund from various sources are readily available: The fund released from the Corporate/Head office is credited to the bank instantly, the recovery in cash from the labourers on issue of ration etc. at subsidized rate, cash from retail sales counter at the estate and other cash receipts are deposited to central cash on the same day and the cheques/drafts are deposited to the bank without delay;
- (ii) Any receivable which has become due but not received shall be stringently followed up;
- (iii) Any fund locked in the form of a deposit, which is no longer necessary or an investment which is not earning at the desired rate, shall be withdrawn;
- (iv) Maximum time available for payment, without attracting any interest or penalty for delayed payment, shall be availed before payment is made;
- (v) Yearly cash budget shall be supplemented with monthly cash budgets to assess the requirement of fund and the sources of the fund, making advance provision for any shortfall;
- (vi) Whether the issues related to fund management are being properly administered by the Management.

Cash Receipts and Cash Management:

Internal auditor has to check whether good cash receipts systems, policies and procedures existed in the company. Ineffective cash management, including billing and collection, affects cash flows and can impact a company's overall productivity. The late billing of customers and slow pays will extend interest free loans to customers. Poor procedures to reconcile aging accounts and overdue collection allow bad debts to increase. Poor internal control of cash/cheque receipts and payment may lead to various types of fraud.

Administration of cash and cheques:

- (i) Verify the system of administration of cash and records maintained to form an opinion on their efficacy;
- (ii) Check whether there is a policy for cash retention (fixed amount or based on requirement arising from time to time) and whether the amount of cash in the cash box in excess of the maximum retention amount has been deposited into the bank in the following day;
- (iii) Whether fidelity insurance and a cash-in-transit insurance have been taken and are in force;
- (iv) Whether the cash is counted at the end of every day and check whether cash in hand is kept in a safe or in locked drawer in order to minimize the risk of loss due to theft from robbery or employees;
- (v) Where there is a system of imprest cash examine the imprest cash book;
- (vi) Whether Cash receipt are deposited in the bank the daily;
- (vii) Whether excess cash was not lying in a non-interest-bearing account;



- (viii) Check that the entries in Cash & Bank Book always remain updated;
- (ix) Whether any payment to the suppliers of materials and other services, contractors, are made directly without routing through Creditors Ledger;
- (x) Whether the cheque books are kept under proper custody, proper record is being kept of the cheques issued and periodical reconciliation of the cheques issued is being done;
- (xi) Check who are the authorized signatories for the bank accounts;
- (xii) Whether two person signatures are necessary for cheque payment;
- (xiii) Whether cheques are numerically sequenced to account for internal checks and control;
- (xiv) Whether signature plates and electronic signature methods safeguarded from unauthorized access.
- (xv) Have old signature plates been disposed of properly;
- (xvi) Electronic signature plates need to be secured and a proper segregation of duties established between cheques preparer and printer;
- (xvii) Whether cheques drawn were sent to the parties or lying with company;
- (xviii) Whether there are an excessive number of bank accounts due to the lack of closing procedures.

Cash Vouching:

- ✓ Check that no payment is made without the approval of the authority/ authorities and who is /
 are authorized for approval of such expenditure;
- ✓ Examine the system of numbering the Payment Vouchers in order to ensure existence of proper internal control system;
- ✓ Examine the authenticity and propriety of the expenditure with the supporting documents;
- ✓ In case of Cash payments, to check that proper acknowledgements are obtained from the Payees on the Payment Vouchers.

Physical Verification of Cash:

- ✓ Carry out the surprise check of cash by the Internal Auditor;
- ✓ Examine that regular cash verification is carried out by the Management, at least once or twice in a week;
- ✓ Whether proper record of physical cash verification is maintained;
- ✓ Whether the records of cash verification bears the signature of the person dealing with Cash and the Manager of the Estate.

Bank Reconciliation Statement (BRS):

- ✓ Whether there is any backlog in the preparation of Bank Reconciliation system if any backlog is found in the preparation of BRS, to examine the reason for delay;
- ✓ Check that the original copy of the Bank Statements are always available at the Estate;
- ✓ Where Bank Statements are down-loaded (in case where e-banking system is in existence), to check that regular confirmation of balance is obtained from the Bank;
- ✓ Examine the Bank Reconciliation Statements, whether any un-reconciled Debit or Credit balance appears in the BRS -if any such entry appears, such cases are required to be examined and it would be checked whether those cases have been properly taken up and followed up with the Bank;



- ✓ Any Cheque which has been issued but has become stale, does not appear in the BRS;
- ✓ If there is any case where any Cheque/ Draft or any other negotiable instrument has been deposited with the Bank for realization but remains unrealized for a considerable period of time, say for a month, to examine whether such cases are followed up properly with the Bank.

System of Booking Liability and Processing the Bills for Payment:

- ✓ Check the system of making payment to the suppliers/ service providers/ workshops, etc. whether payment is made directly charging the respective head of accounts or payments are made after booking the liability for payment;
- ✓ Check the system of booking liabilities for payment on account of Purchase of goods and other services - it should be examined whether the cost of purchase of goods / services are booked in the Accounts on the basis of the basic documents pertaining to receipt of goods in the Stores (i.e. Suppliers' challans or GRNs) or on receipt of services or on the basis of bills only after those are submitted by the Vendors;
- ✓ Where cost of purchase and other services are booked in the Accounts on the basis of the Suppliers' / Service provider's bills instead of basic documents relating to procurement of such goods and services, it should be examined how this is tackled in case of delay in receiving such bills;
- ✓ Check the treatment of taxes, duties and other elements of expenditure like freight, Insurance, octroi, loading/ unloading charges, etc in accounting of the liability for purchase cost of goods and services;
- ✓ Check the system of booking liability for payment in the Creditors Sub-ledger whether simultaneously with the booking of corresponding expenditure in the Accounts or after receipt of bills from the Vendors;
- ✓ Where the liabilities are booked in the Creditors Ledger only after bills are submitted by the vendors, the system followed for cross-checking the liability booked in the main accounts and the liability booked in the Creditors Sub-ledger is required to be examined;
- ✓ Examine the Creditors Ledger, all the unpaid bills can be identified from the Creditors' Ledger or Liability Register at any point of time;
- ✓ Whether the 'Inward Bill Register' containing the following information in respect of bills submitted by the suppliers, different workshops & other service providers are maintained:
 - (i) Sl. No.,
 - (ii) Date of receipt of the bill,
 - (iii) Name of the supplier/Service Provider/Workshop,
 - (iv) Bill No. & Date,
 - (v) Amount,
 - (vi) Purchase Order/ Works Order No.,
 - (vii) Amount for which the bill is finally passed;
 - (viii) Date of passing the bill;
 - (ix) Date of booking liability.
- ✓ In case, where computerized system is in use, to check that all such bills are logged into the system for recording of 'Inward Bills' and the computerized system also contain the information referred to the preceding Para;
- ✓ To check that for future reference and internal control as well, there is a system of tagging the incoming bills either with the corresponding entries in the Inward Bill Register or with the reference of logging bills into the computerized system;



- ✓ Check the system of receiving bills whether the bills are received by any Management staff;
- ✓ Whether all bills are recorded in 'Incoming Bill Register' or logged into the system (in case of computerized system in use;
- ✓ Examine the system followed by the estate to ensure that liabilities are provided in Creditors Ledger in respect of all incoming bills;
- Examine the system of verifying the suppliers' bills with reference to the documents relating to the receipts of materials which may be either the Excise Invoice/ original Challan endorsed by the Stores personnel acknowledging the receipt of material or Goods Receipt Note (GRN) prepared by Stores and also with the corresponding Purchase Order;
- ✓ It should be ensured that there is necessary internal control in the procedure followed for verifying the bills, so that multiple bills cannot be processed for payment against a single receipt;
- ✓ While processing the bills for payment, whether there is a system of checking that all the terms & conditions of the Purchase Order has been adhered to;
- ✓ Whether at the time of passing the bills, relevant statutory requirements pertaining to State VAT, Income Tax, Service Tax and other statutory requirements, if any applicable, are complied with;
- ✓ In respect of Service Contracts of Annual Maintenance for different machines or other facilities, it should be examined that while processing the bills of Service providers for payment necessary certification of fulfillment of terms of contract is checked;
- ✓ Whether the bills submitted by the Contractors are processed for payment on the basis of progress of work as measured and certified in the Joint Measurement Sheet/ Measurement Book maintained by the estate for recording the quantum of job done by the Contractors in respect of individual contracts;
- ✓ To ensure that the person who verifies the vendors' bills put his initial on the bills as a proof of verification of the bills;
- ✓ Whether there is a system of authorizing the payment of the passed bills by local authority empowered by the Corporate Management for the purpose;
- ✓ Whether any advance paid to the vendors/contractors/service providers is adjusted against the liability for payment according to the terms of relevant Purchase Order / Contract and there is sufficient internal control procedure in this regard;
- ✓ Check the system of preserving the bills processed but unpaid and also to review the system of exerting control over the bills against which payments have been made;
- Examine the system of processing any duplicate bill for payment where the original bill is lost or misplaced - to ensure that necessary internal check is exercised to ward off the chance of any double payment - to check there is a system of obtaining an undertaking from the concerned vendor for indemnifying in case any double payment is detected;
- ✓ Examine the system of preparation of vouchers for payment to vendors in order to ensure that normal internal control procedure applicable to the disbursement of payments including the levels of authority specified by the Corporate in respect of such payments are followed;
- ✓ Examine the system of reconciliation between the outstanding balance in the Creditors Subledger and the unpaid suppliers' bills available in the Estate;
- ✓ Examine the system of control exercised over the partly paid bills regarding the payment of the balance unpaid part.



Accounts Payable/Cash Disbursements

Internal audits in Accounts payable/ cash disbursement usually lead to cost savings through best practices, retrieving duplicate payments and tightening controls to minimize error and potential fraud.

- ✓ Internal auditor has to review the company's cash disbursements system to ensure that appropriate controls are in place to reduce errors.
- ✓ In the case of disbursements internal auditor has to do data mining to further examine disbursement trends and search for duplicate payments. The cash disbursement process in any company usually has the highest risk due to the amount of company funds involved.
- ✓ Internal auditor has to check the list of officers who are authorize to make purchases and expenditure;
- ✓ Whether any internal control process is performed before payment to ascertain that only authorized goods and services are being paid after proper verifications documents and vendor invoices;
- ✓ Whether preventative control system exist to prevent duplicate payments and lost discounts;
- ✓ The accounts payable process must have controls over methods of payment (cheque, wire, credit) that include matching authorized purchases to receipt of goods or services and to the vendor's invoice;

Accounts payable:

- ✓ Verify the individual accounts of creditors for purchases with the purchase invoice and the payment details;
- ✓ Correlate the purchase invoice with the purchase order, road challan, and entry at the gate, inspection report and receipt by the store-keeper;
- ✓ Verify whether any returns have been properly accounted for and adjustment in the amount due, has been made;
- ✓ Where cash discounts are available, whether decision has been taken at proper level of hierarchy to ascertain ,whether payment is made early to avail the discount, whether discount has been availed and entry made in the creditor's account;
- ✓ Verify the amount payable to the brokers in case of auction sale by referring to the auction house sales statement, discount allowed, agreement with the broker and broker's note;
- ✓ Verify the other creditors for expenses by referring to the authorization for such expenses (which shall mention the nature of work, name of person whom the work is assigned and the payment and other terms and conditions), certificate for completion of the work by proper authority, any deduction to be made as per such certificate and payment details (like cheque or other instrument issued or advice issued for fund transfer, bank statement and receipt issued);
- ✓ Whether payments have been made after proper authorization and where payment has been made in cash, whether the recipient is properly identified and is authorized by the creditor.
- ✓ Where balance confirmation has been sought by the party, whether there is a dispute and whether it has been resolved under proper authorization. The internal auditor in case of doubt over any balance of debtors may seek balance confirmation from the debtor.

Accounts Receivable

Lack of aging and managing accounts receivable prevented the company from identifying slow pays, enforcing customers' credit limits and identifying customers to be contacted by the collection department. In addition, this lack of record keeping can also hide an employee kiting accounts, which entails borrowing between accounts to cover up embezzlement. The Internal auditor has to check the following:

- ✓ Whether all sales being recorded and collected;
- ✓ Whether the company has proper segregation of duties for sales, recording, collections and deposit functions;
- ✓ In case company hired a collection agency, is there a reconciliation process of accounts out for collection and amounts that been collected and returned;
- ✓ Whether all invoices are accurate and billed on a timely basis.
- ✓ Internal auditor has to investigate and to recommend solutions to tighten controls in these areas.
 - (i) Verify the accounts of debtors by referring to the sales invoice and details of receipt (like cheque or other instrument received and deposited into bank, advice for fund transfer, bank statements and copy of money receipt issued).
 - (ii) Verify whether account confirmation is obtained from the debtors and any difference is sorted out under proper authorization.
 - (iii) Whether any collection mechanism is in place and whether it is active.
 - (iv) Whether age-analysis of debtors are being done and in respect of dues exceeding the credit period as per the general/special terms and conditions, what steps have been taken for collection of the amount due. Bad debt not written off will result in overpaid income taxes, sales bonuses and commissions.

Scrutiny of Advance:

Advance given to staff and employees:

- ✓ Examine the records maintained in respect of advance given to workers, staff and management staff;
- ✓ Whether a single record is maintained for advances given to an employees for different purposes i.e. for Salary, Medical, Festival, Travelling, other official purposes etc. or separate records are maintained;
- ✓ Examine the system of maintaining the records by which the advance given to individual workers/ employees vis-à-vis its recovery and outstanding advances are easily identifiable from such records;
- ✓ To check that regular recovery of advance is made according to the terms of approval of the advance:
- ✓ To scrutinize the record for advance whether any advance remains unadjusted/ unrecovered for a substantial period of time and also to find out the reasons for such advances remaining un-recovered/ unadjusted;
- ✓ Whether any advance remains unadjusted/ unrecovered in respect of any superannuated or deceased ex-employee or who has left the services or whose service has been terminated and also to find out the reasons for such non-adjustment. Whether there are any dues of such employee from which those outstanding advances can be adjusted/ recovered.



Advance paid to suppliers, service providers, contractors & for miscellaneous purposes:

- ✓ Examine the system of keeping records in respect of advances paid to suppliers, service providers, contractors and for other miscellaneous purposes;
- ✓ Whether payment of advance, recovery of advance and balance of unadjusted advances are clearly exhibited in subsidiary Ledger/ Register;
- ✓ Check the system of reconciliation between the Estate's monthly accounts and the subsidiary ledger/ register for advance – whether such reconciliations are made regularly, at least monthly;
- ✓ Examine the cases of individual advances given to the suppliers, service providers, contractors, etc, whether such advances were paid in compliance with the terms of orders placed on them;
- ✓ Whether the recovery is made in accordance with the terms of the orders;
- ✓ Whether any advance remains unadjusted for a substantial period of time without any valid reason;
- ✓ In case of payment of advance to the contractors, to check that Income-Tax is being deducted at source from such advance according to the provisions of Income Tax Act;
- ✓ In case of bulk purchase of HSD oil or TD Oil from the Oil marketing companies, to check that regular reconciliation is done between the amount of advance paid and the value of the corresponding bills raised by the oil companies and also to find that regular recovery is made of excess advance paid, if any;
- ✓ Examine the cases of advances paid for miscellaneous other purposes as to the purpose of the advances and their timely recovery.

Power & Fuel:

Electricity:

- ✓ Examine the records maintained for consumption of electricity at the Estate;
- ✓ Whether separate records are maintained for consumption of electricity (in terms of number of Units, i.e. Kwh) for manufacturing and for other purpose like consumption in Office, Bungalow, Hospital, Street Lighting, Staff Quarters, etc.;
- ✓ Whether there is separate KWH Meters for supply to the factory and supply to other points and consumption of unit is recorded on the basis of the meter reading of the individual meters;
- ✓ Where there is single KWH Meter for Grid supply from Power Supply Agency, to check whether sub-meters are installed for recording consumption in manufacturing and consumption for other purposes;
- ✓ If separate sub-meters are not installed, the basis followed for allocation of electricity consumption between manufacturing and other purposes should be checked;
- ✓ Where there are separate rates charged by the Electricity Board for consumption in manufacturing and domestic consumption and there is single KWH Meter, the reason for not having separate Meter should be examined;
- ✓ In a Rubber Estate, it should be examined whether separate Sub-Meters are installed for recording the electricity consumption for different lines of production as follows:
 - 1) For Cenex i.e. Centrifuged Latex Centrifuge
 - 2) Skim Crepe Skim Rollers/ Skim Milling & Skim Pressing



- 3) Crumb Production Crumb Drier, Crumb Milling & Crumble Pressing (This is required for computing the cost of power for different lines of productions)
- ✓ Whether the readings of the Sub-meters recorded in the Estate's own records are reconciled with the readings of the main meter, as mentioned in the bills sent by Electric supply agencies;
- ✓ Examine the bills of the Electric supply agencies as to the following aspects:
 - a) Whether any extra charge is paid due to lower power factor;
 - b) Whether any penalty/additional charge is payable due to running the factory at higher load than the maximum load declared to the electricity supply agency;
 - c) If there is any findings on scrutiny of the electric bills, as mentioned in Clause (a)& (b) above, to examine the corrective actions taken by the estate;
- ✓ To check the records maintained for consumption of electricity supplied through Grid and to check whether the period of disruption in Grid supply, if any, is recorded;

Captive Generation of Power:

- ✓ Whether Log Books are maintained for individual generators installed at the Estate;
- ✓ Examine the Log Book whether following information are recorded therein:
 - a) Date;
 - b) Hours run;
 - c) Consumption of Fuel;
 - d) Units generated.
- ✓ Where HSD is used as fuel, to check whether opening stock, receipt from Stores , closing stock and consumption is recorded in the Log Book on day-to-day basis;
- ✓ Where natural gas is used as fuel, to check whether separate meter is installed for recording the consumption of gas for running generators;
- ✓ Whether separate Kwh meter is installed for recording the captive generation or generators are connected through the same Kwh meters connected with the Grid supply by State Electricity Boards/ Power Supply agencies;
- ✓ Where same KWH meter is used for recording the consumption from Grid supply as well as from captive generation, to check whether proper reading of the meter is taken whenever generator is run;
- ✓ Whether any average fuel efficiency of the individual generators are computed by the Estate at regular interval i.e. at the end of each month and also at the end of the year considering the following parameters:
 - a) No. of Units generated per unit of fuel consumption;
 - b) Quantity of fuel consumed per hour run;
 - c) Cost of generation per Unit.
- ✓ Compare the fuel efficiency figures of each generator for consecutive 4-5 years including year under audit and to analyze the reasons for variation, if any;
- Check the receipts of HSD as shown in the Log Book with the corresponding issue shown in the Stores record;



- Cross-check the period of running of generators recorded in the Log Book with the period of disruption of Grid supply, as recorded in the relevant record of consumption of electricity from Grid supply
- ✓ Whether generator of lower capacity is run to provide supply of electricity to Bungalows, Hospitals, etc. when the factory is not operative (This analysis is required for rationalization/economization of fuel used in captive generation);
- ✓ Whether separate records are maintained for consumption of captively generated power for manufacturing and other purposes;
- ✓ Review the unit of electricity consumed (taking Grid supply and captive generation together) per Unit of finished product) and to make a comparative study of these figures for consecutive 4 5 years.

Travel and Entertainment Policy

- ✓ Whether there is a written travel and entertainment policy and it comply with tax laws;
- ✓ Whether the lowest fares and best discounts are being obtained;
- ✓ Whether the company uses a travel agency;
- ✓ Whether National and Corporate accounts utilized to obtain better pricing or larger discounts;
- ✓ Whether the employees use a company credit card, floaters, or payment card industry (PCI);
- ✓ Periodic reviews of credit card expenditures;
- √ How does an employee get a company credit card;
- ✓ How are cards handled when an employee leaves the company;
- ✓ Whether there are unauthorized cards in existence or unauthorized charges.

Telephone and other Utilities Expenses:

Internal auditor has to review these areas and provide suggestions for improvement and potential cost savings.

- ✓ Whether company is paying for phone lines that have been disconnected or paying for rates that should have been adjusted;
- ✓ Review of utility bills and see the correct rates being used and duplicate payments are not made. Many companies pay utilities by the "just about the same as last month" method; looking at previous month's bill and if it's close, pay it with checking of error in previous bill;
- Checking the courier or postage bills.

Capital Expenditure:

- ✓ Whether there is a system of preparing Budget for procurement of Capital Goods/ execution of Capital Projects and the same is approved by Board of Directors;
- ✓ To ensure that all capital expenditure proposals are covered by the approved Capital Expenditure Budget;
- ✓ To review the method of fixation of technical details of capital items to be procured or capital projects to be executed; it should also be examined that while deciding upon the specification and make for procurement of any capital equipment it is ensured that the equipment to be purchased conforms to the latest specification and technology available in the market as far as practicable, depending on the availability of fund, present infrastructure, etc.;
- ✓ Examine that while sending the price enquiries, it is ensured that enquiries are made directly to the manufacturers or to their authorized distributors/ dealers as far as practicable;



- ✓ Whether procurement of capital equipments / execution of Projects are initiated at H.O. level or left to the Estate level -- in case of the procurement action is initiated at Estate level, how the internal control is exercised on such procurement;
- ✓ Whether there is any pre-fixed level of authority for approving the procurement action according to the value;
- ✓ All cases of capital expenditure should be reviewed to see that assets created are properly used for the purpose for which it has been procured; in case of any idle assets, the same should be reported;
- ✓ Whether actual expenditure remains within the budget and to report on reasons for variations, if any;
- ✓ Examination of the actual transactions on procurement of Capital goods and execution of Capital Projects with regard to the following aspects, mainly
 - (i) Selection of Vendors/ Contractors;
 - (ii) Fixation of Price vis-à-vis other terms and conditions;
 - (iii) Actual delivery of goods / completion of the projects whether within the stipulated period mentioned in Purchase Order; Payment of advance, if any -- whether given as per terms stipulated in P.O. and recovery of advance as per terms of P.O.; Payment to the Vendors/ Contractors whether in compliance with the terms of P.O.;
- ✓ Check the records maintained for documenting progress of jobs, particularly in case of long term projects and civil constructions, whether the payment to the contractors is linked to the progress of jobs;
- ✓ Whether the Warranty Clause is included in all P.Os. placed for procurement of Capital goods/ execution of projects or Civil Construction and a minimum amount (say 5% of the total Order value) is retained as Retention Money till the completion of the Warranty period.

Security Deposit:

- ✓ Examine the records maintained for deposit of Security Money made to different authorities like Electricity Board, Excise Dept., Sales Tax Dept., etc. to reconcile these records with the amount of Security Deposit shown in the Estate's Accounts;
- ✓ Whether the original receipts of payment of each of the security deposits are available;
- ✓ Whether the purpose of any Security Deposit has lost its necessity and necessary claim has been made with the respective authority for refund of such Security Deposit.

Investments:

- ✓ Review the management's policy of investment including the established procedure for deciding on an investment and withdrawal of investment and whether the same have been complied with;
- ✓ Whether proper record of investment is being maintained;
- ✓ Whether income from the investment has been received and accrued income and any tax deducted at source have been accounted for;
- ✓ Whether the investment certificates in physical form are being kept in safe custody of authorized personnel;
- ✓ Whether the established procedure for transaction in physical or electronic form have been strictly adhered to and security aspects have been complied with;
- ✓ Whether the activities are being properly administered by the Management.

Loans:

- ✓ Review the system of administration of loans;
- ✓ Critically examine the loans particularly the unsecured loans and those taken from



- individuals/ institutions not engaged in extending loans in the normal course of the business, to ascertain whether the terms and conditions are favourable for the entity;
- ✓ Whether any loan fund is being diverted to non-operating or non-profit making activities of the entity.(iv) Verify whether the loans are being serviced properly and monthly statement of stock and debtors are being forwarded within time, in case these are lodged as primary security.

Property and Equipment:

- ✓ Whether the company has an acquisition policy and Disposal policy;
- ✓ Whether the proceeds received on disposal of assets deposited and recorded with appropriate procedures;
- ✓ Whether vehicles, building plant or other assets adequately insured. Some companies do not write off assets properly and as a result pay for insurance on assets that no longer exist.

FIXED ASSETS:

- ✓ Whether the Fixed Assets Register (FAR) in proper form is maintained both at Corporate Office as well as at the Estate containing the following information:
 - a) Class of Assets;
 - b) Description of Assets;
 - c) Identification No.;
 - d) Location;
 - e) Quantity;
 - f) Date of putting into use;
 - g) Total cost of procurement of assets on which depreciation is chargeable;
 - h) Rate of Depreciation;
 - i) Total Depreciation;
 - j) Written Down Value (WDV)
 - k) Disposal, Adjustment and Transfer of Assets, if any;
- ✓ It should be checked in what form the Fixed Assets record is maintained whether manually in a register or in computerized form;
- ✓ In case, the FAR is maintained in computerized form, the program for maintaining such record should be reviewed in order to check that any addition/ deletion or alteration in this FAR would be possible only with the approval of the designated official appointed by top management;
- ✓ It should be checked that respective Asset Identification Numbers., as per FAR, are properly written/ painted on all the fixed assets , specifically on the labour quarters and utilities constructed in the labour line;
- ✓ Whether FAR is updated regularly;
- ✓ Review the records evidencing regular physical verification of assets by the Estate Management;
- ✓ Internal Auditor should also verify physically all class of assets over a specified period of time:
- ✓ Check the status of fixed assets:-
 - Whether any idle or unutilized asset is lying in the Estate and action taken by Management for alternative use or disposal of such assets;



- Whether any scrap or redundant asset is lying in the Estate and action taken by Management in respect of such scrapped assets.
- ✓ In case any asset has been disposed of , the system/ procedure followed for disposal of such asset is to be reviewed with emphasis on the following aspects
 - i) Whether it has been carried out with the appropriate sanction from the authority specified in the Articles of Association of the Company or any other authority appointed by the Court;
 - ii) Whether there is any laid down procedure of the entity for disposal of fixed assets and whether it has been complied with in those cases;
 - iii) How the best price realization on such disposal has been ensured.

Board and other subsidy: The various schemes run by the Tea/Coffee/Rubber Board entitle the participants to various subsidies. The internal auditor has to verify:

- i) Whether the necessary forms and returns have been filed and other requirements have been complied with;
- ii) whether the claim for subsidy has been lodged and followed up;
- iii) Similar verification needs to be done for any other subsidy the entity is entitled to.

Housekeeping and Fire Fighting arrangements:

- ✓ Whether there exists a proper plan for periodical house-keeping exercises and arrangement for fighting fire breakout like keeping sand buckets and fire-extinguishers (of appropriate type) at strategic positions;
- ✓ Whether the plan is being executed and monitoring is being done to check whether the refilling of the fire extinguishers is being done in time.

CONTRACT:

<u>CIVIL CONSTRUCTION & OTHER CONTRACTS INCLUDING CONTRACTS FOR REPAIR TO BUILDING,</u> MACHINERY & VEHICLE:

Civil Construction & Civil Repairs:

- ✓ Examine the system of executing civil construction/ repairs
 - i) Whether all the jobs are done through contractors; or
 - ii) Whether all the jobs are done internally engaging masons/ labour contractors and materials are supplied by the Estates; or
 - iii) Whether major jobs are done through civil contractors and minor repairs are undertaken internally;
 - iv) Whether any value limit has been determined by the Corporate for defining major jobs;
- ✓ Whether any panel of civil contractors are maintained by the estate from which the
 contractors are engaged or civil contractors are selected on the basis of requirement of
 individual jobs;
- Examine the process of selection of civil contractors whether there is pre-fixed criteria which are followed for selection;
- ✓ Scrutinize the credentials of the contractors selected;
- ✓ Review the process of preparation of Bill of Quantities for the jobs executed / to be executed and the process of estimation
 - i) Whether it is prepared for all jobs major or minor;



- ii) Whether it is prepared for the jobs contracted out or for all types of jobs including the jobs done internally;
- ✓ Where the jobs are contracted out, to review the process of fixation of contract price/ rates – whether through a competitive bidding or through negotiations on the basis of bill of quantities and the estimates prepared;
- ✓ Examine the orders placed on the contractors including the terms & conditions whether the following points are covered in the contract -
 - (i) Schedule of jobs to be done and quantity of jobs;
 - (ii) Basis of rates
 - a) Whether fixed for the period of contract;
 - b) Where variable escalation/ de-escalation formula
 - c) Where high value materials like cement & steel are issued free, the method for valuation of such free-issue items;
 - (iii) Security Deposit To be retained till the completion of construction;
 - (iv) Period of completion;
 - (v) Penalty clause for delayed completion;
 - (vi) Warranty period;
 - (vii) Retention money for warranty period;
 - (viii) Terms of payment including interim payment on the basis of progress of jobs;
- ✓ Examine the method of recording the progress of jobs whether the measurement book is maintained;
- ✓ Check the method of recording the progress of jobs in measurement books and certification of progress of jobs in measurement book whether the recordings are in tune with the orders placed on the contractors;
- ✓ Whether the measurement books are regularly examined and certified by any senior management personnel in the estate;
- ✓ Whether the estate follows the practice of issuing cement/ steel as free-issue items in case of all contracts to keep control over the quality of materials used in jobs;
- ✓ Examine the method followed for issuing free-issue items to the contractors, keeping records of such free-issue items, accounting of free-issue items and exerting control over the utilization and consumption of free-issue items;
- ✓ Whether the Estate maintains any register for recording the requests from staff/ workers for carrying out repairs in their quarters and to check the system of monitoring the execution of repairs on the basis of this record;
- ✓ Where civil construction/ repairs are done internally
 - To examine the method of issue materials from Stores, records maintained for utilization/ consumption of materials and system of control over the use of materials;
 - (ii) To examine the records pertaining to recording the attendance of missions/ labours and their payment;
- ✓ Whether measurement book is also maintained and certified in respect of civil jobs executed internally;
- ✓ Check the system of processing the civil contractors' bills for payment with reference to measurement book and terms of contract;



- ✓ Check the bills in respect of which payments have already been made whether the established system of processing the bills for payment have been followed in practice;
- ✓ Where advance/ progressive payment is made to the contractors in terms of contracts/orders,
 to examine the records maintained for such payments and internal control system followed for
 adjustments of such payments against subsequent bills;
- ✓ Whether security deposits are obtained from the contractors and the records maintained for this purpose;
- ✓ In case of execution of civil construction through contractors, to check whether the system of keeping Retention Money for the warranty period has been followed in all cases;
- ✓ Compare job-wise actual expenditure with corresponding estimate/ budgeted expenditure.

Electrical & Mechanical Repair, Repair of Vehicles & Fabrication Jobs:

A lot of electrical & mechanical repairs and other fabrication jobs are required to be undertaken in the Estates regularly including routine annual maintenance. Tea Estates, Coffee Estates and Rubber Estates, mostly being located in remote areas, are not always facilitated with the easy availability of the external resources equipped with upgraded and modern facilities of such repair. In most of the cases, either the Estate has to depend on the estate's own mechanic, electrician, etc. or on whatever local facilities are available. External resources are only hired in case of major repairs or big jobs. Therefore, there should be a strong internal control system to check that those repair and fabrication jobs are executed properly and there is no wastage of resources of fund. So, Internal Audit should concentrate on the following points for evaluation of the effectiveness and efficacy of such internal control system.

- ✓ Whether the Budgetary Control system prevailing in respect of repair expenditure and other fabrication jobs;
- ✓ Whether there is any laid down policy of the entity being audited for undertaking different types of repairs and fabrication jobs;
- ✓ Review the system of preparation of estimate for individual repair to be undertaken whether such estimates are vetted by appropriate technical person;
- ✓ Whether in case of all major repairs and fabrication jobs, Bill of Materials (BOM) are prepared and the same is checked and authenticated by any competent people;
- ✓ Whether the specification, make of the spare-parts/ components required for different types of mechanical & electrical repair are standardized by any technical people before procurement;
- ✓ Check that spare parts required for electrical & mechanical repairs, which are meant to be procured by H.O. are not procured locally except in case of extreme emergency or there is a specific instructions from H.O. for local procurement;
- ✓ Check that the items procured at Estate level are purchased from the local authorized distributors/ dealers of the respective manufacturers of those items;
- √ Whether any list of such authorized distributors/ dealers are maintained by the Estate;
- ✓ In case of machinery repair, mechanical fabrication, CTC Sharpening, etc. whether the Estate has identified the workshop/ fabricators having appropriate infrastructure and a list of such workshops is prepared and maintained by the Estate;
- √ Whether such repair/ fabrication jobs are undertaken through those enlisted parties only;
- ✓ For repair of machines or vehicles through outside workshops whether quotations are obtained from such parties before undertaking such repair;



- ✓ For up-gradation of engine/ processing equipments, overhauling of vehicles, whether procurement of spare-parts including servicing are done either from the respective manufacturers directly or from the manufacturers' authorized dealers and service centers only;
- ✓ Examine the instances of major repair expenditures whether the company's laid down policies are followed and whether multiple quotations have been obtained to ensure execution of jobs most economically;
- ✓ Check that the enquiries sent to the workshops inviting quotations include all required details so that complete quotations may be obtained as far as practicable;
- ✓ Examine the method of checking of the quotations obtained with reference to the enquiries sent to the parties and methods followed for assessing the rates quoted for repair of vehicles and machine from outside workshop;
- ✓ Examine the method followed for assessing the quotations as to their reasonableness where quotations are obtained from limited sources or from single source only;
- ✓ Whether separate Repair Registers are maintained in respect of the repair of the following categories:
 - (a) Electrical Repair Machine Centre-wise or Location-wise e.g. Factory, bungalows, office, staff quarters, labour quarters etc.
 - (b) Machinery Machine-wise or Machine Group-wise,
 - (c) Vehicle- Vehicle-wise

These registers are required to quantify the repair job carried out against individual assets or group of assets during a year or in successive years and to assess the viability of retaining any asset;

- ✓ To examine the repair registers that those registers contain at least the following details:
 - i) Identification No of respective machines / Vehicle Registration No
 - ii) Make & Model
 - iii) Year of put to use
 - iv) Nature of repair
 - v) In case of repair done internally- date of repair, stores requisition no for the spares issued, value of spares and other direct expenses
 - vi) In case of repair done at outside workshop works order no and date, name of the workshop, factory gate pass no. & date, workshop challan no. & date, workshop bill no. and date, passed bill amount;
 - ✓ Review the control system exerted for movement of machines and vehicles out of estate to workshops and back
 - a) Whether pre-printed challans are used for sending them to the respective workshops;
 - b) How such challans are recorded to keep track over the return of such assets after the repair;
 - c) Whether a target date for completion of the repair are mentioned on the orders placed on the workshops whether regular checking is done for return of the assets with reference to those targets;
 - d) Whether the identification no of the machine, vehicle registration no., machine & motor serial no is mentioned in the gate pass issued for sending any machine or vehicle to outside workshop for repair;



- e) To check whether the challans accompanying delivery of repaired machinery items to the Estate are signed by the concerned Technical personnel of the Estate, who checks and receives such item;
- ✓ Whether the estate follows the practice of issuing new machine spares or vehicle spares only after the mechanic deposits the old, damaged or replaced spare parts to the Stores;
- ✓ Check the entries made in the scrap register against each issue of machine / vehicle spare parts;
- Check the system followed for certification of the completion of repair jobs done either through in-house workshops or through outside parties – whether certification of such repair jobs are made by the responsible executives.

STATUTORY MATTERS:

Company Law and other statutory compliances:

- (iii) Tax Laws (Excise, Agricultural tax, VAT, CST, Income tax, Service tax): Review the administration of taxes, duties, cess etc., whether the tax liabilities are being calculated correctly, payments are being made in time to avoid penalties, claim for refunds/rebates have been lodged in time and follow up is being done, various tax returns are being filled properly and submitted in time and whether tax proceedings are followed up with effective representation.
- (iv) **Companies Act:** Review the functioning of the secretarial department regarding maintenance of statutory records, filing of returns with appropriate authorities, arranging for meetings mandated by the statute and other activities, to form a judgment about the functioning of the secretarial department. In this connection, the internal auditor shall also refer to the report of the secretarial audit if there is any.
- (v) **Export and Import laws**: Review compliance with export and import laws, whether documentation has been done properly and records maintained, whether claims for export subsidy has been made in time and followed up.
- (vi) **Factories Act:** Review the maintenance of statutory records and filing of statutory returns. Whether an order issued by the authority based on inspection/query made, has been complied with or contested at the proper forum and being followed up properly.
- (vii) **Labour laws:** Review the maintenance of statutory records and filing of statutory returns. Whether an order issued under any of the labour laws, based on inspection/query made, has been complied with or contested at the proper forum and being followed up properly.
- (viii) **Provident Fund, ESI and employee welfare schemes:** Review whether deposits are being made in time, returns are being submitted in time and proper records are being maintained.
- (ix) Land Revenue and local laws: Verify whether payments are being made and records are being made maintained.

Deposit of Statutory Dues:

- ✓ Whether the following statutory liabilities are paid within the due dates
 - a) Employers' contribution to PF and Employees' contribution to PF deducted from their wages;
 - b) PF Administration Charges;
 - c) Tax deducted at Source and Tax collected at Source as per Income Tax Act;
 - d) Service Tax
 - e) Cess on Made Tea;
 - f) Green Leaf Cess;
 - g) Contribution to State level Labour Welfare Fund;



- h) Professional Tax/ Employment Tax deducted from the employees
- i) State Level Value Added Tax/ Sales Tax and Central Sales Tax;
- ✓ Whether the contribution to Deposit Linked Insurance deducted from Salaries & Wages are deposited with the Insurance Company in time.

Submission of Returns:

- ✓ Whether quarterly TDS Returns (Form 26-Q) are submitted regularly within due date;
- ✓ To check quarterly Service Tax Return (Form ST-3) are submitted regularly within due date;
- ✓ Whether the Returns required to be submitted to Tea Board/ Rubber Board/ Coffee Board are submitted regularly;
- ✓ Whether Returns to be submitted under the rules framed by the respective States under Plantation Labour Act are submitted within the due dates.

Provident Fund:

- ✓ To review the compliance with the provisions of Employees' Provident Fund & Miscellaneous Provisions Act, 1952 and Rules made there under.
- ✓ To check the compliance with the provisions of Assam Tea Plantation Provident Fund (in respect of Tea Estates located in Assam);
- ✓ To check the status of submission PF Annual Return;
- ✓ To review the cases of pending Provident Fund Settlement Whether proper follow-up is being made with the Local Provident Fund authorities for settlement of the cases;
- ✓ To check the reasons for long pending cases of PF settlement and to report thereon.
- ✓ To check the status of filling the nomination forms by the employees ,specifically by the new recruits;

Excise Records (For Tea Plantation only)

VAT/ Sales Tax:

- ✓ Check that State VAT/ Central Sales Tax Returns are submitted regularly and report in case of any irregularities found;
- ✓ Scrutinize the assessment orders where the assessment is complete and to report on the additional demand, if any, imposed by the respective Sales Tax authority;
- ✓ Whether appeals have been filed with the Appellate Authority within the time specified in the Act against the demands , if any , made in the Assessment Orders;
- ✓ Examine the status of receipt of Sales Tax Declaration Forms from the customers; it should also be checked that appropriate recoveries have been made from the customers where the customers have failed to provide with the valid Sales Tax Declaration Forms for which the Company has to pay additional tax to the authority;
- ✓ Examine the status of receipt 'F' forms in case of inter-state transfer of finished goods (this is particularly applicable in respect of transfer of Tea to the Auction Centres in other States or to C&F Agents);
- ✓ Verify that no Input Tax Credit has been failed to be availed.

Licenses & Certificates:

- ✓ To examine the period of validity of following licenses / certificates:
 - Air & Water Pollution Certificates;
 - ii) Tea Waste License;
 - iii) Factory License;



- iv) Standard Weights & Measures License;
- v) Explosive License in case of HSD if stored in tanks;
- vi) Pressure Vessel and Air Compressor License;
- vii) Certificate of fitness Pressure Lifts, Tackles, Chain Pully, etc.;
- viii) Fire Extinguishment Equipment License;
- ix) Prevention of Food & Adulteration License;
- x) Licences & Pollution Control Certificates pertaining to all the vehicles (including tractors, tractor trailor, etc.) used by the estate.
- ✓ Whether the validity of the licenses or certificates have expired or going to be expired within a short span of time;
- ✓ Check the record of the number and locations of Fire Extinguishers placed in the factory;
- ✓ Examine that records are maintained for periodical refilling of Fire Extinguishers on expiry of their validity;
- ✓ Test check physically that content of the Fire Extinguishers have not expired.

V. Marketing and Distribution Department:

The expenses relating to the marketing and distribution department play a very vital role in any company. Adequate care is required to be taken for collection and segregation of the expenditure relating to the marketing, advertisement, identifying the allocation of the expenditure, apportionment of the total expenditure where the benefit of high cost TV advertisements would be spread over a period of more than 12 months in which case, it is appropriate to treat as deferred revenue expenditure. Internal auditor to check:

- ✓ Check the Budget of Marketing and Distribution department and it's comparison with actual expenditure;
- ✓ Identify the heavy advertisement expenditure incurred in respect of electronic and print media and its approvals as per Company policy and to check its allocation and apportionment of the same in the subsequent years where its benefit passes for more than one year or subsequent periods;
- ✓ Check the incentive policy of the Company and the commission paid for the sales relating to the turnover and verify that the same is forming part of the selling and distribution overheads or not:
- ✓ Whether the company is having any marketing/sales/distribution offices located throughout the country and identify as to how the expenditure is collected, allocated and apportioned to the cost sheet and ultimately to the product;

Check the policy of the company – whether any credit period is extended or cash and carry scheme is in operation, for identifying the system of realization of the sale proceeds.

Marketing:

- (i) Verify the management's laid down policy and strategy for marketing/publicity through print and electronic media, display on hoardings, distribution of pamphlets, distribution of samples, setting up stalls at the Trade fares etc., whether within the country or abroad and whether the same is being reviewed periodically;
- (ii) Whether the credential of the advertising agency has been established and the competitiveness of the rates offered has been verified before entering into an agreement with the agency;
- (iii) Whether proper monitoring of the agency's activities as per the agreement is being done;
- (iv) Where marketing activities are done other than through advertising agency or is



- decentralized, whether proper approval has been taken and there is a check on the activities and the expenditure incurred;
- (v) Where samples are being distributed whether a plan has been drawn up for the quantity of samples to be distributed and the targeted recipients and whether the plan has been adhered to;
- (vi) Whether assessment of the benefits derived in terms of queries received and sales generated are being made.

Sales:

- (i) Compare the quantity of dispatched from the factory with the quantity available for sale, for any major variation;
- (ii) Verify whether the transporters reported in time, timely delivery has been made and the standard quantity per vehicle has been carried;
- (iii) Compare the rates realized for different grades of tea between the productions from different gardens;
- (iv) Whether the quantity offered for various types of sales like local direct sales, export sales, retail sales and sales through auction have been authorized by proper authority and ascertain the comparative profitability, net of expenses;
- (v) In case of direct local sales correlate the sales agreement (along with subsequent amendments) which may be in the form of correspondence with the sales invoice issued, stock register, gate pass, road challan, transport documents, confirmation of receipt and excise and CST/VAT records;
- (vi) In case of counter sale or other cash sales, verify the amount of sale by referring to the stock, cash memo issued and cash received;
- (vii) In case of direct export, correlate the sales agreements, sales invoices, delivery notes, bank documents (like 'letter of credit') and shipping documents (like customs documents and shipping bill) and where the amount of sale-proceeds has changed (between the amount as per invoice, customs document and actual remittance) due to foreign exchange fluctuation, whether the change has been accounted for in accordance with the accounting standards;
- (viii) In case of sale through auction house, reconcile the quantity sold by referring to the dispatch from warehouse, sales statements and delivery orders and other documents of the auction house, broker's sales advice and the report of the enterprise's representative who attended the auction. Verify the deductions made for claims on account of poor quality, shortage in quantity and warehouse charges and various selling expenses with reference to the broker's note, the terms and conditions and other record;

Freight and Transportation:

As the Freight and Transportation costs are increasing this area should be audited more frequently and in different ways than in the past. An internal audit of this area usually reveals that best procedures are not always used. It is found that due to poor planning ,lack of lead time from other department or a lack of communication result in rush shipment. Internal auditors facilitate meetings made up of various personnel involved in a process which enables everyone to become familiar with the process from beginning to shipment and usually improved communication across all departments. Internal auditor has to check the following:

- ✓ Whether there are controls over what is shipped, how it is shipped, who is charged;
- ✓ Whether the best rates attained:
- ✓ Whether there is any written policy on appropriate shipping methods and locations;



- ✓ Whether customers are being served on a timely basis. Whether freight being charged to the customer appropriately and accurately;
- ✓ Whether there are any insurance issues, it should be investigated.
- ✓ Whether prescribed procedure has been followed by the company in issuing the advertisement and notice inviting tenders;
- ✓ Whether all the renderers qualify to participate in the bid or are they disqualify for having failed to discharge similar such transport contract either in that area of that company or in any other areas of similar such companies;
- ✓ What is the back ground of the transport contractor whether he was any habitual offender in respect of payment of taxes to the Government;
- ✓ Whether the weighing machines have been properly calibrated at periodical intervals by authorized persons and the certificates to that effect are made available in the company;
- ✓ Whether the transporter has given a list of dumpers of various capacities before the start of the work and the actual transportation has been undertaken with those vehicles only and there was no deviation:
- ✓ Whether the transport contractor has deployed those vehicles which was supposed to have been deployed by him as indicated in the tender notification and there was no violation or deviation there from;
- ✓ The transport contract did not violate any the legal provisions in respect of deployment of the Contract Labour either under the Contract Labour Act or paid the minimum wages as prescribed under the Minimum Wages Act.

IT Department

Information Technology (IT) audits address the internal control environment of automated information systems and how these systems are used. IT audits typically evaluate system input, output and processing controls, backup and recovery plans, and system security. As companies continue to automate tasks, the increase in automation leads to increased risks and the need for proper checks and balances. Companies are required to protect data from non-authorized individuals, whether they are employees or outside hackers. The new world has introduced new threats such as Identity theft and cyber terrorism. Failures in information security not only a matter of embarrassment or financial liability but lose the wrong kind of data and it could become a criminal matter. Much of the risk can be understood and mitigated by performing vulnerability assessments, penetration testing and security reviews on computer systems.

Potential IT Audit Areas

Disaster Recovery Program:

- ✓ Whether the company have disaster recovery programme;
- ✓ What happens if the computer fails;
- ✓ Where is your hot site or backup location;
- ✓ How will disaster affect the company payroll and product or service fulfillment;
- ✓ Internal auditor can test the disaster recovery program of the company.

Physical and Cyber Security

- ✓ Whether Company is protecting its employees, assets and information from a physical or cyber attack;
- ✓ Whether system is setup to protect against identity theft;



✓ Whether the company has a plan in place in case of employee negligence or malicious actions;

Internal auditor can conduct tests to evaluate preparedness, as well as assist with the setup of protection against a physical or cyber security threat.

Network Security

A company's network is exposed to significant risks as a result of internet connections, remote access and the use of laptops. These risks include theft, systems failures, and unauthorized access to accounting records. Exposure of some confidential information can result in loss to the company. Companies have to consider a vulnerability assessment, penetration test or security assessment to evaluate the effectiveness of their network security.

Vulnerability Assessment - A vulnerability assessment uses security hardware and software to scan a company's outside facing computers and connections for all known software vulnerabilities. The scan is usually non-intrusive and can take place any time of the day or night. There is no "user" action necessary. Vulnerability assessment reports list the vulnerabilities found on each computer scanned and provides information on how to remove or mitigate the vulnerability found.

Penetration Test - A penetration test involves trying to legally break in to network using known exploits and vulnerabilities. The methods used can vary from simple "social engineering," that is, tricking users into giving up a user ID or password, to sophisticated fake websites and emails that trick users into giving their user ID's or passwords to a phony "administrator." Penetration tests usually cost more than vulnerability assessments due to their sophistication. Unlike vulnerability scans, penetration tests can degrade the performance of network while they are being executed. Penetration tests are invaluable in pinpointing greatest risks. Reports are produced which detail if and how the systems were penetrated. This information can then be used to direct computer security resources more effectively.

Security Assessment - A security assessment requires the visit to the site, review the security processes and policies, test the computers for vulnerabilities, test internal security settings and make recommendations to help "harden" the security posture.



Chapter 19 Maintenance of Cost Records and Cost Audit specific to the Industry

Government of India for the first time notified "Cost Accounting Records (Plantation Products) Rules, 2002 published vide G.S.R. 685(E) dated 8th October, 2002" under Section 209(1)(d) of the Companies Act, 1956.

Till year 2010, the Companies were covered under Cost Audit by specific order issued by Central Government to a Company/Industry. In year 2011, Ministry of Corporate Affairs superseded Cost Accounting (Plantation Products) Rules, 2002 by "Companies (Cost Accounting Records) Rules, 2011" and Plantation companies covered under these Rules are required to maintain the cost records as per the provisions of these rules. During the year 2011-2012 separate Cost Audit Orders were issued by the Government of India for audit of cost records by the Planation companies if they are covered under Excise Chapters 8, 9, 21 and 40 vide Cost Audit Orders F. No. 52/26/CAB - 2010 dated 24th January, 2012/ 6th November 2012. The Companies required to conduct the cost audit as per the provisions of these Cost Audit Orders are required to e-file the cost audit reports in XBRL Format as per the provisions of Companies (Cost Audit Report) Rules 2011 issued by Ministry of Corporate Affairs vide GSR 430(E) dated 3rd June 2011.

The Ministry of Corporate Affairs, Government of India has again revised the above rules pursuant to provisions in the Companies Act 2013 relating to maintenance of cost records and cost audit vide Section 148(1) and (2). The revised Rules "Companies (Cost Records and Audit) Rules 2014" have been notified by Ministry of Corporate of Affairs vide G.S.R.425 (E) dated 1st July 2014. Vide Rule 3(B)(a)(xi), the companies engaged in "Rubber and allied products being regulated by the Rubber Board" are required to maintain the cost records and conduct the audit of these cost records. The provisions of these rules are as follows:

- i. **Application of cost records:** The Companies engaged in "Rubber and allied products being regulated by the Rubber Board" shall be required to maintain the cost records if the following thresholds limit are fulfilled:
 - (i) in the case of a multi-product or a multi services company (i.e. a company producing more than one product or service), any product or a service for which the individual turnover (from such specific product or such specific service) is rupees fifty crore or more;
 - (ii) in the case of a company, producing any one specific product or service, if the net worth of the company is rupees one hundred and fifty crore or more or the turnover is rupees twenty five crore or more.

The cost records are to be maintained in the <u>Form-CRA-1</u> of the said Rules by the companies on which these rules are applicable. *Extract* of Form-CRA-1 is given at *Annexure-I*.

- (1) The gist of the details required to be maintained under Form CRA-1 by the companies are as follows:
 - (i) Input Material(s)/ Service(s)
 - (ii) Salaries and Wages
 - (iii) Utilities



- (iv) Service Department Expenses
- (v) Repairs and Maintenance
- (vi) Fixed Assets, Depreciation and Lease Charges
- (vii) Overheads
- (viii) Royalty and Technical Knowhow
- (ix) Research & Development Expenses
- (x) Quality Control Expenses
- (xi) Work-in-Progress and Finished Stock
- (xii) Captive Consumption
- (xiii) By-Products
- (xiv) Joints Products/ Services
- (xv) Packing Expenses
- (xvi) Interest and Other Borrowing Costs
- (xvii)Expenses or Incentives on Exports
- (xviii) Pollution Control
- (xix) Production Records
- (xx) Sales Records
- (xxi) Any other Items of cost
- (xxii) Adjustment of cost variances
- (xxiii) Cost Statements
- (xxiv) Reconciliation of Cost and Financial Accounts
- (xxv)Statistical Reports
- (xxvi) Records of Physical Verifications
- (xxvii) Related Party Transactions
- (2) The cost records referred to in sub-rule (1) shall be maintained on regular basis in such manner as to facilitate calculation of per unit cost of production or cost of operations, cost of sales and margin for each of its products and activities for every financial year on monthly or quarterly or half-yearly or annual basis.
- (3) The cost records shall be maintained in such manner so as to enable the company to exercise, as far as possible, control over the various operations and costs to achieve optimum economies in utilisation of resources and these records shall also provide necessary data which is required to be furnished under these rules.
- ii. Cost Audit: The Companies engaged in "Rubber and allied products being regulated by the



Rubber Board" shall be required to conduct the cost audit of the records so maintained if the following thresholds limit are fulfilled:

- (1) In the case of a multi-product or a multi services company, the requirement for cost audit shall apply to a product or a service for which the individual turnover (from such specific product or such specific service) is rupees one hundred crore or more;
- (2) the case of a company producing any one specific product or service, the requirement for cost audit shall apply if the net worth of the company is rupees five hundred crore or more or the turnover from such product or such service is rupees one hundred crore or more.
- iii. Cost Audit Report: Every cost auditor, who conducts an audit of the cost records of a company, shall submit the cost audit report along with his or its reservations or qualifications or observations or suggestions, if any, in form CRA-3 along with Annexure to the Cost Audit Report as prescribed under Companies (Cost Records and Audit) Rules 2014.

Twenty Four Annexures have been prescribed under the rules. The following are the Annexures:

- 1. General Information
- 2. Cost Accounting Policy
- 3. Process of Manufacture of Good(s)/Delivery of Service(s)
- 4. Good(s)/Service(s) Details (For the company as a whole)
- 5. Quantitative Information for Each Good(S)/Service(S) separately
- 6. Details of the major input materials/service used for good(s) manufactured/service(s) rendered under reference
- 6(A). Standard/ Actual Consumption of Input Material(S)/Service(S) Per Unit
- 6(B). Break-Up of Cost of Input Material(S)/Service(S) imported during the Year
- 7. Utilities
- 8. Salaries and wages for the good(s)/service(s) covered (For company as a whole)
- 9. Repairs and Maintenance (For company as a whole)
- 10. Net fixed assets and depreciation (For company as a whole)
- 11.Net block, depreciation and lease rent (For good(s)/ service(s) covered)
- 12. Overheads (For company as a whole)
- 13. Research and development expenses
- 14. Royalty and Technical Know-how Charges



- 15.Abnormal/Non-Recurring Cost
- 16.Non-Moving Stock (good-wise/ service-wise details of non-moving stock may be provided)
- 17. Written Off Stock / Forfeited Services (good-wise/ service-wise details may be provided)
- 18. Inventory Valuation (at the end of the year)
- 19.Sales/Revenue of the good(s)/service(s) covered
- 20. Margin per Unit of Output/service rendered
- 21.Related Party Transaction
- 22. Central Excise/Service Tax Reconciliation for the Good(s)/service(s) under reference
- 23. Profit Reconciliation
- 24.Cost Statement (for each good(s)/service(s) separately
- iv. **Submission of Cost Audit Report to Central Government:** Every company covered under these rules shall, within a period of thirty days from the date of receipt of a copy of the cost audit report, furnish the Central Government with such report alongwith full information and explanation on every reservation or qualification contained therein, in **form CRA-4** alongwith fees specified in the Companies (Registration Offices and Fees) Rules, 2014.
- v. **Exemption of certain companies from applicability of Rules:** The requirement for cost audit under these rules shall not be applicable to the following companies:
 - (i) whose revenue from exports, in foreign exchange, exceeds seventy five per cent of its total revenue or
 - (ii) which is operating from a special economic zone.

Internal Audit of Cost accounting records:

- (ii) Whether proper cost records complying with the generally accepted cost accounting principles and cost accounting standards are being maintained and cost sheets are being prepared on regular basis.
- (iii) Whether the requirements under the Record Rules and the Report Rules as issued by the MCA are being complied with, so far as applicable to the entity.
- (iv) Whether comparison of the cost of various activities/processes/products is being made with the similar costs of previous years and budgeted costs.
- (v) Whether performance analysis on the basis of the information available from the cost records is being done and actions taken for improvement.

Maintenance of Cost Accounting Records:

✓ To check that classification of accounting heads in the Estate's Accounts facilitates accumulation of cost against the respective cost centres in order to classify the cost into main three broad categories i.e. Cultivation, Manufacturing and Estate's General Administration;



- ✓ To check the system of maintaining the accounting records whether cost of material, labour and other expenses allocable to each cost center are separately identifiable from the accounting records;
- ✓ To examine that all direct expenses i.e. material, labour and other expenses allocable to Cultivation, Manufacturing and Estate's Administrative Overhead respectively are separately booked in the Accounts to identify them;
- ✓ To check that in the Materials Issue Requisitions raised on the Stores for issue of materials to the different cost centres , the name of the respective cost centres are clearly mentioned, so that the expenditure can be booked in the appropriate accounting heads as well as against the correct cost centres;
- ✓ Internal Audit should carry out a test check of booking of expenses with reference to the basic records to ensure that the booking of expenses are made correctly;
- ✓ To check that the Estate maintains proper Cost Accounting Records where the Cost Accounting Record Rules are applicable.

Reporting system followed by the Estate to report on the performance to the Corporate:

- ✓ To examine the formats of various reports prescribed by the Corporate for the purpose of reporting the Estate's performance to the Corporate on various criteria;
- ✓ To check the reports are sent to H.O. from Corporate Office in time as prescribed by the Corporate Office;
- ✓ To examine the reports sent with reference to the basic documents on the basis of which such reports have been generated, for ascertaining the correctness of the reports;
- ✓ To examine the adequacy of the reporting system and to make suggestions on the improvement of the reporting system required, if any.

Chapter 20 Audit Follow up

The Institute of Internal Auditors definition of a follow-up: "A follow-up is defined as a process by which the internal auditors determine the adequacy, effectiveness and timeliness of actions taken by management on reported audit findings".

The value of the audit must be assessed to assure that the findings and recommendations, reflecting cost- conscious, workable and timely solutions, have been achieved to some quantifiable degree and provide value to the organization. Unfortunately, this does not happen as often as it should in practice. More organizations would not outsource their audit function if they gained a thorough understanding of the savings and improvement to operations and processes the audit can bring.

The bottom line is how does audit enhance an organization's value? Follow-up is the answer, if an organization is to understand what value audit can have to improving operational integrity, efficiency and effectiveness. By looking at the prior audit recommendations of earlier work, auditors are able to assess if the agency, company or corporation has taken any action toward the report recommendations. If it has, a process is in place to try to assess what impact those recommendations had and to formally report the assessment and findings. Often, auditors will receive direct feedback from managers, supervisors or staff that their actions were the results of an earlier audit report. In some instances, they may even provide direct information and cost figures on how much is being saved as the result of new controls in place or improvements to the existing processes.

Where agreed action plans are not completely implemented the auditor asks the following questions:

- What remains to be done?
- By whom and when?
- Have alternatives been implemented that may be more appropriate?
- Has the agreed action plan ceased to be of value?
- If no action was taken, why not?
- What is the issue or concern causing inaction?

The end result should be a brief summary of the status of every action plan agreed upon. The final summary is reviewed with the person responsible for clearing the audit report before the follow-up report is issued.



Annexure-I

Form - CRA-1

[Pursuant to Rule 5(1) of the companies (cost records and audit) rules, 2014]

Form in which Cost Records shall be maintained

PARTICULARS RELATING TO THE ITEMS OF COSTS TO BE INCLUDED IN THE BOOKS OF ACCOUNTS:

1. INPUT MATERIAL(S)/SERVICE(S):

- (1) Proper records shall be maintained showing separately all receipts, issues and balances both in quantities and cost of each item of raw material/input services (including all direct charges upto the works) required for the production of goods or rendering of services under reference. The basis, on which quantities, cost of issue and consumption are calculated, shall be indicated in the cost records and followed consistently. In the case of imported raw materials/input services, proper records shall be maintained showing quantity of imported material/service, Free On Board value, overseas freight, insurance, customs duty and inland freight charges along with license-wise quantities allowed, actual quantities imported, actual quantities consumed, quantities in stock and quantities yet to be imported out of total licensed quantities. If both indigenous and imported materials/services are consumed, the records showing details of percentage mix of the same have to be maintained for each item.
- (2) Proper records shall be maintained separately showing the receipts, issues and balances both in quantities and cost of each item of intermediate material/service, process material, additives, bought out components, sub-assemblies, accessories, semi-finished goods, consumable stores, spares, other indirect materials/services etc. used in the production of the goods/rendering of services under reference. The cost shall include all direct charges upto works/services delivered. In case of additives, bought out components/bought out services, sub-assemblies, accessories, semi-finished goods, consumable stores, spares and other indirect materials/services, proper records shall be maintained for the value and quantity issued/rendered in a financial year suitably adjusted for consumption. If the life of any input material/service is more than one financial year, necessary adjustment should be made. If the life of any input material/service is not known, consumption may be assessed on technical basis.
- (3) Where the company produces these raw materials/input services, intermediates or process materials, separate records showing the cost of production/cost of service of such items, shall be maintained. The basis on which quantities and cost of issues and consumption of such materials/services produced or processed by the company are calculated, shall be indicated in the cost records and followed consistently.
- (4) The issues, consumption of all raw materials/input services, intermediates, process



materials, additives, manufactured, bought out components/ bought out services, sub-assemblies, accessories, semi-finished goods, consumable stores, spares and other indirect materials/services shall be identified with the process wise production of goods/rendering of services.

- (5) Proper records shall be maintained indicating the quantity as well as value of recoveries at different stages/processes having significant value in relation to cost of material/service. In case the recoveries are not reused in the process and are sold/rendered or disposed of without further processing/rendering, the realisation from such sales shall be recorded and adjusted against the process concerned. In case further processing/augmentation is necessary to make the recoveries usable or saleable, as the case may be, proper records of the cost involved for such further processing/augmentation shall be maintained. If such processing/augmentation is done by any outside agency, proper records to show the quantity sent for processing/augmentation, quantity received back after processing/augmentation and cost incurred thereon shall be maintained. The net realization, if any, shall be adjusted against the major process relating to such recoveries. The cost of recoveries shall be determined on equitable and reasonable basis and applied consistently. The records indicating the actual sales realization of recoveries shall also be maintained.
- (6) Proper records shall be maintained to show the receipts, issues and balances, both in quantities and cost of each item of consumable stores, other process materials/services not covered above, small tools and machinery spares, indirect materials/services etc. The cost shall include all direct charges upto works/services delivered.
- (7) The cost of consumable stores, small tools and machinery spares shall be charged to the relevant cost center/service centre or department or production process of goods or rendering of services on the basis of actual issues. In the case of consumable stores and small tools, indirect services, the cost of which are insignificant (less than 5% of the cost of material consumed), the company may, if it so desires, maintain such records for the group of such consumable stores, tools and indirect services.
- (8) Proper records shall be maintained showing the quantity and value of wastage, spoilage, rejections and losses of raw materials/input services, intermediates, process materials/services, consumable stores, small tools and machinery spares, whether in transit, storage, manufacture or at any other stage. The method followed for adjusting the above losses as well as the income derived from the disposal of rejected and waste materials/services including spoilage, if any, in determining the cost of good(s)/service(s), shall be indicated in the cost records. Any abnormal wastage or spoilage or rejection or losses shall be indicated distinctly and separately along with reasons thereof.
- (9) Proper records shall also be maintained to indicate the value of raw materials/input services, intermediates and process materials/services, finished and semi-finished goods/services, consumable stores, small tools and machinery spares, additives, manufactured, bought out components/bought out services, sub-assemblies, accessories, semi-finished goods/services, consumable stores, spares and other indirect



materials/services which have not moved/utilized for more than twelve months.

- (10) Where any credit under Central Value Added Tax (CENVAT) under the Central Excise Act, 1944 (1 of 1944) or Finance Act in case of service tax, any other benefits of the nature of CENVAT/Service Tax credit, are available on any item of material/service, the cost of such material/service shall be shown after adjusting such credit or benefits.
- (11) If any of the input materials/services is processed through an outside party, proper records shall be maintained for the quantity sent for processing, quantity received after processing, balance quantity of material/service, losses and wastage of material/service during processing, by-products recovered, if any, and the cost involved in processing/rendering of service.

2. SALARIES AND WAGES:

- (1) Proper records shall be maintained to show the attendance and earnings of all employees assigned to the cost centres or departments and the work on which they are employed. The records shall also indicate the following separately for each cost centre or department:
 - (a) piece rate wages (wherever applicable);
 - (b) incentive wages, either individually or collectively as production bonus or under any other scheme based on output;
 - (c) overtime wages;
 - (d) earnings of casual or contractual labour;
 - (e) bonus or gratuity, statutory as well as other;
 - (f) contribution to superannuating scheme;
 - (g) cost of employees stock option;
 - (h) leave travel concession; paid holidays;
 - (i) leave with pay;
 - (j) Training, workshop, seminar expenses;
 - (k) Medical/health, safety, education expenses;
 - (I) any other statutory provision for labour welfare;
 - (m) any other free or subsidized facility.
- (2) The records shall be maintained in such a manner as to enable the company to book these expenses cost centre wise or department wise with reference to goods/services under reference and to furnish necessary particulars. Where the employees work in such a manner that it is not possible to identify them with any specific cost centre/service centre or department, the employees cost shall be apportioned to the cost centre/service centres or departments on equitable and reasonable basis and applied consistently.



- (3) The idle labour cost shall be separately recorded under classified headings indicating the reasons therefor. The method followed for accounting of idle time payments shall be disclosed in the cost records.
- (4) Any wages and salaries allocable to capital works, such as, additions to plant and machinery, buildings or other fixed assets shall be accounted for under the relevant capital heads. The method followed for accounting of such payments in determining the cost of the goods/services under reference shall be on equitable and reasonable basis and applied consistently. The said method shall be disclosed in the cost records also.
- (5) The cost of normal retirement benefits payable to employees shall be recorded separately and charged to cost. The method followed for accounting of such costs in determining the cost of the goods/services under reference shall be on equitable and reasonable basis and applied consistently and disclosed separately. Termination benefits which are payable in addition to the normal retirement benefits, such as benefits under voluntary retirement scheme, expenses treated as abnormal and not forming part of salaries and wages and cost of production of goods/rendering of services.

3. UTILITIES:

- (1) Proper records shall be maintained showing the quantity and cost of each major utility such as power, water, steam, effluent treatment, etc. produced and consumed by the different cost centres in such detail as to have particulars for each utility separately.
- (2) If a utility is purchased, proper records showing the delivered cost including all direct charges shall be maintained for the quantity and value of each utility purchased.
- (3) Where a utility is produced and supplied by any other unit of the company or any related party, proper records shall be maintained to assess cost and the quantity of the utility so procured.
- (4) The cost of utility, if any, supplied to any other unit(s) of the company or any related party, shall be calculated on equitable and reasonable basis and applied consistently.
- (5) The cost of utility allocated/apportioned to the cost centers and further to the individual goods/services shall be on equitable and reasonable basis and applied consistently.
- (6) Where any utility is one of the major inputs to the raw material used in production or manufacture of any of the goods/services under reference, such direct utility shall be included in the cost of such raw material/input service and shown accordingly.
- (7) Proper records indicating any subsidy, grant/incentive, credits, recoveries, abnormal costs, penalties or damages paid etc. in respect of utilities shall be maintained.
- (8) The records shall also indicate the measures taken on conservation of energy and its corresponding impact on per unit cost of goods/services.

4. SERVICE DEPARTMENT EXPENSES:

(1) Proper records shall be maintained to indicate expenses incurred in respect of each service



cost centre like engineering, work shop, designing, laboratory, safety, transport, computer cell, welfare etc. These expenses shall be apportioned to other services and production departments on equitable and reasonable basis and applied consistently. Where these services are utilized for other goods/services of the company also, the basis of apportionment of such expenses to goods/services under reference and to the other goods/services shall be on equitable and reasonable basis and applied consistently. The said basis shall be disclosed in the cost records also. Proper records shall be maintained to indicate cost of purchase, production, distribution, marketing and price of services with reference to sales to outside parties. Proper records shall also be maintained regarding cost of services received from/rendered to related parties and cost of service cost centre incurred in foreign exchange besides proper maintenance of records in respect of any subsidy, grants, incentives, credits/recoveries, any abnormal cost, penalty and damages.

5. REPAIRS AND MAINTENANCE:

- (1) Proper records showing the expenditure incurred by the workshop, tool room and on repairs and maintenance in the various cost centres or departments shall be maintained under different heads. The records shall also indicate the basis of charging such expenses to different cost centres or departments. Records in respect of repairs and maintenance cost of jobs done in-house and outsourced, cost of major overhauls, repair and maintenance paid/payable to the related party, incurred in foreign exchange and any subsidy, grant, incentive, credits/recoveries, penalty and damages and any abnormal portion of this item of cost shall be maintained. The manner of charging a share of the cost of workshop, tool room and repairs and maintenance expenses shall be on equitable and reasonable basis and applied consistently.
- (2) In addition to the above, records shall indicate the amount and also the proportion of closing inventory of stores and spare parts representing items which have not moved for over twenty four months.
- (3) The expenditure on major repair works from which benefit is likely to accrue for more than one financial year shall be shown separately and absorbed in the cost over the period for which such benefits are expected to accrue on equitable and reasonable basis and applied consistently. Method of accounting along with the basis of allocation of such costs shall also be clearly indicated in cost records.

6. FIXED ASSETS, DEPRECIATION AND LEASE CHARGES:

- (1) Proper and adequate records shall be maintained for assets used for production of goods/rendering of services under reference in respect of which depreciation has to be provided for. These records shall, inter-alia, indicate grouping of assets under each good/service, the cost of acquisition of each item of asset including installation charges, date of acquisition and rate of depreciation.
- (2) Those records which enable to identify and/or allocate gross fixed assets, accumulated depreciation up to the year and net fixed assets under the heads; land and building, plant and



machinery, furniture and fixtures etc. employed for goods/services under reference shall be maintained. The basis of apportionment of common assets to the goods/services under reference shall be on equitable and reasonable basis and applied consistently. In case of revaluation of assets, the same shall be indicated separately and depreciation on revaluation shall also be indicated separately.

- (3) The basis on which depreciation is calculated and allocated or apportioned to various cost centre/service centres or departments and absorbed on all goods/services shall be clearly indicated in the cost records. If depreciation charged or chargeable to the cost centres or departments is in excess or lower than the depreciation calculated by applying the rates of depreciation prescribed under the Companies Act, 2013, such amount of excess or lower depreciation shall be indicated clearly in the cost records. The cost records shall also show the effect of such excess or lower depreciation, as the case may be, on per unit cost of each good/service. The cumulative depreciation charged in the cost records, against any individual item of asset shall not, however, exceed the original cost of the respective asset.
- (4) Proper records shall be maintained giving details of assets taken or given on lease. The break- up of lease rental in terms of financial charges, depreciation etc. paid or received shall be maintained separately. The details shall be maintained separately for assets taken from or given to related party.

7. OVERHEADS:

- (1) Proper records shall be maintained for various items of indirect expenses comprising overheads pertaining to goods/services under reference. These expenses shall be analyzed, classified and grouped according to functions, namely, works, administration, selling and distribution, Head Office expenses.
- (2) Proper records shall be maintained in respect of overheads incurred in foreign exchange, any subsidy, grant, incentive, credits/recoveries, unabsorbed overheads and any abnormal portion and also relating to resources received from or supplied to any related party,
- (3) Where the company is also manufacturing goods/rendering services other than the goods/services under reference, the records shall clearly indicate the basis followed for apportionment of the common overheads including head office expenses of the company to such other goods/services and the goods/services under reference, including capital works. Where certain expenses forming part of overheads can be identified with particular goods/services, such expenses shall be first segregated and charged to the relevant goods/services in the first instance and thereafter the residual expenses under the above categories of overheads shall be apportioned on equitable and reasonable basis and applied consistently. The overheads chargeable to capital works shall be indicated separately in the cost records. The basis of apportionment or absorption of overheads to the cost centres or departments and the goods/services shall be indicated in the cost records. The records shall be maintained in such a manner as to indicate the details of works, administration, selling and distribution overheads, H.O. expenses etc.



8. ROYALTY AND TECHNICAL KNOW-HOW FEE:

Adequate records shall be maintained showing royalty and/or technical know-how fee including other recurring or non-recurring payments of similar nature, if any, made for the goods/services under reference to collaborators or technology suppliers in terms of agreements entered into with them. Such records shall be kept separately in respect of each such agreement or arrangement. The basis of charging such amount, including lump sum payment and its treatment shall be indicated in the cost records.

9. RESEARCH AND DEVELOPMENT EXPENSES:

- (1) Proper records showing the details of expenses, if any, incurred by the company for research and development work on the goods/services covered under these rules, according to the nature of development of goods/services existing and new, design and development of new facilities and market research for the existing and new goods/services, shall be maintained separately. The records shall also indicate the payments made to outside parties for the research and development work. The basis of charging such amount, including lump sum payment and its treatment shall be indicated in the cost records.
- (2) The basis of charging these expenses to the cost of production of goods/services under reference and to other goods/services shall be indicated in the cost records. Where the utility of research and development work extends to over more than one financial year, such expenses shall be charged to the cost of goods/services under reference and to all other goods/services on equitable and reasonable basis and applied consistently indicating the criteria on the basis of which it has been decided to extend the utility period of these expenses to more than one financial year.
- (3) Proper records shall be maintained in respect of such expenses incurred in foreign exchange and any subsidy, grant, incentive, credits/recoveries, penalty or damages paid and any abnormal portion and also for resources received from or supplied to any related party.
- (4) The expenses incurred by the research and development department for providing technical know-how to outsiders shall be recorded separately and excluded from the cost of goods/services under reference. The amount recovered for providing technical know-how to outsiders shall also be indicated separately and excluded from the income arising from the sale of goods/services under reference.

10. QUALITY CONTROL:

Adequate records shall be maintained to indicate the expenses incurred in respect of quality control department or cost centre/service centre for goods/services under reference. Where these services are also utilized for other goods/services of the company, the basis of apportionment to goods/services under reference and to other goods/services shall be on equitable and reasonable basis and applied consistently. Proper records shall be maintained in respect of such expenses relating to resources received from or supplied to the related party, incurred in foreign exchange and any subsidy, grant, incentive, credits/recoveries, unabsorbed



The Institute of Cost Accountants of India overheads and any abnormal portion etc.

11. WORK-IN-PROGRESS AND FINISHED STOCK:

The method followed for determining the cost of work-in-progress and finished stock of the goods and for services under delivery or in-process shall be appropriate and shall be indicated in the cost records so as to reveal the cost element that have been taken into account in such computation. All conversion costs incurred in bringing the inventories to their present location and condition shall be taken into account while computing the cost of work-in-progress and finished stock. The method adopted for determining the cost of work-in-progress and finished goods shall be followed consistently.

12. CAPTIVE CONSUMPTION:

If the goods/services under reference are used for captive consumption, proper records shall be maintained showing the quantity and cost of each such goods/services transferred to other departments or cost centres or units of the company for self-consumption and sold to outside parties separately.

13. BY-PRODUCTS:

Proper Records shall be maintained for each item of by-product, if any, produced showing the receipt, issues and balances, both in quantity and value. The basis adopted for valuation of by-product for giving credit to the respective process shall be equitable and consistent and should be indicated in cost records. Records showing the expenses incurred on further processing, if any, as well as actual sales realization of by-product shall be maintained. The proper records shall be maintained in respect of credits/recoveries from the disposal of by-products.

14. JOINT PRODUCTS/SERVICES:

Where more than one product/service which is of equal economic importance arises from a process, the cost up to the point of separation of products/services shall be apportioned to joint products/services on reasonable and equitable basis and shall be applied consistently. The basis on which such joint costs are apportioned to different products/services arising from the process shall be indicated in the cost records.

Proper records shall be maintained in respect credits/recoveries from the disposal of joint products/services.

15. PACKING EXPENSES:

Proper records shall be maintained separately for domestic and export packing showing the quantity and cost of various packing materials and other expenses incurred on primary and/or secondary packing indicating the basis of valuation. Where such expenses are incurred in common for other goods also, the basis of apportioning the expenses between the relevant goods shall be on equitable and reasonable basis and applied consistently. Proper records shall be maintained in respect of packing materials received from or supplied to the related party, costs incurred in foreign exchange and any subsidy, grant, incentive, credits/recoveries, unabsorbed overheads, penalty and damages, any abnormal portion etc.



16. INTEREST AND OTHER BORROWING COSTS:

- (1) Proper records shall be maintained for money borrowed for each project and/or working capital and interest charged thereon. The amount of net interest and other borrowing costs shall be allocated or apportioned to the goods/services under reference and other goods/services on equitable and reasonable basis and applied consistently. The basis of further charging of the share of interest to the various types of such goods/services shall also be equitable and reasonable and applied consistently. The basis of such allocation or apportionment shall be spelt out clearly in the cost records.
- (2) Net interest and other borrowing costs incurred for project under execution shall be capitalized for the period up to the date the project is commissioned.
- (3) Proper records shall be maintained in respect of such expenses paid/payable to the related party, incurred in foreign exchange and any subsidy, grant, incentive and any amount of similar nature received/receivable, payment of penal interest or fine/damages paid.
- (4) Proper records shall be maintained in respect of such expenses incurred relating to prior periods and taken to reconciliation directly.

17. EXPENSES OR INCENTIVES ON EXPORTS:

- (1) Proper records showing the expenses incurred on the export sales, if any, of the goods/services under reference shall be separately maintained so that the cost of export sales can be determined correctly. Separate cost statements shall be prepared for goods/services exported giving details of export expenses incurred or incentive earned.
- (2) Proper records shall be maintained giving the details of export commitments license wise and the fulfillment of these commitments giving the reasons for non-compliance, if any. In case, duty free imports are made, the cost statements should reflect this fact. If the duty free imports have been made after actual production, the statement should reflect this fact also.

18. POLLUTION CONTROL:

(1) Expenditure incurred by the company on various measures to protect the environment like effluent treatment, control of pollution of air, water, etc., should be properly recorded. Records relating to basis of distribution of pollution control expenses, such costs of jobs done in-house and outsourced separately, pollution control costs paid/payable to related parties, incurred in foreign exchange and any subsidy, grant, incentive, credits/recoveries, any abnormal portion of such costs, penalty and damages paid and any amount received/receivable from pollution control agency.

19. PRODUCTION RECORDS:

(1) Quantitative records of all finished goods (packed or unpacked)/services rendered



showing production, issues for sales and balances of different type of the goods/services under reference, shall be maintained. The quantitative details of production of goods/services rendered shall be maintained separately for self-produced, third party on job work, loan license basis etc.

20. SALES RECORDS:

Separate details of sales shall be maintained for domestic sales at control price, domestic sales at market price, export sales under advance license, export sales under other obligations, export sales at market price, and sales to related party/inter unit transfer. In case of services details of domestic delivery/sales at control price, domestic delivery/sales at market price, export delivery/sales under advance license, export delivery/sales under other obligations, export delivery/sales at market price, and delivery/sales to related party/inter unit transfer. Such details shall be maintained separately for each plant/unit wise or service centre wise for total as well as per unit sales realization.

21. ANY OTHER ITEM OF COST:

Proper records shall be maintained for any other item of cost being indispensable and considered necessary for inclusion in cost records for calculating cost of production of goods/rendering of services, cost of sales, margin in total and per unit of the goods/services under reference.

22. ADJUSTMENT OF COST VARIANCES:

Where the company maintains cost records on any basis other than actual such as standard costing, the records shall indicate the procedure followed by the company in working out the cost of the goods/services under such system. The cost variances shall be shown against separate heads and analyzed into material, labour, overheads and further segregated into quantity, price and efficiency variances. The method followed for adjusting the cost variances in determining the actual cost of the goods/services shall be indicated clearly in the cost records. The reasons for the variances shall be duly explained in the cost records and statements.

23. COST STATEMENTS:

- (1) Cost statements (quarterly and annually) showing quantitative information in respect of each good/service under reference shall be prepared showing details of available capacity, actual production, production as per excise records, capacity utilization (in-house), stock purchased for trading, stock and other adjustments, quantity available for sale, wastage and actual sale etc. during current financial year and previous year.
- (2) Such statements shall also include details in respect of all major items of costs constituting cost of production of goods/services, cost of sales of goods/services and margin in total as well as per unit of the goods/services. The goods/services emerging from a process, which forms raw material or an input material/service for a subsequent process, shall be valued at the cost of production/cost of service up to the previous stage.
- (3) Cost Statements (quarterly and annually)in respect of reconciliation of indirect taxes



- showing details of total clearances of goods/services, assessable value, duties/taxes paid, CENVAT/VAT/Service Tax credit utilized, duties/taxes recovered and interest/penalty paid.
- (4) If the company is operating more than one plant, factory or service centre, separate cost statements as specified above shall be prepared in respect of each plant, factory or service centre.
- (5) Any other statement/information considered necessary for suitable presentation of Costs and Profitability of goods/services produced by the Company shall also be prepared.

24. RECONCILIATION OF COST AND FINANCIAL ACCOUNTS:

- (1) The cost statements shall be reconciled with the financial statements for the financial year specifically indicating the expenses or incomes not considered in the cost records or statements so as to ensure accuracy and to adjust the profit of the goods/services under reference with the overall profit of the company. The variations, if any, shall be clearly indicated and explained.
- (2) A statement showing the total expenses incurred and income received by the company under different heads of accounts and the share applicable to other goods/services and the goods/services under reference shall be prepared and reconciled with the financial statement.

25. STATISTICAL RECORDS:

- (1) The records regarding available machine hours or direct labour hours in different production departments and actually utilized shall be maintained for production of goods/rendering of services under reference and shortfall suitably analyzed. Suitable records for computation of idle time of machines and/or labour shall also be maintained and analyzed.
- (2) Proper records shall be maintained to enable the company to identify the capital employed, net fixed assets and working capital separately for the production of goods/rendering of services under reference and other goods/services to the extent such elements are separately identifiable. Non-identifiable items shall be allocated on a suitable and reasonable basis to different goods/services. Fresh investments on fixed assets for production of goods/rendering of services under reference that have not contributed to the production of goods/rendering of services during the relevant period/year shall be indicated in the cost records. The records shall, in addition, show assets added as replacement and those added for increasing existing capacity.

26. RECORDS OF PHYSICAL VERIFICATION:

Records of physical verification may be maintained in respect of all items held in the stock such as raw-materials, process materials, packing materials, consumables stores, machinery spares, chemicals, fuels, finished goods and fixed assets etc. Reasons for shortages/surplus arising out of such verifications and the method followed for adjusting the same in the cost of the



The Institute of Cost Accountants of India goods/services shall be indicated in the records.

27. RELATED PARTY TRANSACTIONS:

- (1) In respect of related party transactions or supplies made or services rendered by a company to a company termed "related party relationship" and vice-a-versa, records shall be maintained showing contracts entered into, agreements or understanding reached in respect of -
 - (a) purchase and sale of raw materials, finished good(s), rendering of service(s), process materials and rejected goods including scraps, etc;
 - (b) utilisation of plant facilities and technical know-how;
 - (c) supply of utilities and any other services;
 - (d) administrative, technical, managerial or any other consultancy services;
 - (e) purchase and sale of capital goods including plant and machinery; and
 - (f) any other payment related to the production of goods/rendering of services under reference.
- (2) These records shall also indicate the basis followed for arriving at the rates charged or paid for such goods or services so as to enable determination of the reasonableness of such rates in so far as they are in any way related to goods/services under reference.