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Assessment and Identification of Major Common Causes of Poor Quality Products Through 80/20 Principle and Cost of Poor Quality in Garment Sectors

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Abstract: Garment sectors play a great role in the economic development of developing countries like Ethiopia and producing a quality product in garment sectors is the basic one for their profit and customers satisfaction. According to of the assessments from the 250 respondents showed that there is defective products, process failures, less responsiveness on quality, and less understanding of the cause of poor quality product and types of cost of quality with effective measured and due to this reason there is a loss with less customer's satisfaction and it needs to assess and improvement for sectors. This study focused on the assessment and identification of the major common causes that affect the quality of the product through 80/20 principles with the identification of cost of quality. Qualitatively it identified the major causes of the poor quality product are listed by using a cause and effect diagram and quantitatively assessed is by using 80/20 principles. Analyzed data for three months (Jun, July, and August) shows total defective products are in cutting and spreading section 5925, Sewing section 9946, and Inspection and finishing section 5291. The study result shows that Quality Workmanship, Machine breakdown, and QC WIP are the major common causes in all sections that affect the quality product of the sector. Also, the analysis for three months of cost of quality in the company showed the total cost of good quality is 33% and the cost of poor quality is 67%. The forwarded recommended solution is to identify and record the main causes of poor quality products (defective), Focus and work on prevention and appraisal costs and reduce failure costs, Develop effective information about quality and transfer in and out of sectors, and Receive comments from both employers and customers and give immediate feedback for a solution.

Keywords: Poor Quality Product, Cost of Quality, SQC tools, Garment Sectors.

1. Introduction

In manufacturing sectors producing a good quality product is a prerequisite in the world competitiveness system and also in developing countries the understanding system about the quality product is very less and it is affected by different losses which included in the poor quality product [1], [2]. In the 21st Garment sectors, participated at a high level in world competition and it has complex production processes and intensive [3]. Garment sectors contribute to the economy of the developed and developing countries, also sub-Saharan Africa including Ethiopia country has a high potential in producing products in a garment [4], [5] and it needs quality improvement, especially for developing countries [6].

Produce quality product play a great role in competitiveness level [7], [8], but in Ethiopia, there is less competition because of the low-quality product (poor quality product) and cost of poor quality cost (external and internal) much higher than good quality cost [4]. The major content cost of poor quality cost is internal failure cost, which means that cost incurred due to internal failures of the process in the organization is high [5]. The quality of the product in the garment sector depends on the customer's satisfaction and the Ethiopian garment sector needs improvement to compete with its competitors [4]. Different challenges are faced in the sectors which quality-related and require improvement [3]. and it needs to improve the production process right/quality product at the first time and reduce wastage and it can increase profitability and customer satisfaction of garment sectors through improve quality product and minimize waste with rework activities [7], [8]. Quality is the basic one for manufacturing sectors and it determines to depend on the acceptance of products and services by customers [14]. Garment sectors are one of the manufacturing sectors that play a great role in the development economic level of the developing country through producing fashion products. In Ethiopia garment industries start to grow in 1995 and currently, it has a rank in terms of industry output [21]. Any challenge in the garment industry requires controlling the overall cost of quality because those are the basic indicator of the performance of the company [22]. Organizations more focus on the cost associated with achieving quality with attaining customers the customers need, because customers need to satisfy at a low cost, so it needs to reduce the cost of poor quality in the overall production process. Cost of quality is the total expenses incurred for achieving and maintaining good quality by an organization to achieve customer satisfaction. Cost of poor quality is a cost which invested due to internal and external failure is occurred in and out of the organization and if the cost of poor quality is much greater than the cost of good quality it affects the profit and customer satisfaction level of the organization. Effectively implementing a cost of quality is used to produce a product at a low cost, produce a quality product, and increase customer's satisfaction [23]. And the cost of quality analyses is an effective tool for garment sectors for the identification of improvement areas [24]. In garment industries, different

problems are there that affect overall production performance, quality of products, and customer satisfaction level of the company. The existence of the different causes of defects in the garment industries affect the actual productivity and those common cause defects impact the overall economy of the organization [25]. Quality control (QC) is the main activity in manufacturing sectors to produce quality product according to its requirement and it needs to manage and monitor each process 759 and activities [26]. Implementing of Statistical quality control (SQC) tools in the production process of garment sectors is the shortest and latest technics to produce quality products through identification of the causes that affect the quality of the product in the organization [13]. A cause and effect diagram is one of the quality tools used to list and identify the major potential causes of the problems that affect the quality of the product [2], [11]. 80/20 rule is one of the SQC tools and its 80 percent of quality products affected because of causes come from 20 percent (Percent of problems fail and categorized in the 20s) and are used to identify major problems depending on their degree of importance [13], [14]. Produce quality fails (defective) products is the main cause of customers loss, so quality is the responsibility of all stakeholders, and to compete with their competitors powerfully, organizations adopt and produce the quality product according to customers' needs and requirements [10].

2. Literature review

Garment sectors

In the 21st Garment sectors participated with a high level in world competition and it has complex production process and intensive labour [3] and contribute to the economy of the developed and developing countries, also sub-Sahara Africa including Ethiopia country has high potential in producing products in a garment [4], [5] and it needs improvement in quality especially for developing countries [6]. *Competitiveness level*: the competition in the garment sector level is very less and it needs to adapt and produce quality products according to customers' needs and requirements because producing quality fails (defective) products are the main cause of customer loss, so quality is the responsibility of all stakeholders [8],[10],[11]. In the modern competition system, it needs to focus on and improve the quality of products to satisfy customers and generate profit in garment sectors [12].

Quality product: is characteristics and features of a product that fulfill the customers' requirements and it's the basis for an organization to produce the product according to customer expectations [13]. In the garment sectors Quality is the basic and foremost important and also the responsibility of all departments and stakeholders [1], [2]. Produce quality fails (defective) products is the main cause of customers loss, so quality is the responsibility of all stakeholders, and to compete with their competitors powerfully, organizations adopt and produce the quality product according to customers' needs and requirements [8],[10],[11]

Causes of poor quality product (defective): Some causes of poor products are: machines, methods, operator's error, materials, and working [3],[8],[11],[13],[14]. Producing defective products like scrap, rework, and reject/failed products is a wastage of the resource and directly and indirectly, there is invested additional cost in the production process of the organization [15], also, Defective products have price conflicts with customers, due to improper price of that product with its quality [16].

Cost of quality: Cost of quality is categorized into two: cost

of good quality and cost of poor quality and higher cost of poor quality leads higher cost of the product which results in the organization of less profit and less customer satisfaction [15]. Cost of good quality (prevention and appraisal cost) and cost of poor quality (internal failure and external failure cost). [1],[2] and Customers need to satisfy at a lower cost of the product, and management needs to avoid/reduce the cost of poor products in and out of the organization [2],[12]. It is difficult to identify poor quality cost when there is insufficient and unclear recorded data of cost in the organization and recording clear data about cost is essential in every activity. Especially identifying the types of cost of quality and recording their amount is critical in taking corrective action in the organization [17]. Cost of poor quality is the cost incurred due to improper/wrong work being done in and out of the organization, lack of knowledge at the management level, and failure to correct action those costs. It is a hidden cost, it means that it's not existed recorded and quantified in each costing system. It can reduce or avoid by doing the right thing the first time and qualifying and recording those losses. It can affect the overall costing system, the scope of production, and the schedule of the organization. The cost of poor quality can avoid if all produced product processes were perfect [15],[18].

Statistical quality control (SQC) tools: Quality control (QC) is the main activity in manufacturing sectors to produce quality product according to its requirement and it needs to manage and monitor each process and activities [26]. Implementing SQC in the production process in garment sectors is the shortest and latest technics to produce quality products through identification of the causes that affect the quality of the product in the organization [13]. A cause and effect diagram is one of the quality tools used to list and identify the major potential causes of the problems that affect the quality of the product [11],[13]. 80/20 rule is one of the SQC tools and its 80 percent of quality products affected because of causes come from 20 percent (Percent of problems fail and categorized in the 20s) and are used to identify major problems depending on their degree of importance [13],[14]. In this case vital few problems are separate from trivial many and those vital few covered major causes of problems and affect the quality of the product more than trivial many [19]

Requirements of quality improvements for:

Customer satisfaction: Customers are the focal point and economic driver of the organization and it needs to satisfy those customers by implementing a quality system in the production process and their customer satisfaction levels are determined by quality products and overall productivity [3],[8],[11],[20] and Poor quality products less customer satisfaction [15].

Profit generate: poor quality products generate less profit and a high amount of loss [7],[8],[15].

More competence: poor quality products reduce the level of competence because they cause customers lose [15]

Responsibility for implementation of quality: All employers have the responsibility to produce quality products and adopt a culture throughout the organization [1], [2].

3. Methodology

To accomplish the study, it follow some methodologies and it includes, assessment in the form of questionnaires', analyses and identifications of problems related to quality depend on the respondents, record existed poor quality product (defective) and cost of quality for three months, using of SQC tools list possible causes and also categories the existed types of cos of quality. At the end depend on the analyzed and

identified problems it recommend the possible solutions. The detailed methodology of the study is specified in table 1.

Table 1: methodology of the study

Main terms	Procedures	Their purpose
Prepare questions for the respondent:	Quality related and generalized	Respondent has some related quality information, so it is used to gather usable information in the sector.
Select respondents	All concerned bodies and those have interested in/out sector	To gather, record, and identify existing problems in/out of a sector
Record and evaluate the values of their response	Record as individual and then sum up averagely of respondent response	To identify their percentages of the existing problems
Depending on the response value identify problems	Identify those who have high percentages of the problems that exist.	To know and understand the major problems.
Record defective product and cost of quality for three consecutive months	For a three-month record of all defects of the product in each section and also types of cost of quality with their quantity.	To know the number of defects and cost of quality in the sector
Identify the causes of the defective product	List possible causes of defects in each section.	To know those causes affect the quality of the product.
Select SQC tools	Select cause and effect diagram to express the causes in qualitative form and 80/20 principles focuses on vital few from trivial many	Identify the major and critical causes.
Identify the major causes of poor quality products (defective products) by SQC tools	By using 80/20 principles identify major causes that affect the quality of the product	To identify those major common causes in each section.
Identify the existing types of cost with their amount	Separately record the existing cost of quality in each type.	Calculate and identify which cost is majorly incurred.
Forward recommended solutions for identified problems.	Identify the major and common causes and types of cost of quality overall.	As a sector, it focuses and takes action on those major and critical causes that affect the quality of products and also reduce the cost of poor quality.

4. Data record and analysis

4.1 Causes of poor quality product (defects) and Cost of quality (CoQ) assessment

The assessment was taken for three consecutive months Jun, July, and August of 2021, and selected respondents from the sector including their customers. Those respondents were

taken from top management, quality controller and inspection department, production department, market and finance department, supervisor, operators and workers, most customers of the organization with a total number of respondents of 250. Prepared main questioners for selected respondents are listed in the table below 2 with their purposes of the question.

Table 2: Causes of poor quality product and cost of quality-related questionnaires'

Quality related questions	Purpose of the question
Is there a defective product in the organization?	To know and understand the existence of the defective product.

Is there customer satisfaction with the quality of the product?	To understand the level of customer satisfaction with the quality of the product
Is quality every department's responsibility?	The way of understanding and readiness for being responsible for quality management
Is Quality everyone's responsibility?	To identify respondents' imagination in responsibility for the quality.
Are customers paying for the product according to their requirements/wants	To determine the existence of satisfaction for the product.
Are there causes that affect the quality of the product?	To identify the causes that affect the quality product of the organization.
Do you measure the cost of quality?	The way they classify the cost of quality and how they measure
Existence of failures in and out of the organization	To identify failures in and out of the organizations
Are there identified and recorded main causes affecting the quality of product to take improvement?	To assess and identify the awareness of management on the implementation of quality

The respondent status is divided into: Strongly agree (SA), Agree (A), Disagree (DA), Strongly Disagree (SDA), and No response (NR). In each perception, respondents were given different percentages with different statuses.

As observed from the analysed data table 3 indicated that the major percentages of respondents agreed on the existence of the defectives product in the organization and the customer's satisfaction with the product is less because of the poor quality product produced in the organization. Also, the majority of the employers have believed quality is the responsibility of

some groups and do not understand that quality is everyone's responsibility and respondents give the responsibility of quality to the specific department only basically for the quality control and inspection department. Due to this reason, there is a failure in (different failures in production process and other activities) organization and out of the organization (because of the product quality failure on the market/customers), but the majority of the employers are do not know the causes of those failures (poor quality product) and it needs improvement on the quality of product with increase customers satisfaction on the product.

Table 3: Causes of poor quality product assessment respondents' value

Perception	Responded in percentage				
	SA (%)	A (%)	DA (%)	SDA(%)	NR(%)
Existence of defective product in organization	34	30	14	12	10
customer satisfaction with the quality of the product	12	18	48	14	8
Quality is everyone's responsibility	18	23	39	13	7
Existence of failure's in and out of the organization	25	41	15	9	10
Knowing the causes of poor quality product	15	21	37	17	10
The necessity to improve the quality of the product	41	49	5	3	2

In the cost of quality, different costs are the cost of good quality (prevention and appraisal cost) those unavoidable costs and involved in producing of quality product at the first time with included in the plan of the organization. The other types of costs are the cost of poor quality (internal failure cost, cost incurred in organization due to some failures and external failure costs, cost incurred out of organization due to some

failures products on market/ customers) and both costs are due to failure and its avoidable cost. According to of analyzed data in table 4 majority of the employers didn't know the types of costs of quality existed and there wasn't measured and recorded cost of quality in the organization also there is less understanding of the employers on advantages of using the effective cost of quality for the organization.

Table 4: Cost of quality (COQ) assessment result

Questions related to COQ	Responses	Respondent's %
Which type of cost of quality do you know?	Prevention cost	28
	Appraisal cost	23
	Failure cost (internal and external)	18
	I don't know any types of COQ	31
Have you measured COQ?	yes	26
	no	74

How do you define the effectiveness of the company in relation to measuring COQ?	I believe that COQ has a direct relation with company effectiveness	20
	I don't know COQ	80

4.2 Types of a defective products in the section

Analysed data for three months (Jun, July, and August) are Cutting and spreading defects section there is a total of 5925 with a defect 97% rework and 3% reject and also in Sewing section there is a total of defects of 9946 with 95% rework

and 5% reject and in Inspection and finishing section the total defects are 5291 with 98% rework and 2% reject and all are listed in table 5 below. This recorded defective product indicated that the company incurred much amount of cost and there is much loose, because of rejected products.

Table 5: types and quantity of defects in the section

Cutting and spreading defects				Sewing defects				Inspection and finishing defects			
Defects	Qty	Rework	reject	defects	Qty	Rework	Reject	Defects	Qty	Rework	Reject
Miss cut	567	550	17	Broken stitch	768	730	38	Uncut thread	523	513	10
Running shade	467	453	14	Uncut thread	907	862	45	Iron problem	456	445	9
Number and bundling	548	532	16	Raw edge out	897	870	27	Broken stitch	530	519	11
Matching plies	489	474	15	Down stitch	723	687	36	Skip stitch	215	211	4
Notch mark	456	442	14	Puckering	645	626	19	Hartack defect	512	502	10
Bowing	428	415	13	Over stitching	512	486	26	Oil/dirty	346	339	7
Narrow goods	387	375	12	Short stitching	956	908	48	Shading	315	309	6
Rugged cut	420	407	13	Skip stitch	630	599	31	Process mistakes	267	262	5
Fabric way measurement	587	569	18	Open stitch	986	937	49	Raw edge out	385	377	8
Leaning	540	524	16	Up dawn position	735	698	37	Fabric faults	324	318	6
Tension loose	287	278	9	Visible joint	741	704	37	Sewing rejects	278	272	6
Bias	312	303	9	Label displace	654	621	33	Size mistake	215	211	4
Alignments	437	424	13	Wrong embroidery	792	752	40	Damage	345	338	7
Total	5925	5746	179	Total	9946	9480	466	Needle mark	365	358	7
								Over stitch	215	211	8
								Total	5291	5185	108

4.3 Major Causes of poor quality product

Statistical quality control (SQC) tools are used to improvement of organizational effectiveness [26]. Quality control (QC) is the main activity in manufacturing sectors to produce quality product according to its requirement and it needs to manage and monitor each process and activities. Implementing SQC in the production process in garment sectors is the shortest and latest technics to produce quality products through identification of the causes that affect the quality of the product in the organization [2]. A cause and effect diagram is one type of powerful tool of SQC and it is used to identify all possible causes that affect the quality of the output in the organization and it helps identify, sort, and display possible causes of a specific problem and also used to perform root cause analysis. The main aim of root cause analysis is to systematically identify the indicators of problem to find its actual causes. Analyze those problems is uses in

taking action and improvement at the requirement system and In cause and effect diagram the possible root causes are categorized in to main cause, sub causes, but all causes affect the main goal of the organization especially on the quality of the product. The identified main causes of poor quality products are Environment, Man, Machine, method, material and others and all of this main causes has its own sub causes includes safety issue, disciplinary issue, lower workers skill, quality work man ship, Absents, Quality control work in process (QC WIP), electric power issue, lack of attachment, machine breakdown, change style, change in color, top fuse supply, late of sub material, cutting quality issue and cutting supply. Then, according to the assessment in three months, the possible causes of poor quality products in the organization are listed by using the cause and effect diagram as bellow figure 1

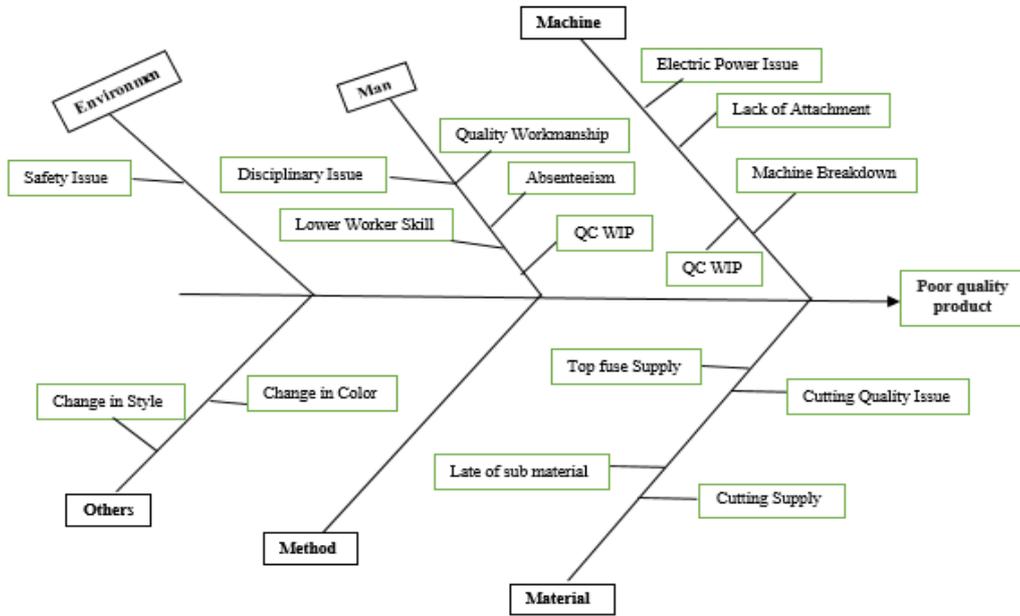


Figure 1: Major Causes of poor quality product

Table 6: causes of the poor quality product (defects) with their frequency value

Cutting and spreading section				Sewing section				Inspection and finishing section			
Causes of defectives	Frequenc y	%	Cumulative %	Causes of defectives	Frequenc y	%	Cumulative %	Causes of defective	Frequenc y	%	Cumulative %
Quality Workmansh ip	45	26	26	Quality Workmansh ip	44	37	37	Machine Break Down	21	23	23
Machine Break Down	41	24	50	Machine Break Down	26	22	59	QC WIP	15	16	40
QC WIP	39	23	73	Worker Skill	13	11	70	Safety Issue	14	15	55
Cutting Quality Issue	10	6	79	QC WIP	10	8	78	Absentism	6	7	62
Cutting Supply	9	5	84	Top Fuse Supply	6	5	83	Cutting Supply	6	7	68
Electric Power Issue	6	4	88	Cutting Supply	5	4	87	Quality Workmansh ip	6	7	75
Top Fuse Supply	6	4	91	Absenteeis m	3	3	90	Change in Style	5	5	80
Mix Size	4	2	94	Cutting Quality Issue	3	3	92	Worker Skill	5	5	86
Absenteeis m	2	1	95	Shading	3	3	95	Change in Color	4	4	90
Change in Style	2	1	96	Change in Color	2	2	97	Disciplinary Issue	3	3	93
Disciplinary Issue	2	1	97	Change in Style	1	1	97	Cutting Quality Issue	2	2	96
Late of Sub Material	2	1	98	Electric Power Issue	1	1	98	Electric Power Issue	1	1	97
Worker Skill	2	1	100	Lack of supervision	1	1	99	Lack of machine	1	1	98
Change in Color	0	0	100	Mix Size	1	1	100	Late of Sub Material	1	1	99
Lack of supervision	0	0	100	Disciplinary Issue	0	0	100	Top Fuse Supply	1	1	100
Lack of attachment	0	0	100	Lack of attachment	0	0	100	Lack of attachment	0	0	100
Shading	0	0	100	Late of Sub Material	0	0	100	Mix Size	0	0	100

Wrong measurement	0	0	100	Safety Issue	0	0	100	Shading	0	0	100
Safety Issue	0	0	100	Wrong measurement	0	0	100	Wrong measurement	0	0	100

Pareto analysis (80%/20% principles) is one type of SQC tool which used to identify most of the loss due to a very few types of causes and 80%/20% principles that 80% of the failure are coming from 20% of the causes. Steps of 80/20 principle:

- ❖ Identify and record causes of poor quality product with their frequency of occurrence.
- ❖ Calculate total number of causes
- ❖ Re order data from largest to smallest.
- ❖ Calculate their individual percentages from of the total defects.
- ❖ Determine the cumulative percent of each causes.
- ❖ Draw the diagram depend on the data of cumulative frequency and frequency number of causes.

Then, identify the vital few from trivial many through sum up the cumulative percentage and those summation is up to or

below 80% are vital few.

From the above table 6 identified of Vital few from trivial many causes which are responsible for 80% of defective products in each section are: In the cutting and spreading section the major causes are Quality Workmanship (26%), Machine Break Down (24%), QC WIP (23%), and Cutting Quality Issue 6% and in sewing section the major causes are Quality Workmanship (37%), Machine Break Down (22%), Worker Skill (11%) and QC WIP(8%) and in inspection and finishing section there are Machine break down (23%), QC WIP (16%), Safety Issue (15%), Absenteeism (7%), Cutting supply(7%), Quality workmanship(7%), Change in style(5%). Among those causes Quality Workmanship, Machine Break Down, and QC WIP are the major common causes that existed in all sections and affect the quality of the product in the organization.

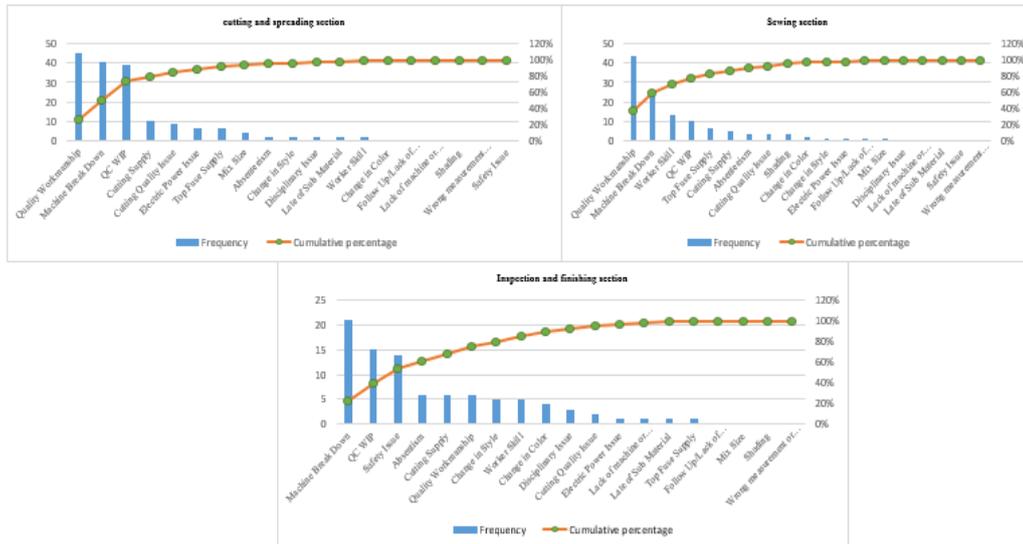


Figure 2: identified major causes of a poor quality product by 80/20 principles.

4.4 Cost of quality

Types of cost of quality

There are conformance and non-conformance costs in the garment, those conformational costs are those costs attaining quality and unavoidable costs (preventive cost) and non-conformance costs are those costs for poor quality and avoidable costs (failure cost). Then the analysed for three months (Jun, July, and August) cost of quality in the company

and detailed data are in table 7. From the analysed data total preventive and appraisal cost is 33% and the total failure cost is 67%. This shown that much amount of cost is incurred on the failure of product (internal and external) and cost which incurred for attainment of quality (preventive and appraisal) are very less and it needs take action and improvement in and out of the sector to get more profit and enhance customers satisfaction.

Table 7: types and quantity of cost of quality in the section

Preventive cost	Amount in ETB	Appraisal cost	Amount in ETB	Failure cost (internal & external)	Amount in ETB
Quality Workmanship plan	120,000	Testing material	97,000	Machine repair	2,13,000
Training and Education	18,500	Inspection for raw materials and sewing accessories	150,000	Excessive use of material	1,10,000

Detail engineering product designing	35,000	Operator	105,000	Electric Power failure	1,45,000
Customer survey	45,000	Prototype inspection	40,000	Overtime	2,34,000
Preproduction review	20,000	Safety checks	25,000	Change in Style with rework	1,25,000
Preventive maintenance	25,000	Process control	88,000	Shortage of Material	1,78,000
Process capable	15,000	Quality checker in process	95,000	Redesigning	50,000
Early product approval	20,000			Wrong measurement	25,000
				Price downgrading for a poor quality product	150,867
				Absenteeism	150,000
				Corrective maintenance	1,34,000
				Product lose cost	3,38,850
Total	298,500		600,000		1,853,717

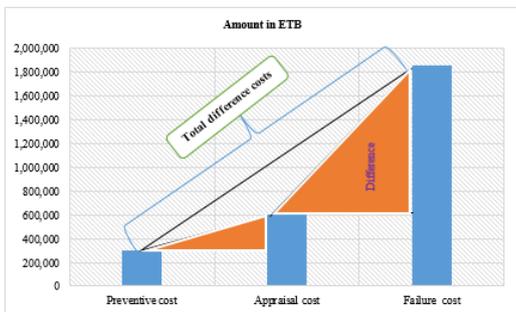


Figure 3: types and total contents of cost of quality

5. Result and discussion

5.1 Forward recommended solution.

A) Clearly identify and record the main causes of poor quality product (defective)

Identification and record the causes of poor quality products (defectives) are uses to solve the problem by giving attention to those causes. This Identification and record of the main causes are used to prioritize the cause according to their occurrence in the section and overall of the organization. In these cases cause and effect diagram is used to detail a list of the causes and through the 80%/20% principle possible to identify the vital few from trivial many causes, it means that 80% of product quality is affected due to the causes of 20% occurred in the process and then organization focuses and reduce the causes of those vital few.

B) Focus and work on prevention and appraisal costs and reduce failure cost

Both prevention and appraisal costs are unavoidable costs and it used in the attainment of quality. Effectively working on prevention and appraisal costs can reduce failure costs, because failure cost is an avoidable cost. In the case of prevention, costs, are included in the initial planning stage, and Activities are planned and designed before operations to guarantee good quality and prevent bad quality products or services and appraisal cost is the cost incurred for the check-up of quality in the organization.

Cost of Good quality (CoGQ) = Preventive cost (PC) + Appraisal Cost (AC)..... (1)

Cost of Poor Quality (CoPQ) = Internal Failure Cost (IFC) + External Failure Cost (EFC)..... (2)

Total Cost of quality (TCoQ) = Cost of Good Quality (CoGQ) + Cost of Poor Quality (CoPQ) (3)

Total Cost of quality (TCoQ) = CoGQ + CPQ..... (4)

The recommended adjustment of the cost of quality is sequential as follows:

Preventive cost (PC) > Appraisal Cost (AC) > Internal Failure Cost (IFC) > External Failure Cost (EFC)

Cost of Good Quality (CoGQ) > Cost of Poor Quality (CoPQ)

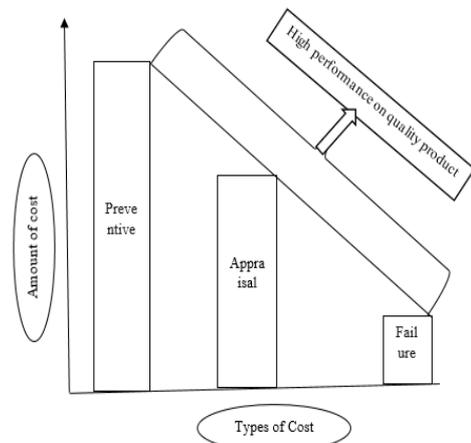


Figure 4: Recommended and adjustment of the cost of quality sequentially

C) Develop effective information about quality and transfer in and out of the organization.

About Quality is not a single employer's responsibility and it requires the participation of all stakeholders. For the implementation of quality in all production processes, it needs to share effective information training in detail about quality for all employers of the organization to increase customer satisfaction levels.

D) Receive comments from both employers and customers and give immediate feedback for a solution.

More produced poor quality products (defective) affect both an organizational level and customers. At an organizational

level, it increases the cost of poor quality (failure cost) and loss of both profit and customers. So it needs to assess and receive ideas and comments about exist status of a quality product. Also, existing customers are the backbone of the organization through buying the produced product and it needs to assess the idea and comments from customers. Assessed ideas and comments from both directions need immediate feedback and take action to solve quality-related problems.

6. Conclusion

Garment sectors play a great role in the economic development of Ethiopia country and producing quality products is the basic one for their profit and customers satisfaction. The result showed there are major causes that affect the quality of the product and affect the profit and customer satisfaction of the sector. Identified major causes by using SQC tools of cause and effect diagram and 80/20 principles are in cutting and spreading section the major causes are Quality Workmanship (26%), Machine Break

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