

MAINTAINANCE OF ELECTERICAL MACHINE VALUE CHAIN ANALYSIS



ECONOMY INFRASTRUCTURE DEVELOPMENT SECTOR

Sub Sector: urban development and
building construction

Maintenance of

Electrical machine Value
Chain

OBJECTIVE

- Generally, the study was conducted to determine the present maintenance practice in electrical machine in Bahir Dar sefere selam, Amhara region.

Specifically, this aims to:

- Discuss the present machine maintenance in Bahir Dar.
- Identify the Value Chain (AS IS) in Bahir Dar town.
- Compare the Value Chain (AS IS) to that of the benchmark.
- Identify the gaps and constraints in machine maintenance quality.
- Identify and recommend technologies that will improve technician practice & increase maintenance quality.

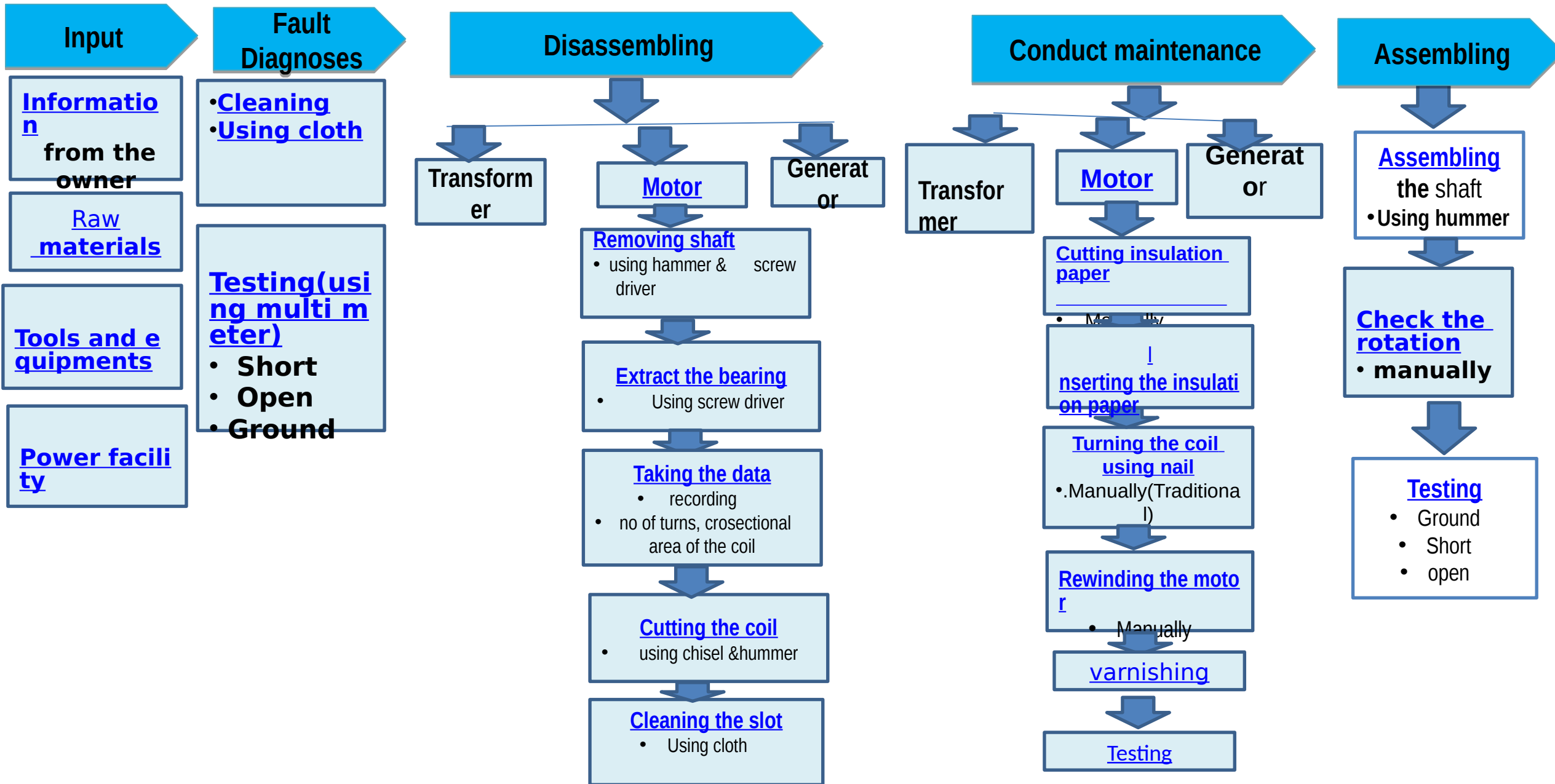
REASEANS TO BE SELECTED THE TITTLE

- To create awareness about modern electrical equipment maintenance system for enterprise.
- To increase enterprise income that he/she gets from fast maintenance system
- To change traditional way of production system into modern.
- To satisfy the demand of need servicing for the society.

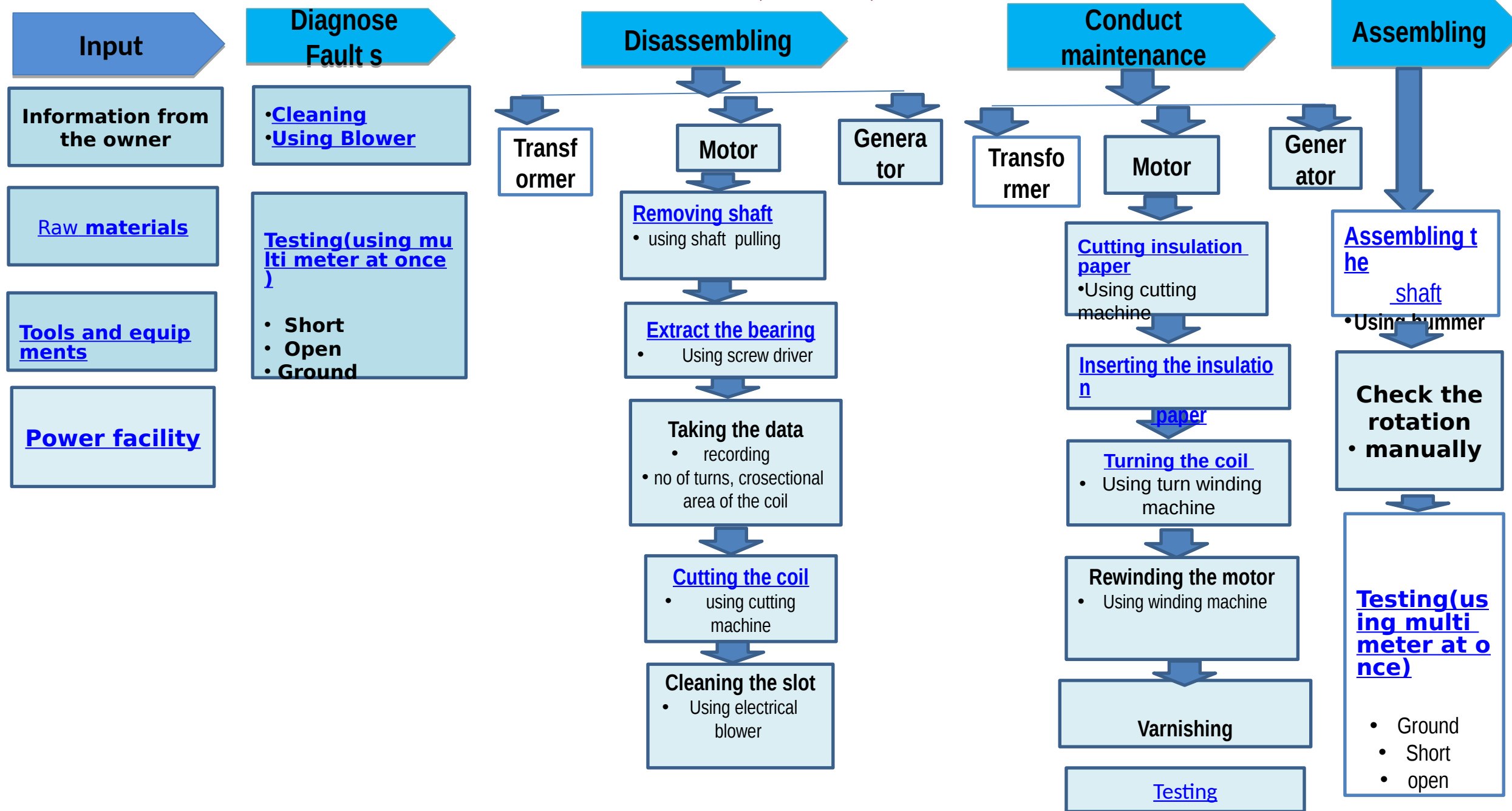
Figure and fact

- The maintenance system the enterprise that we observe in Baher Dar sefer selam (kebele 4)(Ayenew Electrical machine maintenance) is traditional because they do not apply in scientific way . due to this reason we select different developed electrical machine maintenance system as bench mark.
- We have the probability to shift our electrical machine maintenance system to modern electrical equipment maintenance system.

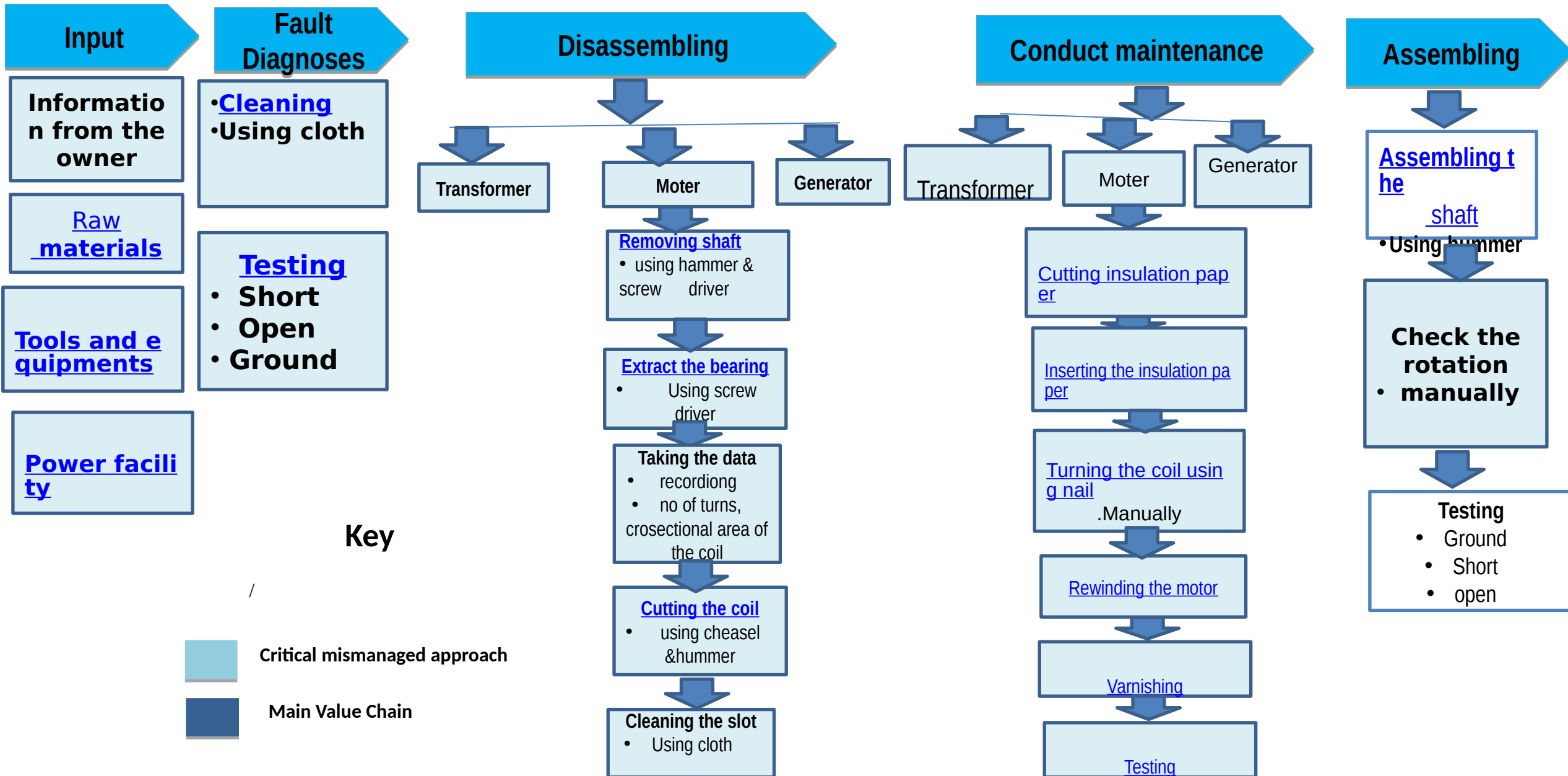
Maintenance of Electrical Machine (As is)



Maintenance of Electrical Machine (To Be)



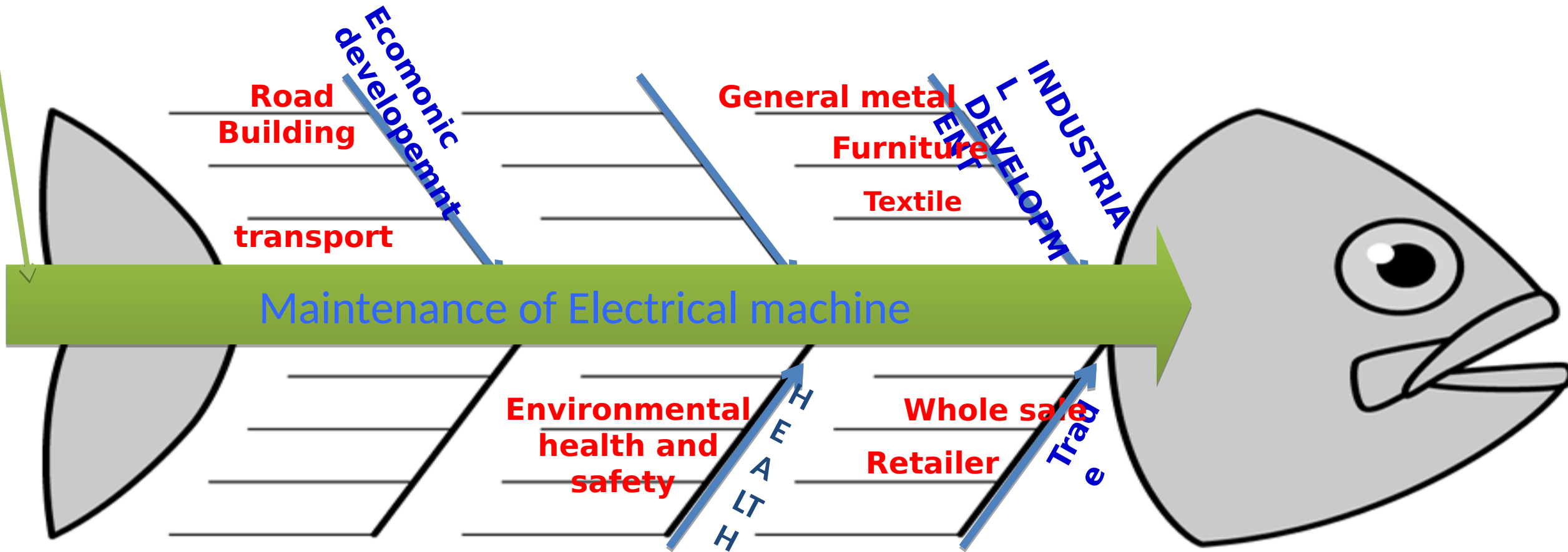
Maintenance of Electrical Machine (Gaps/Constraints)



TECHNOWARE		HUMANWARE	INFOWARE	ORGWARE
Tools	1. Automatic/modern tools used (standard)electrical screwdriver)	Units of Competencies on: Schedule tools preparation	- Latest tools speciation book - Using manual	- Check every year life span of the tools - Control entered tools in country by Authority party
MATERIAL AND EQUIPMENT	2. Latest , modern material and equipment Rewinding mahine,shaft extractor		Each measuring instruments Calibrate every year, winding machine	- Equipment test functionality - Use properly - Use winding machine
POWER FASILITY	3. Automatically Isolate devices	- The power sources near to workers - Use properly - Check/ preventive maintenance every year	- Power use Manual - Power source Operation Manual	EEPCO provide proper power
INFORMATION TAKING FROM COUSTOMER		- Information record - Revise during maintenance	- Refer manuals - Refer information take from customer (note)	
TESTING	5. Test by testing devices	•Protect component lags from broken •Insert component in to testing device properly	Go on procedures testing refer to Manual	
MEASURING	7. Spacial testing measuring instrument use	Calibrate in program	- Measurement techniques Manual - Calibration procedurally Manual	
FUNCTIONALITY	9. Multiple functionality test by single devices	Must be know functionality test steps	Use manuals	* Functionality test area

Value chain relation with other target sector

1) Economy Infrastructure



Changes and Results Come from Bench Mark

Changes that come from Bench Mark

	Indicators	Measurements	As Is	Bench Mark
1	Knowledge and Skill of the person who works on Marinating electrical equipment	Ability	Low	Very Good
2	Input availability	Amount Standard	Not complete Low slandered	Complete High standard
3	Marketing management	Standard	Good	Excellent
4	Marketing	Time taken	low	high

Results that come from Bench marking

	Outputs	Outcomes	Impact
1	Supply tools from market	Satisfy market demand	Higher Rewards
2	marketing Efficient	Increased profit	Increased Income
3	Improved output	customer satisfaction	Marketability increase

Evaluation of the Value chain Analysis

- Electrical machine maintenance is implemented everywhere in Amhara region including Bahir Dar town.
- However, the maintenance system is very traditional. As a result of these, the maintained equipment is very low as compared to the bench mark taken from different developed countries.
- The facts contribute for these gap are the following.
 - In adequate technological inputs
 - Improper maintenance speed
 - Improper maintenance quality

Planning

- Select proper maintenance shop area.
- Acquire new technologies and skill.
- Acquire technologies for maintaining different electrical machine maintenance .
- Check the life span of electrical materials properly and regularly.
- Acquire knowledge and skill for electrical testing instruments.
- Constructing recommended design full facility maintenance shop

Identify technology



Coil winding machine