

# **Ethiopian Industrial Development Roadmap (2013-2025)**

**FDRE Ministry of Industry**

**September 2013**

**Addis Ababa**

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## Acronyms

<b>ASTU</b>	Adama Science and Technology University
<b>CSA</b>	Central Statistical Authority
<b>EFY</b>	Ethiopian Fiscal Year
<b>ECBP</b>	Engineering Capacity Building Program
<b>EC</b>	Ethiopian Calendar
<b>EEPA</b>	Ethiopian Electric Power Authority
<b>ERCA</b>	Ethiopian Revenue and Customs Authority
<b>ETB</b>	Ethiopian Birr
<b>FDI</b>	Foreign Direct Investment
<b>FEMSEDA</b>	Federal Medium and Small Enterprise Development Agency
<b>FGD</b>	Focus Group Discussion
<b>FIE</b>	Foreign Invested Enterprise
<b>GDP</b>	Gross Domestic Product
<b>GTP</b>	Growth and Transformation Plan
<b>GVP</b>	Gross Value of Production
<b>HEIs</b>	Higher Education institutions
<b>HR</b>	Human Resource
<b>HRD</b>	Human Resource Development
<b>ICT</b>	Information Communication Technology
<b>ID</b>	Industrial Development
<b>IDSP</b>	Industrial Development Strategic Plan
<b>IPAP</b>	Industrial Policy Action Plan
<b>ISSP</b>	Industrial Strategy Study Process
<b>LIDI</b>	Leather Industry Development Institute
<b>MDGs</b>	Millennium Development Goals
<b>METEC</b>	Metals and Engineering Corporation
<b>MFI</b>	Micro Finance Institutions
<b>MIDI</b>	Metal Industry Development Institute
<b>MLE</b>	Medium and Large Enterprises
<b>MoA</b>	Ministry of Agriculture
<b>MoCS</b>	Ministry of Civil Service
<b>MoE</b>	Ministry of Education
<b>MOFA</b>	Ministry of Foreign Affairs
<b>MoFED</b>	Ministry of Finance And Economic Development
<b>MOI</b>	Ministry of Industry
<b>MoM</b>	Ministry of Mining
<b>MoST</b>	Ministry of Science and Technology
<b>MoT</b>	Ministry of Trade
<b>MoWE</b>	Ministry of Water and Energy
<b>MLEs</b>	Medium and Large Enterprises
<b>NIPF</b>	National Industrial Plan Framework

<b>PASDEP</b>	Plan for Accelerated Sustainable Development and Eradicating Poverty
<b>PPP</b>	Public Private Partnership
<b>PPPE</b>	Performance of Public Private Enterprise
<b>R&amp;D</b>	Research & Development
<b>R&amp;D</b>	Research and Development
<b>REMSEDA</b>	Regional Medium and Small Enterprise Development Agency
<b>SDPRP</b>	Sustainable Development and Poverty Reduction Program
<b>SLOT</b>	Strength, Limitation, Opportunity and Threats
<b>SMEs</b>	Small and Micro Enterprises
<b>SOC</b>	Social Overhead Capital
<b>SOEs</b>	State Owned Enterprises
<b>STII</b>	Science Technology and Innovation Institute
<b>TIDI</b>	Textile Industry Development Institute
<b>TVET</b>	Technical and Vocational Education and Training

## **Executive Summary**

This study is conducted to provide industry development roadmap, a plan for its implementation and the necessary institutional set-up and governance framework that supports the industrialization and transformation process of the industry sector leading to the achievement of the national vision of becoming one of the middle income countries by 2025.

The document recognizes that Ethiopia's present economic dependence is primarily on an agricultural-based economy and underlines the fact that the country is also gifted with potentials of natural resources and markets that can be utilized through value addition for the benefit of the whole economy.

The study has also presented the status quo of the industry sector and identified major gaps and subsequently has tried to propose the way forward how to fill these gaps. Finally, it outlines future growth of the prioritized industrial sector targeting the country's vision of reaching to the middle income country level by 2025.

The overall objective of the study is to develop a document that shows the growth direction of the Ethiopian industrial sector, the strategic plan that provides strategies to realize country's vision of becoming one of middle income countries by the year 2025, and the necessary institutional setup and governance framework to speed up the pace of the industrial transformation process.

The study has followed standard study methods. The major data collection methods and tools include extensive document analysis, in-depth interviews, focus group discussions, workshops, and industrial zone visits (observation). The study has finally produced three deliverables as a final output of the study namely; an Industrial Development Roadmap, an Industrial Development Strategic Plan Document, and an Institutional Set-up and Governance Framework.

The objective of the Industrial development Roadmap is to show the growth direction of the industrial sector to realize country's vision of becoming one of the middle income countries by the year 2025. This roadmap believed to significantly contribute to the achievement of Ethiopia's vision and to sustain rapid and broad based economic growth. Thus, the overall National Development Goal envisaged

*in the plan is to fully eradicate absolute poverty and build a middle income country with full provision of basic needs.*

Comparison of the Ethiopian Economy with Model Middle Income Country (MMIC) in terms of key Socio-economic and Human Development Indicators shows a clear gap that has to be addressed within the coming 13 years if the country has to realize a vision of becoming a middle income country by the year 2025.

The share of the Ethiopia industry sector to GDP is lagging behind almost by 20 points from that of the Model Middle Income Country (MMIC). This implies that the share of the industry sector should have to increase by more than two folds to reach the MMIC target by the year 2025. The situation is not different in the case of the Ethiopian manufacturing sector which currently (2012) accounts for only 4% of GDP as compared to 17% of GDP of the MMIC. The deficit of the manufacturing sector is around 13% from that of the MMIC.

To overcome this deficit, distortion in the manufacturing sector has to be introduced by mobilizing available resource and allocating it to the sector so that the sector will ultimately achieve the targeted 17 % share of GDP by the year 2025. Such intervention is necessary to attain the vision of becoming one of the middle income countries by the year 2025.

To bridge the gap identified, selected economic growth targets (both macro as well as sectoral) has been set. The economic growth targets are estimated with three different scenarios namely; a GTP high case scenario, declining GDP growth rate scenario, and the GTP base case scenario.

The GTP high case scenario assumes that the GDP will annually grow by an average growth rate of 14.9 %. Under this scenario PCI is projected to reach 746, 1451, and 2877 USD by the year 2015, 2020, and 2025 respectively. Varying GDP growth rate scenario assumes relatively higher growth rate at the beginning of the planning periods which is the characteristics of small economy and gradually declining as the size of the economy gets relatively larger and larger until the final year of the planning period. Under this scenario the PCI is estimated to be 671.7, 970.6, and 1380.1 USD by the year 2015, 2020, 2025 respectively. The study



selected the GTP base case scenario which assumes that the GDP grows by an average of 11.2 % annually. Under this scenario, PCI assumed to reach 676.5, 1116.6, and 1880.2 USD by the year 2015, 2020, and 2025. Based on this scenario selected national growth targets are worked out.

Accordingly, in 2015 the value of Gross Domestic Product (GDP) is targeted to be 59.85 billion USD, 110.68 billion USD by the year 2020 and finally targeted to reach to the level of 206.69 billion USD by the end of year 2025. The share of the industry sector in billion USD is also estimated in similar fashion. The industry sector targeted to contribute about 11.2, 24.8, and 56.5 billion USD by 2015, 2020 and 2025 respectively. Moreover, the manufacturing sector which is one of the subsectors within the industry sector is gradually expected to take the Lion-share in the future and will contribute to GDP 4.2 billion USD by the year 2015. However, the shock that will be introduced during the second and third phase assumed to induce the sector to jump up to 13.3 billion USD by 2020; and finally to 35.2 billion USD by the year 2025.

Currently (2012), the manufacturing sector accounts for 33 % of the industry sector. This share is targeted to increase to 37% by the year 2015, and finally attains 67% of the total industry sector by the year 2025.

Following, upgrading of the capacity of existing priority sectors coupled with their diversification in the coming 13 years along with the coming of new sectors, the contribution of the sector to the economy will increase substantially. The share of the manufacturing sector to the GDP is targeted to reach ultimately 17 % by the end of 2025. To ensure faster and sustained development of the industrial sector, favorable conditions shall be created for industry to play a key role in the economy.

To bring about manufacturing sector transformation five development directions are envisaged. These are upgrading and capacity enhancement of major priority industries, diversification of manufacturing sector to new sectors, enterprise cultivation, private and public investment, and Industrial zone development. Furthermore , the four strategic pillars on which the Ethiopian industry development depend are sustaining the manufacturing sector's contribution to industry and economic growth , ensuring balanced regional industrial development , integrating the Ethiopian industries into regional and global market

and development , and pursuing both Export-Led and Import Substitution Industrialization.

The industrial development target envisaged above are planned to be attained in three developmental phases.

Phase one is a phase where effort will be made to enhance the productive capacity of the existing priority industries. The highest priority will also be given to the development of SMEs. The industrial targets set by GTP are the key targets to be achieved in this planning period. The significant percent of the manufacturing sector will remain in the light industries; however, their percentage share will gradually reduce. In this phase the share of the manufacturing sector to GDP expected to reach 7% by the end of year 2015.

Phase two is a phase where diversification in the existing priority industry takes place along with emerging of new key industries. In this phase, three new types of industries (ICT and Electronics, Petro-chemical industries, Bio-technology, and Packaging industries) are planned to emerge, whereas capacity building to develop new more industries like Knowledge-based industries and Nano-Technology will be undertaken in this second phases. In this planning phase, distortion will be introduced to achieve rapid growth of the manufacturing sector. Along the building up of heavy metal and chemical industries; due continuous attention will continue to be given to major industries which are identified as priority sectors in GTP. The light industries will remain the largest component of the manufacturing sector; however, the percentage share of heavy metal and chemical industries will gradually increase. At the end of this phase, the share of the manufacturing sector to the GDP is targeted to reach 12%.

In phase three, the newly built heavy metal and chemical industries will further expand and build their capacity and high-tech industries will be built up. Tapping potential to develop Knowledge-based industries and Nano-Technology will take place so that such industries will come up in the next stage of industrial development after 2025. The significant percent of the manufacturing sector will still remain the light industries in this phase as well; however the percentage share of heavy metal and chemical industries and high tech industries will gradually increase up to the vision period 2025. By the end of 2025, the industry shows significant structural change and the structure of the sector will consist of more

than 50% of Medium & High-tech Industry. The share of the manufacturing sector to GDP will finally reach 17%.

The sector's contribution to the economy in terms of foreign currency earning will also improve from time to time. Accordingly, the foreign currency earning is targeted to be 2.6 billion USD by the end of year 2015. During the second phase of the plan period, it is expected to grow nearly by three folds (7.32 Billion USD) and finally by eight folds (16.3bil USD) by the end of the third planning phase, that is, by the end of 2025.

The sector is also expected to significantly contribute to the new job creation effort of the country. During the year 2012 it has created 204 thousands new job. From this level, the new job that will be created by the end of 2015 will be increased to 236 thousands and to 377 thousands by the year 2020 and finally by the end of 2025 to reach to the level of 780 thousands. This is an increase nearly by 330% as compared to year 2015. During the planning period the enterprise particularly SMEs shall be cultivated and gradually promoted to SME's. The targeted number of SMEs cultivated is 25, 40, and 65 thousands by the year 2015, 2020, and 2025 respectively.

The strategies, programs and detailed implementation plan how to achieve the targets is presented in the SPD. The necessary institutional set up needed to support the industrialization process is presented in a separate document called Institutional Setup and Governance Framework.

# **1. Part I -Background**

## **1.1 Purpose, Objective, Process, and Methods of the Study**

### **1.1.1 Purpose of the Study**

This study has been conducted to provide industry development roadmap, a plan for its implementation and the necessary institutional set-up that supports and leads the industrialization and transformation process of the Ethiopian industry sector leading to the achievement of the national vision of becoming one of the middle income countries by 2025.

The study recognizes that Ethiopia's present economic dependence is primarily on an agricultural-based economy. It also underscores the fact that the country is also gifted with both tapped and untapped potentials of natural resources and markets that can be addressed through value addition for the benefit of the whole country. It also takes into consideration that Ethiopia has a fairly limited skilled human and financial resource for the transformation of the industry sector to achieve the ultimate goal of becoming a middle income country by the year 2025. It is in this background that the study compiles to address critical issues grappling with the industrial sector to suggest prospects, strategies that would provide the sector with meaningful opportunities to realize its full potential of achieving a broad-based manufacturing capability that can efficiently support and lead the national economy.

To this end, the study provides a broader engagement framework direction and strategies within which all stakeholders, including the public and private sector; civil society and development partners will contribute and play their respective roles in industrial development.

On top of these, the study shows what the industry sector should look like in a middle income country by taking into account the industrial structure of model middle income countries in the context of Ethiopian industry. It also presents the status quo of the manufacturing sector (with regards to industry structure, performance, production capacity, efficiency, effectiveness, market coverage, and industrial competitiveness, etc), and opportunities and challenges for the industrial

development. The study in its different parts tries to clearly show the major gap identified and proposes the way forward to fill these gaps.

Finally, it outlines future growth of the prioritized industrial sector targeting the country's vision of reaching the middle income country level by 2025.

### **1.1.2 Objectives of the Study**

The general objective of the study is to develop a document that shows the growth direction of the Ethiopian industrial sector, the strategic plan that provides strategies to realize country's vision of becoming one of middle income countries by the year 2025, and the necessary institutional setup and governance system to undertake the industrial transformation process. The specific objectives of the study are:-

1. To develop the road map for transforming the manufacturing industry and enable the achievement of the national vision 2025;
2. To develop the strategic plan document that clearly depicts the implementation of the industrial development roadmap; and
3. To develop the institutional arrangement and the governance system needed to support and lead the industrial transformation process in the Ethiopian economy.

### **1.1.3 Process of the Study**

The idea of developing an industrial road map for Ethiopian industry was generated by the discussion with the former ECBP and then with the Ministry of Industry. Following these continual discussions, proposal was prepared and presented officially by ASTU to concerned stakeholders on official inception workshop for comments and suggestions on the idea of the roadmap as well as the process of developing the roadmap. Considering the feedback that were given on the inception workshop, the overall study organization and process was revisited and the development of the roadmap started.

The team of the study is mainly organized from different groups including the core study team having the Korean team, ASTU team as sub team and sector specific experts from the Ministry of Industry. The overall study has been conducted through collaboration of these teams and commented by the technical committee which is organized or established by Ministry of Industry that includes experts

from various universities, professionals, sectors, ministries and well recognized persons.

Finally, by incorporating the comments from the technical committee the document is sent to the steering committee organized by ministry of Industry to include higher government officials for further comments and ideas in future strategic guidance.

#### **1.1.4 Methods Used**

The study has followed standard study methods. The major data collection methods and tools include document analysis, in-depth interviews, focus group discussions, workshops, industrial visits and lessons learned from benchmarked countries.

**Document Analysis:** the study has benefited from information and data obtained from the secondary sources. Different relevant policies, strategies, and programs of national and international documents were identified and thoroughly reviewed and accordingly used to enrich the study documents.

**In-Depth Interview:** In-depth interview was conducted with carefully selected strategic leaders and stakeholders including different ministries, agencies, corporations, chamber of commerce and sector associations, professional associations, foreign business forums, experienced experts and professionals from each sector and other relevant stakeholders including the private sector. Sixty one in-depth interviews were conducted out of which 44 of them were at the sector level and the remaining 17 of them were at the macro level with pertinent Ministers, State Ministers, Directors, and other pertinent high level officials. (Refer annex 3)

**Focus Group Discussion:** Focus Group Discussion was held with selected participants who had strategic influence and important contribution to the development of the road map and other related documents. It was used as a primary data collection method about the current business environment and status of the manufacturing Industry. The participants on the focus group discussions include Core Sectoral Directorates and experts in Ministry of industry, public and private sector actors in industrial development, Industry owners, managers, technical staffs from each sector. A total of 14 Focus Group Discussions were

conducted. In the Focus Group Discussions 114 individuals have actively participated in the discussion forum (refer annex 3).

**Workshop:** workshops have been organized by the study team to get feedback from concerned stakeholders and the comments and feedbacks obtained during these different workshops have been used to enrich the study. A total of three workshops have been conducted. One of the workshops was with the Ethiopian public higher education representatives with the objective of creating awareness about the current study. From this workshop valuable inputs have been obtained for the benefit of the study. The remaining workshops were organized to get feedback from relevant stakeholders participants of which were representatives from different Ministries, MOI institutes, directorates, and private sector representatives.

**Observations and Visit:** Valuable information has been collected through personal observation of different industries and industrial zone/complex visits in two selected countries. The study team members have conducted a ten days exposure and experience sharing visit to china industry provinces. This visit enabled the study team members to get insight on the development of industry zones and its governance system along with related different support service packages needed to be established in the development zone. Selected members of the steady team have also conducted a seven day working and experience sharing visit to South Korea and used the lesson learned to further enrich the study.

**Lessons Learned From International Best Practices:** The Roadmaps, Strategies, industrial policies, and Institutional Setup for accelerated industrial development of other fast developing economies were also reviewed to draw important lessons and adapt to the Ethiopian industrial scenario.

### **1.1.5 Deliverables of the Study**

As an output of the study three deliverables are produced. These are;

1. Industrial Development Roadmap,
2. Industrial Development Strategic Plan, and
3. Industrial Development Institutional Set-up.

These deliverables are presented in three different documents. This document presents the first deliverable, the Ethiopian Industry Development Roadmap.

## **1.2 Over View of Industrial Growth Achievements and Challenges under PASDEP**

At the beginning of the PASDEP i.e. at the end of Sustainable Development and Poverty Reduction Program (SDPRP); the share of the industrial sector including manufacturing, construction, hydropower, and mining, has not exceeded 14% of GDP on average; of which the manufacturing sub-sector (cottage industry, small and micro enterprises and medium and large scale manufacturing industries) accounts for 5.5% of GDP on average. The average share of manufactured products to total exports does not exceed 5% of GDP on average as well.

The main focus of the programs related to industry sector under PASDEP (2005/6 - 2010) was on strengthening of the small scale manufacturing enterprises as they are the foundation for the establishment and intensification of medium and large-scale industries. The small scale manufacturing also had opened the opportunity for employment for those who had not engaged in other sectors in addition to serving as alternative/additional income source for those involved in agriculture.

The country's achievements in the area of industrial policy support during the PASDEP period are:

- Policy supports were designed and implemented
- Huge Infrastructure development projects were implemented
- Six Priority sectors are selected and are given top priorities in all aspects
- Export steering committee is established to monitor and evaluate the performance of the priority sectors and to give policy directions
- Industrial policy toolkit like; benchmarking, business match making, twining, etc. are designed
- High-level TVET and Science and Technology University programs are designed and implementation to address HR requirement is started.
- Development centers and training institutes like, LIDI, TIDI, MIDI, and MDTI are established



During the PASDEP period, even though a substantial increment of GDP share of the total industry sector was registered, there was no significant growth in the manufacturing industry sector, which had motivated to do more to increase the share of industrial sector contribution in GDP. The major challenges encountered in the industry sector during PASDEP period include:

- Availability of raw material
- Inadequate human resource capability, such as technical and managerial skills,
- Shortage of foreign exchange to import important raw materials, spare parts and other inputs
- Electrical power supply disruption;
- Constraints of access to efficient and effective credit and other services.

Based on the achievements marked in policy capability building and the lesson learned from its limitations during the PASDEP period, the Ethiopian Government had entered to the next five year Growth and Transformation Plan where the industry contribution to the national economy will be enhanced and the ground for its leading role will be established.

### **1.3 Industrial Growth Achievement in the First Two Years of the GTP**

The industrial sector is one of the envisioned sectors expected to play a great role in GDP growth, job creation, foreign exchange earnings, and SMEs development in the GTP period. Particular emphasis is given to the promotion of micro and small enterprises as well as supporting the development of medium and large scale industries. Industry zones development and Public Enterprises Management and Privatization are also the focus of GTP in industry development of the country. These Industrial Development strategic directions for which policy support was provided focused on industries which are labor intensive and having wide market, broad linkages with the rest of the economy; use agricultural products as input, export-oriented and import substituting, and industries that can contribute for faster technology transfer.

In light with the aforementioned directions, several activities were carried out in the last two years (2003 EC and 2004 EC (2011 and 2012 GC)) of GTP period. The performance of the sector during these fiscal years under review is presented as follows.

Table 1: Growth Rate of Real GDP (2009/10-2012)

Sector	Base year (2009/2010)	2010/11 Fiscal year Plan	2010/2011 Fiscal year Performance	2011/12 Fiscal year Plan	2011/12 Fiscal year Performance
Overall real GDP	10.6	11	11.4	11.4	8.5
Agriculture and allied activities	7.6	8.5	9	8.5	4.9
Industry Sector	10.8	14	15	16	13.6
Service Sector	13.2	11	12.5	11.1	11

Source: MOFED (2012)

During the GTP period, it is assumed that the agricultural sector will continue to be the major driver of economic growth. However, in 2011/12 its performance was not as expected. Rather it has fallen to 4.9 % from the planned 8.5% growth rate. The decrease in the growth rate of agricultural sector is the major source of decline in the GDP growth rate to 8.5 % in year 2011/12 (2004 E.C)

Although Ethiopia's industrial base is still relatively small, the growth prospects of this sector are significant in the last two years GTP period, as new industries and projects are planned in such areas including steel, chemicals and pharmaceuticals. A number of factories are currently under construction. This momentum is continuing given the priority accorded to industrialization, both for export promotion and import substitution, in the government's five-year GTP.

During 2010/11, real GDP growth rate stood at 11.4 percent, which is well above the target and previous year performance by 0.4 percent and 0.8 percent respectively. In 2011/12 the GDP also continues to grow at 8.5%. This rapid growth rate of real GDP reveals the availability of far-sighted macro economy and sectoral policies and indicates that Ethiopia is in a proper track to achieve the targets set in the GTP. The growth rates of the GDP by major classification during the period under review indicates that the industry sectors has registered high growth rate of 15 and 13.7 percent, in 2010/11 and 2011/12 respectively. Accordingly, the share of manufacturing to real GDP averaged 4 percent in 2011/12.

Table 2: Distribution of GDP by Major Sectors

Sector	2009/2010 (Base year)	2010/2011	2011/12
Agriculture Sector (%)	42	45.6	44
Industry Sector (%)	13	10.6	11.1
Service Sector (%)	45	44.5	45.6
Total GDP	100	100.7	100.7

Source: MOFED (2012)

When compared in terms of the share of GDP, the contribution of agriculture declined from 45.6 percent in 2010/11 to 44 percent in 2011/12 while the share of the industry increased from 10.6 percent in 2010/11 to 11.1 percent in 2011/12. During the same fiscal years, the share of services sector increased from 44.5 percent in 2010/10 to 45.6 percent in 2011/12. The figure below shows the trend in sectors contribution to the GDP during the first two GTP periods.

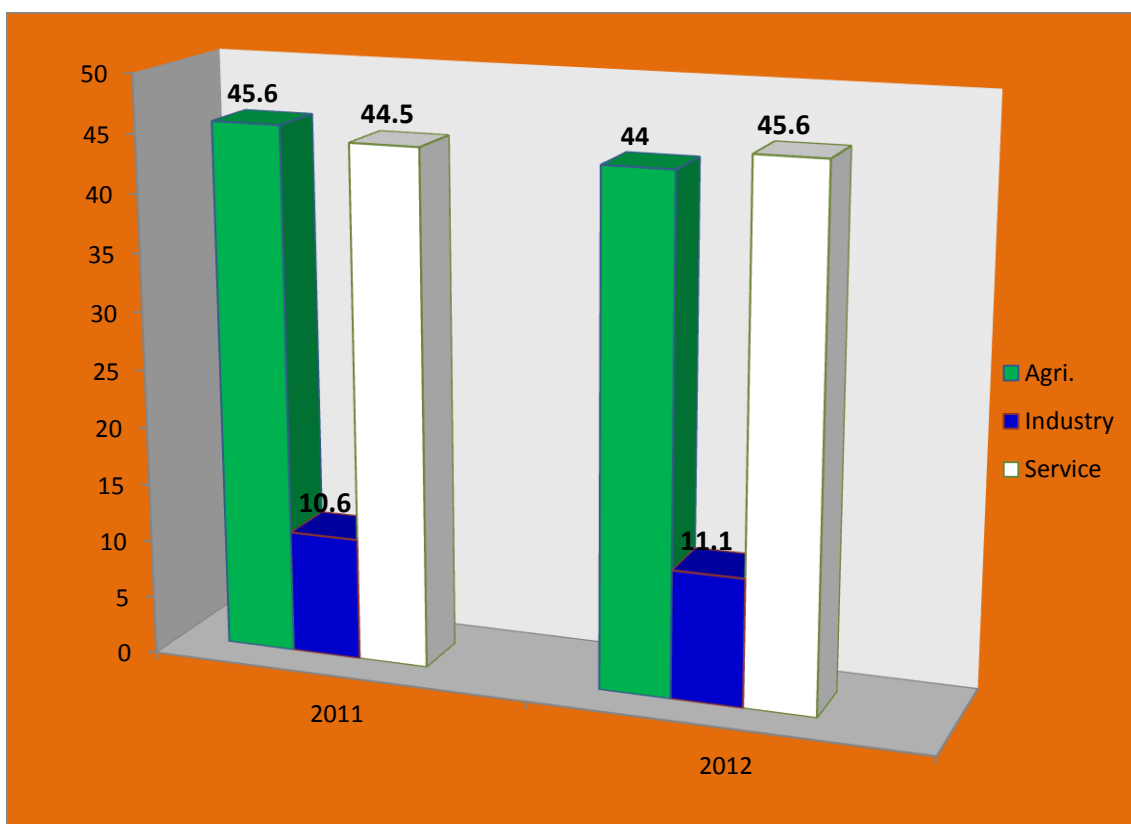


Figure 1: Share of Major Sectors to GDP during the First Two Years of GTP Period

### 1.3.1 Performance of Small and Micro Enterprises (SMEs)

The GTP envisions ensuring rapidly and sustained development of the industrial sector and enabling the sector to gradually play a key role in the economy. To this end, particular emphasis is given to the promotion of micro and small enterprises (MSEs) as well as supporting the development of medium and large scale industries.

The MSEs enterprises are booming in different parts of the country and expected to produce industrial products which are competitive in domestic market and started to play crucial role in the industrial development. These enterprises created job opportunity for 1.15 million unemployed youths and women, which reduced urban unemployment rate from 18 percent in 2010/11 to 17.2 in 2011/12 fiscal year.

The government allotted 1.015 Billion birr in order to strengthen the capacity of SMEs and to resolve their financial constraints. Trainings were also offered for SMEs members in different thematic areas like business management, entrepreneurship, technical and vocational training areas. Moreover, 5000 hectare of production area, 1757 shades and 46 buildings were constructed and offered for SMEs.

Table 3: Summary of Achievements in SME Development

<b>Indicators</b>	<b>2010/2011</b>	<b>2011/2012</b>
Training	453,511 (employees)	15,106 (Trainers)
Land(hectare)	452	5000
Shades	1463	1757
Building	71	46
Loan(million Birr)	983	1,015
Job created	541,883	1,148,000
Women share of jobs (%)	53	40
Urban unemployment (%)	18	17.5

Source: GTP Performance report 2010/11 and draft 2011/2012 (MoFED)

### 1.3.2 Manufacturing Sector Performance

In the last two years of GTP, the government strived to enable the Medium and large scale manufacturing industrial sector to play its role in assuring rapid and sustainable technological development so as to make the economy more competent, resolve the shortage of foreign currency and support the progress of SMEs and agricultural sector.

**Table 4:** Export Performance of Industrial Sector (2011/12) / Million –USD/

S.N	Subsector	2010/11 performance	2011/12		Relative performance (%)	
			Plan	Performance	2010/11	2011/12
					Plan	Performance
1	Textile and Garment	62.22	171.37	84.63	73.1	49.4
2	Leather and Leather Products	104.34	206	112.06	57.8	54.4
3	Agro-processing	34.45	82	51.75	42.8	63
4	Chemical and Pharmaceuticals	6.91	11.92	7.01	96	58.7
Total		207.9	471.3	255.4	58.8	54.2

Source: MOI– 2011/12

In 2011/2012, it was planned to generate a total of 471.3 million USD in foreign exchange earnings from the manufacturing industry; but the total amount generated was only 255.4 million USD during the fiscal year indicating a 54.2 percent achievement of the target and annual growth rate of 22.9 as compared to the 2010/11 fiscal year.

Further disaggregation of the performance of the sub-sector indicated that textile and garment industries attained 49.4 percent of its plan of 2011/12 while in 2010/11 the achievement of the plan was 73 %. Similarly the relative performance of other subsectors as compared to the plan shows declining trend. The Leather and leather products, agro – processing, and chemicals and pharmaceutical industries performance were 54.4 percent, 63 percent and 58.7 respectively

In absolute terms, the foreign exchange earnings 2011/2012 seem better than that of 2010/2011. Nonetheless, the aggregate and sub-sectoral performances all fall

short of the target for the fiscal year. This shows that the manufacturing sector performance as a whole needs special attention and commitment to overcome the backlog of the past two years' performance and to meet the ultimate goal of the Manufacturing Sector (17 %) by 2025.

As envisaged by the GTP, the role of the sub sector should be significant enough to bring about structural transformation in the economy and to accelerate the process of industrial development. Thus, it is critical to drastically improve the performance of the manufacturing industry in the near future and increase the GDP share of manufacturing sector from the current 4% to 17% by the year 2025.

In this regard, it is crucial and urgent to take extraordinary measures in the structural problems of technological capability, additional investment, market development, input and raw materials supply, skill upgrading of both the critical mass and the industrial leaders and appropriate institutional arrangement are fundamentally addressed in order to achieve the sectors GTP targets.

During the past two years GTP implementation period, in order to assure the role that the industrial sector is expected to play, a number of capacity building activities were undertaken and institutional arrangements were set; such as a cabinet ministerial office responsible for manufacturing industry was established following the reorganization of government implementing offices in 2010/2011. Institutional capacity building, benchmarking, twinning and Kaizen programs were implemented in the year 2011/12. Four new and four expansion projects in textile, eight projects in leather investment, ten agro-processing projects and three projects in pharmaceuticals and chemical were supported and supervised.

Corporate governance system was put in place to support, monitor and evaluate the performances of public enterprises management and privatization. In addition, directives and regulations are developed and follow-up of their implementation has been strengthened. Improvements in the public enterprises are manifested in capacity utilization, sales revenue and profit and export performance of the enterprises as depicted in the table 5.

Table 5: Performance of Public Enterprises

SN.	Major activities	Base year (2010/11)	2011/12 Fiscal year		Difference from base year in percent	
			Planned	Actual	2011/12 plan	2010/11
1.	Value added amount (billion ETB)	3.2	3.97	2.4	60.5	(25)
2.	Capacity utilization (percentage)	78.0	98.0	82	83.7	5
3.	Profitability before tax(billion ETB)	2.6	4.06	2.0	49.0	(23)
4.	Export earnings (Million USD)	72.4	76.2	61.5	80.7	(15)

Source: MoFED-2012

The GTP also emphasizes the establishment of industrial zones in different parts of the country. Accordingly, the industrial zone development plan was designed and being implemented. Infrastructures are built in order to create market linkages. The construction of the Eastern Industrial Zone at Dukem is about to be completed, while the Ethio-Turkish Industrial Zone and the Kombolcha textile cluster are a bit lagged due to the absence of preparation from the investors' side. Efforts are under way to speed up the implementation through close supervision and support. Addis Ababa, Kombolcha, Dire Dawa and Hawassa are the four main selected towns for industrial development in which 3735 hectares of land is already reserved by their respective city administrations for the construction of industrial zones.

Limited capacity of government implementing bodies and coordination of support-providing government institutions, shortage of industrial inputs, and limited initiation of private investors to involve in the manufacturing sector, sluggish involvement in practical investment are among the challenges in the past two years. Moreover, low levels of technological and managerial capacity of factories, productivity and technological capacity limitation, inefficient logistic system, inability to cope up with fierce global competition in terms of quality and price was also the persistent challenges of the sector.

## **2. Part II - Objective, Philosophy, and Pillars of Industrial Development**

### **2.1 Objectives of the Ethiopian Industrial Development Roadmap**

The general objective of the road map is to show the growth direction of the industrial sector to realize country's vision of becoming one of the middle income countries by the year 2025 and has the following specific objectives.

- To attain industrial structural transformation in the economy
- To deepen and diversify the industry base by enhancing the manufacturing capacity
- To ensure the contribution of the manufacturing sector sustaining 10.3 % GDP average growth of the economy
- Set industrial development direction to enhance the local and foreign investment

### **2.2 Philosophy and Pillars of Ethiopian Industrial Development**

#### **2.2.1 Industrial Development Philosophy**

The Industrial Development Strategy of Ethiopia clearly formulated the following Industrial Development Philosophy where the emphasis is given to the mutual role of Government and private sector in the industrial development process.

- System of free market economy with active government involvement and support
- Government sets strategic and development directions for the whole economy, and ensures the achievements of socio-economic goals.
- Private sector is free to operate and will be given appropriate policy, institutional and infrastructural support

#### **2.2.2 Industrial Development Key pillars**

The following strategic pillars have been outlined which are categorized in broad continuums as development Initiatives; promotion of growth areas and enhancing the enabling environment which will root to in four strategic pillars.



### **i. Sustaining the manufacturing sector's Contribution to industry and economic growth**

The manufacturing sector will continue to be one of a major source of growth. The priority industry sectors which are working as export oriented and import substitution will be supported to enhance their productivity, upgrading and diversifying their products and markets. Due attention will be given for job creation and environmental sustainability during the industrial development process. The shift towards higher value-added products and activities, and appropriate technology and capital-intensive activities will be accelerated, through encouraging greater investments in these areas. The policy and strategic supports will be provided to achieve the industrial transformation in the year 2025 where the industry share to national economy will be significant and to the level of middle income countries.

### **ii. Ensuring balanced regional industrial development**

To provide a coordinated support for the growth of industrial development the strong institutional linkage between the federal government and regional states will be enhanced. The industrial development will be supported to un-tap the resources across the regions and make them beneficial of the development. The growth which will be generated by industrial development will provide opportunities for further alleviation of poverty and raising the incomes of the lower income groups through employment, as well as contributing towards more balanced regional growth.

Adequate Regional support will be provided to enhance the development of small and medium enterprises SMEs, as the main catalyst of industrial growth of the nation. Expansion of enterprises along different regions will be facilitated with minimum effort of the industrialists.

### **iii. Integrating the Ethiopian industries into regional and global market and development arena**

The national industries will be assisted and supported to take advantage of opportunities, arising from the growing trend towards economic integration at the regional and global levels. The regional and international business agreements will

be tuned to enhance the competitiveness of local industries in regional and global markets.

Companies will be supported to focus on their core competencies and strengthen to be more competitive in the regional and global markets. Collaborations between SMEs and MLEs and Ethiopian industries with bench marked industries operating outside Ethiopia will be institutionally facilitated. The promotion of FDI will help the local industrialists to gain market access, technology transfer and improve their competitiveness. All round support will be provided to promote champion products in the globe and to bring the country as the regional hub for selected products and services.

#### **iv. Pursuing both export-led and import substitution industrialization**

To attain rapid industrial development, industry should produce, following the direction led by agriculture, inputs and goods suitable for agriculture, market agricultural products after adding value to them. By ensuring large foreign exchange earnings by exporting more products in global markets, we can also ensure rapid industrial development by importing the production equipment that we need.

Since large and reliable markets for value added agricultural products are available abroad, the pace and path of our industrial growth is determined by successfully exporting to these foreign markets. The capability for competitiveness in the world market will be transferred in one way or another to other sectors by strengthening export industries.

Currently, the country's import outweighs the export by a huge amount. It is evident that the gap between the two is increasingly widening from time to time in favor of imports. Accordingly, the focus will be given to strategic import substitution areas and invest heavily to address the trade deficit issue, and cross cutting support will be given to the industries who are working on import substitutions. The productivity and competitiveness of industries on import substitution direction will be enhanced. Broadening of the input base of local industries will be supported so that the export oriented industries also work by minimizing their dependence on imported industrial inputs.

### **3. Part III - National Development Visions, Goals, and Targets**

#### **National Vision**

##### **Ethiopia's Vision 2025**

*“.....to become a country where democratic rule, good-governance and social justice reign up on the involvement and free will of its peoples, and once extricating itself from poverty to reach to the level of a middle-income economy as of 2025” (GTP 2010)*

#### **Economy Vision**

*“...building an economy which has a modern and productive agricultural sector with enhanced technology and an industrial sector that plays a leading role in the economy, sustaining economic development and securing social justice and increasing per-capital income of the citizens so as to reach the level of those in middle-income countries” (GTP 2010)*

#### **3.1 National Development Goals**

This industrial development road map (2013-2025) will contribute for the achievement of Ethiopia's vision and to sustain rapid and broad based economic growth. The experience nurtured in resolving challenges that arose during, and lessons learned from the implementation of the PASDEP and midterm performance of GTP were the starting point for formulation of the roadmap 2025.

*Thus, the overall goal of the plan over the two 5 years period is to fully eradicate absolute poverty, build a middle income country with full provision of basic needs, and build up dynamic growth engine.*

#### **3.2 National Development Targets**

##### **3.2.1 Middle Income Country Economic and Industry Structure**

There are a number of variations of definitions and criteria to ascribe what a middle-income country is and also the type of structural transformations required to achieve such a status. The low, middle and high-income categories are World Bank operational lending categories. A country's status is determined based on its

Gross National Income (GNI) per capita in US dollars, using the Atlas method of currency conversion. The categories are divided as follows: low income, \$995 or less; lower middle income, \$996 - \$3,945; upper middle income, \$3,946 - \$12,195; and high income, \$12,196 or more. However, another way to compare incomes in different countries is to use Purchasing Power Parities (PPPs) as to account for differences in price levels between countries.

Researchers in the International Growth Centre (IGC, 2012) developed a pragmatic model that could help developing countries in attaining growth and structural transformation required to reach the middle income country status. The approach entails the analysis of the structure of the economies that have entered into the middle-income country category, and draw lesson as to apply it to specific country situations. Based on the World Bank Development database indicator (WDI, 2010), the model listed out all countries that passed the middle income threshold since 1960. The identification of these countries helps to make analysis of the economic structure of these countries against Ethiopia. These comparator countries are further short listed by considering such factors as to the similarity of the features of the countries with a particular developing African country, countries with greater than a million population, fluctuating economies, and other criteria. Further countries were categorized into oil-resource based and non-oil resource based growth countries. Once the list of countries is identified, a set of socio - economic variables were selected to benchmark at the year of their transition to the middle income country. The averages of these variables formed the expected structure of a typical Model Middle Income Country (MMIC) (Refer Annex 2).

The comparison between the MMIC and Ethiopia with respect to the selected key macroeconomic, and human and social development variables are depicted in Table 6. The gap between the MMIC and that of Ethiopia provides an indication of the structural transformation necessary to achieve the middle income status in 2025.

Table 6 clearly shows the gap between the Ethiopian economy and the MMIC. If we focus only on the industry sector, the share of the industry sector to GDP is lagging behind almost by 20 points from that of the MMIC. This implies that the share of the industry sector should have to increase by more than double to reach the MMIC target by the year 2025. The situation is not different in the case of the Ethiopian manufacturing sector which currently (2012) accounts for only 4% of GDP as compared to the MMIC 17% of GDP. The deficit of the manufacturing

sector is around 13% from that of the MMIC. To overcome this deficit distortion in the manufacturing sector has to be introduced by mobilizing available resource and allocating it to the sector so that the sector will ultimately achieve the targeted 17 % share of GDP by the year 2025. Such intervention is necessary if the country has to attain the vision of becoming one of the middle income countries by the year 2025.

Table 6: Key Macroeconomic Indicators

Key Macroeconomic Indicators									
	Agriculture (% of GDP)	Industry (% of GDP)	Manufacturing (% of GDP)	Services (% of GDP)	Exports (% of GDP)	Imports (% of GDP)	Gross fixed capital formation (% of GDP)	FDI net inflow (% of GDP)	Gross domestic saving (% of GDP)
MMIC	20.7	30.7	17	48.6	30.5	37.4	26.6	4.5	21.6
Ethiopia (2012)	44	11.1	4	45.6	14	32.1	NA	NA	16.5
<b>Gap</b>	<b>+21.3</b>	<b>-19.6</b>	<b>-13</b>	<b>-3</b>	<b>-15.5</b>	<b>-5.3</b>	<b>-</b>	<b>-</b>	<b>-5.1</b>

Source: International Growth Center (2012) and survey data

Table 7: Key Human and Social Development Indicators

	Employment in agriculture ( % of total employment)	Employment in Industry ( % of total employment)	Rural Population (% of total population)	School enrollment, secondary (% Gross)	Electric power consumption (KWH per capita)	GINI index	Poverty gap at \$1.25 a day (PPP) (%)	Population Growth (Annual %)
MMIC	41.2	20.5	62.3	46.5	403.7	38.9	5.3	2.2
Ethiopia (2012)	80	5	85	38.4	3.36	29.8	NA	2.4
<b>Gap</b>	<b>+38.8</b>	<b>-14.5</b>	<b>+22.7</b>	<b>-8.1</b>	<b>-399.3</b>	<b>-9.1</b>		<b>+0.2</b>

Source: International Growth Center (2012) and survey data

Comparison of the Ethiopian Economy with MMIC in terms of key Human and Social Development Indicators is presented in Table 7. Accordingly, the gap in each of the indicator is evident. Much is expected from the manufacturing sector and from the planned industrial zone development to bring about structural change in the economy thereby narrowing the gap during the planning period -that is by the year 2025.

### 3.2.2 Development Targets

The table below summarizes some selected national development targets which are estimated using the information obtained from Ministry of Finance and Economic Development and estimated by the study team using this information.

The Ethiopian economy is targeted to grow annually at the average rate of 11.2 per cent during the planning period (2013-2025). This is in accordance with the Growth and Transformation Plan of the Ethiopian Government which assumed to maintain at least an average real GDP growth rate of 11.2 %.

Table 8: Projection of Selected Macro Variables (2013- 2025)

	2013	2015	2020	2025
GDP Growth Rate (average 11.2%)	11.2	11.5	11.3	10.8
PCI in USD	568.1	676.5	1116.6	1880.2
PCI growth Rate (%)	9.3	9.9	10.8	11.07
Population Growth Rate (%)	2.44	2.44	2.26	2.05
Agriculture Share to GDP (%)	38.17	36.38	34.09	32.67
Industry Share to GDP (%)	15.25	18.73	22.37	27.33
Share of the manufacturing sector to GDP( %)	5	7	12	17
Service Share to GDP (%)	46.58	44.88	43.54	40.01
Poverty head count (%)	24.4	22.2	16.7	11.1

Source: MoFED and estimated based on information obtained from MoFED

The economic growth targets are estimated with three different scenarios. The first scenario (the scenario selected) is the GTP base case scenario which assumes the average rate of growth of real GDP to be 11.2%. Under this scenario the population expected to grow at the average rate of 2.3% and owing to appropriate population management policy, the population growth rate will annually decrease by 20%. In year 2013 population of the country is estimated to be 84.3 million. Scenario two, the GTP High Case Scenario assumes that the GDP will annually grow by 14.9 %.

Under this scenario PCI is projected to reach 746, 1451, and 2877 USD by the year 2015, 2020, and 2025 respectively. The third scenario is declining GDP growth rate scenario which assumes relatively higher growth rate at the early stage of economic growth and development which is the characteristics of small economy and gradually declining as the size of the economy gets relatively larger and larger. Under this scenario the PCI is estimated to be 672, 971, and 1380 USD by the year 2015, 2020, 2025 respectively.

The underlying assumptions to select the study scenario are:

- Conducive macro environment created during PASDEP and GTP period will be maintained and hence the growth momentum will continue after the first GTP period. This enables to attain an average economic growth rate of 11.2% for the coming 13 years as well.
- The model middle income economic structure depicts that the share of the manufacturing sector to GDP need to grow from the current 4% to 17%. This selected scenario ensures the growth of the manufacturing sector to the targeted growth level.
- The country vision targets GDP per capita of 1000 USD as a threshold to be attained by the year 2025. The selected (GTP base case) scenario will ensure 1880 USD GDP per capita by the end of the planning period. This amount of GDP per capita considers the future probable upward shift of the Middle income threshold level.

In general, the basic assumption that the Ethiopian economic performance beyond 2015 will remain relatively the same appears plausible. Thus, extrapolating the GTP growth rate beyond 2015 is found to be logical.

Therefore, on the basis of the above underlining assumptions, the study selected the first scenario (GTP base case scenario). Accordingly, GDP per capita (PCI) is estimated to be 677, 1117, and 1880 USD by the year 2015, 2020, and 2025 respectively. Based on this scenario selected national growth targets are worked out.

For the sake of comparison GDP per capita (PIC) projections under these three different scenarios are presented in table 9 followed by the figure showing the growth path of the three scenarios.

Table 9: PCI Growth in Three Different Growth Scenarios (PCI in USD)

Growth Scenario	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
GTP base case scenario (11.2)	561.8	615	677	745	823	910.4	1008	1117	1238.1	1374	1525	1693	1880.2
GTP high case scenario (14.9%)	579	657	746	850	970	1108	1267	1451	1662	1905	2185	2507	2877
Declining GDP growth rate scenario (10.13%)	568.	617	672	723	779	838	901	971	1045	1124	1207	1293	1380.1

Source: Computed based on secondary data obtained from MoFED

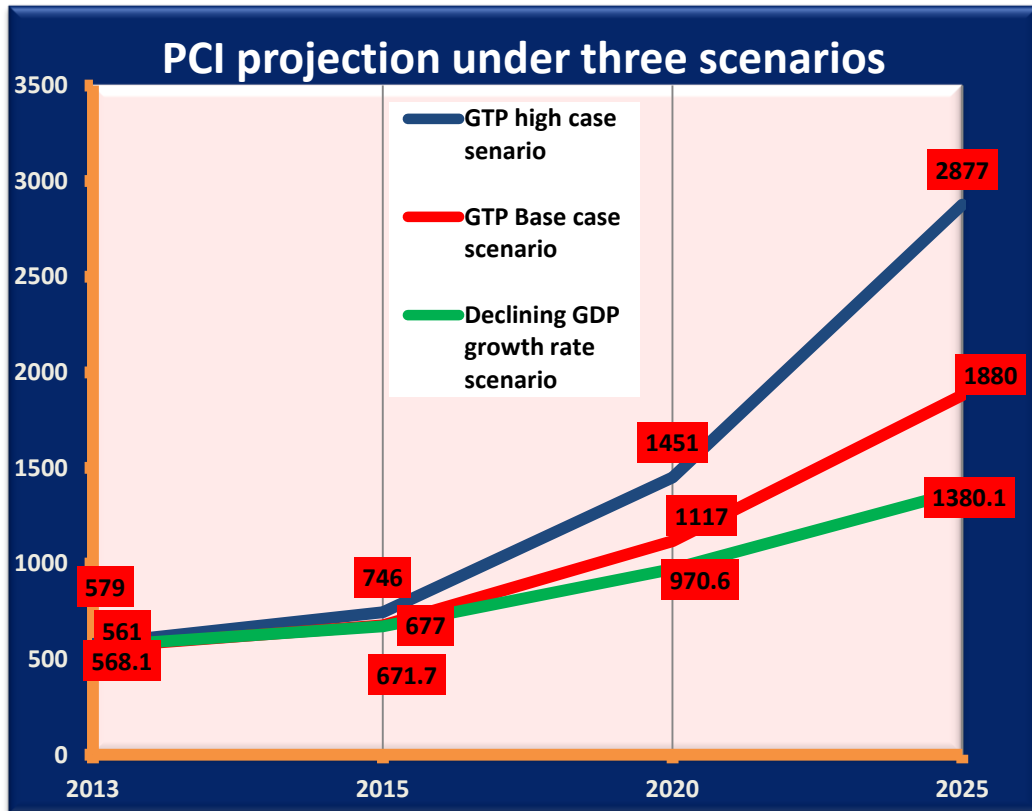


Figure 2: Target PCI in Three Different Growth Scenarios



## National Targets for the Industrial Sector

The GDP growth as projected under the selected scenario is targeted in 2015, 2020, and 2025 to be about 59.9, 111, and 207 billion USD respectively. Out of the targeted GDP of each milestone the total share of the industry sector in billion USD is targeted to be 11.2, 24.8 and 56.5 by 2015, 2020 and 2025 respectively. Moreover, the manufacturing sector which is one of the subsectors within the industry sector is gradually expected to take the Lion-share in the future and will contribute to GDP 4.2 billion USD by the year 2015. However, the shock that will be introduced during the second and third phase assumed to induce the sector to jump up to 13.3 billion USD by 2020; and finally to 35.2 billion USD by the year 2025, as depicted in figure 3.

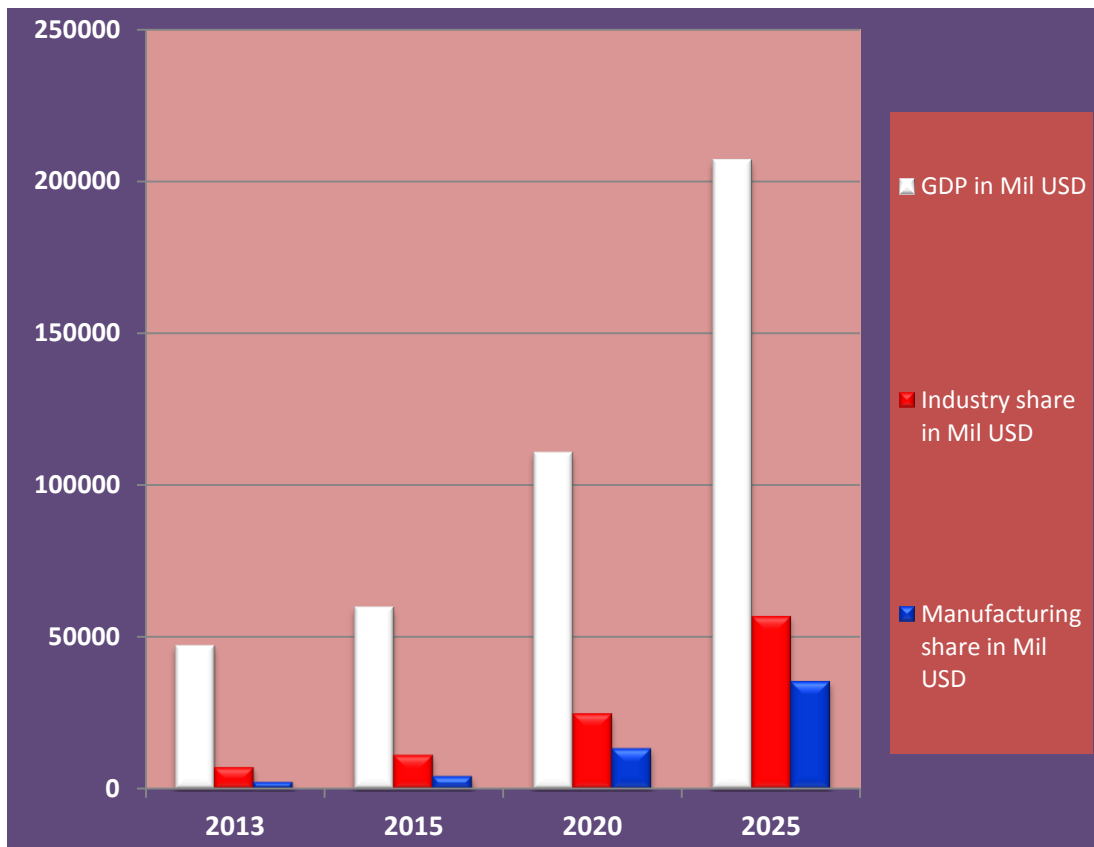


Figure 3: Target Share of Industry and Manufacturing Sectors to the GDP

## Economy Structure

Currently the economy structure is dominated by service sector with the average GDP share of nearly 45% followed by Agriculture with the share of 44%. The industry sector contribution is the least of all with only 11% of the real GDP. If the industrialization goal and the vision of becoming a middle income country by the year 2025 has to be realized such trend must be changed by introducing appropriate distortions or shocks in economy through the provision of extraordinary support to the industry sector. With this in mind, it is targeted that the industry sector will make up to 19 % of GDP by 2015 and 22.4 % by 2020, and finally expected to reach 27% of GDP by the year 2025 while the share of other sectors to the GDP for each milestone would proportionately decrease in favor of the industry sector, as indicated in Figure 4 below.

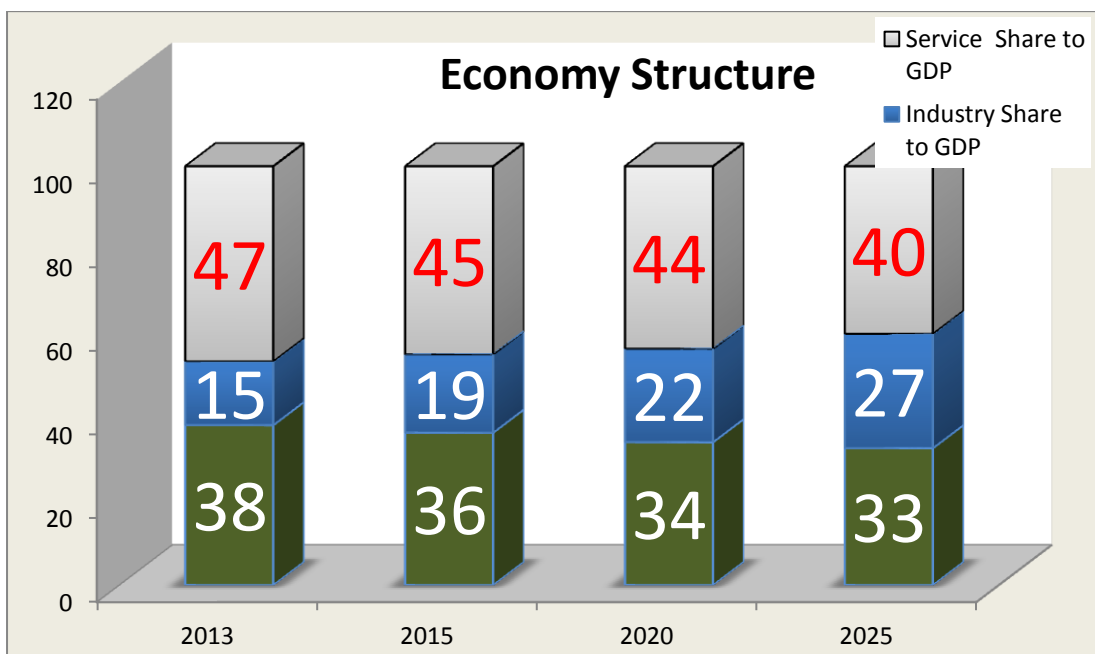


Figure 4: Structure of the Economic Sector (2013-2025)

In general by 2025, the industry sector will constitute 27%, service sector 40%, and the agriculture sector will finally be below 33% of the economy (GDP). The ultimate 27% increase of the industry sector is based on the assumption that the interventions recommended in this study (upgrading and expansion of priority Industry sectors) will enable the sector to reach this level. The contribution of the three sectors to GDP is presented in table 10 below.

Table 10: Contribution of Economic Sectors to GDP ( million USD)

Sector share to GDP	End of phase year			
	2013	2015	2020	2025
Agriculture	18048.43	21776.58	37730.8	67526.15
Industry	7210.86	11211.52	24759.11	56488.81
Service	22025.05	26864.56	48190.06	82697.31
Total GDP	47284.34	59852.66	110680	206712.3

Source: Computed based on information obtained from MoFED.

### Manufacturing Share in the Industry Sector

Currently (2012), the manufacturing sector accounts for 33 % of the industry sector. Using the industry growth rate projection of MoFED (2013-2025), the share of the existing manufacturing sector in the industry is targeted to be 37% by the year 2015, and finally attains 67% by the year 2025. Following, upgrading of the capacity of existing priority sectors coupled with their diversification in the coming 13 years along with the coming of new industries in the sector, the contribution of the sector to the economy will increase substantially. As projected in the national target, the share of the manufacturing sector to the GDP will reach ultimately 17 % by the end of 2025 as depicted in the Figure 5.

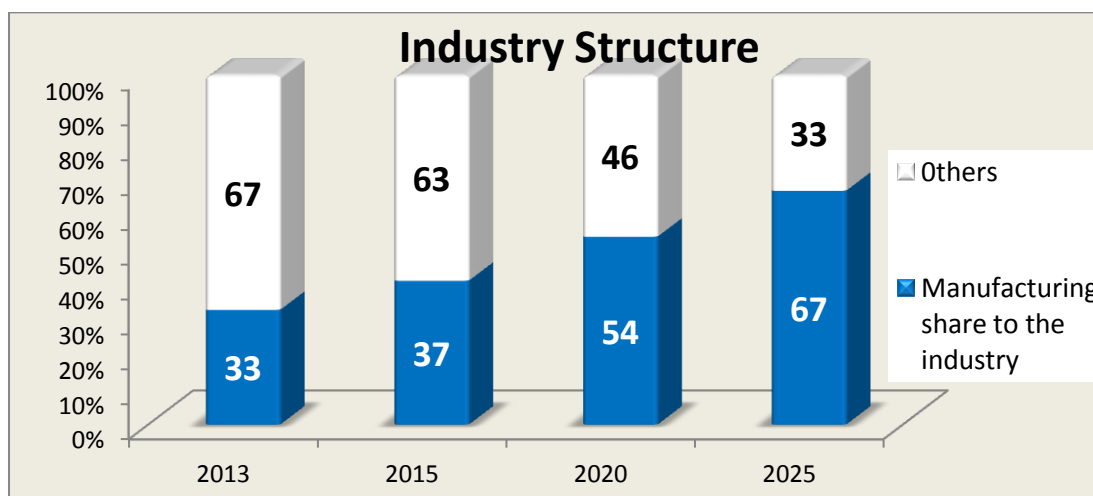


Figure 5: Share of Manufacturing in the Industry Sector

## **4. Part IV - Industrial Development Vision, Direction, Strategic Objectives and Development Phases**

### **4.1 Industrial Development Vision**

In view of its growing contribution to the national economy, the industry sector development plan contains an overall vision which is based on national vision 2025 and reflects the contributions of the stakeholders represented in the manufacturing industry sector. The vision of the manufacturing sector is;

*... "building an industrial sector with the highest manufacturing capability in Africa which is diversified, globally competitive, environmentally-friendly, and capable of significantly contributing to the improvement of the living standards of the Ethiopian people by the year 2025"*

Thus, this vision requires a manufacturing sector that is dynamic and market –led producing high value added competitive products. The sector needs to be highly integrated with other sectors of the economy and continually diversifying into environmentally friendly new and emerging manufacturing sectors.

### **4.2 Industrial Development Directions**

To ensure faster and sustained development of the industrial sector, favorable conditions should be created for industry to play a key role in the economy.

As framed in the industrial policy and strategy the balanced growth of labor intensive industries, the industries with broad sectoral linkages, export oriented and import substituting sectors will be established and expanded; followed along with the introduction of high tech and heavy industries in the last planning period. To this end, particular emphasis will be given to main strategic directions focusing on expansion and development of micro and small enterprises; development of medium and large scale industries. To bring about manufacturing sector transformation the following five development directions are envisaged.

## 1) Upgrading and capacity increment of existing industries

Capacity enhancement of the existing priority medium and large industries is one of the key industrial development directions in the planning period. The following medium and large scale sub industries will be selected as a priority sector for which all round support will be provided to achieve the targets in each planning phase.

- Textile and Garment Industries
- Leather and Leather Products Industries
- Agro-processing Industries,
- Chemical and Pharmaceutical Industries
- Metal and Engineering Industries

Currently, these industries are operating below their capacity. Most of them - if not all are operating below 40% of their full capacity. These selected industries will grow their productive capacity by diversifying their products and markets for which sustainable support will be provided.

## 2) Diversification of manufacturing sector to new sectors

New and diversified sector development will be another direction of industrial development achieving the vision of becoming a middle income country by 2025. Diversification is possible in the existing major priority sectors as well as in the new areas. For the purpose of selecting new industries and products the following criteria were use.

- Market potential
- Local and global value chain consideration
- Potential to value addition
- Resource potential (*For more detailed information refer annex 4.*)

Accordingly, the following industries will emerge during the last phase of the planning period:-

- **Agro processing**
  - Wood based products manufacturing industries
  - Sea food processing factories in potential dam areas
  - Spices extraction and processing factories
- **Textile and garment industries**
  - Man-made fibers manufacturing industries

- Technical textiles manufacturing industries
- Natural fibers (including wool, silk and sisal) manufacturing industries
- **Footwear, leather and leather products manufacturing industries**
  - Rubber, plastic and textile shoes fabrications
- **Metal and engineering industries**
  - Machinery, machine tools and equipment manufacturing industries
  - Iron and steel industry
  - Automotive industries
- **Chemical industries**
  - Petro chemical /Bio-based/ industries
  - Special chemicals (Construction chemicals ,Dyes and dyestuffs )industries
  - Alcohol based chemical products (Acetic acid ,acetone etc) industries
- **Pharmaceutical industries**
  - Specialty medicines and manufactured indigenous medicines
  - Food supplements
  - Pharmaceutical components and ingredients
  - Cosmetics
- **New industries**
  - Packaging industries
  - Bio-technology industries
  - Electrical and electronics industries
  - ICT, both hardware and software manufacturing

### 3) Enterprise cultivation

One of the industrial development directions up to year 2025 will be industrial enterprise cultivation. As the ribs of industrial growth of the country, due attention will be given to micro and small scale enterprises.

All rounded support will be provided across the country to establish SMEs and creating wide employment opportunity for youth and women and alleviating poverty.

The linkage between SMEs and MLEs will be established and sustained in every aspect of industrial endeavor along the value chains of the priority industries. Continuous support will be provided to transform SMEs to MLEs. Enterprise cultivation and the creation of entrepreneurial attitude along the broad and critical mass will be effectively undertaken.

Moreover, there should be a strong focus to link local production systems into the global manufacturing value chain through strategic partnerships with multinational and global firms.

#### **4) Private and public investment**

The private sector is the main actor for industrial development of the country. However, the current status of the private sector is not adequately developed to take over the leading role in industrial development. The investments intervention of the government in capital intensive and strategically important industries will be continued. The management capacity of the public enterprises will be enhanced to keep the industries productive and competitive. In support of the private sector growth, an exit plan of the government from industry investment will be supported through privatization process which will be transparent.

#### **5) Industrial zone development**

The development of the industrial zones, ultimately into industrial city development, is a continuous process which requires a longtime and sustained commitment from the part of the government. It demands not only the preparation of industrial development plan but also a comprehensive plan to establish regional business centers, social services (schools, hospitals, residences...etc.), environmental standards and others dimensions which are crucial to develop industrial cities – commonly known as development zones. This entails the fact that the government in one way or another couldn't be out of the zone development issues rather it will chair governance of the industrial cities development program.

Therefore, the development of industrial cities across the country will be focused in the planning period. The medium and large scale industries which are integrated along the value chain will be located in the industrial cities. In the initial stage of development, the government shall put an effort and provide potential development

actors with different types of incentives and facilitation works. Simultaneously development of the business center and further expansion construction would be planned and implemented gradually. In short, to attract more investments and investors, the industrial zones will be furnished with essential infrastructure and social services. This is a crucial step towards urbanization and industrial transformation that ensure structural change of the country's economy.

### **4.3 Strategic Goals, Objectives, Strategies, and programs**

#### **4.3.1 Overall Goal and Strategic Objectives**

The overall goal of the road map and the strategic plan document is to bring about structural change in the economy through industrial development by:

- Increasing the share of the industry sector as percentage of the GDP from the current 13% to 27% by 2025; and
- Increasing the share of the manufacturing sector as percentage of the GDP from the current 4% to 17% by 2025.

The situational analysis of the current industrial sector was carried out by the involvement of all relevant stakeholders. It indicates that the types of strategic responses that the constraints and opportunities generally highlighted to fall into the eight distinct but interrelated key strategic issues (refer the Strategic Plan Document)). Based on the strategic issues identified during the study the following five strategic objectives are formulated:-

*Strategic Objective 1- To further expand and develop the existing manufacturing industry priority sectors;*

*Strategic Objective 2: To diversify the manufacturing sector to new sectors;*

*Strategic Objective 3: To enhance enterprise cultivation and entrepreneurship;*

*Strategic Objective 4: To Increase public, local and foreign investment for the industrial development; and*

*Strategic Objective 5: To develop and operationalize industrial zones and cities.*

#### **4.3.2 Key Strategies and Programs**

The achievement of the stated strategic objectives clearly calls for the choice of appropriate strategies that help to achieve the strategic objectives. Based on the



overall strategic directions outlined in this study, the following six key strategies are developed (for details refer Industrial Development Strategic Plan Document.

- *Ensuring conducive business environment for industrial development;*
- *Availing competent human resource for Industrial Development;*
- *Availing quality industrial inputs for value- addition;*
- *Developing and diversifying markets for the manufacturing industry outputs (local, regional, global markets);*
- *Enhancing Technology Transfer for Industrial Development; and*
- *Developing and providing institutional support for Industrial Development.*

#### **4.4 Major Programs of the Industrial Development Plan**

The implementation plan is based on selected programs which reflect the various activities and projects to be undertaken to achieve the strategic objectives set forth. Six major programs are designed to achieve the five strategic objectives of the industrial strategic plan. These programs are listed below and are described in the Ethiopian Industrial Development Strategic Plan Document, 2013.

- Priority sectors expansion program;
- New manufacturing sectors development program;
- Industrial enterprise and entrepreneurship development program;
- Local and foreign investment promotion program;
- Government (public) sector investment program; and
- Industrial city development program.

#### **Industrial Development Phases**

The five strategic objectives listed in the preceding section shall be attained through three developmental phases to achieve the industry vision by 2025. The implementation of these phases will bring about the transformation and of economic and industrial structure changes.

## Phase 1: Enhancing the productivity of major industries (2013-2015)

In this phase focus will be given for light industries which encompass a wide linkage with other sectors including agriculture sector. The highest priority will be given to the development of SME and productivity enhancement of major industries which are identified as priority industry sectors. The industrial targets set by GTP are the key targets to be achieved in this planning phase. The significant percent of the manufacturing sector will remain the light industries; however, the percentage share will gradually reduce up to the vision period 2025.

Table 11: Manufacturing Sector Growth Target in Phase One

Sector	2013	2014	2015
Industry Sector in % GDP	15.25	16.99	18.73
Manufacturing industries in % GDP	5	6	7
• Agro-processing industry (%)	2.8	3.1	3.8
• Chemical and pharmaceutical industry (%)	1.3	1.5	1.6
• Textile and apparel industry (%)	0.2	0.4	0.45
• Leather and leather products industry (%)	0.3	0.4	0.45
• Metal and engineering industry (%)	0.4	0.6	0.7

Source: Estimated targets by the study

The trend that shows how the major priority industries will grow in the remaining GTP period is depicted in the figure below (Figure 7).

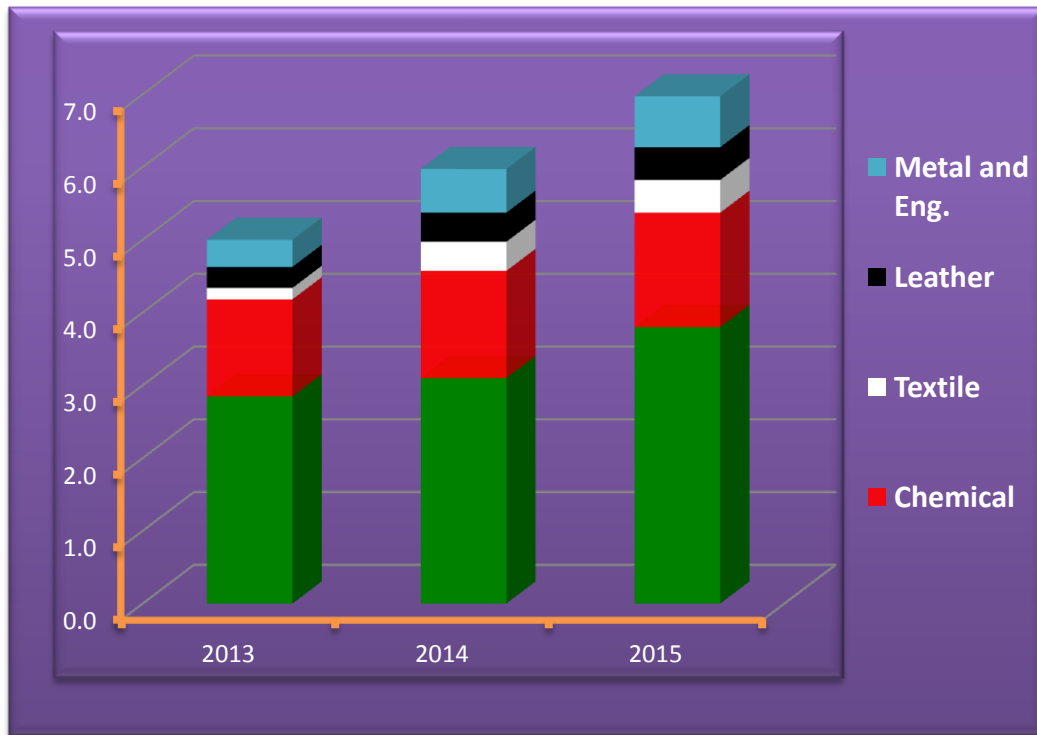


Figure 6: The Growth of the Major Priority Industries during the Remaining GTP Period as Percentage of GDP

## Phase 2: Diversifying and emerging new key industries (2016-2020)

In this planning phase distortion will be introduced to achieve rapid growth of the manufacturing sector and to become a middle income country by the year 2025. In this phase focus will be given to build up new key industries the manifestation of which is the rising of heavy metal and chemical industries, which involves a wide linkage with other sectors including light industries. Along the building of heavy metal, chemical and pharmaceutical industries, due attention will be given to major Industries which are identified as priority sectors in GTP. Increased industrial key targets are set to be achieved in this planning phase. In this phase capacity to develop new more industries like knowledge-based industries and Nano- technology industries will be built in effort to lay foundation for the future industrial transformation beyond 2025. Like in the first phase here also the significant percent of the manufacturing sector will remain the light industries; however, the percentage share of heavy metal and chemical industries will gradually increase up to the vision

period 2025 and a new sectors will eventually emerge in this second phase of industrial development.

Table 12: Share of Existing Sector to the Manufacturing Sector in Percentage

	2016	2017	2018	2019	2020
Manufacturing	8	9	10	11	12
Agro-processing industry	4	4.5	4.8	5	5.5
Chemical and pharmaceutical industry (Total)	1.3	1.45	1.6	1.65	1.8
• Chemical and allied industry	1.03	1.16	1.28	1.32	1.44
• Pharmaceutical industry	0.27	0.29	0.32	0.33	0.36
Textile and apparel industry	0.55	0.65	0.76	0.8	0.9
Leather and leather products industry	0.55	0.65	0.75	0.8	0.9
Metal and engineering industry	1.2	1.3	1.4	1.63	1.75
ICT and electronics Industry	0.16	0.18	0.3	0.4	0.43
Petrochemical industry	0.16	0.18	0.29	0.36	0.36
Biotechnology industry	0.08	0.09	0.1	0.36	0.36

Source: Estimated target by the study

Figure 7 below shows how the existing priority industries are still important and their growth is further ensured even in the second phase of the industrial development.

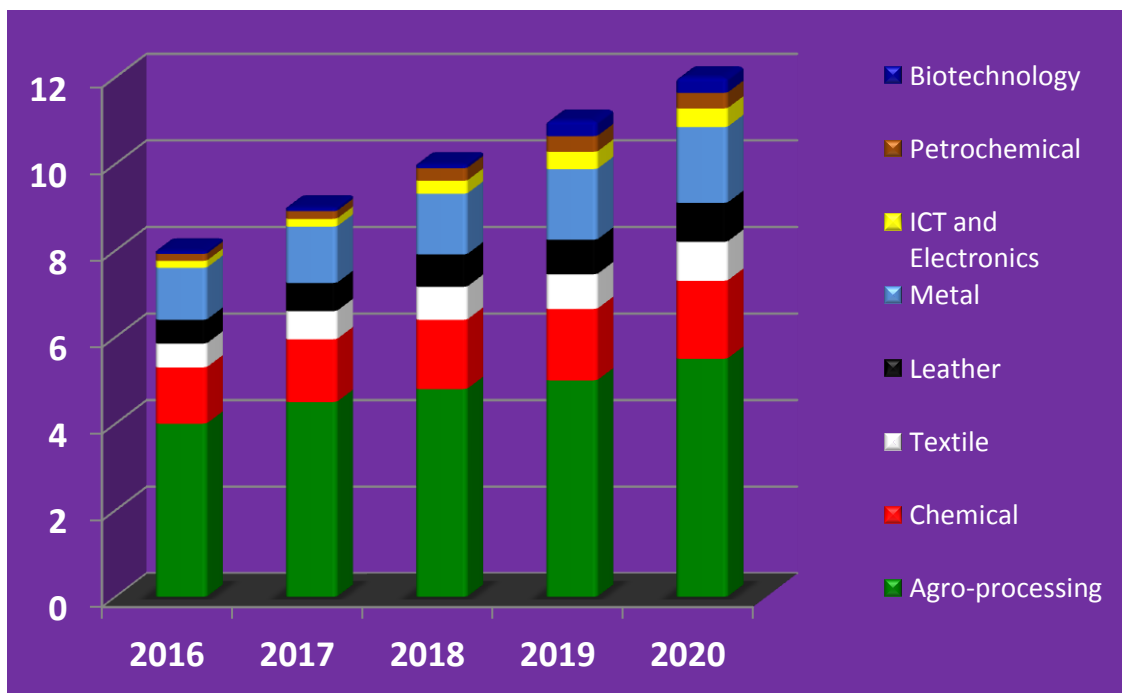


Figure 7: Growth of the Existing and Emerging New Industries in Phase Two

In this phase, new and upcoming industries as a part of diversification in the existing priority sectors are planned to emerge. Figure 8 and the estimated shares of each sector (table 12) include both the existing and new and upcoming industries in the existing as well as in the new areas.

### Phase 3: Building up high-tech industries (2021 -2025)

The last planning phase extends from year 2021 to 2025 which focus on building up and further enhancing the capacity of high tech industries and the deepening and expansion of heavy metal and chemical industries with strong linkages with other sectors including the existing light industries. Industrial key targets are set to be achieved in this planning phase for all three groups of industries. The percentage share of heavy metal and chemical industries and high- tech industries will gradually increase up to the vision period 2025. By the end of 2025, the industry shows significant structural change and the structure of the sector will consist of more than 50% of medium & high-tech industry. In addition tapping potential to develop knowledge-based industries and Nano-technology will take place so that such industries will come up in the next stage of industrial development after 2025.

Table 13: Percentage Share of Existing Priority Sector in Phase Three

Sector	2021	2022	2023	2024	2025
Manufacturing	13	14	15	16	17
Agro-processing industry	5.8	6	6.1	6.2	6.3
Chemical and pharmaceutical industry (Total)	2	2.1	2.25	2.4	2.55
• Chemical and allied industries	1.8	1.89	2.025	2.16	2.295
• Pharmaceutical Industries	0.2	0.21	0.225	0.24	0.255
Textile and apparel industry	1	1.1	1.2	1.3	1.4
Leather and leather products industry	1	1.1	1.2	1.3	1.4
Metal and engineering industries	1.9	2.1	2.2	2.4	2.55
ICT and electronics Industry	0.52	0.55	0.7	0.9	1.05
Petrochemical industry	0.39	0.5	0.65	0.75	0.9
Biotechnology Industry	0.39	0.55	0.7	0.75	0.85

Source: Estimated target by the study

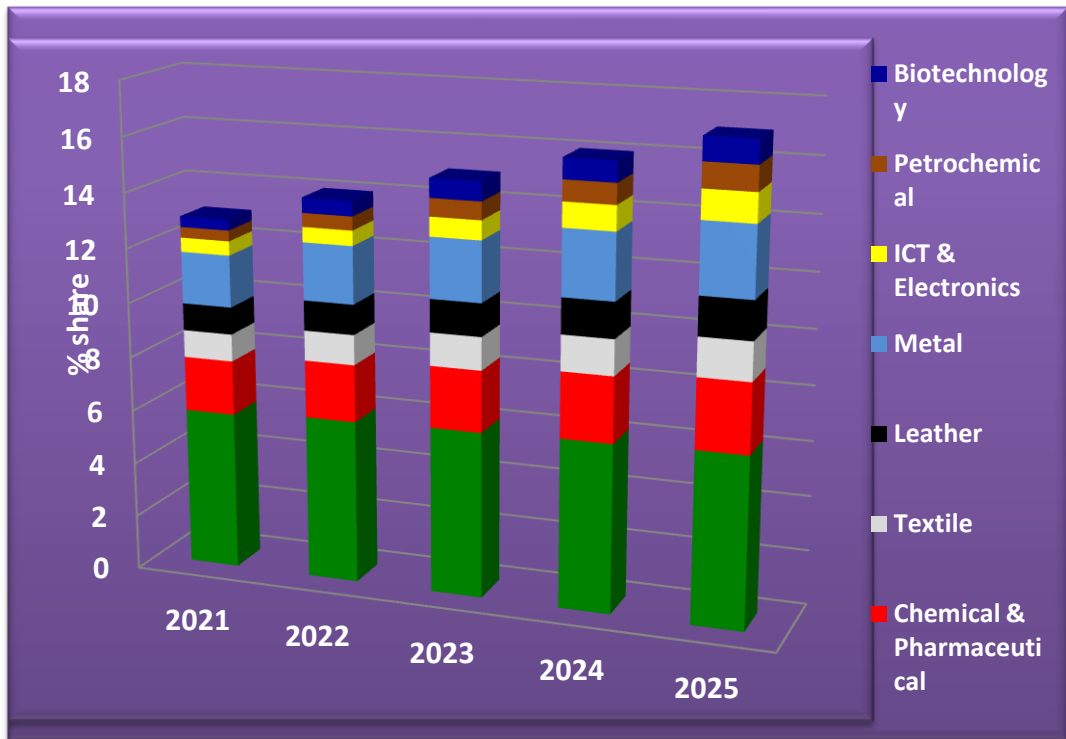


Figure 8: Growth of the Existing Sector in the Third Phase of Industrial Development

## Transformation of the Manufacturing Sector

The transformation process is expected to be implemented in such a way that in each phase there are industries for which top priority will be given. For some industries that will come in the next phase and infrastructure and social overhead capital needed for the new coming industries, necessary potential will be tapped. The industries after tapping their potential will become top priority in the next phase of industrial development. Finally, capacity building activities will also be started which will lead to tapping potential activities in the proceeding phase. The following figure depicts the summary of the industry transformation process;

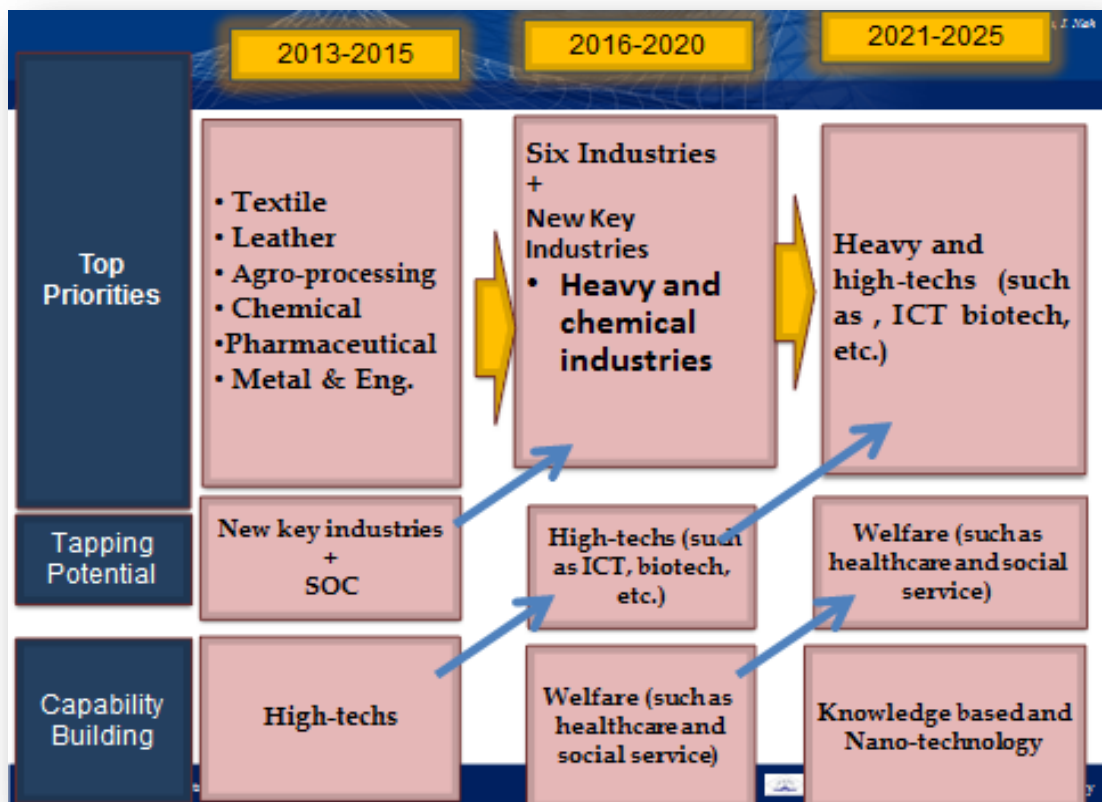


Figure 9: Industrial Transformation Process

#### **4.5 Major Targets by End of the Industrial Development Phases**

The following table summarizes the major targets to be achieved by the end of each phase as measured by key growth indicators. The manufacturing sector as a whole is targeted to create gross value of product worth of 4.2, 13.3, and 35.2 billion USD in the years 2015, 2020, and 2025 respectively.

The sector's contribution to the economy in terms of foreign currency earning will also improve from time to time. Accordingly, the foreign currency earning is targeted to be 2618 million USD by the end of year 2015. But it is expected to grow nearly by three folds (7264.2 million USD) in second phase and finally by eight folds (16228.6 million USD) by the end of the third planning phase, that is, by the end of 2025.

The sector is also expected to significantly contribute to the new job creation effort of the country. During the year 2012 it has created 204 thousands new job. From this level, the new job that will be created by the end of 2015 will be increased to 236 thousands and to 377 thousands by the year 2020 and finally by the end of 2025 to reach the level of 780 thousands. This is an increase nearly by 330% as compared to year 2015. During the planning period the enterprise particularly SMEs shall be cultivated and gradually promoted to SME's. The targeted number of SMEs cultivated is 25, 40, and 65 thousands by the year 2015, 2020, and 2025 respectively.

The summary of major targets is presented in table 14 while detailed plan to achieve these targets by each subsector is outlined in the Ethiopian Industrial Development Strategy (2013-2025) document.



Table 14: Major Targets to be Achieved by the End of Each Phase

S.N	Growth indicators	Base year	Targets (end of phase)		
		2012	2015	2020	2025
1	Gross value of product of manufacturing sector (Million USD)		4190	132816	<b>351376</b>
1.1.	Metal value addition in billion Birr	26	101.40	376.49	1397.88
1.2	Growth rate in value addition assuming the minimum growth rate of 30% sustained (estimated using historical data)	0.3	1	0.3	0.3
1.3.	Per capita steel consumption in kg	17.78	34.72	81.41	190.91
2	Gross value of product of the textile sector (Million USD)	1074	2545	3043	3853.50
3	Foreign currency earning in million USD	255.4	2618	7264.16	1,6228.60
3.1.	Agro-processing industries	51.75	300	832	1,859.70
3.2.	Chemical industries	7.01	20	55.5	123.90
3.3.	Leather Industries	112.06	496.90	1378.70	3080.20
3.4.	Textile industries	84.63	1000	2773.63	6,196.50
3.5	Other new coming industries including metal		802	2225.50	4971.80
4	Growth rate of manufacturing sector (%)	4.5	30	20	15.70
5	Employment growth rate (%)		5.36	12	18.29
5.1.	New jobs created by the manufacturing sector in each year in '000s	204	236	377	780
6	Capacity utilization of manufacturing industry (%)	61.2	78	82	87
7	Manufacturing investment in billion Birr	32	97	587.32	3,556.15
8	Number of industrial zones developed	5	5	5	5
9	Enterprise cultivation				
9.1	New job opportunity by SMEs in '000s	554	740	1,199	1943
9.2	Rate of growth of SMEs (based on the average of 2013-2015)(%)		10.13	10.13	10.13
9.3	No MSEs (assuming an average 30 employees in each small enterprise) in '000	18	25	40	65

Source: Estimated using historical data

The table below summarizes the roadmap for the eventual development and transformation of the current and emerging manufacturing sector industries.

**Table 15:** Summary of Eventual Development and Transformation of the Current and Emerging Manufacturing Sector Industries

Sector	Industrial development Period ( 2013-2025 )			Key Driving Forces
	Phase I 2013 – 2015 <sup>1</sup>	Phase II 2016 – 2020 <sup>2</sup>	Phase III 2021 – 2025	
<b>Agro -processing</b>	<ul style="list-style-type: none"> <li>Increasing productivity of agro processing industries,</li> <li>Intensified Food processing ,</li> <li>Establishing crude edible oil refinery for import substitution</li> </ul>	<ul style="list-style-type: none"> <li>Spices extraction,</li> <li>Packed and canned foods, Animal feed processing</li> <li>Wood based manufacturing,</li> <li>Cattle and goats meat Deboning, special cut meat</li> </ul>	<ul style="list-style-type: none"> <li>knowledge and capital intensive Agro-processing industries</li> <li>Bio and organic food and beverage export ,</li> <li>Fish sector development, and</li> <li>Deepening the agro industries in Phase II</li> </ul>	<ul style="list-style-type: none"> <li><b>Social infrastructure</b></li> <li><b>Favorable business environment and incentive for enterprises</b></li> <li><b>Human resource development</b></li> <li><b>Technological capability building</b></li> <li><b>Resource mobilization</b></li> </ul>
<b>Chemical and pharmaceutical</b>	<ul style="list-style-type: none"> <li>Inorganic base chemicals (Fertilizer, caustic soda, soda ash )</li> <li>Pharmaceutical</li> <li>PVC and polyethylene</li> </ul>	<ul style="list-style-type: none"> <li>Base chemicals ( fertilizer, inorganic and organic chemicals),</li> <li>Pharmaceutical</li> <li>Agro chemicals,</li> <li>Bio-based chemicals,</li> <li>plastic and rubber products</li> </ul>	<ul style="list-style-type: none"> <li>Deepening Bio based Chemicals,</li> <li>Specialty chemicals, and</li> <li>Pharmaceutical</li> </ul>	
<b>Footwear , leather and leather products</b>	<ul style="list-style-type: none"> <li>Leather Product diversification ;</li> <li>Development of shoe city ;</li> <li>Technology improvement of finishing leather ;</li> <li>diversifying the raw hides and skins base such as camel, ostrich, crocodile, and pig etc</li> </ul>	<ul style="list-style-type: none"> <li>Upgrade R&amp;D capabilities;</li> <li>Focus on champion product ;</li> <li>Establish special studios of designing and product development centers :</li> <li>Diversifying to Rubber , plastic and textile shoes</li> </ul>	<ul style="list-style-type: none"> <li>Deepening and exporting Sport and casual shoes made of Rubber ,</li> <li>Plastic and textile shoes;</li> <li>Deepening champion products</li> </ul>	
<b>Metal sector-iron and steel industry</b>	<ul style="list-style-type: none"> <li>Improving the product mix of iron and steel industry</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of iron ore extraction and other industries ;</li> <li>Further expansion of industries in Iron making, steel making , rolling mills,</li> </ul>	<ul style="list-style-type: none"> <li>The growth of making coal-based iron industry ;</li> <li>Deepening the development of iron making industry;</li> <li>Development of crude steel industries and</li> <li>Later finished steel Industries</li> </ul>	
<b>Metal sector-non-ferrous base metal</b>	<ul style="list-style-type: none"> <li>Establishment of new industry for manufacturing of primary product in the resource potential area (Copper, Nickel)</li> </ul>	<ul style="list-style-type: none"> <li>Upgrading the product mix and value addition in the chain of non-ferrous base metals</li> </ul>	<ul style="list-style-type: none"> <li>Deepening and development of the value chain of non-ferrous base metal</li> </ul>	

Sector	Industrial development Period ( 2013-2025 )			Key Driving Forces
	Phase I 2013 – 2015 <sup>1</sup>	Phase II 2016 – 2020 <sup>2</sup>	Phase III 2021 – 2025	
<b>Metal engineering sector-Transport equipment industry</b>	<ul style="list-style-type: none"> <li>Establishment of New Motor Vehicle Parts, body and trailer Manufacturing Industry</li> </ul>	<ul style="list-style-type: none"> <li>Improving capability and widening the depth of product mix in parts, trailer, body and overall automotive manufacturing industry</li> </ul>	<ul style="list-style-type: none"> <li>Specialization towards specific automotive industry and market segment</li> </ul>	<ul style="list-style-type: none"> <li>enterprises</li> <li><b>Human resource development</b></li> <li><b>Technological capability building</b></li> <li><b>Resource mobilization</b></li>   <li><b>Social infrastructure</b></li> <li><b>Favorable business environment and incentive for enterprises</b></li> <li><b>Human resource development</b></li> <li><b>Technological capability building</b></li> <li><b>Resource mobilization</b></li> </ul>
<b>Metal Engineering sector-machinery and equipment development</b>	<ul style="list-style-type: none"> <li>Expansion of agricultural machinery industries;</li> <li>Establishment of tooling/spare part/component manufacturing industry.</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of agricultural machinery industries ;</li> <li>Tools, parts and components of manufacturing industry;</li> <li>Establishment of machinery and equipment industry for common equipment and machinery , and</li> <li>Construction machineries</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of machinery and equipment for Textile, Agro-processing, Leather and chemical industries;</li> <li>Increasing the capability of industrial machinery for capital goods equipment.</li> </ul>	
<b>Textile and garment</b>	<ul style="list-style-type: none"> <li>Improve the cotton supply chain;</li> <li>Further expand and increase productivity to achieve export targets in textile and garment:</li> <li>Build capacity for new technology in textile and garment</li> </ul>	<ul style="list-style-type: none"> <li>Produce synthetic fiber (polyester);</li> <li>Produce man-made fabric &amp; garments;</li> <li>Build capacity for manufacturing of technical fabrics</li> </ul>	<ul style="list-style-type: none"> <li>Export man-made fabric &amp; garments ;</li> <li>Manufacturing of technical fabrics;</li> <li>Expand the variety of man-made fibers</li> </ul>	
<b>ICT and electronics industry</b>	<ul style="list-style-type: none"> <li>Human resource development in software and hardware manufacturing;</li> <li>Establish links to global production</li> </ul>	<ul style="list-style-type: none"> <li>HRD development;</li> <li>Building strong R&amp;D facilities;</li> <li>Establishment of machinery and equipment industry for household electronic equipments and machines</li> </ul>	<ul style="list-style-type: none"> <li>Increasing the capacity to produce advanced electronic equipments and machineries</li> </ul>	
<b>Petrochemical industry</b>	<ul style="list-style-type: none"> <li>Expanding mineral, agricultural and fossil fuel resource bases</li> </ul>	<ul style="list-style-type: none"> <li>HRD development</li> <li>Building strong R&amp;D facilities</li> <li>High skill development</li> <li>Expansion of resources base</li> </ul>	<ul style="list-style-type: none"> <li>Petro chemicals industries and products</li> </ul>	
<b>Biotechnology industry</b>	<ul style="list-style-type: none"> <li>Building R&amp;D capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Building R&amp;D capabilities and expertise in selected competitive areas</li> </ul>	<ul style="list-style-type: none"> <li>Bio technology based products including bio agro, bio pharms and bio industry</li> </ul>	

<sup>1</sup>End of 2015 will be the era for the first big jump through the achievement of higher productivity through reformation.

<sup>2</sup>End of 2020 will be an era for Second big jump in growth rate due to completion of sound social infrastructure (transport, power and water, etc...)

## **5. Part V- Linkage between the Roadmap and Strategic Plan**

In accordance with this Industrial Development Roadmap document, a 13 years Strategic Plan Document is developed. The Strategic Plan Document (SPD) will detail out necessary strategies, programs and major activities to be accomplished to realize the vision of becoming a middle income country by the year 2025. The institutional set up required to support the industrial transformation process as per this Roadmap is provided in a separate document called Industrial Development Instructional Setup.

The full picture of the Industrial Development Roadmap is visualized in conjunction with these two documents - Strategic Plan and Institutional Set up documents.

# Appendix

## **Annex 1: Historical Account of the Industry Sector**

The manufacturing industry in Ethiopia began to appear in the 1950's much earlier than in much of Sub-Saharan African countries. Modern industry commenced to emerge mainly in the second half of the 1950's and 1960's with import substitution as the main goal. The early 1970s ushered in a central planning system of economic management. This development, however, frustrated whatever little there was in private initiative that had appeared in the earlier period. This period witnessed a wholesale nationalization of major industrial establishments. The state became by far the most dominant economic actor and the government followed a policy of deliberate discouragement of the private sector development.

Prior to 1957, when Ethiopia initiated a series of five year development plans, cottage and handicraft industries met most of the population's needs for manufactured goods such as clothes, ceramics, machine tools and leather goods. The First Five-Year Plan (1957-61) sought to develop a strong infrastructure, particularly in transportation, construction and communications and link isolated regions. Another goal was the establishment of an indigenous cadre of skilled and semiskilled personnel to work in processing industries to help reduce Ethiopia's dependence on imports. Lastly, the plan aimed to accelerate agricultural development by promoting commercial agricultural ventures. The Second Five-Year Plan (1962-67) signaled the start of a twenty-year program to change Ethiopia's predominantly agricultural economy to an agro-industrial one. The plan's objectives included diversification of production, introduction of modern processing methods and expansion of the economy's productive capacity to increase the country's growth rate. The Third Five-Year Plan (1968-73) also sought to facilitate Ethiopia's economic well-being by raising manufacturing and agro-industrial performance. However, unlike its predecessors, the third plan expressed the government's willingness to expand educational opportunities and improve peasant agriculture. The total investment for the First Five-Year Plan reached 839.6 million birr, about 25 percent above the planned 674 million birr figure; total expenditure for the Second Five-Year Plan was 13 percent higher than the planned 1,694 million birr figure. The allocation for the Third Five-Year Plan was 3,115 million birr.

Between 1950 and 1960, the imperial government enacted legislation and implemented a new policy to encourage foreign investment. This new policy provided investor benefits in the form of tax exemptions, remittances of foreign

exchange, import and export duty relief, tax exemptions on dividends, and the provision of financing through the Ethiopian Investment Corporation and the Development Bank of Ethiopia. In addition, the government guaranteed protection to industrial enterprises by instituting high tariffs and by banning the importation of commodities that might adversely affect production of domestic goods. Protected items included sugar, textiles, furniture and metal. The government also participated through direct investment in enterprises that had high capital costs, such as oil refineries and the paper and pulp, glass and bottle, tire, and cement industries. In 1963, with the Second Five-Year Plan under way, the government enacted Proclamation No. 51. The proclamation's objective was to consolidate other investment policies enacted up to that period, to extend benefits to Ethiopian investors (previous legislation had limited the benefits to foreigners only) and to create an Investment Committee that would oversee investment programs. In 1966, Addis Ababa enacted Proclamation No. 242, which elevated the Investment Committee's status as an advisory council to that of an authorized body empowered to make independent investment decisions. Thus, by the early 1970s, Ethiopia's industrialization policy included a range of fiscal incentives, direct government investment and equity participation in private enterprises.

The government's policy attracted considerable foreign investment to the industrial sector. For instance, in 1971/72 the share of foreign capital in manufacturing industries amounted to 41 percent of the total paid-up capital. Many foreign enterprises operated as private limited companies, usually as a branch or subsidiary of multinational corporations. The Dutch had a major investment (close to 80 percent) in the sugar industry. Italian and Japanese investors participated in textiles; and Greeks maintained an interest in shoes and beverages. Italian investors also worked in building, construction and agricultural industries.

In 1975, the main characteristics of the manufacturing sector inherited by the revolution included a predominance of foreign ownership and foreign managerial, professional, and technical staffing; heavy emphasis on light industries; inward orientation and relatively high tariffs; capital-intensiveness; underutilized capacity; minimal linkage among the different sectors; and excessive geographical concentration of industries in Addis Ababa. The war in Eritrea and labor strikes and demonstrations also closed approximately 30 percent of the country's plants that had been located in that region.

The economic dislocation that followed the 1974 revolution had a significant impact on the manufacturing sector. Private sector capital investment ceased and labor's marginal productivity began to decline. In performance terms, the manufacturing sector's output after 1975 grew haltingly. Manufacturing had grown at an average annual rate of 6.1 percent between 1965 and 1973. A period of decline from 1974/75 to 1977/78 and an average annual growth rate of 18.9 percent for 1978/79 and 1979/80 were followed by a reduction of the growth rate to about 3.1 percent per annum between 1980/81 and 1984/85 and 3.8 percent per annum from 1985/86 to 1988/89.

The manufacturing sector's performance paralleled developments in other parts of the country. In the revolution's early days, the dislocation caused by nationalization, the flight of managers, the wars in Eritrea and the Ogaden, and local strife in many areas disrupted production and hurt productivity. Zemecha production campaigns, which focused on increasing capacity utilization, characterized the late 1970s. As a result of these campaigns, Ethiopia achieved growth rates of 27.3 percent in 1978/79. By 1985 capacity utilization estimates of many industries ranged between 70 and 100 percent, and many plants operated in three shifts. These figures were high by African standards.

On February 7, 1975, the government released a document outlining socialist Ethiopia's economic policy. The policy identified three manufacturing areas slated for state involvement. These were basic industries that produce goods serving other industries and that had the capacity to create linkages in the economy; industries that produce essential goods for the general population; and industries that make drugs, medicine, tobacco, and beverages. The policy also grouped areas of the public and private sectors into activities reserved for the state, activities where state and private capital could operate jointly, and activities left to the private sector.

Manufacturing productivity began to decline by 1980 because of a downturn in agricultural production and a shortage of foreign exchange to import raw materials. Analysts expected the manufacturing sector's productivity to decline further in the 1990s as equipment aged and spare-parts shortages grew. In response to the downward trend, in 1987/88 the government planned to invest 342 million birr in industrial enterprises to increase production capacity. In 1989 the government issued Proclamation No. 11, which enunciated policies intended to attract foreign investment.



Finally, in March 1990 Dergue announced the replacement of Ethiopia's socialist economic system with a mixed economy. Among the proposed changes were that private investors would be permitted to participate in all parts of the economy with no limit on the amount of capital invested.

Issued in 1983, the PMAC's Proclamation No. 235 (the Joint Venture Proclamation) signaled Ethiopia's renewed interest in attracting foreign capital. The proclamation offered incentives such as a five-year period of income tax relief for new projects, import and export duty relief, tariff protection, and repatriation of profits and capital. It limited foreign holdings to a maximum of 49 percent and the duration of any joint venture to twenty-five years. Although the proclamation protected investors' interests from expropriation, the government reserved the right to purchase all shares in a joint venture "for reasons of national interest." The proclamation failed to attract foreign investment largely because foreign businesses were hesitant to invest.

In 1989, the government issued Special Decree No. 11, a revision of the 1983 proclamation. The decree allowed majority foreign ownership in many sectors, except in those related to public utilities, banking and finance, trade, transportation and communications, where joint ventures were not allowed. The decree also removed all restrictions on profit repatriation and attempted to provide more extensive legal protection of investors than had the 1983 proclamation.

In 1990, acknowledging that socialism had failed; Dergue proposed implementing a mixed economy. Under the new system, the private sector would be able to participate in all parts of the economy with no limit on capital investment (Ethiopia had a US \$ 250,000 ceiling on private investment); developers would be allowed to build houses, apartments, and office buildings for rent or sale; and commercial enterprises would be permitted to develop industries, hotels, and a range of other enterprises on government-owned land to be leased on a concessionary basis. Additionally, state-owned industries and businesses would be required to operate on a profit basis, with those continuing to lose money to be sold or closed. Farmers would receive legal ownership of land they tilled and the right to sell their produce in a free market. Whereas there were many areas yet to be addressed, such as privatization of state enterprises and compensation for citizens whose land and property had been confiscated, these proposals generated optimism among some economists about Ethiopia's economic future. However, some observers pointed out

that Dergue's proposals only amounted to recognition of existing practices in the underground economy.

The industry sector in general and the manufacturing sector in particular were given due national importance following the formulation of the national industry policy in 2003 by the FDRE.

The strategy is designed within the framework of the world environment and the free market economy philosophy with the following underlying principles:

- Accept that the private sector is the engine of the industrial development strategy;
- Following the direction of Agriculture- led Industrialization;
- Following Export-led Industrialization;
- Focus on Labour Intensive Industries;
- Using Coordinated Foreign and Domestic Investment;
- Strong State Control; and
- Mobilizing the whole society for industrial development.

The industry policy has identified priority sectors that deserve attention to build the platform for the industry to take its key leading role in the economy. These sectors include Textile and garment, Leather and Leather Products Industry, chemical, metal, Agro-processing Industry and the Construction Industry. The industry policy has continued to be the corner stone for future industrial development in Ethiopia.

## Annex 2: Macroeconomic, Human and Social Development Indicators of Model Middle Income Countries

Key Macroeconomic Indicators (Source: *International Growth Centre (IGC, 2012)*)

TABLE 1 : KEY MACROECONOMIC INDICATORS COMPARISON												
Country Name	Year	Agriculture (% of GDP)	Industry (% of GDP)	Manufact. (% of GDP)	Services (% of GDP)	Exports (% of GDP)	Imports (% of GDP)	Gross fixed capital formation (% of GDP)	FDI, net inflows (% of GDP)*	Gross domestic savings (% of GDP)	Net ODA (% of GNI)	Revenue, excl. grants (% of GDP)
Brazil	1969	13.22	37.36	28.85	49.42	6.62	6.55		2.53	22.42	0.52	
China	2004	13.39	46.23	32.37	40.38	33.95	31.40	40.73	3.96	45.81	0.09	
Colombia	1970	25.69	28.30	21.15	46.02	14.31	15.82	18.08	4.36	18.66	2.29	
Costa Rica	1965	24.57	21.72		53.71	25.26	28.75	16.38	7.22	12.50	2.63	
Egypt	1998	17.11	30.86	18.29	52.02	16.21	25.71	21.33	8.87	12.00	2.28	
El Salvador	1992	14.56	30.28	24.40	55.16	16.09	32.43	17.18	7.40	2.18	6.78	
Guatemala	1998	23.44	19.99	13.57	56.57	18.17	26.25	16.65	2.18	9.31	1.21	9.53
Korea, Rep.	1973	26.74	29.21	22.23	44.04	28.68	31.85	24.18		22.44	2.06	
Malaysia	1976	27.64	35.05	18.52	37.31	48.95	39.03	22.52	4.53	31.18	0.56	
Morocco	2007	13.73	27.31	15.04	58.95	35.75	44.86	31.25	3.73	23.37	1.44	34.75
Paraguay	1980	28.62	27.44	16.01	43.93	15.31	28.70	30.17	1.69	18.26	0.66	
Sri Lanka	2006	11.34	30.64	19.23	58.02	30.13	41.13	24.87	1.86	16.98	2.82	16.23
Syria	2004	21.86	34.64	9.75	43.50	40.57	37.78	23.83	3.06	20.20	0.43	
Thailand	1990	12.50	37.22	27.20	50.28	34.13	41.65	40.38	4.58	33.84	0.94	
Tunisia	1990	15.72	29.79	16.89	54.49	43.56	50.60	24.36	4.30	20.02	3.29	30.71
<b>Mean</b>	<b>MMIC-O</b>	<b>19.34</b>	<b>31.07</b>	<b>20.25</b>	<b>49.59</b>	<b>27.18</b>	<b>32.17</b>	<b>25.14</b>	<b>4.31</b>	<b>20.61</b>	<b>1.87</b>	<b>22.80</b>
<b>Median</b>	<b>MMIC-O</b>	<b>17.11</b>	<b>30.28</b>	<b>18.87</b>	<b>50.28</b>	<b>28.68</b>	<b>31.85</b>	<b>24.00</b>	<b>4.13</b>	<b>20.02</b>	<b>1.44</b>	<b>23.47</b>
<b>Mean</b>	<b>MMIC</b>	<b>20.7</b>	<b>30.7</b>	<b>17.8</b>	<b>48.6</b>	<b>30.5</b>	<b>37.4</b>	<b>26.6</b>	<b>4.5</b>	<b>21.6</b>	<b>4.5</b>	<b>20.7</b>
<b>Median</b>	<b>MMIC</b>	<b>19.6</b>	<b>29.1</b>	<b>16.4</b>	<b>50.4</b>	<b>28.9</b>	<b>32.2</b>	<b>26.3</b>	<b>3.7</b>	<b>22.6</b>	<b>2.7</b>	<b>18.5</b>

Key Human, and social development Indicators of a Model Middle Income Country (Source: *International Growth Centre (IGC, 2012)*)

TABLE 2 : KEY HUMAN AND SOCIAL DEVELOPMENT INDICATORS COMPARISON											
Country Name	Year	Employment in agriculture (% of total employment)	Employment in industry (% of total employment)	Rural population (% of total population)	School enrollment, secondary (% gross)	Money and quasi money (M2) as % of GDP	Electric power consumption (kWh per capita)	Poverty headcount ratio at \$2 a day (PPP) (% of pop)	GINI index	Poverty gap at \$1.25 a day (PPP) (%)	Population growth (annual %)
Brazil	1969			45.30		17.92					2.52
China	2004	44.10	17.70	60.52	66.97	141.81	1586.25				0.59
Colombia	1970			45.20	23.98	19.84					2.60
Costa Rica	1965			64.50		19.61					3.38
Egypt	1998	29.80	22.30	57.32	70.07	73.28	867.32				1.88
El Salvador	1992	35.80	22.70	48.88	40.85	30.10	385.01				1.55
Guatemala	1998	37.60	23.20	55.70	31.27	19.53	344.44	29.85	55.65	15.65	2.29
Korea, Rep.	1973			54.92		31.47	399.06				1.99
Malaysia	1976			61.44		60.15	463.90				2.30
Morocco	2007	43.30	20.30	44.32	55.85	97.40	707.05	13.97	40.88	2.50	1.20
Paraguay	1980			58.30	26.52	19.43	240.40				2.78
Sri Lanka	2006	32.20	26.60	84.90	87.00	37.93	399.23				1.10
Syria	2004	27.00	25.60	47.12	63.11	74.18	1322.46				3.07
Thailand	1990	63.30	13.60	70.60	29.06	68.42	708.13				1.36
Tunisia	1990	25.80	33.60	42.10	44.03	49.67	638.43	19.04	40.24	5.87	2.43
<b>Mean</b>	<b>MMIC-O</b>	<b>37.66</b>	<b>22.84</b>	<b>56.07</b>	<b>48.97</b>	<b>50.72</b>	<b>671.81</b>	<b>20.95</b>	<b>45.59</b>	<b>8.01</b>	<b>2.07</b>
<b>Median</b>	<b>MMIC-O</b>	<b>35.80</b>	<b>22.70</b>	<b>55.70</b>	<b>44.03</b>	<b>37.93</b>	<b>551.17</b>	<b>19.04</b>	<b>40.88</b>	<b>5.87</b>	<b>2.29</b>
<b>Mean</b>	<b>MMIC</b>	<b>41.2</b>	<b>20.5</b>	<b>62.3</b>	<b>46.5</b>	<b>51.5</b>	<b>403.7</b>	<b>48.4</b>	<b>38.9</b>	<b>5.3</b>	<b>2.2</b>
<b>Median</b>	<b>MMIC</b>	<b>43.3</b>	<b>18</b>	<b>64</b>	<b>47.6</b>	<b>43.1</b>	<b>323.6</b>	<b>48.4</b>	<b>38.5</b>	<b>4.6</b>	<b>1.9</b>

## Annex 3: Key Informant Interviews and Focused Group Discussion Conducted At Macro and Sectoral Levels

### 1. Macro Level Data collection

#### 1.1 Macro Level In-depth Interviews conducted

No.	Name	Organization	Position
1	H.E Ato Mekonnen Manyazewal	Ministry of Industry	Minister
2	H.E Ato Tadesse Haile	Ministry of Industry	State minister
3	H.E Ato Alemayehu Tegenu	Ministry of water and Energy	Minister
4	H.E w/o Sinknesh Ejigu	Ministry of Mines	Minister
5	H.E Ato wondirad Mandefro	Ministry of Agriculture	State minister
6	H.E Dr Abraham Tekeste	Ministry of Finance and Economic Development	State minister
7	H.E Ato Wondwossen Kiflu	Ministry of Education	State Minister , TVET
8	H.E Dr Kaba Urgessa	Ministry of Education	State Minister, HE
9	H.E Yohannes Ayalew Birru	National Bank of Ethiopia	Vice Governor
10	Ato Fikru Gezahegn	National Bank of Ethiopia	A/Director
11	Ato Tesfaye Gezahegn	National Bank of Ethiopia	A/Director
12	Ato Elias Loha	National Bank of Ethiopia	Director
13	Ato GebreMeskele Challa	Federal Small and Micro enterprises Development Agency	Director
14	Ato Mekuria	Eth Electric Power corporation	Planning Head
15	H.E Mohammed Seid	Eth Investment Agency	A/ Director General
16	H.E Ato Esayas Bahre	Development bank of Ethiopia	President
17	Ato yohannes Melese	Customs and Revenue Auth.	Director, Investment Promotion directorate

### 2. Sectoral level data collection

#### 2.1 Agro processing Sector

##### 2.1.1 In -Depth Interview

No.	Key Informant	Organization	Position
1	Dr. Seife	Agricultural Transformation Agency	Director
2	Ato Wondimu Belete	Ethiopian investment Agency	Agro sector team leader
3	Ato Amanuel	Ethiopian investment Agency	Expert
4	w/o Rahel Fitsum	Ethiopian investment Agency	Expert

5	Ato Dendana Chemedda	MoI Agro processing	Director
6	Ato Fekade Wondmagegn	Extension Division Ministry of Agriculture	Director
7	W/o Keno Abate	Extension Division Ministry of Agriculture	Expert
8	Ato Seyoum Abate	Extension Division Ministry of Agriculture	Expert
9	Ato Mohammed	Extension Division Ministry of Agriculture	Expert
10	Giday Gebremedhin	Ministry of Agriculture	Milk and meat development Director
11	Ato Essayas	Ministry of Agriculture	Agro processing Director
12	Mr. Asefa	Ministry of Trade	Advisor to MoT

### 2.1.2 Focused Group Discussion (1)

No.	Name of Participant	Organization	Position
1	Moges Azmtie	Health Care food Manufacturing	Project manager
2	Aster Mengesha	Aster BUNNA	General Manager
3	Kalayou Tessema	Ethiopian Shipping and logistics Enterprise	Shipping Director
4	Elias Geneti	Dipasa Agroindustry	Managing Director
5	Ben Van Ampting	Selet Hilling Plc	General Manager
6	Tesfaye T/Haimanot	KalebPlc	General Manager
7	Tewodros Assefa	Elliana Coffee	General Manager
8	Solomon Abate	Ethiopian Institute of Agricultural Research	Rp Director General
9	Dawit Alem	EIAF	Coordinator
10	Amare Seifu	Ministry of Industry	Team leader
11	Zergaw Feleke	Ministry of Industry	Team leader
12	Menegsha Tadesse	AGP AMDE/USAID	Team leader
13	Yibel H/Sillasie	Africa Juice T SC	Finance manager
14	Belete Beyene	Hilina Foods	General Manager
15	Haile W/ Giorgis	Fafa Food Plc	D/Director general
16	Mesfin Abate	National Alchohol and Liquir Factory	Deputy CEO

### 2.1.3 Focused Group Discussion (2)

No.	Name of Participant	Organization	Position
1	Yohannes Beshah	Honey & Wax Association	General Manager
2	Abu Negesso	EHBPEA	President
3	Tamrat Ejigu	Ethiopian meat Exporters Association	A/ Sec. General
4	Bedlu Asfaw	Ministry of Industry	Team coordinator
5	Solomon Abate	EIAR	Rp Director general
6	Tedela Zegeye	EHPEA	Admin & Finance
7	Asegid Adane	UNIDO	Program officer
8	Mulugeta Tegegn	Edible Oil producers Association	Sec. General
9	Dessie Abeje	Ministry of Industry	Team Coordinator

## 2.2 Leather and Footwear

### 2.2.1 In –Depth Interview (1)

No.	Key Informant	Organization	Position
1	Wondu Legesse Gizaw	LIDI	Director General
2	Berhanu Serjabo	LIDI	Director, Communications Directorate
3	Mr Mario	ARA shoe Factory	General manager
4	Mrs Raluca	ARA shoe Factory	Deputy GM

### 2.2.2 Focused Group Discussion at LIDI (1)

No.	Name of participants	Organization	Position
1	XuJian Liang	Ethio-Africa Tannery	General Manager
2	Tsegaye Tefera	LIDI	Registrar
3	Rediman Bedada	Modjo Tannery	Manager
4	Mishamo Wakaso	LIDI	Technologist
5	Yalew Alemayehu	Wallia Leather	Deputy Manager
6	Andigegn Kebede	LIDI	Economist
7	Bethelhem Tilahun	BoStex PLC	General Manager
8	Wondimu Kumera	LIDI	HR Director
9	Tesfaye Beyene	Jamaica Shoes	Deputy Manager
10	Binyam Bedada	Dire	General Manager
11	Wondu Legesse	LIDI	Director General
12	Yakob Taddesse	Ethio-Africa Tannery	Administrative Manager

### 2.2.3 Focused Group Discussion at LIDI(2)

No.	Name of participants	Organization	Position
1	Dagnachew Demelash	Ethiopian Tannery ,S.C.	Finance Director
2	Brook Debebe (AMBAsador)	ELICO	General Manager
3	Berhanu Serjabo	LIDI	Director, Communications Directorate
4	Esmael Feyissa	HAFADE PLC	Deputy General Manager
5	Solomon Getu	Crystal Tanneries	Managing Director
6	Tesfaye Begna	COLBA Tannery	General Services Head

7	Abdissa Adugna	Ethiopian Leather Industries Association	General Secretary
8	Solomon Tadesse	LIDI	Director
9	Kalu Kebede	LIDI	E/director
10	Berhanu Negus	LIDI	Director, Testing and Laboratories

## 2.3 Chemical and Pharmaceutical

### 2.3.1 In –Depth Interview (1)

No.	Key Informant	Organization	Position
1	Ato Shimelis	Adami Tulu Pesticide	General Manager
2	Ato Tesfaye	Pharmacure (Ethiopia) GM	General Manager
3	W/t Etenesh Abreha	Pharmaceutical Manufacturers Association	President and Production expert
4	Ato Bekele	Chemical Manufacturers Association	President
5	Ato Wolde Aregay	Caustic Soda S.co	General Manager
6	Eng. Lelisa Daba	Cleaner production center	Director
7	Eng. Asrat Bulbula	Midroc Ethiopia	Senior Consultant
8	Ato Asmelash Hailu	ASMI medical supplies and industry	Director and sec of Pharma Association
9	Ato Solomon Yohannes	Ministry of industry	Chemical directorate director
10	Ato Tesfaye H/ Micheal	CADILAC Pharmaceutical Ethiopia Plc	President

### 2.3.2 Focused Group Discussion (Pharma sector) (1)

No.	Participant	Organization
1	Yemanebirhan Taddese	PFSA
2	Shimeles Ayele	EPHARM
3	Yasin Ahmed	FMHACA
4	Mengesteab Woldearegay	FMHACA

### 2.3.3 Focused Group Discussion (Chemical sector) (2)

No.	Participant	Organization
1	Ato Tsega K.	Afro German
2	Ato Daniel Tsegaye	Chemical society of Ethiopia
3	Ato Girma Neway	Agica (Ethiopia) Company
4	Ato Seifu Derebe	Ethiopia Plastic Industry
5	Ato Daniel Tsehaye	Horizon Addis TyreS.Co
6	Eng. Seifedin Khalid	Kadisco Chemical Ind. Plc
7	Ato Habtamu Khasaye	Chora Gas & Chemical products
8	Ato Berhanu Assefa	AAIT/AAU



## 2.4. Basic Metal and Engineering Sector

### 2.4.1 Interviews

(Venue: Metal Industries Development Institute (MIDI) and other industries)

No	Name of Respondent	Organization
1	Wondimu Deginetu	Toussa Steel Factory
2	Samuel Muluneh	Kasma Engineering PLC
3	Daniel Gebre	Mesfin Industrial Engineering PLC
4	Yesuf Ademnur	Mesfin Industrial Engineering PLC
5	Ato Habte Wold	Steely Metal PLC
6	Mohammed Abdi	Hadid Trading PLC
7	AbdiSali	Hadid Trading PLC
8	Demirew Metaferia	Sintec Ethiopia PLC
9	Ato Melaku Messelu	walia steel plc
10	Ato Seyoum Teshome	FeSMEDA(Metal and Engineering Directorate)
11	Mathewos Assele	Kality Metal Products Factory
12	Aseged Mamo	Ethiopian Metal Products Manufacturing Association-G/Manager
13	Workneh Delelegn	Metal Industries Development Institute
14	Mesfin Lakew	Metal Industries Development Institute
15	Girma Alemu	Metal Industries Development Institute

### 2.4.2 Focus Group Discussion at Metal Industries Development Institute (1)

No	Name	Organization
1	Workneh Delelegn	Metal Industries Development Institute
2	Mesfin Lakew	Metal Industries Development Institute
3	Girma Alemu	Metal Industries Development Institute
4	Dereje Asfaw	Metal Industries Development Institute
5	Shumu Tefera	Metal Industries Development Institute
6	Mebru HabteMariam	Metal Industries Development Institute
7	Derbew HaileMariam	Metal Industries Development Institute
8	Kassa Alemaye	Osaka steel PLC
9	Wondimu Deginetu	Toussa Steel Factory
10	Shimeles Eshete	Toussa Steel Factory
11	Demirew Metaferia	Sintec Ethiopia PLC
12	Saad Ibrahim	Euro Cable
13	Belay Alemneh	Alem Steel PLC
14	Yisak Alemneh	Osaka steel PLC
15	Adem	Alem Steel
16	Meseret Alemneh	Osaka Steel PLC
17	Alemneh Beyene	Alem Steel
18	Tesema Gidey (Captain)	METEC / HMMBI
19	Bikila Bekana	METEC / MFI
20	Mossa Yimam	METEC / ABMI
21	Abuhai Mihretie	Ethiopian Standards Agency
22	Yonatan Mengesha	Ethiopian Conformity Assessment Enterprise
23	Birhanu Bechere	Ethiopian Society of Mechanical Engineers
24	Mengistu Bayoulgign	Ethiopian Society of Electrical Engineers

## 2.5. Textile and Garment Setor

### 2.5.1 In-depth Interview

S.N	Participant	Organization and position
1	Mr. Solomon	Chemical Industry Directorate Director
2	Mr. Dooyoung Lee	Director of Korean Trade-Investment Promotion Agency (KOTRA)
3	Park JoonKyu	Golobal Development Agency (Korean International Development Agency)
4	Mr. Assefa Aga	Ethiopian Cotton Growers Association (President)
5	Mr. Sileshi Lemma	General Director , TIDI

### 2.5.2 Focus Group Discussion with Textile Industry Development Institute Directors (1)

S.N	Participant Name	Organization
1	Ephrem Bekele	Engineering Services, Director
2	Anagaw Nigussie	Knitting and Waving Technology Director
3	Amha Bekele	Research and Laboratory Director
4	Fikir Tesfa	Finishing Technology Director
5	Seyoum T/ab	Garment Technology Director
6	Yared Mesfin	Marketing Director

### 2. 5.3 Focus Group Discussion on Enterprise cultivation (2)

S.N	Participants	Organization
1	Mintesinot Asfaw	Federal Small and Micro Enterprise Development Agency ( FESMEDA)
2	Almaz Aychluhim	Federal Small and Micro Enterprise Development Agency ( FESMEDA)
3	Asmayit Getachew	Micro and small enterprise representative (FertShimena)
4	Azmeraw Birhanu	Textile Industry Development Institute (Expert)
5	Demelash Ensermu	Textile Industry Development Institute (Expert)
6	Areda Batu	Bahrdar Universiy, Institute of Textile and Design Development
7	Ashenafi Taye	Bahrdar Universiy, Institute of Textile and Design Development
8	Besufekad Teju	Traditional producer
9	Biruk Wubshet	Representative from Federal TVET Agency

### 2. 5.4 Focus Group Discussion with private sector (3)

S.N	Participant Name	Organization
1	Areda Batu	Bahrdar Universiy, Institute of Textile and Design Development
2	Ashenafi Taye	Bahrdar Universiy, Institute of Textile and Design Development
3	Getachew Biratu	Owner of Akaki Garment
4	Biniyam Abreham	Ayka Addis Garment
5	Mehaue Selim Akman	Ayka Addis Garment
6	Berihanu Degefa	Owner of Edget Garment
7	Yilikal Bisenebit	Owner of OASIS Abysinia
8	Mohammed Umer	Owner of Nov Star Garment

9	Minda Tafesse	Garment manufacturer
10	Belayneh Beka	Owner of Beka
11	Abiy Gidey ()	ASB, Garment Accessories Manufacturing
12	Elias Mulugeta	Owner of EDM Garment

#### **2.5.4 Focus Group Discussion with experts of the Textile Industry Development Institute (4)**

<b>S.N</b>	<b>Participant Name</b>	<b>Organization</b>
1	Haile Sime	Senior Industrial Engineer
2	Wongel Hadis	Lead Mechanical Engineer
3	Dolo Benka	Senior Textile Engineer
4	Henok Adamu	Inspection Expert
5	Wondwosen Shiferaw	Marketing Expert
6	Mesay Alemayeu	Textile Engineer
7	Yitbarek Tilahun	Senior Textile Engineer
8	Mulu Chale	Assistant Textile Engineer
9	Abubeker Mohammed	Textile Engineer

#### **3. Focus Group Discussion with Foreign Investors forum (5)**

<b>S.N</b>	<b>Participant Name</b>	<b>Organization</b>
1	Members of the Chinese Business forum	Chinese Business forum
2	Members of the European Union Business forum	European Union Business forum

**Participants of Validation workshop for the industry development Roadmap, strategic plan, and institutional setup (2013-2025)**

<b>No.</b>	<b>Name</b>	<b>organization</b>	<b>position</b>
1.	H.E Ato Ahmed Abtew	MOI	Minister
2.	H.E Dr. Mebrahtu Melese	MOI	State minister
3.	H.E Ato Sisay Gemechu	MOI	State minister
4.	H.E Ato Mekonnen Manyazewal	N. Planning co.	Minister
5.	H.E Ato Shiferaw shigute	MOE	Minister
6.	H.E Ato Wondwossen kiflu	MOE	State minister
7.	Ahmed Nuru	MoI	Advisor
8.	Fassil Taddesse	ETAGAMA	President
9.	Belay wolleye	AAU	Asst. Prof
10.	Tamiru Habte	MOA	D/Director
11.	Henok Eshetu	ECF	Expert
12.	Yalew Alemayehu	ELIA/wallce	Board member
13.	Addisu Ferede	BDV-IoTex	Director
14.	Zewdu Kassa	MOE	Manager
15.	Zebene Kifle (Dr)	AAU	Asso.prof
16.	Alemu Ambaye (C/E)	Eth.shipping & Logi	DCEO
17.	Nigussie G/mariam	Advisor	MOI
18.	Temesgen walelign	MOFED	Director
19.	Asfaw Abebe	Femseda	D/Director
20.	Yaregal meskir	MOI	Director
21.	Getahun Tadese	Eth Kaizen inst.	G/D
22.	Bekele Temesgen	ERTA	A.A

23.	Sileshi Lema	ETIDI	D.G
24.	Teshome Lakew	MOA	Director
25.	Habtamu Kassie	Chemical Assoc.	Board member
26.	Nuredin Mustefa	MoFA	Senior expert
27.	Tewodros Assefe	Coffee Roasters	v/president
28.	Asres w/giorgis	MoWE	Director
29.	Feleke Lema	Meat & diary	Advisor
30.	Teshome megersa	EKI	Deputy D.G
31.	Salehu Anteneh	AAU	ASSt.prof
32.	Tesfaye Birhanu	LIDI	P.D.D
33.	Kassaye wolde	FBC	
34.	G/Hiwot G/her	ECSA	President
35.	Nebeyeleul Fantahun	MOI	Team leader
36.	Siuru Techale	ETIDI	Director
37.	Yosef Afework	MOI	T/Advisor
38.	Demis Alemu (Dr)	AAU	Reviewer
39.	Tadele Ferede	AAU	Reviewer
40.	Girma Dame	MOI	Expert
41.	Fitsum Arega	MOFED	Expert
42.	Minilik Habtu	ECRA	President
43.	Said Mohamed	MOM/GSE	Geologist
44.	Wudineh Zenebe	REPORTER	Journalist
45.	T/haimanot Geses	EEPCO	Chief officer
46.	Abadi lagesse	T.M	Chief officer
47.	Getahun Haile	Eth Animal feed A.	Board member
48.	Yohanse Tilahun	ATA	S. Director

49.	Endale Shewangizaw	MOE	Advisor
50.	Hunegnaw Abebew	LIDI	Senior Economist
51.	Workneh Delelegn	MIDI	D/G
52.	Girum Abebe(Dr)	EDRI	Researcher
53.	Gebregziabher G/yesus(Dr)	MoA	State
54.	Mohamed Yenus	MOFA	Sinor Expert
55.	Zemene yohanes	Dashen Comm.	Editor
56.	Mulugeta Tefri	HPR	Committee
57.	Mesfin Wubshet	MOI	
58.	Nahom Tesfaye	MCC	Photo
59.	G/Hiwet G/Tatios	ECF	Expert
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61.	Mezgebu Amha	MOFED	Director
62.	Solomon G/medhin	Press Agency	Editor
63.	Lemlem mengistu	Press Agency	Reporter
64.	Tigist Getenet	Press Agency	Reporter
65.	Bethlhem Legesse	Press Agency	ZAMI
66.	Biruk Endale	Press Agency	ETV
67.	Abrham Minilu	TIDI	Expert
68.	Dagnachew eyene (Dr)	MOA	Director
69.	Yirdaw w/semayat	EHFIH	Exe. director
70.	Hagose Sequar	MOI	Team.Leader
71.	Dandena Chemedra	MOI	Director
72.	Danel kitaw (Dr)	AAIT	Asst.prof
73.	Temesgen Garoma (Dr)	Wollega university	Research /director

74.	Abdissa Yilma	MOST	Tech. Adviser
75.	Kidist Fantahun	MOI	Advisor
76.	Gessesse Teshome	AACA	V/president
77.	Samuel Mulugeta	MIDR	Board member
78.	Metassebia Hailu	MIDROC Ethiopia	Legal Advisor