

Short Communication Paper**Profitability Analysis of Door To Door Sales of Plastic Products - A Case Study of Robe Town, Ethiopia****Sreepada Hegde<sup>1\*</sup> & Vijayalaxmi Hegde<sup>2</sup>**<sup>1</sup>*Deputy Registrar/Alumni Management Officer Madawalabu University, Bale-Robe, Ethiopia*<sup>2</sup>*Assistant Professor, Department of Economics, Madawalabu University, Bale-Robe, Ethiopia**\* Corresponding Author: Sreepada Hegde***Abstract**

The study was conducted on the Profitability Analysis of Door To Door Sales of Plastic Products and case study conducted in Robe Town in Ethiopia. The study carried out with an objective to analyze the profitability of plastic sales to consumers. The study employed 120 sample sizes of respondents and assumed (Hypothesis) that the direct sale of plastic products has own impact on daily income. The Second Hypothesis Plastic industry has direct relation with sustainable development and third hypothesis stated that the sellers have facing many problems in Robe town. To test these hypotheses, an elaborate questionnaire for administering sample sizes in Robe town. Apart from the above, secondary sources also used and to prove the inferences or nullify the hypotheses. The collected data was analyzed with the help of statistical tools. The H:1 regression (Single Variable Test-Regression 0.97% resulted), H:2, correlation resulted (For Multi variables) +0.9762. Third Second hypothesis stated many problems are encountering in Robe town and same is weighted under ranking method. To conclude, that the industrialization will contribute to the growth of large number of small production units. The development of Industrial sector contributes to the expansion of existing employment, output and export and fostering entrepreneurship in Ethiopia.

**Key words:** Plastic Products, Sales and Profitability

Ethiopia has made a significant progress in the industrialization. The country is one of the third fastest growing economies in the world. The 8.1 per cent growth rate has pivot the land of creative opportunity and place the premium enterprises in Ethiopia. (CSA, 2011). The government has embarked on a program of economic reform in Ethiopia. To strengthen the GDP; industrialization is most pressing needed in Ethiopia.

Ethiopia has Africa's second most populous country having wide range of market for industrial productions. The country has 84,320,987 million populations in African continent next to Nigeria (United Nations, 2011). 84% of populous are in rural and 16% are in urban areas (Calverton, 2011). Industries are the indicator of economic growth and become the key drivers of innovations & application development. Plastic industry is the best example for industrial innovation due changes in consumer interest on different and varieties of products. Therefore, Ethiopia has a good scope for production and distribution of plastic to the national and international market. The promotion of industries has been widely recommended as one of the most appropriate means of developing industry in our populated backward countries.

In recent years, significant aspect of plastics material growth globally has been the innovation of newer application areas for plastics such as increasing plastics applications in automotive field, rail, transport, defense & aerospace, medical and healthcare, electrical & electronics, telecommunication, building, infrastructure and furniture. Ethiopia is one of the fastest developing countries; industrialization especially in plastic industry will be a new dimension for balancing the regional development because plastic industry has inherent in small production and distribution for domestic consumption.

Worldwide Plastics Industry witnessed a steady growth in the year 2007 which is reflected in the increased consumption figures of all types of Plastics materials. The plastics consumption will have an average growth rate of 5% and it will touch a figure of 227 million tons by 2015. Asia has been world's largest plastics consumer for several years, accounting for about 30% of the global consumption excluding Japan, which has share of about 6.5%. Next to Asia is North America with 26% share, then Western Europe with 23% share in the global market. The key growth segment remains "Packaging" which accounted for over

35% of the global consumption. The individual Plastics Materials, Polyolefin accounted for 53% of the total consumption, (PE with 33.5%, PP with 19.5%) followed by PVC has 16.5%, PS is 8.5%, PET & PU combined together 5.5%, Styrene copolymers has the share of 3.5%, other engineering, high performance & specialty plastics, blends, alloys, thermosetting plastics share is 13%.

Defining the plastic is a material of any wide range of synthetic or semi-synthetic solids that are moldable. Plastic comes from the Greek term 'Plastikos' that means, 'to form'. It was named this because it could be shaped in many ways, by simply heating and cooling it.

Plastics are typically organic polymers of high molecular mass but they often contain other substances. They are usually synthetic, most commonly derived from petrochemicals but many are partially natural. Most plastics contain organic polymers. The vast majority of these polymers are based on chains of carbon atoms alone or with oxygen, sulfur, or nitrogen as well. This fine tuning of the properties of the polymer by repeating unit's molecular structure has allowed plastics to become an indispensable part of the twenty-first century world.

Plastic has occupied a major role in the lifestyle of the 21st century. At present, the global GDP of the world is around US \$ 32 trillion. Out of this, the value of chemical output alone contributes to 5 percent of it. Commodity plastics contribute US \$ 90 billion that is 5.6 percent of the entire chemical output and polyolefin output is US \$ 61 billion that is 3.8 percent of the chemical output. This gives us an idea of the size plastic industry and the significance that it holds in the global scenario. This becomes even more significant when the global polymer industry is growing by almost twice the rate of the global GDP.

Ethiopia changed its approach from a controlled economy to market driven system. The current Government monetary system is supporting the objectives of global integration and brought in a lot of new aspects like pragmatism, consumerism, technology-driven approach, joint ventures, and foreign direct investment. This has benefited the industrial development in the country phenomenally. Plastic industry is one of the industries, which is showing tremendous potential in the near future. It is called as the sunrise industry because of the scope that it is emanating for the country.

The main application of major plastic is identified for industrialized purpose. The large tonnage of commodity plastics is mainly used for packaging. PVC is mostly used for durable and infrastructure applications in building construction and public works. Engineering plastics and ABS are mainly used in automobile and electrical industry in the broadest sense, including appliances, telecommunications, Radio-TV etc. Three important plastics namely, Polyvinyl chloride (PVC), Polypropylene (PP), and Nylon have the widest balanced range of applications. PP is the most diversified of all the commodity plastics with the fastest growth rates. The fastest growing applications are in packaging, and PET bottles. In building construction, plastics are only 1-3 percent of the total material tonnage, but at least 10 percent of the total value, mainly in secondary construction. The fastest growing plastic markets in building construction are pipes, windows, and doors and geo textiles in public works. The electrical industry is another major consumer of plastics with cables and wires. There is rapid growth of applications in agriculture and consumer goods also.

The problem stated in study reveals that the door to door selling of plastic products is profitable or not for the vendors. The question is whether the seller's may lead the independent business or daily life. Thus, the objective of the study analyzed the profitability of plastic sales to consumers directly.

An attempt has made on the review of the studies carried on by many experts on plastic industry and marketing of products has important role in sustainable development. Especially rural and semi urban areas it will create employment opportunity.

The study assumed that (First Hypothesis) the direct sale of plastic products has own impact on daily income. The Second Hypothesis Plastic industry has direct relation with sustainable development and third hypothesis stated that the sellers have facing many problems in Robe town. To test these hypotheses, an elaborate questionnaire prepared for administering on 120 random sample sizes of respondents from Robe town. Apart from the above, secondary sources also used and to prove the inferences or nullify the hypotheses. The data collected was analyzed with the help of statistical techniques like ratios, percentage, regression (Single Variable Test) correlation (For Multi variables), and ranking method.

The study interpreted the various facets. Having examined the socio-economic aspects of street sellers, Interpret the many aspects through analysis tools such as Age, Income Source and problems of entrepreneurs had been analyzed.

The age of sellers(Table)shows that 37.52 % of 120respondents are in the age between 31 to 40 and 25.83% sellers are in 21-30 years, it reveals the tough enough to earn the income and this job is satisfied them to lead the life. Table shows that age wise distribution of respondents in Robe Town.

**Table 1:** Age wise Distribution of Sellers in Robe Town

Age	Seller	Percentage
10-20	5	4.16
21-30	31	25.83
31-40	45	37.52
41-50	23	19.16
50 & Above	16	13.33
Total	120	100.00

Source: Survey Data

The study carried out in Robe town is a separate woreda in south-central Ethiopia Located in the Bale Zone of the Oromia Region. Robe has 21,516 populations (CSA, 1994), during 2007, National Census reported a total population for Robe of 44,382. Over 13 years of period 106% Growth in population,thus, an average 0.09% growth per year. The rapid growth in population and house hold reached 52,400 in 2011(CSA). An average growth 18% per annum correspondingly increases in household also. At present, 70,000 people and 20,000 household are available in Robe Town. Thus, it shows parallel usage of plastic products in Robe Town.

The respondents enunciate that a day transaction has an impact of regular income and economic sustainability. An average daily turnover is 450 birr to 550 birr. Out of that 25 to 30% profit will generate by sales.The highest income earned by exchanging the used/old cloths from households. An average of 100-150 birr day income proved the First hypothesis and resulted (regression Analysis- single test- direct sales ( X-Independent Variable) & daily income (Y-Dependent variable ) positively 0.95% resulted. Thus the daily sales has own impact on income.

To test the second hypothesis, correlation tolls has applied on the assumption that the Plastic industry has direct relation with sustainable development. X Variable (Industries) with their dependent variable Y (Indicator like Employment, Entrepreneurship, Innovation, Export Market, Economic development, New opportunity, Investment opportunity, overall development, location advantages, independency, Empowerment, green economy and sustainability). The Correlation between X & Y & Co-efficient is presented. =Correlation(r) =  $\frac{[N\sum XY - (\sum X)(\sum Y)]}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$  = 105.6/108.17 and Co- efficient of Correlation is + 0.9762 or +1 Thus, the Test Result shows that the Degree of relationship between Plastic industry has direct relation with sustainable development is very high (+ 0.9762).

The study makes an attempt to highlight the problems faced by the sellers in Robe Town. The Third hypothesis has proved that the sellers are facing many problems in Robe town.The problem of Retailer sales (Shop) is the challenge in Robe town is stood at 1<sup>st</sup> Rank (No. of seller opted 1<sup>st</sup> preference & Weighted Score of 1<sup>st</sup> Preference). Determination of price locally stood at 2<sup>nd</sup> rank, Lack of Infrastructure like (Asphalt/ Road) stood 3<sup>rd</sup> rank, raw material availability stood at 4<sup>th</sup> rank, encouragement/ subsidy stood at 5<sup>th</sup> rank and other problems are least preferred because they have tough enough to manage the things.

The Major findings of the study reveals the development of plastic industries and it sales and service will sector contributes to the expansion of existing employment, output and export and fostering entrepreneurship. Door to door sales will provide an employment opportunity and independent leading life especially those who uneducated and unemployed. Study also reveals that some problem and it can be easily resolved by the Government.

The Study suggested that encouraging wide verities of independent jobs like sales, service, marketing, will pave the way for poverty alleviation in the country. To conclude, that the industrialization will contribute to the growth of large number of small production units in Ethiopia. The development of Industrial sector contributes to the expansion of existing employment, output and export and fostering entrepreneurship, so as to fulfill the socio-economic objectives of the nation for balancing the development especially in rural, semi-urban and backward areas in Ethiopia.

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