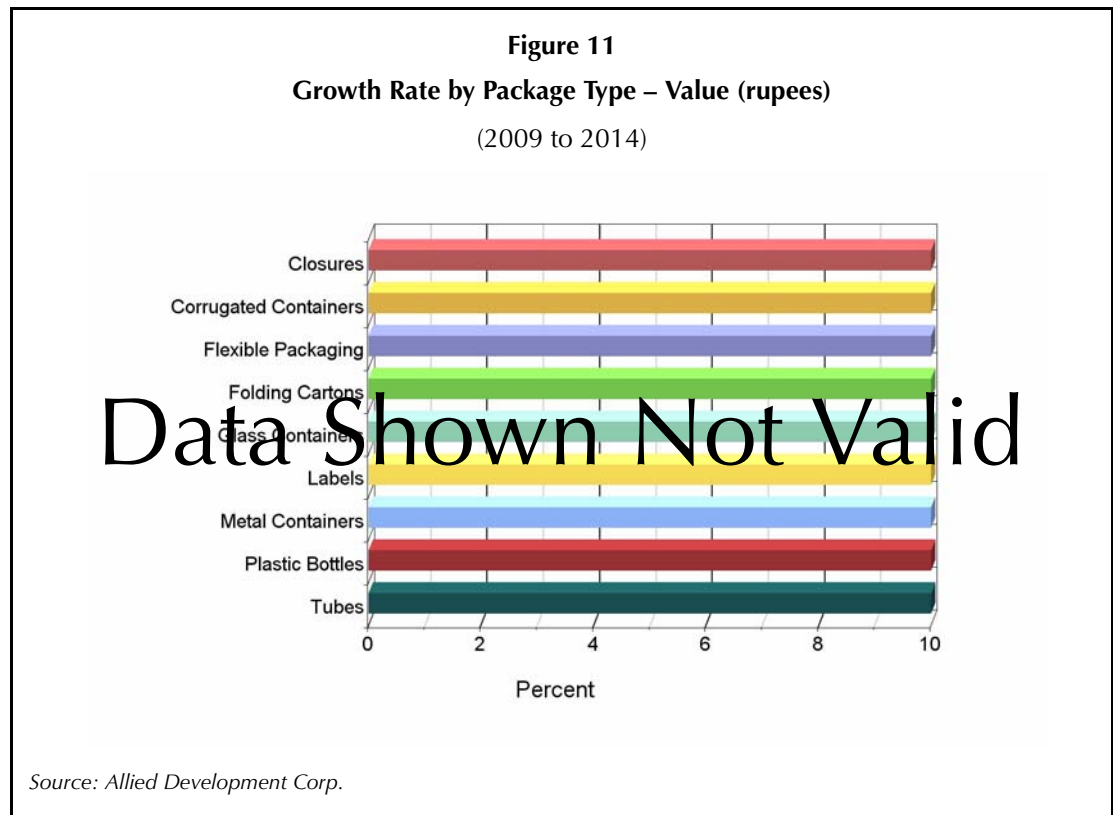


Although flexible packaging has the largest share, the packaging market in India is comprised of many package types, each with a significant market share.

Figure 11 provides the growth rates of the packaging market in India segmented by package type and based on value (rupees).



The growth rate for the total packaging market will be ???% per year through 2014 based on value.

The label industry leads the packaging industry in growth rate at ???% per year. One reason for the high growth rate of labels is the rapid growth of the many containers that labels are applied to, such as PET, HDPE, and glass bottles. Labels are also being used on products that, historically in India, haven't used labels very much, including apparel and cans (shrink labels).

Historically, milk sellers have brought milk to local markets in traditional milk cans (left Figure 14). These cans are used as milk containers around the world. The method of transportation is very basic, resulting in very short distances from dairy farm to market. The picture on the right in Figure 14 shows a milk seller in his milk shop filling a plastic bag with milk for his customer.

The picture on the left in Figure 15 shows milk being delivered to a customers' door step with a motorbike. The picture on the right in Figure 15 shows milk being distributed out of a milk delivery shop inside a private home.



In contrast, Figure 16 shows the packaged milk options that exist in India today. These and similar products will be the popular products of the future.

Figure 16
Distribution Changes



Source: Allied Development Corp.

The top left picture in Figure 16 shows milk packaged in pouches and the bottom right picture in Figure 16 shows milk packaged in folding cartons. Flavored milk in cans (top right Figure 16) and flavored milk in glass bottles (bottom left Figure 16) are also shown. All of the packages are shelf-stable, with the exception of the pouches, which must be refrigerated.

5. Comparison – results

Table 19 provides the comparison of manufacturing cost in India and the United States. The variance column shows India's cost position relative to the United States.

Table 19
PET Bottle – India vs. United States

COST CATEGORY	India	United States	Variance
	(cents/unit)	(cents/unit)	%
Materials			
Labor			
Energy			
Distribution Packaging			
Shipping to Customer			
Total variable Cost			
Office Supplies			
Labor			
Energy			
Lease cost			
Insurance			
Utilities			
Communications			
Travel			
Maintenance supplies			
Minor equipment			
Outside services			
Professional services			
Laboratory supplies			
Total fixed cost			
Total Cost			

Data Removed

Source: Allied Development Corp.

Tobacco

India is a large producer and consumer of tobacco products. Flexible packaging in the tobacco market segment is comprised primarily of unit-dose pouches and, most recently, zippered pouches for multiserve products. High growth will continue through 2014.

3. Flexible packaging forecast – volume(metric tonnes) by end use

Table 17 provides the flexible packaging market forecast segmented by end-use and measured in weight (thousand metric tons).

END-USE	2004	2009	CAGR	2014	CAGR
Beverage					
Chemical					
Food and pet food					
Healthcare					
Industrial					
Personal care					
Tobacco					
Other					
Total					

Data Removed

Source: Allied Development Corp.

Having determined consumption in weight (Table 17), it is important to compare growth in weight to growth in area (Table 16). For flexible packaging, the growth rates by weight are nearly identical to the growth rates in area, and require no further explanation.