

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

Sustainability is defined in different ways throughout industries (Jones, Hiller, Comfort, & Eastwood, 2005)<sup>1</sup>. Marshal and Brown (2003)<sup>2</sup> gave the most acceptable definition of sustainability as “the ability of current generations to meet their needs without compromising the ability of future generations to meet theirs.” Sustainability, which includes environmental quality and preservation as well as meeting the stress of emissions reductions, is rapidly becoming an important issue for business and also for public policy (Wooley, T. D., 2010)<sup>3</sup>. With the advancement of environmental technologies and in combination with harder regulation, many industries began to make corporate commitment to sustainable innovation (Pankaew, P., Tobe, M. (2010)<sup>4</sup>, and Umberson (2008)<sup>5</sup>).

Citizens are aware of the Earth’s surrounding problems such as global warming, toxic substance usage, and diminution of conventional resources. They have also come to realize that “wealth generations can be channeled into new technologies that are not only more productive in terms of energy and resource consumption, but also are environmentally more efficient. This shows the way to customer demand for sustainable products in which companies will need to make an effort to reduce consumption and waste as to help protect the environment and boost profitability and growth” (Tello& Yoon, 2009)<sup>6</sup>.

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<sup>1</sup>Jones, P., Hiller, D., Comfort, D., & Eastwood, I. (2005).Sustainable retailing and consumerism, Management research news, 28(1), 34-44.

<sup>2</sup>Marshal, R. S., & Brown, D. (2003). The strategy of sustainability: A systems perspective on environment initiatives. California Management Review, 46(1), 101-126.

<sup>3</sup>Wooley, Trisha D., (2010) "Sustainable Supply Chains: Multicriteria Decision-Making and Policy Analysis for the Environment". Open Access Dissertations. Paper 152.

<sup>4</sup>Pankaew, P., Tobe, M. (2010), Consumer Buying Behavior in Green Supply Chain Management context – A study in the Dutch Electronics Industry, Jonkoping International Business

<sup>5</sup>Umberson, K.,(2008). “Environmentally friendly purchase intentions debunking the misconception behind apathetic consumer attitude.”, Master’s Thesis, University of North Texas.

<sup>6</sup>Tello, S. & Yoon, E. (2009) Corporate Social Responsibility as a Driver of Sustainable Innovation: Greening Initiatives of Leading Global Brands. Competition Forum. Vol. 7, no. 2, pp. 290-294

Organizations need to implement new strategies to reduce harmful environmental impact of their output (Lewis and Gretsakis, 2001<sup>7</sup>; Sarkis, 1995<sup>8</sup>, 2001<sup>9</sup>). The reason behind this is “awareness of the consumers about possible environment problems has forced businesses, government and every household to buy green products” (Shultz and Holbrook, 1999)<sup>10</sup>. “This demand for implementing new strategies has been restricted not only to the final products but also to the way they are produced and consumed. Thus, the firms are being introduced to the new challenge of environmental demands parallel to the competition. As environmental products are new, it provides new opportunity and a chance to improve their market performance.

Every successful introduction of green product may provide new ways to add value to core business programs (Hansmann and Cloudia, 2001)<sup>11</sup>.” Therefore, market leaders in various industries have taken a step ahead to green their internal operation through ISO14000 certification, which provides framework to guide firms to implement Environment Management System (EMS). EMS helps firms to improve environment performance only within the firm’s operation boundaries instead of through the supply chain (Handfield et al. 2005)<sup>12</sup>.

More and more Indian companies are adopting ‘green practices’. It helps the environment, of course. It also helps the business. Indian Companies are feeling the pressure to go green, as many of their Western counterparts are building environmental sustainability into their business practices. For example, Wal-Mart, which annually imports over \$3 billion in goods from Indian suppliers, recently asked them to adopt green practices or risk losing the retail giant as a customer. The number of organizations contemplating the integration of environmental practices into their strategic plans and daily operations is continuously increasing (Sarkis, J., 2003)<sup>13</sup>.

The purpose of this study is to gain insight into environmentally friendly decorative paints purchase intentions by investigating consumers’ perspectives on the effect of purchasing

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<sup>7</sup> Lewis, H. and Gretsakis, J. (2001), *Design + Environment: A Global Guide to Designing Greener Goods*. Greenleaf Publishing, Sheffield.

<sup>8</sup>Sarkis, J. (1995), “Manufacturing strategy and environment consciousness”, *Technovation*, Vol.15 No 2., pp. 79-97.

<sup>9</sup>Sarkis, J. (2001), “Manufacturing’s role in corporate environmental sustainability: concerns for the new millennium”, *International Journal of Operations and Production Management*, Vol. 21 Nos. 5/6, pp. 666-85.

<sup>10</sup> Shultz, C.J. II and Holbrook, M.B. (1999), “Marketing and tragedy of the commons: a synthesis, commentary and analysis for action”, *Journal of Public Policy and Marketing*, Vol. 18 No. 2, pp. 218-29.

<sup>11</sup>Hansmann, K.W. and Claudia, K. (2001), “Environmental management policies”, in Sarkis, J. (Ed.), *Green Manufacturing and Operations: from Design to Delivery and Back*, Greenleaf Publishing, Sheffield, pp. 192-204.

<sup>12</sup>Handfield, R., Sroufe, R. and Walton, S. (2005), “Integrating environmental management and supply chain strategies”, *Business Strategy and the Environment*, Vol. 14, pp. 1-19.

<sup>13</sup>Sarkis, J. (2003), “A strategic decision making framework for green supply chain management”, *Journal of Cleaner Production*, Vol. 11 No. 4, pp. 397-409.

sustainable products on the environment, individual consumer attitudes toward environmentally friendly purchases, social pressure to purchase environmentally friendly decorative paints, cost of the merchandise, and ease of purchase. Throughout in this study, the terms environment-friendly, eco-friendly, sustainable and green will be used interchangeably.

## 1.2 Profile of Gujarat State

As per details from Census 2011<sup>14</sup>, Gujarat has population of 6.04 Crores, an increase from figure of 5.07 Crore in 2001 census. Total population of Gujarat as per 2011 census is 60,439,692 of which male and female are 31,491,260 and 28,948,432 respectively. In 2001, total population was 50,671,017 in which males were 26,385,577 while females were 24,285,440. The total population growth in this decade was 19.28 percent while in previous decade it was 22.48 percent. The population of Gujarat forms 4.99 percent of India in 2011. In 2001, the figure was 4.93 percent. Literacy rate in Gujarat has seen upward trend and is 78.03 percent as per 2011 population census. Of that, male literacy stands at 85.75 percent while female literacy is at 63.31 percent. In 2001, literacy rate in Gujarat stood at 69.14 percent of which male and female were 78.49 percent and 60.40 percent literate respectively.

Out of total population of Gujarat, 42.60% people live in urban regions. The total figure of population living in urban areas is 25,745,083 of which 13,692,101 are males and while remaining 12,052,982 are females. The urban population in the last 10 years has increased by 42.60 percent. Sex Ratio in urban regions of Gujarat was 880 females per 1000 males. For child (0-6) sex ratio the figure for urban region stood at 852 girls per 1000 boys. Total children (0-6 age) living in urban areas of Gujarat were 2,952,359. Of total population in urban region, 11.47 % were children (0-6). Average Literacy rate in Gujarat for Urban regions was 86.31 percent in which males were 90.98% literate while female literacy stood at 70.26%. Total literates in urban region of Gujarat were 19,672,516. Hence, in this study, focus would be on urban population of Gujarat.

Ahmedabad is the most populated district of the state, with more than 72 lakh people, followed by Surat (60.81 lakh people), Vadodara (41.65 lakh) and Rajkot (38.04 lakh) as per Gujarat's directorate of census operations. Gender wise 2011 census figures for largest four cities are

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<sup>14</sup> <http://www.census2011.co.in/census/state/gujarat.html>

mentioned in Table 1.2.1. Due to this reason, four major cities were selected for the study as a representative of Gujarat state to study consumer-buying behavior in green supply chain management practice context.

**Table 1.2.1: Table showing population of the four selected cities of Gujarat state.**

<b>Largest District by Population in Gujarat</b>	<b>Population</b>	<b>Male</b>	<b>Female</b>
Ahmadabad	7,214,225	3,788,051	3,426,174
Surat	6,081,322	3,402,224	2,679,098
Vadodara	4,165,626	2,153,736	2,011,890
Rajkot	3,804,558	1,974,445	1,830,113

In a July 2011 report, The Economist<sup>15</sup> referred to Gujarat as India's Guangdong. With double-digit growth rates, Gujarat continues to outpace growth in other Indian states. This has led to a booming entrepreneurial economy in Gujarat. In 2010, Forbes list of the world's fastest growing cities included Ahmedabad at number 3 after Chengdu and Chongqing from China. The Per Capita Income (i.e. Per Capita NSDP) at factor cost at constant (2004-05) prices has been estimated at Rs.61220 in 2012-13 as against Rs.57447 in 2011-12, registering a growth of 6.6 percent during the year. The Per Capita Income at current prices has been estimated at Rs.96976 in 2012-13 as against Rs.87175 in 2011-12, showing an increase of 11.2 percent during the year. The state also leads the country in various industrial sectors i.e., chemicals, textiles, petrochemicals and pharmaceuticals etc. The state contributes 21% of country's export.

Here, an attempt is made to study consumer-buying behavior in context of green supply chain management practices with respect to decorative paint market of Gujarat state. For this study, Ahmedabad, Surat, Vadodara and Rajkot cities are taken as representative of the Gujarat state. Respondents from urban area of these cities were surveyed to get detailed view of consumers' buying behavior towards eco-friendly decorative paints.

<sup>15</sup> <http://www.economist.com/node/18929279>

### 1.3 Green Supply Chain Management Practices

According to Khoo *et al* (2001), business organizations are facing increasing pressure of balancing marketing and environmental (green) performance<sup>16</sup>. World market is extremely competitive nowadays and it is more worried about the environment where people live. Researchers have studied how to reduce the manufacturing's negative influence to the environment from different angles and different disciplines (Steve Lippman. 1999<sup>17</sup>; Walton V S, Hardfield R B, Melnyk S A. 1998<sup>18</sup>; Yong T., Wang N., Zhu Y. 2006<sup>19</sup>). More and more researchers have realized that it is not enough to solve the conflict between the manufacturing and environment in all-round way by studying environmental management in a certain respect. So they have instigated to make improvisation in relationship of environment and manufacturing through study of supply chain process. "The lack of consensus in practice and definition of GSCM is not surprising, since it lies at the confluence of elements of corporate environmental management and supply chain management which are both relatively new areas of study and practice" (Sarkis & Zhu, 2004: 267)<sup>20</sup>. "GSCM is indeed costly, especially now that the economy is in the downward tailspin. The manner in which a company responds strategically to this shift of demand is dedicated towards its types of market" (Pankaew P., Tobé M., 2010)<sup>21</sup>. Contrasting reactions from companies in the same industry are common. Choice of strategy relies mainly on each company's choice of customer and market orientation, in which the effectiveness is responsive to the reaction of the consumers (Srivastava, 2007)<sup>22</sup>.

The most common perceived enemy to environmental protection is manufacturing and production operations, in the forms of waste generation, ecosystem disruption, and depletion of natural resources (Fiksel, 1996)<sup>23</sup>. Many manufacturers are among the first that start the taking back and recovering of their products, the attempts relating to their logistics networks towards the reverse

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<sup>16</sup> Khoo, H. H., Bainbridge, I., Spedding, T.A., Taplin D.M., (2001), Creating a green supply chain. *Greener Management International* (35), pp. 71-88.

<sup>17</sup> Steve Lippman. (1999). Supply Chain Environmental Management: Elements for Success. *Environmental Management*[J]. 6(2):175-182.

<sup>18</sup> Walton V S, Hardfield R B, Melnyk S A. (1998). The green supply chain: integrating suppliers into environmental management process[J]. *International Journal of Purchasing and Materials Management*, 4:2-10

<sup>19</sup> Yong, T., Wang, N., Zhu, Y. (2006). "The Research Actuality and Direction of Green Supply Chain Management", *International Journal of Business and Management*, October-2006, Vol. 1, No. 5, pp. 87-95.

<sup>20</sup> Sarkis, J. & Zhu, Q. (2004) Relationship Between Operational Practices and Performance Among Early Adopters of Green Supply Chain Management Practices in Chinese Manufacturing Enterprises. *Journal of Operations Management*. Vol. 22, no 3, pp. 265-289.

<sup>21</sup> Pankaew P., Tobé M., (2010) "Consumer Buying Behavior in Green Supply Chain Management Context – A study in Dutch electronics Industry", Jonkoping International Business School.

<sup>22</sup> Srivastava, S. K. (2007), Green supply-chain management: A state-of-the-art literature review, *International Journal of Management Reviews*.

<sup>23</sup> Fiksel, J. (1996). *Design for environment: Creating eco-efficient products and processes*. New York: McGraw-Hill.

channel functions, i.e. collection, remanufacturing and redistribution activities (Pankaew P., Tobé M., 2010)<sup>24</sup>. Now Green Supply Chain Management has been defined, a closer look can be taken at the practices that are adopted in order to make supply chains greener, often referred to as Green Supply Chain Practices (GSCP).

### **Internal environmental management**

- (1) Commitment of GSCM from senior managers
- (2) Support for GSCM from mid-level managers
- (3) Cross-functional cooperation for environmental improvements
- (4) Total quality environmental management
- (5) Environmental compliance and auditing programs
- (6) ISO 14001 certification
- (7) Environmental Management Systems exist

### **Green purchasing**

- (8) Providing design specification to suppliers that include environmental requirements for purchased item
- (9) Cooperation with suppliers for environmental objectives
- (10) Environmental audit for suppliers' internal management
- (11) Suppliers' ISO14001 certification
- (12) Second-tier supplier environmentally friendly practice evaluation

### **Customer cooperation with environmental considerations**

- (13) Cooperation with customers for eco design

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<sup>24</sup> Pankaew P., Tobé M., (2010) "Consumer Buying Behavior in Green Supply Chain Management Context – A study in Dutch electronics Industry", Jonkoping International Business School.

(14) Cooperation with customers for cleaner production

(15) Cooperation with customers for **green packaging**

### **Eco-design**

(16) Design of products for reduced consumption of materials/energy

(17) Design of products for reuse, recycle, recovery of materials, component parts

(18) Design of products to avoid or reduce use of hazardous products and/or their manufacturing process

### **Investment recovery**

(19) Investment recovery (sale) of excess inventories/materials

(20) Sale of scrap and used materials

(21) Sale of excess capital equipment

### **Green Marketing**

(22) Green Promotion

(23) Green Positioning

(24) Green Pricing

(25) Green Targeting

Considering above mentioned practices implemented by manufacturers of decorative paints like Asian Paints, Kansai Nerolac etc., and this study would provide insights of how consumers from Gujarat react towards purchase of eco-friendly paints.

## 1.4 Paint Industry of Gujarat

“The Indian paint industry has evolved a lot in recent times, both in terms of industry structure and product portfolio. Not long ago, paints were largely considered to be a luxury item. Such a mind-set has changed significantly of late due to the growing awareness on preventing corrosion through paints, by providing a massive fillip to the paint industry. China and India are the major growth drivers in the region with paint demand in these two countries likely to continue growing at more than 10% p.a. in the coming years. Indian paints industry is Rs.15000 crore market” (Ghalla Bhansali Stock Brokers Pvt. Ltd. 14<sup>th</sup> October, 2010. [www.ghallabhansali.com](http://www.ghallabhansali.com))<sup>25</sup>.

A major portion of demand for decorative paints is from fresh coats on existing wall finishes. Thus, the fortune of this segment is closely linked to the construction activity in the country. The leader in the high volume medium and mass segments of decorative paints, Asian Paints has been consolidating its market leadership over the last six years and now has the biggest slice of 37 per cent of the market for decorative paints in the organized sector. Trailing behind are Goodlass Nerolac and Berger Paints with market shares of 13 per cent and 11 per cent respectively. Other major players from the organized sector include Jenson & Nicholson with a low 6 per cent and ICI with 8 per cent (INFORMATION RESEARCH LIMITED - 2003)<sup>26</sup>.

**“What are VOCs?”**- VOCs are solvents that help determine the viscosity, flow and drying time of paints. VOCs readily evaporate into the atmosphere, potentially causing air pollution as well as contributing to global warming. White spirit and ethanol are two main VOC carriers in solvent-based paints. While VOC limits also apply to water-based products, they only carry small amounts of VOCs. For this reason, traditional solvent-based products, such as interior and exterior trim paints; varnishes and wood stains are the products that companies are seriously looking at dropping the VOC levels.

**“Why reducing VOCs?”** - VOCs are damaging to the environment and can pose a health risk to humans. VOCs contribute to air pollution and are seen to play a role in global warming. They also contribute to the creation of ozone in the lower atmosphere, which is harmful to humans, animals and plants.” (Sustainability in action – July 2009)<sup>27</sup>

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<sup>25</sup> Ghalla Bhansali Stock Brokers Pvt. Ltd. 14<sup>th</sup> October, 2010. [www.ghallabhansali.com](http://www.ghallabhansali.com)

<sup>26</sup> Information Research Limited survey – Indian Paint Industry Profile, (2003)

<sup>27</sup> Sustainability in action, (July 2009), AkzoNobel Ltd.



The current state and trend of environmental degradation indicates a need for a change in manufacturing philosophy, the challenge led to re-define the basic structure of the entire supply chain such as a fundamental shift in the way production systems operate, a move towards sustainability achieved through vast reductions in resource use and waste generation, and a move away from one-time use and product disposal (Beamon et.al, 1999<sup>28</sup>; Paquette et. al, 2005<sup>29</sup>).

## 1.5 Consumer Buying Behavior

Conditions of competition are changing rapidly today and companies that strategize and react to these changes promptly and quickly are the most successful. Due to technological developments, physical differences of products have decreased. Differentiation should be made on the meanings products bear instead of on their physical features. A successful brand differentiation can be possible by building personality. Thanks to brand personality, consumer sees brand as friend since it provides him with emotional benefits. However, the arena of consumer research goes far beyond the managerial perspective, when primary focus is placed on consumption. Holbrook and Hirschman (1982)<sup>30</sup>, among others, strongly advocate that the purchase decision is only a small component in the constellation of events involved in the consumption experience. Holbrook (1987)<sup>31</sup> suggests that consumer researchers must expand their view to examine “all facets of the value potentially provided when some living organism acquires, uses, or disposes of any product that might achieve a goal, fulfill a need, or satisfy a want.” The decision process then assumes secondary importance as compared with consumption.

Various models have described consumer decision-making process and theories have been developed to describe consumer decision making, which helps marketer to reach target consumer. Standard consumer theory concept is, consumer decision-making comes through processing of series of stages. Few researchers have developed five stage purchasing process while few have developed multi stage purchasing models. All the process or models are basically deals with

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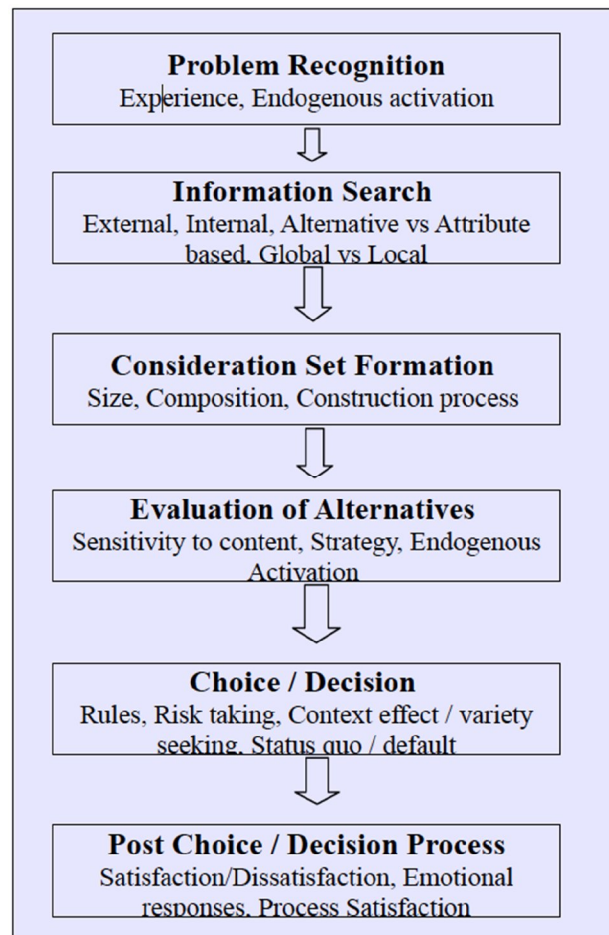
<sup>28</sup>Beamon, B.M. “Designing the Green Supply Chain.” *Logistics Information Management*, 1999, 12:4, 332-342.

<sup>29</sup>Paquette, J. (2005) The supply chain response to Environmental Pressures Discussion. Discussion Paper. *Massachusetts Institute of Technology*. <http://www.docstoc.com/docs/20172722/Supply-chain-and-the-environmentproposing-an-evaluative-framework>

<sup>30</sup> Holbrook, Morris B. and Elizabeth C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9 (September), 132-140

<sup>31</sup> Holbrook, Morris B. (1987), "What is Consumer Research?" *Journal of Consumer Research*, 14 (June), 128-132.

knowledge, motivation, attitude and experiences. However, stylized stage model is most promising model for consumers' decision making process.



**Figure 1.5.1: Stylized Stage Model (S Ratneshwar, 2005)**

The six stages are, problem recognition, information search, formation of consideration set, evaluation of alternatives, choice/purchase and post purchase process. Figure 1.5.1<sup>32</sup> shows the stylized stage model, which is more concentrated on motivational factors that influences consumers' decision, this model is beneficial to understand consumers' reason or motive behind purchase of particular product or brand.

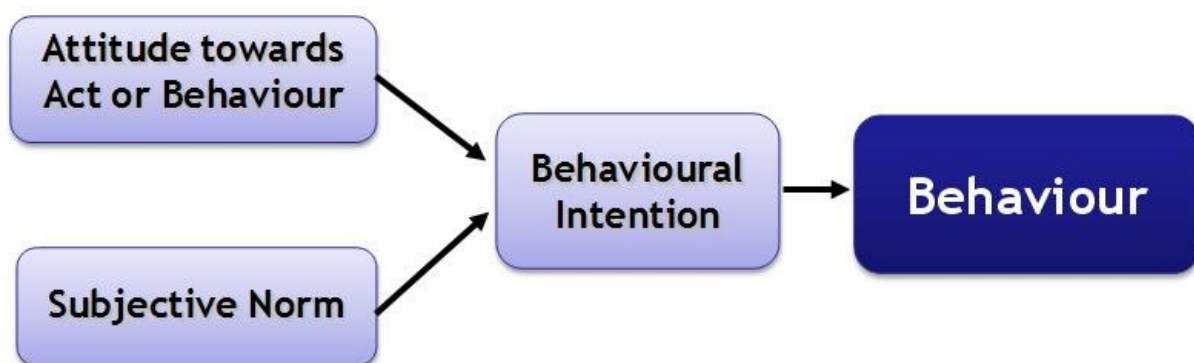
<sup>32</sup> S Ratneshwar, David Mick (2005) Inside Consumption, Routledge

## 1.6 Theoretical Framework

This study is aimed to study psychographic factors like, motivation, attitude, knowledge, social norms, belief, purchase intention and behavior of consumers from Gujarat. Here, Theory of Reasoned action and then its enhanced version Theory of Planned Behavior is used to develop a conceptual framework.

### 1.6.1 Theory of Reasoned Action

The framework used to structure the research and considers the current literature available in both industry and academia. Specifically, the literature review includes a presentation of the guiding theoretical framework presented by the Theory of Reasoned Action (TRA) and the consumer literature that examines the relevant components of TRA within the context of general consumer behavior and environmental consumer behavior (Sampson, L. K., 2009)<sup>33</sup>.



**Figure 1.6.1: The theory of Reasoned Action** (Source: Fishbein, M., & Azjen, I. (1975)<sup>34</sup>)

Azjen and Fishbein argue that people consider the implications of their actions before they decide to engage or not engage in a given behavior. Thus, the concept became known as “a theory of reasoned action” (Azjen and Fishbein, 1980)<sup>35</sup>. The TRA, often referred to as the behavioral intentions model, was constructed to explain the relationships between attitude and behavior. The variables depicted in the theory of Reasoned Action are shown in the figure 1.6.1.

<sup>33</sup> Sampson, L. K., (2009). “Consumer analysis of purchasing behavior for green apparel”, Master Thesis, North Carolina State University, Raleigh, NC.

<sup>34</sup> Fishbein, M., & Azjen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory Research*. Philippines: Addison-Wesley Publishing Company, Inc.

<sup>35</sup> Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.

The Theory of Reasoned Action (TRA) was initially developed as an expansion of the expectancy-value model and is used to predict and understand individuals' behavior. The theory is based on the assumption that human beings are usually quite rational and make systematic use of the information available to them (Ajzen and Fishbein, 1980)<sup>36</sup>.

Theory of reasoned action lacked one factor i.e., perceived behavioral control, which made necessary by the original model's limitations in dealing with actual behaviors over which people have incomplete volitional control. If actual behaviors are not fully under volitional control, even though a person may be highly motivated by her own attitudes and subjective norm, he/she may not actually perform the actual behavior due to intervening environmental conditions. The Theory of Planned Behavior (TPB) was developed to predict behaviors in which individuals have incomplete volitional control.

### **1.6.2 Theory of Planned Behavior**

In psychology, the theory of planned behavior is a theory, which links between beliefs and behavior. The concept was proposed by Icek Ajzen to improve on the predictive power of the theory of reasoned action by including perceived behavioural control. It is one of the most predictive persuasion theories. It has been applied to studies of the relations among beliefs, attitudes, behavioral intentions and behaviors in various fields such as advertising, public relations, advertising campaigns and healthcare.

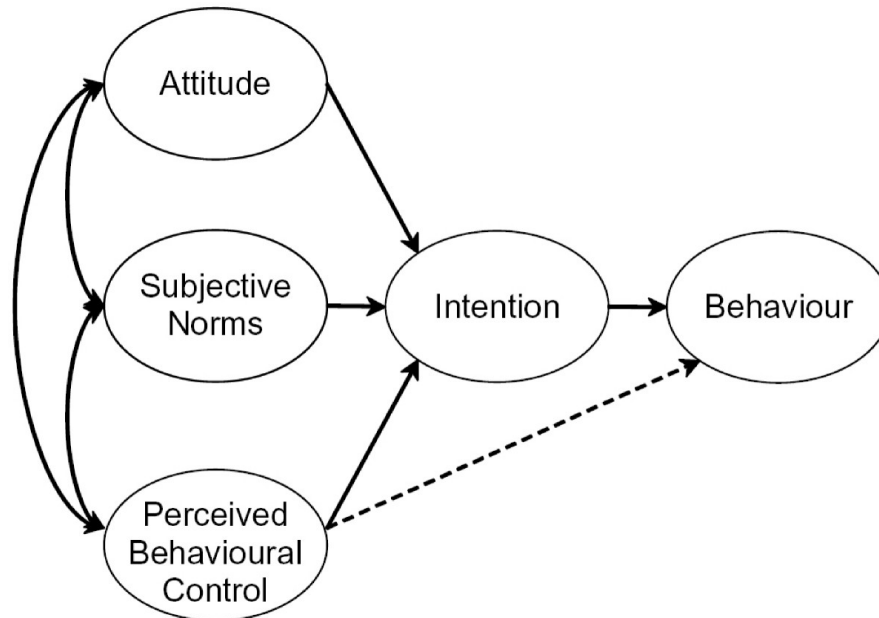
The theory was intended to explain all behaviors over which people have the ability to exert self-control. The key component to this model is behavioral intent; behavioral intentions are influenced by the attitude about the likelihood that the behavior will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome.

The TPB has been used successfully to predict and explain a wide range of health behaviors and intentions including smoking, drinking, health services utilization, breastfeeding, and substance use, among others. The TPB states that behavioral achievement depends on both motivation (intention) and ability (behavioral control). It distinguishes between three types of beliefs -

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<sup>36</sup> Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.

behavioral, normative, and control. The TPB is comprised of six constructs that collectively represent a person's actual control over the behavior (Ajzen I., 2006)<sup>37</sup>.



**Figure 1.6.2: Theory of Planned Behaviour (Source: Ajzen, Icek (1991)<sup>38</sup>)**

This theory states that perceived behavioral control, along with subjective norms and attitude, impacts a person's behavioral intention. The intention of an individual then influences their behavior. Attitude toward the behavior is a person's overall positive or negative evaluation of the behavior. Attitude is determined by behavioral beliefs, belief that behavioral performance is associated with certain outcomes, as well as evaluation of behavioral outcomes, which is the value placed on a behavioral outcome. Theory of planned behavior is depicted in Figure 1.6.2.

<sup>37</sup> Ajzen, I. (2006). people.umass.edu. Retrieved from Icek Ajzen's Homepage: <http://people.umass.edu/ajzen/index.html>

<sup>38</sup> Ajzen, Icek (1991). "The theory of planned behavior". *Organizational Behavior and Human Decision Processes* 50 (2): 179–211

## 1.7 Conceptual Definitions:

**Attitude:** An enduring set of beliefs about an object that predispose people to behave in particular ways toward an object (Wiegl 1983, p.257)<sup>39</sup>.

**Subjective Norm:** “A person’s perception of the social pressures put on him/her to perform or not to perform the behavior in question” (Fishbein & Azjen, 1980, p.57)<sup>40</sup>.

**Socially Responsible Consumption:** “Defined as extending beyond self-interest and the satisfaction of personal needs to incorporate decisions reflecting concern for the environment and society” (Dickson & Eckman, 2006, p.188)<sup>41</sup>.

**Belief:** Subjects with strong pro-environment beliefs (e.g., about banning non-recyclable packaging or otherwise avoiding damage to the environment) were more likely to “(a) to buy products because of their environmental claims, (b) to consider safety to the environment more strongly when making a purchase, and (c) to engage in other consumer actions (e.g., switching products for environmental reasons or purchasing brands packaged in recyclable or reusable containers) compared to those with weaker beliefs” (Mainieri et al., 1997, p.193)<sup>42</sup>.

**Knowledge:** Knowledge advocates beliefs and values (D’Souza, et al, 2007)<sup>43</sup>.

**Environmental knowledge:** It can be defined as “a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems” (Fryxell and Lo, 2003, p.45)<sup>44</sup>.

**Motivation:** “Motivation is the driving force within individuals that impels them to action” (Schiffman & Kanuk, 2007, pp. 103)<sup>45</sup>.

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<sup>39</sup>Weigel, R. H. (1983). Environmental attitudes and the prediction of behavior. In N.R. Feimer & E.S. Geller (Eds.), *Environmental psychology: Directions and perspectives* (pp.257-287). New York: Praeger.

<sup>40</sup>Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.

<sup>41</sup>Dickson, M. (2000). Personal Values, Beliefs, Knowledge, and Attitudes Relating to Intentions to Purchase Apparel from Socially Responsible Businesses. *Clothing Textiles and Research Journal*, 18(1), 19-30.

<sup>42</sup>Mainieri, T., Barnett, E., Valdero, T., Unipan, J., & Oskamp S. (1997). Green Buying: The Influence of Environmental Concern on Consumer Behavior. *Journal of Social Psychology*, 137(2), 189-204.

<sup>43</sup>D’Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(2), 69-78.

<sup>44</sup>Fryxell and Lo, (2003). The influence of environmental knowledge and values on managerial behaviors on behalf of the environment: An empirical examination of managers in China, *Journal of Business Ethics*, 46(1): 45-69.

<sup>45</sup> Schiffman, L. G. & Kanuk, L. L., 2007, *Consumer Behavior*, 9th edn., Pearson Prentice Hall, Upper Saddle River, New Jersey, 561 pages.

**Purchase Intention:** The likelihood that a consumer will buy a particular product resulting from the interaction of his or her need for it, attitude towards it and perceptions of it and of the company which produces it. ([www.marketing-dictionary.com/p.php](http://www.marketing-dictionary.com/p.php))<sup>46</sup>

**Perception:** “Perception is defined as the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world” (Schiffman & Kanuk, 2007, p. 172)

**Eco-Friendly:** Does not induce harm on the environment (Sampson, L. K., 2009)<sup>47</sup>.

**Environmentally Friendly Paint and Eco-friendly paint:** Terms that are used interchangeably in describing paint that is assembled from materials and processes with little or no harm to the environment (Green Living, 2008, p.35)<sup>48</sup>.

**Green Products:** The use of recycled materials, the absence or reduction of harmful chemicals and solvents, the use of organic/pesticide-free farming methods, the use of reduced energy and water, the use of forestry products from sustainable goods and products that create less pollution (Green Living, 2008, p.37).

**Consumer Behavior:** The behavior that consumers show in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs. (Schiffman & Kanuk, 2007, p. 2)

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<sup>46</sup> [www.marketing-dictionary.com/p.php](http://www.marketing-dictionary.com/p.php)

<sup>47</sup> Sampson, L. K., (2009). “Consumer analysis of purchasing behavior for green apparel”, Master Thesis, North Carolina State University, Raleigh, NC.

<sup>48</sup> Green Living. (2008, February). Mintel International Group Limited.

## **1.8 Rationale of the Study**

With prioritized aim of sustainability in paint industry, attractive shares of production, knowledgeable consumers, and dramatic growth of industries in Gujarat in last some decades, an effort was made to analyze consumer buying behavior in Decorative Paints segment with respect to green supply chain practices. As reported by Marshal Cohen, Chief Analyst of the NPD Group, only six percent of consumers were interested in eco-friendly products, excluding food and auto, in 2006. Today, the number has grown to 21 percent (Sopelsa, 2008)<sup>49</sup>. With consumers becoming more interested in environmentally friendly products and companies feeling pressured to offer green products to compete, the decorative paint industry needs to understand consumer perceptions and behaviors toward this emerging phenomenon. Despite recent company efforts to target the eco-friendly paint(decorative) consumers, academicians and practioners know very little about consumer knowledge, beliefs, norms, motivations, attitudes and behavior surrounding this new market phenomenon (Sampson, L. K., 2009)<sup>50</sup>.The purpose of this study is to gain insight into environmentally friendly decorative paints purchase intentions by investigating consumers' perspectives on the effect of purchasing sustainable products on the environment, individual consumer attitudes toward environmentally friendly purchases, social pressure to purchase environmentally friendly decorative paints, cost of the merchandise, and ease of purchase. Throughout in this study, the terms environment-friendly, eco-friendly, sustainable and green will be used interchangeably.

## **1.9 Objectives of the Study**

The objective of this research was to examine the relationship of consumer knowledge, beliefs, norms, motivations and attitudes with purchase intention for environment friendly decorative paints. Specifically, the study would evaluate the impact, of consumer knowledge of green industry initiatives and environment friendly decorative paints, consumer belief related to the general environment, subjective norms influencing eco-friendly paints purchasing, the motivation to purchase eco-friendly paints, consumer attitudes towards green products, individually and collectively on the intention to purchase eco-friendly paint products and actual purchase behavior.

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<sup>49</sup>Sopelsa, B. (2008, April 18). Well Worn Works for Apparel Industry. *CNBC News*.Retrieved from<http://www.cnbc.com/id/24112140>.

<sup>50</sup> Sampson, L. K., (2009). "Consumer analysis of purchasing behavior for green apparel", Master Thesis, North Carolina State University, Raleigh, NC.



To summarize, the following points have been covered in this research:

- ⇒ Consumers' brand knowledge pertaining to eco-friendly paint and knowledge of green initiatives.
- ⇒ Beliefs of consumers relating to the general environment.
- ⇒ Influence of consumers' knowledge and belief on their motivational level and attitude towards purchase of eco-friendly paints.
- ⇒ Influence of subjective norms on motivational level, attitude and intention towards purchase of eco-friendly paints.
- ⇒ Consumers' level of motivation to purchase eco-friendly paint.
- ⇒ Attitude of consumers towards green products.
- ⇒ Influence of consumers' level of motivation and attitude towards eco-friendly paints on intention to purchase eco-friendly paints.
- ⇒ The intention of consumers to purchase eco-friendly paint.
- ⇒ Purchase behavior of consumers regarding eco-friendly paint.
- ⇒ Influence of intention to purchase eco-friendly paints on actual purchase behavior.
- ⇒ The relationships between knowledge, beliefs, motivation and attitudes on intention and purchase behavior for Eco-friendly paint.
- ⇒ Source of information regarding eco-friendly paints and other such products as well as consumers' paint purchase frequency and shopping situation.
- ⇒ Most preferred brand for eco-friendly paints purchase and reason behind selection of those specific brands.
- ⇒ Influence of demographic factors i.e., age, gender, marital status, occupation, educational qualifications, per-capita and monthly income, family type and size as well as number of children in family, on purchase intention level of consumer as well as on consumers' purchase frequency, brand preferences, reasons behind purchase of specific brand and shopping situations.