CHAPTER 2

REVIEW OF LITERATURE

One of the potent drivers for any business is to accurately assess the need and requirement of customer. It is difficult to accurately comprehend and judge customer feedback of products or services. Hence a powerful instrument is required to measure, estimate and analyze customer experience, which can be achieved through development of a Customer Satisfaction Index (Eklof & Westlund 1998).

The review of literature in the field of interest commenced with the search of databases using keywords such as farmers’ satisfaction, farmers’ loyalty, models pertaining to farmers’ satisfaction, antecedents of farmers’ satisfaction, factors influencing farmers’ satisfaction and loyalty etc. Various platforms including google scholar, science direct, major marketing journals including Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, EBESCO, Sodhganga, Proquest etc. were used to collate information. Around fifty research articles were first downloaded, and after careful analysis, eleven best papers were taken into consideration for review. These papers focused on ECSI models adopted in different industries.

The first study on consumer satisfaction was carried out by the U.S department of Agriculture Index (Churchill 1982), which was initially conceptualized by Pfaff & Anita (1972). In late 1980s, companies realised the positive effects of a satisfied customer on sales and accordingly adopted strategies to enhance customer satisfaction through various activities.
Churchill Jr, & Surprenant (1982) reported the determinants of satisfaction. The process of evaluating customer satisfaction was very difficult in the days preceding the information revolution, but the era of the Internet has eased access to information for such research work (Visioncritical, 2015, http://nasummit.visioncritical.com/).

Various CSI models have been developed in different countries. However, there are no globally recognised and accepted models as yet. Differences exist among popular CSI models, but there are similarities as well. Since 1990, many measurement scales have evolved at the National levels in various countries to measure consumer satisfaction across different industries. For example, it was introduced by Fornell (1992) in Sweden, as the Swedish Customer Satisfaction Barometer (SCSB); In USA, the measurement scale was the ACSI by Fornell et al.(1996). Norwegian scales were termed NCSB by Andreassen & Lindestad(1998a, 1998b) Scales in Denmark were developed by Martensen et al.(2000) and in European Union scales were termed ECSI (Eklof 2000).

These CSI measurement instruments are designed such that they are capable of handling large quanta of information about customers’ perception and can evaluate customers purchasing and consumption experience using a set of latent variable (dimensions) and their indicators (observable Variables). This instrument has, since then, been applied in macro (international, national, sector or industry) and micro (company, brand and product) analyses. One can diagnose the factors influencing satisfaction and retention, as well as identify the reasons for dissatisfaction (Eklof & Westlund 1998). A detailed development of customer satisfaction index is chronologically discussed in the following section to lay the foundation for our study.
2.1 REVIEW OF LITERATURE BASED ON EVOLUTION OF CUSTOMER SATISFACTION INDEX MODELS

An in-depth study pertaining to CSI was undertaken. Available literature spanning last years were examined.

2.1.1 Swedish Customer Satisfaction Barometer (SCSB)

Fornell (1990) developed the first ever customer satisfaction index in Sweden. It can validate company-wise satisfaction index data and compare between industries on the basis of customers satisfaction rating. Satisfaction was the central variable having antecedents as well as consequence, and PLS was used to validate the model. The antecedents were expectations and perceived performance. Expectation was found to positively influence the perceived performance based on customers knowledge and experience towards a product performance or “how well it perform”? In addition, expectation can also predict firms’ future performance. Thus according to Andreassen (2000) expectation must also have positive impact on satisfaction and it was operationalized by a single item (observable variables).

Satisfaction may either lead to loyalty or complaint about the product or service based on Hirschman’s (1970) exit-voice theory. According to this theory if the customer is dissatisfied with the products or services provided by the firm, they may either quit or stop purchasing. Perceived performance has two items, viz. “quality of the offering versus price paid” and “price paid versus quality of the offering”. It has been hypothesized that perceived performance positively influences customer satisfaction. As explained by Emery, 1970, customers usually compare quality of brands and categories versus the unit of price paid. Similarly, satisfaction has been explained by three items and has been expected to have two consequences-Loyalty (“tolerance to price increase” and “declared repurchase intention”) and
Complaint (management and staff). Fornell (1992) observed that service industries received lower rating in comparison to product based on homogeneous (good rating) and heterogeneous (low rating) customer demand. The immediate outcome of positive satisfaction was found to be increased customer loyalty and decreased complaints (Bloemer & Kasper 1995). This is an overall experience and “psychological predisposition” of customer about a product or firm. The ultimate outcome of the model was loyalty due to its value as a substitute for retention of customer, which leads to profitability. This model also included customer complaint behaviour, although no predictions were made about the trend and magnitude of link. If the strength of the relationship proved to be positive, it indicated the efficiency of the customer complaint handing process (Fornell 1992) as well as the chance of converting the complaining customers into loyal customers are high. If found negative, the customers were likely to stop purchasing. This model truly laid the foundation of the evolution of customer satisfaction indices. The Swedish Customer Satisfaction Index model developed by Fornell, 1992 can be represented as shown below (Figure 2.1).

![Figure 2.1 The SCSB (Swedish Customer Satisfaction Index Fornell 1992)](image)

**2.1.2 American Customer Satisfaction Index Model (ACSI)**

The ASCI model was developed in United States in 1994 and has been applied across the nation in different business area (Fornell et al. 1996). The model (Figure-2.2), although grounded on SCSB, differs in terms of the
structural model and measurement properties (reflective indicators). Following are some advancement in the ACSI structure compared to the SCSB.

1) Two different constructs - perceived quality (03 items) and perceived value (02 items) replaced perceived performance in the former model. Perceived quality explained the effect of quality whereas the perceived value estimated the influence of price on customer satisfaction ("price paid for quality received and quality received for the price paid). Quality components were segregated from value by the proposal of three additional items—"degree of customization quality, reliability quality and overall quality" (Deming, 1981). This improvement helps in identifying whether satisfaction is driven by price or quality. Later ACSI model were stretched to define perceived quality into two distinct categories, especially for manufacturing durables industry as product and service quality in 1996. However, the same three questions were asked to respondents for each category. This model predicted that customer satisfaction increases with increases in perceived quality and value.

2) Expectation was explained by three items ("overall expectations, expected customization and expected reliability") and respondents data about complaints (ever complaint or, not). Finally, loyalty consisted of three items and the additional question was "How much discount or offering will encourage for repurchase".
Figure 2.2 The ACSI (The American Customer Satisfaction Index)

Findings of ACSI were similar to those of SCSB and showed that satisfaction rating was lower in the service sector and public administration but very good in product sector, although despite cultural differences between Europe and America. This model also explained the complex theory of satisfaction and loyalty. One of the contributions was “Customization of an offering”. Strong influence of expectation on perceived quality and perceived value can be noticed under less difference (benefits) in consumption and production situation (Routine purchase). Loyalty was measured in two ways - likelihood to repurchase and degree to which increase or decrease in the product or service price encourages customer to repurchase. If the differences in offering and differences in consumption were significant, expectation would have a weak influence on “perceived quality and value” (Durables, insurance and services). Similar type of influence on satisfaction was also noticed. Quality was found to have a greater influence on satisfaction than value as long as value was used to attract customers (Retail, Services, Durables, Apparel and
Footwear etc.). In present times, industries are saturated, and cater to the demands of heterogeneous customers. Thus, acquiring a loyal customer base is difficult and attracting competitors’ customer base or market share is not easy. In these circumstances, providing quality product is the only option towards predicting stronger customer loyalty.

This model was extensively debated and laid the foundation for the development of ECSI model. Fornell et al. (1996) argued that ACSI model can provide crucial analytical information. The model, as shown in figure-2.2, also explains that as the influence of value increases compared to quality, perceived value (price) becomes a crucial causal factor of satisfaction (can directly link quality to value).

2.1.3 National Customer Satisfaction Barometer (NCSB) model:

Different countries developed CSIs and incorporated corporate image and its association to satisfaction and loyalty. According to Bransford & Franks (1971), the perception (or schemas) of corporate image in relation to the firms’ product or service are retained in customer memory. Similarly, the effects of overall corporate image (brand reputation) on loyalty has stated by Selnes (1993).

In a practical sense, the experiences and attitudes towards a product and service are related to “behavioural intention” i.e purchase or repurchase (Fishbein and Ajzen (1975). Andreassen & Lindestad (1998a,b) argued that corporate image provides positive correlation between satisfaction and loyalty. This advancement in marketing research was expanded and changed the perception of buying and selling concept to more specific orientation among marketers. Another construct “relationship commitment” was included in the model with affective (emotion) and calculative dimension (switching costs), which was later modified as a mediating variable in some studies.
2.1.4 European Customer Satisfaction Index Model

In 1999, the ECSI was developed and tested. It was based on ACSI model (Eklöf 2000). Twelve European countries participated initially. Industries like telecommunication, retail banking and supermarkets were covered in the project (Juhl et al. 2002). All constructs were explained by multiple items. This model was different from ACSI in the following ways:

A) A new construct “Image” was considered additionally in the ECSI model and was expected to have an impact on satisfaction, loyalty and perceived value.

B) Perceived quality in the ECSI model (Figure 2.3) was explained by two variables, viz. “hard ware quality”, which indicates attribute or feature performance and “human ware quality”, which describes quality services delivered to customers.

C) Customer complaint variable was not considered as consequences of satisfaction and was removed from the ECSI model.

Additionally two items taken under loyalty construct which was not considered in ACSI were “the probability of buying another product from the same company” and “intention to recommend the offering to other consumers”. These two items help identify customer purchase extension and probability of positive word of mouth.
The findings suggested that satisfaction had a strong positive influence on loyalty and increased according to level of competition in the market (Edvardsson et al. 2000). Findings also showed that better relationship with customers and serving their needs leads to better customer retention and good profit margins (Reichheld et al. 2000). In Three items were considered under Image construct-social responsibility, ethics and business practices, as originally developed by Naumann & Giel (1995). These CSIs could be implemented to compare between industries and outcomes, firms could work accordingly to enhance their satisfied customer base. This study attempted to establish a causal model (structural) for the relationship between the variables of ECSI model after detailed theoretical and empirical studies. The model stipulated that perceived value, customer satisfaction and customer loyalty are driven by company image, customer expectations, perceived quality. Each latent construct of ECSI model was operationalized by multiple indicators (Fornell 1992). Popular researcher such as Eskildsen, et al. 2004; Juhl et al. 2002; Kristensen & Westlund 2003; Martensen & Grønholdt 2003; Selivanova et al. 2002 adopted this model in their studies.
The best tool to validating the European Satisfaction European Index is the structural equations modelling (SEM). PLS-SEM was used in this study. This tool is ideal for working with large databases and performing complex statistical analyses. Later ECSI was renamed as the European Performance Satisfaction Index (EPSI Rating 2013, http://www.epsi-rating.com/our-products-and-services/the-epsi-employee-satisfaction-index/). The EPSI is managed by the EFQM-European Foundation for Quality Management, EOQ-The European Organization for Quality and the IFCF-International Foundation for Customer Focus (Kristensen & Westlund 2003) which are considered the best of European CSIs models.

2.1.5 EPSI Model

There are two different specifications of EPSI framework used in Europe, viz. EPSI specification for Denmark (DKI) and that for Sweden (SKI). This EPSI framework was designed based on the study recommended by Grigoroudis & Siskos (2004) and Technical Committee report (ECSI Technical Committee 1998). Both specified (DKI & SKI) models had advantages and disadvantages. The SKI approach had only one exogenous variable; “Image” is the only area where the organization must focus its efforts whereas the DKI specification had the benefit of four exogenous variables. Empirically, the SKI model captured variations in the remaining variables according to the predictor specification (Wold 1980, 1985; Fornell & Cha 1994). In contrast, DKI had few insignificant inner relationships, with different types of problem than SKI (Eskildsen & Kristensen 2005). As argued by Johnson et al. 2001, image was considered an outcome (dependent variable) of customer satisfaction in the EPSI framework because the image of a firm can be influenced by consumers’ recent experience as compared to other constructs in the EPSI framework. Under proposed non-recursive (derived from latin word “recursio” means “I can return”) EPSI framework, Image works as a
“mediating variable in between actual consumption experience (Quality) and overall post-consumption evaluation of value and satisfaction”. Image could also substitute expectation because the pre-purchase expectation matches with post purchase evaluations, which indicate customers’ perception about a brand or, firms’ image. But this argument could not be justified because image measures a larger area of customer satisfaction as compared to expectation. Hence, expectation could be considered as an antecedent of image and perceived value.

Eskildsen et al. (2004) suggested that there is a strong relationship in between product /service quality and value and satisfaction. When “Image” is considered a mediating variable between expectation (actual consumption experience) and assessment of overall post consumption of value and satisfaction, it will also affect product/service quality.

In this work, the EPSI model has been adopted for the measurement of efficiency of Indian fertilizer brands. As discussed earlier, fertilizers are subsidized products in India. Farmers consider fertilizers in terms of product quality and value parameters. The quality of fertilizers in India has never been an issue of debate. There are negligible chances of substandard production because the production process is systematic. In this work, a conceptual EPSI model is proposed, as described below (Figure 2.5), the various constructs that constitutes the model (EPSI) are separately explained in detail.

2.2 REVIEW OF LITERATURE BASED ON CONSTRUCTS

2.2.1 Satisfaction

The eventual outcome of a marketing process is to have a satisfied customer base apart from better image, trust, perception, awareness and loyalty towards the brand or firm. Interestingly, the frequent benchmark used to evaluate a
firm’s performance amongst above variables is satisfaction. Prior to 1950, economists attempted to remove satisfaction as a quantifiable and comparable variable (Allen & Hicks 1934). In the 1950’s theorists (Scitovsky 1976; Simon 1974) considered satisfaction as a measurable variable. Simon (1974) used the word “satisfaction” as a synonym for utility. Hunt (1977) defined customer satisfaction as “an evaluation rendered that the customer (consumption) experience was at least as good as it was supposed to be”. Later Engel &Blackwell (1982) defined it as “an evaluation that chosen alternative is consistent with prior beliefs with respect to that alternative”. Similarly, Tse & Wilton (1988) defined it as “consumers response to evaluation of the perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of the product as perceived after its consumption”. Giese et al. (2000) comprehensively discussed the details of the definitions of satisfaction. Oliver (1980a, 1980b) distinguished satisfaction from attitude. Customer satisfaction was related to disconfirmation as a central concept whereas attitude was the relatively enduring affect of a consumer towards an object or experience and did not involve surprise as a central concept. Several Empirical research (Oliver 1980a, Cadotte et al. 1987) finding showed that consumer evaluates their prior expectation of product or service performance with the “set of standards of product performance”. If performance matches expectations, consumers feel satisfied (confirmation) and if performance fails, consumers are dissatisfied (disconfirmation).

There are two approaches to evaluate and monitor customer satisfaction: objective and conceptual. Measuring the level of satisfaction directly from customers by asking them about a specific product can provide validity and reliability. Cronin & Taylor 1992; Spreng & MacKoy 1996 used a single item scale whereas (Andreassen 2000) used multi item scales to measure satisfaction with higher reliability. With the help of these indices it is
easy to identify not only the factors responsible for satisfaction or retention of customers but also the reasons for dissatisfaction or indicators that influence satisfaction (Eklof & Westlund 1998).

Based on the antecedents and consequences of satisfaction, a number of indices have been developed to evaluate purchasing and consumption experience of customers in the current or future company markets (Johnson et al. 2001; O’Loughlin & Coenders 2004), expectations (Maxham & Netemeyer 2003; Oliver 1997; Spreng & Mackoy 1996), performance (Churchill & Suprenant 1982; Tse & Wilton 1988; Yi 1993) and disconfirmation (Babin et al. 1994). According to Reichheld & Sasser (1990), satisfaction causes customer retention, which in turn affects firms’ profitability and company’s future profits (Mittal & Kamakura 2001). Satisfaction plays an important role in formulating marketing strategies and public policies (Fornell & Wernerfelt 1987, 1988; Simon 1974).

Earlier researchers have conceptualized customer satisfaction broadly into two categories: overall satisfaction and transaction specific satisfaction (Oliver 1993, Oliver 1997; Yi 1991, Johnson 2001). Transaction specific satisfaction can be defined as the customers’ evaluation or judgment soon after consumption, about the experience or reaction to a specific product, service and transaction. This approach dominated marketing literature till 1990s. Later, service and satisfaction research started emphasizing on overall satisfaction or, cumulative satisfaction. It is based on the customer’s overall evaluation of a product or service provider to date (Johnson et al.1995; Johnson & Fornell 1991). According to Anderson et al. (1994) overall customer satisfaction is "an overall evaluation based on the total purchase and consumption experience with a good or service over time". This cumulative satisfaction is central to recent national satisfaction index models in Sweden (Fornell 1992), the United States (Fornell et al. 1996), Norway (Johnson et al.
2001), and the European Union (Eklöf 2000). The ECSI instruments represent overall satisfaction experienced both actually and in anticipation (Anderson et al. 1994; Fornell 1992; Johnson & Fornell 1991), about the goods or service consumed by the consumer.

Given that satisfaction is an emotional construct, its antecedents or drivers may be emotional or cognitive, based on the situation. In this 21st century, companies face intense competition, low growth rates, savvy customer, little differentiation amongst brands, rapid technological development, integration processes, market globalization and heavy price wars associated with low margin. Hence, companies have tried to focus on increasing the satisfied customer base, which is a determinant of customer retention, and is responsible for repeat sales. Our intention was to use and measure farmers’ satisfaction based on two parameters. The overall or cumulative assessment of a firm's market offering has been considered in this work, rather than a farmers’ assessment of a specific transaction. The measurement of cumulative or overall customer satisfaction has been found to be a primary constituent to work out firm's past, current, and future performance (Anderson et al. 1994).

2.2.2 Loyalty

The concept of loyalty in marketing evolved before 1950s in two ways, first as “brand preferences” (Guest 1955) and second as “market share” (Cunningham 1956). These two concepts were termed later as attitudinal loyalty and behavioral loyalty. After a gap of about 30 years, Jacoby & Chestnut (1978) defined brand loyalty as "The biased, behavioural response, expressed over time, by some decision making unit, with respect to one or more alternative brand out of such a set of brands and a function of psychological (decision making evaluative) process.” This definition contained all aspects of brand loyalty. Majority of marketing literature (Assael 1992; Wilkie 1990) have cited this in its original form or with
modification. Andreassen & Lindestad (1998) defined loyalty as “an intended behaviour caused by the service and operationalized loyalty as a repurchase intention and willingness to provide positive W-o-M”. Oliver (1999) defined brand loyalty as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts have the potential to cause switching behavior.” Chaudhuri & Holbrook (2001) suggested that behavioural (purchase) loyalty consisted of repeated purchases of the brand, whereas attitudinal loyalty included a degree of dispositional commitment, in terms of some unique value associated with the brand. Wilkie (1990) defined brand loyalty as “a favourable attitude toward, and a consistent purchase of, a particular brand“. More recently, Rai & Srivastava (2013) defined customer loyalty as “a psychological character formed by sustained satisfaction of the customer coupled with emotional attachment formed with the service provider that leads to a state of willingly and consistently being in the relationship with preference, patronage and premium”.

According to Hirschman (1970), loyalty plays a key role in the process of an organization’s turn-around (recuperation). Loyalty “can serve as socially useful purpose of preventing deterioration from becoming cumulative, as often does when there is no barrier to exit” (Hirschman, 1970). Thus, loyalty raises the exit barrier and activates the voice option.

A four stage loyalty concept was proposed by Oliver (1997) and these four stages were not observed simultaneously over a period of time. First stage of loyalty is “Cognitive loyalty” (Weakest One). Second stage is “affective loyalty” depends on emotions and mood of the consumer, displaying a liking towards a brand. It is little difficult to change consumers opinion in this stage about his preference. The third is “conative loyalty”, in which consumer
performs repeat purchase based on satisfied performance of a specific product or service. Otherwise one can say customer has a strong commitment towards a brand, which in turn leads to an intention to repurchase. Fourth phase is action loyalty, which is the strongest form of any loyalty stage. The consumer invests his time and resource to find a preferred brand and also recommends it to others.

Attitudinal loyalty aspects are repurchase intention, willingness to recommend the company or its products to others, demonstrating resistance to switch to the competitors (Cronin & Taylor 1992; Prus & Brandt 1995), and even willingness to pay a price premium (Narayandas 1996; Zeithaml et al. 1996). Similarly, behavioral aspect represents actual repeat purchase, positive word of mouth communication, and continuing preference for the same product or brand (Lee et al. 2001). A third concept was loyalty composite (Figure 2.4), which considers that loyalty should always comprise favorable attitudes; intentions and repeat-purchase (Czepiel 1990, Jacoby & Chestnut 1978), originated with Day (1969).

![The loyalty construct - 1950-1990 (Rundle-Thiele, 2005)](image)

**Figure 2.4 The loyalty construct - 1950-1990 (Rundle-Thiele, 2005)**

The Combination of both attitude and behavior loyalty measures is one of the most robust and appropriate technique, as it captures two key influences of consumer decision making (Mandhachitara & Poolthong, 2011).

Although brand loyalty has been termed differently based on domain specific and its purposes (i.e. brand loyalty, vendor loyalty, service loyalty, store
loyalty, and so on), it represents an important element for developing a long-term competitive advantage (Kotler & Singh 1981).

By combining both relative attitudinal and repeat purchase “behavioural” measures, Dick and Basu (1994) developed a well-designed framework described below. They divided loyalty into four categories. The first is the case that is high in both repeat patronage and attitude. This indicates loyalty, which is the ultimate goal of all marketers. The second group is latent loyalty, in which, customers show a strong preference or attitude towards a brand over competitor but do not display repeat patronage due to lack of income. The third group of customer is spurious loyalty, in which, the consumer frequently purchases a brand, but sees no significant differences among brands, probably due to unavailability of alternatives or past habits and experience. The fourth group of customers shows no loyalty because of fewer differentiations among brands, and fewer purchases.

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Recently Uncles, Dowling & Hammond (2003) conceptualized loyalty in three ways. Favorable attitudes or belief towards a brand is the first stage. Emotional attachment towards a brand is the second stage and the third is a contingency approach, which assumes that the relationship between attitudes, behaviour and loyalty is moderated by variables such as an individual’s present circumstances or the particular situation, or both. Despite of several
studies on customer loyalty, there is no consensus on the best way to measure loyalty.

According to Reichheld (1993), big companies focused on long-term profits by delivering superior value to customers in comparison to their rivals and enjoying the price premium. Reichheld & Sasser (1990) suggested that five percent increase in customer loyalty leads to 25-85% improvement in profits. Retaining loyalty is a good way of running a business and bringing good value to customers in the long term. The loyalty leaders do not chase short term profit but focus on investing in customer experience to get them stay on even when a competitor offers lower prices or temporary discounts (Reichheld 1993). Leading customer loyalty firms grow twice compared to firms placed in the bottom of customer loyalty ranking.

In this study, farmers’ loyalty is the final outcome variable, operationalized by three indicators—probability of retention, probability of suggesting the brand or firm, and willingness to pay premium and ready not to switch the brand under others recommendation about a different brand. This would help brand managers understand their strength over competitor sand also assist them in formulating loyalty programs.

2.2.3 Image

A strong brand image is a type of asset that cannot be copied. Companies formulate marketing strategies that create positive feelings/beliefs about the company, products and services in the minds of the potential customer Corporate Image refers to the kind of association and awareness held by the customer about the brand. This association and awareness is the outcome of collective experiences, impressions, beliefs, feelings and knowledge that customers have about a company. These basic components trigger strong signals that improve a company’s image. There is no
established definition of “image” in marketing domains. Reynolds (1965) noted that "an image is the mental construct developed by the consumer on the basis of a few selected impressions among the flood of the total impressions; it comes into being through a creative process in which these selected impressions are elaborated, embellished, and ordered".

The earliest report of the concept of “image” is seen in the work of Boulding (1956), which posited that behaviour is primarily affected by image. Consumers are supposed to behave in accordance with what they know of and think about an object and their behavior may influenced by the quality and amount of information available to them. Therefore, consumer behaviour is rooted in the image of the product/service/company in the consumer’s mind. A few scholars have described two components of image, viz. cognitive and affective evaluations. Cognitive evaluation refers to the beliefs and knowledge about the object (Zimmer & Golden 1988; Gartner 1993). Affective evaluations on the other hand, represent the feelings an individual has towards a destination. In marketing and consumer behaviour, these two components are treated under the labels of "beliefs" and "affect", respectively.

Researchers like (Zimmer & Golden 1988; Gartner1993; Dann1994) have posited that image comprises of behavioural components, apart from cognitive and affective components. These authors described image as consisting of cognitive, affective and conative components. The affective element of image pertains to the intention of an individual towards preferring a particular brand. This intention governs or regulates what an individual obtains (product/service valuation) from a preferred brand (Boulding, 1956). The affective element becomes functional usually during the evaluation stage of selection.

Attitude theory recommends that the evaluation of product or services leads to positive or negative reasons for corporate image and these attitudes enhance
the predictive value as accessed in memory (Fazio 1989; Fazio & Zanna 1978). Shee & Abratt (1989) explained three different concepts, viz. personality, identity and image, in this context. They posit that every company in its sum total of characteristics (personality), may be behavioural and intellectual. This distinguishes one company from another. The outcome of this characteristic summary forms an identity in the minds of the customers. Eventually, the overall impression formed due to specific cues constitutes an image.

Brokaw (1990) viewed image as a cognitive construct and described it as “a mental representation of what an entity is and what it offers”. Kotler (1984) defined image as "the set of beliefs, ideas, and impression that a person holds regarding an object". Keller (1993) considered brand image as "a set of perceptions about a brand as reflected by brand associations in consumer's memory". Similarly, Aaker (1991) defined image as "a set of associations, usually organized in some meaningful way". Biel (1992) defined brand image as "a cluster of attributes and associations that consumers connect to the brand name".

Image is a crucial factor in the overall assessment of a firm (Bitner 1990). Corporate image is the customer’s recognition about the company and it behaves as a filter during preferential decision making (Grönroos 1988 and Keller 1993). Image is an important dimension of the customer satisfaction model developed by Martensen et al. (2000). The leading role of image towards forecasting customer satisfaction has been seen in the hospitality industry Chitty et al.(2007), Merrilees & Fry (2002) established the role of image in e-commerce companies. A few researchers found not much influence of image on loyalty (Bloemer et al. 1998); in the words of Bloemer, "the exact relationship between image and loyalty had remained a matter of debate".
In this study five items have been used to explain the “Image”. The ECSI model contains three item-social responsibility, ethics and business practices, derived from the original work of Naumann & Giel (1995).

2.2.4 Expectation

The "subjective notions of things to come" is described as Expectation (Katona 1958). According to Engel et al. (1968), it’s a type of proposition that originates in customers mind before purchase of a product and is validated soon after consumption as acceptance or rejection of the product. Expectation may be positive disconfirmation (when the objective product performance exceeds actual expectation) and negative disconfirmation (objective product performance cannot meet expectation). This expectation is developed and strengthened by a number of factors such as word-of-mouth, advertisement and sales promotion, past experience, consumer class, suggestion and advice from friends and relatives, self-interest or reference group. Expectation may be (i) pre-purchase expectation, which represent the consumer’s belief about different features or attributes of a product or services before purchase or (ii) post-purchase beliefs which refers to the consumer’s perceived product performance on different features or attributes. Richard et al. (1972) grouped expectation under four categories-Ideal, Expected, The deserved and Minimum tolerable. Tse and Wilton, (1988) posited that expectation creates confusion for respondents while distinguishing among these types of expectations.

Expectation has been defined by Oliver (1997) as "an anticipation of future consequences based on prior experience, current circumstances, or other sources of information". From the perspective of consumer behavior, expectations are the “beliefs or predictions about brands or products having desired attribute(s) (Oliver 1980; Olson & Dover 1979; Spreng &
Mackoy (1996). On the other hand, Parasuraman, et al. (1988) defined consumer expectations as desires or wants based on what they feel a company should do rather than what it would do.

As in psychology, social science also requires a brief theoretical framework for each construct or variable. Expectation may differ from person to person and circumstance to circumstance. Therefore it is always advisable to measure the constructs based on multiple items so that the dimension-wise relative weights may vary across respondents and sections. The following theories briefly analyses the existing understanding of expectations.

**Assimilation (Cognitive Dissonance):** According to Festinger (1957), consumers in general overcome the inconsistencies in between expectations and actual performance by regulating their perception about the product such that it is consistent to expectations. Halloway (1967) posits that the information received from friends, advertisement etc., about products is a cognitive input to consumers. However, inconsistent information leads to mental discomfort, which in turn, leads to change of understanding. Higher dissonance leads to stronger motivation to remove or modify the required cognitive elements (Brehm 1962). Cohen & Goldberg (1970) later criticized this idea with the rationale that repurchase of a product by a consumer through justification of decision indicates ignorance of previous mistake.

How does a farmer develop expectation before purchasing branded chemical fertilizers? In this work, expectation is explained using three items, viz. “overall expectations, expected customization and expected reliability”.

### 2.2.5 Perceived Value

Eminent researchers such as Holbrook (1999), Woodruff (1997), and Zeithaml (1988) defined ‘value’ in their respective marketing literature.
An extensively cited definition by Zeithaml (1988: 14) is: ‘... the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given’. This explains ‘value’ as a Unidimensional construct that is obtained by asking respondents to rate the value to a specific product or, services as perceived by them. However, a few authors (Babin et al. 1994; Holbrook & Morris 1994, Mathwick et al.2002; Sweeney & Soutar 2001) conceptualized ‘value’ as being multidimensional in nature, and comprising such characteristics as perceived price, quality, benefits, and sacrifice. Broadly, Value is the outcome of an opinion, other hand, ‘values’ refers to the standards, rules, criteria, norms, goals, or ideals that serve as the basis for such a consideration (Holbrook 1994, 1999).

Woodruff (1997) defined perceived value as: [a] “customer’s perceived preference for an evaluation of those products attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations.”

Researchers such as Dodds & Monroe (1985); Sawyer & Dickson (1984) subscribed to a different school of thought that perceived value is a trade-off between the "give" and "get" components of a product. The ‘give’ component of a product or services was similar to perceived sacrifice postulated by Zeithaml (1988) whereas the ‘get’ components matches exactly with the quality of the product as perceived by the consumer. Similarly, Anderson et al. (1993), addressed ‘value’ in a business market as supposed value (economic, technical, service and social benefits) received by a customer in exchange for the price paid towards a product or, services along with existing offerings. Monroe (1990) has explained ‘Value’ as referring to “tradeoff” in between benefits (quality) and sacrifice (price paid).
The unidimensional approach of ‘perceived Value” with its economic and cognitive (a utilitarian perspective) interpretation, is used to measure the actual benefits and costs. A few related studies are given below.

1. Price-based studies: (Monroe’s research area) : the first study on quality-price relationship was carried out by Dodds & Monroe(1985) and led to the conceptualization of ‘Value”. They found external factors like price, brand name, and store name influence customers’ views about product quality and value. This new idea of ‘Value’ was based on the economic theory of the consumer and the concept of utility.

2. Means–end theory (Zeithaml’s approach). Gutman, 1982 formulated a theoretical and conceptual composition that connects consumers’ value and their behaviour. According to this, individuals are goal directed and whatever they purchase brings the desired end states (Mitchell & Harris 2005). Zeithaml (1988) adopted the model by Dodds &Monroe (1985) and described four different definitions of value: “(i) value as low price; (ii) value as whatever the consumer wants in a product; (iii) value as the quality obtained for the price paid; and (iv) value as what the consumer gets for what he or she gives”. Accordingly a conceptual model evolved, in which consumers assess the product or service based on price, quality, and value, rather than objectively. Later researcher had different thoughts on ‘value’. Value was said to differ from quality in two ways (i) value is more distinctive and special than quality; and (ii) value is therefore a higher-level concept than quality. Later, Brady & Robertson (1999) confirmed the suggestion of Zeithaml (1988) and Bolton & Drew (1991) that the value model is changeable across
individuals and different contexts. A few researchers have used single item to examine customers’ perceptions about value (Caruana et al. (2000); McDougall & Levesque 2000), while a few others have used several items (Andreassen & Lindestad 1998; Blackwell et al. 1999; Cronin et al., 2000; Chen & Dubinsky 2003; Gallarza & Gil 2006).

**Multi-dimensionality:** (Means–end theory-The customer value hierarchy):- Woodruff & Gardial (1996) adapted (Gutman 1982) model that was developed to describe how customers grouped and remembered information about products, in order to recommend a frame work for managers about customer value, termed “customer value hierarchy”. The “customer value hierarchy” had the following features. i) “Three hierarchical levels of value (attributes, consequences, and desired end states), the higher level will achieved only with the help of lower levels. ii) The level of thought increases on moving higher in the hierarchy; and iii) there is a propensity for steadiness to increase at higher levels of the hierarchy”.

To keep a track of customer value, Parasuraman (1997) proposed a frame work having four types of customers (i) first-time customers; (ii) short-term customers; (iii) long-term customers; and (iv) defectors. Later, van der Haar et al. (2001: pp-630) evolved a proposed value map of a company. The main intention was to develop such maps to know how customers decide between products to achieve their higher-order goals and how a company must design its value strategy accordingly. Babin et al. (1994) evolved a measurement scale to rate consumers’ shopping experiences in two dimensions, i) utilitarian value: instrumental, task-related, rational, functional, cognitive, and a means to an end; and ii) hedonic value, reflecting the entertainment and emotional worth of shopping; non-instrumental, experiential, and affective. The above approaches changed the concept of Unidimensional to Multidimensional. Hartman (1973) presented an
axiological model having three dimension, viz. extrinsic (utilitarian or instrumental use), intrinsic (emotional pleasure of the consumption), and systemic value (rational or logical aspects such as relationship between sacrifices and returns). Danaher & Mattsson (1998) adopted it in service-delivery, Lemmink et al. (1998) validated it in a restaurant setting and finally, Huber adopted it along with ‘perceived risk’.

Consumption-value theory: -Sheth et al. (1991a, 1991b) described the different faces of consumer choice, which are different forms of value such as functional (perform its functional or, utilitarian), social (projects social image), emotional (positive- confidence or excitement and negative-fear or anger), epistemic (seeking of novelty), and conditional (some market choices are contingent on the situation). Williams & Soutar (2000) adopted and found only four dimensions to be evident. Similarly, Sweeney & Soutar (2001) developed a ‘Perval’ model, which showed the presence of only three dimensions (emotional, social, quality/performance) along with price/value for money. Their study did not generate items for epistemic value and conditional value. Finally, Sheth et al. (1991a) suggested that the dimensions of value are independent, and that they ‘. . . relate additively and contribute incrementally to choice’. Later, Sweeney and Soutar (2001) showed that the dimensions of value may not be independent because the hedonic and utilitarian components of attitude might be related. According to Holbrook (1994, 1999) perceived value can be defined as an ‘. . . interactive relativistic preference experience’. Holbrook (1994, 1999) proposed a ‘typology of consumer value’ based on three dichotomies.(i) extrinsic versus intrinsic (a product viewed instrumentally as a means to some end versus a consumption experience prized for its own sake as an end in itself); (ii) self-oriented versus other-oriented (something valued by virtue of the effect it has on oneself or for one’s own sake versus an aspect of consumption positively evaluated because of how others respond or for the sake of someone else); and (iii)
active versus reactive (involving the manipulation of some product by its user versus the appreciation of some consumption experience wherein an object affects oneself rather than vice versa).

Perceived value expresses an interaction between a subject (the consumer) and an object (the product); it is comparative, personal, and situational (specific to the context); and it embodies a preference judgment. Based on a subset of Holbrook’s (1999) consumer-value domain, several theoretical reflections (Bevan & Murphy 2001; Kim 2002), empirical studies (Bourdeau et al. 2002; Mathwick et al. 2001, 2002) and experiential value (Mathwick et al. (2001) have been developed. Similarly, Bourdeau et al. (2002) identified five value factors underlying the use of internet-social, utilitarian, hedonic, learning, and purchasing.

In India chemical fertilizer is a subsidized essential commodity. It is interesting and useful to see if the cost of fertilizer is correlated to its quality of fertilizer, or if cost is preferred over quality by the Indian farmer. The perceived value is considered as having only two items as suggested by Monroe (1990), ‘Value’ standing for “tradeoff” between benefits (quality) and sacrifice (price paid).

2.2.6 Perceived Quality

Generally a company’s marketing strategy is based on a strong quality product or services. It is impossible to build a strong brand on the foundations of poor product quality due to failure to fulfill customer needs. Superior and improved product or service quality can create superior customer value and provide competitive advantage in the market (Day 1990; Porter 1980). In the past, product quality was considered as the only antecedent of satisfaction (Bitner 1990, Oliver 1980b). Garvin (1984a) suggested that perceived quality ‘lies in the eyes of the beholder’ and advised
quality is neither absolute nor objective; it is a subjective concept because it is explained according to the perception, needs, and goals of the individual consumer. Monroe & Krishnan (1985) state that: 'Perceived product quality is the perceived ability of a product to provide satisfaction relative to the available alternatives'. Similarly, in the words of Kuehn & Day (1962), “quality of a product depends on how well it fits in with patterns of consumer preferences”. Later Genth (1981) defined quality as 'fitness for use'. Box (1984, p. 179) defined it as 'the degree to which a product fulfills its functions, given the needs of the consumer', and Kotler (1984, p. 479) defined quality as 'the rated ability of the brand to perform its functions as perceived by consumers'. Trenkle (1983) demonstrated three different indications, viz. neutral concept (i.e., 'much quality' - 'not much quality'), evaluative concept ('good quality' - 'bad quality') and positive judgment ('quality products').

A product or service becomes a brand only by consistently delivering superior value. Consumers’ judgments about a product or service are generally considered as a perceived quality. According to Aaker (1991), perceived quality is ‘the customer’s perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternatives.’ Parasuraman et al.(1988) define perceived service quality as "a global judgment, or attitude, relating to the superiority of the service." Later they linked to the concept of perception and expectation and viewed it as “the degree and direction of discrepancy between consumers' perceptions and expectations". Based on above views, perceived quality is a variable that may be considered in behavioural intention studies.

Grewal & Monroe (1989) advocates that two different dimensions (focal and contextual) of stimuli might influence perceived quality. Consumers directly responded to Focal stimuli whereas background or environmental circumstances or, physical surroundings towards perception of
focal stimuli form the contextual stimuli (Oliver 1981). Baker et al. (1994), found that store ambience (store contextual cues) influences perceived quality.

Similarly, Bagozzi (1992) suggested a concept of an “outcome-desire unit” and “outcome desire conflict” which posits that perceived quality will be followed by satisfaction (emotional response). Oliver, (1981) suggested that satisfaction break down into attitude (i.e, perceived quality). Consequently, satisfaction comes before attitude (i.e, perceived quality). Olson (1972) developed a model based on overall judgment (quality cues), which described two subjective components cues - predictive value and confidence value, and a third type that is dichotomous in nature (intrinsicness-price, package, appearance, size and shape etc. and intrinsicness- Brand name, price, origin). Steenkamp (1988b) differentiated between quality cues and quality attributes. Later, the same authors investigated an approach “quality guidance” to narrate perceived quality judgments to physical product features.

Cronin et al.(2000); Lapierre et al.(1999) advocated perceived quality as an antecedent of perceived value and as having a positive effect on it. Similarly, Holbrook (1999); Sweeney & Soutar (2001) argue that quality is a sub component of overall value. On the other hand, Bolton & Drew (1991) asserted that ‘... value seems to be a ‘richer’, more comprehensive measure of customers’ overall evaluation of a service than service quality’.

Peter & Van Trijp (1995) described perceived quality as being a combination of four dimensions (four Ps of the Quality Quadrant) - perception, product, person and place. Generally customers’ overall judgments about a product or service are shaped by tangible and intangible characteristics that are experienced during consumption. Secondly, the perceived quality differs based on a consumer’s perceptual abilities, personal preferences, and experience level. Third, perception of perceived quality differs between experts and
general consumers and finally, situational factors may affect quality. An important element in describing quality in the perception of indicators describes quality as a multifaceted concept.

2.3 RESEARCH QUESTIONS

The above discussion indicates that there have been no systematic studies yet, to assess the satisfaction and loyalty of farmers towards fertilizers. In order to bridge this gap in knowledge, this study is aimed at the following activities

a) There is a need to develop a standard farmers’ satisfaction model which can predict the causes and failure of loyal farmer base of an agri input company. Based on the above discussion, it is clear that ECSI model is suited for the estimation of farmers’ satisfaction and loyalty. ECSI models contain more number of justified constructs than the ACSI and SCSB models, in which, the image of companies is not taken into account, and allow complaint is not taken as an outcome of satisfaction. All the constructs are explained by multiple items. May studies on satisfaction have examined or validated the ECSI model with the help of PLS technique. Therefore, in this study, PLS is used to examine the model and draw conclusion.

b) Farmers’ ECSI rating scores are measured using the DEA technique to measure the efficiency of various Indian fertilizer brands. According to the efficiency score the farmers’ preferences are taken as being efficient brands.

c) The interaction effect of “Mode of Purchase” on farmers’ satisfaction and loyalty is estimated. The presence of an
interaction effect of purchase mode on linear combination with outcome variable is assessed.

A quantitative approach is better suited than qualitative work, for better understanding of the relationship between the constructs and to understand the specifics of this field, rather than generalized outcomes. Based on the above discussion, a quantitative research methodology is adopted to measure farmers’ satisfaction and loyalty using a standardized, popular satisfaction model.

2.4 CONCEPTUAL MODEL DEVELOPMENT AND FORMULATION OF HYPOTHESIS

A conceptual model is developed based on the above discussion and literature review, which provides an effective approach towards measuring farmers’ satisfaction and brand loyalty.

![Proposed Conceptual Model (based on ECSI)](image_url)

Figure 2.5 Proposed Conceptual Model (based on ECSI)
2.4.1 Hypotheses based on Objective-1

After reviewing the theoretical and empirical studies in literature, this work attempts to define a causal model towards analyzing the relationship among the constructs of the ECSI model. The model stipulates that perceived value, customer satisfaction and customer loyalty are driven by company image, customer expectations, product and service quality. This is our main working hypothesis, which is a combination of several sub-hypotheses listed below. A positive relationship is expected to exist between the exogenous and endogenous variables (ECSI model). There are ten hypotheses formulated based on the first objective.

H1_a: There is a significant positive relationship between image and satisfaction
H1_b: There is a significant positive relationship between image and loyalty
H1_c: There is a significant positive relationship between expectation and satisfaction
H1_d: There is a significant positive relationship between expectation and perceived value
H1_e: There is a significant positive relationship between perceived quality and satisfaction
H1_f: There is a significant positive relationship between perceived quality and loyalty
H1_g: There is a significant positive relationship between perceived quality and perceived value
H1_h: There is a significant positive relationship between the Perceived Value and Satisfaction

H1_i: There is a significant positive relationship between satisfaction and loyalty

H1_j: There is a significant positive relationship between image and perceived value.

2.4.2 Hypothesis based on objective-2

H2: There is a difference among the efficiencies of Indian fertilizer brands.

2.4.3 Hypothesis based on Objective-3

H3: There is a positive interaction effect of “mode of purchase” (Cash/Credit) on farmers’ satisfaction and loyalty.