Chapter - 2

A Review of Literature
CHAPTER – II

QUALITY OF LIFE: A REVIEW OF LITERATURE

‘... an acceptable quality of life requires respect, options, reasonable security and a sense of living up to potential’ and that ‘... quality of life ought to come in all sizes for all people’ and further that ‘... facile, contemporary phrase "quality of life" is still a puzzle. Practically everyone seems to know what it means, but no-one can adequately define, classify or measure it’ – Weisman, A.D. 1979: 123. ‘... that there is another world of human experience which is not quantifiable, nor statistically significant, but perhaps of enormous significance in ultimate terms’ – Paterson, W. 1984: 2381.

2.1 Introduction

The survey of literature and review attempted here has a pointed focus on quality of life in general and on the aspects considered in the study such as overall and impressions of quality of life among people and, particularly of, rural Mysore district and also in the context of rural/urban environment, health, education, housing and basic infrastructures, employment, economy and livelihoods, recreation and safety in the communities.

This review of the literature looks at the meaning of the concept 'quality of life', the use to which it has been put in various branches of social sciences, its meaning in particular, and the instruments already developed for its measurement and their relevance to Quality of Life (QOL) Research in India. The review concentrates mainly on the quality of life of people and, in some much broader contexts, of education, health, livelihoods, hope and happiness.

Quality of life is an active arena for interdisciplinary research, attracting scholars from planning, geography, sociology, political science, economics, and other disciplines. Helburn (1982:445) has asserted that because 'quality of life' as a policy goal is attached to place, it is a goal of which spatial scientists must be cognizant, and to which planners and geographers can make important contributions. Cutter (1985) drew attention to the subject of quality of life in her monograph, ‘Rating Places: A
Geographer’s View on Quality of Life’. Awareness of spatial and temporal variations in the quality of life can enable policy makers and planners to monitor changes and to devise more effective policies to address persisting inequalities (Hemmasi, 1994; 1995). Numerical and statistical methodology for creating comparative quality of life indexes is still evolving. Techniques for developing composite quality of life indexes include simple rankings of places, calculation of standard scores, scaling methods, and factor or principal components analysis (Dasgupta and Weale, 1992; Park, 1985; Hall, 1984; Tata and Schultz, 1988; Stover and Leven, 1992; Ram, 1982).

2.2 The Concept of 'Quality of Life'

In a fascinating review of the myriad of ideological uses and abuses to which the concept of ‘quality of life’ can be put, Edlund and Tancredi (1985) postulate five different meanings of the term 'quality of life'. They believe that the meaning is dependent on the user of the term, on his understanding of it and on his position and agenda in the social and political structure. Quality of life can be viewed as fulfilment, the ability to lead a 'normal life', the social usefulness of an individual, from a rational objective point of view, or from the subjective, individualistic point of view. They give examples of the use of the various viewpoints in research and conclude:

'It is to be hoped that we have shown that not only are all of these meanings thoroughly different and ideologically distinct, but that their basic assumptions are often obscured and not immediately evident.

The possibilities for other definitions and ideological uses of the phrase 'quality of life' are simply endless'.

Hornquist (1982) believes that human needs are the foundations of the concept and that quality of life is the degree of need satisfaction. He outlines six spheres of life in which there are needs to be met—physical, psychological, social, activity, marital and structural (that is, in the political field, and in dealings with justice and the authorities).

Berg, Hallauer and Berk (1976) attempted to elicit from 150 health workers the relative importance they placed on 50 abilities or functions. From their position of health, they rated consistently high cognitive, emotional and social functions. The
ability to use one's mental abilities, to think clearly, to see, to love and be loved, to
make decisions for oneself, to maintain contact with family and friends, to live at
home, and to walk, were assigned the largest average values. This chapter makes
some interesting points about the relative importance placed on various functions by
different individuals, and asks the unanswerable question 'How much is the quality of
life reduced when one could no longer climb a mountain if one elected to do so?' The
need to focus on the conceptions of the individual is stressed, to determine what his
concerns are and how they relate to his experience of well-being.

Ziller (1974) also favours the phenomenological approach, assuming that
quality of life is in the eye of the experiencer. In an exploration of the concept as it
applies to life after coronary artery bypass surgery, Cohen (1982) puts forward the
theory that quality of life is based on the capacity of the individual to realize his life
plans. He explains that while some elements are prized by us all, some are prized to a
special degree by each patient. He suggests that it would be useful for patients to
state, prior to surgery, what changes they hope for, and to ascertain, in follow-up, to
what extent their goals are realized.

Andrews (1974) defends the development of perceptual indicators, that is,
measures of what people feel, as valid reflections of society's concerns. He addresses
their weaknesses pointed to by some commentators and concludes that none of the
weaknesses is sufficient to invalidate the development and use of perceptual
indicators. He believes that quality of life is the extent to which pleasure and
satisfaction characterize human existence. He believes that without data from
perceptual measures it becomes difficult to decide which potential objective indicators
deserve measurement. Bond and Lader (1974) used visual analogue scales to measure
subjective feelings in normal subjects and report on an example of their use. Sackett
and colleagues (1977) report on the development of a health index questionnaire
designed to measure the social, emotional and physical functions of a population.
Campbell (1976) promotes the use of subjective indicators, believing that objective
indicators are surrogate indicators.

Liang and colleagues (1982) criticize the use of objective indicators in
rheumatology, taking the measures further away from clinical relevance. They too
believe that functional capacity is relative to patients' goals, expectations, priorities,
social supports and other factors. They also warn against an obsession with statistical soundness that may cloud the objective of finding measures that are patient-oriented and clinically useful.

Abbey and Andrews (1985) have collected data from 675 respondents. Their results have shown strong support for the hypothesis that psychological concepts relate to perceptions of life quality. Internal control, role performance and social support were important for good quality of life. Kirshner and Guyatt (1985) make a plea for developing instruments to measure quality of life with a goal clearly in mind, and that the existing instruments should be limited by their suitability for the specific purpose they are being used for. A recent study by McKenzie and colleagues (1986) found that the sickness impact profile (also see Bergner and others, 1981) was unable to detect within-patient improvements and deteriorations accurately, limiting its use for following individuals over time. The classic dilemma of scale assessment is that, since no absolute standard exists, the evaluation of scale performance is always of one scale against another. The recommendation of Anderson and colleagues (1986) is that instruments administered by the interviewer rather than self-administered are necessary for sufficient reliability and validity on the grounds that the latter lead to under-reported dysfunction. This leads us back to the subjective nature of this construct and the question 'who is experiencing the quality of life we are attempting to measure?'

In a review of the current status of quality of life research, Schipper and Levitt (1985) acknowledge that the most difficult phase of evaluating quality of life is defining what is to be measured. They feel that it is most important to understand that quality of life is a continuous variable, an on-going response to events affecting the patient. They identify four central components consistently considered substantive elements of quality of life: (1) physical/occupational function, (2) psychological state, (3) sociability, (4) somatic discomfort — but they are unclear as to the relative importance of each in the overall quality of life. In an earlier paper Schipper (1983) talks of the difficulties of measuring a construct based on the patients' perspectives, which are emotional and personal. Although with each step out of the laboratory the variables become harder to control, he feels that a gain in relevance is worth a sacrifice in precision. He suggests that:
'we tread on new and unfamiliar ground. Quality of life studies will force us to come out from the comfort of technological medicine into a world that is less concrete and less controllable, but more human. The relevance and validity of some of our most trusted measures will be reassessed. Out of it we will be better physicians, more sensitive to the vigour, complexity and adaptability of the human soul'.

In their review of studies using quality of life criteria, Najman and Levine (1981) point out that there seems to be little understanding of the association between the objective conditions of life and the subjective perceptions of the patients and that the use of objective indicators alone produces results totally unrelated to the feelings and experiences of the patients studied. Those who use objective indicators alone, they warn, may simply be projecting their own values and priorities on the patients they are studying.

2.3 Definitions of Quality of Life

Quality of life has no single uniform definition (O'Boyle, 1997). Cummins (1997) summarized 60 quality of life definitions. Hughes and Hwang (1996) have examined 87 studies on what constitutes quality of life and identified 44 definitions. A group of international researchers, who have done primary research on quality of life in the field of intellectual disabilities developed a consensus related to the conceptualization measurement and application of quality of life (The Special Interest Research Group on Quality of Life, 2000). They under scored that the key characteristics of all definitions are:

(a) General feelings of well-being;
(b) Feelings of positive social involvement; and
(c) Opportunities to achieve personal potential.

Many more definitions of and theories concerning quality of life are explained in the literature. Campbell (1976) believes that 'quality of life is a vague and ethereal entity, something that many people talk about but which nobody very clearly knows what to do about', while to Fayos (1981) it is 'the ability of patients to manage their lives as they evaluate it'. Shaw (1977) produces a mathematical equation, stating that:

'Quality of life (QL) is a product of the patient's natural endowment (NE) and the efforts made on his behalf by his family (H) and society (S), that is QL = NE x (H + S)'.

William Easterly (1999) brings together, from a variety of sources, 81 indicators of quality of life for the years 1960, 1970, 1980, and 1990 for a large number of countries worldwide. The indicators range across seven areas, namely:

- Individual rights and democracy;
- Political instability and war;
- Education;
- Health;
- Transport and communication;
- Inequality across class and gender; and
- ‘Bads’ – indicators of the prevalence of crime, terrorism, pollution, work injuries, and suicide. (The bads are scaled so that a diminution is positively correlated with growth).

This innovative study considers both cross sectional and time series relationships to real GDP per capita of these indicators. Although there is a strong cross sectional association between these indicators and real GDP per capita, the time series relationships are quite mixed.

Easterly (1999) finds that the effect on the indicators of exogenous shifts over time - those due to factors other than economic growth - is quite strong compared with the effect of economic growth. Using three different econometric techniques to assess the role of GDP per capita versus exogenous factors in explaining the change in the various indicators, he concludes that GDP per capita has an impact on quality of life that is significant, positive, and more important than exogenous factors only for from 6 to 32 out of the total of 81 indicators, depending on the technique of analysis.

There are only three of the 81 indicators in all three econometric methodologies ‘for which growth is the primary life-improving and significant determinant: calorie intake, protein intake, and telephones’ (Easterly, 1999: 262). Two of the three relate to consumption and the third, to communications density. He concludes that ‘the evidence that life gets better during growth is surprisingly uneven’ (Easterly, 1999:268).
What conclusion emerges from this survey of objective quality of life measures? The answer is that so far as objective indicators of material living levels are concerned, economic growth does raise quality of life. But there are significant \textit{\textbf{bads}} associated with this consumption such as rising pollution and obesity. With regard to where people live, economic growth is clearly responsible for the strong centralization of population in urban places, but whether this is taken as an improvement in quality of life research is debatable. When it comes to social and political indicators, an examination of historical experience reveals noticeable timing differences in their improvement from that in GDP per capita, and raises serious doubt that economic growth has been the primary factor in quality of life advances in the social and political realms.

One determinant of quality of life, public policy, often plays an important causal role independently of economic growth. A simple illustration is provided by another quality of life indicator, per capita cigarette consumption. In the United States, following the introduction of the cigarette in the late nineteenth century, per capita consumption rose nearly 80-fold from 1900 to the early 1960s. This trend is partly a reflection of rising income associated with income growth, and partly of the impact on consumption of new goods generated by technological advances associated with economic growth. But since its peak in the early 1960s, per capita consumption has steadily declined, and by 2000 consumption was down by one-half from the early 1960sand back to the level prevailing at the start of World War II.

This decline is due to the breakthrough in knowledge that established the adverse effect on health of cigarette smoking, and the dissemination of this knowledge via public health policies and the health industry. Cross sectional data underscore this conclusion. A plot of male adult smoking against GDP per capita does not however reveal a strong positive association across countries. To the naked eye, there is no clear relationship, and a fitted regression reveals a slightly negative, but statistically significant association. This result is because the high income countries are those which have first acted vigorously via public policy to curtail smoking. With this graph, plotted with 1960s data, the more common consumption pattern prevails, that is, high levels of GDP per capita associated with higher prevalence of smoking.
An implication of the finding above is that *bads* associated with economic growth - air pollution, obesity, and the like - are amenable to correction with appropriate public policies. But what smoking illustrates more generally is the important role that public policy may play in influencing quality of life. The cigarette experience is a contemporary example of the central role of public policy in promoting health and life expectancy.

The great breakthroughs in health knowledge came with the sanitation movement and validation of the germ theory of disease in the middle and latter half of the nineteenth century. This knowledge led to the development of a new technology for controlling contagious disease, and this technology was very largely implemented by public policy through the establishment of a public health system (Easterlin, 2004, Chapters 6, 7). In like manner, the disjunction between the advance of schooling and growth of GDP per capita is a reflection of the important and independent role played by governments in establishing universal schooling. If social and political indicators of quality of life are, at present, positively associated with GDP per capita, it is often because the countries that first implemented the new production technology underlying modern economic growth were also the first to introduce, often via public policy, new advances in knowledge in the social and political realms.

### 2.4 Objective and Subjective Dimensions of Quality of Life

Indeed, researchers have agreed that quality of life is multidimensional and includes both subjective and objective dimensions (Halpem, 1993; The Special Interest Research Group on Quality of Life, 2000; Testa and Simonson, 1996; Vinayakam and Sekar, 2013). Another international group of researchers (Schalock et al., 2002) has adopted Schalock' seight domains and specified sub domains as follows (The Special Interest Research Group on Quality of Life, 2000: 28):

- Emotional well-being: safety, stable and predictable environments, positive feedback;
- Interpersonal relations: affiliations, affection, intimacy, friendships, interactions;
- Material well-being: ownership, possessions, employment;
• Personal development: education and habilitation, purposive activities, assistive technology;
• Physical well-being: health care, mobility, wellness, nutrition;
• Self-determination: choices, personal control, decisions, personal goals;
• Social inclusion: natural supports, integrated environments, participation; and
• Rights: privacy, ownership, due process, barrier-free environments.

In general, quality of life has been defined using a combination of both subjectivity and objectivity, which is however controversial (Halpem, 1993). This controversy is neither unexpected nor it deserves careful attention, for human beings are rarely objective. Those who argue for the objective conceptualization of quality of life feel that quality of life is the sum of the objectively measurable life conditions experienced by an individual. Their contention is that subjective satisfaction is nothing more than a response to those conditions (Stark and Goldsburry, 1990). There are some others who argue that a person's expressed satisfaction with life is the dispositive criterion as each individual or family differs in what they enjoy, desire from life, or find important (Edgerton, 1990; O'Boyle, 1997). Some researchers do accommodate both perspectives (for example, Felce, 1997; Schalock, Keith, Hoffman, and Karen, 1989; Stainback and Stainback, 1989). Schalock (2000), on the other, has suggested that some domains and indicators (for example, emotional well-being) are more amenable to personal appraisal, while others (for example, material well-being) are not: in other words, they are better suited to objective assessment.

Quality of life embraces multiple dimensions of human experience that affect well-being. It is captured in both objective and subjective dimensions. The objective indicators are those external to the individual and encompass measures of material living and its components, as well as family life, physical and mental health, work, environment, and the like. The measures relate both to circumstances whose increase raises quality of life, such as level of nutrition or life expectancy, and also to *bads*, like pollutants and crime, whose increase lowers quality of life. Subjective measures, on the other hand, are self-reports of personal wellbeing, as obtained in surveys of happiness, general life satisfaction, prevalence of positive and negative moods, and the like (Easterlin and Angelescu, 2007).
2.5 Measuring Quality of Life

It is often difficult to measure quality of life. Almost all measurement tools have multiple domains, with multiple items in each domain. A number of measurement methods have been used for assessing quality of life, for example, for persons with disabilities, including surveys and questionnaires (for example, Cummins, McCabe, Romeo, and Gullone, 1994; Ferrans and Powers, 1985), interviews (for example, Park, 1985; Lehman, 1988), vicarious interviews, and vicarious surveys (for example, Ouellette-Kuntz and McCreary, 1996). Most other researchers have put in efforts at involving the persons with disabilities, but they have depended on a vicarious response. In some tools, parents or siblings were the major vicarious respondents for the measurement (for example, Becker, Diamond, and Sainfort, 1993; Ouellette-Kuntz and McCreary, 1996).

As individuals are unique, the uniqueness of each individual is at the heart of how quality of life is measured, especially when they are highly diverse as well. At the individual level, a prominent measurement consideration is whether the person has a disability or not. Schalock (2000) has argued that quality of life for persons with disabilities encompasses the same indicators that are important to persons without disabilities. On the other hand, Hatton (1998) has asserted that the experiences of persons with disabilities are restricted because of the limits imposed by disability conditions; and the limited experiences do result in different indicators of quality of life. Hence, specific attention needs to be paid to the uniqueness of each individual, in conceptualizing and constructing a valid measurement for quality of life (Borthwick-Duffy, 1996).

2.6 Quality of Life Research

Quality of life, as an interest and concern, is a subject of great importance and is exemplified in our current concerns for environment and for benefit-burden ratio in medical treatments (Walter and Shannon, 1990). But globally it is an outcome indicator added to social, as well as health, service programme development (DHSS, 1989). It has been added to the Worldwide Healthy Cities Programmes and defined as spanning the visual arts, recreation, employment, transport, housing, environmental and conservation issues, health and other indicators of what has been labelled as 'the social temperature'. The Organization for Economic Cooperation and Development
(OECD) has agreed on a list of quality of life related social concerns of member states, including health, command over goods and services, employment and quality of working life (Andrews, 1973). The salience of quality of life across disciplines has resulted in the recent emergence of generic quality of life questionnaires (Evans and Cope, 1993), and quality of life questionnaires for use in health care evaluation (Chubon, 1987; Patrick et al., 1988; Siegrist et al., 1993).

Quality of life research spans a range of topics, from quality of life in the last year of life (Lawton et al., 1990) to quality of life in urban environments (Rogerson et al., 1989). It has a usage across many disciplines - geography, literature, philosophy, health economics, advertising, health promotion and the medical and social sciences (for example, sociology and psychology). It is multidimensional and, theoretically, incorporates all aspects of an individual's life. It has also been defined as (a) the 'output' of the inputs of the physical and the spiritual (Liu, 1974); (b) the degree to which a person accomplishes life goals (Cella and Cherin, 1987); and (c) quantified crudely as a formula in which quality of life is a product of one's natural endowment and the effort made on one's behalf by the family and society (Shaw, 1977). The meaning of quality of life is thus dependent on the user of the term, his or her understanding of it, and his or her position and agenda in the social and political structure (Edlund and Tancredi, 1985).

In non-experiential social indicators research, quality of life encompasses all circumstances of life, for example housing, leisure activities, work, and the environment (Campbell et al., 1976; Wingo and Evans, 1978; Kaplan, 1993a). Experiential social indicators research on the other includes subjective well-being (see Elster and Roemer, 1993). There are several meanings of the term 'quality of life' in social research, ranging from individual fulfilment to the ability to lead a 'normal' life (Edlund and Tancredi, 1985; Fowlie and Berkeley, 1987). Early on, Dalkey (1972) has first derived a list of quality of life domains from graduate students, and then used the Delphi technique with a panel of people to rework the students' lists. The final list included: novelty (newness, surprise, variety), health (physical well-being, feeling good), dominance (superiority, power, control, aggression), self-respect (self-confidence, self-understanding), challenge (stimulation, competition, ambition), freedom (individuality, spontaneity, unconstrained), comfort (economic
well-being, good things, relaxation), affection (love, caring, relating, understanding), security (peace of mind, stability, lack of conflict), achievement (sense of accomplishment, meaningful activity), status (prestige, social recognition, positive feedback) and involvement (participation, concern).

Discussion of quality of life dates back to Plato and Aristotle (Hagerty and colleagues, 2004). Within the academic literature, centres of health care field, including nursing, medicine and health promotion (King and colleagues, 1997; Haas, 1999) have been the centres focusing on quality of life studies. Haas (1999) refers to a literature review that identified more than 4,000 articles published about quality of life related to health that were published within the four-year period from 1993 to 1997.

Psychology literature on quality of life forms a large subset of the health literature. Quality of life is also the subject of academic debate in economics, particularly in the related field of happiness studies, a research area shared with psychologists and sociologists. Most of this literature considers the effect of medical interventions on the quality of life, or subjective well-being of individuals or groups of individuals with shared characteristics.

Quality of life and well-being are also a concern of the social indicators movement, which developed in both Scandinavia and the US in the 1960s and 1970s out of a feeling that economic indicators alone could not reflect the quality of life of populations (Rapley, 2003). Over the past 30 years this has become a fast growing discipline now fully embraced by governments and public sector agencies worldwide, seeking to measure and compare changes in quality of life within and between communities, cities, regions and nation states. Major studies of quality of life, for example, have been sponsored by organisations such as UNESCO, the OECD, and the World Health Organization (WHO) (Parmenter and Donelly, 1997; Schalock, 2004).

Quality of life emerged as an academic discipline in its own right in the 1970s, with the establishment in 1974 of the peer reviewed scientific journal Social Indicators Research, founded and edited by Alex Michalos. Since then the volume of academic articles concerned with quality of life and well-being issues has steadily
increased. Schalock (2004: 205) reports that since 1985 alone over 20,900 academic articles have appeared in the international literature containing the term “quality of life” in their title. A second key academic publication is The Journal of Happiness Studies, a multi-disciplinary journal which provides a forum for discussion of what it describes as the two main traditions in happiness research (1) speculative reflection on the good life and (2) empirical investigation of subjective wellbeing.

The International Society for Quality-of-Life Studies (ISQOLS) serves as a forum for academic researchers working in this field, encouraging inter-disciplinary research and methodological debate and development. The Scottish team’s literature search (Galloway, 2005) produced a final selection of 244 articles, the majority academic but with a significant minority drawn from commissioned consultancy work and reports by public sector agencies.

Rural-Urban Environment and Quality of Life

Urbanization is a positive or negative change in quality of life is debatable. There are analysts who praise the benefits of urban life, such as opera, theatre, and spectator sports that require a large population base to sustain them. But surveys suggest that a fair proportion of urban people would prefer a rural environment (Fuguitt and Zuiches, 1975; Fuguitt and Brown, 1990). Suburbanization of the 20th century with the advent of motor vehicles is arguably a reflection of this preference to live in a more rural-type of setting. Representative social indicators of quality of life such as life expectancy and education also exhibit a strong cross sectional correlation with GDP per capita.

Life expectancy at birth is the average number of years a group of individuals can expect to live. It is determined by considering a fictitious generation that at every age from birth until the age of the maximum life span has a risk of death observed at that age in the year when the indicator is calculated. It is often taken as a proxy, more generally for health. The high positive association of life expectancy with GDP per capita, coupled with higher levels of food, clothing, and housing consumption made possible by higher income, leads naturally to the inference that ‘wealthier is healthier’ (Pritchett and Summers, 1996). However, increased pollution and adverse dietary changes may also accompany economic growth, raising doubts about the simplistic association of greater health with higher income. Indeed, in the nineteenth
century, the concentration of population in cities and towns, induced by modern
economic growth, increased exposure to disease (Schofield and Reher, 1991). Some
experts assertflatly that ‘low mortality for all will not come as an unplanned spinoff
from economic growth’ (Caldwell 1986).

Migration and Quality of Life

Age at immigration has been a consistent and a most crucial factor affecting
socio-economic well-being, quality of life, and overall life satisfaction among
immigrants in the host country (Angel et al., 1999; Balgopal, 1999; Boyd; 1991; Gee;
1999; Wong; 2001). For example, the study by Angel et al. (1999) on Mexican
immigrants in the United States has shown greater economic dependency among
those who immigrated after 50 compared with those immigrating at younger ages.
Among the factors, living arrangements and quality of life have received greater
attention in studies of elderly immigrants (Basavarajappa, 1998; Boyd, 1991; Gee,

Health and Quality of Life

Quality of life was introduced by Medline in 1975, and accepted as a concept
by Index Medicus in 1977. This was followed by acknowledgement and acceptance
by various scientific bodies (Bech, 1992). Since the 1970s, however, there has been
an explosion of interest in the subject, with an increasing number of citations of
quality of life in the medical literature. Both journal and review articles on quality of
life now appear regularly in the medical literature (de Haes and van Knippenberg,
1985; 1987; Cella and Tulsky, 1990; Aaronson et al., 1991b). There has also been a
proliferation of study groups, conferences and special journal issues (for example,
Advances in Nursing Science in 1985; Journal of Chronic Diseases in 1987;
Psychotherapy and Psychosomatics in 1990; Medical Care in 1990; and Social
Science and Medicine in 1995).

It is because health is the most valued state of existence (Rokeach, 1973;
Kaplan, 1993a), and there has been a rapidly expanding literature on 'health-related
quality of life'. Life expectancy at birth in the developed world has increased over the
past 150 years, although most of the increase has taken place during the first half of
the 20th century. Expectation of life, and expectations of a morbidity-free life at older
ages, has also increased and has led to international attempts at measuring health expectancy (Bone, 1992; Robine et al., 1992). Debate has also been focusing on health care costs in relation to 'health gain' or benefit from the treatments and interventions that are contracted for (see Normand and Bowling, 1998).

Early empirical social research on quality of life in studies in the United States has estimated well-being, satisfaction or happiness, and what people meant by 'the good life' (Gurin et al., 1960; Bradburn and Caplowitz, 1965; Bradburn, 1969). Lawton (1983) was the first to propose a theoretical model of quality of life as 'the good life', defined as psychological well-being, perceived quality of life, behavioural competence and the 'objective' environment.

Health-related quality of life is patient-based and is therefore subjective but focuses on the impact of a perceived health state on the ability to live a fulfilling life (Bullinger et al., 1993). From a health or disease perspective, quality of life has focused on the impact of disease and treatment on disability and daily functioning (Kaplan, 1985). As a double-sided concept, it incorporates both positive and negative aspects of well-being and life. It is multi-dimensional, incorporating social, psychological and physical health (see Morris et al., 1986; Sherwood, 1977). Grant and colleagues (1990) define quality of life as 'a personal statement of the positivity or negativity of attributes that characterize one's life'.

Over the past 40 years, a small set of preference-based measures of health-related quality-of-life (HRQoL) has appeared. Several of these measures are now in use worldwide. There is controversy, sometimes heated, about which of these is "best" and indeed whether any are in fact good measures for what they purport to do and therefore whether new, better measures should be developed and the old ones discarded. I have long advocated for population-based data collection using these standardized measures. (Fryback, Dasbach, Klein, Klein, Dorn, Peterson and Martin, 1993; Fryback, Dunham, Palta, Hamner, Buechner, Cherepanov, Herrington, Hays, Kaplan, Ganiats, Feeny and Kind, 2007) In addition I have argued against tweaking the existing measures to "improve" them or casting them aside to develop "better" measures. (Fryback, 2005).
In an excellent review of the literature of the quality of life of cancer patients, de Haes and van Knippenberg (1970) conclude that:

- The definition of quality of life is mostly lacking and a wide variety of operationalizations can be discerned;
- Little attention is given to intervening variables, whereas demographic variables have been proved to be associated with the quality of life of the population at large;
- The number of patients in these studies is small;
- The reliability and validity of the instruments is not always evident, and
- Practically no attention is given to theories explaining the origins of the quality of life of patients.

Education and Quality of Life

In most countries, schooling was already well advanced before the take-off into modern economic growth. The contrast with the patterns for life expectancy and fertility is noteworthy. Whereas the demographic indicators for these countries typically lag the onset of modern economic growth, a considerable growth of schooling has occurred in a number of countries before the take-off into economic growth, because the initial expansion of schooling occurred rather slowly. It is noteworthy to see a similarity that the pattern for education shares in common with those for life expectancy and fertility, namely, the advent of rapid improvement in the indicator often does not occur concurrently with that in GDP per capita. For education, the simple association between economic growth and quality of life evident in the cross section is not reproduced in the time series data (de Haes and Knippenperg, 1985, for example).

Housing and Basic Infrastructures and Quality of Life

Quality of life embraces material subsistence; as such there can be little doubt that modern economic growth has brought about a major long term improvement, because the food, clothing and shelter available to the average household have risen at rates never before known. A sense of the enormous transformation in material living levels, qualitative as well as quantitative, can be readily obtained from a simple contrast of living conditions in the late-eighteenth-century with the situation today.
Everyday life two centuries ago was most akin to what we currently known as ‘camping out’. At that time, among the rural population (95 per cent of the total), housing typically consisted of one-storey houses with one or two rooms and an attic under the rafters. Frequently, there was no flooring except the hard earth. A fireplace with a chimney provided heating and cooking. Toilet facilities consisted of outdoor privies. Water and wood had to be fetched. Transportation consisted of a horse and wagon (Brady 1972; also Lebergott, 1993, 1996).

The qualitative change from that world to the United States’ current panoply of consumer goods – cars and planes, electrical appliances and running water, telecommunications and computers, pharmaceuticals and health care, and the phenomenal array of food and clothes – is literally incredible. If quality of life is identified with the amount and kinds of goods available to the average consumer, then there can be little question that economic growth has wrought a phenomenal advance.

**Economy, Employment, Livelihoods and Quality of Life**

Literature relating economic growth to quality of life examines crosssectional (point-of-time) relationships, usually how countries at different levels of realGDP per capita differ in regard to various quality of life indicators, where GDP per capita or a variant thereof is taken as an index of the level of economic development (Easterlin and Angelescu, 2007: 4).

Data in these studies relate to recent experience, the past few years, or the latest decade, or at most the last 40 or 50 years. In these cross sectional studies, positive correlations are taken as signifying causal relations between economic growth and quality of life. On the other, a limited set of studies of economic growth and quality of life has been on time series evidence. These studies throw light on the extent to which changes in quality of life accompany the process of modern economic growth (see UNDP, 2006; Hagerty and Veenhoven, 2006).

Higher income allows people to satisfy their needs better and as such consumption is higher in richer countries. This pattern is indeed observed in cross sectional data. From the data for 64 countries, the following quantitative differences in consumption among countries, for individual goods that cover the entire range of goods
included in consumption expenditure and GDP, emerge: Per capita consumption in the five richest countries averages 26 times that of the five poorest. In practical terms this translates into economic differences in the necessities of life on the order of 10 fold for food, 25 fold for clothing, and 73 fold for shelter. Differences in food consumption translate into sizeable nutritional differences, as reflected in energy and protein intake, and fruits and vegetables consumption per capita. The difference between rich and poor is even more pronounced further up the pyramid of material needs and the consumption of durables. Radios, cars, and television sets are all much more plentiful in higher income countries. While cars and TV sets are luxuries in most Third World countries, they are part of everyday life in the richer ones, where the question is often not whether a household downs one but rather how many (Easterlin and Angelecu, 2007: 5-7).

One of the main characteristics of modern economic growth is the introduction of new goods. The consumer durables such as cars, radios, and TV sets were new goods in the first half of the 20th century. Those at the start of the 21st century are cellular phones and the internet. These even newer goods are already becoming commonplace in developed countries. In poorer areas of the world, however, they are for most persons a thing of the future. Higher income is also accompanied by an increase in the so-called "bads", showing that economic growth is not costless. The most prominent bad is pollution. Cross sectional relationships between GDP per capita and carbon dioxide emissions indicate a high positive correlation. This is hardly surprising given that cars, a salient feature of high-income consumption, are among the main sources of such emissions (Shafik, 1994). Holtz-Eakin and Selden (1995) suggest diminishing marginal propensity to emit carbon dioxide.

The relation between environmental quality and economic growth is U-shaped that environmental quality may deteriorate during a period in which developing countries begin to industrialize, but at some point this deterioration is stopped and reversed as income rises (Portney, 2000). Grossman and Kruger (1991) provide some supporting evidence of this U-shape in data on air quality in selected cities in developed and developing countries during the period 1977-88. The flipside of higher food consumption is another bad associated with economic growth: the detrimental diet choices that people in richer countries make is reflected in higher intake of fat.
The result is new and growing health problems that these countries are facing, such as obesity and high blood pressure (Offer, 2006; Oswald and Powdthavee, 2006). Taken together, there is cross sectional evidence that richercountries lead in the quantity and quality of consumption. The positive impact of greater consumption on quality of life is offset to some extent by negative effects brought about by that consumption, such as new environmental and health problems.

2.7 Subjective Happiness Scale

Assessments of well-being measure individuals’ happiness or satisfaction with life. For example, the Australian Unity Well-being Index is described as a “barometer of Australians’ satisfaction with their lives, and life in Australia” (Cummins et al., 2003). Other researchers suggest that subjective well-being can be measured using self-rating questions about “happiness” and “life satisfaction” (Helliwell and Putnam, 2004; Spiro and Bosse, 2000:299). Helliwell and Putnam (2004: 1435) distinguish between these two terms, explaining that:

Generally speaking, self-ratings of ‘happiness’ turn out to reflect relatively short-term, situation-dependent (affective) expressions of mood, whereas self-ratings of ‘life satisfaction’ appear to measure longer-term, more stable (cognitive) evaluations.

Evidence from psychology studies suggests that ratings of life satisfaction/dissatisfaction are a reasonably reliable indicator of how people feel about their lives, providing a good sense of individuals’ subjective well-being (Moum, 1996; Sandvik and Seidlitz, 1993; Layard, 2003). On this basis, economists have generally come to accept life satisfaction as a useful measure of subjective well-being. However economists also accept the evidence from psychology studies that individuals’ expressions of life satisfaction reflect a number of different aspects of their self-perception, related to their life opportunities and outcomes.

2.8 Impressions of Quality of Life

In literature, there also exists confusion about what is quality of life, what contributes to it, and what are the outcomes of it (Hagerty et al., 2001: 81). Taillefer et al. (2003: 294) say that the confusing tendency of some authors results in considering everything a part of quality of life. In practice, however, making this distinction is not straightforward as different authors have arrived at different conclusions:
'Happiness and a feeling of well-being will also result from QOL. When one rates his or her life as having quality, one will concurrently have a sense of self-esteem and pride regarding his or her life. It must be noted that a confounding scenario seems to be apparent with each of these consequences of quality of life in that each can contribute to, as well as result from quality of life' (Meeberg, 1993: 32)

As a result:

'This means that in the current debate, there are some factors that exist both inside and outside the concept of QOL’ (Taillefer et al., 2003).

How well quality of life and well-being are defined has important policy implications. The quality of life ‘movement’ has been received with wariness and even opposition by the disability campaigners (for example, Keith, 2001: 49). Keith and Schalock (2000) argue that quality of life can be used in three ways:

- as a ‘sensitizing notion that provides reference and guidance’;
- as a ‘social construct’; and
- as an ‘organising concept’ or ‘unifying theme’.

Or, in the words of Keith (2001): *a systematic framework through which to view work aimed toward improving the lives of individuals.*

Quality of life, thus, has a high public profile at times; for example, in regard to legal decisions over medical intervention to save very premature babies who could be profoundly disabled, or in prolonging the lives of people in a persistent vegetative state. In a different policy context, however, a psychological concept of quality of life that regards aspects of an individual’s personality or temperament as the determining factor may result in fewer resources being invested in improving the material circumstances of vulnerable individuals. The reform of the community care system in the UK and elsewhere has brought a greater emphasis on the needs of individuals and the use of quality of life as an indicator of satisfaction with services. Because of the nature of the policy decisions being made, Rapley (2003: 81) argues that here are “serious ethical, conceptual and philosophical difficulties” involved in studying quality of life, which researchers must take very seriously.

2.9 Quality of Life Models

In a systematic review of quality of life models, the researchers have identified 3 different types, namely:

1. Conceptual Model: A model that specifies dimensions and properties of quality of life - the least sophisticated type of model.

2. Conceptual Framework: A model that describes, explains or predicts the nature of the directional relationships between elements or dimensions of quality of life.

3. Theoretical Framework: A model that includes the structure of the elements and their relationship within a theory that explains these relationships - the most sophisticated type of model (Taillefer et al., 2003: 294).

2.10 Conclusion

In the course of review of literature on quality of life it has been observed that a very less research work are initiated from Indian scholars, much of the contribution is from Western researchers. Hence the methods, techniques and indicators used in there works are mostly prepared in the Western context which may not be similar in development countries like India. Therefore the present study is aimed to study QOL using the appropriate methods, techniques relevant in Indian context.