Sl No	Particulars		
1	Name of the Candidate	Dr. Sidde Gowda	
2	Address of the parent institution	Professor, SJCIT Chikkaballapur, Karnataka 562101	
3	PhD Thesis Title	Rural to urban migration and Household Environmental problems in slums of Bangalore Metropolitan city	
4	Research guide Name	Dr G P Shivashankara	
	Department and Designation	Professor, Department of Civil Engineering, PESCE, Mandya	
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	University /Branch	VTU/ Civil	
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7 Brief synopsis (Max: 200words)

      Eighty percent of India's population resides in rural areas, but investments for growth are directed at capital-intensive urban centers forcing the rural poor migrate to urban areas for livelihood. This rural-urban divide in development is root cause for unprecedented growth of urban centers and slums. Population explosion is one of the most threatening issues facing contemporary India, particularly the Indian cities, owing to large-scale migration from rural areas and consequent rapid urbanization. India is a part of the global trend towards increasing urbanization. As per Census of India 2001, 27.8% of India's population (285 million) lives in urban areas and 72.2% in rural areas. Though the percentage decadal growth (1991-2001) of population in rural and urban areas is 17.9% and 31.2% respectively. The city of Bangalore, the capital of the Southern state of Karnataka, has grown to become the fifth largest urban center in India. It accounts for 33.98% of the urban population of Karnataka. Incidentally, it is also one of India's fastest growing cities. Its extra-ordinary transformation since the early 1990s from a sleepy and leafy greeny city into a people from neighboring states of Andhra Pradesh, Tamil Nadu and Kerala. The pattern of urban population in Bangalore during 1901-2001 shows that from 14.5 in 1911 to 50% in 2001. The area of Bangalore in a conurbation of 439square kilometer with a "green-belt" of 839 square kilometers. Bangalore is ill-equipped to respond to the explosive growth of population and changes it brought about. Rapid growth has taken its toll and it is now plagued by the ill-effects of urbanization with pollution, inadequate infrastructure and loss of open spaces. This growth has impacted the environment significantly leading to its degradation and formation of slums. While Bangalore has relatively fewer slums compared to India's major cities, the numbers are relative approximately 15-20% of metro-Bangalore's residents are slum dwellers compare to over30% in Kolkata and Mumbai. Slums are a major cause for health and environmental degradation. The major objective of this study is to examine the reasons for migration of rural people to urban areas and its impact on environment and health.

      The study has used both primary and secondary data. The primary survey is mainly composed of observations and interview through questionnaires method. Twelve main questions have been formulated which include particulars of household, dwelling details, demographic characteristics, reasons for migration, utility services, health and medical facilities, market and recreation facilities, disposal of garbage and sullage, solid waste, drainage system and toilet facilities and space index. Bangalore metropolitan city has 473 slums (declared in 2004) and since it is difficult to innumerate all the households to conduct

socio-economic survey, it has been spatially stratified into three ecological zones (core, intermediary and periphery) on the basis of population density characteristics. Data was collected with the help of questionnaire from the survey of 4560 households selected for slums from core areas, 43 from intermediary areas and 35 from periphery of the city. The questionnaire used in the survey is modeled on lines of similar studies by the Stockholm Environment Institute (SEI, 1993, 1994 and 1995) and Aligarh Environment Study Project (AESP, 1994, 1995). Of the 45,600 households in slums in the cities, we have sampled 10% for the study, i.e., 4560. There were 36,480 persons living in the sampled houses with an average of 8 persons per household.

Population density possesses a major threat to household environmental conditions. It is due to increasing population that many environmental problems come to surface. The study established that the high density reflects overcrowding, congestion in slums leading to problems like lack of accommodation, basic amenities and environmental problems. The study shows that the slums are spatially distributed with varying density, area, caste, language and religious groupings, and to availability of land (private and public). The determinants of migration are of two kinds: one is "pull" and other "push". Multivariate logistic regression analysis suggests that unemployment, extreme poverty, natural disaster and wage rate contribute significantly to migration. Poverty, job search and joining relatives/ family have influenced in out-migration, while better opportunity, prior migrants and availability of jobs are the main pull factors for to-urban migration. The study will assist the planners and social scientist to implement and extend rural development programs as it provides an overview of the people involved in rural out-migration process and also identify the root causes of migration at individual and household levels. Migration is a major cause for the formation of slums. Slums in developing countries are characterized by inadequate shelter, overcrowding, inadequate water supply, poor sanitation, and contaminated food, solid waste and indoor pollution and are the greatest environmental threats to human health. These conditions are often compounded by poor nutrition and lack of education, which make people more vulnerable to and less able to cope with environmental threats. The low quality of life in slums is as much a result of unhygienic living condition as it is of the lack of economic sources. The chi-square analysis established that income and household environment conditions are significant at 1%. The study establishes that drinking water quality also get polluted because of bad storage of containers in the houses. The study concludes that water pollution is due to lack of hygienic practices. The prevailing practices of storage, collection and disposal of solid waste and their management in the slums are unsatisfactory resulting the accumulation of waste in hap hazardous manner. The study shows that lower-income households are familiar with the hazards of keeping open at homes but inefficient institutional arrangements for its periodic collection as made them helpless. The waste remains uncollected for weeks and months. Since the low-income households do not have any fly doors and windows because of poor economic condition, they are unable to do anything about the garbage collected in their households. Improper management of solid waste leads to breeding of mosquitoes, pests and rats, etc. which cause a wide range of disease. Simple analysis regressions were used to assess the degree of relationship between diseases and other variables in the slums. The related variables of the diseases are highly significantly (at 1% level) related to dysentery, jaundice, malaria and respiratory diseases in various slums. It means that as the related variables and the diseases are positively correlated multiple regression models were used for pooled data to find out contributing variables to diseases in slums. The study demonstrates a few key environmental problems facing the households in the slums of the city. A household environmental problem is closely interrelated and affects mainly lesser income households. Due to inadequate access to environmental health facilities, in addition to overcrowding at sanitation facilities and hygiene, children of poor households face the greatest obstacles to health. The major limiting factor in achieving a sound environmental health in slums of any city is poverty. Poverty is a great polluter.