INTRODUCTION
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From the beginning of history of mankind, different population groups existed in different parts of the world with different patterns of social behaviour and customs. Biologically speaking, human being can be treated as a highly developed species of primate. But human species differs from other primates in possessing a highly intricate social system which dictates the guideline for all kinds of behaviour, even those behaviour which are the results of biological impulses.

The herds of animals found in different parts of the world have localized territorial demarcation as their habitat. Man, when was in the primitive hunting stage, were moving in herds or groups or bands and their movements were restricted to a limited territory. The group elders not only transmitted their genes to the filial generations, but also their culture. As we find that the individual perishes, but culture remains, similarly we also find that individual perishes but they leave behind them the population group. The process of population replacement is attained through reproduction. All animal survives by the genetic fitness.
expressed through the process of reproduction rate and survival ratio.

In the hunting-food-gathering stage of evolution of human culture the increase of population in numbers was not of very high rate. Due to different types of social and physical constraints, the number of the individuals in a horde were rather small. The land man ratio was higher. But after man became an agriculturist, the first indication of growth of population was noticed, which are evident from the study of different archaeological sites from various parts of the world. Gradually due to the technological development of human society the population also increased.

Then came the industrial revolution in Europe in the medieval period. Earlier to this period, the growth of population was no doubt a definite event, but the rate of growth was not high enough to draw any attention of scholars. After the industrial revolution, the population in those countries grew in tremendous proportions, as a result of which there was large scale migration from central Europe and England to different parts of the world. The agricultural production did not increase in that proportion, and scholars became apprehensive of the result of the unprecedented growth of population. People started studying
the nature of population growth.

The credit of first demographic study goes to John Grant of England who in 1662 published a pamphlet "Natural and Political Observations Made upon the Bills of Mortality". A new science was thus established. He described the 'natural' and 'political' aspects of mortality which suggest the dual aspects of mortality - one is 'biological' and other is 'social'. New investigations started in England and France in the 18th century. Though birth, marriage and death registration were kept in churches, there was no official records. After the introduction of taxes on birth, marriages etc. in England, government started registering these events for individuals, which supplied a variety of demographic information. During the 18th and 19th century, a large number of publications are available regarding birth and death from various countries of Europe (Holland, France, Sweden, Switzerland, England etc.). The most famous of these is the brochure "An Essay on the Principle of Population as It Affects the Future Improvement of Society", with Remarks on the Speculations of Mr. Godwin, M. Condorcet and other writers. This publication generated tremendous interest on 'the population question' in different
parts of Europe, especially England. During this period, most of the demographic information available were related mainly to mortality and its relation to economic condition.

Fertility investigation was paid attention in Scotland in mid-nineteenth century. Statistical information became available in central Europe, especially Germany, Italy, Hungary and France. Fertility began to decline in France at the end of 18th century and this continued till 19th century. This led to wide range of speculation about fertility in France. Emile Durkheim and several other were trying to establish a relation between fertility and social condition. It was speculated that the decrease of fertility is the result of increase of instability in French families. This conception gradually led to different studies which intended to measure "differential fertility" in particular areas, nation or communities in early part of the 20th century.

Population Studies or demography was recognised as a field of interrelated studies in early part of the of this century and first World Population Conference was held in 1927. Then till the end of Second World War, we do not find much activities in this field. In 1954, the World Population Conference was held under the auspices of the United Nations at
Rome, which started various types of population studies, research and training in population studies in different parts of the world.

Population replacement is carried out through two major events of life; - birth and death. Of all the events in life, birth is an event important for future, as the rate of birth and death in a particular generation will determine the extent of population growth of future generation. The population growth of any country is the product of three major demographic factors i.e. birth, death and migration. In absence of large scale migration, birth and death will determine the trend of natural growth of any population at a particular given time. The addition by birth of new individuals will affect the whole population structure and ultimately the social and economic life of the whole population e.g. number of consumers, number of students, labour force, housing requirements, and so on.

Fertility in case of human being is not solely a biological factor. It is determined by the social, cultural and psychological background of the population. Hence, fertility is found to differ from population to population depending on situation. The first few fertility studies were mainly concerned with different types of speculations and deductions from the
available data. In the later part of nineteenth century it was found that fertility in Western Europe was not constant but was decreasing. This started first the conception of social and psychological variables which may influence the fertility performance of given population at a given time.

Man has emerged about half a million years ago during the Ice Age. From that period to this modern age the general tendency was to increase in number. Because birth, death and marriage are the events happening to the individuals while the fertility, mortality and nuptiality are the resultants of those individual events. The basic vital processes are fertility and mortality, the beginning and end of the life. Procreation or the fertility, the rate at which the female population bear children is the well known process of nature through which a population survive or establish itself for the future. So the future of the population depends on the pattern of the reproductive behaviour of the mating pairs within it. Though the fertility is the important event of human life, but over-production always becomes a problem. Now a days the population problem is the most fundamental of all human problems. It affects many aspects of man's social life, individual, national and international. It affects the health and happiness of individual families, it affects
the prosperity and social progress of nations and it affects the peace of the whole world.

The census of India 1931 shows the gradual increase in population and if the population will increase in this rate it will be one billion by 1990. The total population of India in 1971 was 543159652, which was 15.3% of world's population and population increase was 24.6% during 1951 - 61 and it was 24.3% during 1961 - 71. The 1981 census shows that India has second largest population of the world. The total population is 63310051 and increase in the decade 1971 - 81 is 24.7%. In the last three decades, the growth rate has remained almost constant, in spite of decline of birth rate. Within 34 years of independence the population has been doubled by 1981. The population growth is the most important problem for India with its limited resources. The population growth can not be checked without reducing the fertility rate, because population growth is the result of fertility, mortality and migration; and India's in-migration is not very large.

Over last two centuries almost all western countries have experienced large decline in fertility due to urbanization and industrialization. The rate of procreation in any population
is not entirely a biological phenomenon. It is also influenced by many factors, such as environment, mode of living and social behaviour etc. The urbanization and industrialization have accompanied each other closely enough to encourage the idea that industrialization and urbanization cause fertility to decline. The urban industrial families have less need and less desire for the labour of the children. "Urbanization also feeds the revolutionary changes in man's aspirations now underway in much of the world " (Spengler 1974). Urbanization and industrialization affect fertility through their impacts on general aspirations, attitudes towards children, burdens of dependency and contraceptive technology. Simon Kuznets speaks of the "insensitivity of fertility levels to differences in economic and social factors despite the marked contrast between the less developed and more developed groups each taken as a whole, with respect to both social factors and fertility". Demographic historians have accumulated ample evidence, that fertility rose and fell repeatedly before the industrialization of nineteenth century. The fertility behaviour is controlled or influenced by many social or cultural factors in both rural and urban areas. As the most problematic factor in population growth in India, is the comparatively high fertility rate., the demographers have began to turn to more broad based social research
on fertility for better predictions of this element in population growth. Natural growth rate of a population is determined by fertility and mortality. Therefore to know the growth of a population it is essential to study the fertility pattern of the same.

By now, quite a good number of researchers have studied the population in different countries and also in India to know what are the different variables which determine the fertility level of the population and in which direction does each of the variables influence fertility and what is the explanation for the influence of the variables on fertility. Many workers like Frank Lorimer, Edward Reynolds and Donald Macomber, J.W.Combs Jr., Kingsley Davis, Ronald Freedman, Pascal K. Whelpton, Arthur A. Campbell, N.B. Ryder, Carl Mosk, Ovila Turpeinon and Dr. S. Chandrasekhar had studied the fertility pattern in different countries taking into account different factors. The demographic studies of Jain (1933), Sovani (1948), Dandekar and Dandekar (1953), Sovani and Dandekar (1955), Dandekar (1959), Davis (1951), Coale and Hoover (1958), Driver (1963), Mukherjee (1961), S. Chandrasekhar, S.M. Agarwala, Mahadevan and many others undertaken in different regions of India give an idea of the
variation of fertility pattern in different groups of people in different parts of India.

Though "Human fertility" constitutes an essential aspect of the studies in modern Sociology and Demography (UN 1973), regarding the fertility pattern in Orissa, very few studies have been undertaken. The population of Orissa is increasing in a considerably high rate, though lower than average of India. In India average child birth is 6 to 7 but in Orissa it is 5.77. In Orissa no thorough study has been undertaken on the fertility pattern of the people or how the people react towards the fertility variables. A paper "Fertility and Pregnancy wastage" has been published by Dr. U. Deka and P. Patojoshi, Dr. Babita on the basis of data from 769 couples in Puri District had written a paper on "Family structure and Fertility". But the total fertility pattern or how the fertility behaviour is influenced by the different variables both socio-cultural and biological is not yet studied. The extensive fertility study which is entirely lacking, should be undertaken to know the fertility pattern and also by which it can be controlled by adopting new methods or by controlling the variables.

In this present research project fertility variation has been studied in the Urban communities. In Orissa
there are five cities as per 1971 census (though in 1981 census Sambalpur and Puri became city) and except Bokhola all other cities are traditional and not industrial. The present study has been undertaken in two urban centres of Orissa; Cuttack the oldest city and Bhubaneswar, the capital of Orissa and comparatively recent. Due to lack of time other urban centres could not be studied. The unit for fertility analysis may be the whole society, the state or groups within a society or the individual reproducing couples classified in terms of physiological characteristics that cut across social categories. Comparative studies of different societies or of only one at different cultural stages, probably are essential to answer many of the most interesting sociological questions about fertility. My study has been restricted only among the Hindus as they comprise 96.25% of total population (1971 census) of these areas as comparison to Christian, Muslim and other religions. The fertility behaviour of Hindus in Cuttack and Bhubaneswar can throw light on the general fertility pattern of Orissa and by studying the influence of different variables the future trends of fertility can also be visualized. The study has been made on three heading: (1) Fertility (2) Mortality (3) Impact of family planning on fertility.
The fertility chapter deals with the fertility pattern of the Hindu urban women. The fertility rate has been growing rapidly in the last thirty years. In the present study an attempt has been made to use the available data for the purpose of hypothesis verification, theory construction and sociological explanation; "How the different variables (direct and indirect) influence the fertility". The variable which are taken into consideration are categorised as (1) Biological (2) Socio-cultural and (3) Economic variables.

The mortality chapter deals with child mortality particularly, which is the most important factor influencing fertility rate of a population. Any society having to face heavy mortality characteristic must have high fertility to survive as a group. Wrigley, points out that "Declining mortality have helped to promote fertility decline wherever it occurred". If mortality rate is more, then mothers like to produce more to make sure of having few grown up children and preferably the male children for their old age. S. Chandrashekharan summarized that high fertility rate is found among the population with high infant mortality rate. If infant mortality rate is low, the parents become sure of having grown up children, then they need not try for additional births. The child mortality indirectly
determines the fertility rate. Mortality rate is also influenced by different social and cultural variables. The child mortality rate among the same group of women has been studied to find out the change in mortality rate in the urban areas and its relation with the fertility rate.

In case of lower animals, fertility is mostly a biological phenomenon but among the animals of higher category fertility ceases to be determined only by biological background. Human reproduction is affected by biological processes and also by learned behaviour. To-day contraceptive methods for controlling population are far more advanced, often have the active endorsement of the Government. In India, the family planning programme has been undertaken by the Government to make the people aware of different family planning procedures to check the birth rate. Urbanization affect fertility by influencing the general attitudes towards children and contraceptive technology. So, during the study of fertility pattern the impact of family planning programmes should also be studied. Therefore, in this study, attempt has been made to know the impact of family planning programmes or knowledge of contraceptive methods on fertility rate of the urban women of Bhubaneswar and Cuttack. Though the contraceptive methods are adopted by some
people, there are also some ideological groups who strongly oppose the family planning procedures.

Thus in this research work the attempt has been made to study the fertility rate of the urban women of Bhubaneswar andCut tuck to examine the various hypothesis regarding the influence of different variables on fertility. The purpose of this study is also to know whether there is any variation in fertility rate according to various residential, occupational, income and educational groups. In urban areas the people are provided with all opportunities of education, medical facilities and the family planning centres and the family planning workers are very near to them. So the main purpose of this study is to know; the fertility pattern of the women who are availing all sorts of means to lower the fertility rate or how the fertility rate of the urban women is also guided or influenced by many different variables.