

SUMMARY

During the last two decades poverty has emerged as one of the biggest challenges confronting the under developed countries including Pakistan. Poverty is both a problem of a nation's economic development and human trauma by itself. During the last fifty years there is growing tendency of poverty both in absolute and relative terms. It is estimated that about 34% of Pakistan's population are below the poverty line rising from a level of 26% in 1988. A significant proportion of Pakistan's population does not have adequate levels of food, access to basic services and opportunities and hence are particularly vulnerable to add to economic and environmental and political shocks. Add to this the fact that almost 65% of Pakistan's population lives in rural areas and it the here that the bulk of Pakistan's poor (about two third) are found.

The objective of the thesis is to look for an appropriate model for the prediction of poverty in Pakistan. The most important variables such as population growth rate, literacy rate, expenditures on education and health, unemployment rate and consumer price index are considered on which the poverty depends.

In chapter 1 the following topics are discussed in detail:

- Definition of poverty
- Types of poverty
- Origins of poverty
- Main characteristics of the poor
- Poverty measures
- Poverty in Pakistan
- The causes of poverty in Pakistan

In chapter 2, a review of the research on poverty carried out up to 2005 has been made. The review of this literature comprise of the research carried out in Pakistan as well as in United States of America.

In chapter 3, the theory of linear and non-linear regression analysis is discussed, together with the methods of estimation, model adequacy, evaluation of the model, goodness of fit of model, and examinations of the residuals. Description of the data and abbreviations for the variables used in the study are given in chapter 4.

The complete analysis is made in chapter 5. The analysis carried out by studying the descriptive measures and by applying non-linear regression taking poverty as dependent variable and population growth rate, literacy rate, unemployment rate, expenditures as percentage of GNP on education, expenditures as percentage of GNP on health and consumer price index as independent variables.

Since each of the independent variables has non-linear relationships with poverty, this relationship was approximated by curve fitting and then non-linear model was developed. Most of the economists agree that the effect of independent variables on poverty is additive. Therefore we have used, non-linear model taking additive effect of independent variables. The best selected model on poverty based on this study is:

$$P = 182.822211 - 12.132675 * LR + 0.27847132 * LR^{**2} - 0.0019917 * LR^{**3} + 4.15857318 * UR - 0.8132962 * UR^{**2} + 0.05114892 * UR^{**3}$$