学位申請論文要旨 Abstract

Poverty is one of the most urgent political issues of our time, especially since poverty alleviation was set as one of Millennium Development Goals (MDGs) at the Millennium Summit in September 2000. Since then, India has been one of the countries that have the worst poverty problems in the world. Despite the past two decades of significant economic growth, about 35% of the population (or 360 million people), which accounts for approximately one-third of the world's poor, still lived on less than one PPP dollar a day (UNDP, 2007). Thus, understanding how poverty can be alleviated remains an issue of considerable concern to policy makers.

This dissertation is indeed motivated by concerns about the poverty issue in India, and aims to obtain some policy implications to alleviate poverty. The empirical analysis in each chapter focuses on rural dwellers, and this is owing to the fact that three-quarters of the Indian poor is residing in rural areas. The data mainly used in the analysis are from a rural household survey conducted by the World Bank in two North Indian states, Bihar and Uttar Pradesh. Chapter 2 briefly describes the study region and key features of the sample households.

As a direct investigation on poverty at household level, Chapter 3 investigates the determinants of living standards (measured by per capita consumption expenditure).

Especially, the empirical analysis addresses two econometric issues: heterogeneity in returns to education and endogeneity of educational status. The estimation results obtained through an instrumental variables quantile regression suggest that the endogeneity of education matters in determining the causal effect of education on living standards, while no evidence of the heterogeneity in the rate of returns to education is found. However, the results also provide evidence that impacts of other determinants vary significantly over the outcome (expenditure) distribution, and consequently a simulation based on the results shows that poverty alleviation impacts of education differs substantially between the instrumental variables quantile regression and standard instrumental variables regression results. The comparison of the two indicates the possibility that the impact on poverty reduction is likely to be overestimated in the standard instrumental variable regression.

The following two chapters attempt to analyze the structure inside the labor market underlying the returns to education estimated in Chapter 3. Considering the fact that one of the poorest groups is rural laborers and the importance of off-farm wage employment in rural areas, investigating the role of the labor market is quite important to understand how rural development can be achieved and rural poverty eliminated. In Chapter 4, the labor market discrimination is quantitatively investigated. The existence

of discrimination may inhibit the expansion of the labor market which could help to reduce the dependence on agriculture. Moreover, the existence of discrimination may distort households' decisions not only with regard to labor allocation but also to human capital investment. In the rural context, both are issues of great importance. In the analysis, transaction costs associated with entry into the labor market and reservation wages are estimated simultaneously along with market wages. As far as I know, this is the first attempt to structurally estimate transaction costs in terms of monetary amounts. The estimation results provide evidence of the existence of transaction costs in the labor market and discrimination against backward classes with regard to access to regular employment. In line with previous studies, the results suggest that the achievements of India's reservation policy so far have at best been limited. In addition, a comparison between the estimates from the model employed in this paper and conventional (reduced-form) approaches shows that discrimination in labor market entry is likely to be underestimated in the conventional reduced-form approaches.

Chapter 5 investigates the effects of weather risk on the off-farm labor supply of agricultural households, distinguishing different types of off-farm labor markets. In low-income developing countries like India, markets for agricultural inputs and outputs are well developed, while the development of credit and insurance markets has been

lagging behind. This means that people in general, and particularly poor farmers, have few means to hedge against the vagaries of production and price shocks that may put their livelihood at risk. In this sense, the provision of efficient insurance mechanisms becomes highly important in poverty reduction policies. As an example of risk avoidance behavior of farmers, Chapter 5 focuses on their labor supply decision (labor portfolio). The regression results obtained through a multivariate two-limit tobit model show that the share of the off-farm labor supply increases with weather risk, the increase is much larger in the case of non-agricultural work than in the case of agricultural wages paid in kind than in the cash wage case, suggesting farmers' considerations of food security.