

Skill Training Programs and Employment Prospects in Bihar A Study in Darbhanga District

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Disclaimer:

This document represents part of the author's study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

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List of Acronyms

- 1. ATE Average Treatment Effect
- 2. BPL Below Poverty Line
- 3. DDU-GKY Deen Dayal Upadhay Grameen Kaushal Yojana
- 4. GDP-Gross Domestic Product
- 5. GOI Government of India
- 6. LPM Linear Probability Model
- 7. MLR Multiple Linear Regression
- 8. MoRD Ministry of Rural Development
- 9. NCVT National Council for Vocational Training
- 10. NGO Non-Government Organisation
- 11. NMMU National Mission Management Unit
- 12. NREGA National Rural Employment Guarantee Act
- 13. PIA Program Implementation Unit
- 14. PMKVY Pradhan Mantri Kaushal Vikas Yojana
- 15. PPP- Public Private Partnership
- 16. RSBY Rashtriya Swasthya Bima Yojana
- 17. RSM Retail Sales Management
- 18. SEC Socio Economic Characteristics
- 19. SHG Self Help Group
- 20. SLR Simple Linear Regression
- 21. SSC- Sector Skill Council
- 22. TSA Technical Support Agency
- 23. WDR World Development Report
- 24. WPR- Worker population Ration

Abstract

In a number of countries, youth unemployment is a pressing economic and political concern. In the Indian context 54% of the country's population of 1.21 billion is below 25 years of age and faces a high rate of (disguised) unemployment. To augment youth employment, the Government of India has launched a number of skills training programs in several states of India. This thesis deals with participation in and the impact of one of these programs (DDU-JKY) located in Bihar, one of India's poorest states.

Participation in these programs is based on voluntary self-selection by eligible candidates and it is not always clear whether those for whom the programs are intended are actually able to access such programs. To examine this issue, I estimate what determines participation in these training programs. Furthermore, I also estimate the impact of participating in training programs on employment and earnings of participants as compared to non-participants. The study is based on a survey of 526 respondents conducted in July and August 2016 in Darbhanga District in Bihar. All respondents were residents of Darbhanga district and had applied for 3 months training program implemented under DDU-GKY.

My analysis shows that participation in training programs significantly depends on program awareness of the respondents. Aware individuals are 15 percentage points more likely to participate in the programs. Expected future earnings perceived by the individuals from the training programs are crucial determinant of program participation. 1% increase in expected monthly earnings increases programme uptake by 5%. Furthermore, expectation of future earning varies significantly with program awareness. Increase in program awareness increases monthly expected earnings by Rs. 2600 to Rs.2900. Thus, increasing program awareness is essential to increase program uptake by target population.

Participation in training programs was not identified to have impact on outcome indicators. One reason was lack of job opportunities in local market but equally important were hindrances to job market entry posed by existing social structure prevalent in the area.

Relevance to Development Studies

Youth unemployment is one of the core development issues. Government of India is implementing a flagship skill building training program, Deen dayal Upadhay Grameen Kaushal Yojana, to address youth unemployment in rural areas.

My thesis seeks to examine what determines participation in these training programs and also estimates the impact of participating in the training programs on selected indicators.

Employment promotion programs fall within the broader rubric of social policies. Thus my thesis is closely related not only to Development Studies but also to my major, Social Policy for Development.

Keywords

Skill Building Programs, Rural, Youths, Unemployment, Participation, Expected Future Earning, Program Awareness, Impact, Bihar, India,

Chapter 1 Introduction

Across the globe, job creation is a critical issue (World Development Report 2013: vii). According to the 2013, World Development Report (WDR), worldwide some 200 million people, including a disproportionate share of about 75 million who are below the age of 25 are unemployed and actively looking for work. Many millions find themselves shut out of the labour market altogether. Over 600 million jobs will be needed in the next 15 years to absorb the increasing working-age population, mainly in Asia and Sub-Saharan Africa (WDR 2013: vii).

In developing countries, the issue is not only one of unemployment, per se, but is exacerbated by the large proportion of individuals working in the informal economy, including self-employment and carrying out low paid jobs. Half of all workers in developing countries are engaged in small-scale agriculture or self-employment, jobs that don't provide steady pay-checks and benefits. The problem for most working poor in these countries is that many hold more than one job and work long hours, still they do not earn enough to secure a better future for themselves and their children (WDR 2013: vii). Employment is essential to achieve economic and social development, beyond its critical role for individual wellbeing. It is at the heart of broader social objectives, such as poverty reduction, economy-wide productivity growth and social cohesion. The challenge in addressing youth unemployment in developing countries is often lack of skills needed by job providers, given also the low level of formal schooling. In these settings, bridging the skill gap between individual and industry needs and providing access to jobs is likely to provide large development payoffs (WDR 2013: 18).

India is a typical example of a country with a burgeoning youth population and facing a pressing need to devise strategies to provide regular employment to its increasing youth population. With a population of 1.21 billion (Census 2011), out of which more than 62% are in the working age group of 15-59 years and more than 54% of total population is below 25 years, India is amongst the youngest nations in the world (National Policy for Skill Development and Entrepreneurship 2015: 02). The population pyramid is expected to 'bulge' in the 15-59 age groups over the next decade. The average age of the population of India by 2020 will be 29 years as against 40 years in USA, 46 years in Europe and 47 years in Japan (National Policy for Skill Development and Entrepreneurship 2015: 02). This shift in demographic profile is an opportunity as well as a challenge. The opportunity is that, the global economy is expected to witness a shortage of young people (15-35 years) of around 56 million by 2020 and India would be the only country with a surplus of 47 million youth and thus can be a worldwide sourcing hub for providing skilled manpower (GOI, Report on Education, Skill Development and Labour Force 2013-14: 1). The challenge on the other hand is to aptly utilise the 'demographic dividend'. Utilising its 'Demographic dividend' has been a feature of the development success stories of the East Asian countries that grew rapidly during the latter half of the 20th century. Failing to provide opportunities to the youth population as they enter labour market may cause 'demographic disaster' (Mitra and Verick 2013:1).

In this regard, it is important for the Indian government to be concerned about youth unemployment and underemployment. Youth unemployment has direct economic costs but also has tremendous social costs in the form of increased crimes, mental health problems, violence, drug addiction and social exclusion (Mitra and Verick 2013:1). The 'Arab spring' uprisings in 2011 are in part a reflection of a disillusioned and disenfranchised youth, many of whom were unemployed or were employed in jobs that did not fully utilise their skills and abilities (Mitra and Verick 2013:1).

In recognition of the importance of the youth employment challenge in India, Government of India, stated at the 44th Indian Labour Conference in February 2012, '*Youth employment is a high-priority agenda for the government. This can happen only if we equip our young people with skills that are required to meet the demands of our rapidly growing economy*' (ibid.). Training and skill building as instruments to address youth unemployment has been consistently highlighted in the policy agenda of the country. In line with this policy priority, on 25th September 2014, the Government of India launched 'Deen Dayal Upadhyaya Grameen Kaushal Yojana' (DDU-GKY), a program for training, skill building and job placement for 'rural youth' from poor families. The vision of the program is stated as '*Transform rural poor youth into an economically independent and globally relevant workforce*' (DDU-GKY Programme Guidelines, 2016). In DDU-GKY, skill development is implemented through a Public-Private Partnership mode (PPP model), where registered private sector partners (PIAs) plan and implement skills training and job placement, targeting rural youth from poor families (DDU-GKY Policy Guidelines, 2016).DDU-GKY is not an entitlement program whereby eligible candidates are provided monetary or extra-monetary support rather eligible candidates have to selfselect themselves to participate in government sponsored training programs.

Candidates in the age group 15-35 are eligible to participate if they belong to the below-poverty-line (BPL)¹ category or any member from their family is a member of a self-help group (SHG) and if both these conditions are not fulfilled then a recommendation from the Gram Panchayat² can enable a candidate to participate in the training programs (DDU-GKY Programme Guidelines, 2016). It should be noted that BPL card holders are not a 'homogeneous' population, and there is considerable 'heterogeneity' in terms of class, caste, social status and other social markers. Thus, the universe of eligible population for the training programs is fairly broad and highly varied.

The intention of these programs is to attenuate unemployment and poverty but it is possible only if social structures do not hinder voluntary participation in the program. If there is discrimination based on caste, economic status, gender or on any other social marker either in participation in

¹ BPL is an economic measure used by government of India to identify individuals and household in need of government assistance. Internationally, an income of less than \$1.90 per day per head of purchasing power parity is defined as extreme poverty. The number of people living on or less than \$1.9 per day in 2011 census was 259.5 million (21.3 % of total population). In India, scoring is done on 13 parameters ranging from 0-4. Families with score of 17 or less out of 52 marks are classified as BPL..

² Villages in India are called 'Gram'. Gram Panchayat is the village level administrative body whose main task is to implement the development programs for the villages that come under it. It is the cornerstone of the three tier Panchayati Raj Institution (village, block and district level) governed by the 73rd amendment of the constitution. There are about 250,000 gram panchayats in India.

the programs or in job placements after the training, then increasing government spending and augmenting the supply of training institutes and programs may achieve little towards the final goal of improving welfare and equity. From a policy perspective, it is important to know the factors promoting or hindering participation, because then the case is not just to increase labour market training programs but to systematically address issues affecting participation. Hence, one of the main concerns of this thesis is to examine why an individual participates or does not participate in the training programs. However, I not only consider socio-economic and demographic characteristics for explaining program participation but also take into account other typically unobserved differences between participants and non-participants. In addition to understanding participation in the program the second objective of this thesis is to evaluate the impact of participation on two outcome indicators that is employment and earnings.

Participation in self-selected programs has previously been studied in different context such as entrepreneurship (Cramer et al. (2002) in Netherlands; Bauernschuster et al. (2010) in Germany), school initiative program in India (Barnhardt et al. (2009)), microfinance, soft skills and entrepreneurship program in Uganda (Bandiera et al. (2012)), migration program for Tongans (McKenzie et al. (2010)) and in labour market training programs (Heckman and Smith (2004)). However, all these studies, explained program participation based on socio-economic and demographic characteristics, leaving out any typically unobserved differences between participants and non-participants, which according to Dasgupta et al. (2015) constitute the 'black-box' of unobservable. The study by Dasgupta et al. (2015) is an exception. The study was conducted in New Delhi, India with a pool of applicants and non-applicants of a subsidized training program on stitching and tailoring service, which explain program participation based on 'subjective' differences (risk preference, competitiveness and confidence) in addition to socio-economic and demographic characteristics. Their conclusion was "socio-economic and demographic characteristic might not be sufficient to fully explain selection into the program. Participants behavioural traits are important determinants of self-selection into labour market train*ing programs and can influence take up rates in such programs*" (Dasgupta et al. (2015: 3)).

To explain program participation, I argue that decision to participate or otherwise is based on 'expected/perceived future gain' that is anticipated by the individual/decision maker. After all, one would like to participate in training program or for that matter in any social program, if one anticipates or expects to gain something from participating in the program. Thus expectation or perception of future gain is an important determinant of program participation. As far as I am aware, no previous studies have analysed 'subjective expected gains' to explain participation in skill building programs in India.

Two papers which extensively use 'expected/perceived returns' are Attanasio and Kaufmann (2009) and Attanasio and Kaufmann (2010) who explain schooling choice. Attanasio and Kaufmann (2009) used subjective expected returns to analyse the importance of credit constraints to schooling choice. Their operative hypothesis was, if schooling decision is only a function of expected returns then credit constraints might be playing a minor role, i.e., individuals with relatively high expected returns enrol in school regardless of their background. However, if one observes a positive relationship between expected returns and school enrolment are for less poor families, then credit constraints might be an explaining factor. Attanasio and Kaufmann (2010) used expected returns to understand intra-household decision making process and gender differences. Put more formally, she used expected returns to understand whose expectations matter in decision making, either the parent's expectations or that of the youths and whether this depends on the gender of the youth.

Contributing to the growing literature which relies on subjective expectations as a determinant of individual decision making, I use "subjective expected future earnings" as a factor which drives participation in the training program.

In addition to expected returns, this thesis argues that acquiring information is costly, more so in the contexts of low income families in rural households in a developing country like India. It was observed by Jensen (2010) that schooling decisions are typically made on the basis of limited or imperfect information (Jensen 2010: 515). Thus this thesis proposes 'program awareness' as an important determinant of program participation. This is intuitive as well, because to take part in any program, one should be aware of the program. If one knows about a program then only he/she can take decision to participate or otherwise, without having information of a program there is no question of participating in the program. The two papers to study the impact of information on decision outcomes are by Jensen (2010) and Nguyen (2008). Jensen (2010) found that enrolment in secondary school in the Dominican Republic is low because of lack of information about actual returns. Students at randomly selected schools who were given information on educational returns completed, on average, 0.20-0.35 more years of school over the next four years that those who were not given information. Jensen (2010) clearly identified lack or incomplete information to be the causal factor for low enrolment in secondary school. He further mentioned that if underestimates of the returns due to lack or limited market information is a reason for low-school enrolment, simply providing information on returns may be the most cost effective strategy for increasing enrolment (ibid.). Nguyen (2008), using a similar strategy, finds that providing parents in Madagascar with information on returns to schooling improves their children's performance and attendance in the first few months following the intervention (Jensen 2010: 518). These papers provide clear insight for understanding the probable relationship between level of information and decision outcomes. Heckman and Smith (2004) studied the impact of program awareness on training participation. They decomposed the participation process of JTPA program into five stages- eligibility, awareness, application, acceptance and enrolment. They concluded that personal choices substantially affect participation and that program awareness is a major source of variation in participation (Heckman and Smith 2004: 2).

Thus in this thesis, I determine whether individuals who participate in training programs and those who do not participate differ systematically along measured socio-economic characteristics or are there other subjective differences such as expected future earnings and program awareness that can help explain program participation.

I do this by using a unique data set gathered from one district in Bihar, India which enables me to determine the role of subjective earnings expectations and program awareness on participation. My data set is unique along several dimensions. First, I explicitly ask respondents about their subjective probability of obtaining a job once they graduate and the monthly earnings they hope to receive. In addition, I also have a suite of questions which allows me to determine program awareness. I use this information to model the participation decision as a function of expected earnings and program awareness. In addition, to the data on expected earnings and program awareness, I also have a wealth of data on a wide range of variables, from individual's socio-economic characteristics to parental background along with membership in other schemes and programs (BPL, SHG, NREGA, RSBY)³ and also include measures of individual's attitude and self-esteem.

The second objective of my thesis is to evaluate the impact of participating in the training program. Training and skill building programs as a component of the overall basket of active labor market program interventions to tackle unemployment have long been used in OECD countries. There are a number of studies regarding impact evaluation of participation in vocational training programs on earnings and employment opportunities in developed countries (Ashenfelter, 1978; Ashenfelter and Card, 1985; Card and Sullivan, 1988; Hotz, imbens and Klerman, 2006). The role of training and skill building interventions within the overall ALMP portfolio is lucidly reviewed by Meagre (2009). The general conclusion is that the impact of vocational training programs is modest, at best, and that only small scale programs targeted at groups with special needs (women, disadvantaged groups) coupled with active employer engagement and on-the-job training do better (Meagre 2009: 9,10,11). According to Kulve (2006) "The results suggest that programme type is by far the most important variable

³ BPL- Below Poverty Line, SHG – Self Help Group, NREGP- National Rural Employment Guarantee Program (public works program), RSBY – Rashtriya Swasthya Bima Yojana (Public health insurance scheme for vulnerable population).

influencing post-programme employment probabilities and training measures sit in the middle of the hierarchy: neither the most effective measures, nor the least". (Meagre 2009: 12)⁴.

However, for a number of reasons, the findings from developed countries cannot be applied directly in the context of developing countries. Most importantly because trainees in developing countries start with very low level of formal education, skills and full time employment (Maitra and Mani 2013: 3) and secondly much larger informal labour markets and weaker administrative capacity for program implementation may seriously limit the outcome objectives of increased formal employment and increase in wages (Betcherman, Dar and Olivas 2004: 2).

Evidence on the effectiveness of training programs in developing countries is more limited. For example, a study involving developing and transition economies by Betcherman, Dar and Olivas (2004) contains a review of 68 impact evaluations of unemployed and youth training programs of which only 19 are set in developing countries (Betcherman, Dar and Olivas 2004: 19) The review's unambiguous finding was that training programs for youth has no impact on either employment probability or on earnings in developed countries, but training programs in developing countries (Latin America) were found to have a positive impact on employment probability and to some extent on earnings (Betcherman, Dar and Olivas 2004:35). The reason for the better performance of training programs in developing economies was considered to be due to lack of abundant supplies of skilled workers in these countries (Betcherman, Dar and Olivas 2004: 2). Nopo and Saavedra (2003) in their review of training programs in Latin America also report similar findings. Other than the study by Maitra and Mani (2013), I found no study which estimated the impact of training and skill building programs in India. Maitra and Mani (2013) conducted an experimental study to estimate the program impact of participating in a 6-

⁴ Active Labour Market Programs (ALMP) broadly includes 'supply side' and 'demand side' measures. Supply side measures comprise labour market skill building and training schemes, employment services (Information and jobbrokering activities) and sanctions & incentives to activate 'workless' job seekers. Demand side measures include wage/employment subsidies, public work programs and micro-enterprise development/self-employment assistance.

month stitching and tailoring training program, targeted at women aged 18-39 years, with at least 5 or more grades of schooling residing in poor slums of New Delhi, India. They reported positive program impact on post training employment, working hours and increase in earning in both the short and medium term and further identified credit constraints and lack of proper child care support as important barriers to program participation and completion (2013: 1). According to the study's findings, women who were imparted training were 4 percentage points more likely to be self-employed, 6 percentage points more likely to be employed, worked 2.5 additional hours per week and earn 150 percent more per month in comparison to the control group women (2013: 2).

My thesis is an addition to the growing body of literature on participation and program impact in skill building programs in India and contributes to our understanding, especially with regard to programs implemented in a rural socio-political environment. My study setting is quite different from that of the Maitra and Mani (2013). I study program participation and program impact in a rural district of Bihar, which is geographically, socially and economically very different from New Delhi. The determinants of participation in urban slums are different from the factors that determine participation in rural settings, for example, there are substantial differences in market availability and flow of information that may play a major role in the decision to participate in training programs between urban and rural environment. In urban settings, market information and accessibility may be more readily available, thus the primary determinants for decision making may be individual competitiveness and attitude, but in a rural setting, information barriers may be more important and eligible individuals may not participate not because they are less competitive but because they don't have proper information. Furthermore, information and market accessibility may vary substantially based on gender, caste or class. Information flow in any case is not uniform and asymmetry of market information is well known but these asymmetries are heavily influenced by social markers which are predominant in rural environment and quite different from urban settings.

Further, in my thesis, I estimate program impact in a scenario, where employment is to be facilitated by the training organisations, thus it is not only individual readiness that determines program impact but also depends on program implementation by the training organizations and availability of 'jobs' which relate to the broader economic environment and political commitment towards job creation. In addition to the survey data, the availability of in-depth qualitative information will help promote an understanding of the social factors that motivate program participation and employment and earnings outcomes.

Although the study focuses on one government sponsored program i.e. DDU-GKY, it has much wider applicability as similar programs are being implemented in various parts of the country. For instance, another important skill building program is the "Pradhan Mantri Kaushal Vikas Yojana" (PMKVY) which is almost similar to DDU-GKY and implemented by Ministry of Skill Development and Entrepreneurship, Government of India. In addition to these two centrally sponsored programs, various area specific programs such as 'Himayat' (for rural youths of Jammu & Kashmir – implemented by MoRD), Roshni (rural youths in 27 left-wing extremist districts across 9 states- implemented by MoRD), UDAAN (Implemented by Ministry of Skill Development), STAR (Standard training assessment and reward scheme – by Ministry of Skill Development) are also implemented by various ministries under Government of India.

To the best of my knowledge, this thesis is the first impact evaluation study of a government sponsored training program in India which estimates the treatment effect of participating in training programs on employment and earnings. My data set contains information for two time periods, one before the training and second after the training for all individuals. Since I have data for the same individuals over two time periods, it provides an opportunity to examine program impact using an arguably credible econometric approach.

The rest of the paper is organised as follows: Chapter 2 comprise of brief overview of DDU-GKY, Chapter 3 outlines the sampling process and research toolkit used for empirical data collection, Chapter 4 introduces the

econometric specification to address the research objectives, Chapter 5 provides the descriptive statistics of the participants in comparison to the nonparticipants, Chapter 6 deals with the estimation of impact of various explanatory factors on probability of participating in the training programs, Chapter 7 consists of reasons for participating in the programs as deciphered during qualitative interviews with program participants, Impact of training programs on employment and earnings has been dealt in Chapter 8 and Chapter 9 concludes, outlining the need and scope of further research.

Chapter 2

The Program DDU-GKY

The Ministry of Rural Development (MoRD) announced the Deen Dayal Upadhyaya Grameen Kaushal Yojana (DDU-GKY) on 25th September 2014. DDU-GKY is implemented under the aegis of the National Rural Livelihood Mission (NRLM). The program focuses on youth between the age group of 15 to 35 years from rural poor families and the objective is to train the youth and provide them with jobs which pay regular monthly wages⁵.

DDU-GKY is currently operational in 21 States and Union Territories⁶, covering 568 districts and 6215 blocks. Currently 690 training programs are being implemented by over 300 training partners, in more than 330 trades from 82 industry sectors. According to the reports, over 0.27 million candidates have been trained and over 0.134 million candidates placed in jobs. Since its inception, DDU-GKY has invested more than Rs. 56 billion⁷⁸.

The DDU-GKY skilling ecosystem consists of The Ministry of Rural Development (MoRD) or the National Mission Management Unit (NMMU), State Missions, Project Implement Agencies (PIA) or Training Partners and Technical Support Agencies (TSA).

⁵ <u>http://ddugky.gov.in/</u>

 $^{^{6}}$ As of 2016, there are 29 states & 7 Union Territories consisting of 687 districts in India.

⁷ Approximately, 838 million USD.

⁸ <u>http://ddugky.gov.in/content/about-us-0</u>

DDU-GKY Skilling Ecosystem



The responsibilities of stakeholders involved are stated as follows:

- MoRD conducts the overall monitoring, frames policy, and provides funding to the program in collaboration with state funding (75 % central funding and 25% state funding except North-East states where central funding is 90% and state funding is 10 %.).
- State missions identify skill demands, plan and implement the programs through project implementation agencies (PIA).
- Technical support is through National Council for Vocational Training (NCVT) and the Sector Skill Councils (SSC).
- In DDU-GKY, skill development is implemented in Government-Private Partnership mode (PPP model), where registered private sector partners (PIAs) plan, implement skill training and placement, targeting rural youth from poor families.

The salient features of program implementation are described as follows (DDU-GKY Programme Guidelines 2016):

 <u>Mobilisation, Counselling and Selection of Candidates</u> – This is the first step of program implementation. This stage is considered important as the quality of candidates selected is expected to have an impact on retention during training as well as in the jobs they are placed and also in career progression. Community Mobilisation and selection of candidates for training is mainly done by the PIAs, the selected list of candidates is finally approved by the State livelihood mission before the start of the training program, a process termed as 'batch freezing'. Community mobilisation is done in the project area of the PIAs for awareness building about the program and future job opportunities using different modes such as awareness camps, job fairs, banners/handbills/pamphlets and door to door counselling. PIAs also involve village self-help groups (SHGs) and Gram panchayats (GPs) in the process of community mobilisation to ensure minimum exclusion errors, i.e., all desirous eligible candidates should be enrolled in the training programs. After 'mobilisation', candidates 'desirous' of joining the training programs are called for 'counselling', where the candidate and parents are given information on the nature of work in the selected sector/trade, availability of jobs, growth prospects and challenges involved. The list of 'desirous' candidates is finally approved by the state missions.

- Skill Training PIAs can undertake trainings only in sectors/trade for which that particular PIA has been approved. DDU-GKY mandates two broad components of training in each course, the first component includes training on soft skills, English and information technology and the second component is the trade/sector specific training. The trainings can be structured for different durations, i.e., for 3 months (576 hours), 6 months (1152 hours), 9 months (1578 hours) and 12 months (2304 hours). The skilling courses have provision for providing on-job training (OJT). The maximum permissible days for OJT are 30 days (for 3 months training course), 60 days (for six months training course), 90 days (for nine months course) and 120 days (for one year course). The training course curriculum is to be approved by National Council for Vocational Training (NCVT) or Sector Skill Councils (SSCs).
- 3. <u>Assessment and Certification</u>- Two types of assessment are mandated under DDU-GKY. The first is internal and continuous assessment, which is conducted by PIA on regular basis and monitored by the states government on bimonthly basis. The second is the third party assessment and certification of all trainees only by agencies approved by National Council for Vocational Training (NCVT) or

Sector Skill Councils (SSCs). It is mandatory for 70% of the trained candidates per batch to be certified.

- 4. Job Placement PIAs are required to place a minimum of 70% of trained individuals in jobs which offer regular monthly wages at or above the minimum monthly wage of Rs.6000. Proof of regular wage is to be demonstrated either by salary slip from a human resource department of the organisation or in absence of human resource department, certificate issued by the employer indicating wages paid and counter signed by the employee along with bank statement.
- 5. <u>Post Placement Support</u> Post placement monetary support is provided to the candidates by the PIA, which depends upon placement. An amount of Rs.1000/- month is provided for 2 months in case the placement is within the district of residence, Rs.1000/-month for 3 months if placement is outside the district but within the state of residence and Rs. 1000/-months for 6 months if placement is outside the state of residence.
- 6. Post placement tracking and retention support Post placement tracking, counselling and facilitation is to be provided to all candidates to ensure employment sustainability. Each candidate is tracked for one year and retentions, i.e., continuous employment over a period of 365 days is to be ensured with a maximum break of 60 calendar days during this period.

Indicative unit Training Cost per Candidate:

The DDU-GKY Programme Guideline (2016: 34-35) can be referred for detailed budget approved for training programs. However, the summary for residential and non-residential training is depicted below.

For Residential Training (INR)					
Budget Line Items	3 months	6 months	9 months	12 months	
Minimum Cost per Candidate	37,439	69,778	1,03,116	1,35,455	
Maximum Cost per Candidate includ- ing additional incentives to PIA	89,197	1,41,795	1,95,392	2,47,990	
For Non-Residential Training (INR)					
Minimum Cost per Candidate	30,689	56,278	82,866	108,455	
Maximum Cost per Candidate includ- ing additional incentives to PIA	81,197	115,795	151,392	185,990	

Table 1: Summary of DDU-GKY Funding Components

DDU-GKY guidelines provides details of maximum and minimum budget per candidate, but the actual training budget is calculated by the PIAs based on the indicative guidelines, that depends on duration of training and number of candidates proposed for training.

The minimum cost that PIA can claim for 3 months training program is INR 37,439 per candidate and maximum is INR 89,197, similarly the minimum and maximum claimable costs for various project durations have been shown in the table above.

The budget line includes cost for training (line item 1), uniform (line item 3), post placement support (line item 4, to be given to candidate through PIA), boarding and lodging cost for residential training (and includes transport cost for non-residential training, line item 5), additional incentives to PIA (for post placement tracking, counselling and facilitation for 365 days with maximum break of 60 days of candidate and career progression, line item 8), incentive for placement (line item 9), assessment and certification (line item 10) and mobile tracking (line item 11). DDU-GKY mandatory claims no cost to be incurred by the candidates on training or allied activities.

Chapter 3 Study Setting, Sampling and Research Toolkit

To meet the study objectives, in coordination with a local NGO, primary data collection using a custom designed questionnaire was conducted in July and August 2016 in Darbhanga District of Bihar, India. Prior to discussing the research methodology and findings, this section introduces the study setting, sampling process and the questionnaire used to gather primary data for this study.

3.1 Study Setting BIHAR STATE PROFILE

In this section, I provide a brief overview of demographic and economic indicators of Bihar. As per 2011 Census of India, Bihar is the 3rd most populated state in India and has a total population of 103 million (Male 54 million and female 49 million). Bihar's overall worker participation ratio (WPR) is one of the lowest in comparison to other states, with only 48% of males and 3.7% females engaged in employment. Total literacy rate of Bihar is 61% which is lower than the India's literacy rate of 66%. Across the state, male literacy rate (69%) is more than females (51%). The following figure summarises some of the important indicators.

Indicators	Bihar	Source	
Total Population	103,805,267	Census 2011	
Male Population	54,185,347	Census 2011	
Female Population	49,619,920	Census 2011	
State Literacy Rate	61%	NSSO Report No.554: 73	
Male Literacy Rate	69%	NSSO Report No.554: 73	
Female Literacy Rate	51%	NSSO Report No.554: 73	
State WPR	27%	NSSO Report No.554: 73	
Male WPR	47.8%		
Female WPR	3.7%		

 Table 2: Demographic and Economic Indicators

Overall for the state, agriculture sector contributes to only 16% of the state GDP but employs 90% of the resident population which reflects low mechanization and labour intensive jobs along with disguised employment or partial employment (Bihar Skill Assessment and Gap Analysis Report 2012: 30). This may have been one of the reasons for implementing skill building programs in Bihar so as to diversify the sectors of employment and shift the youth population from low productive primary sector to secondary and tertiary sector. Bihar has four notable industries - Food Processing, Manufacturing, Construction, and Trade, Hotel and Restaurants (Bihar Skill Assessment and Gap Analysis Report 2012: 33). According to Census 2001, Bihar has the 2nd highest out-of-state migration rate in India with a net migration of 1.7 million, only next to Uttar Pradesh with 2.6 million. Out-of-state migration happens to the Indian cities like New Delhi, Mumbai, Kolkata, and Hyderabad and recently to Bangalore and Chennai. Significant migration also happens in rural areas of Punjab and Haryana during harvest season (Bihar Skill Assessment and Gap Analysis Report 2012: 38-39).

Out-of-state migration is mainly prevalent among unskilled workers and about 50% of the state's unskilled labour population migrate. They typically get low paid work in labour-intensive industries of the receiving state like agriculture (mainly during harvest season), construction and domestic services. The prime candidates for migration are youth population of the age group 18-25 years, who are either landless or near landless (ibid.).

DARBHANGA DISTRICT PROFILE

Darbhanga district is located in the northern part of Bihar and with population of 3.9 million is among the ten most populated districts of Bihar (Census 2011). Most of the land in Darbhanga is primarily used for agriculture and horticultural purposes. There are several small scale manufacturing units for local handloom and famous Mithila paintings, followed by large proportion of unorganised construction industry. Most of the industries can be categorised as small and micro scale industries. Agriculture sector is the major contributor to the district's economy total GDP (24.08% of total district GDP) followed by construction sector (13.29% of total district GDP) and Trade, Hotel and Restaurants (6.47%) (Bihar Skill Assessment and Gap Analysis 2012: 124-125). Overall worker population ratio (WPR) is 31.2%, with male WPR of 46.1% and female WPR of 14.9% (ibid.).

3.2 Sample Selection

Caste based hierarchy is pronounced in Bihar and has bearing on every walk of life, ranging from trivial day to day activities to business transaction, jobs and is blatantly used for political lobbying. The aim of my research is to examine if decision making is voluntary or any systemic hurdles play role in participation and job placements post-training, and Bihar was considered suitable to examine the impact of 'caste' on my outcome variables of interest. Furthermore, I am conversant with the social context and local language which is crucial to undertake primary research. Darbhanga district was selected because it started implementing the program since the launch of DDU-GKY in 2014, thus suitable in terms of time needed for manifestation of training impact on actual earnings. Also, Darbhanga is primarily agriculture based economy, hence it is crucial to examine the impact of skill training programs in terms of providing regular monthly wage earning jobs to trainees especially in a market which is dominated by primary sector. District choice was also based on low female WPR (15%) to examine participation and program impact from gender perspective.

My thesis is based on a sample of 526 respondents. Out of 526 survey respondents, 263 were training participants and remaining 263 were non-participants, but all were program applicants (i.e. training participants and non-participants both applied for the training program). All participants attended three months standard⁹ training program on Retail Sales Management (RSM) under DDU-GKY. While the choice of the state and district was based on both social and economic context suited for this research and also driven by pragmatic concerns, the survey respondents were chosen on the basis of random sampling from a complete list of the total number of training participants and training non-participants.

⁹ 3 months training program comprise of 576 business hours (8hours/day * 24 days/month * 3 months)

Field data collection was conducted in collaboration with "Samvedna Development Society" (SDS)¹⁰ responsible for implementing DDU-GKY in Darbhanga district (Project Implementation Agency, PIA). In the first stage, the complete list of participants and non-participants (but program applicants) was obtained from SDS. The complete list of training participants comprised of total 520 individuals and the list for non-participants consisted of around 700 individuals. The list was checked to ensure that there were no duplicates and that the names of program participants should not also be in the list of program non-participants and vice versa. 50% training participants was selected randomly from the list of 520 to be covered in the field survey and an equal number of non-participants were also selected randomly out of total 700 non-participants.

3.3 The Questionnaire

The questionnaire (see appendix) was custom-designed to meet the research objectives of this study. The questionnaire comprised of the following sections:-

Section 1 – Socio-Economic and Demographic Characteristics

This section captures socio-economic and demographic characteristics and includes questions on range of parental and respondent characteristics. Respondent's characteristics comprised of religion, caste, age, sex and years of education and membership of BPL/SHG/NREGA/RSBY. Household characteristics comprised of age, years of education, occupation & income for both the parents of the respondent as well as total land holding and nature of housing.

¹⁰ 322, ROAD NO.- 11A, PATLIPUTRA COLONY PATNA, BIHAR, INDIA

<u>Section 2 – Awareness of the Training Program</u>

The next set of questions captures program awareness. The first question to assess program awareness is whether the individuals are fully aware, partially aware or unaware of the program. After enquiring about their overall awareness, in order to delve deeper, the full set of program provisions were mentioned and individuals were asked whether they were aware of each of the provisions. As will be described below many individuals either participants or non-participants form their earnings expectations based on either partial knowledge or no knowledge at all. Also, many individuals who mentioned that they were 'fully aware' in response to the first enquiry were found to have partial knowledge about the various program provisions, when they responded to the second enquiry.

<u>Section 3 – Expected Future Earnings and Supply Side Variables</u>

To compute expected future earnings, respondents were asked to respond to questions which enquired about the probability of getting a job after the training program and the salary associated with that job. Expected future earning is calculated as the probability of getting a job multiplied by the expected salary. Distance of training centre from the place of residence of the individuals was also elicited as a supply side determinant.

<u>Section 4 – Attitude and Self Esteem Measure</u>

A set of twelve questions was used to measure attitude and self-esteem (ASE) of the individuals. One series of question comprised of eight questions, respondents were asked how they felt about self-image using Rosenberg's Self-Esteem Scale, for example "I have positive attitude towards myself", " I feel that I'm a person of worth at least on an equal plane with others", " on the whole, I am satisfied with myself". The response options were strongly agree, agree, disagree and strongly disagree and each option has score as 3, 2, 1 and 0 respectively (Rosenberg, M. (1965)).

In a second series of questions, focussing more on respondent's outlook on life, individuals were asked how important were, for example, "Being successful in my line of work", "Being able to find steady work", "Being leader in my community" and "Being able to give my children better opportunity than I had". Response options were very important, somewhat important and not important with 2, 1 and 0 as respective scores. The score of all the responses were added and is used as the ASE composite score for each individual. A higher score depicts higher ASE (Waddell 2006: 72).

Section 5 – Employment and Earnings Details of Respondents

This section included two sub-sections. In the first sub-section information on employment and earnings of all respondents at the time of applying for the training programs was captured (also referred either as pretraining information or time period one). All respondents were program applicants i.e. participants and non-participants applied for the training programs. I collected information based on respondents' recall. The minimum and maximum time lapse between the oldest training batch and latest training batch from the date of survey is 6 months and 2 months respectively. Thus the maximum recall period used for collecting pre-training information i.e. the information regarding employment and earning details at the time of application (for both participants and non-participants) was maximum 9 months (6 months after the end of the training plus 3 months of training program).In the second sub-section, I captured employment and earning information of all respondents as on the date of survey (also referred either as post- training information or time period two)

<u>Section 6 – Qualitative information</u>

This section deals with open ended questions to understand reasons for joining the training programs (this question was asked only to program participants) such as rise in social status, urban life style preference etc. and reasons for not joining training programs (asked only to non-participants). This section also contains enquired for reasons if training participants were found not continuing in the jobs provided to them by the training organisation at the time of survey (asked only to training participants)

Chapter 4 Analytical Framework

In this section, I discuss a framework and outline an econometric model for estimating the influence of explanatory factors on training participation and the impact of training participation on outcome variables of interest.

4.1 Analysing Determinants of Participation in Training Programs

I treat the decision to join the program as a function of five broad sets of variables – these are variables that capture socio-economic and demographic characteristics (SEC), expected (future) earnings (FE), program awareness (PA), supply side variables (SS), and attitude and self-esteem of individuals (ASE).

The outcome variable, i.e., program participation is a binary variable that takes a value of 1(in case of participation) and 0 (in case of nonparticipation). Since the outcome is a binary variable, the conditional (on vector of explanatory factors given as 'x') expectation of the outcome is equal to the conditional probability of joining the program (given as 'P'=1). Thus, E (Pi | xi) = Pr (Pi = 1 | xi). Combining all the above factors, the econometric model for program participation is as follows:

 $Pr(P_{i} = 1) = \beta_{0} + \beta_{1}SEC_{i} + \beta_{2}logFE_{i} + \beta_{3}PA_{i} + \beta_{4}SS_{i} + \beta_{5}ASE_{i} + u_{i} \dots (1)^{11}$

SEC used to estimate equation 1 comprise of respondent's characteristics such as religion, caste, age, sex and years of education. The specification also controls for range of parental characteristics such as age, education and occupation of father and mother of the respondent as well as other household variables such as land holding, nature of ownership of house and monthly income. Respondent as BPL (below poverty line) card holder,

¹¹ Standard errors are corrected for hetroskedasticity.

member of any SHG, worked in NREGA (public works program), beneficiary of RSBY (health insurance scheme) are other indicators of SEC.

The next variable in equation 1 is an important variable of interest in regard to this research i.e. expected future income (FE). The objective is to examine if expectation of future earnings from the training programs has statistically significant explanatory power for program uptake.

Decision to participate in training program is expected to depend on program awareness (PA). PA is expected to have positive influence on program uptake i.e. more an individual is aware of the program more is his probability of participation. Thus by including variable for PA in equation 1, I statistically test the impact of program awareness on program participation.

To the extent that training participation also depends on supply-side (SS) variables, the specifications include the distance of training centre from the place of residence of the individuals.

As discussed earlier, participation in the training programs is 'voluntary' i.e. eligible candidates self-select themselves into the training program. Therefore, the decision to participate is likely to depend on 'unobserved' qualities of the decision maker. Thus in equation 1, I include attitude and self-esteem (ASE) of the individuals to control for 'unobserved' individual characteristics.

I estimate equation 1 using Linear Probability Model (LPM). In addition to treating program participation as a function of these five sets of factors, the survey instrument also directly asked individuals their reasons for participating or not participating in the program.

4.2 Analysing Impact of Training Programs

This section outlines the manner in which I analyse the impact of skill building training programs on the two outcome variables - employment and earnings. I provide two methods of estimating average treatment effect (ATE) for participating in the training program.

The first is a cross-section comparison of participants and nonparticipants using the following equation.

 $y_i = \alpha + \beta_T Training Participation_i + \beta_1 X_i + u_i$(2) Where:

 y_i = Current employment and earnings of all the respondents (y_i is a binary variable in case of 'employment' that takes on values of '1' if individual is currently employed and '0' if currently unemployed. y_i is case of 'earnings' is the current earning of the individual).

Training participation $_i$ = Training Participation is a binary variable that takes a value of '1' for the training participants and '0' for non-participants.

 X_i = 'X' includes host of other individual characteristics such as sex, age, years of education, religion, caste and attitude and self-esteem measure.

Equation 2 is the single difference ex-post comparison between participants and non-participants. OLS estimation of equation 2 yields ' β_T ', which is our coefficient of interest as it tell us, the average effect of the program on participants.

However, participation in training programme is not exogenously determined or randomly assigned to participants. Rather, participation in training program is based on 'self-selection' which induces 'selection bias' is cross section estimation of β_T . The fact that training participation is not exogenous and based on self-selection implies that '*Training participation*' and unobserved attributes (*u*) in equation 2 may be correlated, i.e., individuals participating in training programs may have certain unobserved characteristics that are correlated with both program participation and outcome variables. For example, participants in comparison to non-participants may

be more motivated which might influence their decision to participate in the training programs and may also affect their chances of finding employment and also their earnings. For OLS to yield unbiased estimates, the essential assumption is that the random error should be uncorrelated with any of the explanatory factors (Zero conditional mean, The Gauss Markov Assumption SLR/MLR 4). Thus, β_T ¹²estimated from equation 2 cannot be claimed as unbiased ATE of training programs on outcome variables.

This is the fundamental problem in assessing impact of program participation and thus naïve ex-post cross-section comparisons of program participants and non-participants may not yield unbiased estimates for program impact.

To deal with the issue a suitable 'counterfactual' needs to be developed. Ideally those who are in the program (treated) should be compared with those who are not in the program (control) and, on average, these two groups should be identical in terms of their observed and unobserved characteristics except that the treatment group participated in the program.

In order to deal with self-selection (use an appropriate control group) this thesis compares participants with a group of non-participants who applied for the program but who did not eventually take part in the training program. The underlying idea is that in terms of their unobserved attributes such as motivation and desire to enhance their earnings those who have expressed an interest in the program but did not join should be similar to those who did join.

Despite the use of those who have applied but did not finally join as a control group it is still possible that those who did join are systematically different from those who did not join and cross-section estimates may continue to yield biased estimates.

In order to further tackle this issue and to generate credible effects of program participation, this thesis exploits the panel data element of the data

¹² Estimating β_T using equation 2 can be claimed to yield unbiased ATE estimates only under condition of randomized treatment, in this case β_T can be said to have casual impact under random program participation.

collection efforts. ¹³ As discussed in Section 3, information was taken for two time periods at t=1 (at the time of application for the job training programs /pre-program information) and t=2 (at the time of the survey/post program information). This information is used to estimate value-added models, that is, to estimate the extent to which program participants experience a *change* in employment and earnings over time (pre- and postprogram participation) as compared to non-participants. The availability of two observations on the outcome variables allows us to control for time invariant individual unobserved characteristics which may influence participation as well as the outcomes as they are 'differenced out'.

The econometric model for estimating the effect of program participation on outcomes is as follows:

 $y_{it} = \alpha + \beta_T Training Participation_{it} + \sum_{t=1}^2 \omega t + \lambda_i + \mu_{it} for t 1, 2.....(3)$

Where:

 y_{it} = outcome of interest (Binary variable if y_{it} is 'employment' and continuous if y_{it} is 'earnings' at t=1 and t=2).

Training Participation $_{it}$ = Dummy for Training participation. '0' for all respondents (individuals) at the time of application (t=1) and '1' for participants and '0' for non-participants at t=2.

 λi = Time invariant individual fixed effect. (Note: Since this is considered fixed there is no't' subscript)

 $\sum_{t=1}^{2} \omega t = \text{Time dummies for two waves of information collection.}$

 $\mu_{it} = idiosyncratic Random error$

Solving equation 3 yields the fixed effect estimate for the average treatment effect of training participation i.e. β_{T} . Since two time periods are used in this study, β_{T} from equation 3 can also be called the 'first difference estimator'.

¹³ Not panel in strict sense as the information for the previous time period is based on recall and not actual field survey at the time of program application.
Chapter 5 Descriptive Statistics

As a preview to the econometric analysis to be followed in the next section, this section deals with descriptive statistics for all 526 respondents. 263 were program participants and remainder, also 263 were non-participants. The first column of table 1 shows the mean for the full sample and the following two columns depict the mean for the participants and nonparticipants respectively. The last column depicts the p-value of the t-test for comparison between both the groups.

Baseline	Obs		Mea	n	t-test
characteristics		Full sample	Participants	Non- participants	p-value
		Individu	al SEC		
Sex of the respondent	526	0.69	0.66	0.73	0.07
Age of respondent	526	20.86	21.03	20.69	0.17
Year of education of re- spondent	526	15.56	15.74	15.38	0.02
Monthly earning of the re- spondent (at the time of applying for the training programs)	526	438	426	449	0.87
Hours of work in a day	526	0.66	0.665	0.654	0.95
Hours of work in a week	526	3.97	3.92	4.01	0.94
ASE score	526	27.86	27.2	28.52	0.00
	Н	[ousehold	SEC		
Age of Father	526	51.69	51	52	0.54
Age of Mother	526	46.45	46.38	46.54	0.82
Years of education of Fa- ther	526	6.04	6.95	5.13	0.0005
Years of education of Mother	526	2.5	2.89	2.2	0.07
Father self-employed in agriculture	526	0.376	0.47	0.28	0.00

Table 3: Descriptive Statistics

Father self-employed in non-agriculture	526	0.136	0.106	0.16	0.04
Father engaged in infor- mal regular wage earning	526	0.04	0.03	0.05	0.136
Father engaged in formal regular wage earning	526	0.02	0.03	0.02	0.588
Father engaged in casu- al/daily wage earning	526	0.365	0.29	0.433	0.001
Father not engaged in eco- nomic activity	526	0.05	0.06	0.04	0.16
Number of earning mem- bers in family	526	1.16	1.2	1.12	0.02
Monthly Household in- come (at the time of apply- ing for the training pro- grams)	526	7053	6860	7246	0.36
Availability of Agriculture land	526	0.39	0.44	0.33	0.007
Availability of Agriculture land (Among those having land)	206	12.05	14	9.52	0.01
Do not own a house	526	0.005	0.003	0.007	0.56
Kutcha house	526	0.37	0.36	0.38	0.71
Semi pucca house	526	0.23	0.24	0.21	0.41
Pucca-IAY	526	0.27	0.28	0.26	0.56
Pucca- Non IAY	526	0.11	0.09	0.13	0.21
BPL	526	0.92	0.92	0.93	0.49
SHG	526	0.69	0.75	0.63	0.003
NREGA	526	0.06	0.09	0.03	0.013
RSBY	526	0.43	0.43	0.43	1.00
Sul	bjective prog	gram awa	reness and exp	pectation	
Complete Program Awareness	526	0.31	0.43	0.19	0.00
Awareness Score ¹⁴	526	3.87	4.94	2.8	0.00
Expected monthly earn- ing after participating in	526	6113	7692	4528	0.00

¹⁴ Score given to each respondent based on number of program provision he/she is aware of. The score ranges from '0' to '7', where '0' is scored in absence of awareness about any provision and for each provision known to respondents, a score of one is added, with 7 being the highest score.

training programs						
Expected monthly earn- ings (Among respondents having complete program awareness)	165	8237	8315	8056	0.68	
Expected monthly earn- ings (Among respondents not having complete pro- gram awareness)	361	5148	7207	3717	0.00	
Supply side determinant						
Distance of training centre	526	28	25	30	0.06	

Socio-Economic and Demographic Characteristics

From table 3, it can be seen that female respondents have more probability of program participation. 69% of the full sample is male and among participants and non-participants the corresponding number is 66 % and 73% respectively. The results are statistically significant at 10% level. Of the other individual characterises, attitude and self-esteem of respondent has statistically significant negative impact on participation probability. The full sample mean for attitude and self-esteem score is 27.86 and the mean score for the participants is 27.2, which is less than the average score of 28.52 for the non-participants. Results are significant at 1% level. No statistically significant difference has been identified in mean age and monthly earnings and employment (at the time of program application) between the participants (241 out of 263) were not engaged in any economic activity before joining the training program

Years of education of father has positive influence on participation probability. Year of education of fathers for the full sample is 6 years at the mean, and 7 years and 5 years for participants and non-participants respectively. Father's occupation also was identified to have influence on respondent's decision to participate in the training programs. Self-employment in agriculture has positive influence whereas self-employment in nonagriculture enterprise and engagement as daily wage earner has negative impact on program participation. 47% of training participants have their father's engaged as self-employed in agriculture as against 28% among nonparticipants. Similarly, 10% of participant's fathers were engaged as selfemployed in non-agriculture business as against 16% in non-participants. 36% of full sample were engaged as casual labourers or daily earners and among participants and non-participants the corresponding proportion of is 29% and 43 % respectively.

Availability of agriculture land has positive impact on participation probability. 44% of all participants have agriculture land as against 33% among non-participants. Among those who have agriculture land, average land holding is more among the participants (14 kattha in participants vs. 9.5 kattha in non-participants).

Membership of self-help groups and beneficiary of NREGA scheme has positive impact on participation in the training programs. 75% of all participants have membership to SHG groups as against 63% among nonparticipants. Similarly 9 % of all participants worked on NREGA projects as against only 3% among non-participants.

Expected Earnings from Training Participation

Decision making is likely to depend on expected or perceived future earnings from program participation. The full sample mean of expected earning is Rs. 6100 per month and that for participants is Rs.7700 per month, which is much more than the expected average monthly earning for the non-participants (Rs. 4500), the results are statistically significant at 1% level. However, to examine if expected earnings depends on program awareness, I estimate the expected earnings conditional on program awareness. The mean expected monthly earnings among respondents having complete program awareness is Rs. 8237 for the full sample (n=165). The corresponding expected earnings are Rs. 8315 and Rs.8056 for participants and non-participants respectively. P value for the t-test statistics is 0.6876, which depicts that there is no statistical difference in expected earnings between completely aware participants and non-participants. The mean expected monthly earnings among respondents not having complete program awareness (n=361), is Rs.5148. For participants the average monthly expected earnings is Rs.7207 and Rs.3717 for non-participants. P value is 0.000 which implies a strong statistical difference in the expected means between not completely aware participants and non-participants.

Thus we see that expected earnings are statistically same between participants and non-participants given complete program awareness. In case of incomplete program awareness, non-participant's perceived earnings are much lower. It may be the case that non-participant's decision not to participate in program is because of low expected future earnings based on incomplete program awareness.

Program Awareness

As discussed above, awareness about the program is crucial for informed decision making. 31 % of total respondents were identified to have complete awareness of all the program provisions and the corresponding number is much higher among participants in comparison to nonparticipants. 43% of all participants had complete program awareness as against only 19% among non-participants. Thus out of total 526 respondents, 163 had complete program awareness (115 participants and 50 nonparticipants). However self-declared complete awareness about program differs from the above statistics. It may well be the case that respondents who think they are fully awareness may not be objectively true. The following figure describes the divergence.



Figure 1: Self-Declared vs. True complete awareness

Thus 141 participants consider having complete program awareness whereas actually 115 have true complete awareness of the program provisions. For the non-participants, 50 respondents were identified with com-

plete awareness as against 64 who consider they are fully aware.

22 participants and 104 non-participants were identified to have no awareness about any program provisions. In between complete program knowledge and no knowledge is the number of respondents having partial knowledge, shown in the following figure.



Figure 2: Program Awareness of Participants and Non-Participants

It can be vividly noticed that, more number of participants are fully aware about project provisions in comparison to non- participants (115 vs. 50). Large numbers of non-participants (104) have no knowledge about program provisions. Thus there is rarely any scope to say that decision not to take part in program was an 'informed decision' on the part of nonrespondents. Very few participants (22) responded not to be aware of the program; we may later see why they could have joined the program. Similarly many non-participants (50) from the replied to be fully aware; given full awareness there may be ample reasons not to join the program.

An interesting observation, there is approximately equal number of respondents from both groups who have partial knowledge about program provisions. With partial knowledge, both treatment and control may have based their decision on some unreliable expectation. The treated could have chosen otherwise provided they have full knowledge and similarly vice versa.

The distribution of participants and non-participants based on complete, partial and no program awareness is depicted in the following graph.



Figure 3: Distribution Based on Program Awareness of Participants and Non-Participants

It can be see that the distribution follows a typical bell shaped curve, with awareness progressively increasing till four provisions and then again decreasing. The number of respondents having partial knowledge is almost similar among participants and non-participants and the pattern of distribution is also very similar. The combined distribution is shown as follows, where awareness score of 7 depicts complete awareness and 0 is for no awareness and in between is the distribution for partial awareness.



Mentioned in table 3, the average full sample awareness score is 3.87 i.e. on an average respondents were aware of 4 program provisions, which is also corroborated from the above graph. Further the average awareness score for the participants is more (5) in comparison to non-participants (2.8) and is statistically significant at 1% level.

The contribution of program awareness to participation probability will be dealt later, but what can be seen at this point is, there is clear difference in awareness about program provisions between participants and nonparticipants. The second important issue is to understand the extent of awareness about various program provisions.



Figure 4: Component Wise Program Awareness

Two observations can be made from the above depiction. First, participants have more awareness of the program provisions as compared to the non-participants which is apparent for each and every program provision. In case of the first provision, training imparted free of any cost, is known to only 60% of non-participants as against 86% of participants. In many case, percentage of non-participants having knowledge about particular provision is half or even less than half as compared to treatment group. For example, possibility of placement outside the place of residence was known to approximately 50% treatment individuals as against only 20% respondents in control group.

Second, there is an overall decrease in the percentage of respondents over the range of program provisions. Over the entire distribution, awareness that training program is free of cost, residential and no food or boarding cost is required, is high in both participants and non-participants. But there is drastic fall in the percentage of respondents having knowledge about assured job for one year after training, minimum salary provision and placement may be outside the block/district of residence. So there is a definite pattern which is same in both groups. Awareness on first four provisions is more than the latter three provisions. Thus overall, we may say that non-participants have less awareness on program provisions as compared to participants.

Having clear difference in awareness about program provisions between participants and non-participants, the next issue is to understand the source of information. That is, to examine, if there is any systematic difference in the source from which both group individuals gained information about the program.





Door to door counselling by NGO workers was the main source of information dissemination. Maximum number of respondents from both participant and comparison group received information through counselling. The next predominant mode was through peer groups and relatives. It is important to note from the above depiction, there is no significant difference in the source of information between participants and non-participants. The number of participants and non-participants receiving information through any particular source is very similar. For example, 93 participants mentioned to have gained information from peer groups and the number of non-participants reporting this source is 92. Similarly, 90 participants gained information from relatives and corresponding number of non-participants is 81.

An intriguing issue at this juncture is the difference in awareness levels between the groups given similar nature of source of information. If the source of information is similar in nature then awareness levels should also have been similar and if awareness levels are different then there should have been some systematic difference in the sources of information between the participants and non-participants.

The conclusion from this section is that, there is in fact difference in the awareness level between the groups but no systematic difference in source of information dissemination.

Estimating Determinants of Program Participation

In this section, I discuss the determinants of participation in the training programs. Specification 1 includes individual's characteristics, specification 2 includes household characteristics and specifications 3 include two variables of our interest i.e. expected future earnings and program awareness in addition to the variables used in specification 1 and 2.

To check for the robustness of the estimates, I run the regression using specification 4 and specification 5 with same explanatory factors as specification 3 but calculate program awareness variable in different ways. In specification 3, program awareness is a binary variable, which takes on value of '1' if the respondent is aware of all program provisions and '0' if respondents have partial or no program awareness. In specification 4, 'awareness score' has been used. Awareness score is a continuous variable ranging from '0' to '7', where '0' is scored in absence of awareness about any provision and for each provision known to respondents, a score of one is added. In specification 5, program awareness enters the equation as dummy variable for three options, 'complete awareness' if all program provisions are known, 'no awareness' if no program provisions are known and partial awareness if any one or more than one (but less than 7) provisions are known. In the regression equation, partial awareness is the base variable. I estimate the regression results using Linear Probability Model.

Deper	ndent variable	: Probabilit	y of Particip	ation	
Explanatory Variables	Spec 1	Spec 2	Spec 3	Spec 4	Spec 5
Individual Characteristics					
Sex of respondent	-0.113	-0.067	-0.087	-0.089	-0.086
	(0.05)**	(0.05)	(0.044)**	(0.043)**	(0.043)**
Age of respondent	0.010	0.011	0.007	0.007	0.007
	(0.008)	(0.007)	(0.007)	(0.0067)	(0.0068)
Years of education of re-	0.034	0.027	0.010	0.007	0.007
spondent	(0.011)***	(0.011)**	(0.010)	(0.010)	(0.010)
ASE Score	-0.058	-0.05	-0.051	-0.05	-0.05
	(0.008)***	(0.008)***	(.0073)***	(0.007)***	(0.007)***
Muslims	-0.202	-0.11	-0.02	-0.04	-0.052
	(0.11)*	(0.12)	(0.11)	(0.10)	(0.10)
Schedule Caste ¹⁶	-0.067	-0.007	0.093	0.063	0.041
	(0.10)	(0.12)	(0.10)	(0.09)	(0.09)
Schedule Tribe	0.488	0.56	0.494	0.45	0.432
	(0.116)***	(0.16)***	(0.143)***	(0.15)***	(0.15)***
Backward Caste	-0.020	0.058	0.144	0.12	0.10
	(0.106)	(0.11)	(0.101)	(0.09)	(0.09)
Household Characteristics			X /		
Age of Father		-0.00044	-0.00045	-0.0002	-0.0002
0		(0.0003)	(0.0003)	(0.0002)	(0.0002)
Age of Mother		-0.0015	-0.0014	-0.0017	-0.0021
Ū.		(0.002)	(0.002)	(0.002)	(0.002)
Years of education of Fa-		0.010	0.0066	0.006	0.0061
ther		(0.004)**	(0.003)*	(0.003)*	(0.003)*
Years of education of		-0.001	-0.0002	-0.0004	-0.0009
Mother		(0.006)	(0.005)	(0.005)	(0.005)
Father self-employed in		-0.25	-0.2054	-0.202	-0.226
non-agriculture ¹⁷		(0.068)***	(0.065)***	(0.063)***	(0.062)***
Father engaged in informal		-0.30	-0.296	-0.292	-0.32
regular wage earning		(0.098)***	(0.094)***	(0.095)***	(0.098)***
Father engaged in formal		-0.028	-0.091	-0.121	-0.124
regular wage earning		(0.13)	(0.138)	(0.13)	(0.13)
Father engaged in casu-		-0.17	-0.092	-0.074	-0.081
al/daily wage earning		(0.049)***	(0.044)**	(0.044)*	(0.043)*

Table 4: Regression Results for Training Participation¹⁵

 $^{^{15}}$ Note: In parenthesis are the robust standard errors, *** depict significance at 1% level, ** depict significance at 5% level and * depict significance at 10% level.

¹⁶ General caste is the omitted variable¹⁷ Father self-employed in agriculture is the omitted variable

Father not engaged in eco-		-0.013	-0.0064 (0.095)	-0.0078	-0.036
Number of earning mem-		0.157	0.123	0.116	0.121
bers in family		(0.05)***	(0.045)***	(0.044)***	(0.044)***
Availability of Agriculture		-0.012	-0.009	-0.0065	-0.0022
land		(0.04)	(0.04)	(0.04)	(0.04)
Do not own a house		-0.088	-0.086	-0.13	-0.10
77 4 1 1		(0.20)	(0.157)	(0.144)	(0.15)
Kutcha house		0.090	(0.012)	(0.0028)	-0.011
Somi nuoso hougo		0.124	(0.072)	(0.07)	(0.07)
Senii pucca nouse		(0.086)	(0.075)	-0.012 (0.074)	-0.023 (0.074)
Pucca-IAV ¹⁸		0.094	0.024	0.008	-0.010
		(0.085)	(0.073)	(0.072)	(0.071)
BPL		-0.045	-0.092	-0.096	-0.090
		(0.07)	(0.07)	(0.07)	(0.07)
SHG		0.137	0.109	0.106	0.107
		(0.044)***	(0.039)***	(0.038)***	(0.038)***
NREGA		0.215	0.107	0.083	0.073
		(0.07)***	(0.074)	(0.074)	(0.076)
RSBY		-0.003	0.010	0.022	0.035
		(0.04)	(0.038)	(0.037)	(0.037)
Monthly Household income		-0.02	-0.066 (0.04)*	-0.07 (0.04)*	-0.07 (0.04)*
Supply Side Determinant		(0.0+3)	(0.04)	(0.04)	(0.04)
Distance of Training control		0.0013	0.0011	0.0010	0.000
Distance of Training centre		(0.0013)	(0.001)	(0.001)	(0.001)
Subjective program awarenes	ss and expecta	tion	(0.000)	(0.000)	(0.000)
Program Awareness			0.15		
			(0.044)***		
Awareness Score				0.047	
				(0.007)***	
Complete Program aware-					0.105
ness					(0.044)***
INO AWAFENESS					-0.22 (0.045)***
Expected Earnings ²⁰			0.057	0.049	0.049
Laportou Lui mingo			(0.004)***	(0.004)***	(0.004)***
No. of Observations	520	516	515	515	514
R Squared	0.1251	0.2268	0.3894	0.4213	0.4235

 ¹⁸ Pucca House – Non Indira Awas Yojana (IAY) is the omitted variable
 ¹⁹ Partial Awareness is the omitted variable
 ²⁰ Log of Expected monthly earnings

From table 4, we observe that coefficients are not sensitive and are stable irrespective of the methods of calculating program awareness.

Females have 8-11 percentage points more probability of participating in the training programs than male counterparts. Attitude and selfesteem score has statistically significant negative influence on probability of participation. One unit increase in attitude and self-esteem score decrease probability of participation by 5 percentage points. Schedule tribe respondents are more likely to participate in training programs by 43 to 50 percentage points.

Years of father education has statistically significant positive influence on decision to participate but practical significance is small (one year increase in father's years of education increase participation probability by 0.6 percentage points).

Father's occupations have statistically significant impact on decision to participate in the training programs. Fathers self-employed in own agriculture have positive impact on probability of participation. All other categories have negative influence on participation probability viz. Fathers selfemployed in non-agriculture sector decreases participation by 20 percentage points and father's engagement in informal but regular wage/salary occupations also have negative influence on participation (30 percentage points) and Father engaged as casual worker decreases participation probability by 7-9 percentage points.

Number of earning members in household has statistically significant influence on probability of participation. One unit increase in number of earning members increases the probability of participation 12 percentage points. Household income has a statistically significant negative influence on probability of participation. Increase in household income decreases participation probability by 6-7 percentage points. Being member of SHG increases participation probability by 10-11 percentage points.

Respondents having complete program awareness are 15 % points more likely to participate in training programs. Also, one unit increase in awareness score i.e. if the awareness of individual increases by one provision more, it increases probability to participate by 5 percentage points. By using the third method of awareness calculation, complete program awareness increases participation probability by 10 percentage points in comparison to the respondents having partial awareness (base variable) similarly 'no program awareness' decreases the participation probability by 22 percentage points in comparison to respondents having partial program awareness.

Thus we see that program awareness has significant impact on program participation and more an individual is aware of the program provisions, he/she is more likely to participate in the training programs after controlling for all other individual and household socio economic and demographic characteristics.

Expected future earning also has strong positive influence on training participation. 1% increase in expected monthly earnings increases program participation by 5 %, results statistically significant at 1% level. However, I mentioned in descriptive statistics section that expected future earning varied with program awareness. I reported mean expected future earning among respondents having complete program awareness to be Rs.8237 and among respondents not having complete program awareness to be Rs. 5148. Thus expectation about future earnings should be dependent on program awareness. To understand the statistical impact of program awareness on expected earnings, I provide the following analysis.

Program Awareness as Predictor for Expected Earnings

In the above discussion we see that both program awareness and expected earnings are statistically significant predictors of program participation. I now examine the influence of program awareness as predictor of expected earnings. Intuitively I expect a positive correlation between the variables.

Dependent variable : Expected Earning					
Explanatory Variables	Spec 1	Spec 2	Spec 3		
	2900	2682	2656		
Program awareness	(355)***	(363)***	(362)***		
Other Control variables					
Sex	\checkmark	\checkmark	\checkmark		
Years of education of respondent	\checkmark	\checkmark	\checkmark		
Muslims	\checkmark	\checkmark	\checkmark		
Schedule Caste	\checkmark	✓	\checkmark		
Schedule Tribe	\checkmark	\checkmark	\checkmark		
Backward Caste	\checkmark	✓	\checkmark		
ASE Score	\checkmark	✓	\checkmark		
Monthly earnings	\checkmark	✓	\checkmark		
Years of education of Father		\checkmark	\checkmark		
Years of education of Mother		✓	\checkmark		
Number of earning members in					
family		\checkmark	\checkmark		
Availability of Agriculture land		\checkmark	\checkmark		
Fathers Occupation		\checkmark	\checkmark		
Type of house		✓	✓		
Monthly Household income		\checkmark	\checkmark		
Membership of groups/schemes			\checkmark		
No. of Obeservations	519	519	518		
R Squared	0.1724	0.2182	0.2405		

Table 5: Regression of Expected Future Earning on Program Awarness

From the above table, we observe that indeed program awareness has statistically significant impact on expected earnings. Having awareness of program provisions increase expected earnings by Rs.2650 to Rs. 2900. Program awareness has individual impact on program participation and it also influences expected earnings which further impacts participation decision. Obviously it is to be reminded that expected earnings is not only a function of program awareness but also depends on other factors. The point of importance is that after controlling for all other explanatory variables, the impact of awareness on expected earnings is significant.

Chapter 7 Further Understanding Program Participation

It is important to understand that reasons for participating in the training programs are not only determined by economic motivations but are also influenced by several other factors.



Figure 6: Reasons for Participation

Clearly, 'expectation of rise in income' is the most frequently mentioned reason for joining the programs but 'aspirations for urban life style' and 'inclination to do jobs/services' are no less important reasons motivating participation. An expectation for improvement in 'social status' and 'long term future job prospects' were also considered important determinants for decision making. What may seem contradictory is that 'low opportunity cost' was mentioned less frequently, especially in a scenario where most of the participants were not engaged in economic activity. This is rather not contradictory but very pertinent in determining the choices made by youth. They may be not engaged in economic activity but they are actively involved in supporting household activities thus there is always an opportunity cost attached to the decision of participating in the training programs, also taking into consideration that training programs are three months residential program and after that there is every probability of getting job outside the place of residence. Also was evident, decision to participate in training programs, in many cases, may not be considered as the 'best available option'.

Similarly, decision not to participate is motivated by a number of factors. Decision can either be made by the candidate himself or family or the training authorities. In approximately 60% cases, candidates seem to play a decisive role in decision making as is evident by the following depiction. However, parent's decision seems no less important. In however, few other cases, it is the training authority's decision that plays a decisive role.



Figure 7: Decision of Non-Participation (n=263)

Out of 155 respondents, about 40% did not participate because of low expected earnings. 43 respondents did not participate in order to continue further studies. About 17 respondents did not join because of negative feedback from peers about quality of infrastructure of the training institute and future job prospects. 27 respondents did not join because the training programs were residential programs and 12 respondents were not interested in training programs.



Figure 8: Self Decision for Non-Participation (n=155)

Family's decision is no less important as about 71 respondent's decision of non-participation was motivated by family involvement. The main reasons elicited were due to family responsibility (70% respondents), upcoming marriage prospects and few were simply not allowed by their parents due to unknown reasons.



Figure 9: Family Decision for Non-Participation (n=71)

37 respondents were not allowed by the training authorities. 19 respondent's applications were rejected for not being either BPL or SHG member. 4 on grounds of less age than permitted and 14 were rejected on unknown grounds (not known to the respondents).



Figure 10: Training authority's Decision (n=37)

The crux of the above discussion is twofold. First, only 12 respondents out of 263 mentioned not being genuinely interested in the program, thus a clear indication for the need of the training programs is evident. Other respondents did not join because of various other factors, however, 56 respondents did not joined because of low expected earnings, which may have been due to lack of program awareness. Thus without any extra effort to address other structural constraints, increase in program awareness can increase program uptake by about 20%.

Chapter 8

Estimating the Program Impact

This section deals with estimation of the impact of skill building trainings on program participants as compared to the non-participants. The outcome variables of interest are monthly earnings and employment. This section is divided into two sub-sections, the first sub section deals with impact of program participation on current employment and the second sub section deals with impact on current earning.

Identifying Impact of Training Programs on Employment

The following table depicts the number of training participants and non-participants employed in pre-training and post-training time periods.

Table 6: Pre Training Employment and Post Training Employment ofParticipants and Non-Participants

Nature of Occupation of Re-	Par	ticipants	Non-participants		
spondent	Pre- training	Post- training	Pre- training	Post- training	
Engaged in economic activity	23	110	22	32	
Not engaged in economic activity	240	153	241	231	
Total	263	263	263	263	

From the above table we see that number of individuals engaged in economic activity before the training programs is almost the same among participants and non-participants (23 vs.22) but after the completion of training programs 110 trainees were employed as against only 32 in the control group. Thus clearly it can be seen that training programs have high potential of increasing the employment probability for the participants. Simple difference- in-difference calculation from the above table reflects the training programs to increase employment probability by about 30 percentage points.

But on delving further, I found that 110 participants were offered job or employment prospects, not everybody accepted the job offers that were provided to them by the training organisations. At the time of survey which was conducted only about 2 months after the end of latest batch of training and 6 months from the earliest batch, only 40 trainees were identified to be employed in jobs.

Reasons for Low Job Uptake

It is important to critically understand why only 40 out of 263 participants are currently employed in jobs. Is that participants were not provided with job opportunities by the training organisation, or jobs were provided to them but they did not joined, what could have been the probable reasons for not joining the jobs that were offered to them, or that they joined the jobs that were offered but didn't continue. It is very important to examine the reasons for such low job uptake by the trainees. This section deals with reasons for unemployment of majority of training participants. About 58 % participants were not provided job placement by the training organisation. Most of these 153 participants have completed training approximately two to six months ago and were still waiting for placements. 37 participants rejected to join the jobs that were provided by the training organisations because of out of state placement. During in-depth discussion with these participants, they mentioned that out of state placement is not the major reason for not joining rather it is due to salary that they consider being less, if one has to reside in states out of Bihar. On other hand training providers mentioned serious lack of placement opportunities in Darbhanga district or even in state of Bihar (outside Darbhanga). During discussions, the training authorities mentioned that they in no way can restrict to Bihar but had to look for placement outside the states mainly in adjacent states of West Bengal, Orissa or even has to go as far as Delhi for placements. They were aware that candidates are apathetic in joining out of state jobs especially given the maximum salary of Rs7000-Rs 8000 that is offered to the candidates. The training authorities also mentioned that they have tried but failed to convince the job providers to provide more salary given the low skill and low education level of the participants (most participants have 12th grade qualification). They also raised issues with the duration of job trainings. These are 3 months training, which the training organisations consider to be quite less in order to inculcate value addition in the candidates that can strengthen candidates bargaining power for higher salary negotiations. Thus what may apparently be seen as a guaranteed job placement after 3 months of training is ridden with serious issues of assured job placement. We actually encounter a two edged sword, lack of job opportunities in district of training and residence and on other hand candidates are unwilling to join jobs outside Bihar given the salary that is offered to them. To make the issue of placement further complex, it is not only economic determinism that participants had to deal with, rather 33 participants left or were made to leave their jobs. These 33 participants joined the jobs that were provided by the training organisations but left, actually fled away from their jobs, some within days and some with one to two weeks. It was surprising to know the reason especially in today's context. They reported serious harsh behaviour that they encountered due to their so called 'low caste' status, most of the time by other employees and some time by the employer. In most of cases they were not allowed to use toilets, kitchens and to eat or sit in common areas designated for such purposes. Some fled quite soon and some tried managing to continue their jobs but could not face harsh discriminations for quite long and were left with no other way than to leave their jobs. The figure below shows the distribution based on current employment status of the participants.



Figure 11: Current Employment Status of Training Participants

Identifying Impact of Training Programs on Current Employment

This section identifies the impact of participating in the training programs on actual employment of the respondents. The table below shows the pre-training and post-training employment status for both participants and non-participants at the time of survey.

Nature of Occupation of Re-	Participants		Non-participants	
spondent	Pre- training	Post- training	Pre- training	Post- training
Engaged in economic activity	23	40	22	32
Not engaged in economic activity	240	223	241	231
Total	263	263	263	263

Table 7: Pre training and Post Training Current Employment of Par-ticipants and Non-Participants

As discussed above almost equal number of participants and nonparticipants (240 vs. 241) were unemployed at the time of applying for the training programs, however in time period two, number of employed individuals is more among participants (40) in comparison to non-participants (32). Thus it can be said employment has increased among participants in comparison to the non-participants. I now estimate the impact of the training programs on employment.

To estimate impact of training programs on employment, I first run simple cross section OLS (at time period 2 i.e. post-training) with employment as dependent variable and training participation as independent variable without controlling for any other explanatory factor. Table 8 shows the regression results for all the specifications that have been used.

Training programs were not identified to have statistically significant impact on employment (p value = 0.263). Thus although number of employed individuals is more among participants than the non-participants at time period two, but this difference in employment status could not be attributed to training participation.

In order to examine, what could probably explain the difference in employment among participants and non-participants, I provide the cross section OLS estimates (at time period two) taking employment as dependent and training participation as independent but this time also controlling for other individual characteristics.

In this specification also training participation showed no impact on post training employment probability but rather sex and age of respondent were identified to have statistically significant positive impact. Male respondents have 9 percentage points more probability of employment in comparison to female counterparts and one year increase in age of respondent increase employment probability by 2 percentage points.

We have seen above that employment has increased both among participants and non-participants over the two time periods and also the increase in employment among participants is more than non-participants, the issue under investigation is whether this increase in employment in participants is due to training participation. To understand this, I exploit fixed effect transformation using the information for two periods. Thus, I examine if the change in employment over the time periods has any significant relationship with training participation.

From the table, we see that employment probability has increased in the second period by 4 percentage points in general among both participants and non-participants but the impact of training on employment remained the same as the OLS estimates.

Dependent Variable: Employment						
Variable of Interest	OLS (without control- ling other individual characteristics)	OLS (controlling other individual characteris- tics)	Fixed Effect (In- dividual fixed ef- fect)			
Training Programs	0.034 (0.03)	0.01 (0.03)	0.03 (0.02)			
Sex of respondent		0.093 (0.03)***				
Age of respondent		0.026 (0.005)***				

 Table 8: Regression Results for Employment²¹

²¹ Note: In parenthesis are the robust standard errors, *** depict significance at 1% level, ** depict significance at 5% level and * depict significance at 10% level.

ASE score		-0.02 (0.006)***	
Muslim		0.104 (0.07)	
Schedule Caste		-0.078 (0.06)	
Schedule Tribe		-0.18 (0.15)	
Backward Caste		0.038 (0.07)	
Time Dummy (for se- cond time period)			0.04 (0.15)***
Number of observa- tions	526	526	1052
Number of individuals	526	526	526

Identifying Impact of Training Programs on Earnings

This sub section deals with identifying impact of training programs on the second outcome variable of interest i.e. earnings. The following table depicts the average earning of participants and non-participants for the two time periods.

Table 9: Pre training and Post Training Average Monthly Earning ofParticipants and Non-Participants

Monthly earning of	Obs	Mean			
respondent		Full Sample	Participants	Non- participants	t-test p- value
Pre-training	526	438	426	449	0.876
Post-training	526	830	933	726	0.311

Two observations can be made from the above depiction. First, average monthly earning of participants and non-participants are statistically the same in both time periods (p value 0.876 and 0.311). Second, there has been increase in monthly earning in all categories (full sample, participants and non-participants) in the second time period as compared to the first time period. Impact of training programs on earnings can be understood by simple comparing the pre-training and post-training mean earnings for the participants and non-participants, participants and non-participants were very much the same in regard to their earning status at the baseline (i.e at the first time period) and training programs had no impact on earnings of the participants since in the second time period also participants and non-participants monthly earning are statistically the same.

However, I provide the cross section OLS estimates for training impact on current earnings, first only on training participation as dependent variable and second after controlling other individual characteristics in addition to training participation. Next I provide the fixed effect estimates to remove any time invariant individual fixed effects.

We see that training participation has no statistically significant impact on monthly earnings of the respondents in the first specification. This is ex-post comparison of mean earnings of participants and non-participants at the second time period (i.e. after end of training programs) and since participants and non-participants were statistically the same at the baseline (at the first time period) cross section estimates for program impact can be claimed to be yield unbiased estimates. The second specification also depicts cross section comparison between participants and non-participants at the second time period but after controlling for other individual characteristics.

Training participation had no impact on monthly earning rather monthly earning is explained by sex and age of the respondents. Monthly earning of male respondents is more than female counterpart by Rs. 574 and one year increase in age increases monthly earning by Rs.172. Until this point, we have clearly identified that training programs have no statistically significant impact on monthly earning of the participants, however, to complete the analysis, I provide the fixed effect estimates for impact of training programs on monthly earning shown in the third column of table 10. The results depict that the mean monthly earning increased by Rs. 277 in the second time period in comparison to the base time period that is statistically significant (p value=0.009) at 1% level but training programs were not identified to have significant impact on monthly earnings.

	Dependent Variable: Earnings						
Variable of Interest	OLS (without controlling other individual charac- teristics	OLS (controlling other individual characteristics)	Fixed Effect (In- dividual fixed effect)				
Training Programs	206 (204)	18 (205)	229 (149)				
Sex of respondent		574 (236)**					
Age of respondent		171 (36)***					
ASE score		-138 (41)***					
Muslim		705 (488)					
Schedule Caste		-356 (429)					
Schedule Tribe		-875 (994)					
Backward Caste		623 (463)					
Time Dummy (for se- cond time period)			277 (105)***				
Number of observa- tions	526	526	1052				
Number of individuals	526	526	526				

Table 10: Regression Results for Earnings22

 $^{^{22}}$ Note: In parenthesis are the robust standard errors, *** depict significance at 1% level, ** depict significance at 5% level and * depict significance at 10% level.

Chapter 9 Conclusion

My thesis examines two objectives, first to estimate what determines participation in voluntary skill building training programs and second to estimate the impact of participating in these programs on post training employment and earnings. To estimate determinants of participation, I attempt to open the 'black box of unobservable' and argued that in addition to range of socio-economic and demographic characteristics, participants and nonparticipants may differ in their subjective expectation of future earnings and program awareness

I do not claim to generalise my research findings to all skill building training programs implemented throughout India, these findings are specific to the study setting and time of this particular study. However, the findings provide critical information on several aspects of program implementation and lessons can be stepping stone of further study. Furthermore, there is no particular reason to expect that findings and lessons from this study are not applicable to other districts of Bihar. The sample size of this study is sufficient²³ to generalise the findings at least for Bihar. Estimates may vary in context of other states depending on the literacy level of individuals, economic situation of the state etc. This provides immense need of conducting such studies in different study settings so that findings can be used for strengthening implementation of skill building programs throughout the country.

Initial research hypothesis was found to hold true based on empirical findings. Both program awareness and expected future earnings was found to be statistically different among participants and non-participants and that increase in both significantly increases participation probability. Increase in

 $^{^{23}}$ Sample Strength calculation was conducted, by assuming change of 25% in control group (which is rather ambitious) and at least 40% in treatment group (little more than half of 70% mandated placement after training),5% significance level and 90% of type 2 error, sample size should be 216 per group. If 'p1' is decreased below 25% and 'p2' increased towards 70%, then the sample requirement decreases further.

program awareness increases participation by 15 percentage points at 1% significance level, thus more the awareness more is the program uptake.

Expected future earning was also identified to have statistically significant positive impact on participation, 1% increase in expected earnings increases program participation by 5%. But how are expectations determined? It was identified in this thesis that expectations about future earnings are based not only on socio-economic characteristics but also depend on program awareness. Increase in awareness increases expected earnings by Rs. 2600 to Rs.2900 (statistically significant at 1% level). Thus increasing program awareness has two fold benefits. It increases participation probability by itself as well as increases the expected earnings which further increases program uptake.

It is often realised that scheme awareness is crucial for increasing scheme uptake and thus strategies are developed to increase awareness, commonly known as Information Communication and Education (IEC) of Behaviour Change Communication (BCC) strategies. It is expected that increase in awareness should increase program uptake, however, in this research, I quantified program awareness and empirically prove its impact on program participation. This finding therefore calls for renewed efforts for investments towards increasing awareness about any social provision scheme in order to increase uptake by target population especially in context of programs implemented in rural settings with relatively low literacy rate among the target population.

In regard to impact of training programs, program participation was not identified to have impact on employment and earnings of the participants in comparison to the non-participants. It is not to say that training programs are not promising and do not holds potential. However, certain findings need to be reiterated at this point. First and foremost, it is important to remember that programs are not implemented in seclusion and void spaces but within broader social structures. Thus investing only in programs may not yield desired results unless systematic efforts are made to address social ills such as caste hierarchy, gender roles, low literacy level etc. Over reliance on skill building programs to improve employment or earnings without improving broader societal issues can be considered a myopic approach.

Since, these type of skill building programs mandate job placement after training, it is extremely crucial to closely assess the local market demand. If there exist mismatch between the local market demand and number of individuals trained, then placements are bound to suffer. We have seen that many participants didn't join because they were provided placements out of Bihar, also given the monthly salary offered to them. Clearly, there was more supply than demand for the local market to engage all the trainees. The fact that it is the participant's decision not to join the jobs offered to them, does show that they assert their 'agency' and are not compelled to take up opportunities that may not suit their own ways. But at the same time, it is reasonably true that all those who are trained can never possibly be accommodated in the local market. Thus it is essential to devise strategy to facilitate placement outside the place of residence. One possible strategy, mentioned during discussion with training organisation was that, counselling sessions should be conducted with participants to motivate them to foresee possibilities of future growth that can be worked out by their hard work and endeavour.

Further, state level process monitoring of PIAs should be strengthened by responsible government departments. As we have seen many participants were not offered any job opportunities after training completion. This is serious issue and should be dealt effectively. PIAs should engage more actively with potential recruiters and negotiate on wages to be provided after training.

Skill building programs are being implemented in developed economies for quite long time and evaluation reports from time to time have expressed concerns regarding effectiveness of such programs and often recommended detailed measures for improving outcome indicators. My research findings in no way express scepticism on potential of skill building programs in India but it surely calls for attentiveness and not to presume the success of such program as immutable instrument to tackle youth unemployment. For now, there is serious need of conducting methodologically sound research studies in different contexts throughout the country and devise policy interventions based on empirical findings and recommendations.

There is a long way to go in regard to skill building programs in India, first in terms of increasing employment and second to ensure that trainees do not land up in low paid and precarious jobs, which may in turn prove counterproductive and may cause more concerns rather than solving the issue of unemployment in youth

References

Ashenfelter, O. (1978) 'Estimating the Effect of Training Programs on Earnings', *The Review of Economics and Statistics* 60(1): 47-57.

Ashenfelter, O., and D. Card (1985) 'Using the Longitudinal Structure of Earnings to Estimate the Effect of Training Programs', *The Review of Economics and Statistics* 67(4): 648-660.

Attanasio, O., and K.M. Kaufmann (2010) 'Educational Choices and Subjective Expectations of Returns: Evidence on Intra-Household Decision-Making and Gender Differences', *CESifo Area Conference on Economics of Education*, Munchen.

Attanasio, O., and K. Kaufmann (2009) 'Educational choices, subjective expectations, and credit constraints', *NBER working paper*: 15087.

Bandiera, O., N. Buehren, R. Burgess, M. Goldstein, S. Gulesci, I. Rasul and M. Sulaiman (2012) 'Empowering adolescent girls: Evidence from a randomized control trial in Uganda', Mimeo, LSE.

Barnhardt, S., D. Karlan and S. Khemani (2009) 'Participation in a School Incentive Programme in India', *Journal of Development Studies* 45(3): 369 - 390.

Bauernschuster, S., O. Falck and S. Heblich (2010) 'Social capital access and entrepreneurship', *Journal of Economic Behavior & Organization* 76(3): 821 - 833.

Betcherman, G., A. Dar and K. Olivas (2004) 'Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries', *Social protection discussion paper no*: 0402, World Bank.

Census2011<<u>http://www.censusindia.gov.in/2011-prov-</u>results/data_files/bihar/Provisional%20Population%20Totals%202011-Bihar.pdf>

Card, D., and D. Sullivan (1988) 'Measuring the Effect of Subsidized Training Programs on Movements In and out of Employment', *Econometrica* 56(3): 497-530.

Cramer, J. S., J. Hartog, N. Jonker and C. M. Van Praag (2002) 'Low risk aversion encourages the choice for entrepreneurship: an empirical test of a truism', *Journal of Economic Behavior &Organization* 48(1): 29 - 36.

Dasgupta, U., L. Gangadharan, P. Maitra, S. Mani and S. Subramanian (2015) 'Choosing to be Trained: Do Behavioral Traits Matter?', *Journal of Economic Behavior & Organization* 110: 145-159.

Hotz, V. J., G. W. Imbens, and J. A. Klerman (2006) 'Evaluating the Di erential Effects of Alternative Welfare-to-Work Training Components: A Re-Analysis of the California GAIN Program', *Journal of Labor Economics* 24(3): 521-566.

McKenzie, D., J. Gibson and S. Stillman (2010) 'How Important is Selection? Experimental vs. Non- Experimental Measures of the Income Gains from Migration', *Journal of the European Economic Association* 8(4): 913 - 945.

Ministry of Rural Development, Government of India (2016) DDU-GKY Programme Guidelines', New Delhi, India.

<<u>http://ddugky.gov.in/sites/default/files/SOP/mail%20ddugky%20guideline</u> <u>s%20with%20cover_0.pdf</u>>

Ministry of Skill Development and Entrepreneurship, Government of India (2015) 'National Policy for Skill Development and Entrepreneurship', New Delhi, India.

<<u>http://www.skilldevelopment.gov.in/assets/images/Skill%20India/policy%</u> 20booklet-%20Final.pdf>

Ministry of Statistics & Programme Implementation, Government of India, January (2014) '*Employment and Unemployment Situation in India*', NSS 68th Round (July 2011-June 2012), NSS Report No. 554. < http://mail.mospi.gov.in/index.php/catalog/143/related materials>

National Skill Development Corporation, Government of India (2012) 'Bihar Skill Assessment and Gap Analysis Report', New Delhi, India.

Nopo, H., and J. Saavedra (2003) 'Recommendations to improve baseline data collection for Projoven and to construct a baseline using random assignment as part of an experimental design', Discussion paper.

Ministry of Labour & Employment, Labour Bureau, Government of India (2013-14) 'Report on Education, Skill Development and Labour Force', Chandigarh, India.

<<u>http://labour.nic.in/sites/default/files/Report%20Vol%203%20final.pdf</u>>

Rosenberg, M. (1965) 'Society and the adolescent self-image', Princeton, NJ: Princeton University Press.

Heckman, J.J., and J.A. Smith (2004) 'The determinants of participation in a social program: Evidence from a prototypical job training program', *Journal of Labour Economics* 22(2): 243-298

Jensen, R. (2010) 'The (Perceived) Returns to Education and the Demand for Schooling', *Quarterly Journal of Economics* 125(2): 515-547

Maitra, P., and S. Mani (2013) 'Learning and Earning: Evidence from a Randomized Evaluation in India', *Fordham University, Department of Economics, Discussion Paper Series 2.*

Meager, N. (2009) 'The Role of Training and Skills Development in Active Labour Market Policies', *International Journal of Training and Development* 13(1): 1-18.

Mitra, A. and S. Verick (2013) 'Youth Employment and Unemployment: An Indian Perspective'. *ILO Asia-Pacific Working Paper Series*, New Delhi India

Waddell, G.R. (2006) 'Labor-market Consequences of Poor Attitude and Low self-esteem in Youth', Economic inquiry 44(1): 69-97.

WDR (2013) 'World Development Report "Jobs"'. The World Bank, Washington, DC.

< <u>http://siteresources.worldbank.org/EXTNWDR2013/Resources/8258024-</u>1320950747192/8260293-1322665883147/Overview.pdf>
Appendix

Household Interview Questionnaire

My name is _______. We are conducting a household interview and
would like to ask you some questions. Participation in this study is voluntary
and whatever information you provide will be kept confidential.
Do you want to ask me anything about this survey?Are you willing to take part in the interview \Box Yes = 1 \Box No = 0Answer any questions and address respondent's concerns

Signature of respondent _____

S . No	Section 1 : Prelimina	ry Information			
1.	Respondent Name				
2.	Respondent Category	Training Participant = 1 Training Applicant(Non Participant)=2			
3.	Respondent Sub Cate- gory	Attended training and continuing in job = 1 (skip Q. 75-77) Attended training but did not joined job/left job = 2 (skip Q. 75- 77) Currently attending training = 3 (skip Q.26, 28, 50-57, 71 & 73- 77) Mobilisation dropout = 4 (skip Q.70-74) Training dropout = 5 (skip Q.70-74)			
4.	Sex	Male = 1 Female = 0			
5.	State				
6.	District				
7.	Block				
8.	Village				
9.	Mobile Number				
10	Name of Interviewer				
11	Date of interview	Day Month 2016			
S	Section 2 : Household Socio Economic Information				

12	Age of the Respondent	years				
13	Current age of Father	years				
14	Current age of Mother	years				
15	Marital Status	 Never Married =1 Currently Married =2 Widowed =3 Divorced/Separated =4 				
16	If 2, Current age of Spouse	years	s (If 1, 3 or 4 then put 'NA')			
17	No. of children	II				
18	Religion	□ Hindu = 1 □ Christian = 3 □ Muslim = 2 □ Others = 4				
19	Caste	□ SC = 1 □ OBC = 3 □ ST = 2 □ General = 4 □ Others = 5				
20	Education staus of Father	 Not literate =1 Literate & upto primary (1 to 5 class)=2 Middle (6 to 8 class) =3 	 Secondary (9 to 10 class =4 Higher Secondary (11 to 12 class) = 5 Diploma/certificate course =6 Graduate =7 Post graduate & above =7 			
21	Education staus of Mother	 Not literate =1 Literate & upto primary (1 to 5 class)=2 Middle (6 to 8 class) =3 	 Secondary (9 to 10 class =4 Higher Secondary (11 to 12 class) 5 Diploma/certificate course =6 Graduate =7 Post graduate & above =7 			
22	Occupation of Father	□ Self employed in agriculture =1 □ Regular wage/salary earning (formal organisations)=4 □ Self employed in non-agriculture =2 □ Casual Labour/daily wage (agri non-agri, MNREGA, etc) = 5 □ Regular □ Not engaged in economic				

23	Occupation of Mother	 wage/salary earning (informal organisations)=3 Self employed in agriculture =1 Self employed in non-agriculture =2 Regular wage/salary earning (informal organisations)=3 	activity = 6 D Others =7 Specify Regular wage/salary earning (formal organisations)=4 Casual Labour/daily wage (agri, non-agri, MNREGA, etc) = 5 Not engaged in economic activity = 6 Others =7 Specify
24	Total earning members contributing to your 'chulha'	II II	
25	Total monthly household income (at the time of application)*		
26	Total current monthly household income		
27	Total monthly household consumption expenditure (at the time of application)*		
28	Total current monthly HH consumption expenditure		
29	Family Arrangement (Respondent's Chulha)	 Nuclear Family (Responsiblings) =1 Joint Family (Responsion Family (Responsion Family (Responsion Family =2) Extended Family =3 Other =4 (specify) 	oondent with father, mother, first idents family along with close kins)
30	Do you own agricultural land?	□ Yes = 1	□ No = 0
31	If yes, land holding status		
32	Land owned (Total in Kattha)		
33	Cultivated land (in Kattha)		

34	Cropping in a year	□1times/year = 1 □2times/year =2				
35	Do you own a house	□ Yes = 1 □ No =	= 0			
36	If yes, Is this house	□ kutcha = 1 □ pucca-IAY know = 3	□ Semi-pucca = 2 □ pucca – Non IAY = 4			
37	BPL Card Holder	□ Yes = 1	□ No = 0			
38	SHG Member	□ Yes = 1	□ No = 0			
39	NREGA benificiary (in past one year)	□ Yes = 1	□ No = 0			
40	RSBY benificiary	□ Yes = 1	□ No = 0			

Section 2 : Pre and Post Socio Economic Information of Respondent				
41.	Education staus of Respondent	 Not literate =1 Literate & upto primary (1 to 5 class)=2 Middle (6 to 8 class) =3 	 Secondary (9 to 10 class =4 Higher Secondary (11 to 12 class) = 5 Diploma/certificate course =6 Graduate =7 Post graduate & above =7 	
Det	alls of both participants and no	n-participants at the time o	application (i.e before training)	
42.	Occupation at the time of application	 Self employed in agriculture =1 Self employed in non- agriculture =2 Regular wage/salary earning (informal organisations)=3 	 Regular wage/salary earning (formal organisations)=4 Casual Labour/daily wage (agri, non-agri, MNREGA, etc) = 5 Not engaged in economic activity = 6 Others =7 Specify 	
43.	Monthly earnings (Average of 3 months)	□ less than Rs 6000 = 1 □ >Rs. 6000 to Rs. 8000 = 2 □ >Rs. 8000 =3	Amount = Rs	
44.	Nature of emplyoment	 Permanent contract =1 Yearly/periodic contract with provision of extension =2 	 yearly/periodic contract with no guaranttee of extension =3 No formal contract =4 	
45.	Provision of social security (PF, mediclaim)	□ Yes=1 □ No =2	If yes kindly describe:	
46.	Number of hours worked per day			
47.	Number of days worked per week			

48.	Number of job changes in the past one year (prior to application)		
49.	Number of months not enagaged in economic activity in the past one year		
Cur	rent details of both participants	and non-partcipants (i.e af	iter training)
50.	Current Occupation	 Self employed in agriculture =1 Self employed in non- agriculture =2 Regular wage/salary earning (informal organisations)=3 	 Regular wage/salary earning (formal organisations)=4 Casual Labour/daily wage (agri, non-agri, MNREGA, etc) = 5 Not engaged in economic activity = 6 Others =7 Specify
51.	Current monthly earnings (Average of 3 months)	□ less than Rs 6000 = 1 □ >Rs. 6000 to Rs. 8000 = 2 □ >Rs. 8000 =3	Amount = Rs
52.	Nature of emplyoment	 Permanent contract =1 Yearly/periodic contract with provision of extension =2 	 yearly/periodic contract with no guaranttee of extension =3 No formal contract =4
53.	Provision of social security (PF, mediclaim)	□ Yes=1 □ No =2	If yes kindly describe:
54.	Number of hours worked per day		
55.	Number of days worked per week		
56.	Number of job changes in the past one year (one year from the date of interview)		
57.	Number of months not		

	enagaged in economic activity in the past one year				
Sec	tion 3 : Awareness about the pr	ogram			
58.	Did you know about the training program	 1= Fully Aware 2= Had some knowledge but not confident about complete information 3= Don't know anything 			
59.	Major components of the training program (can be multiple answers) (Read out the options to the respondents)	 Training program is free =1 Training program is residential =2 Boarding is free during the training =3 Food is free during the training=4 Assured job placement after the training=5 Assured job at least for one year =6 Minimum salary of Rs.6000 = 7 Job placement may be ouside the block or district of residence =8 None =9 			
60.	How did you get to know about the program (Source of information-may be more than one answer) (Read out the options to the respondents)	 Camps organised by the NGO =1 Govt. authorities =2 Banner, pamphlets, posters =3 Job Fairs =4 Door to Door counselling =5 Parents =6 Relatives =7 Peers group =8 Others (specify)=9 Specify			
5ect	tion 4 : Training partcipation What was your expected probability of getting a job after training?	□ 0% = 1 □ 25% = 2 □ 50% = 3 □ 75% = 4			

		□ 100% = 5
		🗖 Had no idea = 6
62.	What was your expected monthly earnings after training	Rs. II II II per month
63.	What according to you is the minimum income for fulfilling household responsibilities	Rs. II II II per month
64.	How far was the training centre from your residence	II II kms
65.	Did you incur/ or could have incurred any direct out of pocket expenditure in order to attend the training	□ Yes = 1 □ No = 0
66.	If yes, then how much	Rs. II II II
67.	On what	
68.	Date of application	II II month II II year
69.	Sector of trade	
Onl	y to training participants	
70.	Date of training	II II month II II year to II II month II II year
71.	No. of months since the completion of training program	II II months
72.	What were the reasons for joining the program (multiple answers are possible)	 Low oppurtunity cost = 1 Expected rise in income =2 Expected rise in social status =3 Better long term future prospects =4 Urban life style =5 Best available option at that time =6 As an oppurtunity to be part of mainstream development =7

		□ Inclination to get involved in service/jobs =8			
		□ other (specify)=9			
		(Specify)			
73.	Are you currently employed in the job provided by the training institute	□ Yes = 1 □ No = 0			
74.	If NO, please describe the resaons in details. (If yes, please mention NA)				
Onl	y to training non-participants				
75.	Who decided that you would not join the training program (If '3' skip Q.76)	 Self Decision =1 Family Decision =2 Not permitted by the training authorities =3 Others =4 (specify) (Specify)			
76.	If '1' & '2', describe the reasons for not joining the program				
77.	If 3, then why do you think the authorities did not allow you to join the program ?	 Because I am not BPL =1 Because they said that I am economically well off and do not need the program=2 Because they thought that I may drop out of the training midway =3 Because they thought that I may not join job after end of training=4 Because they thought that I am not smart and motivated to join the training=5 Because I am illeterate/less educated =6 They didn't gave any reason just rejected my application =7 I don't know =8 			

		Other reasons (specify)=9					
		(Specify)_	(Specify)				
78.	Are you satisfied with you decision of joining/not joining the program	 Very satisfied =1 Satisfied =2 Neutral/Average =3 Dissatisfied =4 Very dissatisfied =5 Don't Know =5 					
Sect	tion 4 : Attitude and Self Esteem						
		Strongly Agree	Agree	Disag	ŗree	Strongly Disagree	
79.	I feel that I'm a person of worth at least on an equal plane with others	3	2		1	0	
80.	I feel that I have a number of good qualities	3	2	1		0	
81.	I am able to do things as well as most other people	3	2	1		0	
82.	I have a positive attitude towards myself	3	2	1		0	
83.	On the whole, I am satisfied with myself	3	2	1 0		0	
84.	I certainly feel useless at times	0	1	2		3	
85.	At times I think I am no good at all	0	1	2 3		3	
86.	All in all, I am inclined to feel that I am a failure	0	1	2 3		3	
		Very Somewhat Important Important Not Important			ortant		
87.	Being successful in my line of work	2	1		0		
88.	Being able to find steady work	2	1		0		

89.	Being a leader in my community	2	1	0
90.	Being able to give my children better oppurtunity than I had	2	1	0

Note: If respondent sub category is '3' i.e. if the respondent is currently attending training, then do not ask question No. 26, 28, 50 to 57, 71 and 73 to 77.