



# Pilot Project on Skills Development, Certification and Recognition

**UAE MOHRE SCIENTIFIC COMMITTEE** 

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## This Presentation

- 1. Skills Project Phase I: India
- 2. Skills Project Phase II: Pakistan



# Objectives

- Research on the Skills training and certification project
- Determination of the impact of the training on different outcomes (productivity, income trajectory, happiness and others)
- Background information for policy recommendations
- Distribution of gains
  - Asia United Arab Emirates (UAE) Corridor
- Other questions on the impact of migration on migrants.



# Phase I: India Pilot Project





#### 1. Returns to Migration experiment

- Skills experiment
- India Baseline Survey
- UAE survey

#### 2. Results on

- a. Training experiment
- b. Returns to Migration
- c. Recruitment fees results



#### Question 1: What is impact of training?

#### Bigger question

- Certification schemes?
- A case for managed migration?
- Harmonization? (next session).



### Question 2: What are returns to migration?

- Income?
- Happiness?
- Other measures



### Question 3: What are payments to brokers and levels of debt

- Begin with Survey information.
- Relate to subjective well-being or average length of stay in the UAE

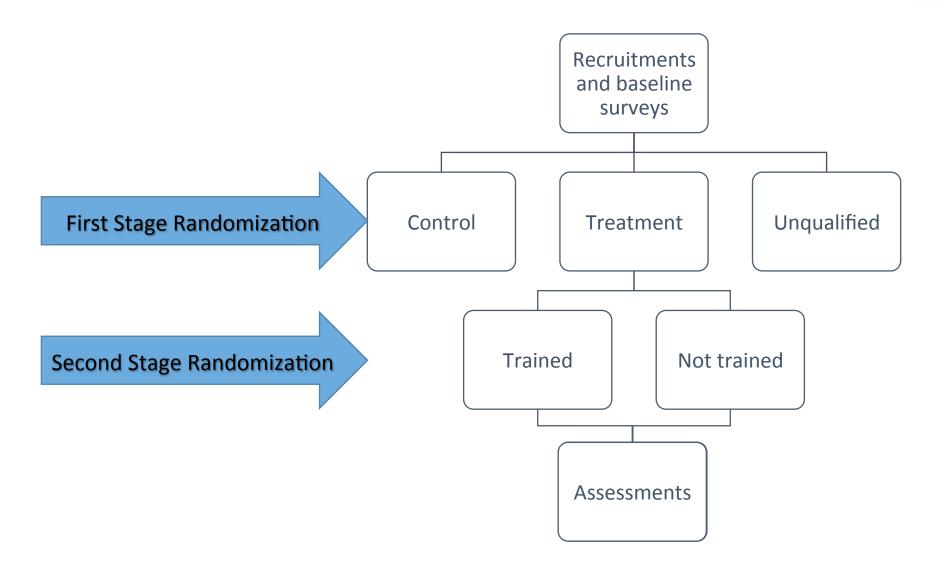


# Process Flow of Pilot Project





## Experimental Design





# First Stage Randomization

- Job Applicants in India divided into three categories
  - <u>Unqualified</u>: These workers fail to receive a job by the recruiting firm due to lack of qualifications.
  - <u>Treatment:</u> These workers receive a job by the recruiting firm and are randomly selected into the study. 5:7
  - Control: These workers receive a job by the recruiting firm and are randomly selected out of the study.



## Second Stage Randomization

• The workers who were "Randomized in" during the first stage randomization are randomly assigned to receive skills training by an accredited training institution in their home country

• This is a 50:50 randomization (computerized randomization).

 All workers (trained and not trained) will go through an assessment phase after they have been deployed to the UAE.





- Initial Surveys of workers in India (6,827 workers) complete
- Assessment of workers in the UAE (1,156 workers so far) Ongoing (35% complete)



### Recruitment Process

- We have been working with five construction firms over the course of the study.
- We identify two main Rounds of the recruitment phases

Round 1 - February and December of 2015

Round 2 – From April 2016 to April 2017

• 8,210 workers were involved during these recruitment rounds



## Recruitment Process

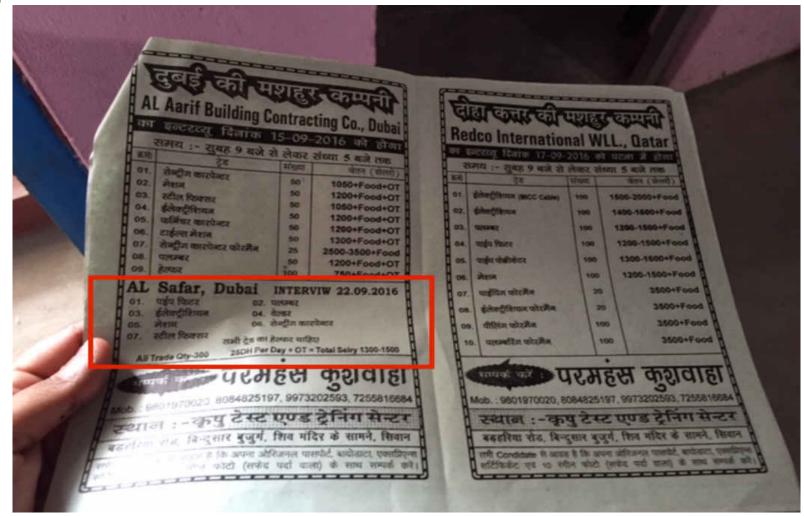
We collected data during baseline surveys in India (6,827)

 Baseline interviews are conducted during the firms' recruitment sessions

- Workers either pass (Qualified) or fail (Unqualified) the interview
  - The workers in Qualified pool are either Treatment or Control



# UAE companies recruit workers in India







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## Recruitment in India







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# Summary of first-stage randomization by occupation

Occupation	Treatment groupin	Control	Unqualified	Total
CARPENTER	1,636	648	691	2,975
HELPER	368	136	1	505
MASON	1,250	339	156	1,745
STEEL FIXER	1,383	448	284	2,115
OTHER	591	80	186	857
Total	5,228	1,651	1,318	8,197



# Preliminary Results - Returns to Migration

We want to investigate the effects of migration on labor outcomes.

• We collected 956 follow-up data points with participants in India and the UAE. There are still on going follow up surveys in India and UAE.

 We look at income effects of migration as well as more subjective measures of physical and mental well-being among the selected workers (Treatment and Control).



# Returns to migration: Income regression

- We want to study the effect of migration on monthly incomes;
- We run the regression below:

$$Y \downarrow i = \beta \downarrow 0 + \beta \downarrow 1 \ T \downarrow i + \beta \downarrow 2 \ X \downarrow i \uparrow' + \mu$$

- Where:  $Y \downarrow i$  is the worker's monthly income at follow-up
- $T \downarrow i$  is a dummy variable indicating the treatment group of the worker (0: randomized out; 1: randomized in)
- $X\downarrow i\uparrow'$  is a matrix variable controlling for income at baseline, firm of employment and occupation of the worker
- $\mu$  is an error term

#### Returns to migration: Income regression

	Monthly income at follow-up (USD)
Treatment (0-1)	53.36** (2.48)
Monthly Income at baseline (USD)	-0.0223 (-0.33)
Firm (0-1)	62.59 (1.62)
Trade_carpenter (0-1)	13.91 (0.48)
Trade_steelfixer (0-1)	116.94*** (2.97)
Trade_mason (0-1)	64.53** (2.34)
Constant	171.05*** (5.53)
Observations	142
R-squared	0.477

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

- The regression output shows that migration increases workers' salaries by \$53.36. This result is statistically significant
- Small number of observation due to low volume of responses in follow-up surveys for phase 1 participants (2015). We expect the follow-up data for phase 2 participants to yield better response rates.

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<sup>1</sup> Two firms were involved in phase 1. The "Firm" variable is a dummy that takes the value 0 for Firm 1 and 1 for Firm 2



# Returns to migration: Well-being comparison between migrants and non-migrants at follow-up

 We ask the subjects to rate on a scale from 1 to 10 subjective wellbeing measures

• These measures include enjoyment, happiness, physical pain...

 We compare the difference in means across treatment groups on these variables

## Returns to migration: Well-being comparison between migrants and non-migrants

	Migrated - Did not migrate
Happiness (1-10)	-0.453* (-2.18)
Enjoyment (1-10)	-0.416*** (-4.88)
Stress (1-10)	-0.328*** (-3.58)
Worry (1-10)	0.046 (0.48)
Anger (1-10)	-0.0769 (-0.99)
Sadness (1-10)	0.125 (1.48)
Loneliness (1-10)	0.485*** (5.26)
Physical Pain (1-10)	0.236*** (3.34)
Monthly work hours	52.80***

Observations

(6.71)

280

- The workers who have migrated report lower happiness and enjoyment levels than those who have remained in India.
- Migrant workers also experience higher level of physical pain and Loneliness than their counterparts.
- Migrant workers on average work 52 more hours than workers in India (per month).
- However, migrant workers experience less stress than workers in India.



## Returns to Migration Conclusions

- One of the goal of this research is to investigate the impact of labor migration to the UAE on different outcomes.
- The initial results suggest that workers who migrated to the UAE through our treatment gained better wages in comparison to the workers who remained in India.
  - These results are consistent with the literature looking at the wage effects of labor migration
- However, migrant workers report worse well-being measures than their counterparts (happiness, enjoyment, loneliness, physical pain).
- 96% of respondents who migrated are not searching for another job while half of the respondents employed in India were still looking for opportunities abroad.



## Recruitment fees and debt levels

- Recruitment agents play a central role in the process of matching local workers to foreign job opportunities;
  - 99% of respondents in our survey worked with a recruitment agent

• These recruitment agents charge a fee to the prospective workers in exchange for various services pertaining to the recruitment process;

 We collected data on recruitment fees and debt levels in our baseline surveys

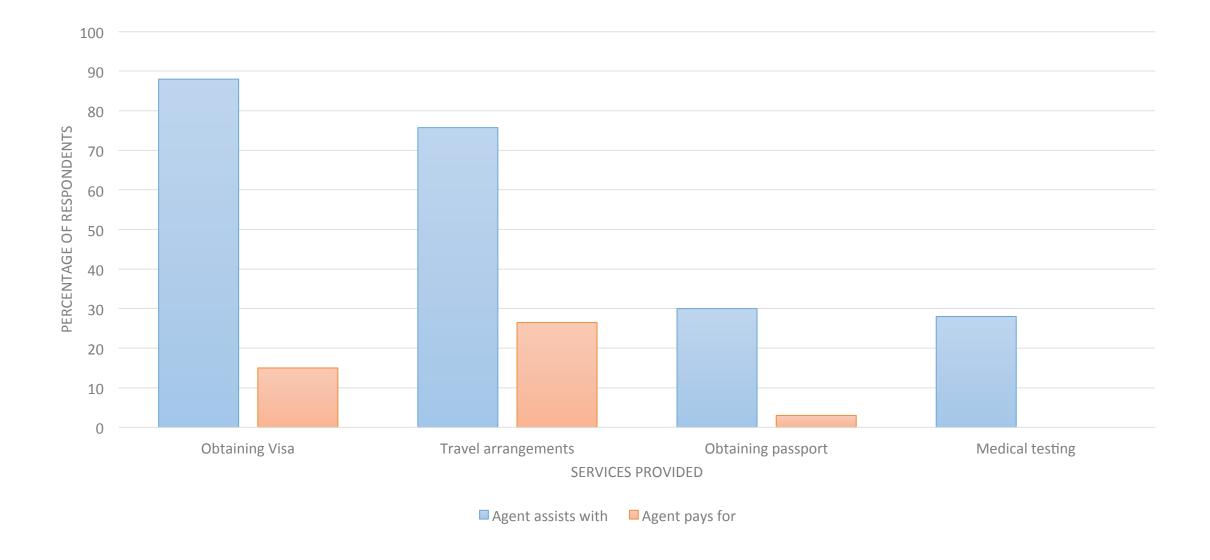


# Recruitment fees (cont'nd)

- On average, the amount charged by the recruitment agent to the workers is slightly over 900 USD according to the survey data we collected on the day of the recruitment interviews;
- This is 3 times the average monthly income reported by the participants at the time of survey;
- These fees generally do not include the costs associated with obtaining the visa/passport, travel tickets or medical testing; these are additional expenses that the workers must pay

# Services included in recruitment agent's fees Apple according to survey responses





# Payment structure of recruitment agent fees

- There are two main payment schemes available to workers
  - 57% of the respondents agreed to a lump sum payment, while 27% pay through regular installments;

 Among the respondents paying by installment, the vast majority (70%) opt for a monthly payment frequency, while 13% prefer to pay every 2-3 months



## Training and Assessments

- The first round of skills assessment was conducted in parallel with the first round of follow-up surveys (from September 27 to October 12, 2016).
- The assessment consisted of two main sections: a theoretical examination and a practical test.
- So far, these assessments have only been conducted with workers from the round 1 pool.
- 326 workers were involved. The participants were assessed for skills in carpentry, steel fixing and masonry.



#### Training and Assessments

- Do trained ultimately do better or have higher productivity in the final places of employment?
- All workers arriving in the UAE are assessed on the skills to measure the impact of the training program.
- Follow-up surveys are conducted in parallel

#### Assessments in the UAE





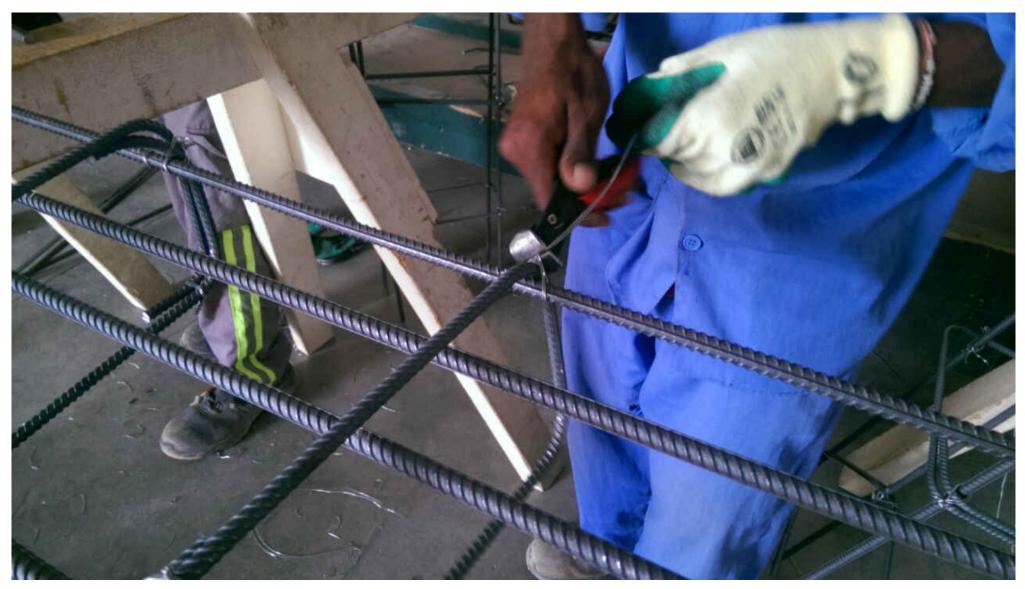


# Assessments in the UAE (Cont'd)



## Assessments in the UAE (Cont'd)





# Assessments in the UAE (Cont'd)







# Preliminary Results: Impact of training on assessments scores

- We use a simple regression analysis to judge the preliminary impact of the training program on the workers' performance in the assessment. The simple regression equation is as follows:
  - Assessment score (as a percentage of total score) =  $\alpha$ +  $\beta$ Training+  $\gamma$ DateDifference+  $\in$
- where: α is a constant, Training is a categorical variable that equals
  0 if worker is not trained and 1 if the worker is trained, and
  DateDifference represents the difference in days between date of
  assessment and date of arrival in the UAE. ∈ is an error term.



#### Impact of training on assessments scores

Assessment score (as percentage of total) (Outcome variable)	Coefficient	Standard Error	t-score	P>t
Difference between assessment date and arrival in days	0.0051	0.00015	3.49	0.0
Training category (0-1)	0.0184	0.0202	0.91	0.364
Constant	0.0540	0.0545	9.91	0

- These results suggest a positive correlation between the training program and the
  performance of workers during the assessment, controlling for the duration between the
  deployment date and the assessment date.
- Receiving training increases the expected assessment score by 1.84% (which represents a 7-point increase for masons, and a 9-point increase for carpenters and steel fixers)
- This effect is not statistically significant. Similar results are obtained when including controls for workers' occupations.



#### Training Experiment Conclusions

- We want to assess the impact of a training programming for skilled workers in India who are being recruited to work in construction companies in the UAE.
- The initial results do not give any conclusive evidence of an impact of the training program on the productivity of workers.
- However, these results are preliminary, and more data is forthcoming as we complete the second phase of this study which involves a much larger pool of workers and has had better compliance numbers.



#### Future activities

- Complete the follow-up surveys for workers It will involve all workers who participated in phase 2 of the study (Treatment and Control).
- Complete the second round of assessments to evaluate the impact of the skills training in India.



# Phase II: Pakistan Pilot Project



#### Phase II: Pakistan Pilot Project

- Building from lessons learnt from Phase I in India to enhance implementation and assessment of methodologies
- Analyze the effects of the pilot skill training program on the outcomes of workers in the UAE (including wages, productivity, subjective wellbeing) and the average length of their residence in the UAE
- Provide confidence in the mechanisms for the testing and certifying of workers, through the deployment of NOSS frameworks

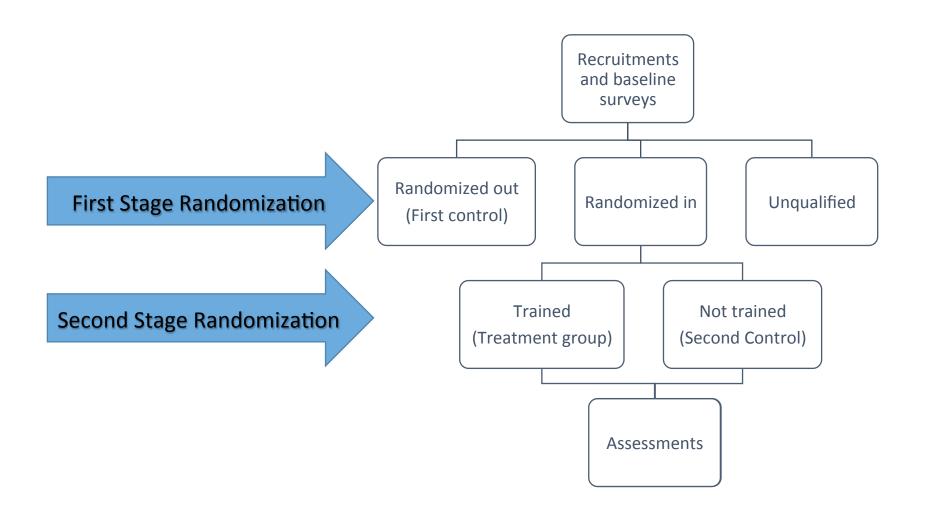


#### Pakistan - Stakeholders

- Ministry of Human Resources and Emiratisation (UAE)
- Ministry of Overseas Pakistanis and Human Resource Development (Pakistan)
- 2 Employers (UAE)
- 4 Training Centers (Pakistan)
- Recruitment Agency (Pakistan)
- 3rd Party Assessor
- Scientific Oversight (NYUAD)



## Experimental Design





#### Experimental design

- <u>Treatment group</u>: Workers being trained in Pakistan arriving in the UAE;
- <u>First control group:</u> Workers not getting trained in Pakistan, but arriving in the UAE;
- <u>Second control group</u>: People who do not get training and do not go to the UAE



#### Lessons from Phase I (India)

- Working with a maximum of two employers in the UAE, in order to enhance project management and enable stronger oversight over the implementation of the project;
- Working with Government-owned and managed recruitment agencies, to ensure that there an alignment of interests between the key stakeholders;
- Working with 3<sup>rd</sup> party assessors to assess the capacity of training centers, overseeing the development of training manuals and ensuring the compliance of testing services;
- Using employer-applicable NOSSs, to enhance the relevance of the training.



#### Training and Assessment Centers

- We have identified 4 training centers;
  - 3 in Islamabad
  - 1 in Punjab
- 2 international skills development and assessment companies will act as 3<sup>rd</sup> party assessor to:
  - Assess the capacity of training centers;
  - Overseeing the development of training manuals;
  - Ensure the compliance of testing services.



#### Deployment: Workers Incentives

- During the training, the worker will be provided with;
  - Housing
  - Stipend



## Goal is to Replicate Questions of Phase 1



#### Goal is to Replicate Questions of Phase I

- Research on the Skills training and certification project
- Determination of the impact of the training on different outcomes (productivity, income trajectory, happiness and others)
- Background information for policy recommendations
- Distribution of gains
  - Asia United Arab Emirates (UAE) Corridor
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• THANKS!!!!