

॥ कौशल भारत कुशल भारत ॥
'A SKILLED NATION IS A STRONG NATION'

What Will It Take to Skill 500 Million People?

A Policy Analysis of India's Flagship Job Skills Training Program,
The Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

Master of Arts in Law and Diplomacy Capstone Project

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ABSTRACT

As part of its larger, national vision to skill 500 million people in India by 2022, the Government of India launched the **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**, a job skills training program in July 2016. At a budgetary cost of INR 12,000 crores (USD 2 billion), the policy seeks to skill 10 million unemployed youth in 416 job roles, for jobs in 32 industries. The policy will be implemented by the private sector and the government will coordinate the implementation. The government will also make subsidy payments to implementing partners and monetary incentives to students enrolling under this policy. This capstone policy document describes the salient features of the PMKVY, analyses its costs and benefits, and discusses potential implementation challenges. Further, drawing on international experience of Malaysia, possible ways to modify the PMKVY for a more effective implementation and policy success are also discussed.

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1.0 Motivation

In 2016, 64%¹ of India's population is in the working age group of 15-59 years, with only 13% of the total aged above 60 years. 10 million people enter the workforce each year in India, but less than 2.3% of them undergo formal skills training as part of their education or employment induction, when compared to countries like South Korea (96%), Japan (80%), USA (52%), Germany (75%) and the UK (68%). Skills are broadly defined to mean "the ability to apply knowledge and use know-how to complete tasks and solve problems"³ according to a Gazette Notification by the Government of India. Skills are either cognitive, involving the use of logic, intuition and creative thinking; or practical, involving manual dexterity and the use of methods, materials, tools and instruments.

The Govt. of India recognised the need for job skills training in the Indian labour market and formulated its first National Policy on Skill Development in 2009, with the goal of harnessing India's demographic dividend and increasing labour productivity through skills training. Most recently, the Government launched the Skill India initiative, which aims to skill 500 million people by 2022, through the

¹ CRISIL. *Skilling India – The Billion People Challenge*. 2010, p.1

² Ernst & Young and FICCI. *Reaping India's promised demographic dividend – industry in driving seat*. 2013, p.9

³ Government of India. *The Gazette of India*. 2013.

implementation of various schemes (policies). One such policy is the **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**, which aims to impart skills training to 10 million youth over four years, between 2016 and 2020, at a cost of INR 12,000 crore (USD 1.8 billion)⁴. The policy was formally introduced in July 2016 and has since been in implementation. This document describes the policy design of the PMKVY, analyses its various costs and benefits, brainstorms what might go wrong or might have to go right in practice, for the policy to achieve its objectives, and raises questions about the monitoring & evaluation required.

2.0 A general theory of Job Skills Training

Workers may acquire two kinds of skills - either general or specific skills to perform activities and tasks which may be closely connected to their employment through job skills training. They may be formally trained by their employers on the job, in off site training institutes or informally through mentorship and coaching. Training however involves monetary costs and/ or time that may be used for other pursuits. Labour economists have thus conceptualised job skills training as an investment decision that individuals make, only if they believe that they will be better off in the long run. In other words, workers or employers must believe that the benefits of skills training in the long term exceed the costs of skills training in the

⁴ Ministry of Skill Development & Entrepreneurship, Govt. of India & National Skill Development Corporation. *PMKVY Guidelines (2016-2020)*. 2016, p.3

short term.

General skills are those skills which are not tied to any employer and allow workers to migrate from one employer to another. These skills are easy recognizable and valuable to a wide range of employers and may include literacy, numeracy, cognitive and behavioural skills and industry specific technical skills that may be of use to many employers. General skills are typically provided through primary, secondary and tertiary education or through job skills training after entering the workforce.

A simple model of general skills explains the economics of general skills in the labour market⁵. According to this model, high skilled labour is distinct from and capable of performing tasks that low skilled labour cannot. In developing countries, the demand for high skilled labour is typically high relative to supply, causing equilibrium wages to reflect a large premium for skilled workers. Since these skills are useful to many employers, they tend to competitively bid up wages for workers with general skills. Under the assumptions of perfect labour mobility, competitive markets and profit maximizing behaviour of employers, the wage premium paid by the employers should theoretically be equal to the full value of the marginal

⁵ Schaffner, Julie. 2014. Development economics: Theory, empirical research, and policy analysis. Hoboken, NJ: John Wiley & Sons, Inc.

productivity the skilled labour brings. This implies that markets incentivise workers to acquire skills by rewarding them with a wage premium for the rest of their working life or until the skills becomes obsolete.

We discussed above that in a competitive market for labour with general skills, employers bid up the wages to the extent that the general skills increase their productivity, failing which other employers might poach the workers away. This means that when employers invest in training their workers in general skills, they do not make any profits – their expenses (in the form of increased wages) increase as much as their revenue (increased productivity from general skills). Therefore, employers have no incentive to invest in general skills training.

Another kind of skills that workers may acquire are specific skills, which are valuable only to the specific employers who provide these skills training. Consequently, workers who acquire specific skills are not mobile relative to general skills. A more expansive view might consider specific skills of some use to other employers, but of substantially greater value to the current employer. Since the skills are not valuable across all employers, we do not see a competitive behaviour among them that bids up the wages of workers with specific skills. However, since these skills are valuable only to the employer who provides them and raises their productivity, there is a strong incentive for the employer to invest in the training

their workers. Even if they were to invest in training their employees in employer specific skills, the returns would be shared between the employer and the worker. Employers might still have to increase their workers' wages in the fear of poaching by other employers, although not by as much as they might have had to, if the workers possessed general skills. Employers might also be concerned about various other reasons why workers quit, not associated with wages and be reluctant to train them. Therefore, employers have strong incentives to underinvest in or underprovide both general and firm specific skills training, creating a market failure.

From the perspective of workers, there may be several constraints that prevent them from acquiring skills – financial constraints, unavailability of credit, lack of awareness and information about the benefits of training or lack of access to training institutes.

Governments respond to this market failure by offering primary and secondary education and job skills training in both general skills and firm specific skills. They may do this by themselves and set up job skills training institutions, or invite private sector partners to offer these trainings. They might encourage workers to take up skills training by offering monetary incentives, vouchers, subsidized loans to defray some or the entire cost of training, extension services around providing access to information, recruitment opportunities, relocation assistance etc. Likewise,

governments might also encourage employers to offer skills training by offering loans, grants and tax credits. Finally, government also may also play a role in creating the ecosystem for skills training in the country and bringing together workers, employers and private sector skills training providers.

3.0 Literature Review

Job skills training has emerged as the major thrust of public policies of various governments across the world, especially in emerging economies, with an aim of creating jobs and increasing productivity. The labour economics literature suggests that job skills training might be an important tool to supplement the role of schooling in increasing labour productivity⁶.

An overwhelming number of workers in emerging markets are unprepared to meet the demands of both current and future jobs. Evidence from the World Bank's Enterprise Surveys⁷ in more than 100 countries shows that lack of workers with the right skills affects firm performance. The surveys asked respondents to rate a variety of potential constraints to their competitiveness and the third leading constraint, behind taxes & regulations and access to finance was the quality and supply of

⁶ Becker, Gary S. "Investment in Human Capital: A Theoretical Analysis." *Journal of*

Political Economy 70, no. 5 (1962): 9-49. <http://www.jstor.org/stable/1829103>.

⁷ The World Bank. *Enterprise Surveys* (<http://www.enterprisesurveys.org>).

skilled technicians. From Table 1 below, we observe with 54.5% firms rating it as a major or moderate constraint^{*}. Regionally, East Asian firms are less constrained than South Asian firms, who are disproportionately constrained by quality and supply of skilled technicians and quality of production workers. By firm size, there was little variation implying that firms of all sizes were constrained in roughly similar ways. Table 2 below outlines the regional ranking of potential constraints to competitiveness arising out of concerns over the quality and skill levels of labour.

Table 1
Constraints to Competitiveness
 (Percentage of Firms Surveyed, globally)

	No Obstacle	Minor Obstacle	Moderate Obstacle	Major Obstacle
Quality and supply of skilled technicians	19.1	26.4	32.3	22.2
Quality supply of production workers	28.9	28.5	27.9	14.7

Source: World Enterprise Surveys

^{*} Batra, Geeta, and Andrew H. W. Stone. 2008. Investment climate, capabilities and firm performance: Evidence from the world business environment survey. OECD Journal: General Papers: 1-37.

Table 2**Region wise Potential Constraints to Competitiveness**

(On a scale of 1-4, 1 being least constrained and 4 being most constrained)

	East Asia	South Asia	Latin America	Overall
Quality and supply of skilled technicians	2.5	2.8	2.6	2.6
Quality supply of production workers	2.2	2.7	2.3	2.3

Source: World Enterprise Surveys

Employers' complaints about skills shortage include both technical and behavioural skills. Efforts to provide skills training, however, have been fraught with poor incentives and weak governance, making them unreliable or ineffective⁹.

Low or Semi-skilled workers who dropped out of the school system, often before having completed secondary education, struggle to find and keep jobs or to engage in higher-productivity activities. Younger workers who lack both skills and work experience suffer unduly. In 2008, youth were nearly three times more likely to be unemployed than adults, resulting in a global average ratio of youth-to-adult unemployment of 2.8 in most regions¹⁰. Training programs aimed at unskilled

⁹ The World Bank. Enterprise Surveys (<http://www.enterprisesurveys.org>).

¹⁰ International Labour Office. *Key Indicators of the Labour Market (KILM) 2010*. 9th Edition. Geneva.

workers generally focus on providing technical, cognitive and behavioural skills. According to Rita et al these programs are effective when they include three main complementary components: (i) subsidies to finance all or part of the training costs, (ii) counselling, and (iii) job-search assistance or support for self-employment.¹¹ Subsidies ease credit constraints by offering incentives to workers to acquire skills and lowering their cost of training. In emerging markets, where we might expect workers to have significant financial constraints and barriers to credit, subsidies that defray the full cost of training may be more incentivising than credit arrangements. Counselling supplements subsidies by providing information about the benefits of training, helping workers identify what kinds of training might best fit their capabilities and expand the information available to workers through which workers may increase their expected rate of return on investment in training. Finally, assistance in job search maybe a critical link required to ensure that workers indeed are placed in jobs that make use of their skills. Where the objective is to stimulate self-employment, training programs should also consider providing trainees with assistance in obtaining credit, access to information about markets and mentorship. In a cross country study of 345 training programs in 90 countries over 50 years, Jean Fares and Olga Puerto observe a general pattern of transition from traditional ‘in

¹¹Almeida, Rita, Jere Behrman, David Robalino, and World Bank. 2012. *The right skills for the job?: Rethinking training policies for workers*. Washington, D.C: World Bank.

class trainings' to a more comprehensive approach that involves classroom training, workplace training and other supplementary services such as placement assistance and counselling¹². Although the quality and quantity of data and robustness of the evaluation differed across time and geography, the meta-analysis shows that on average, programs that offer combined training types along with other services report a higher probability of positive impacts on the labour market prospects of trainees as compared to in-classroom training alone.

There has been little empirical research in jobs skills training relative to primary and secondary education. However, job skills training has merited the attention of researchers and scholars in recent years and the availability of information has increased over time. The impact of job skills training on trainee wages have yielded mixed results, with most of them establishing only a positive correlation, but not a causation¹³.

Two World Bank impact evaluation studies suggest short-term skills training has had limited effects in Latin America. Between 2002 and 2010, The Chilean

¹² Fares, Jean, and Olga Susana Puerto. 2009. "Towards Comprehensive Training."

Social Protection Discussion Paper 924. World Bank, Washington, DC.

¹³ McIntosh, Steven, and Richard Garrett. 2009. *The economic value of intermediate vocational education and qualifications*.

government undertook a package of welfare measures under the name of *ChileCalifica*, that included adult education, short term vocational training of 3 to 9 months, certification of labour skills and the establishment of a public information system. An impact evaluation of this program in 2008-09 found that the skills training increased monthly labour income of trainees by \$17.10/ month¹⁴, an effect that was neither economically meaningful nor statistically significant. Further, this effect was observed only for trainees over 40 years of age while for younger trainees, there were no increases in income.

The Dominican Republic's skills training program, *Juventud y Empleo* involved several weeks of basic skills training by a private provider, a two-month internship with fully subsidized wage and limited follow-up with counselling and technical assistance. Almost none of the interns were hired after the internship, and difference in the employment rate during the follow up survey of those who participated in the training program (57.4%) and those who did not (56%), was not statistically significant. However, program participants earned somewhat higher earnings of 3,133 pesos/month compared to the non-participants, who earned 2,677 pesos/month. This difference of 455 pesos/month was statistically significant at the 95% confidence level and as a 17% increase in monthly income, it is economically

¹⁴ Santiago Consultores 2009. Evaluación en Profundidad Programa ChileCalifica.

significant as well. However, the interpretation of this result is complicated by two problems in the evaluation design. First, several people assigned to the treatment group but who had dropped out or no showed after a few days of training were not contacted during the follow up survey, potentially biasing the estimates. Further, because of the vacancies created in the treatment group because of dropouts and no shows, people from the control group were reassigned to the treatment group, in a non-random manner. When the outcomes of the reassigned people are removed from the sample, then the effect of skills training program on the monthly income of participants are slightly less positive at 2,961 pesos/month but are no longer statistically significant. The peculiar development of increase in earnings without increase in employment was analysed using a series of quintile regressions, which revealed that the effect of skills training program on incomes of participants was concentrated among a subset of better-educated applicants in the capital city.

An impact evaluation of Brazil's vocational training system SENAI, which included short term training courses and vocational graduate level courses in specific trades, found significant impacts of job skills training on wages, especially for younger males in rural areas. Individuals in the age group of 15-29 years and underwent training under the SENAI system experienced a 28.3% increase in monthly earnings, compared to those who underwent training in other private

institutions and experienced a 10.4% increase in monthly income¹⁵. The earnings increase decrease when the sample includes only individuals residing in urban areas, suggesting that the SENAI witnessed huge wage premiums in rural areas. It also improved labour market outcomes by encouraging labour mobility between regions. However, the paper also admits that the specificities of the program and low external validity make it hard to replicate elsewhere.

The relevance of job skills training is more pronounced in Asia, particularly South Asia where latent potential of millions of young workers can either lead to a demographic dividend and economic prosperity or widespread youth unemployment. Despite notable successes in improved participation rates for primary and secondary education, youth unemployment remains pervasive. Although policymakers are increasingly focusing on understanding the skills gap in these regions and framing policies to fill these gaps, but we do not have enough empirical research on training programs in this region.

A study on 2293 adults undergoing skills training across various sectors in

¹⁵ Villalobos Barria, Carlos, and Stephan Klasen. 2016. The impact of SENAI's vocational training program on employment, wages, and mobility in Brazil: Lessons for sub-Saharan Africa? *Quarterly Review of Economics and Finance* 62 : 74-96.

Singapore revealed strong, positive correlation between training and income. The researchers used a probit regression model and estimated that the probability of being in a wage of at least \$3000/ month increased from 9.9% to 50.3%, if the workers had undergone an initial job skills training program which was at least 6 months long¹⁶.

In Thailand, a study that used data from the annual Labour Force Survey from 1989 to 1995 found that among individuals who were employed and reported their earning during the survey, those who had acquired skills through an upper secondary level vocational education earned 63.9% (for men) and 49.4% (for women) higher wages per hour than those who had only general education and no vocational training¹⁷.

The world bank conducted a regional study in South Asia aimed at

¹⁶ Ramos, Catherine R., Michael Chi Man Ng, Johnny Sung, and Fiona Loke. "Wages and skills utilization: effect of broad skills and generic skills on wages in Singapore." *International Journal of Training and Development* 17.2 (2013): 116-34. Web. 15 Feb. 2017.

¹⁷ Moenjak, Thammarak, and Christopher Worswick. "Vocational education in Thailand: a study of choice and returns." *Economics of Education Review* 22, no. 1 (2003): 99-107.

understanding the trends in education and training and the associated changes in earnings and employment, based on data from firm level, household level surveys and worker level surveys, between 1990 and 2005. In the module on post school training and wages, the researchers ask whether post school training has any impact on wages and compare those returns with those from investments in formal education. The results must however be cautiously interpreted as the study simply asks whether the workers underwent post school training or not, disregarding the type, provider, length and quality of training¹⁸. The study also does not include any controls to address the selection bias that may arise from unobserved productivity attributes of individuals that might be correlated with the choice of undertaking training and wages, potentially overestimating the impact of post school training on wages.

Broadly comparable wage models were constructed for India, Sri Lanka and Pakistan, and the results suggest positive and significant effects of post school training on wages, controlling for educational attainment and other worker attributes like gender, caste, geographic location and a measure for potential work experience etc. In India, investments in formal preschool training increased hourly

¹⁸ Riboud, Michelle, Yevgeniya Savchenko, and Hong Tan. "The knowledge economy and education and training in South Asia." (2014).

wages by 8%, almost equivalent to an additional year of education (8.4%)¹⁹. In Pakistan, the returns were 8.1% (relative to 9% for a year of additional education). When disaggregated by type of training, computer and computer related vocational training had higher returns of 18% compared to other kinds of vocational trainings that yielded 6%²⁰. Investments in post school vocational training yielded higher returns in Sri Lanka at 17%, relative to an additional year of education which yielded only 8%²¹.

To draw meaningful policy lessons, however we need much more disaggregated information – whether the training was provided on the job? Or before employment? What was the duration of the training? And who provided it – whether the employer? Government? Or a private training institution? This suggests that particularly in South Asia, there is a need for well thought out and detailed impact evaluation of job skills training program, from which policymakers may discern useful insights about the benefits of skills training programs.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

4.0 Data & Methodology

Since the PMKVY has been in implementation only from July 2016, we do not have sufficient cross sectional or panel data that allows for an econometric impact evaluation to isolate and interpret the effects of skills training. However, using the analytical tools of development policy analysis²², we can pose questions that allow us to critically examine the design of the policy, the different actors involved in the implementation of the policy and the various decisions they are required to make, whether the policy encourages these actors to take good decisions which are critical to the success of the policy and finally, identifying potential risks and threats to achieving desired policy outcomes.

The policy analysis is also supplemented by anecdotal material collected during field visits to India in the Summer and Winter of 2016. The information gathered during field research is intended to advance or challenge the various assumptions made by the policymakers in designing the policy and highlight the gaps between desired implementation outcomes and the implementation outcomes in practice. All necessary approvals from the Tufts Institutional Review Board have been obtained and where appropriate, pseudonyms have been used to protect the identities of respondents.

²²Schaffner, Julie. 2014. Development economics: Theory, empirical research, and policy analysis. Hoboken, NJ: John Wiley & Sons, Inc.

5.0 Policy Objectives

The primary objective of the PMKVY is to encourage youth in India who have discontinued school/ college or are unemployed, to take up job skills training that improves their productivity and employability in the labour market. To incentivise them to invest in skills training, the government provides a monetary reward. This reward may either subsidise the entire training costs or a part thereof, depending on the costs of training incurred by the trainees. The policy aims to increase the wellbeing of youth in India by increasing their stock of human capital, which might also improve their well-being by allowing them to transition into higher-skilled work, perhaps in conjunction with migrating to urban areas, thereby raising their wages and household consumption expenditure, improving health outcomes and increasing their social mobility. At the country level, the policy might also contribute to improved productivity of the stock of human capital, economic growth, reduction in poverty and inequality etc.

6.0 Policy Description

6.1 Essential Structure of the PMKVY

Under the PMKVY, the Government identifies the various jobs that will be demanded across industries in the future and the various skills needed to meet the requirements of these jobs. It then contracts with private sector training partners to offer accredited skills training in these areas. The training partners are provided a

payment subsidising their costs, linked to the number of individuals trained, number hours of training and the employment outcomes of the trainees. To incentivise individuals to take up skills training and invest upfront, the government also makes an incentive payment to the trainees, upon completion of the skills training program and passing associated assessment exams. The PMKVY covers jobs skills training across 32 industries, for 416 job roles²³. To illustrate, some of these job roles are dairy worker, banana farmer, soybean cultivator (in the agriculture sector), Mutual Fund Agent, Debt Recovery Agent, Accounts Executive (in the banking & financial services sector), polisher, pre-shaper, metal setter, designer (in the gems & jewellery industry), sampler, mechanic, wire-saw operator, mine welder, and blaster (in the mining industry) and so on.

6.2 Eligibility Criteria for enrolment

To be eligible for enrolling in the PMKVY an individual must²⁴:

- Be an Indian national AND
- Be unemployed OR
- Have discontinued school or college education AND

²³ *PMKVY Official Website*. Accessed December 11, 2016.

<http://www.pmkvyofficial.org/index.aspx>

²⁴ Ministry of Skill Development & Entrepreneurship. *PMKVY Guidelines (2016-2020)*.

- Possess bank account and Aadhaar Number (National Identification Number) AND
- Possess a verifiable alternate ID proof (such as PAN number or Voter ID)

6.3 Monetary Rewards under PMKVY

The trainees who complete a skills training program and pass associated exams are given a one-time monetary incentive by the government, by way of a cash transfer. The amount of incentive varies based on the level of skills for which training is sought and the industry/ sector to which it belongs. The amount of incentive payable to a trainee is given in Table 3²⁵:

Table 3

Skill Levels	Manufacturing, Plumbing & Construction Sectors		Other Sectors	
	INR	(USD)	INR	(USD)
1 & 2	7,500	(112)	5,000	(74)
3 & 4	10,000	(149)	7,500	(112)
5 & 6	12,500	(186)	10,000	(149)

Source: PMKVY Guidelines 2016-2020)

²⁵ Ibid

6.4 Governance Structure of the PMKV

This section of the document describes the roles and responsibilities of all the implementing agents involved in the execution of the policy, the various decentralised decisions each agent takes, and the relationships between the agents. Broadly, the government implements the PMKVY through a public private partnership company called the **National Skill Development Corporation (NSDC)**²⁶, which coordinates with all other implementing agents and makes incentive payments to the trainees and subsidy payments to the training partners. The NSDC recruits and monitors private sector training agencies called **Training Partners (TP)**, who are responsible for conducting the skills training to trainees and collecting biometric information of the trainees for verification before payment of incentives. The government also works with various autonomous bodies of representatives from the private sector, called **Sector Skill Council (SSC)**²⁷, which are specific to each industry, to ascertain the demand for various kinds of jobs and the skills expected in each of these jobs. The SSCs recruit and monitor private sector agencies called **Assessment Agencies (AA)**, which are responsible for conducting assessments of trainees and reporting the results thereof to the SSCs. The **Assessment Partners (AP)**

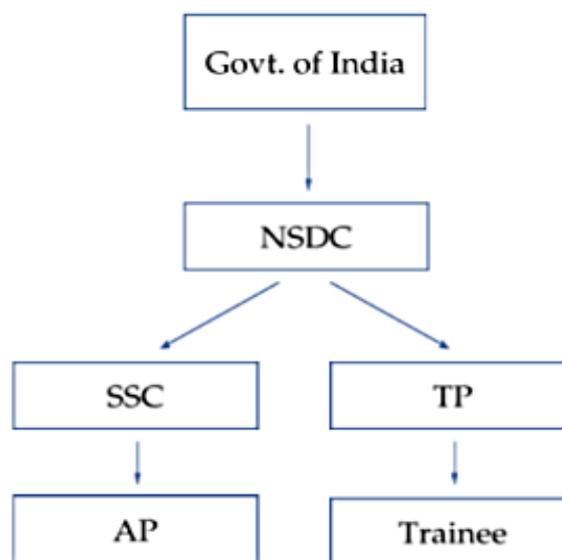
²⁶ National Skill Development Corporation (NSDC). <http://www.nsdcindia.org/>.

²⁷ Ministry of Skill Development & Entrepreneurship.

<http://www.skilldevelopment.gov.in/ssc.html>.

empanelled by **Security Skill Council (SSC)** would conduct the assessment of the trainees. The **NSDC** would receive funds from the government and pay the incentive rewards to the eligible trainees who passed the assessments. Figure 1 represents the governance structure of the PMKVY.

Figure 1



The following section describes the detailed responsibilities of each implementation agency, and the implementation choices they must make.

(1) National Skill Development Corporation (NSDC)

The NSDC is a non-profit, public-private partnership company set up by

Ministry of Finance in 2008. The organisation has a layered decision making structure comprising of the National Skill Development Fund (NSDF), The Board of Directors, Board Sub-committees, and the Executive Council. The NSDF is a trust which receives contributions from the government, bilateral and multilateral agencies and donors; acting as a repository of NSDC's funds. The Board of directors has 6 government nominees and 9 are from private sector, thereby enabling private sector to influence the policy from within the NSDC²⁸.

The PMKVY designates the NSDC as the implementing agency of the government and the nodal organization for engaging with the private sector. In practice, this means that the NSDC's responsibilities include:

Strategic Functions

- Working with the industry to create a registry of skills and a skills qualification framework, through the Sector Skill Council
- Aggressive promotion of the need for job skills training, policies made by the government in this regard, to both people entering the workforce and the industry

²⁸ *Board of Directors*. National Skill Development Corporation. Accessed December 11, 2016. <http://www.nsdcindia.org/our-board-0>

Financing Functions

- Receiving funds from the Government of India and transferring the incentive to eligible trainees after verification of their biometric data
- Providing post training support to special categories of trainees such as those from economically weak backgrounds, physically disabled trainees, women, trainees from special areas like tribal zones etc. in the form of post placement financial assistance, conveyance subsidy, travel and boarding assistance etc.

Administrative Functions

- Empanelling and monitoring the competence, capacity of skills training partners
- Allocating trainee targets to accredited and eligible training partners and periodically review these targets

Monitoring Functions

- Continuous monitoring of training partners, assessment agencies and sector skill councils by way of reviewing performance indicators and self-audit reports filed by these agencies, periodic audits and inspections, surprise visits
- Maintaining the Skill Development Management System (SDMS) – a central, national level repository of the skills training ecosystem which includes the performance data of all the implementing agencies

- Periodic review of the policy design by the steering committee, including review of process manuals and operating procedures

(2) Sector Skill Councils (SSC)

Sector Skill Councils are autonomous bodies that represent each industry and are responsible for estimating the demand for skilled labour in the future, developing a competency framework that establishes skills requirements, grading/ranking of skills in order of complexity and prescribing minimum eligibility criteria for the successful completion of the assessment. The skills requirements are called **National Occupational Standards (NOS)** and these NOS, in turn, are combined to form various modules of skills training relevant to job roles, and these modules are called **Qualification Packs (QPs)**²⁹. Currently, there are 32 established SSCs such as the Retail SSC, IT/ITeS SSC, BFSI SSC, Power SSC, Iron & Steel SSC, Plumbing SSC etc., with proposals for 6 more SSCs under consideration by the NSDC.

(3) Training Partners (TP)

The Training Partners are the chief implementing agents under the PMKVY, responsible for managing the skills certification process. In practice, this involves a

²⁹ *QP and NOS*. Ministry of Skill Development and Entrepreneurship. Accessed

December 11, 2016. <http://www.skilldevelopment.gov.in/qp&nos.html>

variety of actions that include:

- Securing (owning/ leasing) and maintaining training centres in which skills training will be conducted
- Acquiring and maintaining the necessary infrastructure for training
- Promoting the scheme and recruiting trainees
- Collecting required information, documentation and verification of trainee information (such as Aadhaar Number, PAN Card, Bank Account etc.), including assistance in obtaining documentation for the trainee
- Developing curriculum and creating content in line with the competency framework established by the SSC
- Hiring and training staff, trainers who will conduct the training sessions
- Monitoring training and tracking performance of trainees, helping them prepare for the assessments
- Certification of trainees after assessment is completed
- Payment of incentive to the trainees who have successfully completed the skills training after verification of biometric data
- Recruitment and placement support for trainees who have successfully completed the job skills training

Since the training partners make key implementation choices, their capacity and competence to implement the policy is critical to the success of the PMKVY. To

ensure that the right private agencies are selected as training partners, the government employs a two-step selection process.

The first, is Accreditation, which is a process of empanelling private agencies as implementation partners. In this step, the focus is on whether the training partner has the necessary physical and information technology infrastructure to impart skills training. The private agency makes an application and pays an accreditation fee. The application contains operational and financial details about the private agency, its management, the proposed location(s) of the training centre, the facilities therein (such as number of computers/laptops, chairs, air conditioning facility, CCTV camera, number of machinery/ instruments/ workshop space etc.), proximity to the nearest bus stand or train station etc. The application also includes a self-verification segment in which the private agency uploads photographs of all infrastructure and facilities in the centre and geotags the location of the centre. The NSDC reviews this application, verifies the information contained in it and sends an inspection team to conduct on site verification of facilities in training centres. This process typically takes between 40 to 50 days, after the application has been submitted. It is important to point out that, accreditation is for each *training centre* and if a training partner has more than one training centre, then each centre needs to be accredited. Once a centre has been accredited, the accreditation is valid for a period of one year and it is the responsibility of the training partner to keep its accreditation status valid.

The second step is Affiliation, which is a process of formally associating an accredited training partner with their respective Sector Skill Councils, to impart skills training. The process of affiliation means that a training partner will now impart skills training in the manner specified by, and according to the rules, regulations prescribed by the SSC. The training partner is affiliated for each *job role*. This means that if a training partner intends to impart skills training for multiple job roles across multiple sectors, then it must get affiliated to each of those job roles, with their respective SSCs. Training partners have a time limit of 6 months to apply for affiliation, after they have been accredited and delay beyond 6 months requires them to get re-accredited. Once the accredited training partner makes an online application, the affiliation request is received by the SSC and the affiliation is granted within 10 days. A training partner cannot begin skills training unless they have completed both the accreditation and affiliation process.

Once a training partner has been accredited and affiliated, they are ranked in five categories - from 1 Star to 5 Star, based on the scores they received, during the accreditation and affiliation process. Based on their ranking, the NSDC then allocates targets (number of individuals to be trained) to each training partner. Target allocation is based on a formula that considers among other factor, the geographic location of the training centre, the number of classrooms available for each job role,

number of hours the centre operates in a day and number of batches of training in a day. Initially, the targets are set for a period of 3 months and at the full capacity of a training centre, based on self-declared information that is verified by the onsite inspection team. From then on, based on monthly information and reports collected online from the training partner, the NSDC may review and revise the targets for each training centre when it deems fit.

To incentivise private sector participation in applying to be training partners for job skills training, the PMKVY offers monetary rewards that subsidise part of the costs of training to the training partner. The incentive is called ‘base cost of training’ and is paid as laid out in Table 4 below³⁰:

Table 4

Skill Levels	Base Cost per student per hour	
	INR	(USD)
1 & 2	28.90	(0.43)
3 & 4	34.70	(0.51)
5 & 6	40.40	(0.60)

Source: PMKVY Guidelines 2016-2020)

³⁰ Ministry of Skill Development & Entrepreneurship. *PMKVY Guidelines (2016-2020)*.

The cost subsidy paid to the training partner is linked to the number of students enrolled, number of hours training attended and number of students recruited, and is paid in 3 tranches, as outlined in Table 5³¹:

Table 5

Tranche	Percentage of subsidy paid	When?
I	30%	On commencement of the training batch against validated candidates
II	50%	On successful certification of the trainees
III	20%	On recruitment of students

Source: PMKVY Guidelines 2016-2020)

The training partners are also required to host an information session (**Kaushal Mela**) and a career fair (**Rozgar Mela**), once every six months, where they provide information about career opportunities to the trainees and invite potential recruiters to interact with the trainees. To encourage them to do so, the NSDC provides a monetary incentive of INR 20,000 (USD 300) per Mela organized.

(4) Assessment Agencies and Certification Agencies

Assessment Agencies (AAs) are private sector organizations that conduct

³¹ Ibid., p.48

assessments of the trainees under PMKVY, after they have completed their skills training. In practice, the responsibilities of assessment agencies include:

- Designing various forms of assessments that test the skills of the trainees against the competency framework developed by the Sector Skill Councils
- Developing and maintaining a database of assessment questions/ instructions for both theoretical and practical assessment of skills training
- Recruiting and maintaining an active pool of assessors (examiners) who can administer the assessment
- Conducting the skills training assessment at the training centre
- Reviewing, compiling and reporting the results of the assessment to the Sector Skills Council and the training partners
- Collecting feedback about the skills training, from the trainees and reporting it to the Sector Skills Council

Within 5 days of the commencement of skills training, the SSC randomly allots an assessment agency to each batch of trainees under a training provider, and decides on the date of assessment. The assessment agency will then allocate the required number of assessors to conduct the assessment and manage logistics at their own cost.

To ensure uniformity, consistency and comparability of training outcomes, the

assessment will be made per guidelines framed by the respective SSCs. In Table 6, the minimum grading criteria for assessments has been prescribed, to determine whether a trainee has successfully passed an assessment exam or not³².

Table 6

Skill Level	Passing Score for Technical skills [As a % of total score of the exam]	Passing Score for Non-Technical skills As a % of total score of the exam]
1, 2 & 3	50%	50%
4 & Above	70%	70%

Source: PMKVY Guidelines 2016-2020)

The above criteria are only the minimum criteria prescribed by the policy and respective SSCs can increase these acceptable passing scores or impose additional criteria for specific job roles. These modified criteria will be applicable to all training providers providing training for those specific job roles and binding on all trainees undergoing training.

Assessment agencies are empanelled by Sector Skill Councils and the criteria

³² Ministry of Skill Development & Entrepreneurship, Govt. of India & National Skill Development Corporation. *Guidelines for Accreditation, Affiliation and Continuous Monitoring of Training Centres for the Skill Ecosystem*.2016.

for selection are determined by the respective SSCs, but broadly include assessor profile, capacity to conduct technology enabled assessments, safety and security of information systems, past performance of the assessment agencies etc. To be eligible to be empanelled as an assessment agency, every employee of the agency who will act as an assessor, is required to have an Aadhaar number and photo ID proof at the time of assessment³³.

To prevent a conflict of interest, the same private agency cannot be both a training partner and an assessment agency for job roles that belong to the same Sector Skill Council. This ensures that the same agency does not impart skills training and conduct assessments, reducing the likelihood of fraudulent behaviour and malpractices.

The primary incentive to assessment agencies are the assessment fees paid by the trainees, collected by the training partners and remitted to the Sector Skills Council on the first day of the commencement of the skills training. Once the assessment is complete and the grades have been reported to the training partner, the SSC remits the assessment fees to the assessment agencies. The assessment fees prescribed per candidate are INR 800 (USD 12) for skills training in the

³³ Ministry of Skill Development & Entrepreneurship. *PMKVY Guidelines (2016-2020)*.

manufacturing sector and INR 600 (USD 9) for skills training in the service sector³⁴. To motivate the assessment agencies to report the results on time, both the training partner and the assessment agencies are penalized at the rate of 1% of the training cost subsidy and assessment fees respectively, for each day of delay in conducting or reporting the results of assessments. Continuous monitoring of the assessment agencies is carried out in the form of self-verified monthly reports, surprise visits by a NSDC inspection team, regular audits etc.

7.0 Potential Costs & Benefits Analysis

The budgetary costs of the PMKVY are estimated at INR 12,000 crores (USD 1.8 billion), to be spent over 4 years between 2016 and 2020. While the incentive is fixed in nominal terms, there is strong reason to suspect that nominal costs to the training providers of the training programs, especially in urban areas tend to increase year on year. In Bangalore and Mumbai, training providers have faced an average increase in training costs of around 15% - 20% over the past 3 years³⁵, with most of this coming from high cost of renting premises, cost of utilities– especially internet and electricity, trainer salaries and outreach. The government might have to keep pace with the increase in training costs in real terms and increase the incentive, which might increase the budgetary costs of the policy.

³⁴ Ibid. p.26

³⁵ ISTAR, TeamLease and IL&FS. Personal Communication with author. 2016.

In the long run, if people must migrate from one sector to another, or from one region to another either in pursuit of their employment, or because of skills training, the policy might also involve social costs such as the costs of migration, adjustment, psychological costs of staying away from family and so on. It is also possible that the increase in supply of skilled labour might cause some industries and firms to expand at the expense of other industries and firms that use low skilled labour or inferior technologies, competing them out of the market. In theory, job skills training may either increase or decrease the wages of unskilled labour, depending in whether such unskilled labour is a complement or a substitute to skilled labour. If they are complements, then training could possibly increase the wages of unskilled labour, yielding economic and social gains. However, if they are substitutes, then training could impose economic and social costs by reducing the wages of unskilled labour.

The primary benefit of the PMKVY to trainees is increased wages, which might reflect the wage premium paid by the industry in recognition of their increased stock of human capital, which the policy describes as 'employability'. People who have discontinued school or college might not have had the opportunity to develop specialised skills or knowledge required by the industry. Likewise, those who are unemployed might either not possess these skills or might possess skills no

longer required by the industry. By obtaining skills training under the PMKVY, these individuals now possess the skills demanded by the industry and bear a certification that validates their employability, which might increase the possibility of their recruitment, possibly commanding higher wages. Workers with skills training typically earn more than workers without training. A survey of manufacturing firms in Zimbabwe, Kenya, and Zambia show that the wages of the trained workers in the manufacturing firms are substantially higher than the workers without training in specific skills³⁶. However, the increase in wages might not be uniform across job roles and sectors and might differ by the type of skills, quality and relevance of skills and geography, across rural and urban areas.

Various studies conducted by the World Bank in Sub-Saharan Africa confirm that the industry-specific trainings of employees increase the productivity of the firm³⁷. Skilled workers are more productive, efficient and effective compared to workers who are not skilled and require relatively lesser supervision and direction. This has direct impact on the costs of training employees. The World Business Environment survey conducted by the World Bank in 80 countries finds that

³⁶ Johanson, Richard K., and Arvil V.Adams. Skills Development in Sub-Saharan Africa. Washington, D.C.: World Bank, 2004.

³⁷ Ibid

employers face high costs of training their employees in developing countries and that 70% of the firms surveyed provided some form of training to their new employees³⁸. The study further reports that Indian companies incur huge costs to train their new graduates as 80% of them are considered unemployable³⁹. Currently, Indian firms spend 5%-10% of their budgets on employee training, which aggregates to \$22⁴⁰ billion annually, at the country level. The PMKVY scheme could potentially contribute to a decrease in these training costs by creating a pool of skilled labour that are job ready, allowing the firms to use these savings for expanding production or investing in new technologies, which in turn can spur economic growth and generate further demand for both high and low skilled labour. If this is the case, then the PMKVY will expand the number of workers being trained in the economy, with

³⁸ Batra, Geeta, and Andrew H.W. Stone. "Investment Climate, Capabilities and Firm Performance: Evidence from the World Business Environment Survey." DFID-WB Collaboration on Knowledge and Skills in the New Economy working paper. Washington, D.C.: World Bank, 2004.

³⁹ ICFE Monitor. *India's employability challenge*. 2015.

<http://monitor.icef.com/2015/10/indias-employability-challenge/>

⁴⁰ "2015 TRAINING INDUSTRY REPORT." Training Magazine. 2016. Accessed December 07, 2016. <https://trainingmag.com/trgmag-article/2015-training-industry-report>.

the benefits of skills training shared between the firm and the workers. As explained in the preceding paragraphs, the firms gain from increases in productivity while the workers gain from an increase in wages. However, the increase in wages will be such that the workers earn higher wages relative to unskilled workers, but not so much that the increase eliminates the productivity gains of the employers.

However, it is also possible that the PMKVY merely crowds out private sector training that would have anyway been provided by the firms to its workers. If so, the workers who undergo training benefit from increased wages and the firms also benefit from increases in productivity. But, unless it is the case that the workers trained under the policy are the same workers who might have anyway been trained by the employers, the expansion in trainings under the program would be offset by fewer workers getting training from the firms themselves.

PMKVY's success might require that the training programs are taken up by many people, especially women and the socio-economically disadvantaged. Further, high quality training programs must be offered in a wide variety of trades and professions, catering to the skills required by the industry. We further expect the increased human capital and increased wages to contribute to higher levels of savings and investments in productive assets, health, education, and better living conditions. This might eventually lead to higher economic growth in the country,

reduction in poverty, reduction in inequality and improved human development outcomes for society.

8.0 Discussion of Implementation Outcomes, Updates & Impact

The following section of the paper sets out to achieve two main goals. The first is to brainstorm about the concerns we might have regarding the policy's implementation. This requires us to ask – Who are all the key decision makers involved in the implementation of the PMKVY? What kinds of choices do they have the latitude to make, which might affect the quality of implementation? Does the governance structure of the policy enable the decision makers to take these decisions in a manner that the desired outcomes of the policy are achieved? If not, where are the key gaps and what might possibly be done to address these gaps? The second goal is to examine what we do and do not yet know about the implementation outcomes, drawing in part on reports and in part on anecdotal data from my field visits to India during the summer and winter of 2016.

Before discussing the implementation outcomes, it is useful to think through the logical chain of what must go right for the PMKVY to achieve its desired outcomes. At the outset, the policy must incentivize the private sector training firms to come forward and offer skills training. These training partners must offer high quality skills training in relevant skills and at affordable prices so that many potential trainees can take up training. For this to be true, the training partners must

make the necessary investments in infrastructure, hire high quality trainers, and operate cost efficiently. Further, the government appointed Sector Skill Councils must have done a good job of consulting the industry and coming up with a well-defined list of jobs intended to be created by the industry and specifying the various skills associated with each job role. If this is true, then the industry must recognise the skills certification awarded to the trainees and hire them in jobs that make use of the trainees' skills and bid up their wages relative to unskilled labour. This wage premium would then encourage many people to take up skills training and enter the workforce, as intended by the policy.

In the following paragraphs, I lay out and discuss the various challenges in the implementation outcomes and governance structure of the policy that might prevent the PMKVY from achieving its desired outcomes.

8.1 Inadequate Organizational Capacity of the NSDC

The NSDC plays a critical role in the implementation of the PMKVY. On the one hand, it acts as the agent of the government and makes incentive payments to trainees and cost subsidy payments to training providers. On the other hand, it is responsible for administrative work that includes demand estimation, target allocation, contracting with training providers, liaising with sector skill councils, monitoring the work of training providers and so on. The scale of this effort calls

into question NSDC's ability to execute the various functions outlined above. This policy is implemented across the 29 states of India that contain 687 districts, where 150 languages are spoken, aiming to train 10 million youth in 416 job roles that span across 32 different industries. This involves coordinating with multiple policy implementation partners, local stakeholders and demands a decentralised organization of the NSDC, which allows it the flexibility to cater to these differences yet monitor effectively.

At present, the NSDC is an extremely lean and centralised organization. There is only one physical office of the NSDC, based out of New Delhi, India's capital city. It is headed by a 14-member board of directors⁴¹ and comprises of an executive council, and board sub committees, members of whom are appointed on a contractual basis, for terms of 2-3 years that are renewable and at any given time, there are no more than 50 - 75 employees. Further, the NSDC is staffed by mid-career and senior bureaucrats on deputation from the government and technocrats, who have served in key positions in both the public and private sector in their previous careers. A large part of the NSDC's workforce are its short-term consultants and interns, who all work out of the New Delhi office. The NSDC does not have any staff stationed at the state level across the country and all operations are carried out of the

⁴¹ "Board of Directors." Board of Directors. <http://www.nsdcindia.org/our-board-0>.

central office. If we considered that the NSDC staff visit even 50% of the training centres in a year to carry out surprise verification visits or other field visits for monitoring/ selecting training partners, we are looking at around 6000 training centres, which is around 80 – 100 training centre visits a year. It is unlikely that these visits are evenly distributed around the year, but even if they were, then the NSDC staff might be travelling every third day just to monitor performance of its training centres, and this would only increase as the number of training centres increase, making it infeasible for the staff to perform these duties. This does not factor in other administrative duties such as working with the SSCs to create more job roles, skills requirements, considering creation of new SSCs and the internal administration of the NSDC itself. This centralised and understaffed structure might impair NSDC's organizational capacity to implement such a complex and massive policy at the scale intended. Creating another tier of NSDC administration at the state level or hiring more staff might ease the workload of the NSDC and enable it to implement the PMKVY more effectively.

8.2 Issues with training partner eligibility criteria

The PMKVY uses the '**Guidelines for Accreditation, Affiliation & Continuous Monitoring of Training Centres for the Skills Ecosystem**' to select and monitor training partners. These guidelines prescribe the minimum criteria for selecting training partners, and can be grouped into two buckets – the availability &

quality of physical infrastructure and availability & quality of training content and trainers. While these guidelines acknowledge that different trades/ sectors might have different needs and the respective SSCs might be the best judges of what the minimum requirements are, the governance structure of the policy might stifle this flexibility to some extent. The guidelines prescribe various minimum requirements such as classroom & lab sizes (varying from 300sqft – 1000sqft), air conditioned classrooms, CCTV cameras, colour print outs of training manuals and teaching notes for every student, biometric attendance systems⁴². Further, the selection scoring system also grants higher scores to training partners whose centres are closer to public transit systems, who have their centres in standalone buildings instead of being part of commercial complexes and so forth. While the goal of requiring such significant investment is to discourage fly by night operators and hold training partners accountable to provide high quality training, this might burden some training providers more than others, especially those who intend to operate in semi urban or rural areas. There is significant difference in the availability and quality of support services in urban and rural India, especially in electricity, internet speeds and bandwidth, water supply etc. Training providers might therefore be incentivised to set up training centres only in urban areas, which might or might not

⁴² Ministry of Skill Development & Entrepreneurship, Govt. of India & National Skill Development Corporation. *PMKVY Guidelines (2016-2020)*. 2016.

be a bad idea, depending on the skills and industries in consideration. Conversely, this would also mean that even those training providers who might be willing to set up training centres in semi urban or rural areas might not be able to do so, because of stringent infrastructure requirements. The implication of this is that the PMKVY skills training is taken up by individuals who live in or around urban areas and those who reside in rural areas, which is where most of India's poorest live, might have to incur costs in travelling to the urban areas to obtain training. And it might be the case that even just the associated costs are high enough for individuals who live far away from urban areas or in rural areas to not take up skills training. This throws up an interesting question for policy makers – How might this policy (or potentially another version of this policy) be designed to offer high quality skills training to individuals in rural and semi-rural areas? And more importantly, how might this policy incentivise and support a greater number of private agencies to become training partners, even if they might not have the required financial ability to invest upfront in infrastructure? Currently, there are around 267 training partners catering to the needs of 10 million people through 12,187 centres. How might more training partners and centres be set up in a way that doesn't constrain potential training providers because of high upfront costs of infrastructure?

8.3 Demand Estimation & Target Allocation

NSDC allocates targets to training partners – in terms of number of students

to be trained in specific skills, in specific geographies. To do so, it must be familiar with the demand for skills training, supply of eligible trainees who can take up training, and shortage or surplus of skilled labour across various states, industries and job roles. All of NSDC's work to this end is carried out by external consultants such as Deloitte, Ernst & Young, and KPMG who are contracted with, to carry out detailed field studies and publish '**Skill Gap Reports**' for each state. The selection criteria and manner of shortlisting these firms is not public information. The Skill Gap reports are based on primary and secondary research including interviews, focus group discussions, review of micro and macro-economic trends and approximations in the case of the unorganized sector; but the NSDC does not have a process to approve or review the methodology of these Skill Gap reports and neither is the remuneration paid to the consultants linked to the quantity or quality of information contained in the report. This might potentially pose two problems– first, there is no consistency in the Skill Gap Reports across states as they are prepared by different consulting firms each following their own methodology, making comparison of estimated demand difficult and second, there is no process to verify or validate the information contained in these reports. The implication of this is that potentially, the reliance of NSDC on consultants can result in the skilling of trainees in job roles and industries in which truly, there might be no demand in the future or the demand might exist elsewhere but not in industries and places indicated in the report compiled by the consultants.

8.4 Quality of Skills Training & Industry Wage Premiums

An important outcome of the policy that merits attention is the quality of skills training. Do these trainings truly prepare and equip a trainee to meet the requirements of the job roles for which they are being trained? The PMKVY achieves this in two ways. First, is that the trainees are required to pass an assessment exam administered by an independent agency, the Assessment Agency and receive their incentive only when they pass the assessments. Further, 50% of the payments to the training providers is linked to the assessment outcomes of the trainees. In this manner, through policy design, the government holds the training partner accountable for the quality of the training provided and enables students also to hold the training partners accountable.

Yet another way through which quality might be sustained is by diffusion of information – trainees must have a mechanism by which they can be aware of the costs, assessment outcomes, placement outcomes and qualitative feedback on the training programs offered by various training partners. This creates transparency, allows trainees to choose between training partners, which ultimately motivates training providers to offer high quality training programs. This information can either be required to be published by the training partners themselves or the government could potentially publish it. Currently, neither of this is practised. At the government's end, the NSDC only has a state and city wise list of training partners. This list, however, is incomplete – all the training centres under a training

partner, all the courses offered are not updated on the website. Further, there are no details about the costs involved, or performance outcomes or qualitative feedback. This information is neither contained in the websites of the training partners. In the absence of information based on which trainees could potentially evaluate training partners on qualitative aspects, there might be room for training providers who provide poor quality trainings, to exist within the ecosystem. Mechanisms for increased availability of information and transparency as part of the PMKVY policy design might be helpful in weeding out such training providers sooner.

A third way of assessing the quality of skills training would be the increase in wages that workers would experience because of skills training. As discussed earlier in the simple model of job skills training, if it were indeed true that the training bestowed employees with valuable skills and there are no significant information barriers, then the workers should experience an increase in wages. While there has been no study of the impact of skills training under this program, on the wages earned by trainees, anecdotal evidence seems to suggest that employers are unwilling to pay higher wages for employees with skills training, suggesting that they do not perceive the skills gained through the program as valuable.

In an interview to the Outlook magazine in 2015, senior HR executives of Ford Auto, Café Coffee Day and McDonald's admitted that they do not see the need

to give a wage premium. Ford went on record saying, *“Most of the skills we need are learnt on the job, so we can’t pay a higher wage for skilled labour. Also, cheap labour is the reason we attract business in India. If we increase wages, we lose out on the market. Hence, industries hire contract labour.”*⁴³ Sanjeev Duggal, CEO of Centum Learning, one of the largest training partners who have trained nearly 600,000 trainees concurs with this view and admits that most of the trainees are not placed at higher salaries, *“The industry isn’t willing yet to pay a premium for skilled labour.”*⁴⁴ How do we make sense of these anecdotes, which are counterintuitive to the theory of job skills training? One possible reason might be that these training programs do not bestow workers with skills that are valued by employers. Another reason might be that while these training programs enable workers to gain some skills, they still do not allow employer firms to skip their own training i.e. firms need to continue making investments in training their employees even though they might have already undergone some sort of training under the policy and acquired some skills which may not be valuable in a way that is useful to the employers. A third reason might possibly be barriers to information flow or reputation issues, which cause employer firms not to value training skills program undertaken by the government.

⁴³ Rangan, Pavithra. "Trainer Takes It All." [Http://www.outlookindia.com/](http://www.outlookindia.com/). August 10, 2015. Accessed February 13, 2017.

<http://www.outlookindia.com/magazine/story/trainer-takes-it-all/294975>.

⁴⁴ Ibid

Prerit Rana, CEO of Agrasar Foundation, which operates three vocational training centres and two bridge-schools for dropouts near Gurgaon, New Delhi says his experience with placing candidates in jobs is no different. *“Industry says that they will train the workers on the shop floor. But they are not willing to pay even INR 500 a month more than the routine starting wage to a worker trained with National Skill Development Corporation’s certification.”*⁴⁵ Agrasar Foundation has trained 4,000 individuals in the last 2 years, placed around 80% of them.

Experiences of trainees seem to mirror the sentiments of the industry. Rachna, a 28-year-old woman who underwent training as an accessory fitter, under the PMKVY scheme earns a wage of INR 6,600 a month, working in the factory of an automobile giant on the outskirts of Bangalore. 2 years ago, she made INR 5,800 a month. She says, *“There is no value of education or training. Students of class X, XII, or graduates, all get same wages here, everyone is a casual worker on a temporary contract.”*⁴⁶ When asked if she found the training useful, *“The training was nice. I learnt new things. But the manager in my floor doesn’t care for it. Whether we had the certificate or not,*

⁴⁵ Yadav, Anumeha. "Why Modi's new Skill India mission will mean nothing for workers." Scroll.in. July 18, 2015. Accessed February 17, 2017.

[https://scroll.in/article/741960/why-modis-new-skill-india-mission-will-mean-nothing-for-workers.](https://scroll.in/article/741960/why-modis-new-skill-india-mission-will-mean-nothing-for-workers)

⁴⁶ Rachna (PMKVY Trainee) in discussion with the author, December 2016.

we were all trained for a week in the factory and we are all paid the same salary.”⁴⁷ Sridhar, who works as a security guard for a corporate house had a similar story to tell. He has been working here for 13 years and recently got certified under the PMKVY, but continues to be paid the same wages. “What difference does a paper make to a watchman, sir”⁴⁸, he quips. Giridhar, 31, who works as a retail sales associate makes INR 20,000 a month. Although high relative to wages in the informal sector, he shared that he did not earn any wage increases after the training. “I joined this mall after dropping out of school 6 years ago. Business has been good and I have bought a bike and rented a bigger house for my family. They said I’ll get paid more if I do my training course. I paid INR 12000 for it but I continue to get the same salary.”⁴⁹

In stark contrast to these tales, trainees in the IT/ IT support services and the banking/ financial institutions seem to experience real, significant increases in their wages. Kamal, who works as a data entry operator at a software exporting major makes INR 30,000 a month, which in his words is *“something that I can never dream of with only a 12th class qualification. The training has given me skills and confidence. I am planning to bring my brother from our village and get him certified too.”*⁵⁰

⁴⁷ Ibid

⁴⁸ Sridhar (PMKVY Trainee) in conversation with the author, December 2016.

⁴⁹ Giridhar (PMKVY Trainee) in conversation with the author, December 2016.

⁵⁰ Kamal (PMKVY Trainee) in conversation with the author, December 2016.

Admittedly, such responses are highly stylised and subjective impressions. Nonetheless, they capture the sentiments and receptiveness of the industry to the PMKVY and the experiences of trainees after their training. This offers us a segue into many critical research questions – Should the policy be geared towards specific industries? Specific kinds of jobs? Or perhaps in specific geographies? Theory suggests that firms in a competitive environment will bid up the wages of skilled labour but what might be the reasons why the industry is not willing to pay wage premiums to skilled workers trained under the PMKVY? One possibility might be that the skills certification does not truly signal the skills and ability of the workers and it might have to do with the quality of training provided by the training partners. Another possibility might be that while the policy is geared towards general skills, the industries who are not paying wage premiums might require specific skills sets, and they prefer training the workers in house even if they have obtained general skills training. The unwillingness to pay a wage premium might not be universal and we might need disaggregated data to isolate and understand this reluctance. While we might theorise that skills training increases the wages of workers, we need further empirical research to estimate the magnitude of increase in wages and the various patterns in which wages increase across job roles, sectors and regions.

8.5 Improving Incentives for Recruitment

An important dimension in which well-being of an individual is improved because of skills training is by way of employment and higher wages. The PMKVY recognises this and encourages training partners to actively seek out opportunities and place the trainees. As part of the terms of engagement, the training partner is required to organize a **Kaushal Mela** (information session) and a **Rozgar Mela** (career fair) once every six months, where they provide information about career opportunities to the trainees and invite potential recruiters to interact with the trainees⁵¹. The NSDC incentivises the training partners to conduct these events with an incentive of INR 20,000 (USD 300) per Mela organized. The objective behind such fairs is to provide access to information on training programs under the PMKVY and recruitment opportunities, especially in rural and semi urban areas. However, the guidelines on these career fairs and information sessions mandatorily require the presence of legislators and senior bureaucrats.

“The Training Partners must invite one or more Member of Parliament (MP), Member of Legislative Assembly (MLA), District Magistrate (DM), Block Development Officer (BDO), Sub Divisional Magistrate (SDM), District Labour Officer (DLO), Municipal Chairman, or Chief Judicial Magistrate

⁵¹ Ministry of Skill Development & Entrepreneurship, Govt. of India & National Skill Development Corporation. *PMKVY Guidelines (2016-2020)*. 2016.

(CJM) to ensure widest possible reach and gain visibility.⁵²”

Understandably, the goal of having these dignitaries preside over Kaushal and Rozgar Melas might be to gain traction and ensure that information is disseminated as widely as possible. However, given the large number of Melas conducted by various training partners in each region, it is not feasible for these officials to attend each Mela. Further, since they tend to have busy schedules, legislators and bureaucrats often reschedule their availability, and sometimes do not turn up at events. This means that training partners might have to often reschedule their recruitment events, making it inconvenient for both recruiters and trainees to attend, and recruiters might not be willing to reschedule often. This affects the recruitment of trainees when certain employers back out after the Mela has been rescheduled.

Bodhi Skills Academy, a rural skills training firm in Tirunelveli, Tamil Nadu has had to reschedule a Rozgar Mela (career fair) thrice within a span of a month. *“The MPs and MLAs are too busy to come to our town. The Local officials ask for big gifts and 5-star food but we get only 20,000 rupees and we need to manage all our expenses in that”*,⁵³ laments CEO Ashweetha. When asked how such frequent rescheduling affects

⁵² Ibid.

⁵³ Shetty, Ashweetha. Personal Communication. October 2016.

students, “As it is companies are hesitant to come to such small Melas in towns. After great difficulty, we find 5-6 companies who agree to come. But when we have to reschedule these Melas, they get busy and they drop out. All of this affects our students.”⁵⁴

In bigger cities with greater access, one might expect officials are more willing to show up but the situation is no different. 4 skill development firms I interviewed in Bangalore in December 2016 admitted having given ‘gifts’ to local officials to incentivize them to show up for Melas. It appears that while the intention of the policymakers to mandate the presence of legislators and bureaucrats to preside over Melas is sensible, in practice, it seems to slow down or deter training partners from proactively conducting Kaushal and Rozgar Melas, ultimately frustrating the efforts of training partners and recruiters.

The policy also links 20% of the cost subsidy payment to the training partner on the recruitment outcomes of trainees. If a batch of students are not placed, then the training partner forfeits that portion of the cost subsidy. A batch of trainees are considered placed when at least 50% - 69% of the trainees are obtain minimum wage employment within three months of the conclusion of a training program.

An important question to raise here is whether the policy’s governance

⁵⁴ Ibid

structure underscores the importance of recruitment in the process of skills training? Only 20% of the training partner's payments are linked to the recruitment outcomes of their students. Further, when they are re-accredited annually, only 30% of the score is weighted towards performance outcomes (which includes enrolment, assessment and placement) while a significant weight is given to infrastructure (50%) and compliance reports (20%). Purely based on the weightages given, it is unclear whether recruitment is driven by this policy design.

But, at the same time, linking a large part of the training provider's payments to a process over which they have no control over might disincentivize them from offering training programs. It is therefore an important question to consider: How might the PMKVY ensure not just quality skills training but also see through the last mile effort of recruitment of the trainees? This question becomes pertinent especially considering the past record on placements. Across various predecessor policies to the PMKVY, since 2009, around 9.2 million trainees have completed skills training programs, but only 3.6 million or 40% of the trainees have been placed – clearly, placing trainees has not been an easy task. We do not know what the definition of 'being placed' was, in these earlier policies or how the data was collected, as there is no information available. It might be the case that poor data collection or trainee tracking might have underestimated the actual number of people placed. However, these statistics emphasise the importance of recruitment to the process of skills

training and the need for robust data collection, monitoring and evaluation processes to be included in the PMKVY, going forward.

8.6 High Upfront Costs of Training Relative to Incentives

The need to finance the costs of the training upfront might put off potential trainees. Under the PMKVY, trainees bear the costs of the training upfront but are awarded the incentive by the government only upon completion of training and passing associated assessment exams. The prices that trainees pay for training programs are fixed by the training provider and the government does not regulate the prices or the pricing mechanisms. While the amount of incentive paid under the policy is linked to the trade/ sector and level of skill, the costs of training programs might differ based on other factors such as location of the training centre, size of the training centre and competition. For skills in the same job role and same sector, it is likely that training centres in urban areas and the city centre might charge lower fees than centres in rural areas and peripheries of the city. Likewise, training centres operating in markets with intense competition i.e. where other training centres operate in the vicinity might charge lower fees than training centres in markets where there are fewer competitors. Similarly, larger training providers who experience economies of scale might charge lower fees than smaller training providers. What this means for trainees is that while they face different costs of training depending on their location, they all receive the same incentives, making

the training programs relatively more expensive for some individuals than for others. Based on anecdotal data, we might suspect that this might be the case for workers training in skills such as computer programming, financial services or retail sales, and for workers in urban areas. While the policy is set up in a manner that offers the most incentives to the lowest cost training providers, the market determined pricing mechanism for training might still impose constraints on trainees.

Further, relative to the incentive offered, the costs of many courses are high, especially courses in skills that are likely to be used in urban areas and the service sector. Table 7 contains an illustrative list of the course fees across 3 training partners in Bangalore⁵⁵.

Table 7

Skills/ Job Role	ISTAR	IL&FS	TeamLease
Equities Analyst	18,000	15,000	16,000
Software Programmer	24,000	20,000	22,000
Hair Cutting	50,000	55,000	47,000

⁵⁵ Thilakan, Sarga, personal communication, November 11, 2016.

Retail Sales Associate	28,000	30,000	25,000
Sales Manager	17,000	19,000	19,000

Source: Author's personal communication

The trainees might also have to bear associated costs such as cost of travel, accommodation, meals and other personal expenses for the duration of the training. This might mean that the training courses are taken up by relatively well-off individuals and the upfront costs might exclude the poor from participating in this policy.

An important question to consider is whether the high costs of training might prohibit potential trainees from taking up training? We might reason that when faced with constraints, trainees might have to finance their costs of training either by borrowing, or selling assets or drawing down their savings. If that is the case, then potential trainees will be able to finance their costs of training and will not be put off by the need to bear the costs upfront. But this might also mean that only those trainees that have access to sources of credit, or have savings or assets to sell might finance their trainings costs, allowing relatively well-off individuals to take up training, leaving behind the poorest of the poor.

We might think of many sources from which potential trainees might

consider borrowing to finance their costs of training - informally from family, friends, local community moneylenders and formally, from financial institutions and the training institutes themselves, especially considering that the incentive payment promised by the government upon completion of training serves as a kind of collateral.

Of interest here, are the formal sources of borrowing. The Government of India has launched a 'Skill Loan Scheme' that offers credit to potential trainees who might be credit constrained. The scheme offers short term, collateral free loans from INR 5000 (USD 80) to INR 150,000 (USD 2200), repayable between 3 to 7 years, at an effective rate of interest between 9% to 13.5% p.a. compounded monthly. This is comparable with the cost of credit towards general education in India.

Alternatively, it is possible that the training providers might offer credit to potential trainees, especially up to the amount of incentive that is promised to the trainee upon completion of the training. If that is the case, then we might ask if they have the resources and incentives to do so. It is unclear whether training partners have the resources to offer credit to trainees by themselves. The NSDC does not gather sufficient financial information from the training partners to reasonably assess this. Relative to financial institutions, however, training partners have a stronger incentive to offer credit because they can get some repayment out of the

incentive payments made later to the trainees. Even so, we might suspect that they are willing to extend credit only to the extent of the incentive payment that is promised to the trainee from the government and not to the extent of the entire cost of the training program. However, as we have seen above, the costs of training programs can be significantly higher (INR 10,000 – INR 55,000 in the case of Bangalore, for instance) relative to the incentive payment (INR 5,000 - INR 12,500 depending on the sector and skill level), which implies that trainees would still have to incur these upfront costs, or borrow from elsewhere or sell any assets they might have, to finance the training.

Although the policy does not explicitly require the provision of credit from the training partners, it must be noted that some sector skill councils such as the Retail SSC, IT/ITeS SSC, Capital Goods SSC have created institutional arrangements with banks to lend credit, but the arrangement is valid for specific courses, training partners and cities, and such arrangements are not ubiquitous - more likely the exception than the norm as only 8 of the 32 SSCs have such tie ups.

Even though there exist alternative sources of credit available to trainees if they find the costs of training prohibitive, we might still be concerned whether potential trainees indeed take up the offer of credit and undertake training programs. There might be many reasons why they do not take up credit, including

existing debt burden, risk aversion, low expected returns on training relative to cost of credit, cultural preferences, access to institutions offering credit etc. As discussed earlier, we might also be concerned that only relatively well-off individuals take up training and the poorest of the poor would be left behind. This calls for further empirical research in this direction.

8.7 Delays in Payment of Incentives

One of the unexpected ways in which the current policy design imposes significant costs on trainees is by delaying the payment of incentives. Per the policy, trainees may receive it only if:

- They have successfully completed the training program and passed the associated assessments
- Their Aadhaar Card is authenticated and validated
- They have bank accounts and the details of which are uploaded by the training partners accurately onto the government approved payment database - SDMS (Skill Development Management System)
- The bank account of the trainees is KYC (Know Your Customer) compliant

The expectation of the policymakers is that the training partners undertake these logistics at the commencement of the training so that they are complete by the end of the course and the trainees may seamlessly be paid their incentive upon

completion of assessment. However, in practice, this expectation is far from met.

A critical juncture where this process gets disrupted is the authentication and validation of the Aadhaar card. Although an applicant is supposed to receive an Aadhaar card within 30 days of applying for one, it takes on average, 60 to 90 days to receive the card. At ISTAR, a training partner based out of Bangalore, 1200 Aadhaar applications were made between September and December 2016. Only 35% of them came within 30 days, 50% took beyond 45 days and 10% of them had to refile another application as the biometric details wouldn't get uploaded during the first attempt. Of these, around 200 cards were issued with incorrect and misspelled names, gender, age and addresses. Further, poor infrastructure and internet connectivity have resulted in poor quality capture of biometric data – both fingerprints and iris scans, which defies the purpose of preventing duplication⁶. Despite having been issued a card, cardholders are unable to link their bank accounts with the Aadhaar card due to 'biometric information mismatch' – particularly the fingerprints. This unduly affects those individuals who do not have a signature but use their thumbprints to transact with their banks. In a conversation

⁶ Yadav, Anumeha. "Rajasthan presses on with Aadhaar after fingerprint readers fail: We'll buy iris scanners." Scroll.in. April 09, 2016. Accessed February 17, 2017. <https://scroll.in/article/806243/rajasthan-presses-on-with-aadhaar-after-fingerprint-readers-fail-well-buy-iris-scanners>.

with the administrative managers of ISTAR, TeamLease and IL&FS, this seems a regular feature – between the 3 firms, in 2016 alone, nearly 3,500 Aadhaar cards could not be linked with bank accounts, delaying incentive payments to trainees⁵⁷. The motivation behind offering an incentive by the government is to encourage individuals to take up skills training under the PMKY and defray some of the costs involved. However, when incentive payments are delayed, they impose financial constraints on trainees and might deter other individuals from signing up for training, which might reduce the uptake of skills training programs.

As such, payments from the government linked to the Aadhaar card are not made without biometric information verification. As discussed above, this has resulted in huge delays in payments under various welfare schemes. Under the PMKVY, trainees reported to have experienced delays in payments anywhere between 2 – 8 months⁵⁸. However, in September 2016, the Supreme Court of India, in a landmark judgment, struck down the mandatory nature of the Aadhaar card and ruled that welfare benefits must not be denied to people merely because they do not have an Aadhaar card. Pursuant to this, to prevent delays in payments, all welfare payment operators were permitted a ‘reasonable’ number of ‘manual overrides’ each day i.e. they could disburse funds without verification of biometric data. In the

⁵⁷ Dasa, Bhavya & Girish, Prasad personal communication, December 20 & 21, 2016.

⁵⁸ Personal Communication, December 2016

context of the PMKVY, this would mean that the NSDC may either transfer the incentive to any bank account that is not Aadhaar linked (for those who have bank accounts), or make manual payments to the trainees in the form of money orders or demand drafts, and disburse it either by posting it to their residential addresses or through the training partners. While no rules have been framed in this regard yet, there is diversity in payment methods to trainees – some training partners have been sent the demand drafts physically while some others were asked to compile a list of bank accounts and send it to the NSDC. 7 large skills training firms who spoke off the record, admitted to this practice since October 2016.

This development is crucial to this analysis and raises important governance related questions. What might be the checks and balances against training partners creating ghost trainees and/ or ghost bank accounts and siphoning off the incentive payments from the government? The government of India has tabled the Aadhaar Act, 2016 in the parliament to circumvent the Supreme Court decision and make the Aadhaar Card mandatory, but the bill has not been discussed thus far. Until such a time there is a clarity on the Aadhaar issue, the incentive payments to trainees under the PMKVY face the risk of misuse or diversion and this might need immediate attention from the policy makers.

9.0 The Malaysian Experience

Job skills training policies have been conceived and implemented in various forms since the second half of the twentieth century. In emerging markets alone, there is a wealth of experience – including from Chile, Brazil, Colombia, Tunisia, Turkey, Singapore, Malaysia, and Indonesia--from which India stands to benefit. Admittedly, international experiences cannot be transplanted in *toto* across countries, but they offer valuable insights into the various mechanisms and governance structures that contribute to policy success. In the following section, I describe the experiences of Malaysia in implementing job skills training policies and discuss possible takeaways for India.

Industrialization was a major thrust of Malaysia's recovery plan from the recession of 1985-86. However, like India today, Malaysia too found itself in the throes of a labour market mismatch where employers complained about the lack of skills and education of their workforce, while policy makers sought to increase the supply of skilled labour to keep pace with its demand. Formal training was not widespread even though the economy was rapidly industrializing. Around 30% of firms provided no training whatsoever, around 50% provided informal training and only 20% firms provided formal training to their employees⁵⁹. Training also varied

⁵⁹ Gill, Indermit Singh, Fred Fluitman, Amit Dar, Washington World Bank DC, and International Labour Office, Geneva (Switzerland). 2000. *Vocational education*

across firm size - nearly all large firms provided some form of training while smaller firms did not. An employer survey by the World Bank revealed that while most firms do not train because of the low skill requirements of the relatively simple, standardized and mature technologies they use, many firms - especially the small and medium employers did not train because of high labour turnover, lack of knowledge about how to train, and limited resources for training.⁶⁰ To incentivize firms to offer skills training, the government of Malaysia implemented two skills training policies - the Double Deduction Incentive Training (DDIT) and the Human Resource Development Fund (HRDF).

9.1 Double Deduction Incentive Training (DDIT)

Under the DDIT scheme, employers who incurred expenditure on training their employees, either in-house or at private training institutes approved by the Malaysian Investment Development Authority (MIDA) were eligible to offset their training expenditure *twice* against their profits. Since inception, the scheme has expanded to include a wide variety of training programs that are aimed at the development or upgrading of a craft, supervisory or technical skills for the

and training reform: Matching skills to markets and budgets. Washington, D.C: World Bank/Oxford University Press.

⁶⁰ Ibid

manufacture of new products or processes, and production-related training for productivity and quality improvements. To encourage applicants, MIDA imposed minimal reporting requirements and had an easy application process.

The success of the DDIT scheme, however, has been mixed. Although the number of training programs approved since 1991 have increased, the take up of the DDIT scheme has been limited. Relying on the number of training programs can also be misleading since the same employer may file multiple applications for various training programs. For instance, the 317 training programs MIDA approved between 1988 and 1993 were filed by just 159 companies. Between 1988 and 1993, only 3,253 workers were trained under DDIT and half of them were trained in 1993 alone. The take-up of the scheme has been uneven across sectors and firm size. Firms in the electric and electronics sectors were the main beneficiaries, accounting for 57% of all employees trained under the DDIT scheme. Further, larger companies were more inclined to take up DDIT than smaller companies. 93% of the firms who trained their employees under the DDIT scheme had more than 50 employees.

In a 1988 survey of the labour market in Malaysia (Malaysia Industrial Training and Productivity Survey), one of the modules elicited responses from over 1500 employers who did not take up the DDIT, the details of which are contained in Table 8.

Table 8

Reasons Cited for Not Using the Double Deduction Incentive for Training

Reason	Percentage of Firms
Not aware of the scheme	45%
Do not need training	17%
Not Eligible for DDIT	11%
Do not train	7%
Do not know details	6%
Small scale of operations	4%
No training capabilities	2%
Other	8%

Source: Malaysia Industrial Training and Productivity Survey

The survey reported that most multinational and foreign-owned firms would train their employees even without the DDIT scheme, given the sectors in which they operate. For the domestic firms operating in low skill sectors, the poor take-up of DDIT suggested that it had done little to encouraging job skills training. Importantly, the surveys also revealed that lack of information was a significant impediment (for 50% of the firms in in the survey) in the take up of the DDIT, across firm size.

An evaluation of the DDIT suffers from a lack of sufficient and reliable data

due to minimal reporting requirements of the firms. However, two broad questions emerged from this attempt. Were many firms induced to begin training or to increase training by the public subsidization of training costs? Or was the DDIT incentive simply a windfall for employers who would have provided training anyway, even without DDIT? It might have also been the case that many firms in the informal sector who do not typically pay taxes might not have found the double deduction incentive scheme particularly lucrative.

9.2 Human Resource Development Fund (HRDF)

In 1992, the government of Malaysia implemented yet another skills training policy by setting up the Human Resource Development Fund, under the Human Resources Ministry. The fund was generated through a levy on firms at the rate of 1% of their payroll expenditure and contributions from the government. Under the HRDF scheme, employer firms could claim a portion of their training costs for a given year, subject to a maximum of their HRDF levy for that year (1% of payroll expenditure). All firms who had made contributions to the HRDF for a minimum period of 6 months were eligible to file claims. The rates of reimbursement vary depending on firm size and training type, as given in Table 9 below⁶¹:

⁶¹ Ibid

Table 9

Rates of Reimbursement of Training Expenditure under the HRDF Scheme

Type of Training	Large Firms (> 200 employees)	Small Firms (< 200 employees)
	Rate of Reimbursement (%)	
Technical, craft & computer training	60	70
Quality related training	60	70
Supervisory training	60	70
Other retraining	40	50
Overseas training	30	30

The HRDF scheme covered both training in government approved institutions and in house/ on-site training. The employers could file their claims once their employees had completed their training course. Within the first 18 months of the scheme, nearly 3304 employer firms registered under the HRDF scheme, training nearly 110,000 employees⁶².

How successful was the HRDF scheme? Although the initial take up of HRDF was low, especially among small firms - By end of 1994, only 14% of employers filed claims under HRDF for training in approved institutions and 12% employers for on-

⁶² Human Resource Development Fund data.

site training. However, take up drastically increased with firm size. Larger firms who had more than 1000 employees had take-up rates of 52% while smaller firms with fewer than 100 employees had take-up rates of 6%⁶³. However, take up of the scheme was not universal amongst large firms - 38% of large firms did not file any claims under the HRDF and take up was concentrated in specific sectors like scientific instruments, general machinery, electric machinery, ceramics, glass etc., with electric machinery dominating the scheme, accounting for nearly half the trainees. Consistent with the results of the 1988 MITP survey discussed above in the DDIT section, smaller firms were significantly less likely than larger firms to file claims under the HRDF and when they did so, they tend to do so irregularly. Further, the success of the HRDF would also depend on whether the uptake by firms meant new, expanded training of workers or merely a public subsidizing of training that the firms would have provided anyway.

In 1995, the government made it mandatory for all firms employing more than 50 employees to register under the HRDF, contribute the levy and claim reimbursements towards training expenditures. However, in the 1996 round of

⁶³ Gill, Indermit Singh, Fred Fluitman, Amit Dar, Washington World Bank DC, and International Labour Office, Geneva (Switzerland). 2000. *Vocational education and training reform: Matching skills to markets and budgets*. Washington, D.C: World

MITY survey, it was found that of the 1,450 eligible firms 28% (402 firms) had not registered under the HRDF and of those registered, only 65% claimed reimbursements. 35% firms did not claim any reimbursement despite paying the levy to the HRDF. The non-compliance with the mandatory registration policy appears to be significant and systematic - it was concentrated amongst smaller firms and industries the food, beverages, wood and furniture, tobacco industries - traditional, domestic oriented industries that use low skill labour and do not typically train their employees. Further, of the firms that paid the levy but did not file the claims, 6% of them provided no training and 54% provided only informal training on the job, and were hence ineligible to file claims for reimbursement. The other 40% who paid the levy but did not claim any reimbursements were overwhelmingly small firms (employing less than 250 people) and cited the lack of resources and a systematic commitment to create training plans, conduct training and the use of mature technologies as reasons for not training and filing reimbursement claims under the HRDF.

The World bank conducted a study to evaluate the success of the HRDF, examining registration and claims over a three year period from 1992 to 1995. The HRDF appears to have played a role in increasing training provision. 49.8% of the firms registered under the HRDF had increased the number of employees they trained over the 4 years. Further, HRDF had been successful in increasing trainings

only for large firms with more than 250 employees, across various sectors and industries. However, the increases in trainings were highly correlated with the introduction of new technology, which means that firms that had introduced new technologies were more likely to train intensively under the HRDF.

We have examined how both the DDIT and HRDF had a record of mixed success in their initial years. Since the 1990s, both have evolved to become strong instruments of public policy that have contributed to the skilling of the Malaysian labour force. While the take up of DDIT has remained low, the HRDF has expanded to include a wide variety of training programs and is the largest skills training policy in Malaysia in the number of trainees as well as training programs. To encourage on the job training, the HRDF introduced a special Industrial Training Scheme under which employer firms were eligible to claim a 100% deduction on training expenditure incurred by them in training employees on the job, subject to a maximum deduction of 20% of their levy balance in the HRDF. Further, an apprenticeship scheme was also introduced to increase the supply of skilled workers. Under this scheme, school leavers and dropouts are selected to be apprentices through interviews conducted by the HRDF and employer firms, and are trained on the job for 9 – 27 months, depending on the role and the industry. The costs of the training would be borne by the HRDF while employer firms pay apprentices a stipend at the rate of RM 500 per month, which can be set off against

their HRDF levies. More recently, groups of employer firms have come together under the HRDF and are determining the training capacity and needs at the level of the industry / sector. They are piloting new schemes under the HRDF in which firms with excess capacity are encouraged to train workers from other firms, especially small and medium firms who may not have the resources to provide the training to their workers.

An impact evaluation based on the responses of 1152 firms and data of 6,679 workers, using the World Bank Enterprise Surveys from 2002 found that the average returns to job skills training in Malaysia was 7.7% pa⁶⁴. The study covered exclusively formal training programs both in house and at approved training institutions. While the study does not focus on whether these firms were part of the DDIT or HRDF, overall, it appears that training programs have significant and positive returns to the employees.

9.3 Lessons for Indian Policymakers

A complete evaluation and causal analysis of the success of both the DDIT

⁶⁴ Almeida, Rita K., and Marta Faria. 2014. The wage returns to on-the-job training: Evidence from matched employer-employee data. *IZA Journal of Labor & Development* 3 (1): 1-33.

and HRDF might require thoughtful empirical research and sufficient, reliable data. However, the Malaysian experience might still offer important lessons and insights to Indian policymakers and possible ways of modifying the PMKVY to make it more effective.

As discussed earlier in the paper, the goal of the PMKVY is not to crowd out or subsidize private training with public funds but rather to offer employees an incentive to take up skills training which they would not have taken up otherwise and enable them to obtain jobs that would not have been available to them without the newly acquired skills. The thrust of the policy is currently on the supply side of the skills market, and it assumes that if the supply demand mismatch is corrected, then market mechanisms will bid up the wages and skilled labour will find their way into high paying jobs. However, anecdotal evidence from India seems to suggest otherwise and we have examined earlier in the paper, the various reasons that might explain this.

A useful way to think through this would be to examine what industries are most suited for the effective implementation of the PMKVY. In other words, what are the industries in which skills provided by private sector training centres, through the governance structure already in place under the policy, be valuable? What might be the best way to partner with these industries and involve them in the training

process? What synergies might be explored between the government and these industries in terms of cost and knowledge sharing?

In India, the necessary architecture is in place in the form of the Sector Skills councils (SSC). However, their involvement in the skills training process is both limited and sporadic. Initially, they were responsible for generating a list of jobs and associated skills expected from these jobs - which was a one-time exercise conducted more than 10 years ago. Currently, their role is to supervise the performance of the assessment agencies and hand out certificates to trainees. The mixed response to training programs in India might point to the fact that perhaps the SSCs had overestimated the need for skilled labour - across sectors and geographies. It might be the case that not all industries or sectors have a business need for training their labour under the PMKVY. And the skills themselves might be more valuable when built through training by the employer, because it will be done in a way tailored to the employers' needs.

This calls for a thoughtful, sector wise and targeted approach to skills training instead of a big-bang, all inclusive approach. We saw how in Malaysia how both the DDIT and HRDF were taken up by large firms in certain sectors. Likewise, we also saw how wage premiums for skills training in India were not universal, but concentrated in specific sectors. One possible way to make the PMKVY fruitful is

perhaps target key sectors in which training under the PMKVY can be provided effectively. Logistically, this would allow the implementation of the policy to be more focused, and the government might dedicate resources into few sectors that have a high probability of generating returns to skills training. Likewise, we also discern from Malaysia's experience how larger, multinational firms in export oriented sectors, using modern, new technologies are more likely to train their employees than smaller, domestic oriented firms that use mature technologies. This might be a simple, yet powerful way of prioritizing industries and firms in India, under the PMKVY.

Malaysia's experience and increasing focus on training on the job at employer's premises suggests an important step in the direction although there has not yet been any study whether on the job trainings in Malaysia indeed have higher productivity and wage effects relative to off the job trainings at private institutes. The positive response to new onsite training schemes such as the apprenticeship scheme, industrial training scheme and so on seems to suggest that employer firms are keen on providing onsite, employer specific training or industry specific training.

This is also corroborated by anecdotal evidence in India where employers that require firm specific skills do not seem to pay wage premiums to employees with general skills. Shifting the location of the training from a private institution to the

employer's premises might potentially have three benefits. First, the trainees have an opportunity to supplement their theoretical in class training with hands on, practical training in a real work setting. Second, the trainees undergo training in firm specific skills that have a higher likelihood of earning wage premiums than general skills. Finally, since the employers are now training in firm specific skills, they are likely to share a part of the costs of training relative to training only in general skills.

In the current model of the PMKVY, the costs of training are shared by the government and the trainees. In Malaysia, under the DDIT scheme, government bore the costs of training whereas under the HRDF scheme, the costs were shared by the government, employers and possibly the workers, if they earned wages at a level lower than the market wages for their kind of labour, as a result of training. Theory suggests that investments in specific skills will be shared by the trainees and the employers, as the increased productivity resulting from skills training is mutually beneficial to them. The employers do not bear any cost of training under the current PMKVY design, perhaps rightfully so because they might not find the general skills trainees acquire particularly useful to their firm, or do not see the need to reward it with wage premiums. Partnering with employers and sharing costs of training with them might ensure that trainees are trained in firm specific skills that have higher payoffs than general skills. The existing National Skills Development Fund (NSF) could potentially be modelled on the lines of the HRDF, funded by a levy or payroll

tax and be used to set off training expenditures incurred by firms.

An interesting pattern we observe in Malaysia is the tendency for larger firms to take advantage of skills training schemes. This makes sense because smaller firms may not have the resources to provide training to their workers and larger firms might find it more cost effective to train their own workers. If this were indeed true, then policymakers might want to think about whether there are any barriers to growth in firm size and whether they might be eliminated by policy change? If yes, then such a policy change (or perhaps even a new policy) might be an essential complement for the success of the PMKVY.

Stepping back and taking stock of the policy as is, what might be the way forward? As has been described above in the policy description section, the PMKVY is a thoughtful, detailed and well articulated policy that considers the various incentives to all the actors involved in its implementation. However, it suffers from challenges to implementation and this might have less to do with its conceptual clarity and more to do with the fact that it is being misapplied. It might be the case that this kind of a policy is simply a misfit for a wide variety of industries, sectors or firms that the PMKVY is currently being applied to. As we have seen from the experience of Malaysia, different industries and firms respond to different kinds of incentives when it comes to skilling their employees, and there are entire industries

where there is no need to skill their employees at all. The PMKVY, in its current design appears to disregard this heterogeneity in the skilling needs of employers.

The way forward might involve many possibilities. Rationalizing and prioritizing key industries and sectors to which the PMKVY would be applicable is a possible first step. These might be industries that typically require general skills and where workers can be effectively trained at a training centre. Examples of such skills and jobs might include computer programmers, data entry operators, call centre operators, software developers in the IT sector; accounts executives, life insurance agents, mutual fund agents etc. in the financial services sector; security guards, supervisors, customer care agents, sales representatives and so on in the security and retail sectors.

Likewise, implementing the policy in a phased manner, starting from larger firms who either require general skills that can be taught at private centres or might be able and willing to train their employees at their premises, might be another way. This might mean focusing on key industries like information technology, banking and financial services, agricultural services, construction, mining, retail, healthcare and infrastructure equipment that typically rely on labour with broad general skills. This also risks the potential de-prioritization of industries like capital goods manufacturing, tourism, gems and jewellery, automobile etc. that might require

employer or industry specific skills.

Reviewing the list of job roles and skills under the PMKVY and sorting them as general skills, industry specific skills and firm specific skills might be a useful exercise. General and industry specific skills would be most effectively provided offsite by training institutes and best suited for the PMKVY in its current form and governance structure, whereas firm specific skills might be best suited for onsite training provided by employer firms, as discussed above.

Further, for onsite job skills training, it might make more sense to create a fund on the lines of the HRDF in Malaysia rather than have trainees pay the costs of training upfront. This might involve levying a payroll tax that contributes to the NSDF from which employers who train their employees could claim reimbursement. This could both hold employers accountable to train their employees and offset part of the costs borne by the government. Within the current policy design, addressing the various gaps mentioned in the discussion of implementation above, is yet another way to ensure that the PMKVY is implemented in a manner that can efficiently achieve its stated goals.

10.0 Conclusion

The task of skilling 10 million individuals in 4 years is an onerous one,

especially when the policy is implemented by an ecosystem of several private sector agencies. A review of the policy design and governance structure of the PMKVY reveals both strengths and potential weaknesses. International experiences also inform us about the importance of thoughtful, targeted application and a diverse set of implementation mechanisms for policy success. Three important directions for the future emerge out of the discussion above.

First, is the need for a robust data collection mechanism that can generate evidence of policy success (or failure) and provide useful analytical information for improving the design of current and future policies to achieve the policy objectives more effectively. It should offer fine-grained assessments, because it might be that this policy works for certain kinds of skills, industries and not others. Second, is the need to brainstorm and arrive at governance structures that might encourage various private sector partners to make better choices and implement the policy effectively. While linking payments to performance is a reasonable first step, the policy might have to think beyond such conventional measures and come up with complementary efforts. These may include mechanisms for information sharing and diffusion which allow potential trainees to choose from a wide range of training institutes, driving up competition and quality. Encouraging cost and capacity sharing between firms in an industry might also contribute to an expansion of training in the economy and create synergies from collaboration. Offering training

vouchers to potential trainees instead of giving them an incentive after completion might reduce the burden of paying costs of training upfront. Tracking, and perhaps linking learning outcomes and earnings of workers to training provider evaluation might motivate them to do a better job of training. Finally, linking the implementation design of one welfare policy to that of another – such as integrating incentive payments to Aadhaar card might pose unforeseen implementation constraints and might need complex governance structures to resolve ensuing issues.

The iterative, complex and long term nature of each of these directions must be acknowledged and it is easier said than done. However, it is critical for better monitoring and evaluation, and ensuring greater transparency and accountability towards public money. Policies like the PMKVY are well meaning and ambitious attempts by developing countries to improve the wellbeing of its people. Job skills training policies are one such instrument that use the channels of increased productivity and wages to secure a better life for its workforce. The success of such policies however depends on the success of various other complementary policies and market mechanisms, all of which many not be considered or comprehended by the government. While large scale, big bang welfare policies are politically appealing, they are wrought with challenges to implementation. Policy attempts like the PMKVY underscore the importance of targeted, specific and effective policies

that are flexible to the needs of a diverse economy and society, and are a constant reminder that bigger needn't always be better.