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A Critical Review of Apprenticeship Policy of India

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A CRITICAL REVIEW OF APPRENTICESHIP POLICY OF INDIA

K Gayithri[1], Malini L Tantri[2] and D Rajasekhar[3]

Abstract

Apprenticeship systems contribute significantly to the enhancement of required job skills and thereby leading to higher productivity and economic growth. India stands to significantly gain on this count given the presence of a large share of population in the working age group leading to demographic dividend. India, however, has a substantially lower number of apprentices and a large labour force compared with other countries. According to one estimate a mere 0.1% of the formal labour force is involved in apprenticeship compared to 4% in other countries. Against this background, this paper explores the reasons for a poor performance of apprenticeship policy in India through critically evaluating the policy and highlight structural problems that exist in the formulation and implementation of the policy itself. The analysis so carried out helped us to argue that there is a need to put in place short-term as well as long term measures. In the short term, there is a need to understand the working of the scheme by sectors and regions by putting in place institutional arrangements to collect robust statistical data,the data so collected will help understand the potential number of apprentices who can be absorbed in the industry/work establishments given the current mandatory requirement to compulsorily engage apprentices to the tune of 2.5 percent to 10 percent of the total workforce of the establishment. In the long run, there is a need to effectively implement these schemes to obtain the desired results by first creating awareness both in the rural and urban areas,incentivise industry to participate in apprenticeship policy; involve key actors in the formation and implementation of apprenticeship policy. There is considerable amount of success in apprentice systems both with in India and internationally, the state can make good progress by suitably adapting the feasible options rather than attempting to reinvent the wheel.

Background

Industrial development is a key driver of economic growth for any country. It has, however, been observed that development and sustenance calls for trained personnel who may be able to perform necessary multifarious functions. As has been pointed out by Solow (1956) and Romer (1990), technological change, research and development and innovations are pre-requisites to industrial expansion and resultant economic growth. Technological progress is driven by R&D activities which in turn are fuelled byprivate firms' aim to profit from inventions (see Kniivilä, 2007). Thus, a synergy between technology, R&D and innovations isessential for structural change.

Of late, both academicians and policy makers have been emphasising on skill enhancement of the youth so as to facilitate a given economy to reap demographic dividends. In a bid to move towards this, the apprenticeship system prevailing in India will have a great role to play. Apprentice training is one of the most efficient mechanisms to develop skilled manpower for an industry. It has been defined as "a course of training in any industry or establishment undergone in pursuance of a contract of apprenticeship and under prescribed terms and conditions which may be different for different

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categories of apprentices" (GoI, 1961). Individuals, after undergoing apprenticeship, are better able to adapt to the industrial environment and settings at the time of engagement in a regular environment. Skills are imparted through the process of learning by doing.

India has a substantially lower number of apprentices and a large labour force compared to to other countries where great emphasis is laid on apprenticeship training programmes (Planning Commission Report, 2009). Our formal education has been inadequate in producing "work-ready youth" that may be facilitated by taking the aid of authorities willing to function positively in this direction. Research undertaken by the Planning Commission (2009) had shown that apprentices account for 70% of competence of development in several countries. In fact, as per one estimation a mere 0.1% of the formal labour force is involved in apprenticeship in India compared to 4% in other countries [ILO, 2013]. If it is so, then it becomes necessary to explore why apprenticeship policy is not taking off in India and are there any structural problems present in the formulation and implementation of the policy itself.

Against this background, the present paper attempts to critically evaluate the Apprenticeship Act, 1961 and provide appropriate policy suggestions to improve the reach and scope of apprentice system in improving skill enhancement of the youth. The paper is based on a larger study on the Apprenticeship policy in Karnataka. The study is based on a desk review of the policy, analysis of the secondary data available from both the Central and state government sources, insights from focus group discussions involving major stake holders like government officers, industry representatives, apprentices to understand the issues relating to the Apprenticeship policy The rest of the paper is organised as follows: section two presents details about the Act and its various components. The third section outline the current achievement of apprenticeship system in India, followed by critical evaluation of the policy and the last section summarises the paper with a few recommendations.

About the policy

The National apprenticeship scheme was framed in 1959 on a voluntary basis. It, however, got statutory enforcement with the enactment of Apprentices Act in 1961 and was implemented w.e.f. 1.3.1962. The main aim behind the implementation of this Act in the first place was to meet the rising demand for proficient craftsman by giving experimental training to the people specialised in their crafts. Initially, the Act envisaged training of trade apprentices. Later amendments extended its coverage and scope. It is obligatory as per the Act for the establishments covered by the Act to appoint apprentices and impart theoretical as well as practical training to such youth. Administrative structures, involving both the Central Government and the State Government with multiple authorities under them, have been established to facilitate successful implementation of the Act.

Amendments to the Apprentice Act 1961

The government has brought comprehensive amendments in the Act since its implementation in 1961, each time to make it more attractive and adaptable to the changing requirements of both the industry and youth. The first amendment in 1973 was made to include training of graduate and technician apprentices, the second amendment in 1986 extended its scope to the technician (vocational)

apprentices. The third amendment in 1997 spelt out definitions of the establishment and worker, while the fourth amendment in 2008 focused on inclusion of candidates belonging to the OBC category. The recent amendment was introduced in 2014 that has replaced the system of trade and unit-wise regulation of apprentices with a band of 2.5% to 10% of the total workforce, introduction of optional trades, removal of stringent clauses like imprisonment that have been replaced with fines and allowing industries to outsource training facilities (see Table1 for the chronological development of apprenticeship policy).

Table 1: Chronological Development of Apprentice Policy in India

Sl No	Amendments	Specification
1	National apprenticeship scheme, 1959	Promoted apprenticeship on a voluntary basis
2	Apprentices Act, 1961	To regulate the programme of training of apprentices in the industry so as to conform to the syllabi, period of training, etc. as laid down by the Central Apprenticeship Council; and to utilise fully the facilities available in industry for imparting practical training with a view to meeting the requirements of skilled manpower for industry. Initially the Act envisaged training of trade apprentices only.
3	The first amendment (1973)	The scope expanded by including training of graduate and diploma engineers as "graduate" & "technician" apprentices
4	The second amendment (1986)	The scope was further expanded to include the training of the 10+2 vocational stream as "technician (vocational)" apprentices.
5	Third amendment (1997)	Provisions clearly spelt out definition of "establishment" and "worker"; termination of apprenticeship contract; number of apprentices in a designated trade, practical and basic training of apprentices; obligation of employers; penalty for contravening the provisions of the act and cognizance of offences
6	Fourth amendment (2008)	Focused on: • Reservation for candidates belonging to other backward classes (OBCs) • Expenditure on related instruction shall be imparted at the cost of employer and the employer shall, when so required, afford all facilities for imparting such instructions and to provide flexibility in respect of ratios prescribed for apprenticeship seats.
7	The recent amendments (2014)	• It focused on replacing trade-wise regulation by a band of 2.5% to 10% of the total strength of the workers • Introduction of optional trades, extending the scope to non-engineering occupations • Doing away with imprisonment for non compliance and limiting the penalties to fine only. • Allowing outsourcing of basic training and bringing the establishments operating in four or more states into the fold of central authorities for easy interface, etc.

Source: Authors' compilation

Coverage and Stipend

It is obligatory on the part of employers, both in Public and Private Sector establishments having requisite training infrastructure as laid down in the Act, to engage apprentices. Till date, 259 groups of industries are covered under the Act out of which, 28,500 establishments engage apprentices. In that, 2.12 lakh training seats for the trade apprentices have been utilised against 3.92 lakh seats identified under the Act; 0.43 lakh training seats for Graduate, Technician and Technician (Vocational)

Apprentices have been utilised against 1.22 lakh seats identified for these categories[4]. The duration of training for trade apprentices varies from six months to four years, depending upon the requirements of the specified trade. The syllabi for different trades are prepared and finalised by the respective Trade Committees comprising of trade experts from industry.Meanwhile, the Act and its subsequent amendments spell out the **Stipend/allowance** to be paid to apprentice at various levels. The minimum amount of stipend payable to apprentices has been revised in the Apprentices Act 2014 wherein:

Graduate apprentices	Rs. 4984/- per month
A Sandwich course (students from Degree institutions)	Rs. 3542/- per month
Technician apprentices	Rs. 3542/- per month
A Sandwich course (students from Diploma institutions)	Rs. 2890/- per month
Technician (Vocational) apprentices	Rs. 2758/- per month

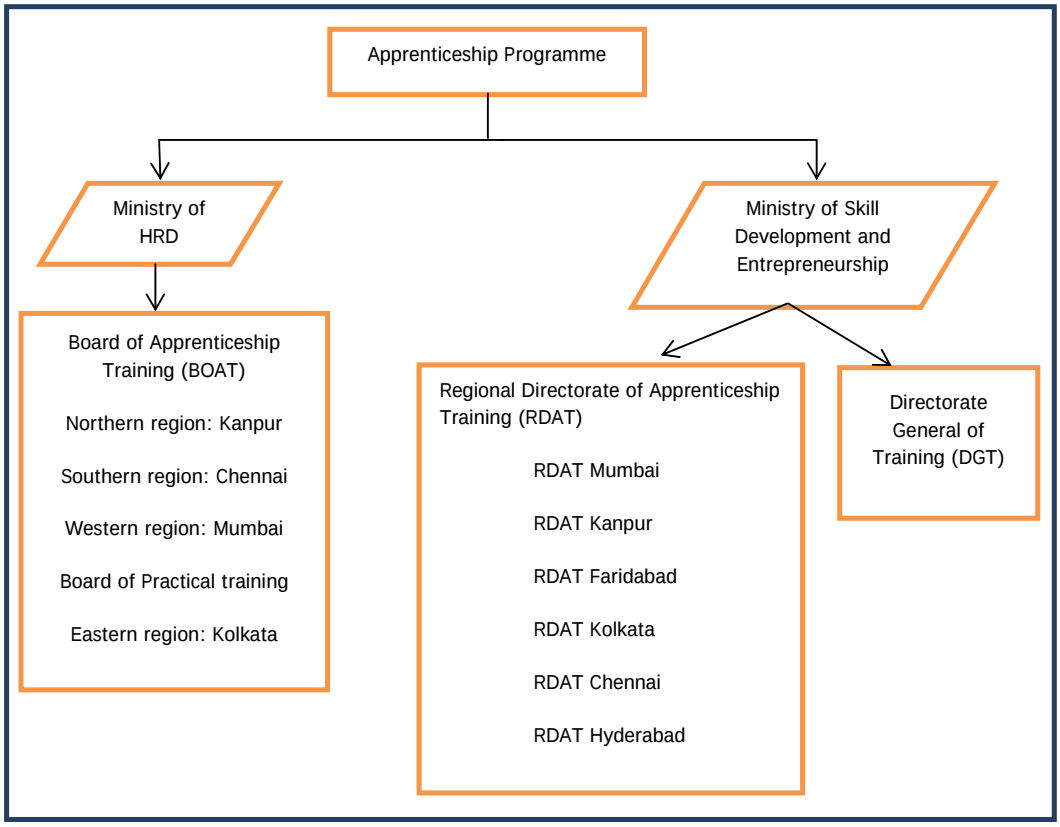
In reality, many companies pay wages over and above the minimum mandate. For instance BOAT (Board of Apprenticeship Training) makes an extra effort to negotiate with industries for a revision in a graduate stipend ranging between Rs. 12000-15000 along with technician stipend ranging approximately Rs. 10000 and above.

Implementation and Monitoring Agency

Currently, Apprenticeship policy is implemented by the Ministry of Human Resource and Development (MHRD) and the Ministry of Labour and Employment (MOLE) and is monitored by three agencies namely: Board of Apprenticeship Training (BOAT), Regional Directorate of Apprenticeship Training (RDAT) and Directorate General of Training (DGET). (see flowchart one)

[4]See third section for further detail.

Flow chart1: Implementation and Monitoring Agency of Apprenticeship System in India

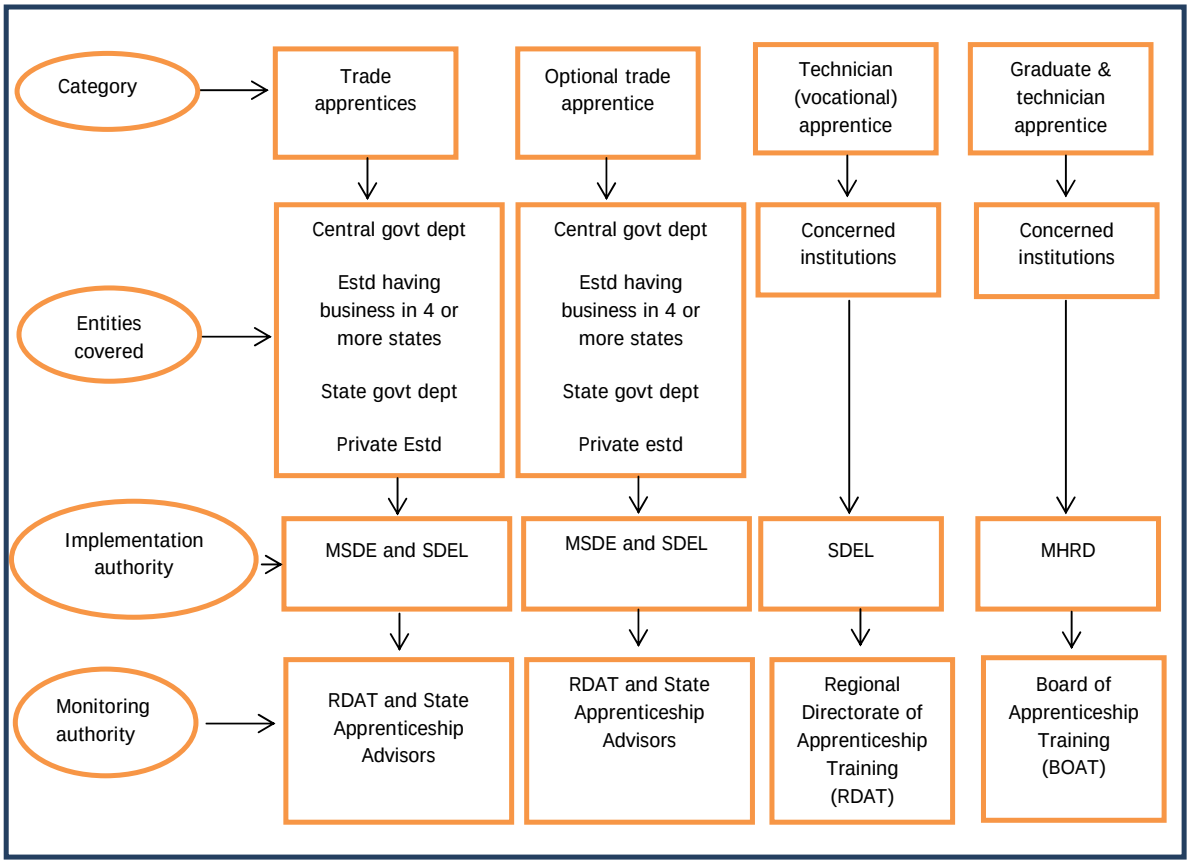


Source: Author's compilation

MHRD through BOAT implemented graduate and technician apprenticeship wherein Graduate apprentice require a degree in Engineering or Technology granted by a Statutory University or by an institution empowered to grant such a degree by an Act of Parliament or professional bodies recognised by the Central Government and Technician apprentice requires a Diploma in Engineering or Technology granted by a State Council or Board of Technical Education established by a State Government or granted by a University or an Institute recognised by the State Government or Central Government. BOAT has four regional offices each located at Kanpur, Mumbai, Chennai and Kolkata. Karnataka being geographically located in the southern region, all matters relating to graduate and technician apprenticeship are overlooked by the BOAT regional office located in Chennai.

Ministry of Skill Development and Entrepreneurship through RDAT and DGT implement trade apprenticeship, non-trade apprenticeship and technician (vocational) apprentices. RDAT being a regional body has offices located at Mumbai, Kanpur, Faridabad, Chennai, Hyderabad and Kolkata. Trade apprentices are those who complete their education either at one of the established ITI's of the country or those who immediately after their 8^{th}, 10^{th}, or 12^{th} standard education enroll for training which is called Apprentice Training Scheme (ATS).

Flowchart 2: Categories of Apprenticeship and Entities Covered in India



***Source**:* Author's compilation

Categories of Apprenticeship

On the whole, there are four categories of apprentices. The details of entities covered, implementation and monitoring authorities are shown is shown in flowchart two. The Central Apprenticeship Council acts as an apex statutory body to advise the government on laying down policies and prescribing norms and standards with respect to Apprenticeship Training Scheme (ATS). It is tripartite by constitution with members from governments at both Central and State/UT's levels and employers and trade unions.

Current Achievement of Apprenticeship System in India

The data below represent the achievement of the apprenticeship system in India for the years 2001, 2010 and 2011. Between 2001 and 2010 the percentage of utilisation of apprentices has increased marginally from 62.47% to 66% (Table 2). Among the various categories of apprentices, large increase (in absolute term) is observed with respect to trade apprentices (from 130014 to 177566). This is followed by graduate apprentices showing an increase from 6679 in 2001 to 25856 in 2010. Across social categories the proportion of SC population engaged in apprentice training has shown a marginal increase from 10.96 to 11.53 percent between 2001 and 2010. The share of ST population has,

however, shown a marginal decline from 4.13 to 3.66 percent. In 2011, the overall apprentices engaged shows a decline (59%) compared to that observed for the year 2010 (Table 3). Of the total seats utilised, scheduled caste account for a greater proportion i.e.; 11.61%, compared to the scheduled tribe who account for 4.87% of total apprentices engaged. With respect to training facilities for apprenticeship across Indian states it is observed that maximum number of establishments having training facilities were in Maharashtra (7520), followed by Gujarat (5381), Delhi (3033), Tamil Nadu (2294), J&K (1757), Karnataka (1630), Kerala (1560), Haryana (1332), Andhra Pradesh (1224) and West Bengal (1095) etc.

Across sector (Central and state/private) 87% and 60% utilization of capacity is found in the Central sector and State/Private Sector respectively (Table 4). This also indicate that 16% of the establishments with training facilities have so far not participated in the apprenticeship training programme. A comparison across regions shows that good performance is attained in the southern region with 168265 apprentices engaged (Table5). This is followed by a significant increase of 139912 apprentices engaged in the western region. Across categories of apprentices, increasing proportion of individuals are engaged in trade apprenticeship.

Table 2: Apprenticeships Training in India–All India Perspective (as on 2001 and 2010)

Year	Grad	Tech	Tech (voc)	Trade	SC	ST	Total	Percentage of utilisation
2001	6679 (4.08)	21832 (13.34)	5109 (3.12)	130014 (79.45)	17939 (10.96)	6761 (4.13)	163634	62.47%
2010	25856 (10.6)	29866 (12.30)	9497 (3.9)	177566 (73.13)	28015 (11.53)	8887 (3.66)	242785	66%

Source: Indiastate

Note: figures in parenthesis represent percentage of total utilisation

Table 3: Apprenticeships Training in India – All India Perspective (as on 31st December, 2011)

Sl No	Items	Trade Apprentices	Graduate, Tech. (Vocational) Apprentices*	Overall Apprentices
1	Intake capacity (No. of seats located)	2,90,448	1,15,430	4,05,878
2	No. of apprentices on roll (No. of seats utilised)	1,84,796	53,139	2,37,935
3	Percentage utilisation	64%	46%	59%
4	Out of total seats utilised			
	(i) Scheduled Castes (SC)	23,518 (12.73%)	4,100 (7.72%)	27,618 (11.61%)
	(ii) Scheduled Tribes (ST)	10,714 (5.80%)	882 (1.66%)	11,596 (4.87%)

Source: Trade Apprenticeship training In India, 2011

Table 4: Sector-Wise Overall Trade Apprenticeship Training (As On 31st December, 2011)

	Central Sector	State/Private Sector	Total
No. of estts. having training facilities	875	31266	32141
No. of estts. engaging apprentices	705	26293	26998
Intake capacity	38295	252153	290448
No. of apprentices on roll	33198	151598	184796

Table 5: Macro scenario of Apprenticeship Achievement – Regional Perspective (as on 2001 and 2010)

Year	Northern region					Southern region					Eastern region					Western region				
	grad	tech	voc	trade	total	grad	Tech	voc	trade	total	Grad	Tech	voc	trade	total	grad	tech	voc	trade	total
2001	477	3297	545	26238	30557	3387	12387	2777	46735	65286	310	1867	74	7397	9648	2479	4133	1649	44642	52903
2010	3078	3577	579	30316	37550	13974	20544	3938	64523	102979	1663	1180	3553	9256	15652	7746	4366	1427	73471	87009
Grand total	**68107**					**168265**					**25300**					**139912**				

Source: Indiastat

Critical Evaluation

Apprenticeship policy in India has evolved over the years. Its amendments on an average, however, deal with the scope and coverage and are silent about how to equip educational institutions to meet the increasing need of apprentices and also how to make education pattern or syllabus more employable. Many issues pertaining to this have been overlooked. Thus, in this particular section, we attempt to critically evaluate the Act under the various broad headings:

Mismatch between demand and supply of skilled labour force

The Apprenticeship Act, 1961 and its subsequent amendments have dealt elaborately with the scope, coverage of apprentices and mandate on industries. What is lagging, however, is a parallel system to ensure supply side factors of apprenticeship. As a result of this, there is an obvious mismatch between demand for and supply of skilled manpower required for making apprenticeship policy very successful. In fact, the Planning Commission's Sub-Committee (2009) on 'Remodeling India's Apprenticeship Regime' had used the term "India's Skill Crisis" and had stated in their report that nearly 53% of the employed youth suffer some degree of skill deprivation. This clearly indicates that alongside employment, skill development is equally important as over the years the job market has become highly competitive. The skill development issue is pertinent both from the demand as well as the supply side (Skill Development in India, 2015). From the demand side the issue is related to seeking apprenticeship training while from the supply side the issue relates to the employability of existing workforce due to several socioeconomic factors. To become employable means to be in possession of professional qualification.

In India, however, given the higher dropout rates than enrolment rates (Skill Development in India, 2015) the desire for a skilled India appears to be a remote possibility. As per one estimation, net enrolment in vocational courses in India is about 5.5 million per year compared to 90 million in China and 11.3 million in the United States. A mere 2 percent of Indian workers are formally skilled (India Infrastructure Report, 2012). Further a study by FICCI (2015) identified some factor responsible for high unemployment along with stagnant skill development in the country. They include: low literacy level, formally skilled workforce being less than 3 percent of the total workforce, inadequate training capacities, high level of unemployment amongst highly educated individuals, etc.

The above-mentioned factors are a clear indication of the gross reality prevalent in the country. Despite seventy years of having secured Independence and having the largest young age workforce, poor skill sets are prevalent due to factors that have been impeding the economy since ages. This raises a question regarding the adequacy and accountability of the various schemes that have been implemented.

The skill deficit hurt more than the infrastructural deficit because it sabotages egalitarianism in opportunities and tends to amplify inequality while poor infrastructure maintains inequality. One of the key concerns raised by industry representatives related to poor quality of ITI graduates highlighting the mismatch between the acquired and required skills, which eventually acts as one of the reasons for the industry not to put a lot of effort in promoting apprenticeship. This definitely calls for improving the educational curriculum and also addressing the problem of understaffing in the ITIs which perhaps

could be one of the reasons for the poor quality of ITI set up. In addition to this, it was highlighted that trainee who perhaps was good in theory but lacked in soft skills. Thus, it was highlighted that effort should be made to inculcate such skills at VET institute. ITIs are also not in a position to play an active role in promoting apprenticeship through their existing placement cell that are given the responsibility of apprenticeship related work due to the insufficient academic staff who are overburdened with teaching, Hence, this responsibility comes in as their least priority. Besides this, placement cell tries to promote on-campus job selection than engaging in apprenticeship related work. Thus, there is a need to strengthen the cell.

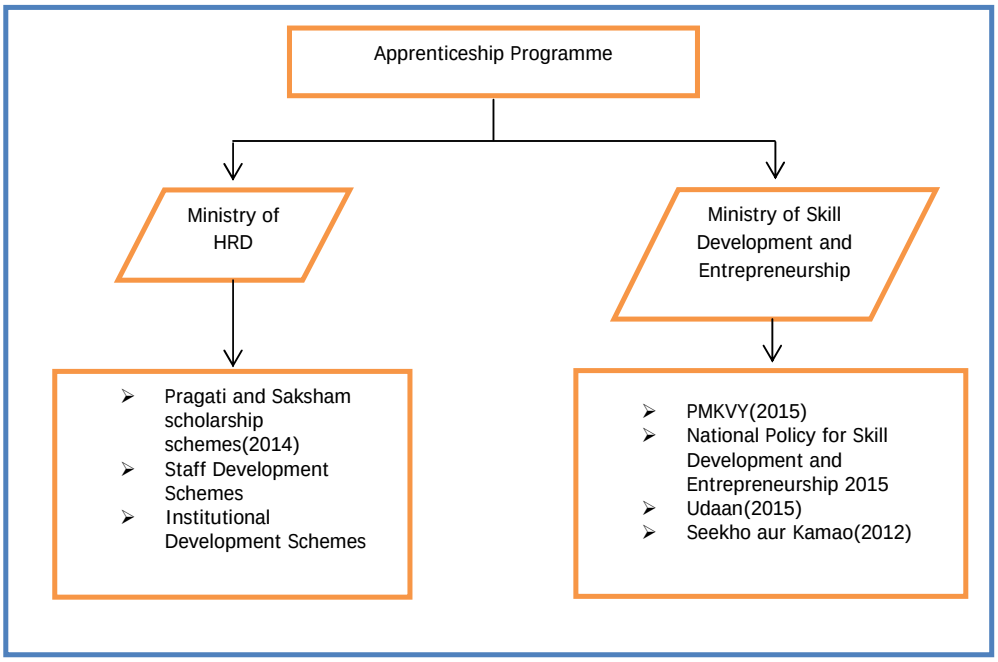
Thus, the sole way out to solve the skill crisis through apprenticeship in our country is to propose specific, scalable and effective solutions to the problem rather than lamenting about the problem of "skill crisis". In this context, India has a lot to learn from the other countries. For instance, take the case of the German model of apprenticeship system. The fundamental reason for the success of an apprenticeship programme in Germany is that it is based on a combination of formal education along with real time experience in the workplace. Under this system individuals can enrol themselves for one of the 365 apprenticeship occupations where the precise skills and theory imparted were regulated by national standards. As part of the dual education course, students are trained in a company for three to five days a week where the company is responsible for ensuring that students get standard quantity and quality of thetraining set down in the training descriptions for each trade[5].

Too many parallel schemes and lack of coordination

Of late, in the pursuit of reaping demographic dividends, the government, both at the Centre as well as at the State has implemented numerous schemes for skill formation. On the one hand, there is an obvious mismatch between demand and supply of skilled labour force required by the industry while on the other too many parallel schemes are tending to disturb the very purpose of apprenticeship policy. (see flowchart three)

[5] See Annexure 1 for some of the good practice of appprentceship system from across the globe.

Flowchart 3:Recent Schemes for Enhancing Skills among Youth



Source: Author's compilation

For instance the Ministry of HRD has implemented the Pragati and Saksham Scholarship schemes. While the former aims at providing assistance to girls who wish to acquire a technical education that will aid in their further advancement, the latter aims at providing assistance to disabled children who seek technical education. While the Ministry of HRD targets women and differently-abled youth, the schemes for apprenticeship implemented by the Ministry of Skill Development and Entrepreneurship caters to a large cross-section of population such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY), National Apprentice Promotion Scheme, National policy for skill development and entrepreneurship 2015, Udaan, Seekho aur Kamao etc. While schemes like Udaan cater to enhancement of skills of Kashmiri youth, the others were implemented with the objective of provision of professional training in enhancement of skills and achieving the targeted proportion of skilled individuals by 2020.

At the state level, specifically in Karnataka, the Karnataka Vocational Training and Skill Development Corporation (KVTSDC) were formed to provide short-term training and facilitate employment. As part of KVYSDC, programmes such as the Kaushalya Karnataka Scheme were launched in a bid to provide for adequate skill formation along with theprovision of employment facilities to the unemployed youth. Similarly, in Maharashtra, there is the Maharashtra Technical and Self-Employment Training Society (MTSTS) which is an autonomous and Government of Maharashtra-approved society aimed at providing vocational and skill development training courses.

However, schemes are implemented at both the levels with no uniformity in implementation mechanism as well the target population. Rather, attempt should be made to strengthen the existing schemes or programmes.

For instance, the All India Council for Technical Education with an objective to offer on-the- job practical training to enhance employability of students who have completed or pursuing graduation/diploma introduced the National Employment Enhancement Mission (NEEM). The objective of NEEM is to offer on-the-job practical training to students pursuing graduation/diploma in any technical or non-technical stream in a bid to increase his/her employability. The NEEM has provided a list of 23 industries in which such trainees may be placed where they will be paid wages matching unskilled worker's minimum wages. Presently, some 200 industries are incorporating NEEM trainees. Outwardly the scheme appears to be well designed which is supposed to serve its agenda of offering on-the-job practical training for theenhancement of employability. However, the status 'trainees' that is given to Neem who are engaged in work similar to those who work regular hours but are not yet classified as a workman. Therefore, the scheme does not gratify the needs of individuals who are seeking skilled employment that might enhance their livelihood.

Lack of Synergy between monitoring and implementing authority

Apprenticeship training in India is overlooked by two ministries: The Ministry of HRD and Ministry of MSDE. This implies that there is a sharing of responsibility between two ministries with regard to vocational training. In other countries, however, especially in the West, vocational training is monitored by a single authority. A point to be noted here is that vocational education is supervised by the Ministry of HRD while vocational training is part of the Ministry of MSDE. At the Centre there is theDirectorate General of Entrepreneurial Training (DGT) responsible for all matters related to designing and implementation of schemes with regard to apprenticeship training while responsibility for monitoring the administration lies in the hands of the state government.

It is generally observed that with this division of responsibility between both monitoring and implementing authority, the Act and its performance should have been successful. It was observed, that the Apprenticeship training system is functioning much below the expected level of effectiveness. The efficacy of the Apprenticeship training system has been adversely affected by indifference in the administration of the Act (Saini, 2006). This information throws light to the fact that there may be prevalent mismanagement in the administration of the policy. With two ministries handling the same policy there is bound to be a conflict in terms of flow of funds to states, clarity in policy proposals etc.

Another important point to be noted is with regard to NCVT and SCVT. Both act as an advisory board for the Central government and state governments respectively. It was observed that there is there is a lack of coordination between these two advisory bodies, the adequacy with regard to implementation of schemes at both the Centre and State and accountability with respect to the provision of funds for successful training of apprentices needs to be thought of. This lack of coordination may be a result of complex bureaucratic proceedings involved that complicate the smooth functioning of apprenticeship training (Saini, 2005).

As a way out, the government can think of establishing linkage between NCVT and SCVT so as to allow both the institutions to mutually benefit from their curriculum and pedagogy that will help improve employability and vertical mobility of students; shift towards competency-based training should be made. It enables focus on skill-oriented training essential to learn a particular trade; Both NCVT and

SCVT can develop close linkages with common industries by catering to the needs of the employers and the organisation. Courses and curricula could be developed in close conjunction with industries, both at the state and at the national level such that they become relevant and useful for recent times.

To facilitate the process of apprenticeship training, immediate attention is to be paid towards unification of apprenticeship training in the country. This unification is feasible in the presence of a single administrative body to supervise the functioning. Various ministries and departments in the Central and State government and many organisations outside the government are providing vocational training in the country. But there is no synergy between these training providers (Saini, 2006). Increased autonomy should also be given to the central and state ministry undertaking apprenticeship training. In fact, during our interaction it was observed that there is no sharing of information and mutual complementarity between BOAT, RDAT and DGET. All of them basically act as independent units than complementing their efforts towards pushing the apprenticeship programme. For instance, the online portal managed by DGET has many issues, whereas the portal managed by BOAT is highly appreciated. However, both the implementing agencies have no platform to discuss and disseminate information required by each other.

Incentives and penalty

Repealing the imprisonment clause for non-compliance with apprenticeship stipulations is a welcome amendment albeit its poor execution for non-compliance. While replacing it with a penalty in the form of fine to the tune of Rs 500 initially, with a subsequent enhanced levy of Rs 1000, may be less harsh on establishments, the purpose may still not be served as the industry may have it as an easy option of abdicating their responsibility by duly paying the fine amount. Industry has to be made to voluntarily comply with the programme and be encouraged to take a pro-active role in promoting apprenticeship programme. Industry associations have expressed their willingness to actively engage with the government in this task. In addition to this, the current system of apprenticeship in India does not have any provisions for incentives, either to encourage the participation and/or industries that are really providing very good apprenticeship training. Towards this, global experience has shown that incentives act as an important channel to arrest market failure, through which apprenticeship system can be encouraged in scaling up skills among youth. For instance, in Germany, a vocational training bonus was introduced in July 2008 (ended in 2010) for companies creating an additional training place for apprentices whose training contract was prematurely terminated on account of the insolvency or closure of the training company. In Russia on the other hand, employers offering apprenticeships are entitled to partial reimbursement of the labour costs associated with both the trainees and the trainer.

Awareness about Apprenticeship policy

A major barrier in the expansion of the apprenticeship programme relates to lack of awareness among the major stakeholders, i.e. the industry and the students pursuing technical training. This is especially the case with the establishments based in rural areas. It was noted that there isa lot of ambiguity regarding apprenticeship programmes concerned and a lot of people are not aware of their benefits and incentives that are provided to them.

Availment of incentives

Those who are currently aware of the apprenticeship programme and have engaged apprentices in their establishments have been having enormous procedural issues with reference to the availment of the benefits. It was observed that the NAPS claim proforma is complicated and is time consuming seeking elaborate information under 38 different heads, which basically shuns away the establishments from availing the incentives.

Government machinery:

It was observed that the industrial establishments have considerable difficulty in accessing information and support from the state administrative machinery as there is no exclusive cell to administer the apprenticeship programme. It was observed that frequent change in the officers concerned, by way of transfers, is adding to the current difficulties in accessing information and follow up; hence, any expansion of the apprenticeship programme should aim at creating the necessary administrative structures. The lower level administrative units, like districts and below, too have serious bottlenecks in the form of inadequate staffing of the divisional office. At present, there is only one Assistant Apprentice Adviser for the entire division that consists of eight (8) districts. Additional staff support is expected to provide the necessary facilitation and easy access to the establishments. It was felt that atleast one Assistant Apprentice Adviser for four districts may significantly improve the administration on the scheme.

It is very important to put in place the required statistics regarding the progress achieved in the apprenticeship programme, be it with reference to the number of establishments undertaking apprentices or the number of apprentices engaged etc., in evolving informed policy and strategies in the expansion of the programme. During the course of the present study, enormous effort has been made to obtain relevant data to understand the extent of current progress in the state of Karnataka by sectors and by regions. Unfortunately we could not access the required data, in addition, it has been observed that there is considerable variation in the numbers reported from one source to another. This issue needs to be resolved on a priority basis in order to understand, in the first place, as to what the current achievements have been sector wise and region wise so that informed decisions can be taken in expanding the programme.

Involvement of key actors and industry-specific concerns

In the current system of apprenticeship, the role of private parties includes only in providing apprenticeship than making them involved in the process of designing and implementing the apprenticeship system. Towards this, the best practice followed in other countries, and even in the state of Maharashtra, highlights the need to shift the approach. Specifically, industries should be encouraged to participate in designing a syllabus, upgrading tools and equipments of ITIs, etc. Meanwhile, the Act mandates industrial unit with more than 500 workers should have their own training centre. This needs to be relaxed to encourage them to outsource training centres. This not only reduces their overhead costs, but also helps to form a consortium of industries. In addition to this, there are many industry-specific concerns, which need to attend. For instance, one of the common concerns raised by industry

representatives during our discussion is related to a huge drop out of apprentices, despite the current stipulation to recover the dues from apprentices dropping out of the programme. This, in a way, affects their cycle of production and training. Thus, a system should be put in place where a person who completeshis/her apprenticeship successfully should be awarded. Further, the Planning Commission appointed a Sub-Committee in 2009 on remodelling the apprenticeship regime which categorises problems faced by industries into the following major areas i.e.; Administrative, Regulatory, Viability and Marketing. Major recommendations of the Sub-Committee relating to each of these areas and the actions initiated are listed in Table two

Table 2: Major Recommendations Relating to Each of the Areas and Action Initiated

Agency/ Issue	Recommendation	Action Initiated
Administrative Issues		
MOLE/MHRD	Simplify workflow for engagement of apprentices by the employer	Web portal put in place
MOLE/MHRD	Simplify workflow for inclusion of new trades (model on MES process)	Optional new trades included
MOLE/MHRD	Simplify ongoing compliance (returns and records) and allow e-filing	Facilitated by web portal
MOLE/MHRD	Remove NOC requirement for out-of-region candidates	Not required
Regulatory Issues		
MOLE/MHRD	Revise current levels of Stipend	Rs 4984/3542 and not revised (MHRD)
MOLE	Equate stipend reimbursement regime with MHRD	No information
MOLE	Allow capacity flexibility for ratio fixing from 1:7 but a maximum of 1:1	Replaced with a band 2.5 to 10 % of workforce
MHRD	Make all eligible for graduate apprenticeship training programme	All are eligible(within three years) (MHRD)
MOLE/MHRD	Reduce Minimum Course Duration to 3 months/ Converge MES	One year/ not reduced (MHRD)
MOLE/MHRD	-Review Penal Jail Provision	Repealed, fine imposition Rs 500 per day
Viability Issues		
MOLE	Allow the outsourcing of classroom training instead of the current in house basic training requirement	**Third party**
Marketing Issues		
MOLE/MHRD	Set up Information and Matching Infrastructure for Employers; Website, Call Centre and reach out to industry associations	Facilitated by Web portal
MOLE/MHRD	Introduce recognition programme for employers with largest number of Apprentices	Encouraged preference
MOF	Allow for 150% income tax deduction of apprentices stipend paid by employers	No
MOLE/MHRD	Information and Matching Infrastructure for Candidates; Set up website, call centre and reach out to schools/ colleges	Facilitated by Webportal
MOLE	Revamp Outdated Curriculum; Converge with MES	**??**

Source: Authors' compilation

Conclusions

Undoubtedly, apprenticeship policy has a very big role to play in skill enhancement of youth and thereby facilitating Indian economy to reap demographic dividends. The achievement of apprenticeship policy in India is definitely far behind its actual capacity. This definitely calls for serious introspection and revision of the Act. The exercise so carried out indicates that, the apprenticeship policy, which has evolved over

the years, on an average dealt mostly about its coverage and scope and was silent about many detailed problems relating to its execution and implementation. For instance, while there exist two governing bodies at the Center that strive to make the apprenticeship programme a success, the individual governance undertaken by them in terms of implementation of schemes have proven to provide lop-sided development with efforts undertaken being futile. This, as has been pointed out, is essentially due to the mismatch in demand and supply with supply exceeding demand due to faulty regulations. The resulting mismatch is the result of provisions in the Act that prove apprenticeship programme to be a costly affair to be undertaken by the employers of respective industries. As a way out, we argue that there is a need to put in place short-term as well as long-term measures. In the short-term, there is a need to understand the working of the scheme by sectors and regions by putting in place institutional arrangements to collect robust statistical data to understand the potential applying the mandatory 2.5 percent and 10 percent. While this information will render clarity as to the lead and lag sectors/regions with reference to the potential, plugging in the actual engagement of apprentices data by sectors/regions will facilitate informed understanding of the gap, based on which suitable strategies can be identified. The specific policy suggestions are;: establishing synergy between monitoring and implementation agency; incentivise industry to participate in apprenticeship policy; involve key actors in the formation and implementation of apprenticeship policy; take appropriate intervention to spread awareness about apprenticeship policy. Meanwhile, it is necessary that we also learn the success stories of the West and attempt to incorporate their principles in the Indian scenario.

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Annexure 1: Good Practice Provisions for the Apprenticeship System

Provisions for the apprentice	Provisions for the employer
Assistance in meeting entry requirements and/or learning support once employed; Employed status within an enterprise; An increase in pay over the period of an apprenticeship and a higher rate of pay on completion; A combination of on- and off- the-job learning with around 20% of time at a training provider; A chance to mix with apprentices from other enterprises; Attainment of a recognised qualification; A training plan within the company; Opportunities to experience different workplaces if in a limited environment; A 'case manager' to oversee progress in off- and on-the-job training (e.g. 'pedagogical referent tutor' in France); Opportunities to switch employers for good reason; A chance to progress further to higher level employment or self-employment.	Provision to enterprises of suggested workplace curriculum; Cohort management systems within or across enterprises; Support for small and medium enterprises, through structured arrangements, by specified bodies; Support for employers rather than punitive measures for non-compliance; Easily-available information about the system for would-be apprentices and employers (e.g. Ellis chart in Canada); Fall-back system for apprentices whose employer can no longer afford to employ them (e.g. Group Training Organisations in Australia or interim 'out of trade' arrangements).

Source: Erica and Roslin (2013)

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