

ENHANCING NEW KNOWLEDGE AND SKILLS OF HUMAN RESOURCES IN AGRICULTURE THROUGH SKILL DEVELOPMENT MISSION IN INDIA

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ABSTRACT - Indian agriculture is gambling with monsoon. More than 67 percentage of human resources entirely depend upon agriculture as their prime occupational source whereas their productivity is roughly estimated nearly 38 percentage and most of the human power and labor force is unnecessarily leaked by means of following very old traditional methods of production, mapping up of the human resources in agriculture in a progressive path certain specialized vocational training and programs are needed today so as to achieve better results in the farming sector. In this juncture the skill development missions is boon to the human resources so as to acquire new knowledge and inexpensive labor force techniques, Apart from these certain short-term courses vocational training programs and creation of proper infrastructural facilities at the rural elite is the need of the hour today. Especially the influx of the human resources migrated from one state to another is also forced to create competitive low wages in the labor market which is absolutely inelastic in nature. The researcher made an attempt to analyze how far these programs are very useful in acquiring new knowledge and how to utilize their untapped potentialities of the human resources in a better and significant way is also touched in this paper in a detailed manner.

Keywords: Skill development – New knowledge – Vocational training –Short-term courses

INTRODUCTION

In India, agriculture actually utilizes around 44 percent of the labor force (in 2019, ILO 2019) and a normal customer spends almost 45 percent of her use on food (in 2011, NSSO, GOI 2018). The vast majority of the ranchers have little landholdings. The normal size of landholding in India is simply 1.08 hectares (in 2015, Agriculture Census, GOI 2019). The best way to take care of the rising populace with expanding per capita livelihoods just as increase salaries of ranchers, from a low base, is raise profitability by utilizing current data sources, (for example, high yielding seeds, manures, pesticides, ranch apparatus, accuracy cultivating rehearses, and so on) in an economical way. Notwithstanding, the utilization of these cutting edge innovations requires abilities that might be not quite the same as those fundamental for resource customary horticulture. This requires strategy consideration and institutional help to give suitable abilities and professional preparing to individuals occupied with creation exercises in agribusiness, yet up and down the rural worth chains and food-handling area. It is against this background that this investigation maps the general ability advancement program in India

its extension, targets, and institutional components to address the current aptitude holes and achieve a significant change in the nature of labor force.

The examination takes a gander at the arrangement course and backing, yet additionally the advancing plans of aptitude advancement programs, along these lines getting developments and business. It gives a diagram of the parts of different partners, for example, public and private areas and their endeavors in propelling expertise improvement. Further, it likewise takes a gander at significant worldwide associations in ability improvement programs zeroing in on the agribusiness and food area.

INTERNATIONAL STATUS

Worldwide organizations help to encourage a trade of thoughts and aptitude through Government to Government (G2G) discoursed and responsibilities just as through Business to Business (B2B) joint efforts and other potential associations. As a route forward, this investigation gives understanding on approaches to guarantee the manageability of the program, improve private area cooperation, and grow the wildernesses of ability advancement for a more current, beneficial, and supportable horticulture. We accept that such a checking study can have significant exercises for some smallholder horticultural economies in the creating scene. Universally, despite the fact that the agrarian business has diminished from 45 percent of the absolute labor force in 1991 to 31 percent in 2017, about 1.1 billion individuals actually get their occupation from agribusiness.

In India, the area utilizes 44 percent of the labor force (ILO, 2019). Most of the farming labor force is neither taught nor gifted which is a consequence of them being more unfortunate than laborers in different areas. Likewise, being poor doesn't permit them to put resources into preparing and ability advancement. Rural laborers are multiple occasions as liable to be poor than those utilized in different areas (World Bank 2019). Of the 799.6 million needy individuals, around 80% are provincial poor, 64 percent work in farming; 44 percent are 12 years of age or more youthful; and 36 percent have no proper schooling by any means (World Bank 2019). Farming jobs have an immediate linkage with destitution and appetite given that these are more endemic among the provincial populace and agribusiness utilizes transcendently the rustic labor force. Consequently, dovetailing admittance to advancements and innovation with the correct expertise and training can assume a significant part in empowering nations to accomplish a profitability achievement, to improve monetary returns of ranchers and, curiously, to open up new roads of commitment in the area through positions like innovation engineers, business visionaries, and agribusiness authorities.

BACKGROUND AND NEED FOR THE STUDY

Around 67 percent of the populace in India is matured 15-64 years and 27 percent of its populace is matured 0-14 years (UNFPA). The National Policy for Skill Development and Entrepreneurship (NPSDE) 2018 reports that by 2020. Throughout the following twenty years, the labor force in the industrialized world is probably going to shrivel by 4 percent, while in India it is extended to increment by 32 percent (GOI 2019). A monster portion of work in India is packed in the casual area, which transforms any ability advancement approach into a huge test. As in 2009-10, almost 93 percent of the complete labor force was involved in the casual area having expanded from 91 percent in 1999–2000. The portion of casual specialists in the non-rural areas (barring farming) declined to 85.6 percent from 93 percent during the above period. This is still extremely

high contrasted with Thailand (49 percent), Mexico (50%), Brazil (51 percent), the Philippines (72 percent), and Indonesia (78 percent) (GOI 2013). One of the fundamental explanations behind this pattern are exceptionally prohibitive work laws in the coordinated area, which energize even the coordinated area to recruit work through casual courses of outsider agreements. Since the declaration of the National Policy on Skill Development Policy (NPSD) in 2009, progressive governments have reported diverse skilling targets dependent on the current labor force and the expanding requirement for talented labor across various financial areas.

SIGNIFICANCE OF THE RESEARCH

Perceiving the need to more readily facilitate the different endeavors of different services and government offices in advancing expertise advancement, the public authority informed the arrangement of a Department of Skill Development and Entrepreneurship on 31th July 2014 under the Ministry of Youth Affairs and Sports, which was later moved up to Ministry of Skill Development and Entrepreneurship on ninth November 2014. With the declaration of the NPSDE on fifteenth July 2015, the National Skill Development Mission (NSDM) was endorsed and the various boards under the Ministry were informed. MOSDE is an umbrella Ministry planning all exercises around aptitude improvement for not simply accomplishing the yearning targets set out for skilling individuals however for making a public environment of gifted labor force and cultivating advancements and business venture fueled by cutting edge foundation, top notch guidelines and systems for consistence.

STATEMENT OF THE PROBLEM

Expertise advancement is a significant driver to address neediness decrease by improving employability, efficiency and helping maintainable endeavor improvement and comprehensive development. It encourages a pattern of high efficiency, expanded work openings, pay development and improvement. Notwithstanding, this is only one factor among many influencing the profitability whose estimation varies for people, venture and economy. The expansion in efficiency could be because of accessibility of talented and solid labor; mechanical up degree and creative practices; and sound macroeconomic methodologies. The indications of improved efficiency can be as progress in genuine total national output (economy), expanded benefit (undertakings) and higher wages (laborers). In this segment, we are investigating the connection between ability improvement and efficiency with center around India. In any case, in any case it is important to comprehend what comprises efficiency and how it is estimated at various levels. In this point the current investigation encapsulates on **“ENHANCING NEW KNOWLEDGE AND SKILLS OF HUMAN RESOURCES IN AGRICULTURE THROUGH SKILL DEVELOPMENT MISSION IN INDIA”**.

SCOPE OF THE STUDY

The degree and target are to expertise youth, the current labor force and business visionaries just as to address the current ability holes across areas. Professional and expertise preparing includes formal, non-formal and casual models. The institutional instrument driving the program contains the public authority as the significant player, and incorporates the private area, for example, the connected business players, advancement offices and common society. MoSDE-Ministry of Skill Development and Entrepreneurship; MoA & FW –

Ministry of Agriculture and Family Welfare; MoF & AH – Ministry of Fisheries and Animal Husbandry; MoFPI – Ministry of Food Processing Industries.

OBJECTIVES

- ❖ To study the different type of Skill development programs for Human Resources in Agriculture.
- ❖ To show how far the skill development programs increasing their Knowledge and skills for farm works.
- ❖ To deal the matters pertaining to the implementation process and what type of packages have been offered.
- ❖ To study the attitude and tendency of Human resources in farm sectors in understanding the programs.
- ❖ To analyze the various problems and bottlenecks involved in implementing this schemes.
- ❖ To suggest certain suitable policy options before the government to the farm workers.

HYPOTHESES

Having the broad objectives in the mind the following major hypotheses have been formulated by the researcher for the study purpose.

- ❖ The enrollment rate of human resources in the skill development programs shows an increasing trend.
- ❖ There is an appreciable response from agricultural human resources in participating the short term courses rather than week-end programs.
- ❖ There is a wider differential labor force and technique before and after the participation of the program.
- ❖ There is a significant association between the nodal agencies involvement and inter-state labor market variation in the farm sector.

RESEARCH QUESTIONS

- ❖ How far the skill development programs are very useful in updating their knowledge and technique of production?
- ❖ What type of incentives and sops are needed from the participating workers of the programs?
- ❖ How to mobilize larger interstate agricultural laborers in participation of the course and how to interchange their own knowledge?
- ❖ In what angle these programs are remodeled so as to suit the existing current Indian scenario?
- ❖ What are the options before the farmers as well as agricultural research instate under this program?

METHODOLOGY

Descriptive study method is largely used in this method. Data relevant to the broad area of research is gathered from the records of Ministry of Agriculture and co-operation, Skill development Ministry, Krishi Vigyan Kendra (KVK) ,IARI, IFFCO also various information have been gathered from working papers, reports and gazettes. Secondary data have been gathered for a short span of 5 years period say 2015-2020.

LIMITATIONS

One of the major limitations of the study is that the participants details on acquiring knowledge and skill have not been clearly measured and manipulated. It is very difficult to measure the impact of the program on acquiring skills and how these programs are very useful in updating their technique have not been frankly responded.

The usage of secondary data is inevitable in this study purpose. More time period dealing a short term courses and creation of infrastructure facilities have not been discussed detail is a serious lacunae of the study.

ANALYSIS AND DISCUSSION

The National Skill Development Corporation India (NSDC) is a one of its sort, Public Private Partnership in India. It means to advance aptitude improvement by catalysing formation of enormous, quality, for benefit professional establishments. It gives financing to construct adaptable, for-benefit professional preparing activities. Its order is additionally to empower emotionally supportive networks, for example, quality confirmation, data frameworks and train the coach foundations either straightforwardly or through associations. Notwithstanding the expertise improvement plan attempted by the MoSDE, singular Ministries have been embraced area explicit skilling and preparing activities. There is significant degree for adjusting these various activities just as for synergizing the usage endeavours. The Ministry of Agriculture and Farmers' Welfare (MoA&FW): Unlike numerous different areas, agribusiness isn't an optimistic employment choice for ranchers and additionally individuals occupied with the area in different limits.

- ❖ Yet, it represents 44 percent of the labour force in India remembering ranchers and cultivators and a lot more for terms of those by implication working for the area, for example, augmentation labourers, input sellers, market functionaries, and so on.
- ❖ Amongst these partners, the lion's share have no proper preparing and rely upon learning by doing, expertise passed on from before ages, and on hands on preparing. Thus, there is a huge potential for skilling individuals occupied with agribusiness through a separated methodology obliging the particular necessities of individuals required at various degrees of the horticulture esteem chains.
- ❖ The MoA & FW – through the division of horticulture and ranchers' government assistance (DAC & FW) and the branch of rural examination and schooling (DARE) – have embraced significant activities towards guaranteeing a more noteworthy effort of augmentation and instruction administrations people yearning for a profession in farming and associated areas.
- ❖ The Indian Council for Agricultural Research (ICAR), a self-sufficient establishment under DARE, MoA & FW, and GOI leads rural exploration and schooling. Through its rural schooling division having an organization of 98 establishments and 71 colleges across India (as in 2016-17), ICAR conveys agri expansion and training, which are an indispensable piece of the general expertise improvement plan of the public authority of India.
- ❖ It essentially takes into account building proficient limits fit for undertaking progressed specialized examination and guaranteeing its viable effort and selection among ranchers.
- ❖ Through its expansion division, which incorporates Agricultural Technology Application Research Institutes (ATARIs) and Krishi Vigyan Kendras (KVKs) or Farm Science Centres, ICAR attempts innovation evaluation, show and limit working of ranchers. ICAR dispatched the ARYA (Attracting

and Retaining Youth in Agriculture) venture in 25 areas of 25 states to prepare youth in enterprising exercises.

- ❖ In every one of these locale, 200-300 youth are being enabled to set up their pay producing units and work as model for other youth in the towns. Agrinnovate India Ltd. was set up in October 2011 fused under the Companies Act, 1956 and is revenue driven organization possessed by DARE.
- ❖ Its objective is to advance rural developments and business venture by utilizing the qualities of ICAR and DARE at making public private organizations in the region of limit building. Through the branch of augmentation (DoE), DAC&FW has attempted key activities towards limit and ability advancement of ranchers, and other agri business players.
- ❖ The National Institute of Agricultural Extension Management (MANAGE) is the nodal organization for the execution of these projects notwithstanding its order of offering the board and specialized aptitude advancement to agri business experts. Under ARYA (Attracting and Retaining Youth in Agriculture), 5,000 youth are being engaged through Krishi Vigyan Kendras (KVKs).
- ❖ Through an aggregate of 662 KVKs spread the nation over, 48,983 preparing programs was coordinated with an effort of 1.3 million ranchers and augmentation work force. Ability arranged professional instructional classes were coordinated for 170,000 provincial youth.
- ❖ Capacity advancement programs were directed for 104,200 augmentation work force, 22,889 (22 percent) of whom were ladies. KVKs coordinated 469,000 augmentation programs with 19.8 million members to make mindfulness among ranchers about improved innovations and to offer warning types of assistance.
- ❖ Technology weeks coordinated by KVKs were focused towards 2.06 million ranchers, including ladies ranchers, augmentation staff, provincial youth and individuals from self-improvement gatherings.
- ❖ Agricultural warning administrations through SMS (56,107) directed 15.5 million ranchers. ICAR-Agricultural Technology Application Research Institutes (ATARIs) overhauled the information and aptitudes of 5,009 staff of KVKs by masterminding limit improvement programs.
- ❖ Agricultural Technology Information Centres (ATICs) filled in as single window conveyance frameworks and gave innovation data, innovation administrations and innovation contributions to 467,000 ranchers.
- ❖ With the vision to advance development and business, ICAR made an Incubation Fund supporting 25 agribusiness brooding (ABI) focuses situated in different organizations for encouraging commercialization of ICAR innovations.
- ❖ These ABIs attempted different exercises including marketable strategy advancement (75); meetings and courses (21); present moment and long haul consultancy (104); selecting business people in brooding (163); graduating business visionaries from the hatchery (61); and esteem chain improvement (40) (GoI 2017). Under the ACABC program directed by MANAGE, almost 23,501 centres were set up and 54,496 competitors were prepared between April 2002 and September 2017 (MANAGE 2017).
- ❖ There are a few other aptitude advancement programs started by the branch of augmentation (DoE) of MoA & FW in 2015 and displayed along comparative lines to focus on the adolescent as well as ranchers when all is said in done just as other people who are now occupied with agribusiness.

- ❖ To influence the current organization and projects, the NSDM ought to bring these projects under one pennant as opposed to making new projects and obligations inside the public authority.
- ❖ Pandit Deen Dayal Upadhyay Unnat Krishi Shiksha Yojana under Unnat Bharat Abhiyan (UBA) is another promising project that target making a comprehensive scholarly framework wherein higher scholastic foundations assume a vital function in the provincial improvement mission.
- ❖ The Ministry of Food Processing Industries (MoFPI): The Availability of talented labour is one of the significant difficulties for the Indian Food Processing Industry, tending to which can empower the area to develop quickly. By progressively zeroing in on the nature of food, tough cycles should be clung to in the preparing area, which requires gifted and prepared labour.
- ❖ The Ministry of Food Processing Industries (MoFPI) is working with the Food Industry Capacity and Skill Initiative (FICSI), the area ability board (SSC) in food handling, to finish the approvals of QPs for each employment job. It is likewise engaged with the improvement obviously educational programs through the National Institute of Food Technology Entrepreneurship and Management (NIFTEM).
- ❖ Under Pradhan Mantri Kisan SAMPADA Yojana, MoFPI underpins skilling foundation and advancement obviously educational programs with a spending expense of Rs.275 million from 2017-18 to 2019-20.
- ❖ The plot involves two segments:
 - Development obviously educational plans for preparing modules and their interpretation to English, Hindi and provincial dialects.
 - Help for the production of framework offices for ability preparing focuses. The plan rules are as yet under cycle. The Indian Institute of Food Processing Technology (IIFPT).
- ❖ NIFTEM lead standard projects on aptitude advancement and business for youth, ranchers, self improvement gatherings and industry. MoFPI, through NIFTEM and IIFPT, centers on business venture advancement by methods of ability and limit building, outreach projects and town appropriation programs.
- ❖ It has remembered a module for business in the course educational plan relating to all employment jobs. MoFPI set up NIFTEM in 2012 and has been pronounced a Deemed University under the anew classification.
- ❖ The establishment gets budgetary help from MoFPI to advance examination exercises, grow the Village Adoption Program (VAP) and ability improvement in the food-handling area for which a portion of Rs.1 billion has been made. The IIFPT in Thanjavur, Tamil Nadu, has been moved up to a public level organization in 2008. An assignment of Rs.750 million has been made to extend its exercises and projects to fulfil the expanding needs of the food-handling area.
- ❖ The IIFPT has made a hello there tech, cutting edge food preparing brooding cum-preparing focus with deals source as a food handling hatching model nearby. Through this office, it offers shortand long haul involved preparing to country youth, ladies self improvement gatherings, makers, understudies, new and experienced business visionaries and different partners. It likewise offers specialized consultancy administrations for setting up food industry units.
- ❖ The Food Industry Capacity and Skill Initiative (FICSI), the area expertise gathering (SSC) in food preparing, has the order to build up an aggregate of 70 QPs, 55 of which have just been created. Of

those 55 QPs, 44 QPs have been affirmed by the QRC, and the leftover 11 QPs are finished and are to be introduced to the QRC for endorsement.

Under PMKVY 2.0, 21 Training Centres have been partnered with the NSDC through the SMART Portal. The primary pattern of preparing under the PMKVY was introduced by the Hon'ble Minister of Food Processing Industries on fourth September, 2015, in 30 focuses across 11 states (GOI).

Notwithstanding the aptitude advancement activities embraced by MoSDE, MoA&FW and MoFPI, prime self-governing public instructive establishments like the Indian Institute of Management (IIM) and the Indian Institute of Technology (IIT) have been assuming a significant function in propelling developments and business through their individual hatcheries that help developments and sustain business venture. Through the Bharat Innovation Fund, the Centre for Innovation and Entrepreneurship (CIE), which is subsidiary with the IIM-Bangalore, gives pre-arrangement An and arrangement A subsidizing to game-evolving business visionaries.

WAY FORWARD

Make advancement and business necessary to aptitude improvement. All expertise improvement programs, regardless of whether they are important for the professional instruction and preparing or formal training, ought to underline development and business venture. These are the two significant columns for manageable turn of events and financial advancement and they have started to characterize the fate of occupations across areas. With India's populace being energetic and developing and different open doors across areas, it is essential to get the abilities youthful and sustain them going ahead through the correct brooding and tutoring, in this way getting ready preparing them for the market lastly for take-off. The agribusiness and food areas have seen a quick whirlwind of advancements that are pointed toward unraveling a portion of the squeezing difficulties defying the areas. With these has arisen another age of business people who can use innovation towards improved horticultural and food handling rehearses. They can possibly profit the area everywhere and ranchers and essential processors specifically regarding ideal use of assets and of accomplishing better yields. Be that as it may, not all advancements have endured the chances and turned effective because of an absence of institutional, scholarly, and venture uphold. Thus brooding going from cutting edge innovative work openings, preliminaries and investigations on ranchers' fields, coaching and warning administrations to create vigorous plans of action, and monetary help, among others, are basic for commercializing a few developments.

- Entrepreneurship in farming has opened another business open door for youth and is now picking up energy against countless individuals who are not ready to proceed in agribusiness. Experts with admittance to information and innovation can have an enormous effect to the manner in which agribusiness has been working hitherto. Business insight can empower to advance past customary practices and view horticulture as a business attempt.
- A virtual stage interfacing all open and private run hatching and quickening agent projects can be helpful in sharing accepted procedures, implementable arrangements that can be recreated, and can make a bound together network supporting advancement and business venture with certain standard destinations, approaches, and targets consequently intensifying the effect.

- The idea of rancher field schools can be stretched out to assemble an association between lead ranchers, town level business person and public expansion framework to offer skilling and show adoptable practices at grassroots levels.

SPECIFIC RECOMMENDATION

On the foregoing analysis the researcher recommended certain specific policy considerations.

- ❖ The existing short term programs are not enough to meet their human resources in agriculture. It may be extended to other allied sectors also.
- ❖ Active involvement of the state government nodal agencies and also it may be clearly designated the duration of the course well in advance before the harvesting seasons.
- ❖ Additional stipends and monetary benefits may be given to the participants so as to attract more and more.
- ❖ Monitoring and coordinating agencies on the program must frequently make a surprise visit during the ongoing sessions and certain interactive sessions must be made among the participants.
- ❖ The feedback of the program must be essentially entertained among the participants and also what are the additional infrastructure facilities are also needed will be discussed in detail.
- ❖ The implementing process will be only done by the KVK'S, State agriculture universities and other agricultural research stations which are located in the respective zones which will be gathered higher momentum among the participants.

CONCLUDING OBSERVATIONS

From the foregoing analysis one can opined and come to a strong conclusion that Indian workforce on agriculture sector and existing labor market have recently faced lots of constraints and problems on the outbreak of COVID-19 and it is very difficult to improve and recapture the work force and skills.

Many laborers turned out to be unskilled because of the successive declaration of seven lockdowns which forced them to be idle and restless and also created illegal immigration to other states and returned to their hometowns, even the skills obtained from the on-going programs are underutilized and cannot be tapped them in improving the agricultural productivity, Again they are needed to be underwent specific skill development programs on agricultural sectors and also efficient mechanism of mobilizing the human resources which can be channelized into farm sector in a progressive path in future is the only amicable way to solve the problem of under efficiencies in this sector. Significance of rural area in Indian economy can't be destabilized. The human asset upholds for the rural area was getting more fragile and there is a developing hole between logical expertise and field levels do-how. This information deficiency ought to be defeated quickly to improve the efficiency and benefit of the little ranchers.

REFERENCES

- ❖ Ashton, D. & Green, F. (1996). Education, Training and the Global Economy. Cheltenham: Edward Elgar.
- ❖ Asian Development Bank (ADB). (2008). Education and skills: Strategies for Accelerated Development in Asia and the Pacific. Manila: Asian Development Bank.
- ❖ Desai, S.B., Dubai, A., Joshi, B.L., Sen., M.Sharif, A. & Vann man, R. (2010). Human Development in India: Challenges for a Society in Transition. New Delhi: Oxford University Press. Government of India (GOI).

- ❖ (2011b). Census of India 2011: Provisional Population Totals, Paper 2, Volume 1 of 2011. Rural-Urban Distribution. Delhi: Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, GOI.
- ❖ (2011c). Statistics of School Education 2009-2010. Delhi: Ministry of Human Resource Development, GOI. (2011d). National Manufacturing Policy.
[http://commerce.nic.in/whatsnew/National_Manufacturing_Policy2011.pdf] (Accessed on November 20, 2012).
- ❖ (2008a). Educational Statistics at a Glance 2005/06. Delhi: Ministry of Human Resource Development, Department of Higher Education, GOI.
- ❖ Johansson, R. & van Adams, A. (2004). Skills Development in Sub-Saharan Africa. World Bank Regional and Sectoral Studies. Washington, D.C.: World Bank.
- ❖ Kuruvilla, S., Erickson, C.L. & Hwang, A. (2002). "An Assessment of the Singapore Skills Development System: Does it constitute a Viable Model for Other Developing Countries?" *World Development*, 30 (8). pp. 1461-1476.
- ❖ Middleton, J., Ziderman, A. & Van Adams, A. (1993). Skills for Productivity: Vocational Education and Training in Developing Countries. New York: Oxford University Press.
- ❖ National Council of Educational Research and Training (NCERT). (2009). India Year book 2009. Delhi: NCERT.
- ❖ OECD. (1997). Industrial Competitiveness in the Knowledge-based Economy: The New Role of Governments. OECD Proceedings. Paris: OECD. Okada, A. (2006). "Skills Formation for Economic Development in India: Fostering Institutional Linkages between Vocational Education and Industry," *Manpower Journal*. (Special Issue on Vocational and Professional Education edited by Jandhyala B G Tilak), XXXI (4), pp. 71-95.
- ❖ Bangalore's Software Cluster," in Akifumi Kuchiki and Masatsugu Tsuji (eds.), *Industrial Clusters in Asia: Analyses of their Competitiveness and Cooperation*. New York: Palgrave-Macmillan, pp. 244-277.
- ❖ Skills Development for Youth in India: Challenges and Opportunities-193(2004). "Skills Development and Inter firm Learning Linkages under Globalization: Lessons from the Indian Automobile Industry," *World Development*, 32 (7). pp. 1265-1288.
- ❖ Paul, B. (2011). "Demographic Dividend or Deficit: Insights from Data on Indian Labor" Paper presented at the 3rd Annual Conference of the Academic Network for Development in Asia (ANDA), Nagoya, March 3-6, 2011.
- ❖ Pratham. (2010). Annual Status of Education Report: Rural 2010. New Delhi.
- ❖ Standing, G. (1993). *Global Labour Flexibility: Seeking Distributive Justice*. Basingstoke: MacMillan.