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# Migration of Agricultural Labour: A Study in Telangana

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#### **ABSTRACT**

Human migration is the movement of people from one place in the world to another for the purpose of taking up permanent or semi permanent residence, usually across a political boundary. An example of "semi permanent residence" would be the seasonal movements of migrant farm laborers. People can either choose to move (voluntary migration) or be forced to move (involuntary migration). Migrations have occurred throughout human history, beginning with the movements of the first human groups from their origins in East Africa to their current location in the world. Migration occurs at a variety of scales: intercontinental (between continents), intracontinental (between countries on a given continent), and interregional (within countries). One of the most significant migration patterns has been rural to urban migration, the movement of people from the countryside to cities in search of opportunities. The present study is a modest which is deals with the migration of agricultural labour in Telangana State.

#### INTRODUCTION

There are various types of migrations are viz., Internal Migration, External Migration, Emigration Immigration, Population Transfer, Impelled Migration (also called "reluctant" or "imposed" migration, Step Migration, Chain Migration, Return Migration and Seasonal Migration.

According the migration the peoples are also classified into Emigrant, Immigrant, Refugee,

Internally Displaced Person and Migration Stream.

People move for a variety of reasons. They consider the advantages and disadvantages of staying versus moving, as well as factors such as distance, travel costs; travel time, modes of transportation, terrain, and cultural barriers. The factors are Push Factors, Place Utility, Intervening Opportunities, Distance Decay Pull Factors, Several types of push and pull factors may influence people in their movements (sometimes at the same time), including Environmental, Political, Economic and Cultural.

Human migration affects population patterns and characteristics, social and cultural patterns and processes, economies, and physical environments. As people move, their cultural traits and ideas diffuse along with them, creating and modifying cultural landscapes.

The migration can be measure as In-migration, Out-migration, Gross migration, Net internal

migration, Movers from abroad and net migration

Agricultural labourers who are mostly landless and form a significant section of rural society mainly depend on wage employment in agriculture. Majority of them belong to the category of SCs and STs and are among the worst exploited section of the society. Their income has always been meager, resulting in poor living and heavy indebtedness. Much worse are those who get casual agricultural work merely exist and do not live. Their morning holds no promise for the evening and they can never sleep without tensions for they have no stocks left for the morning. Struggling for their morning and evenings they pass their whole life.

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to order to understand the problems of agricultural labour and to formulate an appropriate policy in Unilike industrial labour it is rather difficult to necessary to define them. Unlike industrial labour, it is rather difficult to give an exact definition of agricultural labour pecouse in the absence of a capitalistic type of agriculture in our country, a separate class of workers depending wholly on wages does not exist. Since the line between agricultural labourers and other agricultural groups is subject to a marginal shift, one class overlaps the other, -therefore, it cannot compartmentalize the agranan society into distinct classes.

The basic definition of agricultural labour was provided by the department of Census, Government of India. According to the Census of India, 1961, all those workers were included in the category of agricultural labour that worked on the farms of others and received payment either in cash or kind (or both) The 1971 Census excluded those farm workers from the category of agricultural labourers by whom working on the farms of others as a secondary occupation.

Many empirical studies have been done, related to agricultural labourer's problems, in the context of mechanization of agriculture and migration from one place to another. But these studies did not focus on the withdrawal of agricultural labour have become redundant with the passage of time.

# IMPORTANCE OF THE STUDY

Several studies are concentrated on labour migration with coverage of the states and also national level with special attention of skilled and unskilled labours including with agricultural labour. But no one study has made an attempt on migration of agricultural abour issue with special reference to Telangana before and after formation. However some studies are conducted on migration of agricultural labour in the Andhra Pradesh state with the coverage of districts of Rayalaseema, and few districts of Telangana such as Mahabubnagar, Ranga Reddy, Nizamabad and Adilabad and these are studied on labours how are not depending on agricultural sector.

In the light of the above discussion the present study is a modest which is deals with the migration of agricultural labour in Telangana State.

#### HYPOTHESIS

An observation about the farm practices will reveal, majority of farming activities are confined to a particular season. All crops do not need the agriculture labour uniformly in the different stages of their crop growth. Moreover, where there is adequate rainfall, irrigation work may not be required. If it is summer and crop free period, farmer may not need more labour. Hence, this uncertainty on labour needs makes the life of agricultural laborers to consider alternate options.

To reduce the migration tendency of agricultural labour from rural another place the central and state governments implementing various policies and programmes such as MGNREGA.

The migration of agricultural labour shows intensive impact on the human lives.

# **OBJECTIVES OF THE STUDY**

In the light of the importance and hypothesis of the study the broad objectives are framed and they are given in the following:

- 1. To study the meaning, nature, concept of the migration.
- 2. To study the migration its impact on agricultural labour.
- 3. To examine the socio-economic status of the agricultural labour who are migrated.
- 4. To trace out the various problems of the migration on agricultural labour.
- 5. To suggest the appropriate solutions to reduce the migration with special reference to agricultural labour.

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# RESEARCH METHODOLOGY

In order to assess the various reasons for which labour migrate from agricultural works, the the order out among agricultural laborers in Telangana. The needed data for the present research work has collected through the primary and secondary sources.

# Primary Source

A simple random sampling technique was followed to choose 210 families belonging to various districts of Telangana state namely Mahabubnagar, Medak, Nalgonda, Nizamabad, Rangareddy, Karimnagar, and Warangal District.

From these five districts, five tahsils has selected, one from each district, were selected using probability proportional to size (area) under wheat and paddy crops. From each selected tahsil, 30 migrant labourers were interviewed making a total sample of 210 families. The data from selected respondents were collected by personal interview method using a specially designed interview schedule. Migration during peak agricultural season being a common feature in the state, all persons who come to Punjab only during peak periods and return to their native places within the same year were considered as short-term migrants. Persons working permanently with farmers on a yearly contract or year after-year contract and visit their native place occasionally for a few days, were considered as long-term migrants.

# **Secondary Source**

The research work will not be completed with the collection of the secondary data. For this purpose the researcher has visited to various libraries, government departments for collection of books, journals, newspaper clippings, official and unofficial documents, report, research works and also visited to the various internet sources.

# LIMITATION OF THE STUDY

The present study confined to the draught areas which are declared by the Telangana Government as on 24th November, 2015. The study focused on the migrants who are having the agricultural land but they are migrated to the other areas for livelihood.

In the light of the hypothesis, objectives, sample has been selected for the present study which is deals with the migration of agricultural labour in Telangana State.

Recently Telangana Government has declared of 231 Mandals as Drought Affected Areas. Telangana Government has been reviewing the seasonal conditions from time to time in the State during the South West Monsoon 2015. During the South West Monsoon Period (1.06.2015 to 30.09.2015), the State has received an average rainfall of 610.8 mm as against normal rainfall of 713.6 mm, with a deviation of (-) 14%. Several mandals spread over 7 districts have received deficit rainfall along with severe dry spells that have caused withering and drying up of crops that is likely to result in drastic yield reduction of several major rainfed crops. Government after careful examination hereby declares the 231 mandals in 7 districts i.e., Mahabubnagar (64), Medak (46), Nizamabad (36), Ranga Reddy (33), Nalgonda (22), Karimnagar (19) and Warangal (11) as drought affected mandals.

On the basis of the government declaration a simple random sampling technique was followed to choose 210 families belonging to various districts of Telangana state namely Mahabubnagar, Medak, Nalgonda, Nizamabad, Rangareddy, Karimnagar, and Warangal District.

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#### FINDINGS

- Out of the 210 family members 649 (50.39%) members belong to male category and 636 (49.60%) members are from female category.
- The data clearly indicates that the majority of the migrants is belonging to young and middle aged (85.64%).
- Majority of the migrants families are belongs to Hindu religion i.e., 65.23% and next place occupied by the Muslim (2.95%).
- Out of the total percentage, majority of the families are belong to BC (46.61%) and second place occupied by the STs (20.47%), SCs (17.61%) and 15.71% are OCs. The data clearly indicates that the BCs, STs and SCs are found majority migrants.
- The data shows that the majority of the migrants are illiterates (64.50%) and only 35.50% are educated among the educated members 29.01% are found educated up to school level and 6.47% are collegiate education.
- According to the above data it can be said that the majority of the migrants are either studied
  or dropped their education upto primary and SSC level (17.47% and 11.54%); while only
  1.95% f migrant's educated up to degree level.
- Migrants are found as married (82.13%), 2.02% of as widows and 15.83% of are as unmarried.
- Majority of the migrants are having the nuclear family (88.57%).
- Out of the total percentage irrespective of the tahsil, majority of the migrant families are taking shelter in sheds and huts (arranged in open places) i.e., 34.28% and 21.42%; and remaining 21.90% are residing in semi-pacca houses.
- Out of the total percentage, majority of the migrant families are belong to agricultural labours (46.66%) and it is followed by the labour (29.04%), self-employed (10%) and farmers (9.04%).
- Majority of the migrants are depending on labour work (53.33%).
- Out of the total percentage, majority of migrated due to Poverty (88.57%) and it is followed by 77.14% of unemployment, 68.57% of lack of civic amenities, 68.09% of lack of irrigational facilities, 62.38% of for children's education, 61.90% of are due to landlessness, 56.19% of with equal percentage small holdings and indebtedness, 54.28% of due to low wages and 50% of due to crop failure.
- Out of the total percentage, majority of families are migrated below 6 months period and 6 to 1 year i.e., 31.42% and 20%. It means 51.42% are short term or seasonal migrants and remaining 48.58% are long-term migrants.
- On overall basis pre migration majority of the family are found in the income group below Rs. 150/- per day (75.71%) and after migration the percentage is decreased upto 42.86% and regarding to the income group between Rs. 151/- and Rs. 250/- pre migration found 24.28% and while after is 59.04% the difference increased up 34.76% and 8.09% are earning upto Rs. 251/- to Rs. 350/-.

- Majority of the migrant families are residing in two rooms (59.04%) and 32.85% are residing in one room.
- 95 66% of the families are not having safe kitchen facility.
- 96 96% of the houses are not having ventilation facility.
- 83.33% of the families are depending on public water taps for drinking water.
- 81.90% of the families are not having drainage facility.
- 62.28% are not having the bath rooms and latrine facility.
- Majority of the migrants are not affected by any deceases or other problems (39.52%), but 18.57% are suffered from malaria, and it is followed by serious fivers (14.76%), 11.90% are from chicken gunia, 8.57% are from dengue and 6.66% are hospitalized by hitting the insects due to lack of safety environment of the residence.
- 32.85% of families are not having the gas facility till today.
- Out of the total percentage, majority of the migrants (62.85%) said that they did not having any and remaining 37.14% had Bank Accounts.
- 7.14% of migrants are not having Aadhar card neither migrant place nor their own village.
- 36.19% of migrants are not having the voter card invent they are migrated long back.
- 36.19% of migrants are not having the PDCs because these are belongs to short-term
- The employment generated programmes are not providing sufficient working days and also the work is not distributing/measuring between the aspirants at their village so they
- Regarding to spending pattern of earnings more than half percent are spending on daily consumption, investment in agriculture, repayment of debts, health care, daughter marriage, well digging, house construction and children education.
- Response majority of the migrants said that they not have any savings (86.66%) because they are struggling for clear the debts which laid for daughter's marriage, children's education and house construction.
- majority of the migrant had near 15 days per month who are purely depending on unskilled and it is followed by 25 days (74.28%) who are depending on unskilled and in driving field, 20 days (58.09%) who are working as domestic servants and self employed and remaining 55.71% of who are depending on watchmen and attendant work in private offices and in shopping complex and at contractions site.
- Majority of the migrants (54.76%) are not observed any changes in their lives because the earning amount is fulfilling the daily consumptions, indebtedness, children education and other unexpected expenditure, and remaining 45.23% observed some changes in their lives.
- 40.95% are not having the memberships in associations/SHGs/Trade unions because these are short-term/seasonal migrant agricultural labour.
- 40.95% are interested to go back to their negative village when the government will take the necessary initiatives such

# **SUGGESTIONS**

- The living expenses are too much in the migrant place, they are hardly overcrossing the
- Some time they are not getting the work from two to three or more then in a week hence they are facing lot of financial and other associated problems. In this situation no one has giving any kind of help at the migrant place.

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- The government is neither given a cent land to construction the house not a constructed
- They are residing in congested houses very hardly with their families.
- The government officers are not allotted PDCs.
- The bankers are not favour to open the bank account.
- The private money lenders are not giving loan to them in emergency they asked for guarantee. Allot the agricultural land to landless people.
- Facilitate the bank loans to all for self-employment and also for overtake the agricultural
- Enhance the amount of Programmes like MGNREGA.
- The government must take the initiation to prevent/abolish the social stigmas in villages.
- The government must take steps towards the development of the irrigational and drinking facilities in the villages.
- The government must take steps toward the development of small scale industries and
- Linkage loan should enhance to all SHP at village level.

# RESEARCHERS OBSERVATIONS AND SUGGESTIONS

The study has revealed that most of the migrants were in the age of thirties and forties, belonged to general castes with faith in Hindu religion, were mostly illiterates and migrated in the first decade of 21st century. Nearly 62% of the migrants were earning a monthly income of Rs. 3000-5000. Low wages and rain-fed agriculture in the native place have been found the economic factors leading to migration, while poverty, poor civic amenities, leading a poor life, high aspirations and demonstration effect were social and psychological factors resulting to migration. Before migration, about 23% persons were unemployed and 60% were getting less than 250 days employment per year, but after migration, 41% got more than 300 days of employment and 31% got employment for 250-300 days.

As far as income is concerned, before migration 49% migrants were earning less than Rs. 10000 per annum, while after migration 34% could earn more than Rs. 50000 and 28% could get between Rs. 40000 and Rs. 50000 per annum. Nearly 58% long-term migrants sent 50-70% of their income as remittances back home.

A general perception of the farmers regarding migration of labour was that it has resulted in increased supply of labour, decreased wage rates and increased social tension, crime, drug menace and cultural invasion. Despite this, Telangana farmers preferred migrant labour due to their timely availability, quality of work and low wages. Some farmers preferred local labourers due to their trust worthiness and adjustment for advance payments.

Among various farm operations, migrant labourers were preferred for transplanting of paddy, while for harvesting, threshing, cattle tending, sowing, spraying, hoeing and tractor driving local labourers was preferred by most of the farmers. Also, with migration of labour there was a significant decline in the harvesting charges of wheat, transplantation charges of paddy and annual rates of contract of a permanent labourer.

Thus, in an overall scenario, migration of agricultural labour for has been found not beneficial, with the exception of increase in crime rate, drug menace and cultural invasion. There is a need of government intervention to get the antecedents of migrant labour verified from their respective native villages before employment by the labours. The Government of Telangana should also maintain a demographic balance by regulating the inflow of migrants.

Mahatma Gandhi National Rural Employment Guarantee Act (2005), a government sponsored hundred days' employment programme, is pertinent to seasonal labour movement in the village. Since the employment programme was yet to start during the surveyed year (2006), it was not possible to collect information on it. However, one can broadly say that it has improved consumption level, removed food insecurity, and enhanced expenditure on health and purchasing capacity. These results vary across the households, depending on the number of job card holders in a household, working days and wages. On the other hand, it has reduced the extent of migration, particularly during summer time. But it could not stop most of the households from migrating during non-MGNREGA period.

On the contrary, the programme has manifold problems such as poor implementation and administration, widespread corruption, bias in allocation of work, lack of supervision, manipulation of working days and wages, etc. There is ambiguity about the onset of employment, number of working days and wage rate every year. On the other hand, there is hardly any sustainable asset created under the scheme in the village. If this situation continues, the spirit of the scheme would be in jeopardy. It may neither benefit the rural poor nor be continued for long. Hence, there is a need

to remove the obstacles in the implementation of the programme.

Migrant workers, those workers, who migrate from one area to another area within the state or country in order to get seasonal or temporary or part time work in different sectors. Migrant workers, who are not organized under any trade unions and their labour standards, are not protected by the government as well as trade unions, these migrant workers are illiterate, ignorant, and belong to backward community. They do not get minimum wages stipulated under the Minimum wages Act. Today, the real issue is how to extend human rights to all segments of the labour market. There are many groups of workers in the unorganized sector or informal economy, like migrant workers in agriculture, building and road construction, brick kilns, sugar factories and others, for whom decent work is a very distant goal. The Government of India should ratify all the relevant international covenants that respect the dignity of labour, especially important ILO Conventions No.87. The freedom of association and protection of the right to organize convention, and the ILO convention 98, the right to organize and collective bargaining convention. Workers, whether industrial workers or employed with the government should have an inalienable right resort to strike. Uniform labour standards in the context of unorganized sector workers, like migrant workers, should be implemented in rural and urban areas of India. It is necessary to protect migrant and other workers in the unorganized sector by International Labour Standards.

The main focus of the study was to examine the seasonal labour migrant's characteristics, nature of work, forms of migration and wage and working conditions at the work site. The study village witnessed an exodus, which is largely seasonal in nature. From the village, more than half of the households have migrated to other regions after the monsoon or slack season in search of work/employment for a short period. Seasonal migration from the village is basically towards urban and rural areas, in which the urban migration stream is the predominantly large flow from the village. Urban migrants work mostly in construction of buildings which involves hard work (loading and unloading), risk and long hours of work which obviously needs physical strength, and the urban stream is outnumbered by male migrants. Both rural and urban migrants migrate on a seasonal basis, the only difference being that urban migrants stay longer, that is, for up to one year, while rural migrants stay for less than six months. Half of the migrant households moved with all family members (whole family) and the rest with either one or more members of the households. The migrants have to live in slums without basic facilities, though rural migrants were better off in this regard. There are wage differences between rural and urban destinations. Urban migrants earn more than their rural counterparts, and it is mainly because urban work is different from rural agricultural work. Thus the villagers travel between village and destinations repeatedly and are unable to come

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out of this victous circle. This is taking place due to distress conditions in local agriculture and the tabout market it seems, until and unless there is an improvement in their economic status and resources, and agriculture becomes profitable and viable, they are not going to end migrating to

#### CONCLUSIONS

This study explored the pattern of agricultural labour migration. It also examined the role of seasonal labour migration on migrant household's resources. It study revealed that more than half of the households in the village migrated. The migration was more of seasonal and short-term in nature. It led to both rural and urban areas especially the latter. Landless labourers as well as small and marginal landholding households were more prone to migrate to rural areas, whereas medium and large landowners chose to work in Hyderabad city. In terms of resource ownership, non-migrant households were at an advantage over their migrants' counterpart. Indeed, inadequacy of resources stimulated such households to undertake migration in order to supplement their household income. Further, in both land and lease transactions, non-migrants outnumbered migrant households.

After the return from migration there was hardly any acquisition of new or additional resources. A majority of the migrant households spent their income on daily food consumption, repayment of old debts and conducting their daughters' marriages. This did not allow them to accumulate additional resources. Thus, seasonal migrant households did not acquire resources due to inadequate earnings, consumption needs, seasonal stay and low wage rates. Obtaining additional resources in bulk is not possible for them by migrating once or twice alone. Hence they continue to migrate on a seasonal

There is a need for government intervention to develop rural India through encouraging the agricultural sector, and implementation of employment scheme and infrastructural development programmes. In doing so, government policies should focus on providing timely crop loans, seed supply, subsidized fertilizers, and minimum support price and extension services. This could redress most of the problems that farmers face today. Second, government employment programmes like MGNREGA should be implemented effectively. Steps should be taken to remove impediments that they face today. Hundred days of work should be ensured and wages paid without delay and deduction. Steps should be taken to create basic and sustainable infrastructure in the rural areas. Finally, there should be appropriate policies and regulations to tackle the problems faced by seasonal labour migrants at the destinations. Safe and secure working and living conditions at the destination must be the object of the labour laws. Enforcement of migrant labour laws and protecting the basic human rights of mobile population must be the foremost priority of the governments, both Central and State. Then only can the safe passage of migrants between the regions and States be ensured.

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## DEFENCE STRATEGY IN NDA GOVERNMENT: AN OVERVIEW



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**Abstract:** Narendra Modi became the PM in 2014. Modi's legislative agenda has been dominated by the news of defence acquisitions, participation in war games, defence budgets, etc. The present paper focused on the different strategies led by the NDA Government.

Key Words: Defence Reaction with world countries, Defence Budget, Strategies

#### Introduction

After Independence, India did not pay much heed to the military. Pandit Nehru thought that defence expenditure is unnecessary and is imperialist. Whereas India's neighbor China gave a lot of attention to this aspect. Some think that he was also scared of giving too much power to the military after he saw the coups happening in Pakistan. Narendra Modi is different in this manner. He believes in the power of the military. He is absolutely right in believing that as long as a country has a strong military, diplomacy will never fail.

Nirmala Sitharaman, in her address to the Lok Sabha recently, presented some facts about our defence preparedness and that of our neighbors. China, during 2004-15, added 400 new aircraft, including 5th generation stealth aircraft. Pakistan also increased their capacity by adding some F-16s and 43 JF-17 aircraft. While everyone around us was increasing their military capacity, India's squadron's strength went down from 42 in 2002 to 33 in 2015. Here is a brief overview of how NaMo has fared in the defence aspect of his tenure.

#### Dealings with the United States

India's fleet of MiG 21 is aging and is in need of replacement. In 2017, the GOI went on a buying spree looking for new aircraft in the international markets for the Air Force. It had to choose from Lockheed Martin's F-16 Fighter Falcon and Saab's JAS 39 Gripen. India opted for the F-16 jets. F-16 jets are used by many countries, so its reputation is quite known. It has APG-83 Active Electronically Scanned Array (AESA) radar, a modernized cockpit, advanced weapons, conformal fuel tanks, automatic ground collision avoidance system, advanced engine, and industry-leading extended structural service life of 12,000 hours.

It can locate targets in all weather conditions and detect low flying aircraft in radar ground clutter. An all-weather capability allows it to accurately deliver ordnance during non-visual bombing conditions.

The wings of the airplane will be manufactured by Tata Advanced System Limited due to Na Mo's flagship project "Make in India" in a facility in Hyderabad. The planes will start being delivered by 2021 or at the latest by 2022. This is just the starting of a defence partnership between the US and India. It is a win-win situation as US companies will profit with gaining access to the huge Indian market and India needs them to increase their capacity.

India will acquire the Block 70 version of the fighter jet which is more advanced than what Pakistan possesses.

#### **Involving Israel**

Israel has been a supplier to the Indian defence industry for quite some time now. Israel is an expert at making drones, UAVs, radar systems and India has requirements for all of them. Under Narendra Modi's leadership, friendship with Israel has touched new heights. India's defence relationship with Israel was given a boost after the US strong-armed Israel into stop exporting defence equipment to China.

India purchased three AWACS from Israel for the Air Force. Airborne Warning and Control Systems is a mobile, long-range radar system which is very efficient in detecting low-flying aircraft at a distance of 370 km and also high-level targets. AWACS can detect and track incoming fighters, cruise missiles, and drones much before ground-based radars. Due to its high speed, the communication system of AWACS cannot be jammed or intercepted. Although Pakistan and China have more of this than India, it is a start in the right direction.

India also purchased a Long Range Surface to Air Missile (LR-SAM) from Israel. Israel has agreed to supply the Barak 8 Missile for seven ships of Indian Navy. This is jointly being developed by Israel and India. Designed to defend against a variety of short-to-long-range airborne threats including fixed-wing aircraft, helicopters, drones and projectiles, Barak-8 incorporates a state-of-the-art phased array multi-mission

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radar, two-way data link, and a flexible command and control system, enabling users to simultaneously engage multiple targets day and night and in all weather conditions.

India has also decided to buy a Medium Range Surface to Air Missile (MR-SAM) for the Army. In this deal, there will be around 40 firing units and 200 missiles for the army. The MR-SAM, a land-based version of the (LR-SAM) of the navy, will have a strike range of up to 70 km.

There is still one missed opportunity by India, this is the purchase of 8,000 spike missiles, 300 launchers and transfer of technology from Israel to Bharat Dynamics Limited. India and Israel first confirmed the deal, then PM Narendra Modi backed out stating the reason that this purchase will not be good for the indigenous manufacturing companies. DRDO is said to be making its own version of the spike missiles, but they always miss their deadlines and the missiles always have some flaws in them.

#### Relationship with Russia

As mentioned earlier in the article, Mr. Nehru did not focus much on the armed forces, this changed after China defeated India in the 1962 war. India decided to strengthen its armed forces significantly after that. Russia had a big role in ensuring this. Russia has since been a vital defence partner for India helping India in its time of need. Now, India purchases more defence material from Russian defence industry than Russia purchases for itself.

Russia is the largest source for India to maintain its defence might. In October last year, PM Modi and President Putin signed \$7 Billion worth of deals. This includes completing the final phase of the S-400 Triumf Air Defence Shields. India has decided to purchase 5 regiments of this. The system can engage all types of aerial targets including aircraft, UAVs, and ballistic and cruise missiles within the range of 400km, at an altitude of up to 30km. The system can simultaneously engage 36 targets.

S-400 has 4 new types of missiles in addition to the missiles of the previous model of S-300. The range of these missiles is from 120 kilometers to 400 kilometers. They can hit high-speed target such as fighter jets with a high hit probability. The radar can detect and track aircraft, rotorcraft, cruise missiles, guided missiles, drones and ballistic rockets within the distance of 600km. It can simultaneously track up to 300 targets. The command and control center of the S-400 system recognizes the threats and also prioritizes them. The systems would be delivered by 2020.

India will also purchase 4 frigates from Russia for the Navy. These frigates will improve India's capability to detect and track submarines and enemy missiles. They will also help in carrying cruise missiles. 2 of these will be built in a Goa shipyard and two will be directly imported from Russia. The two that will be built here will involve the transfer of technology which will lead to higher prices for these two frigates. Frigates have been a long-standing demand of the Indian Navy.

But there are some outside forces that do not want this relationship to prosper. America has been using CAATSA against India and other countries. Countering America's Adversaries through Sanctions Act, in the Indian context, prohibits any Indian entity to indulge itself in any "transactions" with the Russian defence sector. If any Indian entity did so, it will invite US sanctions on that entity. In the Indian case, that entity can be the Defence Acquisition Council (DAC) headed by the Minister of Defence or the Defence Procurement Board (DPB) headed by Defence Secretary. Although India has received a waiver as of now from the CAATSA, Russia and India are looking at alternatives to keep their partnership going without the fear of US sanctions. This could include setting up a dedicated bank for military purchases between the two nations and the possibility of transferring money in troubles to Russia instead of dollars.

#### Rafale Aircraft

This section will not try to answer the question of whether the deal was a scam or not. According to the above-mentioned stats by Nirmala Sitharaman, India's defence preparedness was not at all up to the mark. Any confrontation with China or Pakistan might not have gone India's way.

The former Defense Minister A.K. Antony had 10 years to make that deal, but for reasons only known to him, he never acted on it. There were fundamental differences between France's Dassault and India's HAL. They had disagreements over two issues, these were: (i) number of man hours it will take to produce the 108 aircraft from scratch, and (ii) the responsibility matrix, i.e. the responsibilities of both the companies which were not acceptable to both the sides. These issues were never solved and the deal was never signed.

It was Modi's government that signed the deal with slight changes. They decided to buy 36 aircraft instead of 126. But all of their 36 aircraft were in flyaway condition, whereas in the UPA deal, 18 were in flyaway condition, and 108 were bare to the bones. The deal that the Modi government struck will start to bear its fruits from this year only. The first delivery will be made in the middle of the year.

Modi's deal involved 13 ISEs (Indian Specific Enhancement) to the Medium Multi-Role Combat Aircraft (MMRCA). These 13 ISEs are confidential so that the other countries do not know what our aircraft possesses. Because of these 13 ISEs, India now is the owner of the most advanced Rafale aircraft. The Air Force needed these aircraft very badly, and now they will have it, this is a plus point for the NaMo administration. They state that 36 aircraft were bought because the Air Force had an urgent demand for them; one aspect where Modi could have improved was that he could have bought 36 now and kept 90 for later.

The decision to involve Reliance on production is not all a bad one. HAL is not the organization it once was. Many personnel in the armed forces also agree that HAL would not have been able to manufacture it. There have been instances when

bulletproof jackets made by HAL had to be rejected by the army, imagine the kind of problems they would have had if they tried to make the aircraft as advanced as Rafale.

#### Defence Budgets

This is one more aspect where NaMo government could have done better. Defence budgets are a very strong indicator of the defence condition of the country and in India; the defence budget does not present a positive image. Although the absolute amount of the budget allocation for defence purposes has been increasing, the defence budget as a percentage of GDP has been declining consecutively for years. This year Rs. 300,000 crore was allocated in the defence budget, the highest ever, but as a percentage of GDP, this is not much. Such kind of paltry spending is not enough to sustain the defence capability when we have a stronger than ever China and Pakistan.

Given the recent changes in Afghanistan, after the US withdrawal of troops, Pakistan will not need to spend so much of its energy in Afghanistan as the Taliban will already have a good presence there, they can focus on their strategy of making India bleed by a thousand cuts by focusing on their incomplete mission of an India free of Kashmir. The US will probably get an assurance from the Taliban that Afghan soil will not be used for anti-US activities. Pakistan is the reason that the US will get such assurance, the grateful US will give some of its immovable defence material to Pakistan and might resume their sales of defence equipment to Pakistan. This can be used against India.

In addition to the material help that will begin to pour into Kashmir Mujahideen, a victory over the US (as the American withdrawal will be interpreted) will boost the morale of terrorists in the valley and beyond. Pakistan will again facilitate the induction of battle-hardened Taliban into Kashmir as was the case in the 1990s.

Even countries which have no threats to their territorial integrity prefer keeping their defence budgets at the rate of 2% of GDP. India right now is below this level. India apart from threats from outside also faces militancy in Kashmir and also faces Left Wing Extremism (LWE), the army is also needed to keep this under control.

The next administration will have to focus on this. The best I can do is hope that the electorate does not throw a hung house, only a strong decisive government can deal with this.

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# STATUS OF DISTANCE EDUCATION IN INDIA – AN OVERVIEW



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Abstract: The concept of the distance education system (DES) focuses on open access to education and training to make the learners free from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners. Distance education (DE) is one of the most rapidly growing fields of education nowadays and it has a substantial impact on all education  ${\it delivery \, systems.}\ The\ new\ DES\ growing\ fast\ because\ of\ the\ development\ of\ Internet-based\ information$ technologies, and in particular the World Wide Web. The concept of DE came from the idea where the learners and the teachers can not be in a classroom and they should be separated by some geographical distance or maybe they cannot come close to each other to make the entire education system flexible. DE is not a new concept. In the late 1800s, at the University of Chicago, the first launched major correspondence program in the US in which the teacher and learner were at different locations. It is addressed to a wide range of potential partners, governments, intergovernmental and non-governmental organizations, specialized institutions, associations, industrial corporations, telecommunication companies, and others interested in this field, to seek their co-operation in meeting today's urgent education and training needs, through DE. After the development of Radio during the First World War and television in the 1950s, the mode of instruction outside of the traditional classroom had suddenly found new delivery systems. In the present days, we have audio and computer teleconferencing which have influenced the delivery of instruction in public schools, higher education, the military, business, and industry. The objective of the present paper is to review DE in the context of present challenges and opportunities, examine relevant concepts and contributions, outline current global and regional trends, suggest policy and strategy considerations.

#### Introduction

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The term DE reflects both the fact that all or most of the teaching is conducted by someone who is away from the learner, and that the mission aims to include greater dimensions of openness and flexibility, whether in terms of access, curriculum or other elements of the structure. DESs can usually be described as made up of a range of components such as the mission or goal of a particular system, programs and curricula, teaching/learning strategies and techniques, learning material and resources, communication and interaction, support and delivery systems, students, tutors, staff and other experts, management, housing and equipment, and evaluation. The DES is used for school-age children and youth those who are unable to attend ordinary schools, or to support teaching in schools, both at the primary and secondary level. However, most courses and programs are aimed at the adult population.

In developing countries particularly DE for primary and secondary schools is an important method of expanding educational opportunities to the semi-adult and adult population. The teacher training program is an important area where DE has made a major contribution. In developing countries, it is found that teacher training at a distance may reach large groups of students and have a profound impact on the development of national education systems. This includes initial training for formal qualifications, in-service supplementary training for formal upgrading, and continuing in-service training in particular subjects and topics. The use of DES for teacher education is, therefore, a crucial strategy when expansion or quality improvement is needed in the public education system. Both private and public providers have made important contributions to the development of industry and trade through programs for technical and vocational education. The basic purpose is to include the ability to respond flexibly to the need for working adults to obtain training and to provide opportunities for those who are most deprived by existing provision.

DE can support large-scale campaigns, e.g. in the field of HIV/AIDS education, is significant in the context of continuing education and training. Non-formal education and community development represent other sectors where DE is increasingly used. Programs at a distance often reach substantial numbers of women, in societies where women lack equal opportunities for participation in conventional forms of education and training. DES allows lending themselves to the teaching of many complex issues of the modern world, in which input from a variety of disciplines is necessary. DE now functions in two ways. On one hand, numerous single mode open universities have emerged to absorb large numbers of new learners, while, on the other hand, increasing numbers of traditional universities have begun to offer their programs also through DE mode.

The tremendous growth in ICT has reinforced this trend. DE has the potential to generate new patterns of teaching and learning. There is evidence that DE can lead to innovation in mainstream education, and may even have effects beyond the realm of education itself. Therefore the DE plays an especially decisive role in the creation of the

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global knowledge-based society. The current trends in DE show that DE will be an important element in future education and training systems. It is approaching acceptance within mainstream education and training in such a way that it will make up part of the range of most educational institutions in the future. In our present study, we will try to explore the various issues in DES and how this can improve the traditional education system.

# The DES in Asynchronous Mode

Asynchronous mode issues have been thought to be quite complex because they usually are fundamental for the correct educational and functional procedure. They involve both programming and installation techniques that demand extreme customization during development according to the projects special requirements. The learner has to keep in mind that educational matters are extremely delicate and that makes database structure rather complicated at first place. The services that are offered contained quite a few troubling issues in the database management and data transfer level. All asynchronous discussions are stored in a special database that keeps a log for all participants and their statements. The database structure required careful design and implementation to hold with integrity the raw information of the participants (trainers and trainees) online behaviour. The database had to keep track of users as objects and be able to categorize their statements both in users' data and in discussion data during the whole process of the discussion.

# The DES in Synchronous Mode

In the synchronous mode in DES, the issues are different from asynchronous study and this is to be dealt with separately. The components of the system were coherently stuck together and troubling issues were focused on logging and scheduling features. Synchronous component data accounting is centralized mainly to record different states of file and discussion sessions and not the data exchanged. Things tend to be simpler but in no way less delicate than the previously described procedures and problems. Logging for file transfer and chat-like communication had to be provided. The logs had to be explicit especially whatever concerned the members involved in the communication. Special care had to be taken for the detailed view and archive recording of the system file exchange. They had to be written down explicitly also the chat requests just for the record. Scheduling of the meeting had to be available. The meeting-time database had to update the announcements and the calendar of the instructor. Fundamental feature for the correct workflow of the meetings and conferences is an appropriate calendaring system. Therefore, the data system logging has to keep track of system and user time to give information and to announce the meeting for the synchronous meeting so that all members would be in time updated.

# The User and Lesson Database Issues

The user and lesson database issues had also an important role and needed special attention especially as far as the educational part is concerned. The database system had to take into consideration all the educational aspects that were imposed by the academic view of the project. The bureaucratic process had to pass into an electronic system of invitations, submission forms and responds that the database system had to keep track of. The elements of user registration requests had to be handled with an open-minded way because they involved comparisons and logging of two language words and phrases. Transformations had to be made in a formalized way so that everybody has an ASCII-based login name for the web access better compatibility. User database had to keep wait state status when registering a student for the crosscertification with the secretariat of the department involved. Moreover, the database had to be ready for annual rebuilding and or re-utilization prepared for the next academic year. That means exhaustive packing and updating of all data of the past year from the main database.

At that time all outdated data had to be moved to the backup database keeping in mind all issues that may be needed in the following year for better indexing and quicker access and retrieval. In the new academic year, everything has to be ready to accept all the new data recording without, though, losing the capabilities to search and link to older elements especially records of grades, statistics and answers to sets of tests and exercises. The database system provided easy and consistent access to every annual database because it has consisted of both scientific and other educationally vital information for the better designing and organizing of the academic year to come.

## Internet and Web-Based Education

The emergence of the Internet and related networks such as the World Wide Web (WWW) has had and will increasingly have a radical effect on the transformation of education and training in all sectors. The impact is already significant in all developed countries, and the great majority of developing countries are despite difficulties and fears seeking to take part in the emerging global educational community. The Web offers a worldwide forum in which to teach courses that can be dynamically updated in ways never before possible. Each student has an enormous range of resources available, free from limitations of time and space. There remains considerable work to be done concerning searching and sifting techniques within these resources for learners and teachers alike. These resources are reconfiguring how students learn, and new approaches to networked learning are evolving. The trans-cultural nature of the Web also creates problems of legislative and public control, with fears that local culture can be threatened by the international culture of developed countries. While the use of the Internet and the WWW in DE is predominantly represented within higher education, it is also beginning to be used in schools.

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## UNESCO'S Initiatives in DES

United Nations Educational, Scientific and Cultural Organization (UNESCO)'s initiatives in DE are based on its overall priority to ensure the right to education for all. While the use of DE was given early support by the Organization, new developments in information and communication technologies, in particular, the Internet and the WWW have radically increased the demand for lifelong education but also provided new means to meet the demand. Facing the educational challenges of the 21st century, UNESCO continues, through its support of DE, to contribute to the construction of knowledge societies in a lifelong learning context. Within its overall priority, UNESCO focuses on fostering basic education for all to meet the commitments of the Dakar World Education Forum, encouraging and supporting action in its Member States with special emphasis on co-operative efforts to develop DESs and programmes to the benefit of those deprived of basic learning skills. Great attention is given to DE to meet the educational needs of the adult population, to provide new and alternative learning opportunities for those who were initially deprived of them, or who, for one reason or another, did not make use of them. UNESCO continues to strengthen the role of DE in the diversification of educational delivery systems, notably, for technical and vocational education, encouraging co-operation and partnership between enterprises, professional bodies and distance teaching institutions. Support is also given to DE to meet the special needs of the disabled, migrants, cultural and linguistic minorities, and refugees, populations in crises, who cannot be efficiently reached by traditional delivery systems.

Great importance is attached to DE in teacher education, notably, for an in-service teacher training but also the training of teacher educators. The potential contribution of DE to the development of higher education is fully recognized and supported by UNESCO. UNESCO gives great importance to international, interregional and regional co-operation for the promotion of DE.

# Major Contributions of DE

DE is used for a wide range of purposes. Now we will summarize those areas:

General Education: DE can be used at primary and secondary education levels to provide both in-school and out-of-school programmes. In-school DE programmes are used to support teaching in schools when learning materials are lacking, or where enrichment is thought to be desirable. They may also be used where teachers do not have formal qualifications, or to support subjects where the number of pupils is too small to be able to organize conventional teaching. A variety of approaches are used, including Interactive Radio Instruction (IRI), schools radio, educational television through terrestrial and satellite networks, multimedia schemes delivered through satellite, and Web-based delivery of multimedia schemes. The materials may be designed for young children or adolescents and adults. DE is used in out-of-school programmes both at the primary and secondary level to educate school-age children and youth

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who are unable to attend ordinary schools, including those who are disabled, suffering from a long-term illness, or living in remote areas or living outside their own countries.

Teacher Education: Teacher education is an important area where DE has been used extensively to provide pre-service teacher preparation, upgrading of academic qualifications and in-service continuing professional development in particular subjects, content areas and instructional methods. The DE initiatives in countries such as Burkina Faso, Chile, China, India, Mongolia, Nigeria, and South Africa to prepare new teachers or upgrade skills of the existing teaching force. The use of DE for teacher education is, therefore, a crucial strategy when expansion or quality improvement is needed in the public education system. DE may play an increasingly important role during this decade in helping address the growing shortage of teachers, educational administrators and other educational professionals experienced in both developing and developed countries. Internet serves as the principal or supplementary means of providing both pre-service and in-service teacher education.

There are a growing number of high quality Web-based professional development resources available for educators globally. The Web also provides opportunities for online mentoring and support of novice teachers during their first year of teaching and to develop online communities of practice. Virtual Web-based environments for teachers now enable them to seek help from other teachers, locally, nationally, or globally in solving classroom problems, sharing lesson plans and materials, interacting with experts in particular fields, and in planning collaborative curriculum development projects. DE may also play a major role in upgrading the knowledge and skills of teacher educators both in higher education and educational agencies. The advantage of DE is that it makes teacher preparation and professional development programs accessible to indigenous peoples and others located in remote, rural areas that do not have convenient access to higher education institutions and where there is often a shortage of well-prepared teachers and other educational professionals.

Vocational and Continuing Education: Technical and vocational education have in recent years played important roles, not only in contributing to the improvement of productivity of a national labour market but also in assisting individuals to improve their employment prospects in rapidly changing socio-economic conditions. In this context, the DES has the role in the field of technical and vocational education to respond effectively to the growing demand of working adults or any others who have difficulties in getting training in conventional education because of lack of flexibility in the timing and location of courses. DE in the field of technical and vocational education makes up a mixed and complex picture. It may include experimental work and hands-on training as an integral element. It has often been developed by private institutions and enterprises and makes an important contribution to human development.

Non-formal Education: The DE has been used to considerable effect in the nonformal and community development sectors of education. The basic adult education

grew in the 1960s and 1970s just as technology began to be used more widely in education. Mass communication methods, often linked with some kind of group meetings and face-to-face support, were seen as one way of delivering a wide range of educational and skill-based program to support agriculture, health and nutrition, political education and development and employment-related projects, to large numbers of adults. This approach was used in India and Ghana. Radio campaigns were another early and influential model. The idea was to deliver short, highly intensive campaigns to support major development ends. Botswana, for example, used the approach in 1976 to raise awareness on a new policy for cattle on tribally owned land, and there was another project run by the cooperative movement in Zambia in 1982. There is much subjective evidence of the effectiveness of small-scale non-formal education projects using radio. for example, to support health care in Sudan and rural women in Mongolia. Latterly radio and television dramas have been used in countries such as Gambia and Nigeria as a means of educating people about the concept of DES. Indeed, radio, in particular, has a powerful role to play in non-formal education.

DES in India: DES in India started around 1960s. By the 1980s there were 34 Universities offering correspondence education through departments designed for that purpose. The first single-mode Open University was established in Andhra Pradesh in 1982, followed by the Indira Gandhi National Open University (IGNOU), and subsequently in Bihar, Rajasthan, and Maharashtra, Madhya Pradesh, Gujarat, Karnataka, West Bengal, and Uttar Pradesh (established throughout the 1980s and 1990s). The establishment of these single-mode DE universities was stimulated by the government's intention to democratize education and make it lifelong.

The initiative did not discourage the expansion at the same time of correspondence programs in dual mode universities. The year 1995 witnessed the enrollment of 200,000 students in DE, accounting for 3% of total higher education enrollment. Most DE universities in India follow the model of the UK Open University. They co-ordinate communication and collaboration through the Distance Education Council (DEC), founded in 1992. DEC is responsible for the promotion, co-ordination, and the maintenance of quality and standards. A range of factors including emerging ICTs, liberalization, privatization and globalization have amplified the demand for DE. While the government is responsible for more than 90% of DE funding, plans are underway to involve the private sector more closely, especially through permitting the increase of fees.

Conclusion and Future Scope: UNESCO.s role in international co-operation for spreading DES which consists of both intellectual co-operation and technical assistance. Great importance is given to international interregional and regional co-operation for the promotion of DE, such as awareness, confidence and capacity building, mapping of relevant experience, success and failures, networking between key players in DE technology, piloting and adapting educational technologies in different settings, shared development of learning systems programs, and learning materials involving inter-

Which are competent to act in this field? With the advancement of technologies, learning and collaborative work in the future can become radically different from what it is today. Although no one can expect that educational networks will replace the traditional lecture. The traditional lecture has some drawbacks: students have to attend at a fixed time, the needs of students with different backgrounds cannot be met and students have no control of their learning pace or environment. Many web-based training and learning platforms have been developed. However, none of these platforms offers an integrated and open platform for learning according to our requirements. Some of them do not support all the necessary DES (synchronous, asynchronous and collaborative learning). The DES is now a fast-growing subject. The time is not far from now when the entire education and training system will be fully controlled by DES. In India especially IGNOU is doing a key role in this area.

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