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Job Security - A Motivational factor for Employee Retention in Indian IT & ITES Sector

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Abstract: Employee Turnover is an integral part of running a business and is inevitable in any kind of industry. IT/ITES industry which is intrinsic on human capital is prone for higher employee turnover. Higher employee turnover in the IT/ITES industry is an impediment for organizations to gain competitive advantage. In that context, this article tries to study 'Job Security' as a motivational factor for employee retention. The study was conducted on a sample of 402 IT/ITES employees from various organizations in Hyderabad, AP through a questionnaire. The sample is broken down based on their positions and is broadly categorized as senior level, mid level and entry level employees. The responses were analyzed accordingly.

Keywords: ITES Sector, Job Security, Business Challenges, Employee Retention.

Introduction:

The Indian IT & ITES Sector has grown considerably over the last decade and contributed over six per cent of the country's GDP. Growth in Indian IT sector in the world market is primarily dominated by IT software and services, including system integration, IT consulting, application management, custom applications, infrastructure management, software testing and web development. Competitive factors such as skilled manpower, adequate telecommunication networks and appropriate policy framework and regulatory environment have enabled both domestic and

foreign firms to rapidly expand in the internationally competitive IT services sector. India is regarded as the premier destination for the global sourcing of IT-ITES, accounting for 51 per cent of the global sourcing market. The year 2009 would, for many reasons, be marked as a watershed year in the history of India's IT/ITES industry.

The industry, that heralded the entry of India as a global economic super power, was significantly impacted by what was arguably one of the most severe economic contractions in decades. After over a decade of 30 per cent compounded annual growth the industry "slowed down" to a growth rate in the high teens and India's largest employment growth sector was talking about "manpower rationalization". The IT sector is now seeing signs of recovery and optimism. The character of this recovery in the aftermath of the Great Recession will be very different from the recovery after the dot-com bust, which was a sector specific correction. India has moved from being a major driver to "the largest player" in the off-shore delivery world. The processes delivered are amongst the highest in the value-chain of companies, the supply-side elasticity of skilled English speaking manpower across technology and non-technology spaces is unmatched, the economic surplus in the industry has shifted to the off-shore players who are now looking at acquisition targets worldwide and the Indian service provider

community is being viewed as a “strategic business partner” – not just an IT services vendor.

Importance of HR in IT/ITES Industry

IT/ITES employees are in high demand and represent a group of employees with elevated turnover potential. As organizations expand globally and increase their use of technology, IT employees become more valuable to the long term success of most of the companies. In this context the competition to retain key employees is intense. Top-level executives and Human Resource (HR) departments spend large amounts of time, effort and money trying to figure out how to keep the valuable employees from leaving the organization.

Employee attrition is one of the most important parts of corporate life today. It has a huge impact on the bottom-line and is a part of cost of doing business. Employee turnover in some cases have far reaching consequences and will hamper the organizations, big time, in achieving their objectives. In many cases losing critical employees may hamper deliverables and will impact the services provided to the client. In this context, it is very important for the organizations to retain their Key employees for the organization to go to the next level.

Nothing can be more frustrating for the organizations than the constant aggravation of employee turnover. Normally employee turnover varies with the industry and the shape of the economy. The competitive advantage of the

organizations depends on the skilled and talented employees. It is they who take the organization to the next level. In this context the main emphasis of human resource management is how to retain skilled and talented work force. A loyal and efficient and work force that is aligned with the organizational culture, values and goals are to be treasured. It is very important for the industry to have an outward focus towards its customers. Retaining their key employees is one of the means for the organizations to deliver to their clients with quality and on time. In the above context retaining key employees should be of paramount importance for all the organizations and right retention strategies should be developed to target them.

In pursuit of identifying how job security would influence employee retention, the data was collected from 402 employees from different organizations in Hyderabad city of Andhra Pradesh state. These professionals are at different levels in the organizational hierarchy. For the purpose of the study, the sample is categorized as senior level, middle level, entry level based on the designation of the employees.

The primary data was collected by campaigning exhaustively with a questionnaire to answer which tried to dig deep into their perceptions on their organization and how various job factors would influence them in their decision to remain with their organization or to move on. The results of the study are discussed, analysed below.

Table-1.1: Gender-wise distribution of the sample IT employees

Gender	Employee Levels			Total %
	Senior level %	Middle level %	Entry level %	
Male	74	84	114	272

	(84.1)	(74.3)	(56.7)	(67.7)
Female	14 (15.9)	29 (27.7)	87 (43.3)	130 (32.3)
Total	88 (100.0)	113 (100.0)	201 (100.0)	402 (100.0)

From the table 1.1, it is observed that out of the 402 total employees interviewed – 272 (67.7%) are Male and 130 (32.3%) are Female. Out of 272 male employees in the sample, 74 are senior level, 84 are middle level and the remaining 114 are at the entry level employees within their organization. Out of the 130 female sample employees 14 are at senior level, 29 are at middle level and 87 are at entry level of the organization. Hence from the sample it can be observed that the male employees are higher in numbers when compared to the female employees in any IT organization.

From the sample of 88 employees at senior level, 74 (84.1%) are men and 14 (15.9%) are women. When the same is observed at middle level, 74.3 per cent are men and 27.7 per cent are women. At entry level 56.7 per cent are men and 43.3 per cent are women. It can be observed that from the data that the composition of female employees is reducing from entry level through senior level and is vice-versa in the case of male employees.

Table-1.2: Age-wise distribution of the sample employees

Age	Employee Levels			Total
	Senior level	Middle level	Entry level	
20-25 Years	6 (6.8)	8 (7.1)	84 (41.8)	98 (24.4)
26-35 years	29 (33.0)	98 (86.7)	115 (57.2)	242 (60.2)
36 and above years	53 (60.2)	7 (6.2)	2 (1.0)	62 (15.4)
Total	88 (100.0)	113 (100.0)	201 (100.0)	402 (100.0)

The table 1.2 shows the age wise distribution of sample employees based on their position in the organizational hierarchy. Out of the 98 (24.4%) employees in the age group of 20-25 years – 6.1 per cent are in senior level position, 8.1 per cent are in middle level positions and 85.8 per cent are in entry level positions. Many organizations would hire students from premier institutes like IIT, IIM etc at higher levels and hence we could see about 6.1 per cent employees in the age group of 20-25 years in

managerial positions. Out of 242 employees in the age group of 26-35 years- 12 per cent are in senior level positions, 40.5 per cent are in middle level positions and 47.5 per cent are in entry level positions. Out of the 62 employees (15.4%) in the age group of 36-45 years- 85.5 per cent are in senior level positions, 11.3 per cent are in middle level positions and 3.2 per cent are in entry level positions.

Out of the total 402 sample employees the highest employees of 242 (60.2%) comes under the age group of 26-35 years followed by 98 employees (24.4%) falls under the age group of 20-25 years. The remaining 62 employees (15.4%) are in the age

group of 36 and above years. In any organization bulk of the employees are with 4-10 years of experience. Hence it can be observed that most of the employees would fall under 26-35 years of experience.

Table-1.3: Years of service with the current organization of the sample IT employees

Sl. No	Service with the Organization	Employee Levels			Total
		Senior level	Middle level	Entry level	
1	Less than 1 year	3 (3.4)	8 (7.1)	47 (23.4)	58 (24.4)
2	1-3 years	19 (21.6)	42 (37.2)	92 (45.8)	153 (38.2)
3	3-5 years	21 (23.9)	37 (32.7)	57 (28.4)	115 (28.6)
4	5-10 years	39 (44.3)	26 (23.0)	5 (2.4)	70 (17.4)
5	More than 15 years	6 (6.8)	-	-	6 (1.4)
Total		88 (100.0)	113 (100.0)	201 (100.0)	402 (100.0)

The table 1.3 records the distribution of the sample respondents by their years of service with their current organization. The employee level and their length of the service are also presented in the table. It is noticed from the table that out of the total sample employees the highest proportion of 38.1 per cent have 1-3 years of experience with their present organization followed by 28.6 per cent employees having 3-5 years of service with the organization and 14.4 per cent of employees with 1-3 years of service. It is understood that approximately 53 per cent of the employees are having less than three years of service with their

present organization and the remaining 47% of employees have more than 3 years of service with their organization.

Job Security- One of the top motivational factors for employee Retention

To understand the importance of job security as a factor influencing employee retention, the responses received for the five questions associated with this factor has been analysed. One of the major factors that influence employees to retain with an organization is the job security.

Table-1.4: Job Security

Sl. No	Statements	Levels	SD	D	UD	A	SA	Total	Chi-square
1	I have access to the info about the organizations policies	Senior	1 (1.1)	5 (5.7)	7 (8.0)	51 (58.0)	24 (27.3)	88 (100.0)	20.24**
		Middle	-	7 (6.2)	9 (8.0)	77 (68.1)	20 (17.7)	113 (100.0)	
		Entry	1 (0.5)	4 (2.0)	33 (16.4)	138 (68.7)	25 (12.4)	201 (100.0)	
2	The company retains people who are considered to be good performers	Senior	2 (2.3)	7 (8.0)	27 (30.7)	42 (47.7)	10 (11.4)	88 (100.0)	20.00*
		Middle	5 (4.4)	16 (14.2)	13 (11.5)	64 (56.6)	15 (13.3)	113 (100.0)	
		Entry	4 (2.0)	11 (5.5)	58 (28.9)	106 (52.7)	22 (10.9)	201 (100.0)	
3	The organization always promotes the people who are best equipped to meet the future demands of business.	Senior	-	6 (6.8)	21 (23.9)	51 (58.0)	10 (11.4)	88 (100.0)	14.76
		Middle	2 (1.8)	19 (16.8)	17 (15.0)	61 (54.0)	14 (12.4)	113 (100.0)	
		Entry	1 (0.5)	22 (10.9)	54 (26.9)	111 (55.2)	13 (6.5)	201 (100.0)	
4	The Sr. Leadership of the organizations is trust worthy and always balances employee interests with those of the organization	Senior	-	7 (8.0)	17 (19.3)	49 (55.7)	15 (17.0)	88 (100.0)	9.32
		Middle	3 (2.7)	15 (13.3)	27 (23.9)	58 (51.3)	10 (8.8)	113 (100.0)	
		Entry	2 (1.0)	21 (10.4)	53 (26.4)	105 (52.2)	20 (10.0)	201 (100.0)	
5	The organization is financially strong enough to overcome short term/long term economic crises.	Senior	-	-	7 (8.0)	55 (62.5)	26 (29.5)	88 (100.0)	9.03
		Middle	1 (0.9)	2 (1.8)	13 (11.5)	74 (65.5)	23 (20.4)	113 (100.0)	
		Entry	1 (0.5)	3 (1.5)	34 (16.9)	121 (60.2)	42 (20.9)	201 (100.0)	

*Significant at 0.05 level ** Significant at 0.01 level

It is concluded from the table 1.4 that 85.3 per cent of senior level employees, 85.85 of middle level employees and 81.1 per cent of entry level employees feel that they have access to the information about the organization policies. A marginal 8 per cent, 8 per cent and 16.4 per cent of senior level, middle level and entry level employees of the organization are undecided if they have access to the organization policies. 6.8 per cent, 6.2 per cent and 2.5 per cent of senior level,

middle level and entry level employees respectively feel that they do not have access to the organization policies. The chi square value of 20.24** is found to be significant at 0.01 level. Thus it can be concluded that there is a significant difference in the employee responses received from respondents of different levels of the organization with reference to the access to the information about the organization policies. It is ironical that more senior level and middle level employees think they do not

have the access to the information about organization policies compared to the entry level employees.

It can be observed from the table that 59.1 per cent of senior employees, 69.6 per cent of middle level employees, 63.6 per cent of entry level employees feel strongly that the company retains employees who are considered to be good performers. It is astonishing to observe that 30.7 per cent of senior level employees think they are undecided about the same. Among the other category employees 11.5 per cent middle level employees and 28.9 per cent of entry level employees feel the same way, undecided if the company retains good performers. While 10.3 per cent of senior level employees feel that the company does not retain good performers, 18.6 per cent of middle level employees and 7.5 per cent of entry level employees also feel the same. It can be observed that the undecided lot of employees who are not sure if the organization retains good performers is relatively high and if only those numbers can be brought down, it would be great to the organization and they can also create a sense of feeling amongst the employees that the organization will always want to keep them. In a way this would instil a sense of confidence amongst employees about their job security as long as they feel they are performing well. The chi square value of 20.00** is found to be significant at 0.05 level. This indicates that there is a significant difference in employee opinions on company retaining the good performers. It is an important observation that more employees from entry level and middle level agree with it than that of the senior employees. Organizations should instil a sense of feeling among employees that it would treasure good performers and would go always want to retain them. That way they can reduce

employee attrition by retaining more good performers.

It is observed from the table that 67.45 per cent of senior level employees, 66.4 per cent of middle level employees and 61.7 per cent of entry level employees either agree or strongly agree that the organization always promotes people who are best equipped to meet the further demands of business. Among the other category of employees 23.9 per cent, 15 per cent and 26.9 per cent of senior level, middle level and entry level employees respectively feel that they are not sure about the same and feel they are undecided about it. The remaining 6.85 per cent, 18.6 per cent and 11.4 per cent of senior level, middle level and entry level employees respectively either disagree or strongly disagree about the same, which means that they think organization doesn't always promote people who are best equipped to meet the future demands of business. The chi square value of 14.76 is found to be not significant. This indicates that there is no significant difference in the employee responses received on company promoting the people who are best equipped to meet the future demands and needs.

Organizations should have a good talent management process in place right from hiring the right kind of employees and providing necessary training etc through their growth in the hierarchy to make sure they adapt themselves with the skills needed to meet the future business challenges. This way, organizations can create a great work force that can realize and agree to the fact that the company always promotes people who are best equipped to meet the future business needs.

It is also noticed from the table that 72.7 per cent of senior level employees, 60.15 of middle level

employees and 62.2 per cent of entry level employees either agrees or strongly agrees that the senior leadership of the organizations is trust worthy and always balances employees interests with those of the organization. While 19.3 per cent, 23.9 per cent and 26.4 per cent of senior level, middle level and entry level employees respectively feel that they are undecided about the same. From the rest 8 per cent, 16 per cent and 11.4 per cent respectively either disagree or strongly disagree that it is the case. This means they feel that the senior leadership of the organization is not trust worthy and does not always balance employee's interests with those of organization. The chi square value of 9.32 is found not to be significant. This means that there is no significant difference in employee's opinion across the organization that the senior leadership is trustworthy and always balances the employee interests with those of the organization.

In this context it is very important for the senior management of the organization to have a direct and regular contact with their employees, like town halls, emails etc. to communicate the business situation, performance of the organization, the steps taken by the company to address some of the pain points of the employees etc. This would definitely instil a sense of confidence in the management in employees at all levels, which will create a feeling of security amongst the employees and will help in their retention.

It is good to observe from table-1.4 that 92.0 per cent, 85.95 and 81.1 per cent of senior level, middle level and entry level employees feel that their organization is financially strong enough to overcome short term and long term economic crisis. The chi square value of 9.03 is found to be

not significant. This means that there is no significant difference in the responses received from employees across the organization is financially strong to overcome short term/long term financial crises. It is always good for the organizations to share their financial performance with their employees periodically. If they can lay out their plans for the future that would make the employees even more confident that their company is moving in the right direction which would translate into more employee retention.

Conclusion:

In the context of employees attrition being a part of corporate life these days, the way the organizations treat their employees during the financial downturn and the way they support them during the economic troughs will go a long way in creating an employee loyalty and might influence them a big way in retaining with the organization even if offers from other companies pour in. Organizations tend to hire more people during the economic buoyancy, but they tend to lay-off people during the economic distress to survive and reduce their costs. But if only they can take care of their employees during the down time can they score on the job security factor with the employees. According to this survey, one of the top motivational factors for employees is job security. That also means the lack of job security is most likely to wreak havoc with a company's employee retention.

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Structural Changes in Agricultural Economy of Andhra Pradesh, India: Irrigation and Cropping Pattern Aspects

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Abstract: This paper assesses the structural changes in the economy of state of Andhra Pradesh, India and more precisely focusing on the aspects of irrigation and cropping pattern. The study covers the post green revolution period from 1950-51 to 2008-09. The structural changes at the major sectoral level are examined in terms of the variations in the shares of sectoral output in the total output of the state. In this paper, the analysis is carried out in terms of the changes in the proportion of area under the crops to the total gross cropped area. And the trends in growth of area under different source of irrigation in Andhra Pradesh are analyzed of using compound growth rates. We find that the agriculture is the major sub-sector in the primary sector and the structural changes that have been taking place in the state economy may have an impact on this sub-sector and on the livelihoods of the rural masses. However, the research results exhibits that the increasing ground water irrigation leads to declining ground water table; and it causes environmental degradation to the state. In addition, the cropping pattern shifts have been taking place in the state is favorable to commercial crops; it indicates that the cropping pattern trend may cause the distress especially to the small and marginal farmers; because the capacity to invest and risk bearing of the farmers are low.

Keywords: Agricultural economy, irrigation, cropping pattern, Andhra Pradesh

Introduction

Historically the growth of the economics has been associated with the structural changes. The most common structural changes followed a sequence of shift from agriculture to industry and then to services. This pattern has also been observed across the countries with different levels of development. Today's developed countries followed the common pattern of steadily declining share of agriculture in the total output, increasing share of industry for a considerable long period and a steadily increasing share of services although. The economic development in India during the last 50 years seems to have followed more or less the same structural changes. However, the most striking feature of the structural changes of the Indian economy in recent decades has been the pre-eminence of services sector as the major contributor to growth. Industry, particularly manufacturing, which has been observed historically as the main contributor of economic growth, at least in the initial period of economic growth has played only a minor role in India's economic growth in recent years. Observing this phenomenon, the questions have been raised

whether India is on the way to become a post-industrial service economy without industrialization? Whether such a pattern of growth and development in the Indian economy sustainable? What are its implications on the distribution of income and poverty? Many studies examined these aspects at the all India level. As India is a country with large variations in climatic conditions, resource base, and social and cultural milieu, observations at the all India level may be different from those at the state level. Hence the state level studies assume importance.

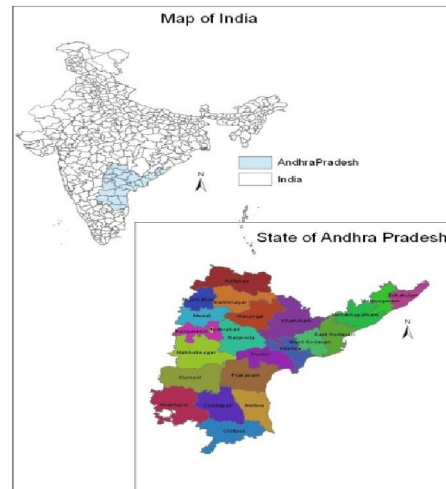
Andhra Pradesh is predominantly a resource poor small farm agricultural economy. The pattern of structural changes observed at the all India level may also be followed in the state economy. It may have implications for the living conditions of rural masses and rural poverty. In this paper an attempt has been made to examine the structural changes in the economy of Andhra Pradesh in general and the structural changes in the agricultural economy in particular focusing the aspects of irrigation and cropping pattern.

Geographical Location of the State and Topography

The State of Andhra Pradesh is situated between the latitude of 12° 14'N to 19°54'N and longitude 76°50'N to 84°50'E (Figure-1). Andhra Pradesh is bounded on the Northeast by Orissa and Madhya Pradesh on the Northwest by Maharashtra, on the East by Bay of Bengal, on the South by Tamilnadu on the West by Karnataka state. It is spread over an area 275069 sq. kms. It is the 4th largest State in the Indian Union in terms of area and accounts for 8.37 percent of Country's area. The State is in the East coast, having coastal plain areas, midlands and

uplands. It has a coastline of 974 km. It is mostly plain area with hills here

Figure-1: State of Andhra Pradesh, India



and there. The uplands, which are also called the agency area, mostly consist of the hilly regions covered by Eastern Ghats and they run parallel to the Coast. It is the forest area rich in flora and fauna having good scenic beauty. The area between the coastal plains and uplands is the midlands, which are located at a height above the coastal plains. The coastal plains are located almost at the sea level. As the state is spread over the regions located at different altitudes, there are variations in climate rainfall and soils. The diversity makes the state conducive for growing a variety of crops and rearing different types of livestock. The state is endowed with good water bodies like rivers, lakes and canals. They not only enrich the scenic beauty of the state, but also provide water for irrigation and other purposes, and facilitate transportation. The major rivers flowing through the State are Godavari and Krishna. They are practically perennial. Besides these two large rivers they are many other rivers such as Vamsadhara, Nagavali

and Sarada. Godavari and Krishna flow mainly through the districts of Telanagana and Coastal Andhra. Pennar flows through Rayalaseema. While Vamsadhara, Nagavali and Sarada flow through Coastal Andhra region. The major lakes in the state are Pulicat Lake covering an area of 327.33 sq.kms and Kolleru Lake with an area of 245 sq.kms. These water bodies along with estuaries on the coast make the State conducive for taking up aqua culture and pisci culture.

The method and source of data

This study is mainly based on the secondary sources of information obtained from the various issues of Statistical Abstracts of Andhra Pradesh, published by Bureau of Economics and Statistics, Government of Andhra Pradesh. The study covers the post green revolution period from 1950-51 to 2008-09. In order to eliminate the effect of the year-to-year variations in the area under crops, 'triennium average ending' is used for computing the proportion of area under crops, and area under irrigation. There had been shifts in the various crops grown in the State. The structural changes at the major sectoral level are examined in terms of the variations in the shares of sectoral output in the total output of the state. This analysis covers the period from 1980-81 to 2008-09. The study of the changes in the agricultural sector with respect to irrigation and cropping pattern covers the period 1950-51 to 2008-09. To analyze the pattern of these shifts, the triennium centered (T.C.)averages of the areas under the various crops at the periods 1970-1971, 1980-81, 1990-91, 2000-01, and 2004-05 are considered and the analysis is carried out in terms of the changes in the proportion of area under the crops to the total gross cropped area. In this study trends in growth of area under irrigation by types of

source in Andhra Pradesh are analyzed of compound growth rates.

The paper is organized as follows: the section 2 outlines the geographical location of the state and topography; section 3 describes the structural changes in the economy of Andhra Pradesh. Section 4 describes the structural changes in agricultural sector-irrigation and shifts in the cropping pattern, followed by section 5 conclude the major findings of the study.

Structural Changes in the Economy of Andhra Pradesh

As per the CSO methodology estimating the State income, the economy consists of three major sectors viz., primary sector, secondary sector and tertiary sector. The primary sector consists of sub-sectors: agriculture and livestock, forestry and logging, fishing. Secondary sector consist of the sub-sectors: mining and quarrying, registered manufacturing, unregistered manufacturing, electricity, gas and water supply; and constructions. The tertiary sector consists of the sub-sectors: trade, hotels and restaurants, railways, transport, other means of communication, banking and insurance, real-estate, ownership of dwelling, public administration and other services. The estimates of the shares of these major sectors and the sub-sectors in the total output are presented in the Table 1.

During the study period these has been a continuous decline in the share of primary sector and a continuous increase in the share of tertiary sector in the total output. But in the case of secondary sector, the contribution is subjected to neither an upward nor a downward movement. The share of the primary sector declined drastically

from 42.00 per cent in 1980-81 to 25.14 per cent in 2008-09 while the share of tertiary sector increased from 37.21 per cent in 1980-81, 55.16 per cent in 2008-09. The share of the secondary sector varied between 20.74 per cent and 22.70 per cent. Thus the structural changes in the state economy are not in accordance with the changes at the all India level, especially in respect of the secondary sector.

In the state economy the decline in the shares of agricultural sector and increase in the shares of tertiary sector are much faster relative to the changes at the all India level. The continuous upward trend in the shares of secondary sector at the national level is also not found in the state economy.

Table 1: Sectoral shares of Net State Domestic Product (at 1993-94 Prices) - Andhra Pradesh

S. No.	Sector	1980-81	1990-91	2000-01	2008-09
1. Agriculture, Forestry and Fishing					
1.1	Agriculture and Livestock	37.09	32.42	27.79	22.52
1.2	Forestry and Logging	2.64	1.58	0.95	0.64
1.3	Fishing	3.21	1.79	2.18	1.98
Sub Total: Primary Sector (1.1+1.3)		42.00	35.99	30.92	25.14
3. Manufacturing					
2	Mining and Quarrying	1.66	1.53	2.22	3.12
3.1	Registered	6.89	8.84	6.80	5.70
3.2	Unregistered	6.42	4.89	4.59	2.76
4	Electricity, Gas and Water Supply	0.04	1.44	1.42	1.31
5	Construction	5.73	5.54	6.04	9.81
Sub Total: Secondary Sector (2 TO 5)		20.74	22.24	21.07	22.70
6	Trade, Hotels and Restaurants	11.58	12.61	14.64	14.64
7. Transport, Storage and Communication					
7.1	Railways	1.11	1.09	1.28	1.15
7.2	Transport by other means	2.93	2.89	2.95	4.80
7.3	Communication	0.77	0.85	2.42	4.96
8. Financing, Insurance and Real Estate					
8.1	Banking and Insurance	1.74	4.56	5.24	5.11
8.2	Real Estate, Ownership of Dwelling	6.57	6.75	6.54	7.83

9. Community, Social and Personal Services					
9.1	Public Administration	3.10	4.03	4.79	3.83
9.2	Other Services	12.95	9.64	10.14	9.83
Sub Total: Tertiary Sector (6 TO 9)		37.21	41.94	48.00	52.16
Net State Domestic Product (NSDP)		100.00	100.00	100.00	100.00

Source: Statistical Abstract of Andhra Pradesh, various issues.

Within the primary sector the major component is agriculture and livestock. The contributions of forestry and logging, fishing to the total primary sector income is very less. However, the welcoming changes are declining contributions of forestry and logging, which is environmentally friendly and increasing contributions of fishing. But the decline in the shares of agriculture and livestock are not desirable changes. The increasing exploitation of mining and quarrying pose environmental problems and the declining contributions of agriculture and livestock cause deterioration in the living conditions of the rural masses.

Within the secondary sector the major contributions are construction followed by registered manufacturing, mining and quarrying, and unregistered manufacturing. The contribution of electricity, gas and water supply to the secondary sector income is very less. Unlike the pattern of contributions of registered and Unregistered manufacturing and electricity gas and water supply, the contribution of construction to the secondary sector income has been on an increasing trend during the study period. To the tertiary sector income the major contributor is the services

followed by real estate, ownership of dwelling and banking and insurance. Among these the fastest growing one is banking and insurance. In recent years, real estate & ownership of dwelling is observed to be growing at a faster rate than the other sub-sectors of the tertiary sector.

Structural Changes in Agricultural Sector-Irrigation

As already pointed out, the major sub sector in the primary sector is agriculture and livestock and its share in the NSDP declined from 37.09 percent in 1980-81 to 22.52 percent in 2008-09. This declining trend in the shares of agricultural sector might be the outcome of the changes that have been taking place with in the agriculture sector itself. Since irrigation is a critical factor influencing the agriculture production the study of the irrigation aspect assume importance. The net irrigated area as a percentage of net sown area, which was 27.52 percent in 1970-71 gradually increased to 43.99 percent in 2008-09. Similarly the percentage of gross irrigated area in gross cropped area increased from 31.07 percent in 1970-71 to 48.74 percent in 2008-09. Consequently the irrigation intensity increases from 113.42 in 1970-71, to 139.84 in 2008-01 (Table 2).

Table 2: Trends in Irrigation and Irrigation Intensity in Andhra Pradesh

Particulars	Triennium Centered (T.C.)				
	1970-71	1980-81	1990-91	2000-01	2008-09
Proportion of Net irrigated area in Net area sown	27.52	31.84	39.03	40.52	43.99
Proportion of Gross irrigated area in Gross area sown	31.07	35.25	40.88	43.66	48.74
Irrigation Intensity	113.42	115.38	119.53	121.48	139.84

The most striking feature of agriculture in Andhra Pradesh is increasing the net irrigated area and irrigation intensity during the period 1970-71 to 2008-09. The structure of irrigation in the state is such that, irrigation waters are provided through canals, tanks, wells including tube wells and other sources. In 1950-51 the major source of irrigation was canals, which accounted for 49.87 percent of the irrigated area followed by tanks (33.71 percent),

wells & tube wells (12.61 percent). Over the last 50 years period structural changes took place in the system of irrigation- canals and tanks lost they prominence, and the ground water sources gained importance. By 2008-09 in the total irrigated area, canal irrigated declined to 34.63 percent, tank irrigated area declined 13.44 percent while the area under tube wells and other sources increased to 51.93 percent (Table 3).

Table 3: Structural Changes in Irrigation in Andhra Pradesh (Area in Hectares)

Source	Triennium Centered						
	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2008-09
Canals	1211719 (49.87)	1292888 (43.64)	1529294 (48.29)	1698493 (49.09)	1860962 (43.14)	1615351 (36.85)	1669447 (34.63)
Tanks	818918 (33.71)	1221272 (41.23)	998582 (31.53)	897844 (25.95)	980548 (22.73)	648585 (14.80)	647809 (13.44)
Tube wells	306422 (12.61)	342559 (11.56)	526482 (16.63)	767597 (22.19)	1304816 (30.25)	1927223 (43.97)	2323168 (48.20)
Other sources	92548 (3.81)	105703 (3.57)	112319 (3.55)	95929 (2.77)	167364 (3.88)	192082 (4.38)	179827 (3.73)
Net irrigated area	2429608 (100.00)	2962422 (100.00)	3166677 (100.00)	3459863 (100.00)	4313690 (100.00)	4383240 (100.00)	4820251 (100.00)

Source: Statistical Abstract of Andhra Pradesh, various issues.

These structural changes in irrigation in the state are the outcome of the growth of area under the

different sources of irrigation. During the period 1950-51 to 2004-05 the canal irrigated area

recorded as a significant positive growth but the rate of growth is only 0.56 percent per annum. The tank irrigated area recorded as a significant negative growth and it declined at the rate of 1.10 percent per annum. On the other hand, the area under wells and tube wells increased at the rate of 3.0 percent (Table 4) during this period. The rapid increase in the ground water irrigation and fast deterioration the tank irrigation are not desirable changes with the fast or rapid increase in the

ground water irrigation the water table goes down and environmental degradation may occur as a result of intrusion of sea water in to the land. It may also lead to the increase of power charges for lifting water for irrigation. The surface source of irrigation i.e., tanks and canals are the sustainable sources. Therefore deterioration of tank irrigation with no significant increase in the canal irrigation may pose the problem of sustainability.

Table 4: Trends in the Growth of Irrigation by Source in Andhra Pradesh

Source of Irrigation	Rate of Growth						
	1950-51 to 1959-60	1960-61 to 1969-70	1970-71 to 1979-80	1980-81 to 1989-90	1990-91 to 1999-00	1990-91 to 2004-05	1950-51 to 2004-05
Canals	0.0057* (3.76)	0.0096 (1.66)	-0.0079* (-4.63)	0.0054 (0.97)	0.0426* (11.88)	-0.0249* (-4.84)	0.0056* (5.70)
Tanks	0.0494* (5.66)	-0.0275 (-1.73)	-0.0245* (-6.84)	-0.0043 (-0.21)	0.0200* (2.87)	-0.0436* (-4.64)	-0.0110* (-6.35)
Tube wells	0.00009 (0.02)	0.0347* (4.99)	0.0375* (26.31)	0.0456* (6.00)	-0.0304* (11.88)	0.0288* (8.45)	0.03* (49.49)
Other sources	0.0178 (0.74)	-0.0128 (-0.56)	0.0093* (3.94)	0.1127 (1.57)	0.0046 (0.74)	-0.0062 (-0.85)	0.0146* (5.04)
Net irrigated area	0.0217* (5.33)	-0.0010 (-0.18)	0.0045* (3.70)	0.0232* (2.96)	-0.0161* (-3.20)	-0.0052 (-1.19)	0.0101* (16.47)

* Significance at 1 percent level. ** Significance at 5 percent level.

Thus the structural changes that have been taking place in the irrigation system of Andhra Pradesh are not environmentally friendly and pose sustainability problem.

Structural changes in - shifts in Cropping Pattern

Another important factor behind the structural changes in the agricultural sector is the cropping pattern shifts. This section examines the shifts in cropping pattern in Andhra Pradesh during the

period 1970-71 to 2004-05. In the early seventies, cereals, pulses and oilseeds dominated the cropping pattern in the state. In the triennium centered (T.C.) 1970-71, they respectively accounted for 59.47 percent, 11.07 percent, and 18.04 percent. Among the cereal crops the major one is rice and it accounted for 25.08 percent in gross cropped area. The coarse cereals accounted for 34.39 percent. The commercial crops: cotton, sugarcane, tobacco and chillies accounted for only 6.63 percent in the gross cropped area. By T.C.2004-05, the area under coarse cereals declined to 11.44 percent of gross

cropped area including major crop rice exhibits declining trend from 31.86 percent in T.C. 2000-01 to 25.17 percent on T.C. 2004-05. The area under total pulses and total oilseeds increased to 17.25 percent and 22.49 percent respectively. Similarly the area under cotton, sugarcane, tobacco and chillies increased to 7.99 percent, 1.86 percent, 1.07 percent and 2.01 percent respectively. There was also a significant increase in the area under fruits and vegetables from 2.58 percent to 6.90 percent (Table 5). Thus the most striking shifts in the cropping pattern in Andhra Pradesh over the last 30 years is that there has been a drastic decline in the area under coarse cereals and big jump in the cultivation of commercial crops.

The cropping pattern shifts in favour of commercial crops at the cost of coarse cereal crops have serious implications in small farm agriculture with in

adequate irrigation facilities. The coarse cereal crops are drought resistant and less capital intensive. Therefore in the resource poor small farm agriculture, which is subjected to frequent occurrence of droughts, coarse cereal crops are relatively more suitable, although they are low value crops. On the other hand commercial crops are more capital intensive and more risky, although they are high value crops in the event of low risk bearing capacity of the farmers, which is generally the case with the small and marginal farmers in resource poor economies; cultivation of commercial crops may pose problems. It also increases the market dependence for food and poses the problem of nutritional security especially to the small and marginal farmers and agricultural labourers. This situation, call for strengthening of Public Distribution System (PDS).

Table 5: Cropping Pattern Shifts in Andhra Pradesh, India

Sl.No.	Crops	Andhra Pradesh				
		T.C. 1970-71	T.C. 1980-81	T.C. 1990-91	T.C. 2000-01	T.C. 2004-05
1	Rice	25.07	29.30	30.71	31.86	25.17
2	Jowar	19.28	17.69	9.07	5.46	5.02
3	Bajra	4.22	4.06	1.73	0.94	0.90
4	Wheat	0.14	0.14	0.07	0.11	0.09
5	Maize	1.93	2.53	2.35	3.74	5.39
6	Ragi	2.23	2.05	1.22	0.74	0.62
7	Small Millets	6.59	4.65	1.35	0.45	0.42
8	Total Cereals	59.47	60.43	46.51	43.30	37.61
9	Total Pulses	11.07	11.25	12.29	14.55	17.25
10	Total Oilseeds	18.04	15.36	24.68	19.51	22.49
11	Cotton	2.43	3.50	5.12	8.44	7.99

12	Sugarcane	0.99	1.32	1.51	1.83	1.86
13	Tobacco	1.66	1.41	1.61	0.94	1.07
14	Chillies	1.55	1.31	1.73	1.94	2.01
15	Total Condi- Ments & Spices	1.18	1.23	1.02	1.29	1.68
16	Fruits and Vegetables	2.58	3.12	4.36	6.79	6.90
17	Other Dyes & Narcotics	0.03	0.04	0.05	0.48	0.09
18	Fodder Crops	0.98	1.03	1.13	0.93	1.06
19	Gross Cropped Area	100.00	100.00	100.00	100.00	100.00

Source: Statistical Abstract of Andhra Pradesh, various issues

Conclusions

Structural shifts have been taking place in the economy of Andhra Pradesh from primary sector to tertiary sector with no significant change in the secondary sector. However, the pattern of change is slightly different from the one observed in the national economy. The decline in the shares of primary sector and increase in the shares of tertiary sector are much faster in the state economy relative to the national economy. Agriculture is the major sub-sector in the primary sector and the structural changes that have been taking place in the state economy may have an impact on this sub-sector and on the livelihoods of the rural masses. The two aspects that need to be examined in this connection are changes in the structure of irrigation and cropping pattern shifts. In spite of the various efforts made by the government for creation of irrigation facilities, irrigation coverage could be extended to only about 48.74 percent of the cropped area by 2008-09. The structure of irrigation in the state is such that irrigation is

provided through canals, tanks and wells. Canals and tanks are sustainable sources of irrigation and well irrigation is an unsustainable source. While there is no significant increase canal irrigation over the last two decades, there has been a drastic deterioration in the tank irrigation in the state. On the other hand, the ground water irrigation has been increasing at a faster rate. It is not a desirable trend. The increase in ground water irrigation leads to decline in the ground water table and causes environmental degradation and poses a threat to the sustainability of water resources for irrigation and other purposes.

The cropping pattern shifts in favorable commercial crops at the cost of coarse cereals have been taking place in the state. In the resource poor small farm agricultural economies where the capacity to invest and risk bearing capacity of the farmers are low, this trend may cause the distress especially to the small and marginal farmers. Therefore for protecting the farmers from the adverse consequences of the changes in the

agricultural economy resulting from the structural changes, efforts are to be made on the lines of expanding the surface sources of irrigation and regulating the ground water irrigation. Efforts should also be made to regulate the cropping pattern according to the resource availability and risk bearing capacity of the farmers.

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Tiger Reserve in Kawal Wildlife Sanctuary: Issues and Concerns

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Abstract: The tribal societies, which have been still in the hunting, gathering and slash-and-burn stages, have a much closer relationship with nature and its management. Development projects initiated so far have been displaced the indigenous people. Consequently, there has been a near total disintegration of the tribal ecosystem. This has led to the breakdown of the tribal community and their culture with overwhelming majority of individuals within the tribal society unable to cope with a society which has nearly become de-linked from nature. The tribals understood and interacted with the nature in a manner, which according to many anthropologists and environmentalists is unique and a key to the future management and relationship with nature. At this context, it is also important to analyse the reasons and processes involved in integrating the tribal communities into the so called mainstream society and the accompanying changes likely to be occurred in the man-community-environment relationship which bring miseries to their basic life and mere survival. The paper is an attempt to analyse the issues and concerns involved in the proposed Tiger Reserve Project (TRP) in the Kawal Wildlife Sanctuary (KWS) of Adilabad district in Andhra Pradesh, India based on anthropological perspectives.

Keywords: Natural Environment, Wildlife, Indigenous People and Harmonious Co-Existence.

Introduction

There are more than 600 protected areas covering nearly 5% of total land of the country that has been declared as wildlife sanctuaries and National parks in India (Sekhsaria 2007). Most of these protected areas are in the fifth schedule where tribal population is high. The Wildlife Protection Act (WPA), 1972 (as amended in 2006) is a strong regulatory statute that restricts almost all activities inside protected areas. These include restrictions on entry to sanctuary (as per section 27), collection of Minor Forest Products (MFPs) including Non-Timber Forest Products (NTFPs), except for bona-fide self consumption and grazing / movement of livestock, etc. This effectively exiles people living inside the protected area over generations.

More than 1,500 villages are still inside the existing sanctuaries. Apart from these, a large number of non-surveyed villages and settlements exist inside these sanctuaries (Sekhsaria 2007). In this process, most of the tribal communities are treated as encroachers, even though; these villages have been existed inside the sanctuaries since centuries. Satellite pictures of these areas reveal the state of extensive cultivation of both the settled and shifting types. Many of the tribal villages have not even been surveyed and are treated as encroachments, even today.

As per the WPA, 1972 many of the villages are supposed to be evicted from the sanctuary areas. Even where they are not being evicted, the collection of NTFPs and other forest products are totally restricted and this makes their livelihoods extremely difficult. This has been the cause of regular conflict and has led to impoverishment of people living inside these areas. The powers granted to the forest department under the WPA, 1972 also helps them in harassing and exploiting the tribals and other marginalised sections.

Location of the KWS in Adilabad District

Adilabad district is situated between 77°46 and 80°0 of the eastern longitudes and 18°40 and 19°56 of northern latitudes. It is surrounded by Yavatmal and Chandrapur on the north, Karimnagar and Nizamabad on the south and Nanded district on the west. The KWS was established in 1965 and later declared as the Protected Area (PA) in 1999 under the WPA, 1972. It is located in the schedule area of Adilabad district at a distance of 100 km from its district headquarters. It extended from the sahyadri hill ranges to the Tadoba forest in Maharashtra (GoAP 2012; Rajagopal 1976).

Governments' Move to Establish the TRP

Recently, the Government of Andhra Pradesh (GoAP) has declared the KWS in Adilabad as the second TRP, next to the establishment of Nagarjunasagar Tiger Reserve Project (NTRP) in 1983 in the midst of major controversies. The proposed TRP falls under the forest divisions of Adilabad, Bellampalli, Nirmal and Jannaram. The total coverage of the sanctuary is 892.23 sq km that forms the core area and an extent of 1,123.212 sq

km in the surrounding notified forest area (located in the radius of 10 km constitutes the buffer area to the proposed TRP. It is estimated that as many as 1,000 households covering more than 42 tribal villages are likely to be displaced / relocated due to the TRP (GoAP 2012; Sayanna 2012).

The officials of the forest department argue that all the villages existed in the project area are not included under TRP and hence, there will be no displacement / relocation of local tribal communities. On the other, they also announced the compensation at the rate of rupees 10 lakh to the each household in the core area for those who wish to vacate voluntarily. At this point, the project affected tribal communities have been voicing against the threats of forceful displacement and loss of their livelihoods by ignoring the false claims of the officials. According to officials of the forest department, the purpose behind establishment of TRP is to provide the water, grass, etc., resources to the wildlife. And this will prohibit the wildlife not to enter into the agricultural fields and habitats of Forest Dependent Communities (FDCs) for not destroying the crops and attacking the human (GoAP 2012).

In this process, the officials of the forest department further argue that they will prohibit hunting; pay compensation to the humans for the injuries caused by the wild animals; evolve strategies for the benefits of FDCs villages living in core and buffer areas; recognise the needs of FDCs for forest resources; provide infrastructure needed to FDCs; develop tourism in order to provide knowledge over the nature to the visitors; provide employment to FDCs families in order to protect wildlife and the forests; improve the life standards of the FDCs; take up activities under the TRP are

same as the activities taken up for the sanctuary earlier; protect the rights of culture / tradition of FDCs; provide Re-settlement and Rehabilitation (R&R) for the FDCs who voluntarily vacate the forest; and provide Liquid Petroleum Gas (LPG) cylinders to the FDCs families by prohibiting collection of firewood from their forest in the name of reducing the local communities' pressure on the use forest in core and buffer areas (GoAP 2012).

Inhabitant Indigenous Communities

The inhabitant traditional tribal groups in the project area are the Raj Gonds, the Nayakpods, the Kolams, the Pardhans, the Thotis, the Lambadas and other marginalised / weaker sections who primarily depend on forest resources as the FDCs and also other agricultural activities for their survival. Poverty and marginalisation of tribals has been a historical process aided by the state formation and extension, has led to impoverishment of a large section of tribal society. Structural factors constraining access to land and forests have played an important and fundamental role in the marginalisation process. Larger political factors frame these structural constraints which need to be addressed through political processes (Haimendorf 1949, 1982; Murty 1988; Rajagopal 1976; Rao 1952; Rao 1993).

Socio-Cultural, Ecological and Economic Systems of the PAPs and their Livelihoods

The tribals in the region mainly cultivate pulses and vegetables as well as maize, jowar, cotton, chilly and tobacco. They collect more than 100 varieties of NTFPs / MFPs and 250 other medicinal products from the nearby forests which are thick, dry deciduous woodlands of *Tectona terminalia* series. Most of these products, i.e. nuts and fruits are used

for household purpose and also for sale or exchange at the weekly market fairs (*shandis*) and as well as at the ration shops, established by the Girijana Cooperative Corporation (GCC) (Babu 2006; Murty 1981, 1988; Rao 1993).

The NTFPs / MFPs generally collected by the tribal communities in the region include tene (Honey), usiri (*Emblia officinalis*), ippa (*Bassia latifolia*), chintha (*Tamarindus indica*), vepa (*Azadirachta indica*) tapsi (*Sterculia urenus*), musti (*Strychnos nuxvomica*), tangedu (*Cassia auriculata*), rela (*Cassia fistula*), veduru (*Bambusa arundinacea / Dendrocalamus strictus*), ganuga (*Pongamia pinnata*), beedi (*Diospyros melanoxylon*), etc. which are available in different seasons (Babu 2006).

Plantations, i.e. teak (*Tectona grandis*), eucalyptus (*Eucalyptus camaldulensis / Eucalyptus grandis*), rubber (*Hevea brasiliensis*), mulberry (*Morus alba*), jackfruit (*Artocarpus heterophyllus*), mango (*Mangifera indica*), guava (*Psidium guajava*), cashew (*Anarcardium occidentale*), etc. have been growing by extending to nearby forest land. However, this may also gradually affects the traditional livelihood patterns of tribal communities, forest flora and wildlife in future (Babu 2006). According to the reports of forest department, there are more than 673 plant species, 10 varieties of amphibians, 34 varieties of snakes, 270 varieties of birds, and 75 varieties of mammals existed in KWS (Ali 1941; GoAP 2012).

According to the reports of Integrated Tribal Development Agencies (ITDAs) in Andhra Pradesh and the available field data, most of the tribals work as labourer in their fields which have been cultivated by the non-tribal farmers on lease, except

for a few tribal cultivators. The fertile lands, possessed by the tribals earlier, have been already alienated by the non-tribal settlers with several illegal methods. Apart from agriculture, and NTFPs / MFPs collection, they also rear cattle, sheep, pigs, goats, hen, etc. for their agriculture and commercial purposes. As the tribals, are illiterates, and due to their simplicity, they are unable to coup up with the market operations, from time to time. Consequently the gullible tribals have been exploited by the traders and non-tribals in most cases. Most often they take loans from traders and non-tribals and remain indebted (Babu 2006).

They have been following their own cultural practices and indigenous knowledge systems for their sustenance over generations, even though they are in transition (Murty 1994, 2003). Many of them have been living in extreme poverty even without basic amenities like health care, drinking water and education. Poverty, hunger, malnutrition and impoverishment are the important evils which have been facing by the most of tribal communities since long time. Threats of land alienation, indebtedness, displacement and inadequate resettlement measures are the major problems, which have been haunting these tribal groups. Paradoxically no proper protection is extended to tribal communities for the loss of thier lands to the single most important source of their expropriation, namely the state itself (Babu 2006).

Harmonious Co-Existence of Indigenous People and Wildlife in Natural Environment

In the tribal areas of Eastern Ghats region of Andhra Pradesh as well as other tribal societies, the ecological balance can be seen as the level of congruence between human needs and the

sustenance of the natural environment. This balance is primarily maintained through cultural practices in the form of taboos or prohibitions or norms, which define the nature and extent of exploitation within the communities. Any imbalance in this relation either by changes in nature or culture because of forced displacement due to development projects including TRPs acts as man made catastrophe and leads to destruction of livelihood patterns which has been the very basis for survival of communities (Babu 2006; Jha 1994; Murty 1994; Rao 1993; Shahabuddin and Shah 2003).

The ecosystem from the tribal point of view is the relationship they have as individuals and as community with the natural resources around them. This includes the use of natural resources for livelihood and the various values, beliefs, practices and cultural norms which regulate the use of these. These systems were evolved not only to ensure a continuous supply of livelihood requirements but also to reinforce the continuation of a relationship between the individual, the community and nature. Tribals looked upon themselves as an integral part of nature. It is imperative here to critically examine this relationship because there has been a continuous shift in the individual-community-nature relationship with the progress of civilisation and an increasing alienation from nature. Such a shift in relationship must be dealt with great concern and viewed as a part of the process of development (Babu 2008; Biksham and Krishna 2007; Gold and Gujar 1989; Jha 1994; Misra and Narendra 2007; Murty 2003; Shahabuddin and Shah 2003).

Why Tiger is so Important at the Cost of Indigenous Communities?

As the tiger is the national animal in India, the efforts of appropriate governments for conservation of tigers are welcomed in the context of their extinction. The Government of India (GoI) has initiated various safeguards for the conservation and protection of the tigers since 1970s. The Tiger Task Force Report (TTFR) suggested several measures for the protection of tigers by strengthening the institutions of governance; checking, poaching, convicting wildlife criminals and breaking the international trade network; expanding the inviolate spaces for the tiger by minimizing human pressure in these areas; repair the relationships with the people who share the tiger's habitat by building strategies for co-existence; and regenerate the forest habitats in the fringes of the tiger's protective enclaves by investing in forest, water and grassland economies of the people (GoI 2005; Indira 1992).

However, the grassroots level practices adopted by the officials of the forest department for the protection of tigers are seemingly different in their approach as they have been targeting the inhabitant tribal communities for their forceful evacuation, either by the direct or indirect administrative actions from the core and buffer areas of the tiger reserves by ignoring the nature and context of the FDCs from the historical point of view, in the line of the arguments made by the wildlife and conservation filmmaker Shekar Dattatri (2005) in his article "the myth of harmonious co-existence" as "humans and wildlife trying to share the same patch of forest is a recipe for disaster. Voluntary resettlement is the only permanent way to resolve conflict between people and wildlife".

It is unfortunate to mention the comments made by the another filmmaker and conversationalist Mike

Pandey on the proposed forest rights bill 2005, when it was recommended by the Joint Parliamentary Committee (JPC) as "If these recommendations are incorporated, we can forget about our forests and all conservation concerns" (Prasad 2006). In this process, they have been ignoring the socio-cultural and economic aspects of the indigenous peoples who have been living as individuals, communities and members in the same habitats since centuries.

The PAs situation in India is hazardous as the government officials have been acquiring the forest lands in the name of wildlife sanctuaries, tiger reserves and national parks. Later these areas have also been de-reserved and allotted for the promotion of paper, mining, cement, bauxite and other industries at the cost of livelihoods of the FDCs. A study by Ashish Kothari (1995) on Narayan Sarovar Sanctuary (NSS) and Shoolpaneshwar Sanctuary (SS) in Gujarat; Kaila Devi Sanctuary (KDS), Ranthambhor Tiger Reserve (RTR) and Sariska Tiger Reserve (STR) in Rajasthan; and Radhanagari Sanctuary (RS) in Maharashtra, exposed these irregularities as the forest officials encouraged other development projects.

In case of NTPP (Srisailam TRP), the forest department officials argue that so far no enclosures and families were shifted outside from the forest. On the contrary 350 Chenchus who belong to most vulnerable tribal community have got livelihood in the form of animal trackers, protection watchers, fire watchers, etc. They are enjoying their traditional rights which were recognised like MFPs / NTFPs collection, grazing, etc. They further say that, the livelihoods of the tribals will not be affected by the notification of TRP in KWS. On the

other, there will be better livelihood opportunities for the tribals due to improved and increased eco-tourism activities. They claim that already more than 100 youth, mostly tribals are employed in different works in TRP of KWS (GoAP 2012).

In reality the main source of livelihood for the inhabitant vulnerable tribal community the Chenchus is the NTRP region (Haimendorf 1943). We don't know, whether the total number of tigers said to be existed in this protected area by the forest officials is correct or not, but the efforts being taken up by the forest officials in the name of tigers' protection have been worstly affecting the mere survival of these forest dwelling and dependent tribals. On the other, the tribal welfare officials, who supposed to look after the development of these tribals, have not paid any attention to hear and solve their problems. Whereas the forest officials have been concerning only the welfare of forests and the animals existed in it but not the tribals living in it.

Further, they have also been trying to displace the tribals from the forest settlements by using several unjustified methods like, leaving poisonous snakes in their surroundings by the forest department. The process of recognising the cultivable forest lands of the inhabitant tribals and their rights over the MFPs / NTFPs is not at all completed, even though, the recognition of forest rights act was introduced by the central government, even after more than five years. On the other, the forest officials have been trying to increase the strength of tigers all over the country in the name of keeping the equilibrium between the animals and their natural environment (Srinivas 2009).

In this context, the forest officials have also been initiated the process of evicting the tribals from their home lands located in the NTRP. For this purpose, the forest officials have also been implementing the RoFRA, 2006 as an eye-washing effort, just before their evicting strategy for the protection of tigers. At this juncture, eviction of tribals in the name of tiger protection, the forest officials have just ignored the problems being faced by the inhabitant (local) tribals, their aspirations, and also their relation with the forests and natural environment to survive as individuals and as community. NTRP is extended all along the nallamala forest ranges covering Mahaboobnagar, Karnool, Prakasam and Guntur districts with an extent of 3,568 sq km. The entire PA comprise of 200 villages, out which more than 120 villages are located in the outskirts of the forest. This was declared as Wildlife Protection Forest Area (WPFA) for the first time in 1973. Later, this area was recognised as one of the Tigers' Protection Areas (TPA) in 1983. It is estimated that there are about 5,000 population representing 1,500 families, covering 24 villages located in the core area of the protected region.

The figures pertain the population of the Chenchus of this region, prepared by the ITDA, Srisailam and Forest Department are vary with one to other. More than 50,000 and 1,30,000 tribals have been living in the buffer zone and the PA respectively belong to 80 villages located in the forest out skirts. According to the sources forest department, there existed 100 tigers during 1990. These sources further say that because of government policies, increase of extremist activities, illegal hunting, and lack of stringent measures for the protection of tribals, the forest in this region was heavily degraded, and resulted in decreasing the population

of the tigers to 34 in 1994. Later this situation was said to be improved by more than 70 tigers. However, there is no reliability on the data provided by the forest department in this regard (Srinivas 2009).

As part of the wider national strategy to increase the tiger population and protecting the reserve forests, the Ministry of Environment and Forests (MEF) permitted to declare an extent of 1,000 sq km core area of the nallamala forest as the critical tiger habitat. In this context, forest rights act enacted by the Indian parliament five years ago has created new hopes among the Chenchus as like other FDCs in the country. If we deeply look at the implementation part of this forest rights act, it is very difficult to think of socio-economic change to be brought in the lives of the Chenchus, as it remained far beyond the tribal reach. Lack of awareness among the Chenchus, coordination between forest and tribal welfare department, interest to the officials at the state level to streamline the administrative activities, and the problems / factors involved in implementation of RoFRA 2006 have remained as the main obstacles before the new hopes / aspirations of the Chenchus.

On the other, Nayak, A K Field Director and Conservator (FDC) of NTRP says that after providing the rights over land and forests to the Chenchus as per the RoFRA 2006, all the Chenchus families will be convinced and rehabilitated to outside the tiger reserve area by providing appropriate Rehabilitation and Resettlement (R&R) package with their consultation (Srinivas 2009).

Violation of Constitutional Safeguards and other Legal Provisions Applicable to the Scheduled Areas

In the post-independent period, there are various safeguards for the protection and development of Scheduled Tribes (STs) in accordance with the special provisions mentioned in the Indian constitution and fifth and sixth schedules. In pursuance of the article 46 of the Indian constitution, the welfare of the STs is being looked after by the State government. In order to protect the interest of the STs and to curb exploitation at the hands of others, the fifth schedule of the Indian constitution empowers the Governor to modify the State and Central legislations regarding their applicability to the Scheduled Areas and to frame regulations for good Governance (MCRHRDI 2000; Rao 1972; Reddy and Reddy 1995).

Accordingly, the GoAP has framed the 'Andhra Pradesh State Agency Land Transfer Regulation' (APSALTR) of 1959. Regulation 1 of 1959 protects the tribal interest regarding land issues. In 1963 this regulation was amended by regulation 2 of 1963. It was again amended in the year 1970s by regulations 1 of 1970s and 2 of 1970s. In exercise of the powers confirmed by sub section 1 of section 8 of the APSALTR 1959, the GoAP made rules called the 'Andhra Pradesh State Agency Land Transfer Regulation Rules (APSALTRR) in 1969 (MCRHRDI 2000; Rao 1972; Reddy and Reddy 1995).

In addition to the above safeguards, there also existed, the other protective regulations and acts such as: Andhra Pradesh Scheduled Areas Money Lenders Regulation (APSAMLR) of 1960s, Andhra

Pradesh Scheduled Areas Debt Relief Regulation (APSADRR) of 1960s, National Forest Policy (NFP) of 1894, 1952 and 1988; Panchayatraj Extension Act to Scheduled Areas (PESA) of 1996, besides other government policies and government orders (GOs), The Scheduled Tribes and Other Traditional Forest Dwellers Recognition of Forest Rights Act (RoFRA), 2006 and several historical judgments pronounced by different courts from time to time, especially the land mark Samata judgment (MCRHRDI 2000; Rao 1972; Reddy and Reddy 1995; Samata 2003).

Implementation of RoFRA, 2006 in the Scheduled Area of Adilabad District

As per the RoFRA, 2006 the tribal communities have rights to claim the *pattas* (title deeds) for their individual and community (common) lands / Common Property Resources (CPRs). But their rights have been denied and *pattas* have not been issued properly to all the eligible tribals. The main reason behind this may be due to declaration of the TRP and escaping from paying proper compensation, and also legal problems involved in acquiring the tribal lands in schedule areas for initiating the project. In Adilabad district, this Act facilitated to re-identify the community lands (such as grazing lands, pathways, burial grounds, temples, rivers and streams) which have been under the illegal possession of the forest department and other private companies, like the Orient Cement Company (Reddy, Kumar and Nagaraju 2009).

As per government records, about 2,276 titles have been issued towards common land claims covering an extent of 7,84,949 acres. Majority of the claims approved under the common lands belong to Vana Samrakshana Samitis (VSSs) which have no right

to claim under the Act. If the VSSs continue like this, the gram sabhas empowered to protect, conserve and manage CPRs for sustainable management / use will deprive their statutory rights as the forest departments will retain control over Joint Forest Management Committees (JFMCs) as earlier. On the other, many of the community claims filed by tribal villagers have either been rejected or approved for a much smaller area than the total extent claimed. The Adivasi Aikya Vedike (AAV) fought for proper implementation RoFRA 2006 in Adilabad. Most of the villagers have tried to file fresh claims over the community rights. Herding and grazing communities have been struggling to file claims for seasonal grazing rights which have also been ignored (Reddy, Kumar and Nagaraju 2009).

In total 2,66,000 acres covering 341 VSSs, out of total claims of 3,542.54 acres under community land has been issued. The GoAP (2010) has issued titles covering an extent of 9,48,076 acres related to 1,669 VSSs in Andhra Pradesh. Even though, the progress report says that there are no pending cases / claims before the District Land Committee (DLC), there also existed as many as 8,538 pending claims covering an extent of 29,132 acres before the *gram sabha* for consideration. The total budget allocated and implemented under the forest lands development scheme is over 1,043.36 crore. Paradoxically, the state seems to exercise the control on the use of these forest lands in the form of VSSs / JFM. Such an initiative may not increase the livelihood options of people, instead forcing them to work in plantations by ignoring their new rights as per RoFRA 2006.

The contest between the state and forest people for control over forest landscapes will be continued in

different forms. The trainings said to be initiated by the government officials have not raised awareness on the provisions of the collective rights as conferred in the RoFRA 2006. On the other, the representatives of the local communities and other civil society functionaries have not given any stake in the process of claiming the community rights (Reddy, Kumar and Nagaraju 2009).

Why Information is not Disclosed to the PAPs prior to the Establishment of TRP?

Instead of providing the information to the affected communities and their respective *grama-sabhas* related to TRP, the authorities responded in undemocratic manner without disclosing any information. On the other hand, the officials of the forest department initiated the process for formation of TRP. However, the affected communities and their representatives have been trying to get the information relevant to TRP through the Right to Information Act (RTA), 2005. Further, they are also demanding the forest officials for the disclosure of detailed information regarding the proposed TRP.

Mandatory Public Hearing (MPH)

The Government announced the establishment of TRP in KWS on 10 April 2012 as per vide G.O. Ms. No. 27, EFS& T (For. II) without serving any notice for organising the mandatory public hearing. There was no proper information to the project affected tribal families or even the Project Officer (PO) of the concerned ITDA, Utnoor.

According to the circular dated 11 November 1998 of the Department of Rural Development and Order of the Hon'ble High Court of Andhra Pradesh on the writ petition no. 8476 of 2001, the village

council (*grama-sabha*) meeting should be held in the project affected villages. The decision of the *grama-sabha* is ultimate in this regard and this must be ratified by the members of the Mandal Parishad Territorial Council (MPTC). Then only the State Government should specify the complete details of the proposed project based on the socio-economic assessment study conducted by the reputed social sciences research institute (Babu 2006). None of these norms have been followed. No *grama-sabha* meeting was organised for the project affected as revealed by many respondents from the Ali Nagar and Dongapalli of Jannaram and other villages which fall under the TRP.

Role of ITDA, Political Parties and Civil Society Organisations (CSOs) in Establishment of the TRP

According to Mutyala Raju Revu the PO of ITDA, the forest department did not serve any information regarding the TRP, even though this project displaces several tribal villages located in the jurisdiction of ITDA. It indicates that the role of ITDA in safeguarding the interests of the project affected families under TRP was ignored by the officials of the forest department.

Actors Opposing the TRP

The PAPs, civil society and other organisation such as Adivasi Hakkula Porata Samiti (AHPS), Tiger Zone Vyatireka Porata Samiti (TZPS), Progressive Democratic Students' Union (PDSU), Adivasi Samkshema Parishad (ASP), Telangana Vidhyarthi Vedika (TVV), Gramina Peddala Sangham (GPS), Andhra Pradesh Civil Liberties Committee (APCLC), Human Rights Forum (HRF), Telangana Peoples Front (TPF), Arunodaya Samskrutika Samakya (ASS), Kolam Sangham (KS), Akhila

Bharateeya Rytu Coolie Sangham (ABRCS), Telangana Rastra Samiti Youth (TRSY), Madiga Reservation Porata Samiti (MRPS), etc., and other political parties like CPI, CPM, CPI (ML) New Democracy, CPI (Maoist) have been opposing the establishment of TRP in KWS.

Indigenous Communities as the Real Conservators of Natural Environment and Protectors of Wildlife

Indigenous people conserve and protect the nature in their surroundings of their habitats. They have several taboos / prohibitions / restrictions with regard to use of certain plants / trees and animals which have been deeply rooted in their culture in the form of socio-economic and religious practices. For instance, tribal communities follow certain norms in using a particular (part of) plants / trees and animals based on their respective clan names and thereby conserve the natural resources in a sustainable manner. They consider certain plants / trees and animals as their gods and goddesses or clan deities in the form of totems / totemic symbols and sacred groves. In the same way they preserve various seeds for the use in future. They will not use any agro based product without performing the harvesting festivals. They have very excellent practices of preservation / conservation / regeneration of their traditional foods and other grains and foods, MFPS / NTFPS, CPRs and other natural resources (NRs). They worship nature, plants and animals as gods / goddesses (Babu 2008; Bikku 2012; Jha 1994).

Role of Indigenous Communities for the Protection Wildlife under TRP

The officials of the forest department and the ITDA have responded in a manner without providing any

information to the affected communities for their involvement in the formation of TRP. Hence, there would be no any appropriate role of PAPs in the project activities and its maintenance in future in view of their total denial. Roles likely to be played by the Wildlife Protection Committees (WPCs) and VSSs formed by the forest department as part of the JFM is not clear.

Who Conducted the Studies on the Socio-Cultural and Economic Aspects of the PAPs and their Impoverishment Risks related to Relocation and Resettlement?

Before initiating any project, there is a need to conduct a socio-cultural and economic assessment study among the affected communities or FDCs as mandatory. It is observed that the department of forest did not undertake any socio-culture and economic assessment study before establishing TRP.

Is Relocation of Indigenous Communities by Force or Voluntary?

The communities and the wildlife have been harmoniously co-existed in the forest over generations. At this point where is the question of voluntary relocation / resettlement of the displaced communities as the tigers are being brought and said to be protected by the officials of the forest department in the name of TRP in the core area. Even though they offered the compensation at the rate of rupees 10 lakh to the each affected family who wish to relocate by themselves from the core area, it sounds much but how long this compensation is helpful to displaced communities living outside the forest fringes at the cost of their precious culture and livelihoods. It is not clear to the question how the officials estimated the cost of

the relocation / resettlement in view of the forced displacement. The claim of forest officials said to be using the services of the affected communities even after their evacuation for the protection of wildlife in the TRP is baseless argument.

In many cases, relocation involves the issue of transformation of an entire way of life of the oustees. In such situations, displaced people have had to face the transition from a nomadic hunter-gatherer or grazer existence to a livelihood based on settled agriculture. Several communities such as the Gujjars in Uttaranchal, Sahariyas in Madhya Pradesh and the Maldharis in Gujarat have had to face this difficult transition, which is difficult in the best of circumstances (Shahabuddin and Shah 2003).

Ecotourism - Myths and Realities

Promotion of eco-tourism activities under TRP is not at all suggestive in view of the safety of local communities, wildlife and natural environment. The experiences from Andaman, Eastern Ghats (Papihills), Arku valley, Western Ghats (Nilagiris), etc., reveal that introducing tourism will definitely bring miseries to the affected people in the form of addiction to alcohol, changes in the traditional food habits, prone to new diseases and lifestyles. Women are more vulnerable in this case and sometimes this may also lead to breakdown / total disintegration of their traditional families / communities / society. Providing employment to affected families in the project and paying salaries from the revenue generated out of tourism activities is a myth (Vinodan and Manalel 2011). Arranging traditional tribal performances by the tourism agencies for the enjoyment of tourists / guests who

visit the tribal areas by just paying some money is not at all branded as development.

It is observed that the officials of forest department did not learn any lesson from their past experiences. It is evident from the experience of NTRP, where they have failed to relocate / resettle the Chenchus from core area, even today. Herein, understanding the socio-cultural and economic aspects of livelihoods of the affected communities and their association with natural environment cannot be underestimated / altered / bartered / forcefully relocated or evacuated by paying a mere compensation in the name of development / TRP.

Setting up of Special Taskforce for the Protection of Tigers is Alright and Where is the Taskforce for Understanding the Problems of Vulnerable Indigenous Communities?

Just for the cause of tiger protection, we have the Tiger Task Force Committee (TTFC) at the national level. Unfortunately, it is pity that we do not have any effective task force committee at the higher level for the protection of vulnerable tribal communities in India, even though after witnessing too many deaths of tribals due to hunger and ill-health, especially malaria. It shows the lukewarm attitude of the government in order to understand the travails of marginalised millions of the country who deprived and alienated from their rights over resources, livelihoods and environment and finally life.

PAPs vs TRP: Who will Benefit and Who will Lose?

All the development strategies in the present era revolve round the rich with their own advantage at the cost of / exclusion of the vulnerable

communities. A close observation on the formulation, implementation and execution of these development projects reveals that there is a nexus between politicians, bureaucrats and contractors behind the screen for their own advantage (Fernandes 1989; Kothari 1995).

PAPs Struggle for Survival with Dignity

In the wake of TRP, the affected tribal communities have been felt threaten by the dangers / threats of displacement and loss of livelihoods and culture. Without any information from the officials on the benefits and the burdens of the project to the people and wildlife, the officials responded in a casual manner. Hence, the FDCs have been raising their voices against all kinds of injustices with the support of various civil society organisations and political parties in opposition for the past 10 months. They have been demanding for the total withdrawal of the TRP and ensuring their rights over *Jal, Jangle, Jameen* to survive as human beings with dignity.

Conclusion

In order to rectify the historical injustices done to tribal communities, the RoFRA 2006 came into prominence. The tribals and their supporters have struggled a lot to pass this act in the Indian Parliament. This act created new hopes for their lives as they get titles (*pattas*) for their forest lands to the extent cultivated by them so far and also the rights over MFPs / NTFPs for collection and marketing as guaranteed and conferred by it. But they have been pushed to confusion by the indifferent attitude of the states machinery to implement the law. There are no field studies, strict rules and guidelines, efficient and affirmative administrative actions to implement this law in all

the states. With this indifference attitude of the forest officials, the tribals have been losing their faith over the act and living with lot of discouragement and insecurity. They have been worrying that this act will also be remained ineffective, like other protective acts which have been confined / restricted to papers.

Thus, violations against the legal framework existed for the protection of indigenous communities and their territories in the implementation of TRP causing tensions among the affected tribal communities. In the manner through which the officials of forest department have been moving to establish the TRP is objectionable and un-democratic as the officials of forest department did not disclose any information to the public, ITDA and other line departments, and in view of the concerns explained by the PAPs. Ignoring the affected peoples' concerns may lead to tensions among the communities regarding their survival. Occurrence of tribal movements in the scheduled area of Adilabad district against displacement / evacuation and loss of livelihoods and alienation of their lands is its testimony. Without involvement of local communities and ensuring their livelihood opportunities properly, it is not advisable to relocate inhabitants by themselves voluntarily or force either by directly or indirectly due to TRP as they cannot sustain any longer outside forest. Linking tourism to TRP is dangerous move of the forest department and not at all suggestive in view of the vanishing cultures of the indigenous communities. Any imbalance in the individual, community and nature relationship due to TRP may lead to total destruction of the affected communities in future.

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Impact of Globalization on Management Education in India

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Abstract: The management education plays an essential role in today's dynamic business environment. The rapid trend of globalization and technological changes have made difficult for organizations to survive in the competitive world. As a result the importance of management education has been increased many folds. Business executives need to update their skills due to sudden changes in the external environment. Due to the increasingly complex nature of organizations and businesses, there is a need that the business schools impart relevant, current, and cutting edge knowledge to the students. The significance of management education which is essential for today's organizations, the business as well as engineering schools should play pivotal role in equipping our future managers with the emerging trends of management skills to face the challenges of dynamic business world. This paper emphasized the emerging trends in management education and updates the MBA curricula to come at par with the international standards of business education. This paper sets the foundation for future research focusing on improving management curricula for business schools in developing countries based on the international trends in business and management education.

Keywords: WTO, Knowledge Society, Simulation, Globalization, Ethics, Economic Growth

Management Education – An Introduction

"Management education is in great demand especially after the change towards liberalization, privatization and globalization. There are several challenges of management education which require change in the character and structure of management education, integration of management education with corporate sector, up gradation of curriculum and course content, designing of different programs for executives, maintenance of an efficient and effective regulatory system to check mushrooming, and emphasis on research. India being the part of global linkage in the aftermath of WTO agreement is becoming a technology driven society. Nearly one lac management graduates pass out every year in India, providing a tremendous potential to contribute to the creation of a 'knowledge society'.

In the modern economic scenario all over the world- "Management" – as a stream of education and training has acquired new dimensions. Management is an exciting field which an immediate impact on the operations of any business. The field of Management is dynamic in nature. New tools and techniques are continually being introduced to improve the efficiency, productivity, and profitability of any organization. All organizations and their departments, functions, or groups use Management methodologies, which include problem solving techniques and guidelines for various related activities.

There is also a need that our dependence on foreign literature and techniques should be minimized and management teaching and thinking should be based upon practical experiences deriving strength from Indian ethos. Management education need to be made value based, rather than money based. India is facing a crisis of quality management education. As compared to international standards the Indian management institutions (with a few exceptions) are far behind. There is a need to fill this gap. A modern day Business Manager is required to have proficiency in:

- § Functional knowledge of a business organization
- § In-depth knowledge of minimum one discipline of Management.
- § The ability to adapt to new environments at micro- and macro- levels
- § Problem analyzing and solving.
- § Inter-personal skills.
- § Knowledge of functional interdependencies and adaptability.
- § Communication skills.
- § Self-confidence and motivational skills.
- § Drive to succeed and control with initiatives.
- § Entrepreneurial Skills
- § Management skills

A business school is normally a university-level institution that teaches topics such as accounting, finance, marketing, organizational behavior, strategic planning, quantitative methods, etc. These include schools of "business", "business administration", and "management". It must also make students aware of application software such as ERP, POS, Simulation, SCM & logistics. In addition to this they must also get to learn of the

actual running of an enterprise. A business School is an entity by it self and can not be run as a department of a technical school now. Business school must have a branding and that can come from the quality of teaching and their richness. The alumni bring prestige to the school. Placement is a sequel to quality of teaching staff and education provided in the school.

Management education cannot be compared with studying other subject areas like chemistry, physics, mathematics or law etc. Management education can rather be compared with medicine. No doctor is allowed near a patient purely on the basis of theoretical knowledge. Doctors learn the professional skills by acquiring the practical knowledge that is taught by practicing doctors and hence they become experts in diagnosing the real physical condition of patients. In the similar way, in a business scenario also it has to do things, take decisions, take actions, and monitor results. It cannot operate any business by just planning what to do on paper. Planning is, though an important step in the process, there are many examples of businesses with excellent plans having failed because of non-implementation of proper ideas. Management education should actually supplement on job training being given by the companies to the management trainees. It should also develop the analytical skill and improve the ability to assimilate complex external and internal factors influencing an organization.

Critical issues of Indian Management Education:

Management education in India is in the phase of change. The two current developments sweeping India, namely liberalization and globalization, have

had a considerable impact on management education. The management education in India has come a long way. The first Business School in India was Indian Institute of Social Welfare and Business Management, Calcutta, which was established in 1953. The next one being Indian Institute of Management, Calcutta in 1961. Then IIM-A in 1962, Department of Business Administration, Delhi School of Economics in 1966, XLRI in 1966 and so on followed this. The early 90's saw the boom of founding new management schools, most of them in private sector. In the last three years alone 400 Business Schools came into being. Few Business Schools have also established collaboration with some western Universities.

The management education system of in India is beset with a host of problems and challenges. The sudden proliferation of management institutions has lead to a considerable decline in the quality of education that is being offered. In order to install the quality in the management education in India, the AICTE, apex institution in the country and universities should focus on the following issues:

- § Quality Assurance
- § Qualifies and Competent faculty
- § Proper Infrastructure
- § Accountability of Management Institutes

There are other critical issues which need to be addressed like: -

- § Faculty shortages
- § Values and Ethics
- § Allowing foreign institutes in India
- § Role of professional bodies and authorities

Challenges for responsible Management Education

The institutions of Management learning involved in the education of current and future managers are voluntarily committed to engaging in a continuous process of improvement of the following challenges, reporting on progress to all the people involved in business and management related activities and exchanging effective practices with other academic institutions:

Purpose: It is to develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

Values: Is to incorporate into academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

Method: To create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

Research: Engaging in conceptual and empirical research that advances the understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

Partnership: Interacting with managers of business corporations to extend the knowledge of challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

Dialogue: It is to facilitate and support dialogue and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

The emergence of such a new dimension has already begun. Companies are feeling the need for global standards to benchmark human resources, and academics are encouraging the use of merit-based candidate selection systems. India's position as a lead contributor to the global IT human resources pool will need to be supported by the adoption of global standards for talent selection. It is out of this need that a council of companies, hiring experts, technology experts, psychologists, government agencies and test development experts came together and set up the Professional Aptitude Council. With a charter to develop and administer global, industry-standard examinations on behalf of the IT Industry, PAC helps test skills and aptitude to make a highly predictive assessment of a person's ability to perform in an IT job within a global business setting.

At the time of independence, Indian economy was developing and hence we required bureaucratic management skills. However 50 years after independence, the Indian economy has become more mature and hence we require entrepreneurial management skills. Our management schools have failed to meet this challenge. Therefore there is a need to revamp our management education.

Internationalize Management Education

As the business is getting global, day-by-day, there is an increasing need for the colleges to produce global managers. Therefore, it has become

necessary that Indian Management education should also become more global. The message is quite clear; the response to the globalization of business is the globalization of management education. The following are the directions in which the Business Schools can focus to make management education global:

- § The business schools must admit international students to the program. The Indian management institutes are the only ones with no international participation.
- § The business schools should induct a few international faculties and provide an opportunity to the students to listen about other country's business culture and systems.
- § They should provide an active program of students and faculty exchange with advanced countries.
- § To ensure that at least 25% of the curriculum deals with international subjects like international economics, international marketing, international financial management, etc.,
- § They should collaborate with some well known foreign Business Schools by which Indian students can do part of their education in those institutes.
- § Lastly the Business Schools also collaborate with some foreign placement consultancies to make sure at least some students can attain jobs abroad.

Management Education in India is at cross roads. With the dawn of new millennium, while there was phenomenal growth in the number of B-Schools, the benchmarks were also on the rise. The internationalization doesn't seem to have happened

just to the Industry but also to Indian B- Schools. The expansion of B- Schools (in Number) doesn't look to be in line with the challenges posed by the globalization of Indian Management Education.

Of the 1500 B- Schools India currently has, there might be around 200-250 schools, which might stand a standard test of quality. Should the internationalization of Management education India become a reality in terms of free movement of faculty and freedom of operations across the globe, the Indian B-Schools might have to take many initiatives to stand up to the challenge. The solution seems to be, 'While the affiliated colleges are needed to be more autonomy-both financial and academic, the autonomous institutions have to strengthen their curriculum'.

The fundamental scope of doing business in India is lying with its people. The huge population of India has created a large unsaturated market of consumers. This is one of the reasons why global companies are very much interested in doing business in India. In the post globalization era this scope has increased immensely for global multinational companies as Government of India has also played a very crucial and supportive role in this respect through liberalized policies and legislative structure.

Impact of Globalization on Management Education in India

The term 'globalization' means integration of economies and societies through cross country flows of information, ideas, technologies, goods, services, capital, finance and people. Cross border integration can have several dimensions – cultural, social, political and economic. In fact, some people fear cultural and social integration even more than

economic integration. Knowledge is the driving force in the rapidly changing globalised economy and society. Quantity and quality of specialized human resources determine their competence in the global market. Emergence of knowledge as driving factor results in both challenges and opportunities. It is well known that the growth of the global economy has increased opportunities for those countries with good levels of education.

Globalization has a multi-dimensional impact on the system of education. It promotes new tools & techniques in this area like E-learning, Flexible learning, Distance Education Programs and Overseas training. Globalization will mean many different things for education. In the near future, "it will mean a more competitive and deregulated educational system modeled after free market but with more pressure on it to assure that the next generation of workers are prepared for some amorphous 'job market of 21st century'.

The education system in India should deliver such education and training so that professionals can adjust themselves as per market expectations. It has underlined the need for reforms in the educational system with particular reference to the wider utilization of information technology, giving productivity dimension to education and emphasis on its research and development activities. The benefits of globalization accrue to the countries with highly skilled human capital and it is a curse for the countries without such specialized human capital. Developing and transition countries are further challenged in a highly competitive world economy because their higher education systems are not adequately developed for the creation and use of knowledge. Converting the challenges into

opportunities depend on the rapidity at which they adapt to the changing environment.

In India, over the years, there have been private initiatives in education initially for philanthropic reasons and eventually in professional and even in general higher education not only to meet the growing demands but also to realize the huge and quick profits potential. This was situational because government has shortage of funds so for the benefit of nation government allowed private institutions. Privatization of management education has emerged in several forms and types in the recent decade in India. Commercial management education emerges from market forces and tied to economic and global forces.

Globalization leads to challenges and threats also. The major concern is to deliver world class education with updated curriculum and practical exposure. This is possible only by attracting talented & experienced persons in to academics. At present it is difficult to assess not only the nature and dimensions of globalization, but also what it means to the field of education. A few educational researchers have attempted to make connections between the several dimensions of globalization and the policies of education. India is witnessing new era in the field of Management Education. Many Corporate groups like Reliance, Nirma, Tata, Sterlite etc. have promoted Management Institutes. Some reputed foreign universities are also coming to India. In India, there is a considerable hope and expectations regarding the value of management education and its potential contributing largely to nation's economic growth.

Conclusion

India's management education is under going a major transition. Internationalization, cross cultures, strategic alliances, partnerships, and mergers are the new trends in management education. The top priorities for management education institutions in India are to improve the quality of faculty; to address and respond to critical social, economic and technological issues facing Indian management. In a churning global marketplace, understanding the fundamental connections between business, the environment, and society has become essential. The roles and responsibilities of business as a global force are becoming more urgent and complex, and concepts related to societal responsibility and sustainability are gaining recognition as essential elements in business management.

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Social Impacts and Political Management at the Time of Disasters – A Case Study of NACL, Srikakulam

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About the company

Nagarjuna Group is truly an enterprise on the move. The foundation of the Group was established in 1994 by technocrat entrepreneur Shri. K.V.K Raju. He started with an initial investment of US \$ 1.2 million and sowed the seeds of what is now one of the fastest growing industrial houses in India. Addition to a growing presence in Agribusiness, the Group has made significant investments in core sectors like Refining, Power generation and Life Sciences. Today, the asset base of Nagarjuna Group is over US \$ 2.5 billion. The Agribusiness Division of Nagarjuna is committed to enhance the availability of quality food supply for the future by developing products and services that contribute to increase farm productivity with business units of Plant Nutrition and Crop Protection.

Nagarjuna provides a complete range of cost effective agricultural inputs. Nagarjuna's products and services enjoy nationwide reputation in India among the farming community due to their consistent high quality. NACL have adequate capacities such as state-of-the-art infrastructure, skilled experienced manpower and technical absorption capabilities. In fact, Custom Synthesis and manufacturing are one of its inherent capabilities. The production lines are designed for a quick change over. It also has a Custom Synthesis

and Toll Manufacturing Division, which caters to the requirements of reputed overseas customers.

NACL has one of the largest Dealer Network spread across India, with marketing and sales offices in addition to an extensive Warehousing & Logistics Infrastructure to handle operations in 20 Indian States. NACL has tie-ups with large Indian Agrochemical Majors and MNC's for the domestic and export markets. The Current Gross Annual Sales of the Organization is approximately US \$ 138 million.

NACL has been assessed and certified as meeting the requirements of ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007. Quality at Nagarjuna Agrichem is a result of conscientious and consistent efforts. Naturally, each of its products ranks with the best in the world. The most stringent quality control tests mark every stage of manufacturing - from raw material sourcing to processing and packaging. Along with in-house norms and standards in eco-friendly operations and safe handling, we have the capabilities to standardize products and packaging to meet the prevailing regulatory demands of any country of the World. This primary focus on quality is the key to the wide acceptance for Nagarjuna products in many countries across the Globe. The Quality management facilities are equipped with modern

analytical equipment such as GC-Mass, LC- Mass, GLC, HPLC, UV Spectrophotometer and etc.

The Nagarjuna Agrichem product profile includes those tested and certified by best GLP Certified Independent laboratories in Europe & U.S.A. All the products conform to National and International Specifications. NACL operate one of the most modern and comprehensive Technical Agrochemical manufacturing plants, situated in Srikakulam district of Andhra Pradesh, India.

NACL formulates its formulations in a modern Formulation Plant situated in the East Godavari District of Andhra Pradesh. This location is situated in the scenic rice growing area on India's East Coast. This Unit is one of the few to have in a single location, integrated multi-line facilities capable of producing a variety of pesticide formulations such as liquids, wettable powders and granules simultaneously. This unit has the formulation technology to produce dry flowables and water based emulsions. The category wise annual installed capacities are Technical: 9,500 MT and Formulations (Liquids / Wettables / Granules): 38,000 KL/MT.

NACL has an impressive range of branded formulations in the categories of Insecticides, Fungicides and Herbicides. In addition to catering to the entire Indian subcontinent, we export both Technical and Formulation grade pesticides to some countries in Europe, Asia including the Middle East, Japan, USA, Australia and Africa.

Products manufactured by NACL

Nagarjuna Agrichem Limited, established during the year 1994 with a motive of Serving Society through Industry since then has been striving hard

to serve the Indian farmers by providing cost effective and eco friendly total crop solutions to improve their farm productivity. NACL has got entire range of Agrochemicals to take care of all the pest problems of major crops grown in India i.e. Paddy, Cotton, Chill, Vegetables, Pulses, Fruits and Oil seed. It has got a strong network of about 10,000 dealers across the country serving even the remote areas of the country. NACL product range includes Insecticides, Fungicides, Herbicides and Plant Growth Promoters.

To fulfill the dream of its founder to provide the entire farm inputs through a single outlet, NAGARJUNA as a group is providing all the farm inputs like Fertilizers, Micro Nutrients, Liquid Fertilizers, Drip Irrigation Systems and Agro Chemicals. NACL with its product strength of 55 brands, strong network and with its diversifying activities and future vision will continue to serve the Indian farmers for their sustainable growth and also for the economy of the country. NACL can manufacture and supply Technical grade Agrochemicals, Formulation Bulk and/or Formulated Finished Goods in the desired concentration based on Customers Requirement.

Nagarjuna's growing global presence is reflected in its exports. Today Nagarjuna is among the few companies in India exporting pesticide technical and formulations to as many as 24 countries including Australia, Bangladesh, Belgium, Brazil, Colombia, Egypt, France, Germany, Indonesia, Italy, Ivory Coast, Japan, Malaysia, Netherlands, Nigeria, Saudi Arabia, Singapore, Sri Lanka, Switzerland, Taiwan, Tanzania, Thailand, USA and Yemen.

To meet the growing demand in the international markets and improve its export business, the Group is constantly introducing new generics and formulations. To strengthen this process, Nagarjuna has generated complete packages of Chemistry, Toxicology, Residues and Bioefficacy data for all its manufactured technical.

Manufacturing and R & D

The process Development Skills of NACL are comparable to the Best Indian Companies. It is our belief that the R & D / Process Development Department of NACL are the second largest of any Indian Agrochemical Company in terms of size and scope of operation. Research and Development plays a critical role in NACL. The R&D division carries out work on process development of technical and intermediates, custom synthesis, process improvement, application research and basic research. NACL is involved in contract manufacturing for leading multinational companies and technology transfer is done by the R&D department. The department is equipped to carry out all types of reactions. There is a fully fledged pilot plant to scale up process. The Research and development activity is supported by analytical laboratory which has sophisticated state of the art equipments including LC-MS and GC-MS.

The R&D laboratory of NACL is recognized by the Department of Science & Technology, Government of India. NACL's reputation for excellent manufacturing facilities and proven process development skills has attracted several multinational companies for Contract Manufacturing. NACL is doing Custom Synthesis and Contract Manufacturing for leading MNC to meet their global requirements.

Disaster held in Srikakulam NACL plant:-

A fire accident held in the NACL at 9.12 a.m. on Saturday June 30, 2012, a fiery explosion released toxic gases in BLOCK 5. It threatened to turn into a catastrophe but the damage was confined to injuries to 17 factory workers. On that bright, sunny day, there was no wind to carry the thick black smoke and gases in the direction of human habitations.

The seriously injured were rushed to a corporate hospital in Visakhapatnam. The blast occurred on the fifth floor of the building at about 9 a.m. when 300 workers on duty left their workplace during tea break. It would have been major catastrophe had all the workers been inside at the time when fire engulfed the third, fourth and fifth floors. Thick, black smoke, visible from miles away, continued to billow out of the plant till evening.

“The reactor could not absorb the pressure while preparing a chemical formulation Myco butanil for making a pesticide. There was a backfire leading to a massive explosion and fire,” reported by the management. The explosion was so deafening that villagers in the vicinity ran for their lives. Panic-stricken villagers nearby from Alinagaram, Chilakalapalem, Akkivalasa and Ravupalli complained of dizziness and nausea.

The deafening blast created panic with workers as well as people of Akkivalasa running away to Ranasthalam and other areas for safety. All the educational institutions in the area were given a holiday. Tension gripped the area as the management was tight-lipped about the cause of the accident. Agitated villagers squatted in front of the main gate and tried to lock the plant but were chased away by the police who cordoned off the area. The fire department personnel battled for

hours with two engines, but could not extinguish the fire. Later, more fire tenders were requisitioned from Visakhapatnam and other places, and by late evening, the fire could be brought under control.

Tension gripped the area as news of the fire spread through the TV channels and many in the neighboring villages moved to safer places. The authorities also evacuated some people in the morning and asked people within a radius of 10 km to be on the alert. Attempts to extinguish the fire were hampered by lack of proper equipment. Fire engines with hydraulic platform and foam arrived from Visakhapatnam only at 1.30 p.m.

Reaction of the village people:-

On Sunday, when the first shift workers came to the factory, people from the 15 villages in the vicinity gathered at the gates and stopped them from going in. They staged a demonstration and asked the district authorities to close down the factory immediately, as it posed a great danger to their lives. The agitating public also stopped traffic on NH 5 in the vicinity of the factory for hours.

Several villagers with the support of opposition parties, including the CPI (M) and the BJP, organized a protest against the blast on the busy Srikakulam-Visakhapatnam highway leading to a traffic jam between Etcherla and Ranasthalam. The 'Rasta roko' between Chilakapalem and Rajam continued till 3 p.m. Heavy police force was deployed to avert untoward incidents. The villagers, firm on staging the protest till evening, had a heated argument with the revenue and the police officials. The agitators contended that if the fire had spread to the other reactors in the factory the consequences would have been even more disastrous and, therefore, the factory should be shut

down immediately. They alleged that the management was not taking proper safety measures.

In response to the agitation, the district administration served a show-cause notice on the management on Sunday afternoon, instructing it to stop operations for a fortnight, and offer an explanation on July 15 on the accident and the related issues. The district authorities assured the public in the nearby villages that all steps would be taken to ensure their safety and that requisite steps would be taken against the management.

A massive public meeting was held on Sunday near Chilakapalem to step up pressure on the government for complete shutdown of operations in the pesticide plant where an accident took place, causing tension among the people with the release of toxic gases after the accident. Many leaders from different opposition parties attended to extend their support to the movement against the plant. They stated that the company had completely ignored people's representations to reduce the pollution that made their lives miserable. The TDP leaders alleged that Vizianagaram MP Botcha Jhansi did not respond to the accident though the Etcherla Assembly constituency was under jurisdiction.

Many villagers have been fighting against the company for the last 18 years as it is polluting air and groundwater. The soil has got contaminated due to the runoff of chemicals, raw materials and products into the lakes. They are also not able to take up agricultural activity near the factory as the soil is contaminated.

Reaction of the Andhra Pradesh pollution control board (PCB) after the disaster:-

The AP Pollution Control Board (PCB) on Monday ordered closure of the Nagarjuna Agrichem Limited (NACL) unit citing violation of pollution norms and lack of safety standards. A task force headed by senior environmental engineer K Ramesh handed over the closure notice of the plant issued by PCB member-secretary M Ravichandra to the factory officials at Chilakapalem village in Etcherla Mandal. PCB officials also issued the order copy to the EPDCL authorities to stop power supply to the plant till further orders. Sources said the PCB ordered the plant management that the unit would be closed till further orders. The district collector had issued temporary closure orders of the plant on Sunday based on a report from the joint chief inspector of factories. PCB officials imposed a cut in the production of the plant following frequent complaints about rising pollution levels.

The NACL management deposited Rs 25 lakhs with the PCB for high levels of pollution in the surrounding villages. Sources said the PCB authorities had warned NACL after the plant started releasing effluents and polluted water to the nearby areas. During their inspections, the PCB officials found the water used to douse the fire in the recent mishap was itself hazardous as there were chemical substances in it. Ramesh said that they found that one agricultural bore well near the plant was polluted with the effluents from the plant in the past. Ironically, pollution control equipment was gutted in the fire and it would take nearly one year to erect the equipment.

Notice ignored by NACL management

Inquiries revealed that the company was continuing production without possessing a Valid Consent for Operation from the Pollution Control Board (PCB).

The then District Collector K. Sreekanth had expressed concern over the risk of the release of effluents into the air causing respiratory and skin diseases to people living within a 25-km radius. Mr. Sreekanth sent letters to the PCB on March 10, 2010, and January 12, 2011, asking it to stop the factory's operations until the management installed effective pollution control equipment. But the PCB officials took his advice lightly. The A.P. Pollution Control Board and the Inspectorate of Factories were found wanting in discharging their mandate of conducting periodic and thorough inspections of polluting industries.

Reaction of the NACL management after the disaster:-

NACL management told that there are no casualties in the unfortunate accident which occurred in the plant at 9.12 a.m. of June 30th. It is now under control. The damage was confined to injuries to 17 factory workers. Nagarjuna Agrichem Limited sought permission from the government for 'safe shutdown' of various units in the plant. The company feared that complete closure of the plant at this juncture might lead to pollution and release of gases from effluent treatment plant (EFT) and other units.

The company officials could not enter the premises after the blast and gas leak from the plant on Saturday, with the widespread agitations by locals for the complete closure of all the operations. Management told to Bombay Stock Exchange that they were assessing the loss in last Saturday's fire. It said only 17 workers were injured and ruled out death of any worker. It also said that production had been temporarily stopped.

How the NACL unit Re-opened:-

NACL management went to collector for permission “NACL was providing employment to nearly 2,000 people” Nagarjuna Agrichem executives and staff on Wednesday urged Srikakulam Collector Saurabh Gaur to take stern action against the people who were conspiring against the company which was providing employment to around 2,000 people.

They met the Collector in his camp office and said that there was no major accident in the last 18 years except the mishap that occurred on July 30 in the plant in which a few workers escaped with minor injuries. NACL management invested around Rs.50 crores for the upgradation of technology and safety measures and minimizes the release of toxic gases from the plant. “Permanent closure of the plant would take away our source of income. Our future will be bleak,” said B.Ramanamurthy and D.V.V. Suryanarayana Murthy.

Permission obtained:-

NACL obtained permission to restart work from the AP Pollution Control Board and the inspector of factories after submitting a detailed plan on safety measures. However, it could not start operations due to opposition from locals. The boiler was re-lit, in the presence of NACL Vice-President K.G Vadivelu, DGM P. Kanaka Rao and other officials. There was heavy deployment of police in 12 villages in the vicinity to prevent any incidents. Production is planned to begin from the next day evening as the company is yet to complete overhaul of the machinery. It will take a couple of weeks for

the company to resume operations on a full scale, according to sources. NACL Vyatireka Porata Samiti deplored the heavy presence of police force despite the locals agitating peacefully. The agitation of 2,000 NACL workers to reopen the factory has forced the district administration to give its assent for restarting production despite stiff resistance from the locals.

It has become a major issue to the political parties to encash the situation for which all opposition parties are sympathetic towards the villagers. Government has been successful in bouncing back with some developed measurements to be taken by NACL. Villagers are in such a condition that they have been regarded and considered neither by NACL nor by political parties on the other side the employees of NACL

There are many issues to go in depth while pragmatic approach is found by any group. A few of the challenges for the researchers could be

1. How to change the revolutionary attitude developed in the minds of the villagers by the political parties?
2. What would be the expectations of the political parties from NACL and outcomes of this commotion? And
3. What kind of decision would be acceptable to either the villagers or the employees and would the involvement of the Government show the path to both parties.
4. What kind of comparisons with steel plant blast at Visakhapatnam would result into the positive solution to the company?