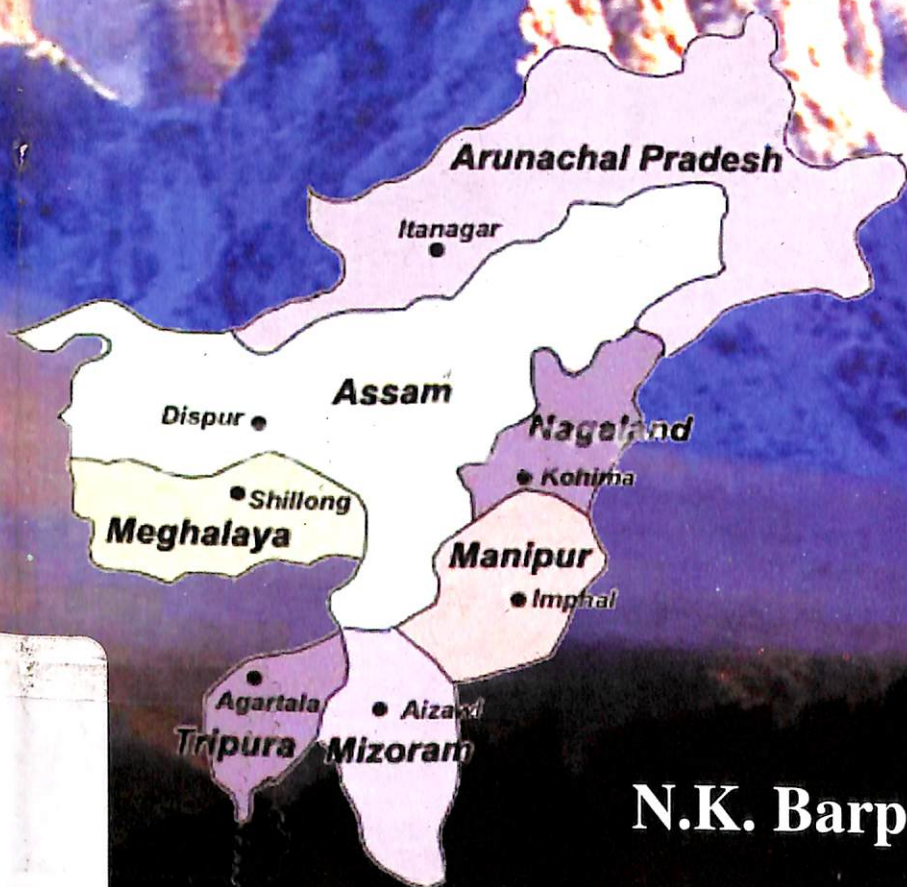


# Seven Sisters

## North East India Profile



N.K. Barpujari

# SEVEN SISTERS

## NORTH EAST INDIA PROFILE



Dr. N.K. Barpujari

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## Preface

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The name, the land of seven sisters, had been originally coined, coinciding with the inauguration of the new States in January, 1972 by Jyoti Prasad Saikia, a journalist in Tripura in course of a radio talk. These seven provinces of India are inhabited by over 500 ethnic groups, some of which have preserved ancient customs, Shaman rituals and headhunting traditions. They are surrounded by China, Myanmar and Bangladesh.

This book aims at compilation of upto-date and innovative material on this fascinating and ethnological transaction zone of Northeast India.

While preparing this work, we have incurred indebtedness of the authorities on the subject. We respectfully record our acknowledgment to them.

Librarians and their staff members have helped us in many ways. We cannot adequately thank them.

Finally a word of appreciation for my publisher for his special interest in this subject. He merits patronage of my readers for bringing out this valuable and rich material, in its present form, for greater intellectual use and further research on this subject.

AUTHOR



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## Introduction

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The Seven Sisters of India is a survey of the seven isolated and until recently closed to foreigners northeastern states of India. The book examines the political and historical background of the seven states Arunachal Pradesh, Tripura, Meghalaya, Nagaland, Mizoram, Manipur and Assam including their local customs, religious practices, and ancient rituals. It a glimpse into the life of these remote cultures, their traditional architecture and dress, provides their healing and hunting practices their ancestral worship and matriarchal culture.

In a region rarely visited by foreigners, numerous ethnic groups continue a way of life unchanged for centuries. For example, in Arunachal Pradesh, many people practice polygamy. In Manipur, native people perform elaborate, ritual dances to honor village deities and in Nagaland, villagers worship the sun and the moon, to which they attribute human life.

Surrounded by China, Myanmar and Bangladesh, Northeast India is extraordinarily diverse, described by the authors as an "ethnological transition zone." The Seven Sisters provinces of India are inhabited by over 500 distinct ethnic groups, some of which have preserved ancient customs, shaman rituals and headhunting traditions. The

Seven Sisters of India documents the traditions and daily life of the diverse inhabitants of this region, examining the myths and folklore stories connected to present-day practices among different groups. The book gives both the diversity of the groups and the common traditions which unite them, making for a fascinating exploration of the little known provinces of Northeast India.

The *Seven Sister States* are a region of northeastern India, comprising the contiguous states of Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland, and Tripura. The region had a population of 38.6 million in 2000, about 3.8 percent of India's total. The ethnic and religious diversity that characterizes the seven states distinguishes them from the rest of India. For most of their history, they were independent, and their complete integration with India came about only during the *British Raj*.

The reference *Seven Sisters* is symbolic of their relative isolation from mainstream Indian culture and consciousness.

### **The Number Seven**

When India became independent from the *United Kingdom* in 1947, only three states covered the area. *Manipur* and *Tripura* were princely states, while a much larger *Assam* Province was under direct *British* rule. Its capital was *Shillong*. Four new states were carved out of the original territory of *Assam* in the decades following independence, in line with the policy of the government of reorganizing the states along ethnic and linguistic lines. Accordingly, *Nagaland* became a separate state in 1963, followed by *Meghalaya* in 1972. *Mizoram* became a Union Territory in 1972, and achieved statehood—along with *Arunachal Pradesh* in 1987.

### **Ethnic and Religious Composition**

Assam, where the major language, *Assamese*, is the easternmost of the *Indo-European languages*, the region has a predominantly tribal population that speak numerous *Tibeto-Burman* and *Austro-Asiatic* languages. *Hinduism* is the

predominant religion in this region. The proliferation of Christianity among the Seven Sister States sets it apart from the rest of India. The work of *Christian missionaries* in the area has led to large scale conversion of the tribal population. Christians now comprise the majority of the population in *Nagaland, Mizoram and Meghalaya* and sizable minority in *Manipur and Arunachal Pradesh*. The bigger states of *Assam and Tripura*, have remained predominantly *Hindu*, with a sizeable *Muslim* minority in Assam.

### Natural Resources

Main industries in the region are *tea-based, crude oil and natural gas, silk, bamboo and handicrafts*. The states are heavily forested and have plentiful rainfall. There are beautiful *wildlife sanctuaries*, tea-estates and mighty rivers like *Brahmaputra*. The region is home to *one-horned rhinoceros, elephants* and other *endangered* wildlife. For security reasons, including intertribal tensions, widespread insurgencies, and disputed borders with neighbouring *China*, there are restrictions on foreigners visiting the area, hampering the development of the potentially profitable tourism industry.

### Interdependence

The landlocked Northeastern region of the country comprises seven separate states whose geographical and practical needs of development underscore their need to thrive and work together. A compact geographical unit, the Northeast is isolated from the rest of India except through a slender and vulnerable corridor, flanked by alien territories. *Assam* is the gateway through which the sister states are connected to the mainland. *Tripura*, a virtual *enclave* almost surrounded by Bangladesh, wholly depends on *Assam* even for bare existence. *Nagaland, Meghalaya* and *Arunachal* depend on Assam for their internal communications. *Manipur* and *Mizoram's* contacts with the main body of India are through Assam's *Barak Valley*. Raw material requirements also make the states mutually dependent. All rivers in Assam's plains



originate in Arunachal Pradesh, Nagaland and western Meghalaya. Manipur's rivers have their sources in *Nagaland* and *Mizoram*; the hills also have rich mineral and forest resources. *Petroleum* is found in the plains.

The plains depend on the hills also on vital questions like flood control. A correct strategy to control floods in the plains calls for soil conservation and *afforestation* in the hills. The hills depend on the plains for markets for their produce. They depend on the plains even for food grains because of limited cultivable land in the hills.

To provide a forum for collaboration towards common objectives, the Indian government established the *North Eastern Council* in 1971. Each state is represented by its Governor and Chief Minister. The Council has enabled the Seven Sister States to work together on numerous matters, including the provision of educational facilities and electric supplies to the region.

## North-East India

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*North-East India* is the easternmost region of *India* consisting of the contiguous *Seven Sister States* and the state of *Sikkim*. This region is officially recognized as a special category of states. The North East Council (NEC) was constituted in 1971 as the nodal agency for the economic and social development of the eight states, the North Eastern Development Finance Corporation Ltd (NEDFi) was incorporated on *August 9, 1995* and the Ministry of Development of Northeastern Region (DONER) was set up in September 2001.

### The States

1. Arunachal Pradesh
2. Assam
3. Manipur
4. Meghalaya
5. Mizoram
6. Nagaland
7. Sikkim
8. Tripura

Of these, Sikkim became an Indian protectorate in 1947 and a full state in 1975. The states border *Nepal*, *Bhutan*, *China*, *Myanmar* and *Bangladesh*. They share a 21 km common border with the rest of India via the *Chicken's Neck*.

### Political Issues

The North-East has been added to political India only in recent times, though India itself was rarely unified for most of its history. Assam (which included at the time of Indian independence, *Nagaland*, *Mizoram* and *Meghalaya*) was rarely part of political India for most of its *history*; *Manipur* and *Tripura* were princely states also rarely a part of political India; *Arunachal Pradesh* was beyond the outer line of *British India* at the beginning of the *20th century*; and *Sikkim* too was not part of political India. These areas were incorporated into mainstream India during the *British Raj* when British colonial authorities annexed traditionally separate border countries into Indian territory to form a buffer between their colony and external powers (ie: Assam, *Manipur* and *Tripura* in the Northeast, and *Balochistan* and the *North West Frontier Province* in the northwest). After independence in 1947, extension of the Indian state and political apparatus has been a challenge. The North-East became increasingly isolated.

The isolation of the Northeastern states began earlier as a result of British imperialism, when the region was cut-off from its traditional trading partners (*Bhutan*, *Myanmar* and *Indo-China*). In 1947 Indian independence and partition made this a landlocked region, exacerbating the isolation that is being recognized lately, but not studied yet. Soon it became a captive market for mainstream India. The Northeast has a strong genetic similarity with the peoples of *East Asia*. The northeastern states with just 25 out of a total of 543 seats in the *Lok Sabha* are politically insignificant in Delhi.

The northeastern states are home to many ethnic groups, that are engaged in self-preservation. In recent times, some

of these struggles have turned violent, leading to proliferation of armed insurgent groups, like the *ULFA*, *NLF*, *NDFB* and *NSCNS* (*NSCN*, *ULFA*, and *NDFB*). Soon after the *Sino-Indian War* of 1962 and especially after the rise of insurgency in the region, security influence on policies has increased.

The region is known for its unique culture, handicrafts, martial arts, and scenic beauty. Problems include insurgency, unemployment, drug addiction, and lack of infrastructure. Since the beginning of the economic liberalization in the 1990s, studies have shown that this region is lagging behind the others in terms of development.

### **Economic Backwardness and Plan for Growth**

Causes of the region's economic backwardness lie with the model of development followed by the Indian state, (i.e., the 'Mahalanobis Model' (MM)), combined with the regulatory regime that was adopted to implement the model. The North-Eastern states compounded this problem by following policies that did not promote growth but also ensured that the states were in no position to take advantage of the opportunities afforded by economic liberalisation.

Before proceeding to the description of the attempt at rapid industrialisation, it would not be out of place to describe in brief at least the Assamese economy at the time of independence. When observers talk about promoting exports from the North-East exhorting the people of this region to look for markets and opportunities abroad, they tend to forget that in essence, North-East is already a globalised economy and has been, for quite some time, because it produces tea which is exported; it does produce oil which is an import competing product and for long years, has saved India the embarrassment of running short of foreign exchange reserves. This region received Foreign Direct Investment long before it became a buzzword with Indian policy makers. This investment was in sectors like



tea and petroleum and the products of these two regions have for well over a century seen external markets. Why then it may be asked has this region whose per capita income at the time of independence was above the national average stagnated? The answer lies in the nature of this investment. The tea sector made no demands on the rest of the economy either by way of products or labour to raise either income or affect the production pattern of the local economy. The labour in this sector came from outside the state as the wages offered did not tempt the local residents who lived in an area that initially was a land abundant region. Where petroleum was concerned, this was equally true. Thus there existed a dual economy, a local one that was entirely self-contained and a global one that existed for the rest of the world. The profits from these ventures were not reinvested in Assam but elsewhere after the potential for expansion of tea cultivation and oil exploration was deemed to be exhausted but was reinvested elsewhere. This was not surprising because although the area had bountiful natural resources, transport facilities as well as other infrastructural requirements were lacking in this state especially when compared to Bengal or the Bombay Presidency. Independence brought no respite. As will be argued in subsequent sections neglect of this region, as well its exploitation was written in the strategy of industrialisation that was followed.

## I

The decision of the Congress to go in for a model of rapid and heavy industrialisation ignoring the fact that India was a labour abundant economy had its roots in economic theory as well as certain observed developments.

Economic theory discusses a class of growth models that *minimises the time* taken for an economy to achieve a particular economic structure. These models (called turnpike models) call for heavy initial investment in (capital-intensive) capital goods industry shifting to (labour-intensive) consumer goods industry only at a later stage. The economy

which grows slowly initially picks up steam at a later stage growing very rapidly towards the end.

This contention was supported by developments in the Soviet Union which recovered from the ravages of a long civil war growing rapidly in the 1930s when the rest of the capitalist world was stuck in depression. The decision to go for rapid industrialisation was strengthened by the Prebisch-Singer findings about the declining terms-of-trade of exports of the South vis a vis commodities from north which was body blow to the case for export-led growth based on traditional advantages.

The policy-makers chose the Mahalanobis Model (MM) a turnpike model and chose to implement it through state investment in the desired sectors and a license-permit Raj to guide private investment (and not by taxes and subsidies as suggested by conventional economic theory).

The adoption of the MM and the manner in which it was implemented had its implications for economic inequality. The fact that a policy of heavy industrialisation was chosen meant that investment per worker in the concerned industries would be high. Thus very few (well-paid) people would be employed, meaning that increased income would accrue to very few. This meant a greater degree of inequality than what an investment based on comparative advantage (In India's case abundant labour) would have implied.

Secondly, as this high-wage employment was more regionally concentrated than the results of the latter strategy would have been, regional inequality also rose. As the central government set up industries in those regions possessing raw materials required for heavy industry or those that already possessed an industrial base or other regions were at a disadvantage. Indeed, the adoption of the MM meant that it could not be otherwise. Investment in the steel industry meant that these industries had to be set up in areas that had access to minerals like coal, iron-ore, manganese, etc. Machine tools industry also could

not be set up in remote areas merely for the sake of regional equity. They had to be set up in areas well served by railroads and at distances not too great from their markets and sources of raw materials. Thus, in so far as the MM directed investment towards green field sites that had hitherto seen no industrial development during British rule, it was due to economic considerations; namely the exploitation of plentiful mineral resources, not considerations of regional redistribution. Given the objectives of the model, this policy was a sensible one.

We have already said that the planners, instead of concentrating resources on a few sectors and taking advantage of economies of scale, decided to spread resources at their disposal into several sectors with self-sufficiency as their objective. As a result of in-optimal scales, costs of production rose, transforming the Indian industry into a high-cost industry. To protect this industry India had to impose high tariffs on industrial imports. As high tariffs were taken recourse to, agriculture was discriminated against as the price farmers now paid, for industrial goods became higher because of the terms of trade effect. Thus apart from sectoral inequality, regional inequality would have also been adversely affected as some states are more dependent on agriculture than others. The North-East which was by no means industrialised would naturally be badly affected.

Could the poorer states have expected growth to trickle down as a result of sustained growth? This is unlikely. First of all given the MM's stress on initial heavy investment in capital goods and basic goods, it becomes clear that the industries that such sectors stimulate did not exist in most poor states. Industries likely to receive increased orders as a consequence of state investment in capital goods industries as well as basic goods sector would be specialised engineering and construction. Such services are likely to have been imported or were supplied by companies located in the industrial states to begin with, and the North-Eastern states did not figure in this list.



It becomes clear that states that had no mineral wealth did not generally receive significant central government investment. This is not to say that mineral wealth was the key to success. For one, mines and minerals being largely in the central government's domain, states which had only mineral wealth to begin with did not benefit (except for an increase in employment of the residents of the states in the mines). The rest of the state's economy (if it had no industry to begin with) was not greatly benefited by any sort of linkage. Thus the fact that Assam had oil was not of consequence as investment by the central government to tap this resource would have practically no spill over effect as industries supporting these industries did not exist in Assam in the first place.

The output of the basic and capital goods sector went to other industries which were by and large located in those states which already had an industrial base even under British rule. Indeed this was precisely what the MM was designed to do, i.e., supply the consumption goods sector (as well as the capital goods sector itself) with basic inputs for their continued growth.

Thus the demand creating effects of the MM as well as its supply effects benefited a handful of industrial centres. Economic interaction and exchange therefore remained restricted to these centres. The periphery (in which we must include the North-East) was left out of the growth process.

Faced with central government neglect in the form of industrial investment, states that did not historically possess an industrial base could have marshalled their meagre financial resources in exploiting their own natural resources. However, as the central government monopolised even the issue of licences (ironically to bring in socialism by marginalising the domestic bourgeoisie), the possibility of fostering local entrepreneurship or individual action by entrepreneurs (in states which were not the beneficiaries of central government investment) leading to growth also became extremely difficult. Thus apart from good



governance, it seemed *willingness* and *ability* to lobby on behalf of local businessmen to procure licenses was also required for states to grow.

However, as things turned out, in line with Stigler's contention, established industrialists invariably cornered most of the licenses, in effect ending up controlling the very institution that was set up to control them and curb their monopoly. Thus a state with an industrial base where established business houses were most likely to be based was more likely to receive a licence to set up an industrial plant than a non-industrialised state. Again the North-East which lacked industrialists suffered as the number of people lobbying on its behalf was not likely to be high.

### **Did the Mahalanobis Model Imply a Licensing Raj?**

The MM did not require a licence-permit Raj. Indeed it was also ownership neutral (as admitted by Mahalanobis). According to traditional economic theory, a tax-cum-subsidy policy can determine both the volume of investment as well as its direction. In fact, the economic theory in general does not discuss physical controls other than quotas in trade theory. Even then the general result obtained is that tariffs (taxes) are better than quotas. Indeed, it may be argued that to promote regional growth as to the use of conventional methods as suggested by economic theory like tax holidays and subsidies would have done as well.

In fact, even those who subscribe to the MM will be hard put to support the use of licensing to implement the plan. Licensing as a tool was used in order to make the economic growth in India an exclusive process. Although nominally a democracy, the state ensured that economic growth (in so far as industry was concerned) remained non-participatory and was open to a few favoured businessmen.

It is interesting to note that when the licensing procedure was liberalised in the 1980s, one beneficiary was Nirma, who used labour-intensive techniques to make detergents

that ate into niches hitherto occupied ironically, by Hindustan Lever, a multinational corporation (MNC) long unchallenged because of the permit raj. The region to benefit was a rural and tribal area of Gujarat. It might have been a poorer state, had their attitudes been conducive to enterprise.

It can be argued, however, that the above example represents a latter day case when the MM for intents and purposes was on the verge of being aborted. Had the economic programme being followed still been the MM, delicensing would have done little to spread growth. While this is difficult to answer, we may argue that in the absence of the license permit raj in the North-East would not have fared worse. What the regime prevented was a possibility whose demonstration effect could have been considerable. We will discuss the outline of this 'possibility' in the third section.

## II

The MM and its delivery mechanism, the licence-permit raj system, by concentrating financial resources as well economic discretionary powers in the hands of the central government, deprived the state governments the resources as well as the power to effectively promote economic growth. While the powers of the state governments had been whittled down the expectations of the people did not. Thus, as job opportunities generated by the MM did not grow rapidly (by design) the provincial governments were the first to feel the dissatisfaction of the electorate. The states tried to tackle this situation (of responsibility without power) by following generally populist policies. Explanations about their inability were not toned down given the competitive nature of India's electoral politics.

The only sector that the states could develop largely unhindered was agriculture. And indeed it was also in this sector that India's comparative advantage lay. Thus, if the states (especially those with no industry) were to grow, it would have to be agriculture. This is a sector where

employment created requires long hours of physical labour. However, the class that occupied office in the state governments in post-independent India came from the middleclass. The influence of the middleclass on such politicians was out of proportion to their actual population. Jobs that called for long hours of physical labour was not the kind of employment the educated unemployed youth was looking for. They wanted white collar jobs.

The states invariably buckled in to middle class pressure. Employment was artificially created by sanctioning extra positions in the government and state-owned corporations. Thus, from its revenues (already limited to begin with) even less would be left over for investment, after current expenses were met. As this process continued, the salary bill of many state governments outstripped their revenues leaving nothing for investment in any sector. While industrial units were also created, they wasted no time in becoming white elephants.

The tendency to pander to middle class interests was largely because of electoral. One of the most common slogans which governments-in-waiting used (and still use) to persuade the electorate to vote them to power is the promise of employment. This tendency to promise jobs to all and sundry (although sometimes, only to sons of the soil) cuts across party barriers. Most parties seize power by effectively tapping the frustrations and anxieties of the youth, by pointing to the invariably abysmal employment record of the incumbent regimes. Given the fact that in most states (and certainly in the North-East) the rate of job creation remains low, this weapon is an integral part of the arsenals of any opposition party that hopes to be voted to power at the hustings.

What the parties concerned took care (and take care) never to spell out is how these jobs were to be created. The electorate, intelligentsia and the press took care not to ask. The entire drama would be allowed to continue undisturbed because if the right questions were asked and the right answers given, the huge bubble of popular



expectations would be the first casualty. The truth is that job creation is initially a very slow process even for economies with great potential, and grows rapidly only over time, provided the states gets it policies right and implements them effectively.

When the press, intellectuals or chattering classes talked about the unemployment problem, they generally had (and still have) in mind the educated urban employment. It is not as if they were completely ignorant about the far greater numbers of the uneducated, unskilled (and largely) rural work force. However, the urban unemployed being concentrated in smaller areas and being educated were (and are) easier to organise for rallies, bandhs and protests than the dispersed, illiterate uneducated rural workforce. Having been perceived to have come to power on the shoulders of the urban youth (who incidentally not are the largest voting bloc), no state government could frame policies to boost employment without keeping them in mind, and herein lies the problem.

Economists know, as does the general public, that sustainable employment creation can only come through sustained economic growth. Therefore, policies at boosting employment should be those that encourage economic growth. In an economy, such as ours where labour is abundant, and capital expensive, states should give a boost to those sectors which use labour-intensive technologies and whatever natural resources that the country has to offer. For most Indian states that would imply a greater demand for agricultural labour, agro-industries, labour for industries like clothing and apparel, etc. In general, employment created will of the type that requires long hours of physical labour that is readily available. However, this is not the type of employment that a significant and vocal section of the educated urban unemployed are looking for; they want desk jobs. However, white-collar jobs created will only be fraction of the employment generated under appropriate economic policies. The problem simply put is this. The appropriate economic policies by and large do



not cater to that section of people that is seen to have helped the government to seize power. As these policies can show significant results only in the long-run, the government may show a dent in rural unemployment at the end of its term, but the number of white collar jobs created is likely to remain low. And no government likes to be on the wrong side of the educated youth, especially when they feel that they have been betrayed.

It is here that political parties in many states have failed. Invariably, they have tried to create new jobs for this small but vocal section by sanctioning new posts, both in the government as well as in government-owned corporations. The results have been disastrous. The extra (and unnecessary) workforce implies extra resources being spent on salaries leaving increasing smaller amounts for developmental and infrastructural purposes. Not surprisingly, economic growth suffers, and as the states' revenues depends to a great extent on state product, they become stagnant. If the state government persists with this policy, economic decline/stagnation occurs faster as do revenues, making it impossible to create white collar jobs after a while. Thus state governments that embark on a white collar employment policy find it impossible to create employment after a while. By this time the state is in a condition where there is no economic growth and no fresh white collar openings either.

A state which follows a policy of pursuing economic growth not only will do a better job of reducing employment in the state, but also in the long run is more successful in creating white collar jobs. This is because as the states' economies expand, the demand for people in managerial posts and other white collar jobs also grows. Also, over time with the economic structure changing with low-skill industries making room for higher-skill industries, the proportion of white collar jobs also rises. What is important is that the states do not view jobs as an end, but as a means to an end. The end we have in mind is not necessarily economic growth. It could be better living standards, better

health care and education, and whatever goals the state may think fit. In so far as resources are required for the fulfilment of these goals, the state's economy must grow to enable the state government to collect the required resources. This policy of growth cannot be achieved by following a policy of white collar employment. And as we have pointed out, that in the longrun, a policy of whitecollar employment is impossible to sustain. Such a policy is against the interests of the majority of the populace and is grossly unfair to future generations.

This is typical of those states where the intelligentsia or the powers that be do not believe in the dignity of labour. Invariably (and ironically) such people also have socialist pretensions. Political rhetoric in these states is invariably involves the 'proletariat' or the 'mazdoor' and the 'kisan'; policies on the other hand are aimed at preserving or increasing whitecollar employment. In some states that had an industrial base, there were also successful attempts to increase blue collar employment by forcing companies to hire labour in excess of their requirements. Over-staffing and resistance to technology upgradation (because of fears that it would lead to labour being displaced) in course of time took its toll on these industries. Thus an attempt to create employment led to the eventual loss in employment.

The road to employment is a long and hard route. Short-cuts to employment creation, by way of sanctioning extra government jobs or forcing businesses to hire more labour yield short-term returns. A whitecollar employment policy, once adopted, cannot be reversed easily and without pain. Reversing it implies either cutting or at least freezing employment. It is only then that resources are generated for investment in infrastructure. It is only then that fresh investment comes and jobs are created. All this operates with a lag. During that period the state earns the ire of a vocal and educated section of the people without getting the support of the dispersed and uneducated rural labour. In a polity where short-term policy making is the order of

the day, few governments have the courage to reverse policy. In the long run, what is left behind is a ruined economy. When jobs for the boys run out, parochial slogans appear demanding that 'outsiders' be discriminated against! Additionally, as educational institutions are now seen as places of employment opportunities, 'outsiders' are generally excluded with predictable consequences on the quality of education imparted. It is no accident that educational institutions in richer states are in general better than the ones in poorer states although there is no perceivable difference in salaries.

Are the states to be absolved of the blame for wrong policy decisions undertaken by the central government that left the states powerless? It must be remembered that most political formations did not realise the fact that the MM, by its very nature called for increasing inequality, both regional and sectoral (at least in the initial stages). If they did, they considered it a short-term phenomenon curable by appropriate policies. Their outlook for the greater part was to look for large projects to pull them out of the poverty.

They never looked at agriculture as a sector that could lead or initiate growth. In keeping with the times, when agriculture was ignored and small invited derision, there was no attempt to foster growth in agriculture (where there was some administrative leeway: no licences were required) by investing in technological upgradation and spreading of these skills by the poorer states. There was no attempt to utilise local idle labour that existed into building capital by way of minor irrigation projects like canal building. This no doubt required effective local government like panchayats and the states like the central government did not want devolution of power. This attitude did not change fundamentally even when regional parties came to power protesting against the central government's monopolisation of political and economic power. All states, poorer ones included, thought big and relied on big projects to transform their states economically.



There was no attempt to foster local entrepreneurship by encouraging local people to go into business by opening small factories. This, while not to be condoned, was understandable. To encourage local businesses would mean wresting a large number of licences from Delhi for an aggregate sum of investment that would probably be less than one large project financed by an established business house. Given the complexity of the licensing procedure, wrestling with the bureaucrats in Delhi time and time again as atomistic businessmen in their numbers kept on applying would be a thankless task. Secondly, and most importantly, given the socialist outlook of political life in most of the poorer states, entrepreneurship of any kind was not explicitly encouraged in any case (making the first reason totally hypothetical). Ironically, private investment when sought (because central government investment was not forthcoming and the state did not have sufficient resources to do the job) came from big businesses based outside the state. This contradiction between ideology and practice was ignored and (except for very economists) did not draw comment from academia either.

At the end of the day the central government's monopoly over the issue of industrial licences and permits remained unchallenged. This was primarily the result of a shared mindset. Development policy was seen to be an exclusive process where only the state would decide on who would participate and to what degree.

This was not to say that the poorer states were totally averse to dealing with private capital. Indeed, Indian corporate houses had a substantial stake in the few going concerns in the poorer states and their relations with the state governments in power was sufficiently cordial for them to maintain their presence in that state. This was generally true regardless of which party came to power in the state. However this attitude was singularly non-existent when it came to creating conditions where local businesses could grow and prosper.



It is ironic that the effect of ideology for most of these poor states fell not on big business domiciled elsewhere, but killed the possibility of a flourishing local business class. But this is hardly surprising. A big business has the money power to temper radicalism either through bribes or through threats to close down their factories with its implications for employment and revenues. A class that is nascent or non-existent does not enjoy this luxury.

The mindset of regional politicians was not very different from that of the planners and the plan implementers of the central government. Even those who would later call for autonomy as a measure to deal with regional inequality or stagnation shared the mindset. What they called for was a transfer of power, economic and political, from Delhi to the state capitals. What was not on the cards was a subsequent transfer of authority to the districts and the villages. Nor was a curb on the state's authority to regulate business by issuing licences considered. Indeed, the record of the poor states in investing in education and other social services is abysmal. As to how states that could not implement the limited responsibilities given to them should be entrusted with greater powers is not a question that has been satisfactorily answered.

However, when states left behind in the development process started to protest their growing poverty and neglect, they did not question the MM *per se*. At most, what they spoke about was to incorporate programmes to temper the effects on the regional inequality that the MM necessarily had, or better still, that the central government hand over a larger share of revenues to the states. The MM with its accent on heavy industry was still sacrosanct; the licence-permit raj still a guarantor of the socialist path of development (except for C. Rajagopalchari and his Swatantra Party) and investment by the state the only way out of poverty.

To be fair to regional politicians, even economists trained in neo-classical economics where licences have no rationale did not question policy and hardly ever advanced rigorous

arguments in favour of it and issued nebulous statements in its defence only after it was in the process of being discarded.

### III

The sections above have made it clear that the state governments of the North-Eastern States like their counterparts in the rest of the country in trying to create white collar employment have put themselves in such a difficult financial condition that they have hardly any resources left over for investment purposes. As if this were not enough, they also have the additional problem of terrorism to deal with. Encouraging economic growth with empty coffers, poor infrastructure and the additional problem of terrorism is not very easily done. Ironically, these problems have come to a head at the same time when both the MM as well as the licence permit system have been discarded making it possible for states to pursue policies of economic growth more vigorously than before. So while previously the finances of the states were in better shape the regulatory regime constrained them from pursuing economic growth. Today the poor shape of state finances constrains states although the regulatory regime has been swept away. However, this does not mean that a shift in the distribution of finances between the states and the centre will make the states more growth oriented, certainly not in the North-East.

It is well known that the North-Eastern states, (or at least some of them), have received grants far in excess of what their population calls for compared to what other states have received. This has led to a peculiar situation where some of them that have an agricultural sector marked by low productivity, a non-existent industrial sector, a non-existent tourism sector but a flourishing service industry. This service industry is obviously supported by massive transfers from the central government, and its beneficiaries are few in number. The vast majority of the populace remains out of the purview of such grants.

Moreover, there is ample evidence to suggest a 'terrorist economy' has taken root in the North-East, one that is not geared towards development but one where funds are systematically leaked to terrorist groups, politicians as well as selected bureaucrats. Here, external investors will not invest as security of investment or even personal security is not guaranteed. This problem is compounded by the fact that the political class, by frequently raising the bogey of the state being drained of resources by outsiders (read businessmen), has made the looting of the entrepreneurial class socially and politically acceptable.

Given the constraints that the North-East faces, it is clear that any plan that is aimed at boosting growth in the North-East must have the following attributes:

1. It must not call for massive investment.
2. It must not call for heavy infrastructural support.
3. It must not be overtly dependent for external investment or external entrepreneurial talent, i.e., the nature of industries chosen must be such that local potential entrepreneurial talent should be able to manage these industries.

While the list of desirable attributes presented here is by no means exhaustive, they are necessary. It must be noted that given the precarious financial condition of the North-East states anything that calls for heavy investment is probably not feasible. This is compounded by the fact that private investment from other states will probably not flow in as the investment climate in this region does not compare with other states of the union. In the same vein, given the actual nature of infrastructural services like power and transport, modern industry is also ruled out. It becomes clear that at least in the short run the salvation of the North-East lies in agriculture, horticulture and floriculture as well as agro and other industries that would add value to these sectors.



### Agriculture—The North-East's Advantage

The North-East had a tremendous advantage in certain crops especially those that require a lot of water like paddy. Unfortunately, it is only in recent times that the introduction of shallow tube wells that have pushed up rice production. Growing such crops in water scarce states like Punjab and Haryana has led to what seems increasingly like a financial, economic, social and environmental disaster. The farmers in these states had to be given subsidised electricity so that they could pump groundwater to grow paddy. This led to the states losing out financially. It has also led to the depletion of ground water resources. This in turn has led to farmers being forced to invest more on boring deeper and spend more electricity lifting water from deeper underground. Thus paradoxically, the farmer and the state are increasingly spending more as a result of a subsidy on electricity tariffs! Sooner or later procurement prices will have to be raised reflecting increasing costs. Even so many of Punjab's farmers are deeply in debt.

An alternative route would be bring the green revolution to the Brahmaputra valley in a large way. Assam's resources are obviously adequate which makes Assam fit for crops like paddy. While Assam has seen a spurt in rice production to 3.4 million tonnes in 1999, this was for an irrigated area of 2.30 lakh hectare. Per hectare yields are thus quite low. While this is being sought to be remedied by the rapid spreading of shallow tubewells, the spread of High Yield Variety seeds as well as petrochemical fertilisers, care should be taken that Assam does not follow the route of Punjab's farmers that has led so many to indebtedness.

It is well-known that Assam's abundance of water is a seasonal phenomenon. In the winter the water table does go down and as tube well irrigation spreads, it will go down further. This phenomenon is a recent one accentuated by the filling up of the numerous jalashoys (water bodies) that used to charge the ground water reserves during rains. To tackle this, rain water harvesting, even in a water



abundant state may be advisable. This practice by raising ground water levels will make pumping up of such water during the dry winter season cost less. Thus an extra crop in the winter season will be able to be grown at little extra cost.

However, rainwater harvesting projects cannot be successfully undertaken on a wide scale by a centralised state administration. If the comparative experiences in rain water harvesting of Gujarat (panchayat executed) and Andhra Pradesh (state government) are anything to go by, panchayats are best suited to handle such projects. This calls for a decentralised polity. While the present Tarun Gogoi led Congress government has held elections to these bodies, the less said about the devolution of finances the better. This is unfortunate. Unlike oil or tea, the expansion of rice cultivation in Assam has the potential of increasing incomes of a large section of the rural population thus considerably reducing disaffection that many feel for the state. Yet, it is quite likely that the present trend towards using pumps to water paddy fields without any action taken on the ground water front will put Assamese farmers on the same route as the indebted Punjabi farmers although given Assam's water resources, things may not become as bad.

### **Floriculture—A Suggested Trajectory**

Consider the following hypothetical development: a possible development of a successful floricultural sector based on exports of flowers to the rest of the world. This is not a development that calls for massive investment or indeed an enormous leap in technological knowhow. It does call for the existence of roads and airports (which were not totally absent). What it requires mainly (and cannot be easily provided by local businessmen) is availability of credit and facilities for collection of goods at certain nodal points and their subsequent air shipment. What it calls for is organisation and coordination which should not be beyond the capability of a state government.

While the nature of Floriculture business is such that given the infrastructure in Assam, very little addition to the existing infrastructure is required, it is to be admitted that the roads are poor. But then this factor is less important for flowers than for tourists; the former can be transported across bad roads. The main cost component of the floriculture business is air transport. Arguably, with very little investment on the Lokapriya Gopinath Bordoloi Airport, a link not just to Bangkok but also to the rest of the world would be created. What is important in this respect is the following: that authorities build a marketing network, build up marketing channels, not only to Amsterdam that is the flower capital of the world, but also to major markets as far as floriculture is concerned such as Japan. Currently, the global flower market is over 4 billion dollars. India exports a little over Rs.100 crore worth; that is not even 1% or 0.5%; it is probably 0.3%. This is one area where the North-East with its microclimate has a massive advantage. This does not require much by way of infrastructure; it requires a/c. storage facilities, but again, they do not constitute a demand that can be compared to setting up a new system of entire roads. This is something that is eminently doable. What is it required? Firstly it is a labour intensive activity, which requires farmers to work on their existing plots. This, as far as North-East is concerned, is not an insurmountable problem. It requires coordination in terms of collection. This again is not a problem; it also requires organisation for the production of cut flowers. Again, given the levels of education, this is not a problem in North-East. Of course, the Govt. has to step in and bring in the regulation that is required to transform Guwahati Airport into a truly world class international airport and an investment is required to achieve this transform. The government will have to negotiate and set up institutes that ensure that the necessary phyto-sanitary conditions are maintained. That is extremely important in export-import market.

This are steps that are eminently achievable. It requires



very little by way of additional infrastructure and it is well within the ability of the local people, given the fact that on an average their education levels are much higher than rest of India. Such a sector can be built up largely by local business and entrepreneurs. The demonstration effect can be considerable and there is no reason why this cannot be repeated in other sectors.

Indeed, given the establishment of a local business class of a critical minimum size, travelling up the technological ladder becomes easier if not inevitable. For example, an owner of cycle repair unit may graduate to actually assembling cycles and then building it. He could then diversify to mopeds, scooters and to motorcycles and end up making cars. Similarly, in a state with forests, the timber merchant could diversify to plyboard and end up establishing a paper mill.

For the North-Eastern states, this possibility is no longer a mirage, far less climbing the technological ladder. This is because this hypothetical trajectory of development is no longer constrained by the existence of a regime where restrictions are in the form of licences and a state government supportive of private enterprise.

### **Horticulture**

Horticulture is another field that does not call for massive amounts of investment initially. However the problems of transport are greater as they cannot be shipped by air (unlike flowers) and require road transport. A casual observer may be forgiven if he forms the opinion that in spite of the hype that is generated about horticulture, the high cost component of industrial activity (given power and transport bottleneck) in the North-East would render useless all efforts to promote horticulture. That is why the performance of the North-Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC) is revealing. For quite a few products, NERAMAC offers its products at prices that are at most 60% of the prices of established

brand name. If NERAMAC can do this, there must be other economic agents who can do at least as well.

For one, buyers in the rest of the country do not see the products from North-East as they do not have a visible shop or shelf presence in markets outside the North-East. This is tragic because this is not an insurmountable problem and given the massive cost differential that exists relative to the existing brand names that seem to have the Lion's share of the market. This is extremely important, especially if policy makers want to export horticultural products from the North-East to the rest of the world. Marketing is extremely important. Cost advantages are no doubt very important, but if the rest of the world does not know that these products exist and exist at a fraction of the cost that are available elsewhere, they will not buy. So, to that extent, I think, it is extremely important that businessmen should be invited to and informed about the North-East and the opportunities that are available there, in this particular sector made known to them. While it is to be admitted that price differentials are very crude indicators of the cost differentials, given the information at hand, these are the only indicators that we have. But the fact remains that as far as horticulture is concerned, in spite of the disadvantages that exist, the advantages that the North-East has, as a very cheap source of raw material far outweigh the disadvantages. Thus setting up production sites in the North-East in horticultural products will be extremely fruitful and rewarding enterprise especially those who go in early. What they require is proper management and marketing. The latter is of course easier said than done. One way to accomplish the latter is to encourage local investment in management and production in fruit processing industries, and get national players to market these products for a consideration using their national marketing networks. In any case, most of these players are present in the North-East through their investments in tea, and expansion into the latter business do not call for substantial investment. Populist slogans that may be anti-'outsider' will be opposed



by the same class of local businessmen whose interests are ostensibly being sought to be protected.

There should be no transfer payments as these create a system of dependency whereby the recipient expects the state to bail him out all the time. Projects should be evaluated on a strictly commercial basis and timely repayments of loans be insisted upon. This is best done when the state targets the particular sector by extending it logistical support (helps to organise marketing, collection, transport) but does not advance financial credit itself. At best it may subsidise the loan, while the loan itself is advanced by a commercial bank as a purely business proposition and recovery insisted upon. Strategies like group lending may also be adopted whereby a list of potential borrowers is compiled with each potential borrower being told (implicitly or explicitly) that their chances of receiving a loan depend on the repayment record of those who precede him or her. The aim of this exercise is the following: to create an entrepreneurial class; to spread the awareness that entrepreneurship can be associated with the creation of wealth and not necessarily exploitation of local resources and economic drain, that unethical business practices like non-repayment of loans no matter under what political guise is anti-people as it adversely affects the prospects a class of potential entrepreneurs which is far larger than the number of defaulters.

The importance of local entrepreneurship is even more important in the context of the terror economy. While militant outfits may find it convenient to extort money from politicians, bureaucrats and big businessmen using political slogans coined by regional parties themselves, they run the risk of alienation when they extort money from small-scale local businessmen. Indeed, not only do they risk alienating the person extorted, but also all members of his group. Indeed, if the project succeeds then alienation that often comes from exclusion from the process of economic growth is also reduced. Thus, the approach outlined is also the best for tackling the spread of insurgency

as creates a constituency for economic liberalisation and against terrorism as the effects of terrorism on the economy is realised.

#### IV

The North-East like most of the other poorer, states has remained backward partly by design. The MM was not designed at least in the initial stages to emphasise regional equality. However, the licence-permit regime accentuated this trend by making impossible the feasibility of initiating local growth. Strangely enough politicians from the North-East states never called for the dismantling of the economic regime but insisted on a greater transfer of resources. Additionally, they catered to the pan-Indian phenomenon of creating jobs in the government workforce largely for the middle class. Thus, by the time the old economic regime was discarded the North-Eastern states did not have the finances nor the infrastructure to take advantage of economic liberalisation. Additionally, they are now saddled with an additional burden of terrorism. All this calls for a plan of economic development that now takes into consideration all the constraints that the states of the North-East face. Such a plan cannot be ambitious. It must be participatory and must not be over-dependent on outside entrepreneurship, although that participation must always be welcomed. The only way to sustainable economic growth is by encouraging local entrepreneurship that exploits the comparative advantages that the North-East possesses in the form of a varied fauna and as a result creating local employment without demanding too much resources.

## 2

### Arunachal Pradesh

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Coordinates:	27°04'N 93°22'E/27.06, 93.37
Time zone:	IST (UTC+5:30)
Area:	83,743 km <sup>2</sup> (32,333 sq mi)
Capital:	Itanagar
Largest City:	Itanagar
Districts(s):	17
Population:	1,091,117 (26th)
• Density:	• 133/km <sup>2</sup> (34/sq mi)
Language(s):	English, Hindi
Governor:	K. Sankaranarayanan
Chief Minister:	Dorjee Khandu
Established:	1987-02-20
Legislature (seats)	Unicameral (60)
ISO (abbreviation):	IN-AR
Website:	<a href="http://arunachalpradesh.nic.in">arunachalpradesh.nic.in</a>
Coordinates:	27°04'N 93°22'E/27.06, 93.37

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Arunachal Pradesh pronunciation (help·info) (Hindi: अरुणाचल प्रदेश Arunachal Pradesh) is the eastern-most state on India's north-east frontier. *Itanagar* is the capital of the



state. The state is part of *India*, although *China* still holds a territorial claim over portions of the stated. Arunachal Pradesh is next to the state of *Assam* to the south and *Nagaland* is to the south east. *Myanmar* lies towards the eastern side of the state, *Bhutan* towards the west, while the *Line of Actual Control* separates it from *China* to the north.

Arunachal Pradesh means "land of the rising sun" ("Pradesh" means "state" or "region") in reference to its position as the easternmost state of India. Most of the people living in Arunachal Pradesh are either of *Tibetan* or *Thai-Burmese* origin. Another 16% of the population are immigrants, including 30,000 *Bangladeshi* and *Chakma* expatriates, and immigrants from other parts of India, notably *Assam* and *Nagaland*.

## I

The first ancestors of the tribal groups migrated from *Tibet* during the prehistoric period, and were joined by Thai-Burmese counterparts later. Except for the northwestern parts of the state, little is known about the history of Arunachal Pradesh, although the *Adi* (or *Adi*) tribe had legendary knowledge of the history. Recorded history was only available in the *Ahom* chronicles during the 16th century. The tribal *Monpa* and *Sherdukpen* do keep historical records of the existence of local chiefdoms in the northwest as well. Northwestern parts of this area came under the control of the *Monpa* kingdom of *Monyul*, which flourished between 500 B.C. and 600 A.D. This region then came under the loose control of *Tibet* and *Bhutan*, especially in the Northern areas. The remaining parts of the state, especially those bordering *Myanmar*, came under the control of the *Ahom* and the *Assamese* until the annexation of India by the British in 1858.

Recent excavations of ruins of Hindu temples such as the 14th Malinithan at the foot of the Siang hills in *West Siang* shed new light on the ancient history of Arunachal

Pradesh. Paintings of the Hindu gods and altars remained untouched for many years. They attracted many local pilgrims. Another notable heritage site, Bhismanagar, suggested that the Idu Mishmi had a local civilisation. The third heritage site, the 400-year-old Tawang monastery in the *Tawang* district, also provides historical evidence of the Buddhist tribal peoples. Historically, the area had a close relationship with *Tibetan people* and *Tibetan culture*, for example the sixth *Dalai Lama Tsangyang Gyatso* was born in Tawang.

In 1913-14 British administrator, *Sir Henry McMahon*, drew up the 550-mile *McMahon Line* as the border between British India and Tibet during the *Simla Conference*, as Britain sought to advance its line of control and establish buffer zones around its colony in South Asia. The Tibetan and British representatives at the conference agreed to the line, which ceded *Tawang* and other Tibetan areas to British India; however the Chinese representative refused to accept the line owing to domestic pressures. The Chinese position since then has been that since China was sovereign over Tibet, the line was invalid without Chinese agreement. Furthermore, by refusing to sign the Simla documents, the Chinese Government had escaped according any recognition to the validity of the McMahon Line.

For the first two decades after the Simla Conference, the Survey of India did not show the *McMahon Line* as the border between British India and Tibet either; only in 1937 did they publish a map showing it as the official boundary; in 1938 the Survey of India published a map showing Tawang as a part of Tibet. In 1944, Britain established administrations in the area, from *Dirang Dzong* in the west to *Walong* in the east. Tibet, however, altered its position on the McMahon Line in late 1947 when the Tibetan government wrote a note presented to the newly independent Indian Ministry of External Affairs laying claims to Tibetan districts south of the McMahon Line. The situation developed further as India became independent and the *People's Republic of China* was



established in the late 1940s: with the PRC poised to take over Tibet, India unilaterally declared the McMahon Line to be the boundary in November 1950, and forced the Tibetan administration out of the Tawang area in 1951, despite protests by the PRC and Tibet. The PRC has not recognized the McMahon Line since. (In 1959, a suppressed Tibetan uprising resulted in PRC's abolition of Tibet's self-ruling government headed by the Dalai Lama. The Dalai Lama fled to *Dharamsala*, India, where he continues to lead the *Tibetan Government-in-Exile*. Maps published by the Tibetan Government-in-Exile now show the McMahon Line as the southern border of Tibet.)

The NEFA (North East Frontier Agency) was created in 1954. The issue was quiet during the next decade or so of cordial Sino-Indian relations, but erupted again during the *Sino-Indian War of 1962*. The cause of the escalation into war is still disputed by both Chinese and Indian sources. During the war in 1962, the PRC captured most of the NEFA. However, China soon declared victory and voluntarily withdrew back to the *McMahon Line* and returned Indian prisoners of war in 1963. The war has resulted in the termination of barter trade with Tibet, although in 2007 the state government has shown signs to resume barter trade with Tibet.

Of late, Arunachal Pradesh faces threat from resistance groups, notably the *National Socialist Council of Nagalim (NSCN)*, who were believed to have base camps in the districts of *Changlang* and *Tirap*. There were occasional reports of these groups harassing the local people.

## II

Arunachal Pradesh is famous for its mountainous landscape.

Much of Arunachal Pradesh is covered by the *Himalayas*, although parts of *Lohit*, *Changlang* and *Tirap*, which are covered by the *Patkai*. *Kangto*, *Nyegi Kangsang*, the main *Gorichen* peak and the Eastern *Gorichen* peak are some of the highest peaks in this part of the Himalayas.



Recently at 2006, Bumla pass in Bomdila, was opened after 44 years for the first time for the traders. The traders from both the sides were permitted to enter each other territories. The Himalayan ranges that extends up to the eastern Arunachal separates it from China. The ranges extend towards the Nagaland, and form a boundary between India and Burma in Changlang and Tirap district, it acts as a natural barrier it is called Patkai Bum Hills. It is low level ranges as compared to Greater Himalayas.

### III

The climate of Arunachal Pradesh differs with the elevation. Areas that are at a very high elevation in the Upper Himalayas close to the *Tibetan* border enjoy an alpine or *Tundra* climate. While below the Upper Himalayas are the Middle Himalayas, where people experience a climate which is temperate. Fruits like *apples, oranges*, etc are grown here in this region. Areas at the sub-Himalayan and sea-level elevation generally experience a humid sub-tropical climate, along with the hot summers and mild winters.

Arunachal Pradesh receives heavy rainfall of 80 to 160 inches (2,000 to 4,000 mm) annually, most of it pours down between May and September. The mountain slopes and hills are covered with alpine, temperate, and subtropical forests of dwarf *rhododendron, oak, pine, maple, fir, and juniper*; *sal* (*Shorea*) and *teak* are the main economic species.

### IV

The current education system of India is currently at child stage. State government are pushing by taking help of various NGO like Vivekananda Kendra. Besides several reputed Schools, Colleges and Institutions the state is famous for its reputed university:

- *Rajiv Gandhi University: Arunachal University*

## V

Arunachal Pradesh is divided into Sixteen districts, each administered by a *district collector*, who sees to the needs of the local people. Especially along the Tibetan border, the *Indian army* has considerable presence due to the concern about Chinese intentions. *Special permits* called Inner Line Permits (ILP) are required to enter Arunachal Pradesh through any of its checkgates on its border with Assam.

Districts of Arunachal Pradesh:

- Anjaw District
- Changlang District
- East Kameng
- East Siang
- Kurung Kumey
- Lohit District
- Lower Dibang Valley
- Lower Subansiri
- Papumpare
- Tawang District
- Tirap District
- Upper Dibang Valley
- Upper Subansiri
- Upper Siang
- West Kameng
- West Siang

## VI

*Buddhism* is practiced by 13% of the population. Shown here is a statue of *Buddha* in Twang, Arunachal Pradesh.

Main article: *Demographics of Arunachal Pradesh*

63% of the Arunachalis belong to 19 major tribes and 85 tribes, who had a tradition which is a diverse and of

rich culture, language and beliefs. Most of them are either of *Tibetan* or of Tai-Burmese origin. Another 35% of the population are made up of the immigrants, including 31,000 Bangladeshi, *Bodo Hajong* and *Chakma* expatriates, and immigrants from other notable parts of *India*, *Assam* and *Nagaland*. The most major tribes include the *Adi*, *Nishi*, *Monpa* and *Apatani*.

The literacy of the State rose to 54.74% from 41.59% in 1991. As of today, the number of literates is 487,796. Recent statistics shows that 20% of Arunachal's population are *Animist* who follow Animistic religions such as *Donyi-Polo* and *Rangrah*. 25% are *Hindus*. Tribes who follow Hinduism include the *Nocte* and *Miri*. Another 40% are practicing *Buddhists*. *Tibetan Buddhism* predominates in the districts of *Tawang*, *West Kameng* and isolated regions adjacent to Tibet, and *Theravada Buddhism* is practiced by tribal groups living near the Burmese border.

## VII

This is a chart of trend of gross state domestic product of Arunachal Pradesh at market prices estimated by Ministry of Statistics and Programme Implementation with figures in millions of Indian Rupees.

### *Year Gross State Domestic Product*

1980	1,070
1985	2,690
1990	5,080
1995	11,840
2000	17,830

Arunachal Pradesh's gross state domestic product for 2004 is estimated at \$706 million in current prices. *Agriculture* is the primary driver of the economy. *Jhum*, the local word for shifting cultivation, which was widely practised among the tribal groups has come to be less practiced. Arunachal Pradesh has close to 61,000 square kilometers of forests, and the forest-products are the next most significant sector



of the economy. Among the crops grown here are rice, maize, millet, wheat, pulses, sugarcane, ginger and oilseeds. Arunachal is also ideal for horticulture and fruit orchards. Its major industries are sawmills, plywood (these two trades however have been stopped by law), rice mills, fruit preservation units and handloom handicrafts.

### VIII

The state's airports are located at *Itanagar*, *Daparjio*, *Ziro*, *Along*, *Tezu* and *Pasighat*. However, owing to the rough terrain, these airports are mostly small and cannot handle many flights, they were actually used for transportation of food, when these parts were not connected by the roads. Arunachal Pradesh has two highways; the 336km National Highway 52, completed in 1998, connects *Jonai* with *Dirak*: There is another highway which connects *Tezpur* in *Assam* with *Tawang*. Now in 2007, every village is connected by road. It's due to fund that central government has provided, every small town has got its own bus station and daily bus services are available. All places are connected to *Assam*, so increasing the trading capacity. A National Highway is being constructed on the famous *Stillwell Road*, which connects *Ledo* in *Assam* to *Jairampur* in *Arunachal*.

### IX

Arunachal Pradesh attracts tourists from many parts of the world. Tourist attractions include the *Namdapha* tiger project in *Changlang* district, *Sela lake* near to *Bomdila*, the bamboo bridges hanging over the river. Historical attractions include *Malinithan* in *Lekhabali* and *Rukhmininagar* near *Roing*, place where *Rukhmini*, lord *Krishna's* wife, used to live. *Parshuram kund* in *Lohit district*, is believed to the lake where *Pashuram* washed away all his sins. Rafting and trekking are also available. A visitor's permit from the tourism department is required.

Situated in the extreme north-east of India, Arunachal Pradesh is bounded by independent countries on three

sides and by the states of Assam and Nagaland on the south. It has Bhutan on its west, the Tibet region of China on its northern border and Myanmar (formerly Burma) on the eastern border. With an area of 83,743 sq. km., the largest of any state in the north-east, Arunachal Pradesh has a population of 1,091,117 according to the 2001 Census. The state is predominantly rural in character and only 12.80 per cent of the people live in the few urban areas of state, besides the capital town of Itanagar. The state is divided into 13 districts, viz., Changlang, Dibang Valley, East Kameng, East Siang, Lohit, Lower Subansiri, Papum Pare, Tawang, Tirap, Upper Siang, Upper Subansiri, West Kameng and West Siang.

Changlang district has been carved out from Tirap district of Arunachal Pradesh. The district covers an area of 466 sq. kms. and lies roughly between the latitudes 26° 28' N and 27° 33' N and longitudes 95° 10' E and 97° 11' E, situated entirely to the north of the Tropic of Cancer. Changlang district lies almost on the south-eastern corner of Arunachal Pradesh, bounded on the north by the Lohit district of Arunachal Pradesh, on the east and on the south by Myanmar, and on the west by Tirap district. The headquarters is located in Changlang itself.

The Dibang Valley district derives its name from the river Dibang which flows through it and finally debouches into the plains where it meets Lohit river near Sadiya. The district is a wild, mountainous area and presents a remarkable topographical variety. The district is bounded on the north by China, on the south partly by Assam and partly by Tezu sub-division of Lohit district, on the east by China and the Hayuliang subdivision of Lohit district and on the west by East and West Siang districts.

As per re-organisation of the District Act, 1980, Kameng district was divided into two districts namely, East Kameng and West Kameng. The district headquarters of East Kameng district is Seppa which was the subdivisional headquarters of erstwhile Kameng district. The name, Kameng, is derived from the Kameng river, a tributary of the Brahmaputra.



East Kameng district is situated in the western part of Arunachal Pradesh which lies exactly to the east of West Kameng district, covering an area of 4,134 sq. kms: It roughly between 92.36'E and 93.24'E longitudes, and 26.56 N and 27.59 N latitudes. Its northern portion passes through the international boundary of China (Tibet) and some parts of the Lower Subansiri district of Arunachal Pradesh. In the east lies Lower Subansiri district of Arunachal Pradesh and the southern boundary is bounded by Darrang district of Assam and the western part is bounded by West Kameng district of Arunachal Pradesh. East Siang district is bounded on the north by Upper Siang district, on the north-east and east by Dibang Valley district, on the south by Lakhimpur district of Assam state, and on the west by Along subdivision of West Siang district.

Papum Pare is one of the south-western districts of Arunachal Pradesh. It is bounded on the north by Lower Subansiri district, on the east and south by Assam state and on the west by East Kameng district. The total area of this district is 2,875 sq. kms. and the administrative headquarters is proposed to be set up at Bhupia.

Tirap district covers on area of 2,362 sq. kms. and lies roughly between the latitudes 26° 28' N and 27° 33' N and longitudes 95° 10' E and 97° 11' E. It is located on the south-eastern corner of Arunachal Pradesh bounded on the north by Lakhimpur district of Assam and Changlang district of Arunachal Pradesh, on the east and on the south by Myanmar and on the west by Nagaland and Sibsagar district of Assam. The headquarters of the district is located at Khonsa. The name of the district is derived from Tirap river which flows through the district.

Upper Subansiri district is a mountainous tract in Arunachal Pradesh which covers approximately 7,032 sq. km. of area. It is bounded by Tibet in the north, West Siang in the east, West Siang and Lower Subansiri in the south and Lower Subansiri in the west.

Bomdila which was the district headquarters of erstwhile



Kameng district was declared as the headquarters of the newly constituted West Kameng district. West Kameng district covers an area of 7,422 sq. kms. and is located roughly between  $91^{\circ} 36' E$  and  $92^{\circ} 54' E$  longitudes and  $26^{\circ} 54' N$  and  $27^{\circ} 53' N$  latitudes. Its northern boundary passes through the high peaks of the Himalayas that forms the boundary between India and China (Tibet). In the east lies East Kameng district. The southern boundary adjoins Darrang district of Assam. The western boundary of the district demarcates Bhutan from India.

West Siang district covers an area of 12,006 sq. kms. lying roughly between longitude  $93^{\circ} 57' E$  and  $95^{\circ} 23' E$  and latitude  $27^{\circ} 36' N$  and  $29^{\circ} 20' N$ . It is bounded by Tibet in the north, Dibang Valley and East Siang in the east, Assam state in the south, and upper Subansiri district in the west.

### **Physical Features**

The Brahmaputra, one of India's major rivers, enters Arunachal Pradesh from Tibet and flows into Assam from where it goes to Bangladesh before emptying into the Bay of Bengal. The state gets as much as 500 centimetres of rainfall and this accounts for the large number of rivers and lakes in the region apart from extensive forests which have induced the people to adopt the Jhum form of cultivation in which a select area of the forests is burnt down and used for cultivation. In the following year, the farmers shift to another forest plot which leads to the cultivation being called shifting cultivation.

The south-western part of erstwhile Tirap district is the continuation of north-east south-west Naga hills while in its north-eastern part the Lohit frontal ranges extend with a prominent north-west south-west trend in the region of Vijayanagar. On the northern side, the NE-SW hills rise to a maximum altitude of about 2,000 metres in Kuwen Bum and Mio Bum regions of the district towards the south-western side, the components of the Patkoi range shows a

similar trend and continues in the southern sectors of the district. In Miao region, the low NW-SW hill of Manabum rises as an appendage of the north-east physiographic trend and extends towards Upper Assam (Lohit) plain where it gradually loses its identity. The forests of Arunachal Pradesh are managed under the provisions of the Assam Forest Regulations. The local people are given special privileges to collect forest produce for their own use and also hunt and fish freely. The belt of forest that separates Arunachal Pradesh from Assam is important commercially. Some rare species of timber are extracted from the foothills of the district. The forestry in upper ridges has been organised and soon will become important for commercial exploitation and soil conservation. The local people derive a share of royalty for extraction of timber by the outsiders.

A forest has great value in economic and commercial development. In Dibang Valley 63.36 per cent is forest area. Based on forest produce many saw and veneer mills have come up. There is a proposal for the establishment of a paper mill. Such type of enterprises show a bright aspect in the commercial field. The government has taken various steps to establish forest-based industries by issuing licences, permits and financial aid to persons through the industry department. Dibang has quite a big number of tributaries which divide the district into a number of sub valleys. The tributaries of Dibang river in the district are Dri, Mathun, Ithun, Talen, Embra, Ahuli and Sisseri. There is a big lake known as Mayu Lake in Roing circle having an area of 2 sq. kms. (200 hectares).

East Kameng district is an extension part of the east-north-eastward Bhutan Himalaya range. This Sub-Himalayan tract is made up of E-W to ENE-WSW Tertiary (Siwalik) ranges rising to an altitude of about 11,000 metres. There are longitudinal but ill defined 'Dun' type of valleys particularly to the east of Kameng river. The antecedent Kameng river cutting across this terrain receives the easterly flowing waters of the Tanga and Bichom rivers of West Kameng district and Westward flowing Papu, Pachi and



Para rivers, etc. The northern part of the district is rugged and through numerous N-S ridges joins the ENE-WSW great Himalayan ranges. For house construction purpose, each family is entitled to a 300-ft of round timber free of royalty, etc. Besides all these facilities, the other benefits enjoyed by the people are:

- i) Permits for trees for trade purpose are issued only to the local people in order to improve their economy and inculcate business skills.
- ii) seven and a half per cent concessions in the award of leases and contracts pertaining to forestry and other works.
- iii) Preferential treatment in the matter regarding issue of licences for forest-based industries.
- iv) Preference in employment in the government establishments.

Moreover, there are some other scheme of plantations implemented in the whole region such as cash crop plantation, social forestry plantation scheme, etc.

East Siang district is a wild, mountainous area and presents a remarkable topographical variety. The people enjoy customary rights, recognised under the Assam Forest Regulations, over collections of minor forest products for their bona fide domestic requirements. The mighty Siang (Dihang) river flows through this district which joins the Brahmaputra in the plains of Assam.

In Lohit district 57.69 per cent of the area are forest area and 26.62 per cent are the reserved forest area. Based on the forest produce many saw mills and veneer mills have come up. There is a proposal for the establishment of a paper mill as the raw materials for this are in abundance in Tirap and Lohit districts. There are a good number of rivers, natural beels, swamps and lakes in the Lohit district. The three rivers which flow through the district are Lohit, Tengapani and Noadihing. Beels are large water bodies like lakes formed in the vicinity of rivers. In Namsai and



Lekang circle of this district these are a few such beels. These are Bar beel, Dhane khona beel, Namsai beel, Rangali beel, Mahadevpur Kumarikata beel, Nong Khong beel, Mohong beel and Deo beel. The total area under these beels would be more than 500 hectares. In Wakro circle of this district there is a lake known as Glow Lake with water area of 15.20 hectares. In addition, there are a good number of ponds in the district, particularly in Namsai and its adjoining areas.

Papum Pare district is a mountainous tract. The foothill zone, i.e., the Siwalik hills, rising to maximum altitude between 1600 and 1700 metres runs in NE-SW direction. The maximum range of the hills is about 20 kms. North of the Siwalik hills, the outer lower Himalayan hills follow the same trend. It consists of the rocks ranging from pre-Cambrian to Permian age. Further north of the lower outer Himalayan hills is the Great Himalaya. The rocks of this area are not well known. Popum, Par, Poma, Panir, Pering, Dikrang and Pachin are the main rivers passing through this district. Some other rivers/nala are Krimin, Khod, Papu and Senkhi. One natural lake is situated about 5 kms. away from New Itanagar which is spread over in an area of 16 hectares.

The forest area of West Kameng District is 6,536 sq. km. approximately, of which the reserved forest is 2,094.51 sq. km. The West Kameng district is crisscrossed with various creeks, channels, streams and natural lakes. The main river of the district, the Kameng river, flowing through the north-eastern belt of the erstwhile Seppa subdivision and part of the southern region of the district together with Tenga river and network of streams and rivulets form the main drainage system in the district.

The forest area of West Siang district is 7,722 sq. km. The reserved forest area of the West Siang district is 214.7 sq. km. Government has taken various steps to establish forest-based industries. West Siang district has yet to show any remarkable development in regard to forest-based industries although there is no dearth of potentialities.

The following minerals of economic importance are found in West Siang. Coal, graphite, Limestone, Marble, Ferrous minerals, Ochere, Sulphide minerals, Clay and Kyanite.

Excepting a few sq. kms. adjacent to Assam state, the whole area is hilly and mountainous with divergent climatic conditions. The main river Syom flows from north to south with her numerous tributaries. The wide valleys with small perennial streams offer good scope for development of pond culture. Though no proper survey has yet been undertaken it is very roughly estimated that the total length of river and rivulets may sum up to 800 kms, while the approximate area of pits, ditches, swamps and other low-lying areas suitable for development of fisheries may be round about 100 hectares.

### **History**

Modern history, in Arunachal Pradesh, begins with the inception of British rule in Assam after the Treaty of Yandaboo concluded on the 24 February 1826. Before 1962 the area was popularly known as the North-East Frontier Agency (NEFA), and was constitutionally a part of Assam. Due to its strategic importance, however, it was administered by the ministry of external affairs until 1965 and subsequently by the ministry of home affairs, through the governor of Assam. In 1972, it was constituted as a union territory and renamed Arunachal Pradesh. On 20 February 1987, it became the 24th state of the Indian Union.

The Ahom rulers had once established their rule but the tribes were noted even then for independence of outlook. The British made their way into the region and by 1838 had established a semblance of their rule here. They were more concerned at the prospects of Russia and China making a bid for the region through Tibet which had an ambiguous status of independence while acknowledging Chinese suzerainty. Free India must be grateful to the British rulers who took the trouble to sign in 1914 a treaty, called, the



Simla Treaty, under which the Tibetans and the Chinese recognised the boundary between Tibet and NEFA, as the region was then known (North-East Frontier Agency) to be the McMahon Line. The Chinese ruler went back on the treaty by not signing it but his plenipotentiary had initiated the Simla Treaty. The McMahon Line is India's strongly defended boundary in the east with China, and it lies in Arunachal Pradesh. China entered into a treaty with free India in April 1954 in which, for the first time, the five principles of peaceful coexistence were spelt out. In spite of it, they went on claiming Indian territory in the east as well as the west (Ladakh in Jammu and Kashmir) and even in the middle sector in Uttar Pradesh.

After some border incidents, the Chinese attacked India in October 1962. They overran large areas in the east as well as the west but while there was stiff resistance to the invading forces in Ladakh the Chinese were able to penetrate vast areas of NEFA, right up to its border with Assam. But after little more than a month they withdrew from most of the areas they had occupied and India strengthened her defences in both sectors to thwart any further incursions. It was then for the first time that the people of India became acutely aware of the existence of the NEFA region and of the tribal people who inhabit it. India's relations with China have also become more or less normal but the Indian army sits pretty on the borders, ever vigilant to defend the honour of the motherland. The people of Arunachal Pradesh are aware of it and have been giving the gallant men of the army all the support they need.

In the large-scale reorganisation of the north-eastern region in 1972 the name of this area was changed from the awkward NEFA to Arunachal Pradesh. Aruna signified the importance of the sun, and 'achal' stood for the mountains which abound in the state.

### **Irrigation and Agriculture**

Agriculture is the mainstay of the people of Arunachal



Pradesh and has mainly depended on *jhum* cultivation. Foodgrain production was 2,03,287 MT in 1998-99. Encouragement is being given to the cultivation of cash crops like potatoes and horticulture crops like apples, oranges and pineapples. Rice, wheat and maize are the principal crops in the area of foodgrains production in Arunachal Pradesh. Heavy floods in some areas and drought in some others have affected foodgrain output, and efforts are being made to check the downward slide. The total foodgrain production which was 2.26 lakh tonnes in 1991-92 declined to 1.28 lakh tonnes the following year.

The centre launched a scheme to benefit a number of states, including Arunachal Pradesh, to bring about a change in both agriculture and horticulture. Nearly 4,000 hectares of land was brought under horticulture. A number of juicy fruits including apples pineapples, citrus fruit and bananas are being produced in Arunachal. The production has also been going up and by 1992-93 it was nearly 50,000 tonnes. Arunachal also grows ginger, chillies and turmeric among the spices, and ginger production alone was of the order of 14,525 tonnes in 1992-93. Schemes to help the farmers grow cardamom and black pepper, so as to augment the overall supplies in the country and induce the Arunachal tribals to go in for more productive type of cash crops, are being implemented.

As much as 82 per cent of the total land area of the state is under forests. No wonder forests are the main source of revenue in Arunachal Pradesh and provide as much as 60 per cent of its revenue. Social forestry is encouraged in a big way, and in 1992-93 as much as 80,652 hectares of land was brought under forests through this programme. At the same time, some 45,499 hectares of degraded forests were reclaimed as the afforestation programme was brought to bear on them. Since the Brahmaputra flows from Arunachal to Assam the preservation of the forests helps in checking floods in Assam.

The administration had approached the problem of agriculture development rather cautiously. They had

introduced the improved hand-operated equipments first, then new types of seeds, then demonstration of new methods of agriculture in the state farms, money inducement for taking to permanent types of cultivation and so on. The impact is not immediately visible, but may turn out to be of far-reaching consequences. Paddy, millet, maize and drum are the major crops. The indigenous vegetables are sweet potato, brinjal, ginger, chillies, pumpkin, cucumber and local cowpeas.

In view of the vastness of the territory and abundant green pasture available, there is ample scope for development of livestock in Arunachal Pradesh. Based on the traditional animal husbandry practices already in vogue, the state has been divided into three main zones and one Alpine zone.

- i) Foothill areas covering altitudes of 500 to 3,000 feet occupying nearly 30 per cent of the total area is conducive for rearing of cattle, pig, poultry and goats.
- ii) Broad valley and plateau ranging from 3,000 to 6,000 feet covering nearly 35 per cent of the total area is conducive for rearing hill cattle, mithun, sheep and poultry.
- iii) The third upper belt having an altitude of 6,000 to 11,000 feet covers another area of 35 per cent of the total area. Suitable animal husbandry practices in this area include sheep, yak, zo-zomo, etc.

Keeping in view the rainfall and adaptability to different climatic zones as described above, emphasis been laid on the extensive cross-breeding programme to improve the local livestock for more production of milk, meat, eggs, wool, etc. On the cattle development aspect, besides distribution of a number of breeding bulls in villages cattle upgrading centres and key village sub-centres have been set up with a view to upgrade the local cattle population only.

Some poultry farms are functioning through the



government subsidy. Besides these poultry farms, poultry units on subsidy are distributed to the farmers under plan and IRDP scheme. Piggery has a great potentiality in Arunachal Pradesh. It makes a staple food in the day-to-day life of the people of Arunachal Pradesh. Some piggery farms have been established in different parts of the state. The distribution of exotic pigs to the deserving farmers are undertaken for cross-breeding and multiplication.

Sheep, goat and wool development programmes envisaged in this sector are as under:

- i) A sheep breeding farm in with exotic Russian Merino sheep has already been set up in West Kameng district. The sheep of Arunachal Pradesh has a fine wool with a long staple length. Therefore a crossbreeding programme with Russian Merino is taken up. Performance of crossbreed is better in terms of wool and body weight.
- ii) Pure and cross-breed Merino sheep produced in the farm is subsequently distributed to deserving local sheep breeders for upgrading of local stock and further multiplication. Subsidy is provided to the local breeders for the purpose.

Other livestock development are (i) yak—the high altitude area ranging from 6,000 ft. and above is suitable for rearing of yak and yak-cross-breed (zo-zomo). The cross-breed female (zomo) are important from the dairy point of view, having higher percentage of fat contents. The livelihood of local inhabitants of this particular zone depends on milk products of these crossbreeds. Therefore emphasis has been laid on supply and multiplication of more cross-breeds through deserving breeders of the locality, (ii) Mithun is a rare animal reared by the farmers of Arunachal Pradesh in the lower middle belt. The animal is socio-economically important to the people of these areas. A cross-breed female mithun is potentially utilised as dairy animals having higher percentage of fat contents. Hence, extensive breeding and crossbreeding of mithuns has been emphasised and schemes



are drawn up. Accordingly under the North East Council Scheme crossbreeding between mithun and cattle is taken up at Kamti Cattle Breeding Farm. Fodder development is another aspect which goes side by side with livestock development projects. There are already nine fodder farms set up in the territory.

As the rivers and streams in the northern belt of the West Kameng district are originating mostly in the high Himalayan mountains of snow-belt regions and entering through Tibet and Bhutan, almost all these are barren due to the extremely cold climatic conditions where fishes of any worthwhile economic values cannot grow and survive. So a modest scheme was launched for propagating the brown trout during 1966-67 with small consignments of brown trout eyed ova and hatchlings from Jammu and Kashmir state.

The long-range objective was to raise a parent stock of this species in the small-scale hatchery established for the purpose at a place called Nuranang, at an altitude of over 11,000 ft. in the Se-La pass area. The brown trout was found to establish in a stretch of about 120 km. of these two streams without any inhibition. The middle belt has a slightly higher temperature and therefore in the year 1980, another trout hatchery has been established at Shergaon with all modern hatchery amenities.

The eyed ova and hatchlings were supplied to the governments of Meghalaya and Nagaland from the Nuranang Trout hatchery in 1978 and 1979, respectively. Thus the West Kameng district has been the first district, not only in Arunachal Pradesh but also in the entire north eastern region, to propagate and produce trouts for the long range benefit of the people.

### **Transport and Communication**

The main requirement for road communication is the construction of a good number of bridges over the rivers and streams. The bridging of river/streams takes a long

time due to non-availability of tools and plants, labourers, etc. Also the ration commodities and medical facilities to the workers are not readily available. However, steps are being taken to provide such facilities to the workers by the government of Arunachal Pradesh.

Being a part of the erstwhile Tirap district, Changlang is an equally better equipped district in terms of road transport. Bus services are provided by the state transport, Anchal Samilaer, and by the private operators plying within the district which also connect the Tirap district headquarters. However some of the roads are *kuchcha* road and fit for fair weather only.

Dibang Valley is a badly connected district. Even the headquarters is connected by air only, service being provided by occasional sorties of IAF planes for air lifting of foodstuffs and other materials and these too are very irregular during the rainy season. Even the plains areas of the district occasionally remain cut off during the rainy season due to the presence of torrential rivers. Bus service is available to Roing only, a subdivisional headquarters in the plain area.

From the point of transport and communication the East Kameng district is the most backward of all the districts. All the roads are *kachcha* and unsurfaced except the road up to Seppa and Seijosa from the main road connecting Assam and Bomdila, the district headquarters of West Kameng district. Communication and approach by *pucca* road in the district is also very poor, only Seppa and Seijosa circles have this facility covering the range of 9.09 per cent of the villages in the district. There is only one kind of transport facility available to the district and that is bus service.

East Siang is the only district where the North-Lakhimpur-Murkongselek rail line touches some fringes of the territory but even then due to torrential rains along the route the places occasionally remain cut off during the rainy season. Similarly, though many places are connected by roads, communication is badly interrupted during the



rainy season. Daily bus services are operated by the Anchal Samity and by the Cooperative Society. The district headquarters is connected by motorable roads with all its circles which are the lowest administrative units. Still the communication in this district is much better than expected. Many of the porter tracks are used only in monsoon when the road blockades occur.

The role of the Central Public Works Department (CPWD) in Pasighat from the very beginning is the construction of road communication through the help of local people. Almost all the villages have been connected by road except a few which are not connected by porter tracks. Efforts are being made by CPWD to connect each and every village by all weather roads in the near future.

The All India Radio Station was established at Pasighat on March 6, 1966 with medium wave 282.4 metres (1062 KHL). In Lohit district, communication is cumbrous, difficult and irregular during the rainy season because even the road to Tezu (district headquarters) is not only heavily silted but also passes through heavily flooded rivers. The boat service partially serves the district but sailing is extremely difficult, because of heavy current, shallow beds and rocks. Three daily bus services are provided by the Cooperative Societies and seven by Anchal Samities. Vayudoot provides bi-weekly air service to Tezu. MF sorties also provide occasional service to Walong. This district had 108 kms. of surfaced roads and 73 kms. of unsurfaced roads up to February, 1981. CPWD is constructing and maintaining the roads connecting administrative centres. The BRTF had constructed Dirok-Tezu and Hayuliang road and it is under their maintenance. Hayuliang Hawaii road will also be constructed by them on behalf of the Arunachal Pradesh government. The new national highway NH-52 has been approved for construction by Border Roads connecting Pasighat-Roing-Tezu-Wakro-Namsai-Rupai.

In Lohit, All India Radio, Tezu, although a small station covering a radius of 15 kms. only, deserves special mention in the realm of All India Radio network. It came into service



on 15 August, 1967, perhaps in the wake of Chinese aggression and, principally, to bridge the gap of communication between the local inhabitants and the rest of the country.

District has, however, a comparatively good system of road communication. There are a few daily services run by the State Transport Department, Anchal Samities and by private operators. Goods are carried to the interior places by porters but in case of inaccessible areas air dropping is the only means of supply of consumer goods. Approach to the interior of Arunachal Pradesh is mostly by foot tract or footpath. Even where there are road communication these are mostly *kachcha* roads. The proportion of *pucca* roads is very low. Among all the circles of this district, Old Itanagar circle tops the list in the percentage of villages having *pucca* road.

Tirap is the best connected district in the state. Four daily bus services are provided by the state transport, five by Anchal Samities and two by private operators. There is quite a heavy traffic, not only for passengers but also for trade and commerce. It is expected to increase when the road to Tezu (in Lohit district) via Miao is completed and oil extraction is in full swing in the Kharsang area. Tirap district had 372 kms. of surfaced road and 417 kms. of unsurfaced road. The Central Public Works Department construct and maintain main roads connecting administrative centres, and rural roads are being constructed by the Rural Works Department.

In Upper Subansiri, passenger service is mainly confined to the Taliha-Daporijo-Likabasi route. Two daily services are provided by the local transport, three by Anchal Samity and one by private operators. A direct bus service from Daporijo to Itanagar via Ziro has been introduced recently. It is proposed to provide air service to Daporijo.

West Kameng has the largest stretch of *pucca* road from Bhalukpong to Tawang (290 Ian.) passing through an altitude of over 4,000 mts. in Sela pass. Three other roads to Nafra,

Kalaktang and Lumla are *kuchcha* which do not permit regular heavy traffic. Four daily services are being provided by the state transport, six by the Cooperative Society and three by Anchal Samiti. Vehicular transport is well developed in the Bhalukpong-Bomdila route. Exploration of forest resources in the upper areas could increase traffic movements. Passenger service has so far not been very satisfactory, which could improve with better roads.

West Siang has a well developed transport service between Likabali and Along. The Likabali-Along, Along-Yingkiong and Along-Kaying roads are *pucca* roads. Two daily bus services are provided by the state transport, three by Anchal Samities and six by Cooperative Societies. A private operator runs a direct bus service between Likabali and Itanagar. Along is proposed to be connected by air.

### Industries

In the industrial department, apart from the identification and formulation of projects for large and medium industries, special emphasis on village and small industries will continue. The department has various plans and programmes to be taken up through the Arunachal Pradesh Industrial Development and Financial Corporation either in the joint sector or in collaboration with private capital. A big push and impetus will be given to handlooms and handicrafts with an added thrust to handloom wool, wool and carpets, as a selected craft. Production will be organised on a group basis, and the entire responsibility for the supply of raw materials and marketing of finished products will be taken up by the corporation. Besides these traditional handicraft, agro-based and timber-based small industries will be encouraged specifically in the areas of fruit processing, manufacture of hand tools, agricultural implements, milling of foodgrains and oilseeds and processing of certain specific commercial crops like ginger, turmeric and chillies. Therefore, the direction of progress will be towards diversified small industries like match splinters, toys and handicrafts as well as a small beginning



in terms of growing cocoa, small cardamom, stone and nut fruits.

The organisation through which these activities will be undertaken would be departmental by providing services, training and accommodation to the entrepreneurs. The financial assistance would also be borne through the department. The commercial banks and the corporations would establish close links for rendering financial assistance to the employees of the corporation. The corporation would also maintain liaison with other production sectors so that identification of various projects and other small industries are in line with the general focus of development in the territory.

For conservation and explorations of vast minerals the Arunachal Pradesh Mineral Development and Trading Corporation Limited (APMDTCL) was set up in 1991. The Namchik-Namphuk coalfields are taken up by APMDTCL. To provide training to craftsmen in different trades there are two industrial training institutes at Roing and Daporijo. At present there are 88 crafts and weaving centres, 18 medium scale industries, 5,224 registered SSI units besides one mini-cement plant, a fruit processing plant and a citronella oil distillery.

The prominent resources of coal in Arunachal Pradesh are in Tirap district. There are two coalfields located in the district, between the two tributaries of Buridihing river, that is, Namphuk-Kharsang river in the north and north-east and Namchik river in the west; the coalfield is situated about 10 km north-east of Makum coalfield of Assam. The major coal seams occur in the supra-thrust block in the Tikak parbat stage (Barail series) which is separated by the Baragolois by the basal coal horizons. As a result of extensive survey carried out by the Geological Survey of India and others, eight coal seams (seam I to VIII) have so far been established in the area of which seam III has a maximum thickness varying from 4.55 m to 19.00 m. The total seamwise reserves of coal proved in this coalfield so far amount to 14.28 million tonnes though the overall



potential of the area may be about six times more. The coals of this field, in general, have high volatiles and high sulphur contents similar to those of upper Assam coalfields. The general range of variations in the proximate analyses of these coals is as follows:

Since the Central Fuel Research Institute has already proved the suitability of Makum coal as coking blend with Jharia-Raniganj coal, the adjacent Namchik-Namphuk coals may also prove suitable for this purpose. Suitability of Assam coal has been indicated for the manufacture of synthetic petroleum, low temperature carbonisation plants and power generation. The Tirap coals may also hold such promise.

A number of oil and gas seepages ('pungs') have been reported in the Namchik area. 'Oil shows' have also been reported near Tissa stream, south of Kanubari area. But economic finds of oil and gas in these areas are yet to be established. Small nodules and veinlets of pyrite are observed in Disang shales between Bhogapani and Khonsa along road cuttings and river sections. These occurrences are of academic interest only.

Brine saline springs and wells are well known in Tirap district. These are locally called 'Sum.' Salt is prepared by the local inhabitants from the saline water. A preliminary investigation of these brine wells has been recently carried out by the Geological Survey of India particularly to determine the potassium content. The oozing is mostly in Disang beds but a few are located in Barail rocks also. Although no distinct source of the salinity is yet known, it is felt that the source is deeper or below the exposed Disang shales or the brine represents are connate water in marine sediments.

The urge to start new industries was shown by the people of East Siang district during the decade. For this purpose the industries department has opened a craft centre at Pasighat. Efforts are being made to popularise the indigenous crafts in the market outside Arunachal Pradesh.

In addition to the craft centres there is a big candle factory located at Pasighat. The Pasighat sericulture farm produces Eri and mulberry silk. There are three sericulture demonstration centres in this district at Sille, Mebo and at Pasighat to popularise the Sericulture among the local people.

Based on the forest produces many saw mills and veneer mills have come up. A paper mill may soon be established as the raw material for this is available in this state. The government has taken various steps to establish forest-based industries by issuing licences, permits and financial aid to bonafied persons through the industry department.

The scope for development of large scale industries in Lohit district is not encouraging now. This is mainly due to the lack of proper infrastructural facilities. The main drawback of setting up industries is the transportation system. This transportation bottleneck exists due to the stiff hills, speedy flowing rivers and frequent changing river course, which challenge the transport and communication system. Hence, it is difficult for a unit to transport raw-materials and finished products within and outside market. The other drawback of establishing an industrial unit is the shortage of power. The main source of power in the district is diesel-generating sets, which is not economical for industrial use. However, a microhydel project with a capacity of 4000 KV has been set up at Dura Nallah near Tezu which is able to feed few small-scale industry (SSI) units in Tezu township. Recently, Namsai/Chowkham areas have been connected with a 33 KV H.T. line from Namrup thermal project, Assam, which will add to the development of industries in the district.

There is a plywood factory at Namsai in the private sector, which is considered to be one of the biggest plywood factories in India. Besides, there are 13 saw mills in the small-scale sector in the lower belt of the district. Moreover, with the development of the saw mills in the district, a number of small-scale industries like furniture making and



allied products have come up. These units produce decorative furniture, electrical accessories, etc.

According to the Geological Survey of India, mineral resources like graphite, limestone, stone marble and clay or bricks are available. About 140 million tonnes of limestone have been made available in the district which has encouraged the government to set up a 30 TPD Mini Cement Plant at Tezu to utilise the limestone for commercial purposes. Due to the surplus resources, the government is also proposing to set up another 200 TPD cement plant at Tidding. Based on the surplus limestone, the government has also established a lime kiln unit with three-ton capacity at Tezu. The brick unit at Namsai/Chowkham has also come up to utilise the clay found in the district.

Lohit is not self-sufficient in cereals and foodgrains. Based on surplus produces of the lower belt, some tiny paddy husking and oil expelling units have come up. The fruits and vegetables cover an area of 126.57 hectares. The crops are papaya, banana, guava, pineapple, plum, mango, orange, pears, lemon, etc. Considering the resources available, the establishment of a fruit processing unit has good scope. According to the agriculture department, the average yield of chillies in the district is about 15 metric tonne at present. As such, a spice grinding unit can be established.

It is mentioned earlier that the district has got suitable clay for making bricks. This clay can be utilised for making various types of potteries in various designs. Lohit district is also rich in banana trees, which are useful for industrial purposes. These banana trees can be utilised for commercial use as banana fibre can be reprocessed for making decorative bags, mats and other products. The handloom industries in the village and cottage sector play an important role in both commercial and non-commercial basis. About 2,490 looms of different types, like fly shuttle loom, loin loom, khamty loom, and pit loom are working in the district. The handloom products have good demand both within



and outside the district. Hence, a few more handloom units could be set up in the district.

Besides this, the bee-keeping industry also has good scope. Local people could be encouraged and given training in this field to start bee-keeping units. This will also help to increase production of agriculture through poligraphic means. Woolen textile industries, wood carving and silver and blacksmithy articles need special attention.

Most of the local people are using silver ornaments like earring, necklace, etc. At present, there is a training section in the Craft Centre, Tezu. So, two silversmithy units can be established, one each at Hayuiiang and Hawaii.

Tirap district has made a significant contribution towards the development of forest-based industries. Due to its advantageous position so far as resources and communications are concerned, the Arunachal Pradesh Forest Corporation has given first priority to this district to start with their work. The Forest Corporation was formed in December 1977, and in the first instance it took up timber extraction, plantations and setting up of forest-based industries in Tirap. The Forest Corporation has taken over Nocte Timber Co., Deomeli, producing commercial plywood, and has started manufacturing match splint and furniture. A saw mill unit has also been started in Tirap and this may subsequently be expanded to a commercial plywood unit.

Valuable timbers like Borpati, Mekai, Holong, Holok and other species are available for veneering industries which can eventually be converted into plywood factory. Apart from wood-based industries there is also a scope for the establishment of a paper mill around Miao and Namdang. Plenty of bamboos grow luxuriously, apart from soft wood, around the said area. The government has already engaged Hindustan Paper Corporation in establishing a paper plant with a capacity of 200 tonnes per day. The site for the proposed mill is recommended in between Miao and Kharsang. Also mineral-based industries have a bright

future around Kharsang. As per the recommendation of the Geological Survey of India and the Mineral Exploration Corporation, the North Eastern Council has already finalised commercial mining of coal deposits at Namchik and Namphuk areas. The necessary mining lease has been finalised for commercial mining by M/s. Coal India, Margherita, for 30 years.

Crude oil deposit has already been confirmed and Oil India has been engaged in drilling operations. Out of nine wells, five have been confirmed to be bearing oil. Oil India has gone ahead with drilling operations at Kharsang and they have a plan to set up a mini refinery. Also the development of demand-based ancillary to the aforesaid potentials have tremendous scope around Kharsang and Miao. On the other hand, Deomali provides a good avenue for setting up of plywood industries.

A project for raising cardamom in Khonsa and Changlang areas is under consideration of the Agriculture Refinance and Development Corporation. An expert from Coffee Board has joined the Corporation to organise the coffee cultivation scheme. As regards tea, it has already been raised successfully in an area at Kanubari, and it is proposed to extend the area in order to make it an economically viable unit. Besides raising of the above cash crops there is ample scope for the development of cottage industries. Over and above, there are six cottage industry units dealing with the production of handloom, furniture, etc., established by the local entrepreneurs which are functioning smoothly in the district. There is scope for full exploitation of traditional crafts like woollen textile, wood carvings, blacksmithy, cane and bamboo articles of everyday use, etc. There is tremendous scope for establishment of handloom and handicraft centres also through local entrepreneurs.

Under the present conditions, there is little scope for the development of major industries in Upper Subansiri district as the area is difficult and the terrain formidable, diverse and inaccessible. The district is also located far



from the main market centres and it does not have a market structure of its own. The only possibility at present is a proposed mint-cement plant at Menga, where it has been established that the area consists of high-grade limestone and dolomite. Though forest and mineral wealth do exist in abundance in the area, the present stage of communication and other basic industrial infrastructural facilities are wanting, and combined with the formidable terrain, makes the exploitation of the resources impossible. Therefore, at the present stage of development the exploitation cost would prove prohibitive. Cottage industries, though in existence, are at the subsistence level. All products made and produced are nearly always for personal consumption and rarely find their way to the markets. The major items that come under this group are loin loom and cane-bamboo products. Due to this there is hardly any surplus for export.

The government, through its craft centres and weaving and cane-bamboo training units, has been encouraging and training the people of the area in the use of the handloom and other equipments for cane-bamboo works. These training units are run and operated by the Department of Industries, Government of Arunachal Pradesh, not only to impart technical skill, but also enable the trained personnel to earn a living. The trainees, after the completion of their training, are given certificate and 50 per cent subsidy of equipment of their trade (i.e., handloom, knitting machines, sewing machines, tools and implements, etc.). If the trainee so desires he may be absorbed into the production centres attached to the training units, the products of which are marketed through the emporiums run by the department. Here the workers are paid wages for their work. The Department of Industries also registers and monitors the number of small-scale industrial units in the district. As incentive and encouragement for the development of entrepreneurship and small-scale industries, the government has given a price preference of 10 to 15 per cent to all small scale industry and handicraft products manufactured in the state. Further, a 25 per cent subsidy on capital



investment by small-scale industrial units is also given by the centre.

The people of West Siang district and those of other districts mainly depend upon agriculture for their livelihood. Weaving for women and basketry for men are the main traditional craft. Blacksmithy, silversmithy, skin and leather works are also known to the people. The Cottage Industries Department of the government has trained the people in various craft and technology including fruit preservation, but could provide employment to only a limited number of people on a regular basis. The West Siang district is a potential area for setting up fruit preservation and fruit processing unit.

The district has abundant varieties of fruits. But necessary infrastructural facilities like road, power, etc., in proper potential areas are not yet available. As a result, marketing facilities are also not available in these areas. In spite of high production of apples in Mechuka area it cannot be transported out. However, the government has recently come forward with a proposal to set up a fruit processing unit in West Siang district at an estimated cost of Rs. 88 lakhs for proper preservation and processing of fruits.

### **Religion and Culture**

The state is predominantly tribal in character and the Inner Line system protects the people from any large-scale or small-scale inhabitation of its extensive territory by people from other parts of the country. The presence of the Chakmas, refugees from the Chittagong Hills of Bangladesh, in the midst of peaceful people of Arunachal is a sore point with the people.

The terrain is extremely hilly and even mountainous as we move northwards towards the McMahon Line with China's Tibet region. The various tribes inhabiting the state are of Mongoloid extraction many of whom follow the Buddhist religion and some may have come from Tibet with which the people have extensive cultural and other

contacts. Indian mythology has many references to the region, and many believe this was the ancient Vidarbha, although modern Maharashtra state has also a claim to the title. The state is known as Arunachal Pradesh because, Aruna is the charioteer of the sun god and it is here that the sun appears first in India. There are some 22 tribes inhabiting the region and all of them speak different languages which are also named after the tribes. The lingua franca is a kind of variation of Assamese, called Arunachal Assamese, although Hindi and English are also getting to be widely known.

There are many traditions which link the region to the rest of the country and its ancient past. Even now the Brahmakund, which has hot springs, is visited by thousands of people every year in the winter month of Pausha for a bath. The waters of the spring were used for the coronation and anointment of the ancient Ahom kings of Assam. The Brahmakund is also called Parashuram Kund after the fiery sage who is said to have created a path in the mountains and, also the lake here.

Some of the important festivals of the state are: *Mopin* and *Solung* of the Adis, *Lossar* of the Monpas and the Sherdukpens, *Boori-boot* of the Hill Miris, *Dree* of the Apatanis, *Si-Donyi* of the Tagins, *Reh* of the Idu, Mishmis, *Nyokum* of the Nishings, *Chalo loku* of the Noctes, etc. Animal sacrifice is a common ritual in most festivals.

Major scheduled tribes found in Changlang district are Nocte, Wancho, Tangsa and Singpho. The Singpho tribe who are Buddhists and the followers of Buddhism, celebrate 'Songken', a Buddhist festival in the month of April every year. In addition, they have not given up their old shamanistic belief as a number of spirits, known as Nats, are worshipped on various occasions with the sacrifice of bulls, cows, pigs and chickens.

The Idus are the major tribe inhabiting the Dibang Valley district. The Idus are one of the main three groups of the Mishmis. The other two groups are the Taron and Kaman



of Lohit district. They are distinguished from the other groups of the Mishmis by the peculiar way of dressing their hair. Both men and women shave the hair at the sides of the head and keep it long at the back. The hair in the front is cut short and hangs over the forehead. Due to their peculiar method of cropping the hair they are called Chulikata (Chuli means hair, Kata means to crop) by the plains people.

Reh festival is prevalent as a legend among the Idus. In the ancient days there was a powerful man among the Idus named Tadu who was wandering in several places and ultimately settled down around Kundilnagar where he worshipped various gods and goddesses. There he heard that Krishna came to marry Rukmini. Since Tadu opposed Krishna with him and was defeated, his hair was cut off by Krishna. Tadu, therefore, could be identified as Rukma, the brother of Rukmini and son of Bhismaka. After the defeat, Tadu left Kundilnagar and wandered in the forests where he met another man called Enima Mega. Both of them were in distress and extreme hardship. So they approached 'Igu' the priest for their well-being and prosperity. Igu then advised them to collect rice, mithuns, pigs and prepare 'Igu', the rice beer, to perform some rites for their well-being. Accordingly when they collected everything, the 'Igu' performed the rites by dancing and chanting hymns for propitiating the Supreme Creator. After performing these rites Tadu and Enima Mega lived in peace and prosperity. This was the first Reh festival and since then it is being celebrated.

Since 1972 the festival has been celebrated every year on a community basis in the midst of gaiety, merriment and enthusiasm on 1 and 2 February. The local administration has been extending financial help since the festival is very expensive.

East Kameng district is predominantly inhabited by the tribal communities. The tribes called Bangnis and Sulungs inhabit the area contiguous to the north-eastern Kameng extending to the Lower Subansiri district. The



Bangnis are known as Nishi, Nishang, Nissi or Dafla in Subansiri district. A marriage of the Bangni people takes place through the process of formal negotiation between the parents of both the parties. After a stipulated bride price has been paid, the girl comes to live with the husband. There are no formal ceremonies which mark the consummation of marriage. Husband and wife are both clad in clothes and wear a number of ornaments. Besides, the marriage by employment and the marriage by service are also prevalent in their society but is practised in rare cases.

Tribe endogamy and clan exogamy is the normal rule. Though polyandry is not known to them, polygamy is very common. The Bangni society is patrilocal, patriarchal and patrihneal. The Sulungs are a scattered tribe. Their society is not based on the unit of village community. They do not observe rituals and ceremonies on a community basis. They do not have any festivals as such.

The Bangnis have a number of festivals of their own of which Mlokom Yulo is the major one. It is the only festival which is celebrated annually in every village on a community basis in the Bangni months of Lakang and Leehar, corresponding to the English months of March and April, amidst great joy, devotion and enthusiasm. The festival starts with a worship in the name of the God-Doni-Yulo, and Kamio-Yulo. The Arunachal Pradesh Administration extends all possible help including financial aids, in the form of festival grants, etc., to make this festival a success. Festivals form an essential part of the socio-religious life of different tribes of the East Siang district. The Solung festival is a manifestation of the 'Adis' fertile cult.

In Solung they try to propitiate both Doying-Bote and Kine-Nane, and if they are pleased and satisfied, the former will appear in the form of clouds and rains and the latter in the form of greater fertility of soil. Mopin is another popular festival of the Adis-mainly of the Gallong community of Arunachal Pradesh. In this festival, Mopin, the Goddess of welfare, peace, wealth, prosperity and

wisdom is propitiated in a grand celebration. The festival lasts for five days from the fourth to the eighth of April before the sowing of paddy. There are similar festivals that are celebrated on identical occasions throughout India, such as (i) Bahag Bihu, (ii) Baisakhi, (iii) Chaitra Shankranti and (iv) Basant Utsav, etc. Besides Solung and Mopin festivals the Adis perform some other festivals. The Minyongs perform Aran or Cluing (New Year), Lutor or Etor, Solu, Pine and Yoge, Pambi and Doring. The Padam celebrate Aran festival during the month of February. All these festivals are connected with the different stages of agriculture like selection of land, clearing of jungles, sowing of seeds, harvesting, etc.

Lohit is inhabited by some major tribes. The Khamtis are Buddhist by religion. They have their own script which is derived from the Tai language. The society is divided into classes, signifying a distinct status in the social hierarchy. The chiefs naturally occupy the highest position followed by the priests who wield considerable influence over all ranks. The class of common men form the bulk of the population. In the past the slaves constituted the lowest rank. However, the Khamtis profess the Hinayana form of Buddhism but they do not abstain from meat. The two great celebrations are held in commemoration of the birth and death of Gautama Buddha: for which they take out religious procession with the idol of the Buddha.

The Khamtis celebrate Sangken a Buddhist festival, annually, once in the month of April and similarly, Nunhak is also celebrated on the full-moon day in the month of May. The other ceremonies such as Khau-A, Catang Cale and Nyin-Cam-Meifung are celebrated in the Buddhist way by offering flowers, vegetables and rice at the village monasteries in the last part of July for Khau-A, in the middle of September for Catang-Cale and before the start of winter for Nyin-Cam-Meifung.

The Singphos are Buddhists and as follower of Buddhism they celebrate "Sangken" but, on the other hand, they have not given up their old shamanistic beliefs for a number of

spirits are considered as malevolent and responsible for causing miseries to human beings. Therefore, such spirits (Nats) are worshipped on a number of occasions such as Ningsenat, Mutung-Dingna, Cithungnat, Natkun, Mainat, etc., by sacrificing bulls, cows, pigs and chickens.

The Deoris have three distinct groups or Khels, namely, (a) Dibongia (b) Tengapania and (c) Borgoya and each of the group of Khels has a number of clans of its own. There are 24 clans of these three groups or Khels of the Deoris.

The Adis are the major group of tribes inhabiting the West Siang district. Though quite a number of tribal groups, scattered over a fairly large area, are designated as Adis, they are bound together by a common language with slight dialectical variations from place to place. A similarity of culture and temperamental affinity is also seen among all these groups. The different subgroups of the Adis in the West Siang district are Gallong, Janbe, Karka, Memba, Ashing, Bori, Bogum, Bagi, Pailibo, Minyong, etc. Moshup and Rasheng, dormitories for boys and girls respectively, play an important role in the Adi society. Different sections of the Adis call these institutions by different names, such as, the Padams call "Moshup", whereas the Miniyongs call it "Dere", etc. Each village has Moshup for boys and Rasheng for girls. It is customary for boys and girls to become the members of their respective institutions when they attain the age of 10. They remain in their respective dormitories till their marriage. There is no restriction for the boys of different Moshups to visit girls in their Rashengs. In course of such visits if a boy and a girl happen to like each other, negotiations are carried out between the boy's and the girl's parents. If approved by their parents, a formal marriage takes place, according to their custom. In the Adi society descent is traced through the father and the property devolves on the male line. The children belong to the father's clan. A child born of extra-marital relation, if a boy, belongs to the father's clan and, if a girl, to the mother's. The elder sons generally set up their separate



households even while the father is alive, though on principle they have equal shares of the parents' property. They do not dispute with the youngest brother who stays with the parents and inherits the ancestral house by common consent. The widowed mother is considered a special responsibility of the eldest son but, in practice, she prefers to live with the youngest under the roof of her deceased husband's home.

In the West Siang district, the Adis and its sub-tribes have a well-knit pattern of society. Most of their traditions and customs have been handed down over centuries, and are being practised with great devotion and festivities. The Solung is the main festival of the Adis.

Itanagar, the capital itself, is a place of interest to the visitors. The Tawang monastery, situated at a great height of 10,000 feet, has residential accommodation for several hundred Lamas who live here pursuing religious studies and carrying on other activities calculated to promote the glory of the *Enlightened One*, the Buddha. Close to the border with the Tibet region of China, it is a centre of religious studies for followers of the faith in this country as well as outside. The Monpa and Sherdukpen tribes of Arunachal Pradesh find in the monastery spiritual solace and satisfaction.

### **Tourism**

The fifth Himalayan Tourism Advisory Board meeting which was held at Itanagar during November 1992, brought Arunachal Pradesh in the tourism map of the country. Domestic tourists, however, have to obtain inner line permit either from the Deputy Commissioner of the district or the Secretary (Poli.), Itanagar, the Resident Commissioner of Arunachal Pradesh, Delhi, Liaison Officer, Calcutta, Guwahati, Tezpur, Lakhimpur North (Lilabari) and Dibrugarh (Mhanbari). Foreign tourists have to obtain restricted area permit from the Ministry of External Affairs or from the Ministry of Home Affairs. The Restricted Area

Permit (RAP) has been relaxed in two travel routes, namely, Itanagar-Zirb-Along Pasighat and Margherita-Miao-Namdapha to enable foreigners to visit the state. Within the district, though there is no significant place of tourist interest, there are many nearby such places, viz., Bomdila, Tawang, with the largest Buddhist monastery in India, Itanagar with the excavated ruins of the historical Ita fort and the attractive Ganga lake, Malinithan and Bhismak Nagar, the two archaeological sites, Parashuram kund, a place of pilgrimage and Tipi, an Orchid Research Centre (in West Kameng District).

The western part of the West Kameng district is full of Mahayana (rather Vajrayana) monasteries, chortens and other belonging to the seventeenth and eighteenth centuries. All these are the cultural and religious traits of the Buddhists, and the influence of Bhutan and Tibet is also prevalent on these. At Goreham, in the Zemithang circle, stands one of the largest Buddhist chortens in Asia. Built by stones and mud plaster, it has a base of 120 sq. ft. and height of about 100 feet. It took 12 years to build this chorten and is believed to be older than Tawang gompa situated in Tawang district. The Monpa-Scherdukpen belt is the only region of the district where traditional art and architectural structures have survived for over three centuries. In Tawang Tawang monastery, urkiling Gompa, tea Gompa, war memorial are the main places of tourist interest.

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