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THESIS

UNDERSTANDING INDIAN INSURGENCIES: IMPLICATIONS FOR COUNTERINSURGENCY OPERATIONS IN THE THIRD WORLD

by

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December 2005

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There has been a resurgence of indigenous Maoist insurgencies in the South/South East Asia region in the recent past. Left unchecked, these developments can have significant implications for the Global War on Terror. Third World countries have inherited many attributes from their colonial past which make them susceptible to insurgency. These factors, which are typical of the Third World, limit even the capacity of democratic states to mitigate divisive tendencies. This paper analyzes the susceptibility of Third World countries to insurgency and develops a theoretical perspective to illuminate some of the factors contributing to insurgency in these countries. A simple linear model for India is developed, based on the hypothesis that the degree of inaccessibility of an area, the strength of separate social identity of its population, and the amount of external unifying influence on the area determine the propensity of that area for insurgency. The model is empirically verified for the entire country by comparing data from India's 528 parliamentary constituencies. The implications of the Indian model for some competing ideas about appropriate counterinsurgency strategy for the Third World countries are discussed.

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UNDERSTANDING INDIAN INSURGENCIES: IMPLICATIONS FOR COUNTERINSURGENCY OPERATIONS IN THE THIRD WORLD

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ABSTRACT

There has been a resurgence of indigenous Maoist insurgencies in the South/South East Asia region in the recent past. Left unchecked, these developments can have significant implications for the Global War on Terror. Third World countries have inherited many attributes from their colonial past which make them susceptible to insurgency. These factors, which are typical of the Third World, limit even the capacity of democratic states to mitigate divisive tendencies. This paper analyzes the susceptibility of Third World countries to insurgency and develops a theoretical perspective to illuminate some of the factors contributing to insurgency in these countries. A simple linear model for India is developed, based on the hypothesis that the degree of inaccessibility of an area, the strength of separate social identity of its population, and the amount of external unifying influence on the area determine the propensity of that area for insurgency. The model is empirically verified for the entire country by comparing data from India's 528 parliamentary constituencies. The implications of the Indian model for some competing ideas about appropriate counterinsurgency strategy for the Third World countries are discussed.

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EXECUTIVE SUMMARY

Problem: There has been a resurgence of indigenous Maoist insurgencies in the South/South East Asia region in the recent past. Left unchecked, these destabilizing developments can have significant implications for the Global War on Terror. Researcher William Latimer (2004), suggests that the United States in its global counter-terrorism campaign must draw on the experience of India, which has an extensive history of counterterrorism efforts.

About India: India is a union of states. The Constitution of India provides for a parliamentary form of government, federal in structure with certain unitary features. The Constitution of India distributes legislative powers between parliament (national level) and legislative assemblies (state level). Apart from the states, there are centrally administered territories, called Union Territories.

According to the Indian federal structure, the fighting of insurgency at home is the responsibility of the concerned state government. This accounts for the diversity and inconsistencies in the Indian approach to counterinsurgency. However, there has been also a broad evolution of counterinsurgency strategy over the years because of involvement of the central (federal) government, army, central (federal) police organizations, Indian Police Service, Indian Administrative Service, and the linkages between provincial and central politics in counterinsurgency by state governments. A list of major insurgencies faced by India since independence in 1947 is shown below.

Place		J&K	Assam	Punjab	Nagaland	Tripura	Mizoram	Naxalism –1	Naxalism – 2
Period		1980-on	1979-on	1978-96	1947- on	1980- on	1966-1976	1967- 70s	1980- on
Style		guerrilla, terrorism	Maoist guerrilla, terrorism	guerrilla, terrorism	Maoist guerrilla	Maoist guerrilla, terrorism	Maoist guerrilla	Maoist guerrilla	Maoist guerrilla
Nature of Insurgency	Religious	√		√					
	Ethnic		√		√	√	√		√
	Ideology				√		√	√	√
	Linguistic		√						

Objective of The Study: The objective of this paper is to develop a theoretical perspective for analyzing the Indian experience with insurgency, and to discuss its implications for counterinsurgency in Third World countries.

Literature Review and Conceptual Discussions: Understanding the affected population is essential for understanding an insurgency or planning for counterinsurgency. The contested population is not only the end; it is also an important means for the insurgent. The insurgents and government of the day contest with one another to control the population as well as to gain the populace's loyalty.

Skocpol(1994) holds that the probability of revolution against the state is determined by the degree of penetration of national territory by a state, the incorporation of socially mobilized groups, and the degree of bureaucratization of the state administration and its armed forces (p.273). India, with a history of democratic governance for more than fifty years, should ideally score high on all three dimensions. True to the model, at the macro level, India has been able to handle the many insurgencies it has faced since independence from the British Empire in 1947. However, this does not explain the emergence of insurgencies at various areas within India. The reasons for these insurgencies can be traced to the many attributes of the country which, like many other Third World societies, affect all the three dimensions of Skocpol's model. Based on these aspects, a slightly different model is developed.

Hypotheses, Scope and Methodology: Based on scholarly works by many authors from various disciplines, I advance the following hypothesis.

In India, the degree of inaccessibility of an area, the strength of separate social identity of its population, and the amount of external unifying influence on it, determine the propensity of that area for insurgency.

To test this hypothesis, I examine all the major insurgencies in India since independence. A simple model is developed to explain the emergence and strength of insurgencies in India. Secondary and tertiary sources are used for collating data to test the model.

The Model: Based on the above hypothesis, the relationship between the variables can be expressed by the following equation.

$$I = C_{xrel}X_{rel} + C_{xlang}X_{lang} + C_{xethn}X_{eth} + C_{yfor}Y_{for} + C_{yslope}Y_{slope} + C_zZ + I_0$$

I_0 is the value of I when all the other factors on the right-hand side are 0,

X_{rel} is the *SSI* due to religion.

X_{lang} is the *SSI* due to language.

X_{ethn} is the *SSI* due to ethnicity.

Y_{for} is the average forest coverage of an area.

Y_{slope} is the average slope of the terrain of an area.

C_{xrel}, C_{xlang}, C_{xethn}, C_{yfor}, $C_{yslope,}$ and C_z are the coefficients.

SSI (The Strength of Separate Social Identity): Can be defined as the sense of separation from majority population through religion, language, ethnicity, and any other distinct social attribute of the population as a whole.

I (Propensity for Insurgency): This is the dependent variable. It is defined as the level of insurgency seen in the past in an area.

Z (The Amount of External Unifying Influence): Is defined as the proportion of persons among the top leadership of the main insurgent groups who are of outside origin or who spend a lot of their time outside the affected area.

Because of unavailability of data, only the X and Y dimensions of the model have been empirically verified for the entire country by comparing data from India's 528 parliamentary constituencies, while the Z dimension is supported by empirical evidence. For verification by correlation, both the graphical method as well as the analytical method is used. For this, ArcGIS software and statistical tools are used for analyzing geographic data and for finding the strength of correlation through regression analysis.

Conclusions and Recommendations: Acceptance of the model has significant policy implications for the Third World countries, regarding the role of democracy, the desirability and extent of decentralization of political power, the desirability and type of

economic development with respect to the ground situation, integration of the population, and the effect of forest on counterinsurgency. The following recommendations are made, based on these discussions:

1. Economic development of inaccessible and hitherto economically unviable areas should be fostered by the state. Careful considerations should be undertaken regarding the likely outcome of the governmental efforts, particularly in the areas already dominated by the insurgents and in the areas inhabited by relatively isolated tribes.
2. Democratic decentralization, within the broad legal structure based on equality and human rights, should be adopted to politically mobilize the marginal population in the right direction.
3. Outside influences inciting the insurgency should be denied access to vulnerable areas by constructing physical barriers.
4. The structure of force and hardware for counterinsurgency operations should be appropriate, keeping in mind the terrain and inhabitants of an area.

I. INTRODUCTION

A. BACKGROUND

1. Problem

In the recent past, Maoist insurgency in Nepal has caught international attention with spectacular violent incidents in the Himalayan state. More and more areas of Nepal may fall into lawlessness, which in turn may offer safe haven for smugglers, poachers, drug traffickers and terrorists. There has been a similar resurgence of Maoist insurgency in India and the Philippines without any apparent support from any communist country. What effect all these developments might have on the Global War on Terror should be a matter of great concern and immediate attention.

Researcher William Latimer (2004), suggests that "as the United States embarks on its global counter-terrorism campaign, it must draw on the experience of other countries. Specifically India, with an extensive history of counterterrorism efforts, can reveal important lessons applicable to America's endeavors"(p.v).

2. About India

India is a union of states. It is governed under the terms of the Constitution of India, which came into force on January 26, 1950. The Constitution provides for a parliamentary form of government, federal in structure with certain unitary features. The constitutional head of the union is the President. The parliament of the union consists of the President and two houses known as the Council of States and the House of the People. The real executive power of the union is vested in the Council of Ministers headed by the Prime Minister of India. The Council of Ministers is collectively responsible to the House of the People (*Constitution of india.*).

Similarly, at the level of state government, the Council of the Ministers of a state, headed by a Chief Minister, is collectively responsible to the Legislative Assembly of that state. The Constitution of India distributes legislative powers between Parliament and states. Apart from the states, there are centrally administered territories, called Union Territories.

It may be worthwhile to briefly discuss certain trends in the evolution of Indian society. The Indian subcontinent, until its colonization by the British, had witnessed many invasions. The conquerors either left after sacking and looting the inhabitants, or made India their new home. If the conquering tribe or people decided to settle down, then those who were defeated had two choices. They either accepted an inferior position in the conqueror's society, or they left their land and fled to more inaccessible and less economically viable areas within the subcontinent.

Sometimes another invading tribe might again conquer the economically viable land and push the earlier conquerors to less viable areas. For example, the Bodo Cachhar tribes from the east settled in the fertile valley of Brahmaputra river sometimes in third or fourth century AD, pushing the original inhabitants into higher mountainous terrain. Then after a few hundred years, the Ahom tribes came from the east and pushed the Bodo Cachhars into the southern hilly areas.

Areas with forest cover and hilly terrain generally provided the inaccessible refuges for the vanquished. However, over the ages, the relative inaccessibility of vast areas changed. With the adoption of iron implements, thick forests were cut down for conversion to agricultural land. Road construction also decreased the inaccessibility of these areas. After colonization, the British constructed railroads for accessing new areas for mining and plantation.

Those who inhabited the inaccessible areas generally remained marginalized and were identified as tribesmen by the more complex societies which developed on the fertile irrigated lands. For example, the Bodos remained relatively isolated compared to the Ahoms, who developed economically and politically and ultimately were integrated into the complex Hindu society of the Aryans which had developed elsewhere on the subcontinent.

However, the situation has never been completely stable. There have been dynamic political, economic, and social interactions among the greater civilizations and the "little traditions." Dynamism was introduced sometimes through change in technology, sometimes through social and religious reforms, sometimes through change

in economic activities and yet other times through political conquest. Thus the marginalized societies remained at various levels of isolation from or integration with the greater socio-political system.

Over the years and after independence, the position as well as the ambitions of these societies has changed. After 50 years of democratic governance, it is difficult to identify some of them as separate from the mainstream, while others can still be called tribesmen in the real sense. The impact of democracy and modern economic development has been different for different populations. For example, because of the quality of the land and its inaccessibility, a particular area may be less viable for modern economic development. However, the inhabitants of that area, with emotional attachments to the land of their ancestors, will not migrate to a more viable area. Therefore, many of them continue to remain on the fringes of the economic and political system.

The government of India has been trying to stimulate development in these areas. Since the actual governance of an area, as specified in the Indian Constitution, is left to the democratically elected provincial government, there is wide variation in the impact of democratic development on these societies.

An easy way to describe today's India would be by comparison to the European Union. If the European Union is able to achieve greater integration through single currency, similarity in legal and administrative structures, unified security and foreign affairs management, and a sense of patriotic loyalty to the Union among the citizens of member nations, then the European Union will closely resemble India. The Indian constitution recognizes 23 official languages while European Union has 20 official languages (*Encyclopedia: European languages.*; *Encyclopedia: India.*). The official figure of "mother tongues" spoken in India is 1,683, of which an estimated 850 are in daily use. The SIL Ethnologue lists 387 living languages for India (*Encyclopedia: Indian languages.*2005). The social, cultural, religious, and ethnic diversity of India surpasses that of the European Union.

Another way to describe India is by contrast with the United States. If the US society resembles a bag of multigrain rice in which diversity is visible but more or less uniformly dispersed, Indian diversity is visible like plums in a pudding.

Fighting insurgency has been a homeland problem for India. According to the Indian federal structure, the fighting of insurgency is a provincial responsibility. Therefore, depending on the local political situation, fluctuating and divergent counterinsurgency strategies are adopted in India. This accounts for the diversity of approach and different levels of success in counterinsurgency since India's independence in 1947. However, in spite of this diversity and inconsistency, there has been also a broad evolution of counterinsurgency strategy over the years because of involvement of the central (federal) government, army, central police organizations, Indian Police Service, Indian Administrative Service, and the linkages between provincial and central politics in counterinsurgency by state governments. A list of major insurgencies faced by India since independence in 1947 is shown below.

Place		J&K	Assam	Punjab	Nagaland	Tripura	Mizoram	Gorkhaland	Naxalism –1	Naxalism – 2
Period		1980-on	1979-on	1978-1996	1947- on	1980- on	1966-1976	1986-88	1967- 70s	1980- on
Terrain		hilly & forest	hilly & forest	plain	hilly & forest	hilly & forest	hilly & forest	hilly & forest	plain	mostly rural, hilly & forest
No. of States Involved		1	1	1	1	1	1	1	4	6
Style		guerrilla, terrorism	Maoist guerrilla, terrorism	guerrilla, terrorism	Maoist guerrilla	Maoist guerrilla, terrorism	Maoist guerrilla	Maoist guerrilla	Maoist guerrilla	Maoist guerrilla
Nature of Insurgency	Religious	√		√						
	Ethnic		√		√	√	√	√		√
	Ideology				√		√		√	√
	Linguistic		√					√		

Table 1. List of Major Indian Insurgencies

B. OBJECTIVE OF THE STUDY

The objective of this paper is to develop a theoretical perspective for analyzing the Indian experience with insurgency, and to discuss its implications for counterinsurgency in Third World countries. This thesis postulates that the strength of an insurgency and the success of the counterinsurgency strategy are the dependent variables, and factors like the inaccessibility of an area, the strength of separate social identity, and external influences are important independent variables. The role of relevant independent variables in deciding successful counterinsurgency strategy is discussed in the section containing recommendations.

C. LITERATURE REVIEW AND CONCEPTUAL DISCUSSIONS

1. Insurgency and Affected Population

Understanding the affected population is essential for understanding an insurgency or planning for counterinsurgency. The Marine Corps' Small Wars/21st Century (2005) cites Bernard Brodie's *War and Politics* as stating that "good strategy presumes good anthropology and good sociology," and "some of the greatest military blunders of all time have resulted from juvenile evaluations in this department" (Brodie, 1973. p.332). The Marine Corps goes on to note that,

> Fundamentally, war involves an iterative competition between peoples or societies. This combination of national history, myth, geography, beliefs, ethnic backgrounds and religion we know as culture…. The nature of Small Wars places a premium on an in-depth knowledge of a nation's or people's strategic culture—but more importantly its societal culture. (*SMALL wars/ 21st century*2005. p.25)

Blind application of conventional military doctrine can be the best recipe for failure. According to Leites and Wolfe(1970), "the military measures, forces, and capabilities that are best suited for counter insurgency are apt to differ from those that are best suited for other types of contingencies" (p.74). Application of conventional strategy in an insurgency situation is bound to alienate the affected population and provide the insurgent the advantage of propaganda. Krepinevich (1986) describes how the absence of "an innovative counterinsurgency strategy alienated the population and provided the enemy with an excellent source of propaganda" in Vietnam (p.198). In insurgency, the

components of the Clausewitzian trinity (Van Creveld, Martin L., 1999, p.42) lose their distinction. Eckstein (1964) points out that "[the] tripartite distinction between combatant, noncombatant, and support/supply system is typically blurred in guerrilla war, unlike conventional war" (p.83). According to van Creveld (1991), low intensity conflicts (LIC) very rarely "involve regular armies on both sides, though often it is a question of regulars on one side fighting guerrillas, terrorists, and even civilians, including woman and children, on the other" (p.20). In guerrilla warfare "in the classical sense, the 'people sea' forms a sanctuary of people support for the 'guerrilla fish'; in urban guerrilla warfare the anonymity of the city provides protection" (Mack, 1974, p.177).

Leites and Wolf (1970) describe insurgency as a system, and population as one of its important source of inputs (pp.150-151). The contested population is not only the end; it is also an important means for the insurgent. The insurgents and government of the day contest with one another to control the population as well as to gain their loyalty. Therefore, proper understanding of the contested population in a particular insurgency is absolutely necessary for deciding appropriate strategy for tackling it.

2. Susceptibility of Population to Insurgency

Skocpol(1994) holds that the probability of revolution against the state is determined by the degree of penetration of national territory by a state, the incorporation of socially mobilized groups, and the degree of bureaucratization of the state administration and its armed forces (p.273). This can be represented by the following diagram.

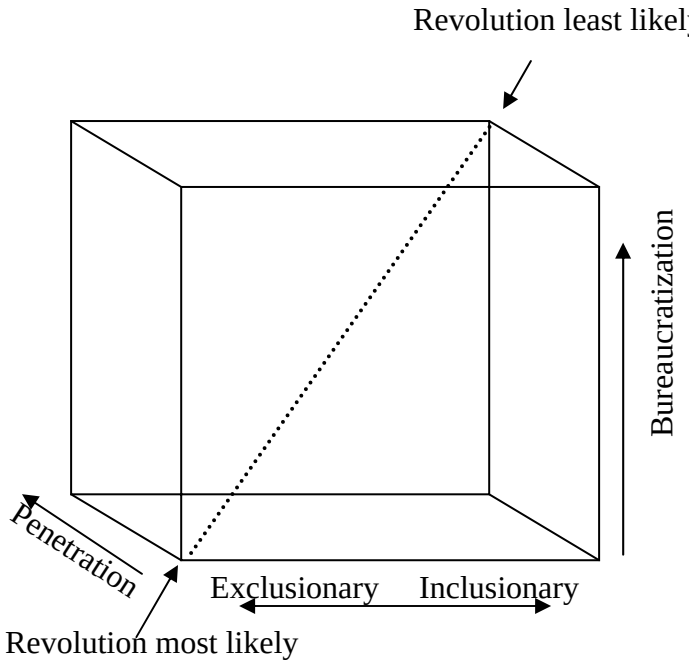


Figure 1. Skocpol's Model

3. Adapting Skocpol's Model to India

India, with a history of democratic governance for more than fifty years, should ideally score high on all three dimensions. True to the model, at the macro level, India has been able to handle the many insurgencies it has faced since independence from the British Empire in 1947. However, this does not explain the emergence of insurgencies at various areas within India. The reasons for these insurgencies can be traced to the many attributes of the country which, like many other Third World societies, affect all the three dimensions of Skocpol's model. Based on these aspects, a slightly different model is developed in the next chapter, which includes dimensions that are easier to estimate.

4. Social Control and Penetration

The first consideration is the degree of penetration of national territory by the state, which depends on both the reach of the administration as well as the nature and quality of governance. Every population has mechanisms for social control. According to Johnson (1966), "Society, conceived as the successful adaptation of a collectivity of people to their environment through a division of labor, can not succeed unless some

people have power over other people" (p.19). Quoting Weber, he describes "[a] state as a human community that (successfully) claims the *monopoly of physical* force within a given territory" (p.19). He further adds, "Every society needs institutions authorized to exercise force [for social control], occasionally, in order to establish confidence. The most typical form of this institution is the state" (p.30). Therefore, penetration of a state into a population implies social control by the state over the individual members of that population.

5. Fragmented Social Control in the Third World

Unlike the Western world, Third World countries, for the most part, have not evolved into modern nation states on their own. Western society slowly evolved from medieval to modern over hundreds of years. According to Tilly (1985), "looking back, one cannot help but be struck by the seemingly symbiotic relationship existing between the state, military power, and the private economy's efficiency in the age of absolutism"(p.179). All the subsystems reinforced each others' transformation into modern industrialized societies. This did not happen in the case of the Third World countries. According to Migdal (1988), Third World states are weak and are not able to provide satisfactory enforcement of the laws they promulgate. Many Third World countries "have differed from those of both the West and the socialist bloc, not so much in the amount of social control in the society but in its distribution and its centralization"(p.34). Third World countries, with web-like societies, have "[fragmented] social control dispersed among various social organizations having their own rules rather than centralized in the state or organizations authorized by the state" (p.40). At the time of its independence, Indian society did not resemble a feudal society, nor did it have a modern state. According to Kuppuswamy(1960),

> Conflicts at the cultural level and between social norms have been responsible for the large scale sense of frustration in the country [India]. Democracy, socialism and secularism are preached but hierarchy, inequality emotionalism and particularism are extensively practised at home and in all sectors of the society.(p.432)

The reasons for fragmented social control in the Third World can be traced to the colonial past. According to Migdal(1988), land tenure laws, taxes, and new modes of transportation introduced by imperial rulers destroyed the old social and political

arrangements within a very short period of colonization. Imperial powers preferred to rule through fragmented, indigenous leadership and local strongmen, rather than by establishing centralized social control in place of the old system. Thus, in these colonized societies, old social control was replaced by fragmented social control. Establishment of the Zamindari system and permanent settlement of land by British in India after 1858 are examples of fragmentation. Even in the societies that escaped former colonial rule, Migdal(1988) points out, "the alliance of European merchants and indigenous strongmen limited the ability of the state leaders to concentrate social control"(pp.51,91,127,&262).

6. Fragmented Social Control and Penetration by the State into a Population

To review, "every society needs institutions authorized to exercise force [for social control], occasionally, in order to establish confidence. The most typical form of this institution is the state" (Johnson, 1966, p.30). In case of Third World countries, where social control is fragmented, the weak state competes with 'strong' societies for popular control. Therefore, the degree to which social control is fragmented is a measure of lack of penetration by the state. The state has a better chance if a distinct society is divided compared to the situation when that society is more homogeneous. Therefore, the greater the social homogeneity of a distinct population, the less is the penetration of the state into that population.

In India, the population can be divided along many dimensions like religion, ethnicity, language and caste. The existence of a strong unifying social identity on any one of these dimensions, however, can offset the divisive tendencies of multiplicity in other dimensions. A population can have a strong cohesiveness due to a minority religion. In such a situation, the state will face strong competition from religious institutions in exerting social control over this population. This religious cohesiveness will be stronger if the population is less divided along other dimensions like ethnicity, language and caste. In other words, the relevant question is whether the particular population has a strong sense of separate social identity in contrast to the majority population. In view of the foregoing discussion, it can be assumed that the degree of the state's penetration into the population is inversely related to the strength of the separate

social identity of that population, and the sense of separate social identity should be sought in factors like a homogenous minority religion, regional language, ethnicity, caste, etc.

7. Multiplying Effect of Separate Social Identity for Insurgency

In an insurgency situation, the fragmentation of social control has a multiplying effect in favor of insurgents. It helps the insurgents by influencing the choices made by the population. Leites and Wolf (1970) point out that as a rational decision maker, an individual or a group in a population assesses the opportunities and/or consequences of joining the insurgents or helping the government (p.42). Therefore, an individual who is forced to choose one side or the other in an emerging situation will naturally be attracted to the one yielding higher social control.

This is even more apt because the social organizations which exercise social control over the individual also provide the person with the necessary trust networks. According to Sztompka (1999), an individual who is forced to choose one side or the other in an emerging situation is clearly taking a risk. Sztompka quotes Luhmann that "trust becomes the solution for specific problems of risk" (p.29). If the insurgents are representing the perceived grievances of the local dominant social group, an individual belonging to the social group is even more likely to cooperate with the insurgents. Moreover, it is clear that the state is not able to provide satisfactory enforcement of their laws. On the other hand, the population belonging to these areas is connected to the insurgency through the local social network and therefore forms the support base for the insurgency. Sikh and Kashmir insurgencies in India are obvious examples of these linkages.

8. Dependence of Insurgents on the Social Networks

Insurgents also depend on the social networks for their security. Bell (1988) describes how an insurgent organization, being an underground organization, is highly secretive and consequently inefficient (pp.204-209). Such an organization is forced to fragment into small local groups to avoid detection. It resembles Barabasi's (2003) description of loosely interconnected clusters inside a hierarchical network (Barabasi & Bonabeau, 2003, p. 68). Its existence depends on the risky business of maintaining communication and coordination among its clusters with utmost secrecy. Therefore, the

insurgents try to prevent entry of anybody who cannot be trusted into their in-group. According to Sageman(2004) the terrorist groups resist the temptation to expand through recruitment drives or brainwashing in order to ensure security. The preexisting social affiliations of an incumbent form the initial basis on which he or she is granted formal affiliation (pp. 107&111). For the recruit, also, trust based on social network plays a big role, because he or she risks everything, including life, by joining the insurgency. Sztompka(1999) explains how social capital, like social networks, family, friendship and religion, helps in taking risk (pp129-131).

Therefore, the existence of a separate social identity in the target population is very helpful to the insurgents. On the other hand, if the insurgents are not linked to the entire population, it can be their weakness. According to Gill(2001), the Sikh insurgency, which ultimately could not sustain itself, was waged not by the entire Sikh community, but was "actually a rebellion of a privileged, quasi-feudal, caste based orthodoxy that saw its privileges shrinking" (pp.68-69). Gill also speaks of how "it was the Sikhs . . . that stood against the movement for Khalistan. 65 percent of the Punjab police, of course, were Sikhs. But more significantly, there was increasing and organized resistance among civilians [Sikhs] against terrorist violence" (p.26).

9. Bureaucracy and Separate Social Identity

Finally, fragmentation of social control adversely affects the bureaucratic agencies of the state. The sense in which Skocpol uses the phrase "bureaucratization of state agencies and armed forces," refers to the impersonal and bureaucratic forms of the state and its agencies (Skocpol, 1994, p.272). While many non-democratic states have highly bureaucratized agencies and armed forces, it is difficult to imagine any reasonably large democratic state without bureaucratic agencies. At the time of their independence from colonial rule, bureaucracies in the Third World did not have the level of objectivity and rational organization which is the hallmark of modern democracies. According to Migdal(1988), in a society with fragmented social control, "The bureaus of the state may become little more than the arenas for accommodation [by the state] with other organizations [of social control]. Their tentacles may be captured by those with very different rules and principles from those expressed in the state's legal code, and state resources may be used to strengthen the very forces they aimed to eliminate"(pp.265-

266.). Thus the strength of separate social identity of an area's population can adversely affect the bureaucratization of state administration and its police in that area.

10. Inaccessibility and Insurgency

In the Third World, the inaccessibility of an area directly helps insurgency in many ways. Inaccessible areas provide excellent havens for insurgents. Mack(1974) discusses how “operating in uninhabited areas and supplied from without . . . the insurgents may simply rely on the mountains and forests to conceal and protect them”(Mack, 1974, p.177).

11. Inaccessibility and Penetration by the State

The remoteness of an area inhibits penetration by the state into its population in a significant way. According to Leites and Wolf (1970), less developed countries have units that are physically, functionally, and technologically remotely situated within the bigger political entity. The state and its agents are not part of the "life-world" of these remote people (p.31), and hence, do not enjoy their confidence. On the other hand, the insurgents normally thrive in these remote areas and their social networks. The population belonging to these areas is connected to the insurgency through the local social network and forms the support base for the insurgency, as discussed above. More than the physical distance, remoteness can result from inaccessibility due to forests, rugged mountains, inhospitable terrain or extreme climate. As mentioned in earlier sections, historical events dating back hundreds of years have resulted in populations living in inaccessible areas in the Third World. Members of the government machinery who do not belong to these remote populations are reluctant to go to these places or to live there. The government may build schools, hospitals, police stations and other facilities, but vast majority of these facilities may be defunct due to absenteeism by government employees. Thus the inaccessibility of an area inhibits penetration by the state into the local population.

12. Inaccessibility and Social Change

Inaccessibility of an area inhibits economic development which might have helped the state to better penetrate the population. Economic development is understood to have strengthened the state in medieval Europe at the expense of other competing agents of social control. According to Karl Marx, the developments and changes in

human history are basically shaped by the economic, technological and more broadly, material developments. Similarly, Tilly (1985) describes how, “looking back, one cannot help but be struck by the seemingly symbiotic relationship existing between the state, military power, and the private economy’s efficiency in the age of absolutism” (p.179). The dynamism that is instigated by economic developments or cognitive changes resulting from exposure to science, technology and democracy has also induced a slow social transformation in countries like India. In India, for example, economic developments have forced people to migrate from one area to another or from rural areas to urban industrial areas, greatly reducing the hold of the pre-independence social controls by caste, village, religion and tribe.

However, because this transformation is related to economic development, it bypasses the inaccessible areas within the country. In these areas, for geographical or historical reasons, very little economic development has taken place since India’s independence. Hilly areas, due to their inaccessibility, and forest areas, due to environmental protection concerns, do not get their share of economic development. At the same time, large scale migration from these areas is impeded by the people's attachment to their ancestral lands. Thus the inaccessibility of an area insulates the area from social transformation that affects the other areas of the society.

13. Inaccessibility and Relative Deprivation

The inhabitants of inaccessible areas feel an acute sense of relative deprivation because of all the points discussed above. Increases in the flow of information into these areas through radio, TV, long distance telephone and the internet have contributed to this sense of deprivation. These communication channels bring information about what goodies are available to others in the country, what opportunities the society is supposed to provide, and the tall claims by national and regional politicians about what has been made available to every citizen. But because of economic underdevelopment, the inhabitants of inaccessible areas do not find any of these things available to them in sufficient quantity. This contributes to the sense of relative deprivation which in turn increases the disposition to collective violence. According to Gurr(1970), “the capacity, but not the need, for violence appears to be biologically inherent in men. The disposition

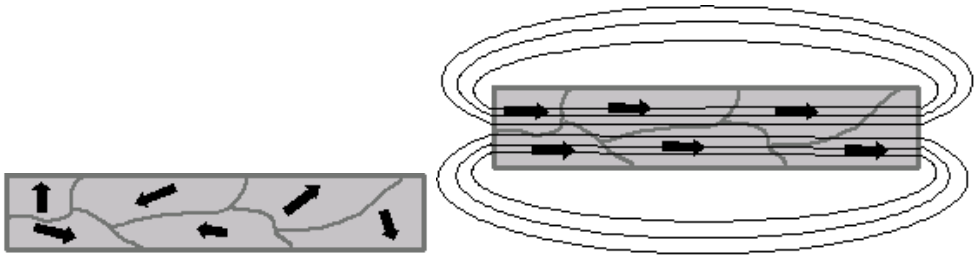
to collective violence depends on how badly societies violate socially derived expectations about the means and ends of human action"(p.317).

14. Inaccessibility and Exclusion from State

The inaccessibility of a population also affects the relative power position of its politicians in the state's politics. If its representatives are marginalized in the national level politics, then the population can be expected to have less sense of inclusion in state governance. Thus inaccessibility is a hindrance to the state's inclusiveness. Clearly, inaccessibility of a population both determines and reflects the penetration by the state into the population as well as the population's inclusion in the state's politics.

15. External Unifying Influence and Insurgency

Finally, a short discussion about the internal social dynamics of the target population can provide insight into yet another aspect which has contributed to the growth of insurgency in India. How Third World societies are fragmented has already been discussed. Even a small population may have many divisions. One of the basic divisive aspects of an otherwise homogenous population is kinship segmentation. Such segments usually remain divided but can unite in certain circumstances. Keiser (2002) brings out this segmentary opposition in his study of an isolated population in Pakistan. He, however, describes how "[sometimes] segmentary units mobilize [or unite] to protect their reputation and their rights to natural resources" (p.82.). Therefore, it is suggested that a unifying external force can play a catalytic role in unifying and aligning the segments, very much the way domains of a ferromagnetic substance become aligned by an external magnetic field (shown below). The external unifying force is not necessarily from across the country's political boundary. It can be any influence external to the target population.



Un-magnetized Material Magnetized Material

Figure 2. External Unifying Influence

Thus the strength of the separate social identity of a population and its inaccessibility affect all three dimensions of Skocpol's model. At the same time, the presence of a unifying external force can help mobilize the segments of an isolated population.

D. HYPOTHESES

Based on the discussion above, I advance the following hypothesis.

In India, the degree of inaccessibility of an area, the strength of separate social identity of its population, and the amount of external unifying influence on it, determine the propensity of that area for insurgency.

E. SCOPE

To test this hypothesis, I examine all the major insurgencies in India since independence.

F. METHODOLOGY

1. A simple model is developed to explain the emergence and strength of insurgencies in India.

2. Secondary and tertiary sources are used for collating data to test the model.

II. THE MODEL

A. PROBLEM

As discussed in the first chapter, according to Skocpol, the degree of penetration of national territory by a state, the extent of incorporation of socially mobilized groups, and the level of bureaucratization of the state administration and its armed forces, determine the probability of revolution against the state. This is shown diagrammatically in the model (see figure 1 at page 8).

It was pointed out that India, with a history of democratic governance for more than fifty years, should ideally score high on all the three dimensions. In fact, the model explains India's stability and success in the face of all odds. However, in spite of its democracy, since independence India has experienced insurgencies in various areas which require explanation. In the previous chapter, the explanation of Indian insurgencies was traced to certain aspects of the society and state inherited by Third World nations from their colonial past. These aspects, like the fragmentation of social control and the preponderance of relative deprivation in inaccessible areas, affect all the three dimensions of Skocpol's model. However, it is difficult to empirically verify the explanation using Skocpol's model, as the three dimensions it presents are difficult to measure quantitatively. Therefore, a slightly different model is developed in this chapter, with dimensions that are easier to estimate empirically.

B. DESCRIPTION OF THE MODEL

1. Assumptions

Assumption 1: The greater the sense of separate social identity a population has, the more prone it is to insurgency.

Assumption 2: The more inaccessible an area, the more vulnerable it is to insurgency.

Assumption 3: A unifying external force can play a catalytic role in unifying and aligning a segmented society, thereby mobilizing the population towards political action, including insurgency.

2. Variables

There are four variables: (1) the degree of inaccessibility of an area, (2) the strength of separate social identity of its population, (3) the strength of external unifying influence on the population, and (4) the propensity towards insurgency shown by the area. The first three are independent variables and the fourth is the dependent variable.

3. Relationship among the Variables

The basis for this model is the hypothesis that in India, the degree of inaccessibility of an area, the strength of separate social identity of its population, and the amount of external unifying influence upon it, determine the propensity of that area for insurgency. The relationship among the variables is presumed to be linear.

$I = C_x X + C_y Y + C_z Z, + I_0$ where

I is the propensity towards insurgency shown by an area,

I_0 is the value of I when all the other factors on the right-hand side are 0,

X is the strength of separate social identity of its population,

Y is the degree of inaccessibility of the area, and

Z is the amount of external unifying influence on the population.

C_x, C_y, and C_z are coefficients or weights given to each variable. These are necessary because all the variables are of different types with different units. Basically, this takes care of the fact that tigers, dogs and hyenas are added and compared with elephants.

The Indian insurgency model looks like the following figure.

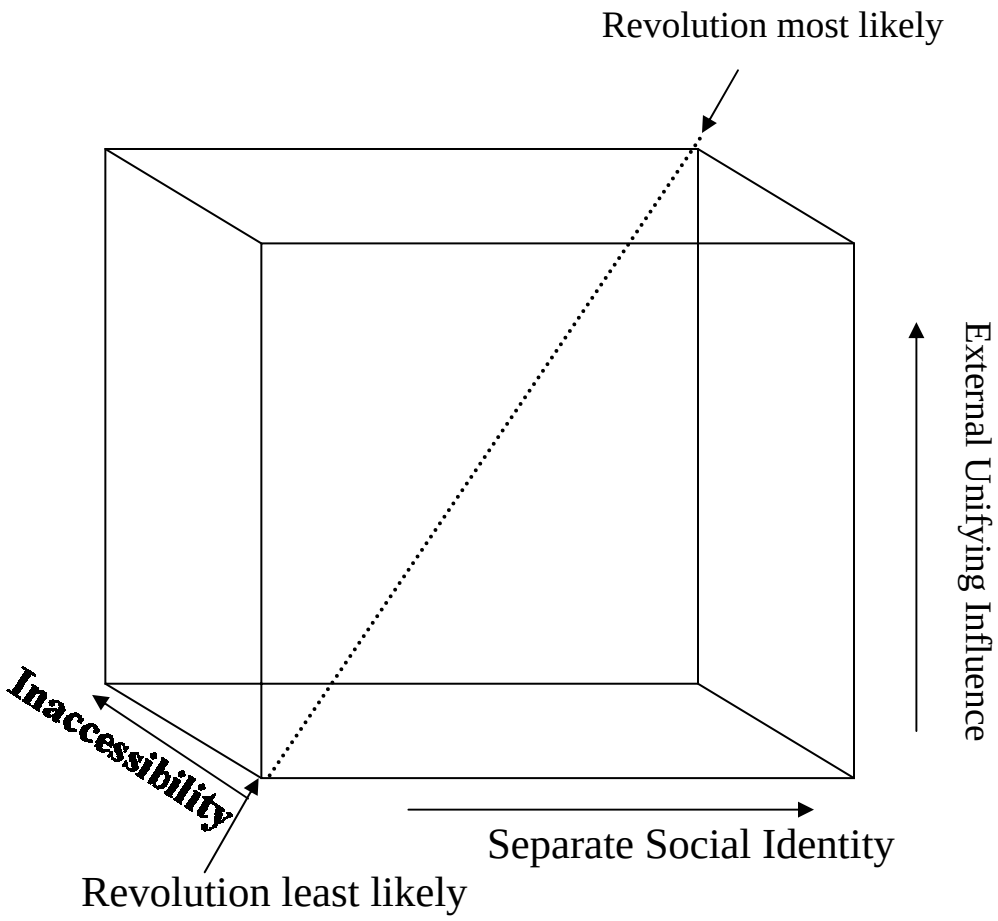


Figure 3. Indian Insurgency Model

4. Definitions

The Strength of Separate Social Identity (SSI): Can be defined as the sense of separation from majority population through religion, language, ethnicity, and any other distinct social attribute of the population as a whole. In other words:

$X = C_{xrel}X_{rel} + C_{xlang}X_{lang} + C_{xethn}X_{eth} + C_{x?}X_{?}$, where

X_{rel} is the *SSI* due to religion. It is taken as 1 in case the population mostly belongs to a minority religion, otherwise it is 0.

X_{lang} is the *SSI* due to language. It is taken as 1 in case the population mostly speaks a minority language, otherwise it is 0.

X_{ethn} is the *SSI* due to ethnicity. It is taken as 1 in case the population mostly belongs to one ethnic group, otherwise it is 0.

$X_?$ is the *SSI* due to any other social attribute. It should be computed the same way as above. An example of such a social attribute is caste. This analysis, however, is limited to the first three attributes only.

C_{xrel}, C_{xlang}, C_{xethn}, and $C_{x?}$ are the coeeficients.

The Degree of Inaccessibility of an Area(Y): Can be defined as a combination of the average amount of forest coverage in that area and the average slope of the terrain of that area. In other words:

$Y = C_{yfor}Y_{for} + C_{yslope}Y_{slope}$, where

Y_{for} is the average forest coverage of an area. If 60% of an area is covered by forest, on a scale of 1 to 10, the area will get 6 as its Y_{for}.

Y_{slope} is the average slope of the terrain of an area. For example, a flat area situated on a plateau and a plain area at sea level may have average slope close to 0, while hilly areas have values close to 90 degrees irrespective of their altitude. The average slope is a measure of hilliness or undulation of an area and not the elevation from sea level.

C_{yfor} and C_{yslope} are the coefficients.

The Amount of External Unifying Influence (Z): Can be defined as the proportion of persons among the top leadership of the main insurgent groups who are of outside origin or who spend a lot of their time outside the affected area. For example, if 2 out of 6 top leaders of the main insurgent group either do not belong to the area or live outside the area, then on a scale of 1 to 10, the insurgency gets $Z = 3.33$.

Propensity for Insurgency: This is the dependent variable. It can be defined as the level of insurgency seen in the past.

C. METHODOLOGY FOR TESTING THE MODEL

Due to paucity of time and resources, attempts are made to verify the correlation only between the level of insurgency (dependant variable) and the following two dimensions (independent variables): Degree of Inaccessibility of an Area, and Strength of Separate Social Identity of its Population.

The third dimension, External Unifying Influence, is dealt with less rigorously and supported through empirical observations.

Units for Comparison: The parliamentary constituencies have been taken as units for statistical comparison. The lower house of the Indian parliament is composed of representatives of the people chosen by direct election on the basis of adult suffrage. The maximum strength of the House envisaged by the Constitution is 552, with up to 530 members representing the states, up to 20 members representing the Union Territories, and not more than two members nominated by the President of India. For the purpose of elections to parliament, the entire country and population are divided into parliamentary constituencies of more or less equal population size. This analysis uses 528 constituencies belonging to the states, for the sake of comparison. Each unit has about one million population, which makes the population of each unit of comparison more or less equal in size.

Combining Variables: Both the independent variables and each of their components are of different types and the units of measurements adopted are also arbitrary. Therefore, for combining or adding them, coefficients are used. Regression analysis by Microsoft Excel is used to find the values of the coefficients which optimizes the correlation of the combination of independent variables with the dependent variable. However, for more accurately identifying the relevance of individual independent variables, the correlation between each component of the independent variable is also compared with the dependent variable.

Correlation: If the causal relationship hypothesized on the basis of the theoretical arguments is correct, then there should be high correlation between the combination of independent variables and the dependent variable. The reverse may not be true, i.e., a strong correlation does not necessarily mean a causal relation. However, a negligible or

low correlation would show a lack of linear causal relationship. For computation of the correlation, graphical as well as analytical methods are used. In the analytical method, Regression Analysis by Microsoft Excel is used. The data on each variable for each unit (parliamentary constituency) is tabulated. Then, with the help of the software, the correlation between the dependent variables and the independent variable is calculated.

D. DATA

1. Slope of the Terrain:

World elevation data was downloaded from Geography Network and the map of Indian parliamentary constituencies was downloaded from http://www.eci.gov.in/ official portal of Election Commission of India. With the help ArcGIS software, the average slope of the terrain for each constituency was calculated.

a. World Elevation Data

The data about elevation for India and nearby areas was downloaded from Geography Net, with the help of ArcGIS software. The following GIS map represents the data graphically.

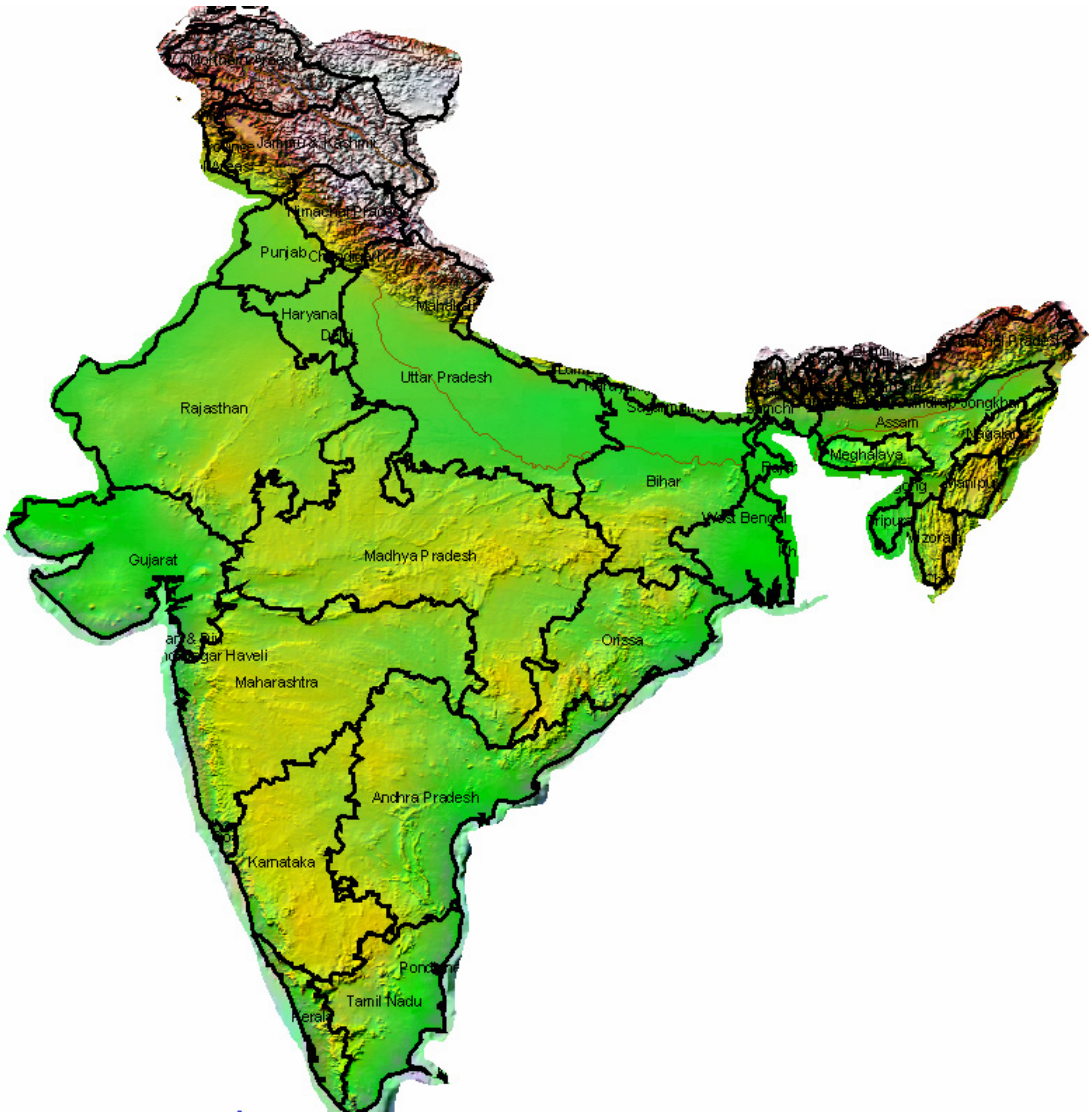


Figure 4. Elevation Map of India
(*Source*: *http://www.geographynetwork.com/explorer/explorer.jsp?mode=arcmap* accessed on 7/10/2005)

b. Slope Calculation

Using the above data, ArcGIS software calculated the slope. The following map shows the data graphically.

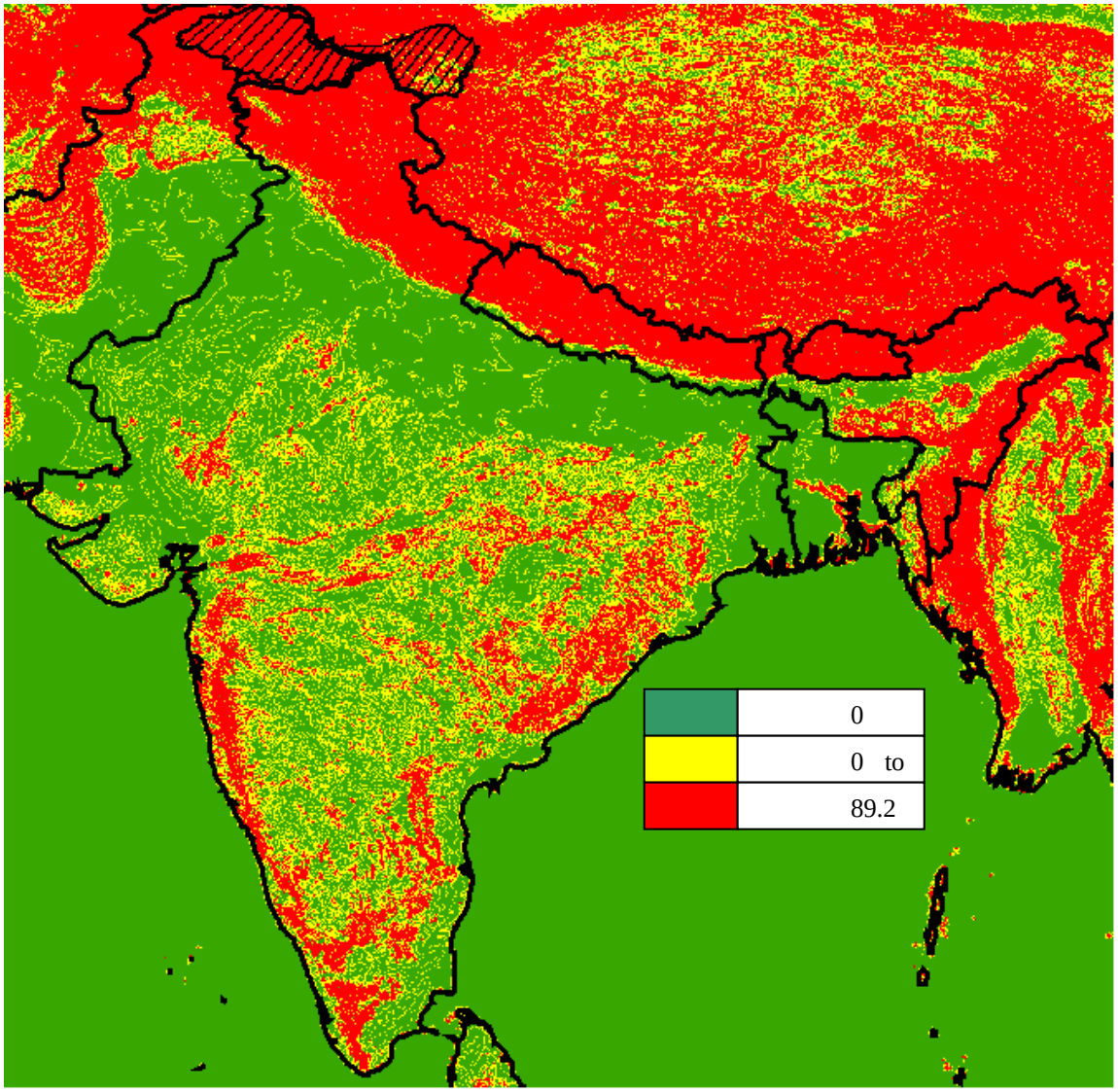


Figure 5. Slope Map of India

c. Map of Parliamentary Constituencies

The following GIS map showing parliamentary constituencies of India was downloaded from official website of the Election Commission of India.

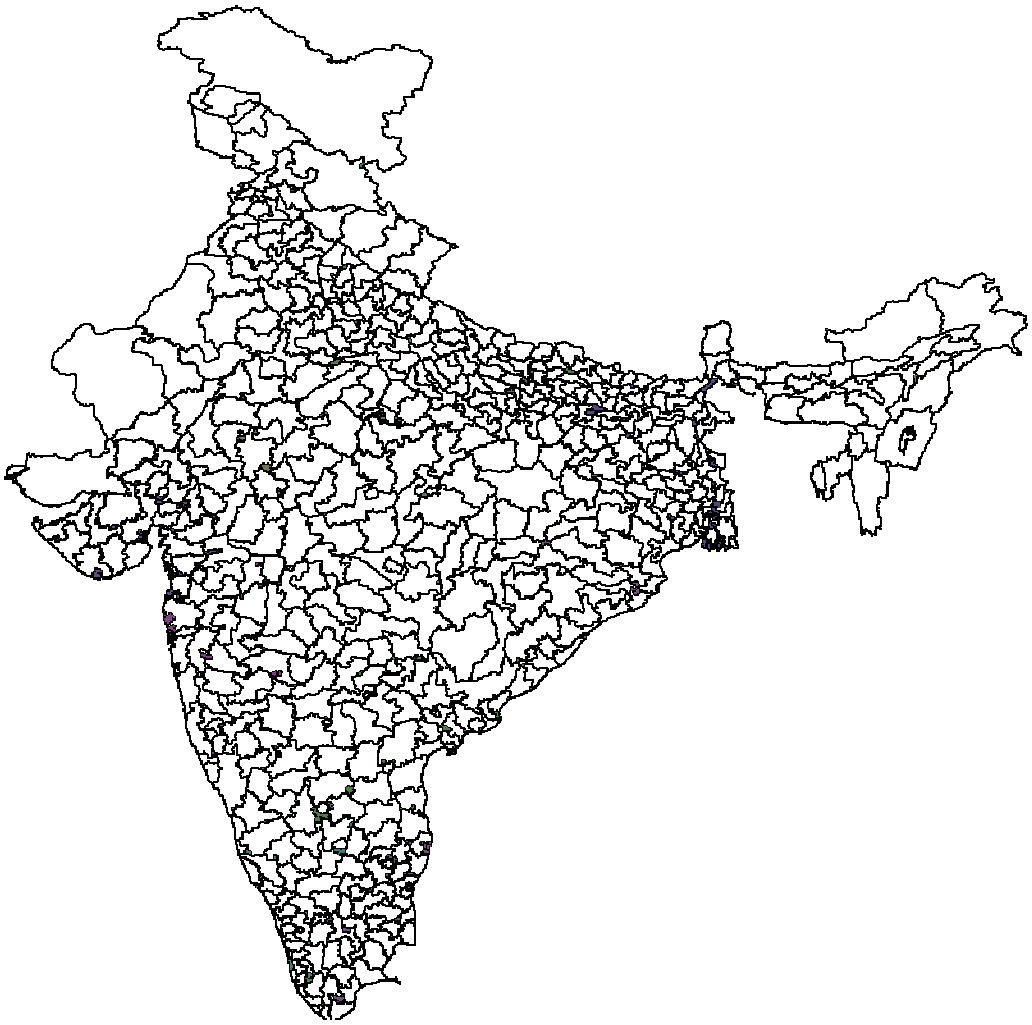


Figure 6. Outline Map of Parliamentary Constituencies of India
(*Source:* *http://www.eci.gov.in/* accessed on 9/4/2005)

d. Average Slope for Each Parliamentary Constituency

Combining the above map with slope data, ArcGIS calculated the average slope for each constituency. The data is given below graphically for the state of Orissa, where the first number within each constituency shows the average slope of that

constituency in degrees and the alphanumerical number below it shows the identifying code number of the constituency. The identifying code number is unique for each parliamentary constituency. This number has been used as the key number for tabulating and handling the data.

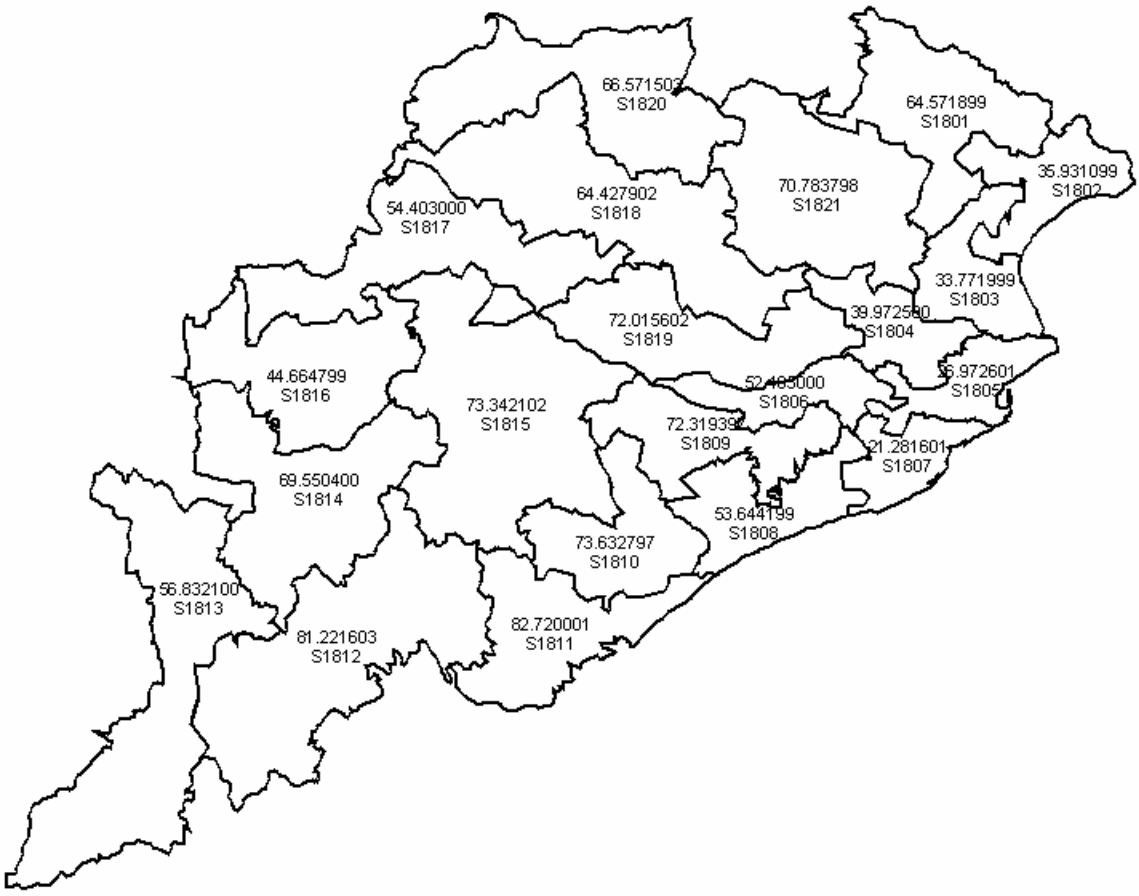


Figure 7. Average Slope Shown on a Map
(The first number in each constituency shows the average slope of that constituency in degrees and the alphanumerical number below it shows the identifying code number of the constituency.)

2. Average Forest Cover

Average forest cover has been calculated by visual estimation of the amount of forest as presented on the official site of the Environment Ministry of the Government of India juxtaposed onto the parliamentary constituency maps.

a. Statewide Forest Maps

Maps of statewide forest coverage were downloaded from State of Forest Report (2001) by National Forest Commission of India. These maps were superimposed on the map of Indian Parliamentary Constituencies.

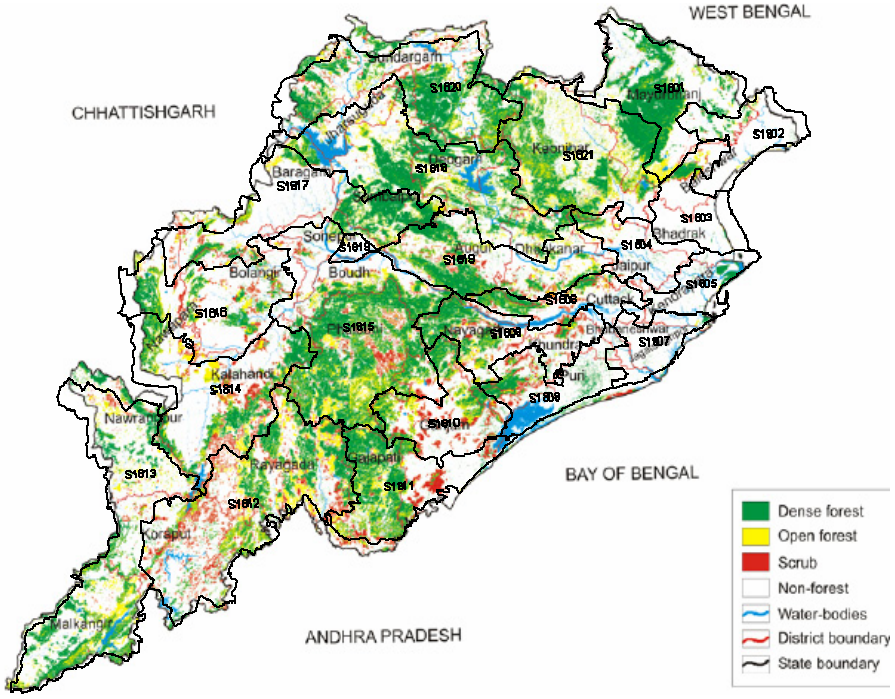


Figure 8. Map of Forest Coverage of Orissa State
(*Source: http://envfor.nic.in/nfc/s-chap-6.pdf 6/27/2005*)

3. Separate Social Identity (SSI)

As discussed in Section B.4 of this chapter, SSI is the sense of separation from the majority population through religion, language, and ethnicity. Therefore, data was collected separately for the three aspects of SSI.

a. SSI due to Religion

The following map shows the demographic distribution of religion in India. Only data regarding places where a minority religion was majority was tabulated. Except for a couple of small pockets, the areas where religious minorities are in the majority coincide with parts of state boundaries.

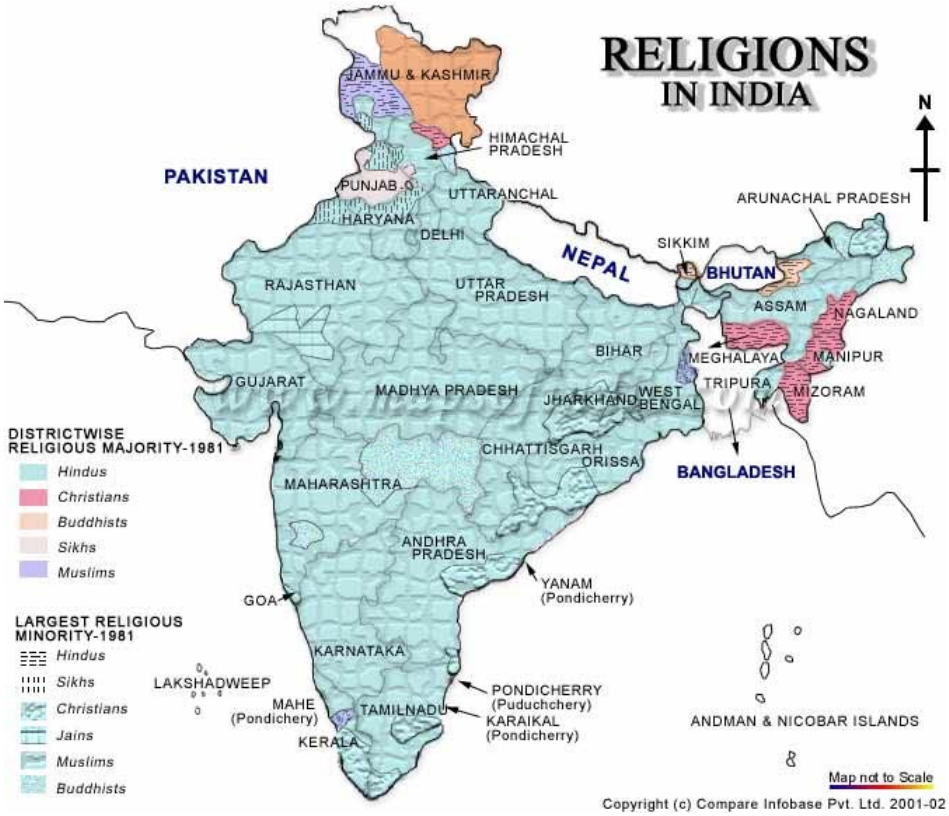


Figure 9. Map of Religions in India
(*Source: http://www.mapsofindia.com/maps/india/religionsinindia.htm accessed on 7/10/2005)*

b. SSI due to Language

The following map shows the demographic distribution of languages in India. Hindi is the language spoken by the majority population. The major linguistic

minorities' areas coincide with the state boundaries. In the introductory chapter of this thesis, it was mentioned that the Indian constitution recognizes 23 official languages (*Encyclopedia: India.*). The official number of "mother tongues" spoken in India is 1,683, of which an estimated 850 are in daily use. The SIL Ethnologue lists 387 living languages for India (*Encyclopedia: Indian languages.*2005). For the purpose of this study, data was confined to the main linguistic minorities.

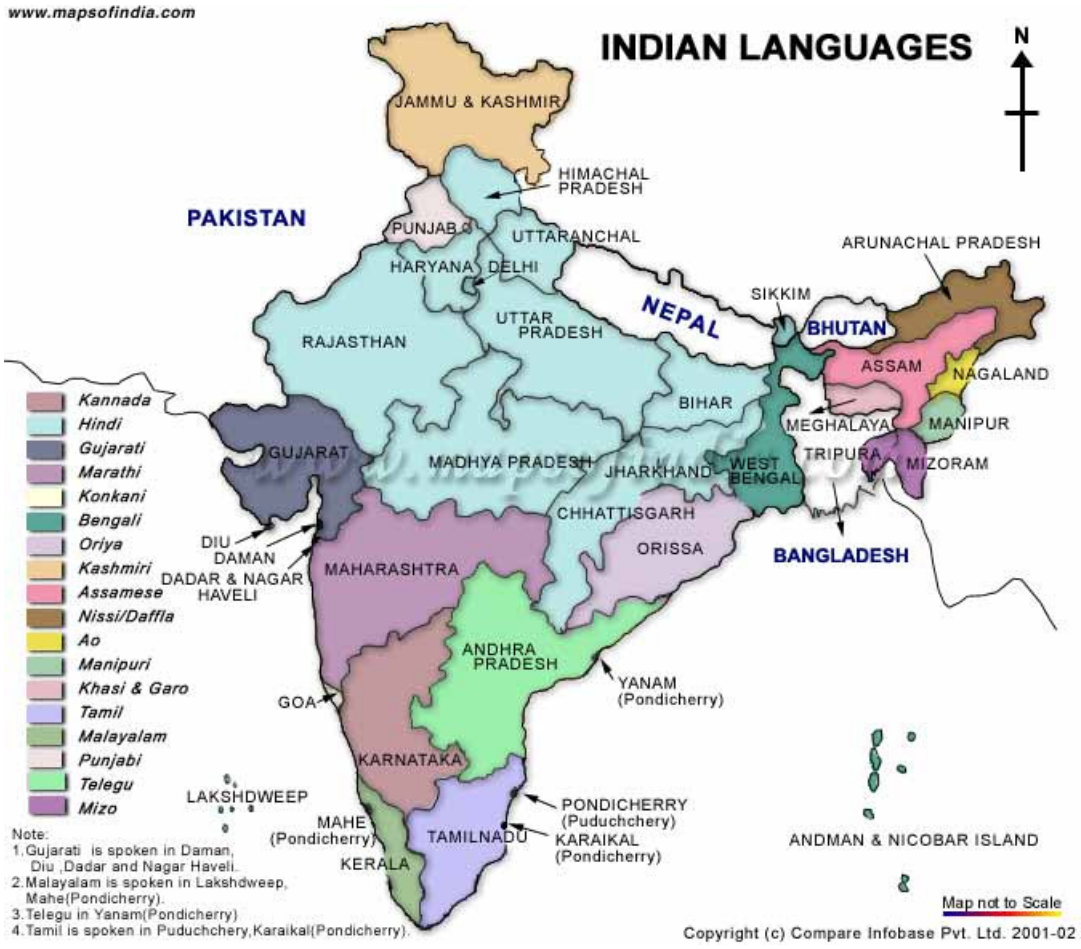


Figure 10. Map showing Main Indian Languages
(*Source: http://www.mapsofindia.com/index.html accessed on 7/10/2005*)

c. SSI due to Ethnicity

The following GIS map shows parliamentary constituencies of India. There are some constituencies which are reserved for persons belonging to certain castes. Similarly, some constituencies are reserved for tribes. These are called Scheduled Castes and Scheduled Tribes. These provisions in the Constitution of India were made to insure

political participation by those sectors of the population because they had inherited social and economic handicaps at the time of India's independence. The ethnic distinctiveness of the Scheduled Castes has been lost over the thousands of years of their assimilation into the mainstream of Indian society, but the Scheduled Tribes have distinctive ethnicity due to their non-assimilation into the mainstream society. Members of Scheduled Tribes can be found nearly everywhere in India, but their population can be taken as concentrated in the constituencies reserved for them. Therefore, this data was tabulated for distinct ethnicity.

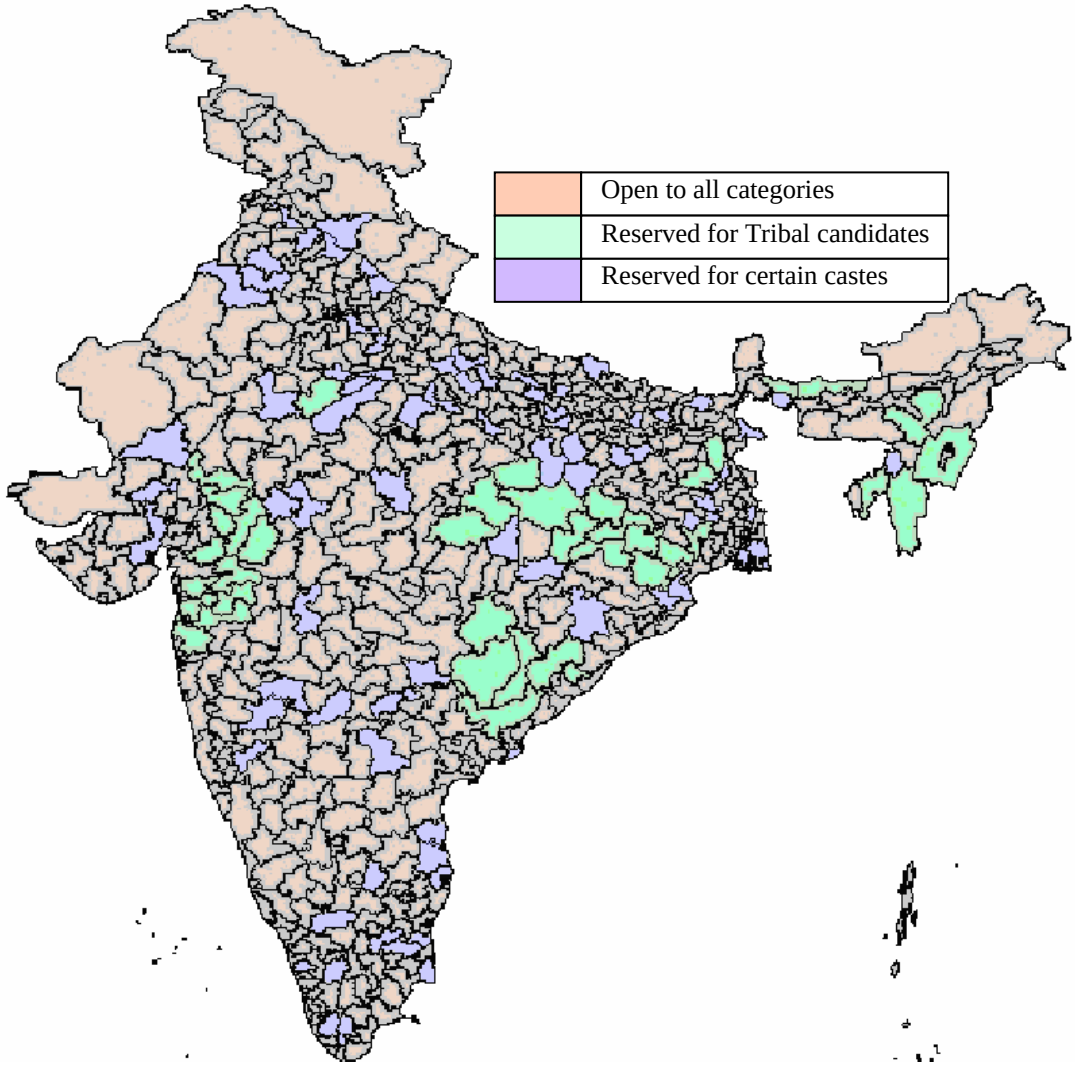


Figure 11. Map showing Parliamentary Constituencies of India Reserved for Scheduled Tribes and Scheduled Castes
(*Source: http://www.eci.gov.in/ accessed on 9/4/2005*)

4. External Unifying Influence

Due to paucity of time and opportunity, data regarding top leadership of different insurgent groups could not be collected. Therefore, the relevance of this variable could not be established through quantitative correlation. As an alternative, empirical evidence has been used to verify this dimension of the model, as discussed later in this chapter.

5. Level of Insurgency

A rigorous definition of level of insurgency would be highly desirable. There are both spatial as well as temporal aspects to insurgency. The level of insurgency can refer to the duration of an insurgency, the peak level of violence perpetrated by it, the total amount of violence, the level of popular support, the strength of the cadre, the size of the affected population as a percentage of the total target population, the size of security forces deployed by the state to control it, the area over which the insurgents have real control, or the extent to which the insurgency achieves its objectives. In this thesis, the measure of the level of insurgency is based on the author's considered but informal judgment of all the criteria based on experience and a review of relevant literature.

Naga Insurgency: This is the oldest and most mature insurgency in India. It is called Mother of Insurgency in India. The insurgents in northeast India have looked upon the Naga insurgents for inspiration. It has been able to hold its ground for more than 50 years and perpetrate violence at will. Recently, one of the two factions of Naga insurgents has started talks with the government of India for a peaceful solution. All things considered, it is evaluated I =5.

Kashmir Militancy: Though the insurgency has been active for only about 25 years, its consistently high level of violence and daring actions beyond its area of influence puts it close to the level of Naga insurgency. It is evaluated I = 4.

Mizo Insurgency: This was active for about 10 years but during that time the level was very high. It arrived at a peaceful solution with government of India, and the insurgents achieved part of their demands. Its leaders went on to participate in state democratic politics and gained power off and on. Thus, they are evaluated I = 4.

Sikh Militancy of Punjab: Punjab militancy was very violent and daring. For about 18 years it created terror in Punjab and nearby areas, including the national

capital. It attracted international attention by its level of violence. However, it could not hold its ground and was crushed. It is evaluated $I = 3$.

Tripura Tribal Militancy: The tiny state of Tripura has been ravaged by tribal militancy for nearly 25 years. The level of violence has been high, but it consists mostly of kidnapping. It is evaluated $I = 3$.

Insurgency in Assam: Though this insurgency has been active for about 25 years, its level of violence and activities have been decreasing over the years. It is evaluated $I = 2$.

Darjeeling Gorkha Agitation: This was not an insurgency in true sense since they did not demand separation from the union, but the level of violence and tactics puts them in the same category. They were successful in achieving parts of their objective. It is evaluated $I = 2$.

Left Wing Extremism: The left wing extremism is quite high in certain core areas whereas in other areas they operate only once in a while. Though a large number of districts in the central part of India are affected by this insurgency, the average level in the entire area is low. Not having a resolution on the variation in the level of extremism within the affected area, it is taken as uniform and evaluated $I = 1$.

Other Minor Insurgencies: There are minor insurgencies in Manipur and Arunachal Pradesh, which have been evaluated as $I = 1$.

The following map showing insurgency in India, expressed in terms of high and low intensity conflict, was also used for identifying boundaries.

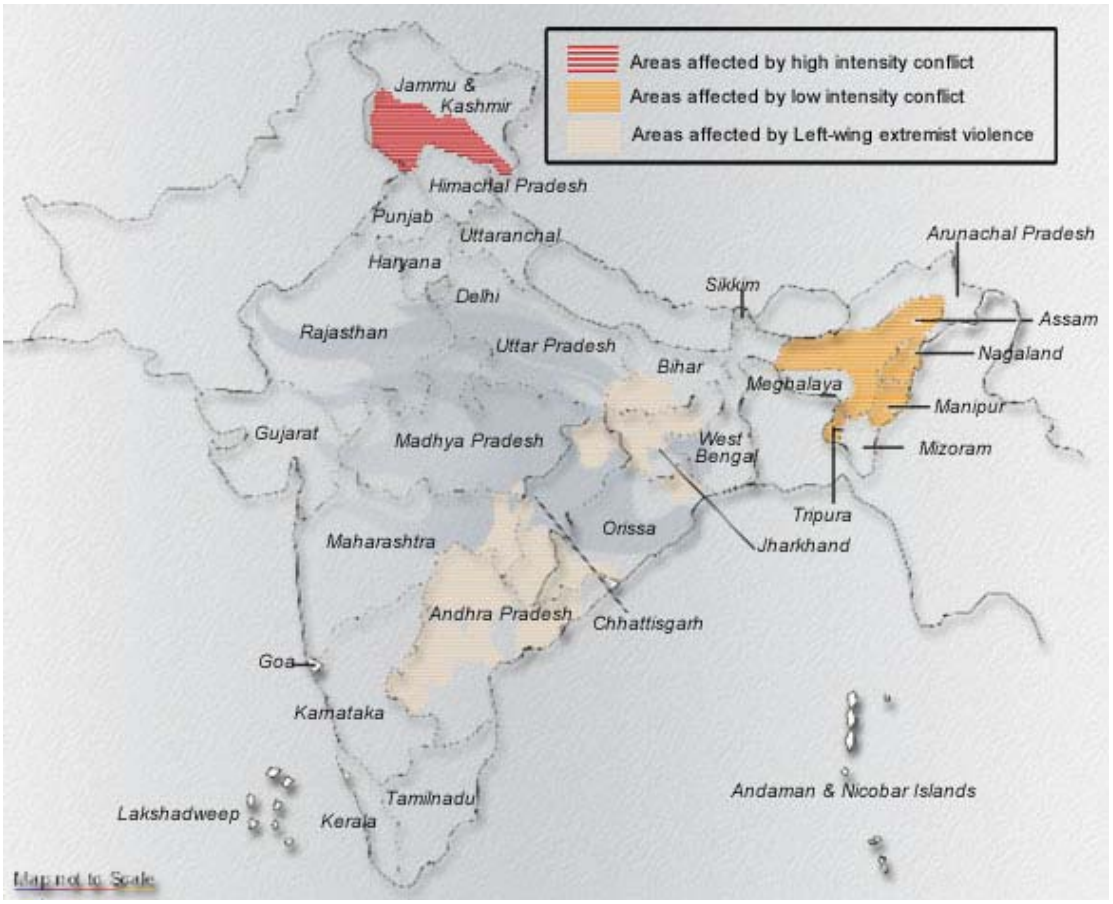


Figure 12. Map of Major Insurgencies in India

(*Source:* http://www.satp.org/satporgtp/countries/india/images/indiaconflict.jpg accessed on 7/12/2005)

6. Tabulation of Data

The above data was tabulated in an EXCEL work sheet. Except for the slope, forest, and insurgency, all other values were entered 1 for presence and 0 for absence. The slope was entered as calculated by ArcGIS software from data taken from Geography Net, forest was entered on a scale of 1 to 10, and insurgency was entered on a scale of 1 to 5. The tabulated data can be seen in Annex I.

E. TESTING THE MODEL

If the causal relationship suggested by the hypothesis is correct, then there should be a high correlation between the combination of independent variables and the

dependent variable. In other words, a negligible or low correlation would show a lack of causal relationship. The following causal relationship was tested using available data.

$I = C_x X + C_y Y + C_z Z + I_0$, where

I is the propensity towards insurgency shown by an area,

I_0 is the value of *I* when all the other factors on the right-hand side are 0,

X is the strength of separate social identity of its population,

Y is the degree of inaccessibility of the area, and

Z is the amount of external unifying influence on the population.

C_x, C_y, and C_z are coefficients or weights given to each variable.

Because data has been collected only for *X* and *Y*, and because both the variables have been further broken into their components, the relationship to be tested can be expressed by the following equation.

$I = C_{xrel}X_{rel} + C_{xlang}X_{lang} + C_{xethn}X_{eth} + C_{yfor}Y_{for} + C_{yslope}Y_{slope} + I_0$

I_0 is the value of *I* when all the other factors on the right-hand side are 0,

X_{rel} is the *SSI* due to religion.

X_{lang} is the *SSI* due to language.

X_{ethn} is the *SSI* due to ethnicity.

Y_{for} is the average forest coverage of an area.

Y_{slope} is the average slope of the terrain of an area.

C_{xrel}, C_{xlang}, C_{xethn}, C_{yfor}, and C_{yslope} are the coefficients.

For verification by correlation, both the graphical method as well as the analytical method are used.

1. Graphical Method

For graphical comparison, the maps of slope, forest, religion, language, and ethnicity, available in section D of this chapter, were superimposed on each other and

then the superimposed map was compared with the map of insurgency. First, the following map was produced by superimposing the forest and slope maps.

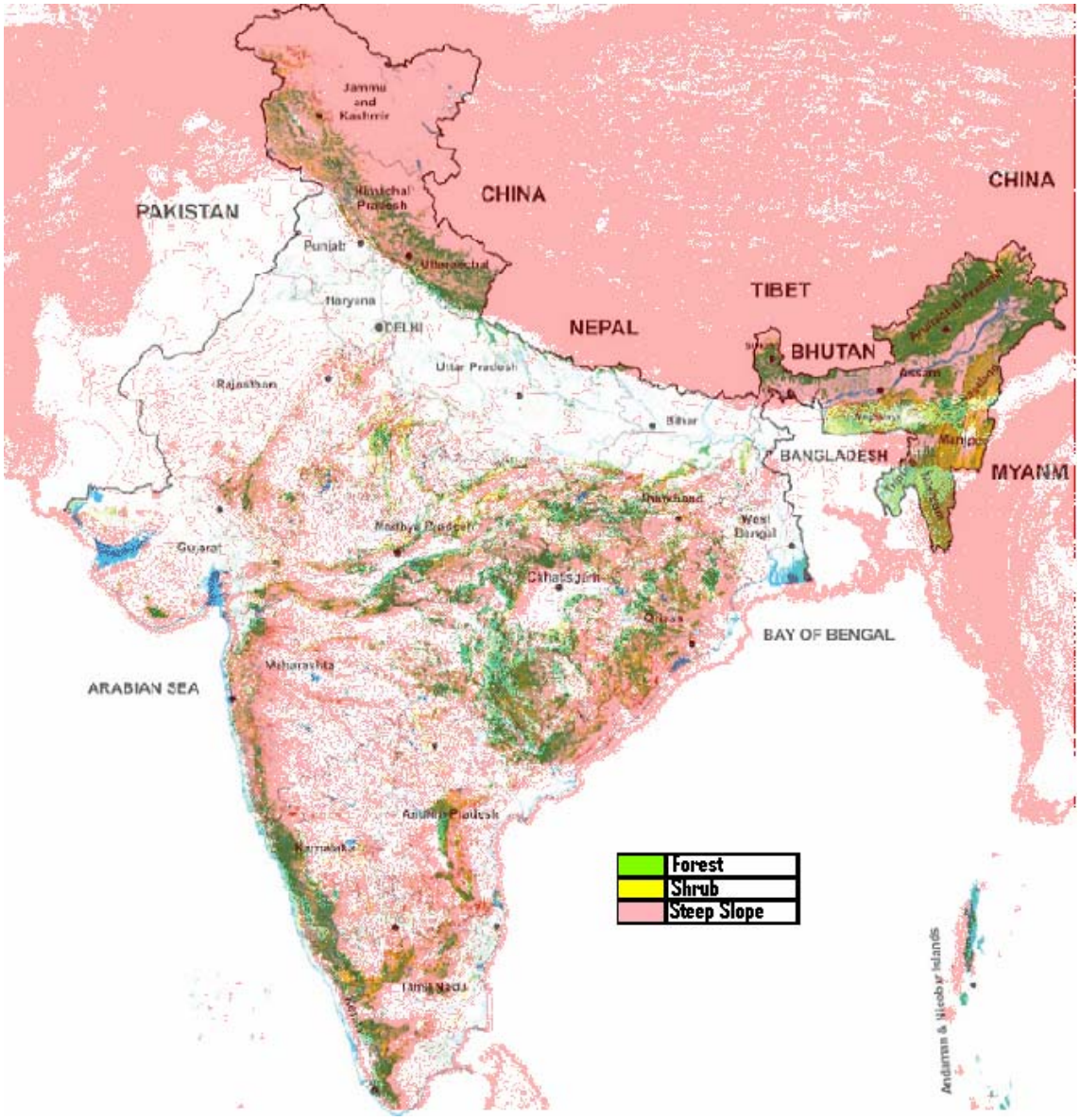


Figure 13. Combined Map of Inaccessibility

Then, other aspects like ethnicity, religion and language were superimposed to produce the following map (on the left side). This map was compared with the right side map showing insurgencies.

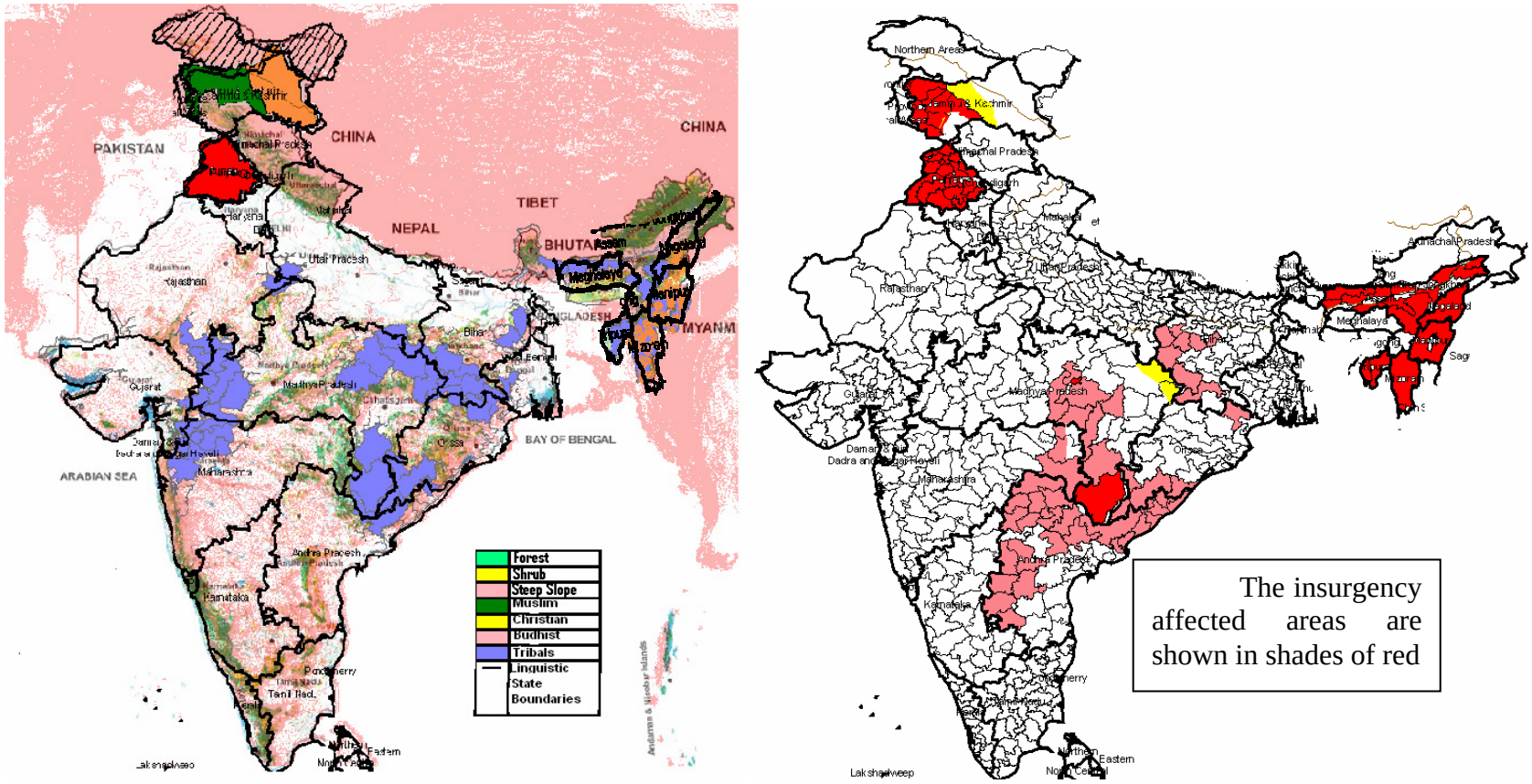


Figure 14. Maps showing Combination of Independent Variables (left) and Insurgencies (right)

2. Statistical Method

a. Analysis of Data

Individual correlation of each of the independent variables with the dependent variable (insurgency) was calculated using the RSquare function of Microsoft Excel. The results are given below.

Independent Variable	Correlation with Dependent Variable
Average Slope	0.019
Forest Cover	0.128
Militant Minority Religion	0.476
Non-Militant Minority Religion	0.028
Minority Language	0.042
Distinct Ethnicity	0.041

Table 2. Correlation between Individual Independent Variables and the Dependent Variable

The following results were found when a regression analysis was done to find the covariance of all the independent variables with the dependent variable (insurgency).

Independent Variables	Distinct Ethnicity	Minority Language	Non-Militant Minority Religion	Militant Minority Religion	Forest Cover	Average Slope of the Affected Area	Value of Insurgency when all the variables are 0
Value of coefficients (weights)	0.433	0.162	0.714	3.015	0.116	-0.004	0.027
Value of Total RSquare			**0.644**				

Table 3. Coefficients and Correlation through Regression Analysis

Therefore, the equation showing the relationship between the variables of the model becomes:

$$I = 3.015X_{rel} + 0.162X_{lang} + 0.433X_{eth} + 0.116Y_{for} - 0.004Y_{slope} + 0.027$$

b. Interpretation of the Results

Relative relevance of different independent variables: Based on the RSquare values shown above, the following is the order of relative relevance of the independent variables tested for their influence on insurgency.

1. Militant Minority Religion
2. Forest cover
3. Minority Language
4. Distinct Ethnicity
5. Non-Militant Minority Religion
6. Average Slope of the Affected Area

Co-variation among the independent variables: Though the independent variables are independent with respect to the propensity of an area towards insurgency, which is the dependent variable, they are not totally independent of each other. For example, the RSquare value between 'forest cover' and 'slope' is 0.34. Similarly, 77% of forests lie in areas having average slope more than 45 degrees, which lie in about 1/3rd of all the parliamentary constituencies. This can be explained by the fact that over thousands of years, after the introduction of iron implements, most of forest areas in the plane, accessible lands have been converted to agricultural land. The forests in the relatively inaccessible areas have escaped this conversion. Therefore, the Rsquare value of combined correlation, 0.644, is less than the sum of individual Rsquare values which is 0.734. This interdependence is also the reason why one of the coefficients is negative.

The value I_0 : Since I_0 is the value of I when all the other factors on the right hand side are absent, a small positive value indicates that in India there is a propensity for insurgency, however small it may be, in any population even without any of the enabling factors. In other words, a small niche is available for the extremists in any population in India. This appeals to the common sense also, because occasional localized political violence has been seen in almost every part of the country after its independence. Moreover, this corroborates McCormick and Giordano model for Band Wagon Effect on the growth of insurgency.

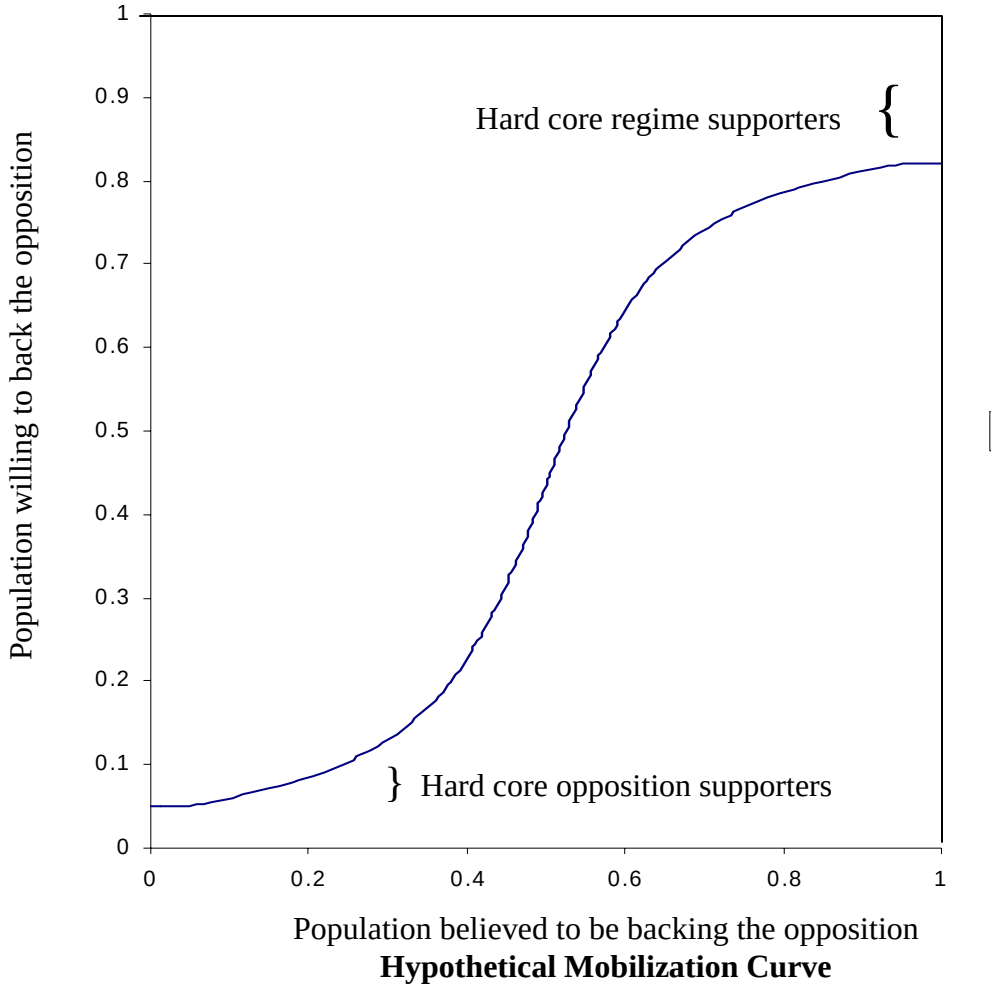


Figure 15. McCormick Giordano Model of Support for Insurgency
(*Source: Paper presented by Prof Gordon McCormick and Prof Frank Giordano at Insurgency Board, Washington DC, February 18 2005*)

According to this model, the willingness of a population to support insurgency depends on the perceived size of the support for that insurgency, as given in above figure. However, even when the insurgency is young and the insurgent organization is negligibly small, there will be always some people ready to support the insurgency.

The value of RSquare: The relatively high value of RSquare indicates a high correlation, which is consistent with the relationship proposed in the model between

the variables tested above, i.e., inaccessibility and separate social identity, with insurgency. To that extent the model is verified statistically.

3. Verifying the Relevance of External Unifying Influence

Though I do not have the data to verify this dimension of the model statistically, it can be supported by empirical evidence. Sikh militancy provides a good example of effect of external influence on insurgency. It is well known that Pakistan heavily supported and guided Sikh terrorism during its heyday in Punjab. According to Gill (2001), "Pakistan was strenuously and openly directing the terrorist campaign at this stage [1989], to the extent that terrorist training camps were being organised even within 75 metres of the international border (in the Ferozepur sector)." He further adds that "border crossings remained a continuous and daily occurrence along the 533 kilometre long international border Punjab shared with Pakistan, and could never really be effectively checked, despite 122 kilometres of fencing that had been erected by August 1989" (p.53). However, according to the Indian government's 2003-2004 Annual Report of Ministry of Home Affairs, the India-Pakistan border fencing on the Punjab sector was completed by 1993 (*Annual report of ministry of home affairs, government of india.*2004). There was also a sharp decline in Sikh insurgency during and after 1993, as shown in the figure below.

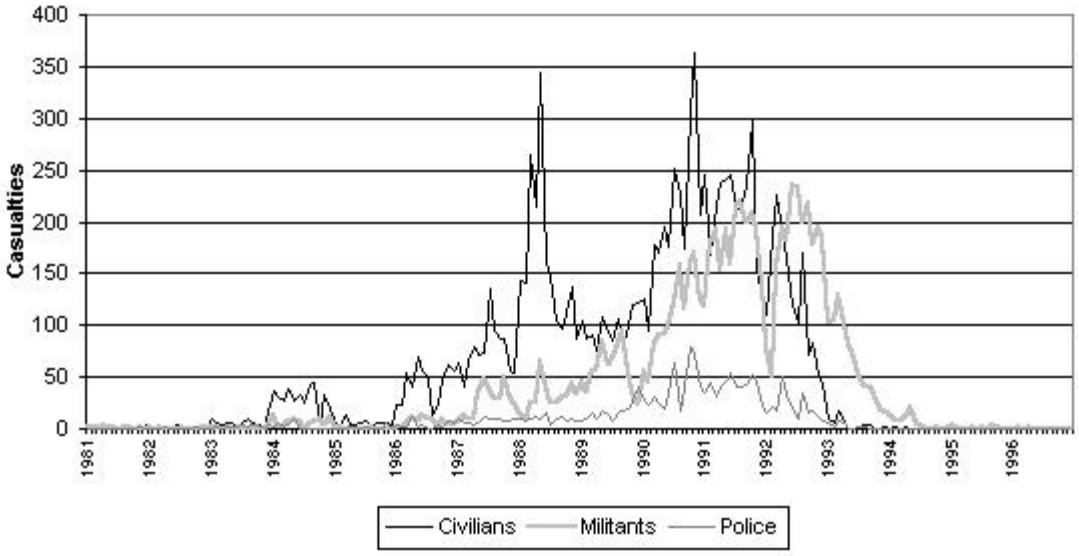


Figure 16. Civilians, Police and Terrorist Casualties in Punjab - 1981-1996
(*Source:* (Gill, K. P. S., 2001, p.70))

Though the credit for quelling Sikh militancy cannot be given solely to border fencing, the coincidence in timing does not seem unrelated. According to Singh (Singh, 2003),

> It [border fencing along the Indo-Pak border in Punjab] went a long way in controlling movement across the border. Infiltration of armed militants was reduced to a trickle and the inflow of weapons was substantially reduced. Intercepted documents mentioned that terrorists were finding it "very hazardous to cross the border." The Punjab Police, thereafter, decimated the diminishing ranks of the terrorists. The graph of violence came down sharply and, by 1994, terrorism in the state was contained. In fact, what was achieved by the internal security forces in Punjab has yet to be replicated anywhere else in the world.

Thus, border fencing helped to cut off or minimize outside influence on the Sikh population in Punjab and decreased its propensity towards insurgency. It was easier to disrupt the extremist political mobilization after the border fencing was complete. This is an example of macro-level insulation from external influence. There are examples of micro-level insulation also. Professor Kalev Sepp (2005) describes the efficacy of "berming" in controlling insurgency in Iraq (See Annex II). Berming is basically insulating a town by building a mud wall around it and enforcing access control for vehicles. It is similar to border fencing at the micro level. It decreases external influence on the town population, since in Iraq insurgents use vehicles for their movements in and out of the towns. According to Prof Sepp, berming is “problematic for the insurgents and criminal gangs. It lengthens their time of travel, limits their choices of routes, and increases their risk of capture, especially if they're shipping weapons . . . Berming was considered successful enough in Mosul that Tall Afar was bermed before the major coalition and Iraqi military operation in September to clear out the Serai neighborhood. Samarra, long a contested town, will likely *be bermed* next” (See Annex II). Clearly berming is used in Iraq to cut off external influence before enforcing political remobilization.

The role of physical barriers in decreasing the effect of external force also seems evident in the case of Israel. According to the government of Israel’s official web

document, "The Anti-Terrorist Fence - An Overview" (2004), comparing the number of suicide attacks before and after the construction of fencing leads to the unavoidable conclusion that

> Construction of the fence in Samaria was followed by a significant decrease in the number of suicide attacks originating from the area. Yet, in Judea, where no fence was built, there was no reduction in the number of attacks.(p.3)

The earlier metaphor of ferromagnetic substance can elaborate this point. The magnetic lines of force which helped in magnetizing the substance can be cut off by keeping the substance in magnetic insulation. Thereafter, there are many ways the magnetic alignment can be disrupted or even realignment achieved in the desired direction.

It can also be explained in terms of Prof Gordon McCormick's model, shown below (see also *Special Warfare*, September 2005, Vol. 18, No. 2, p.8). According to this model, the state, the insurgents, and the foreign actors are all targeting the population. Therefore, above Indian model can be seen as a sub-model of Prof McCormick's general model of insurgency.

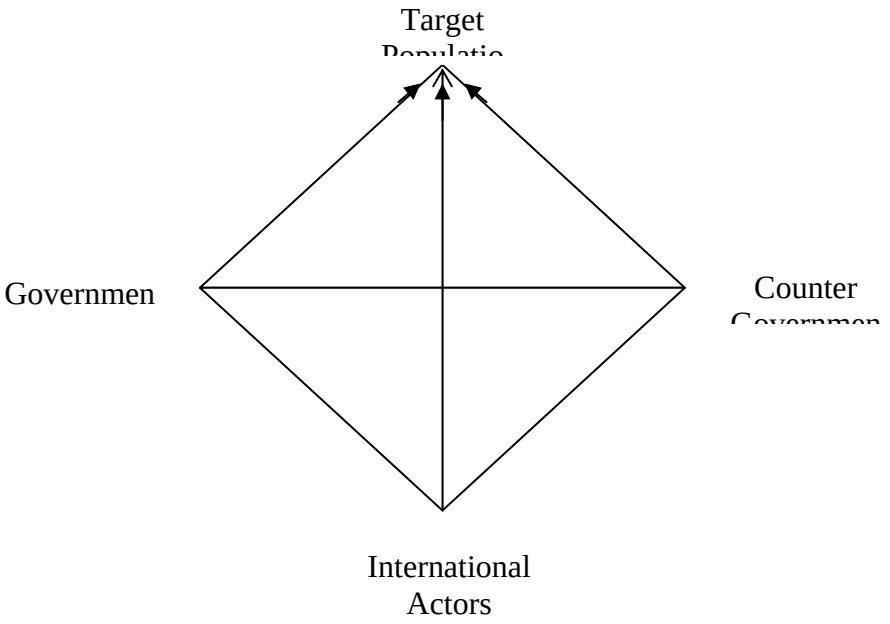


Figure 17. McCormick's Mystic Diamond Model of Insurgency and Counterinsurgency

III. CONCLUSION

A. LIMITATIONS OF THE RESEARCH

1. Defining External Influence

In this paper, the extent to which the top leadership of an insurgency comes from or resides outside the contested area is presented as the sole indicator of the amount of external unifying influence influencing the population living in that area. Admittedly, it ignores various other ways in which the population living in an area can be influenced from outside. Internet and other forms of communications, for example, can be used to reach the population and may provide unity. When required, physical contacts can be made through low-level go-betweens, making travel by top leaders unnecessary. Nevertheless, this definition is used because of the following considerations. Historically, almost every top leader of an armed rebellion, during its earliest stage, has taken refuge in territory outside the contested area (e.g., Lenin in France and Austria, Sun Yat-Sen in Japan, Fidel Castro in Mexico, Che Guevara in Mexico, Hekmatyar in Pakistan, and Ho Chi Minh in China). Almost all the top leaders of Sikh, Kashmir, Naga, Tripura, and Mizo insurgencies of India have done the same. Second, the areas in the Third World with the maximum propensity for insurgency are relatively inaccessible and without much electronic connectivity. Thus person-to-person connectivity is still critical. Third, unless an insurgency has succeeded in creating a liberated zone within the contested area, the contested area remains a dangerous war zone. An insurgency is normally associated with its top leader(s), and their survival becomes very important for the unity and morale of the insurgents. The foreign sponsors and the insurgents, therefore, want to keep the top leaders safe and away from the war zone. This gives the sponsoring country greater capacity to more effectively influence the insurgency.

Similarly, in this thesis the sense of separate social identity is confined to three social factors: religion, language and ethnicity, which are not exhaustive. Other aspects like caste, subculture, and even strong class consciousness can give a population a sense of separation from the majority population. However, it is presumed that the enabling factors behind Indian insurgencies have been limited to the three social aspects which were empirically tested.

2. Availability of Data

The parliamentary constituencies were chosen as units for statistical correlation because data was available for them. Though the number of constituencies is large, each constituency is fairly big, with an average area of about 6000 km^2 and more than a million voters. Due to their sizes, most of these constituencies do not have uniform distributions of the variables considered for correlation. Therefore, a finer resolution with more units of smaller sizes will throw more light on the way these factors influence the dependent variable as well as each other. For example, a small part of a parliamentary constituency may be more undulated or forested, while rest of the land may be flat plain or less forested, giving rise to low values for slope or forest. Because the average forest cover is also partially dependent on the slope, with the RSquare value between the two variables being 0.34, a portion of the entire constituency may be highly inaccessible, despite the constituency's low average of inaccessibility as a whole. Therefore, a larger number of data units may reveal a higher or lower correlation between forest and slope as well as a higher or lower correlation between insurgency and inaccessibility.

Similarly, a more objective and quantitative definition of level of insurgency is desirable but could not be adopted because the necessary data is not available in the secondary and tertiary sources. Thus, the statistical analysis is limited by lack of data.

B. STATIC AND DYNAMIC ASPECTS OF THE MODEL

The model has both static as well as dynamic aspects. The geographic factors constitute the static aspect of the model, while historical and human factors belong to the dynamic aspect. The inability of Third World countries to develop strong states, as suggested by Migdal (1988), remains unchanged, if the following dynamisms are not acknowledged or taken into consideration.

1. Inaccessibility

The accessibility of an area is changeable. Deforestation for economic activities has opened up large tracts of land which were earlier inaccessible due to dense forest. The most densely populated fertile heartland of India, irrigated by the river Ganges and its branches, was covered by dense forest before the advent of iron axes. Similarly, roads and railroads cut through dense forests and highly undulated land and make them more

accessible. Generally, the discovery of profitable economic opportunities in remote inaccessible areas has led to human activities that make the area more accessible. A tribe inhabiting in an inaccessible area might have remained isolated from the larger political, social, and economic system for thousands of years, until mineral deposits were discovered or the area was deemed suitable for tea and coffee cultivation by British colonizers. Within a few years of such a discovery, the area becomes open to outsiders, sucking the local population into the larger political-economic system. This assimilation, over a number of generations, may integrate the tribesmen into the larger social system. Thus, in some areas, local tribes may get identified as castes of the more complex society, while elsewhere the local tribes remain isolated communities and not integrated into the more complex social system.

2. Global Trends

There are macro trends or currents, seen all over the globe, which may affect a population's sense of separate social identity at the micro level. Some trends, like religious fundamentalism and ethnic revivalism, have a tendency to increase the sense of separation, while others, like westernization and urbanization, tend to decrease the sense of separation.

3. Relative Deprivation

Apart from roads and railroads, other forms of communication links have been increasing at a faster rate with the advent of radio communication and developments in information technology. Irrespective of economic development in general and its effects on an area, communication links, like radio and television broadcast, telephone connections, and internet connections, have penetrated areas considered physically inaccessible. Although transport and communications infrastructure are important enabling factors for an area's economic development, when the standard of living does not improve, improved communication can engender a sense of relative deprivation. Through the flow of information, knowledge, propaganda, and physical contact, a population's general expectations may increase. But without the means to achieve their increased expectations, improved communications can create a greater sense of relative deprivation. Thus, an increase in accessibility may produce a greater sense of separation, due to an increase in the population's sense of relative deprivation.

4. Changes in the Enabling Factors

Global trends and a sense of relative deprivation can increase a population's sense of separation, while increased accessibility through roads, railroads, and other means can decrease the sense of separation. As discussed below, democratic mobilization and economic development can also decrease the sense of separation. Similarly, physical barriers can cut off external influences on an insurgency. Thus all the dimensions of the model have some aspects that change, making it more dynamic and time-specific. The situation in an area may have changed dramatically since India's independence. Some enabling factors may have increased while others have decreased.

C. ROLE OF DEMOCRACY

Democracy's detractors point to the many instabilities in democratic countries in the Third World, arguing the unsuitability of democratic governance for Third World countries. Ausuf Ali (2000) at the online website *beliefnet.com,* describes how “Pakistanis have developed a sad conviction that democracy as we know it is not a workable form of government for their country, because Pakistanis do not have the social psychology, the political culture, the social ethics, or the common decency for making democracy work.” These types of arguments are not limited to Pakistan. One can hear them in Thailand, Nepal, Nigeria, Bangladesh, and even in India; indeed, in almost all the Third World countries. However, the reason for this instability is that Third World states, at the time of their independence from colonial rule, were weak due to the fragmentation of social control, which was "dispersed among various social organizations having their own rules rather than centralized in the state or organizations authorized by the state” (Migdal, 1988, p.40).

Democratic governance is like walking, cycling or swimming. One learns these activities over long periods of time during which one's performance remains clumsy. Western democracies took hundreds of years to reach the level of perfection they have today. One thing is sure: one cannot learn to swim without entering the water. In his 1999 keynote address to the World Movement for Democracy, Amartya Sen (1999) pointed out how “a country does not have to be judged to be fit for democracy, rather it has to become fit through democracy.” Therefore, imperfections in

the Third World democracies, and their initial inefficiency in handling centrifugal tendencies, should not be taken as evidence that democracy is undesirable in the Third World.

Democracy helps to integrate a population into the state through political mobilization, decreasing the population's sense of separate social identity. On one hand, political mobilization and access to information through an independent press in a democratic country can increase a population's sense of relative deprivation. On the other hand, democracy also provides the channels for expressing perceived grievances which might otherwise accumulate and create an explosive situation. Democracy also helps to bring these grievances onto the government's radar, and eventually leads to mitigation of some of the grievances. Free and fair elections give legitimacy to the state, thereby decreasing the scope for insurgency. In Third World democracies, religious, caste, linguistic, and ethnic identities are often used for political mobilization, but instead of creating a sense of separation these mobilizations ultimately help to integrate the population into the national polity. Initially, such mobilization helps the social group to bargain and lobby for its share of political power at both the regional and national levels. Democratic India's history is full of examples of linguistic, caste, religious and ethnic separatist movements which eventually transformed themselves into mainstream political parties, contributing to the strength of the country's democratic fabric. Thus, in the long run, democracy helps to mitigate and neutralize the enabling factors of insurgency.

D. POLITICAL MOBILIZATION BY DECENTRALIZATION

As discussed above, political mobilization is democracy's main process for integrating a population into national polity and strengthening it. Coupled with decentralization, democratic political mobilization can reach a country's remotest and most inaccessible areas. Decentralization does not mean total autonomy, because without a national legal system based on democratic governance, equality, and respect for human rights to tie the entire country together, such autonomy can reinforce an autonomous area's sense of separate identity. Rather than mitigating its centrifugal tendencies, such autonomy can strengthen them. Autonomous tribal areas of Pakistan and FARC (Revolutionary Armed Forces of Colombia) autonomous areas (1999-2002) exemplify

how such autonomy can lead to islands of chaos and lawlessness. In proper decentralization in a democracy, on the other hand, the state partially distributes its power to its local units. It does not create a state within, but rather the local unit becomes a more empowered part of the state itself. This helps the state to exercise social control more effectively and decreases the fragmentation of social control by the local social organizations.

E. ECONOMIC DEVELOPMENT

1. Desirability of Economic Development

The role of economic development in integrating an area into the larger political-economic system of the country is discussed in Chapter I, section C 13. The adverse impact of partial development without overall economic development on the sense of separation has been already discussed. Economic development increases accessibility. Availability of modern economic activities decreases individuals' dependence on a social network (typical of subsistence and feudal economies) for economic activities. Economic development encourages demographic mobility, which blurs the geographic separation of the population from others. Economic development encourages education, which empowers individuals and the population to participate better in the larger political-economic system and decreases their sense of separation. Balanced economic development decreases the population’s sense of relative deprivation and resultant sense of separation.

2. Type of Economic Development

However, in areas of relative inaccessibility, spontaneous economic development is unexpected and out of the ordinary. Obviously, Adam Smith’s "invisible hand" has not helped the area to develop. Therefore, the state cannot depend on *laissez-faire* economic policy to stimulate economic development in inaccessible and hitherto economically unviable areas. The state must create infrastructure and incentives to stimulate development. The state’s long term political objectives have to override immediate economic considerations. After all, by preventing insurgency, the state can avoid future expenditures on counterinsurgency.

3. Economic Development in Areas Dominated by Insurgents

However, the state should be cautious in dealing with an area already dominated by insurgents. Keeping in mind a Third World country's severe constraints on resources, careful consideration should be given to the distribution of resources between counterinsurgency operations and developmental activities. An insurgent group would prefer that the state divert a part of its resources from counterinsurgency to developmental activities. This helps the insurgents by decreasing the pressure on them. Moreover, if insurgents have good control over the population, they can divert some of the developmental resources to themselves. However, if the developmental activities give greater advantage to the state, the insurgents will find excuses to oppose such activities.

4. Economic Development in Tribal Areas

Caution should also be taken while dealing with areas inhabited by tribesmen. The vulnerability of tribes towards outside influence has been highlighted by the Yanomami controversy of Brazil. On one hand, there is a need to avoid exposing the tribes to outside influence detrimental to their well being. On the other hand, it is not desirable to let them live with Stone age technology, because once they are aware of the many conveniences of the modern age, they do not want to remain in the Stone age (Boforsky, 2005, p.144). If the relative deprivation felt by the tribes is not addressed properly by the state, then the insurgents can take advantage of them. Referring back to the ferromagnetic metaphor (see Chapter I, section C 15), if the state does not mobilize the isolated segmented populations in the desired direction, outsiders can mobilize them against the state.

F. INTEGRATION AND HORIZONTAL/VERTICAL LINKAGES

A marginal population develops linkages outside its geographic limits as it mainstreams into the politico-legal structure of the country, integrates into the national economy, and becomes more and more integrated into the larger society. The linkages can be both vertical and horizontal. For example, an individual belonging to an inaccessible area in an Indian state like Assam develops vertical networks through his or her social affiliations (like caste, ethnicity or religion). Such networks extend beyond the provincial boundaries, because these social affiliations are pan-Indian. Similarly, through

profession, trade, political involvement or education, the individual develops vertical economic and political linkages with the national economy and polity. In India, most of the senior jobs are all-India in scope. Moreover, even the lowest-level government employee likely belongs to a provincial or federal service. The more linkages a population develops outside the hitherto limited area, the weaker grows the hold of local networks on that population. The flip side to this development is the acquisition of multiple mutually-incongruent roles by the individual. This is desirable from counterinsurgency point of view, since expectations based on the country's rational legal system tend to gain at the expense of local social affiliations. Influenced by the legal expectation of objectivity, a person is forced to sacrifice parochial considerations based on ascribed characteristics. Thus the person becomes integrated into the national polity and economy and loses the sense of separate social identity.

G. COUNTERINSURGENCY OPERATIONS IN FOREST AREAS

Analysis of data in Chapter II, section E 2 b, showed that most of Indian forests lie in relatively inaccessible areas. Forests play an important role in insurgency in these areas. First, the state, concerned about environment, is committed to preserving the forests. The state, therefore, is not able to allow the tribes to carry on destructive practices like shifting cultivation[1], whereas the insurgents, by keeping the forest employees away, help the tribes to carry on the destructive practice. Since the tribes had no role in the massive deforestation of the past couple of centuries in other areas for commercial purposes, and since they do not fully understand the critical importance of forests today, they find the government actions unjust and the insurgents as friends. This makes counterinsurgency both difficult as well as important. Secondly, these areas have features that demand appropriate force structure and hardware.

[1] In *shifting cultivation,* tribesmen clear a part of the forest by burning the trees. After using the cleared area for subsistence cultivation for two to three years, the tribesmen leave the area and do the same in another part of the forest.

IV. RECOMMENDATIONS

The following recommendations are made, based on the discussions above:

1. Economic development of inaccessible and hitherto economically unviable areas should be fostered by the state. Careful considerations should be undertaken regarding the likely outcome of the governmental efforts, particularly in the areas already dominated by the insurgents and in the areas inhabited by relatively isolated tribes.
2. Democratic decentralization, within the broad legal structure based on equality and human rights, should be adopted to politically mobilize the marginal population in the right direction.
3. Outside influences inciting the insurgency should be denied access to vulnerable areas by constructing physical barriers.
4. The structure of force and hardware for counterinsurgency operations should be appropriate, keeping in mind the terrain and inhabitants of an area.

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ANNEX I

Sl. No.	PARLIAMENTARY CONSTITUENCY'S NAME	TYPE, ST-Tribe, SC-Caste	Average Slope in degrees	Forest in a scale of 1-10	Militant Minority Religion	Non-Militant Minority Religion	Minority Language	Distinct Ethnicity	Insurgency
1	Srikakulam	GEN	67.4405	1	0	0	1	0	1
2	Parvathipuram	ST	71.7029	2	0	0	1	1	1
3	Bobbili	GEN	63.2641	2	0	0	1	0	1
4	Visakhapatnam	GEN	75.9186	2	0	0	1	0	1
5	Bhadrachalam	ST	74.1807	9	0	0	1	1	1
6	Anakapalli	GEN	76.9629	3	0	0	1	0	1
7	Kakinada	GEN	60.1211	3	0	0	1	0	1
8	Rajahmundry	GEN	19.1838	0	0	0	1	0	0
9	Amalapuram	SC	28.3793	0	0	0	1	0	0
10	Narasapur	GEN	13.0035	0	0	0	1	0	0
11	Eluru	GEN	23.3937	0	0	0	1	0	0
12	Machilipatnam	GEN	22.7901	0	0	0	1	0	0
13	Vijayawada	GEN	34.9229	0	0	0	1	0	1
14	Tenali	GEN	13.1977	0	0	0	1	0	0
15	Guntur	GEN	25.1723	0	0	0	1	0	0
16	Bapatla	GEN	27.6283	0	0	0	1	0	0
17	Narasaraopet	GEN	52.3784	0	0	0	1	0	0
18	Ongole	GEN	39.0796	0	0	0	1	0	0
19	Nellore	SC	29.6643	1	0	0	1	0	0
20	Tirupathi	SC	54.6096	1	0	0	1	0	0
21	Chittoor	GEN	69.3924	1	0	0	1	0	0
22	Rajampet	GEN	75.5448	1	0	0	1	0	0
23	Cuddapah	GEN	64.2306	1	0	0	1	0	0
24	Hindupur	GEN	59.0581	0	0	0	1	0	0
25	Anantapur	GEN	40.5849	0	0	0	1	0	0
26	Kurnool	GEN	33.3595	0	0	0	1	0	1
27	Nandyal	GEN	53.6526	2	0	0	1	0	1
28	Nagarkurnool	SC	50.8351	3	0	0	1	0	1
29	Mahabubnagar	GEN	36.9827	0	0	0	1	0	1
30	Hyderabad	GEN	40.7235	0	0	0	1	0	0
31	Secunderabad	GEN	38.5117	0	0	0	1	0	0
32	Siddipet	SC	34.4866	0	0	0	1	0	0
33	Medak	GEN	33.7563	1	0	0	1	0	1
34	Nizamabad	GEN	41.6862	1	0	0	1	0	1
35	Adilabad	GEN	56.2728	6	0	0	1	0	1
36	Peddapalli	SC	47.7632	3	0	0	1	0	1
37	Karimnagar	GEN	47.8528	1	0	0	1	0	1
38	Hanamkonda	GEN	36.7919	0	0	0	1	0	1
39	Warangal	GEN	44.7401	3	0	0	1	0	1
40	Khammam	GEN	51.6037	3	0	0	1	0	1
41	Nalgonda	GEN	46.1271	0	0	0	1	0	0
42	Miryalguda	GEN	39.1142	0	0	0	1	0	0
43	Arunachal West	GEN	89.5373	10	0	0	1	0	1
44	Arunachal East	GEN	85.1471	10	0	0	1	0	1
45	Karimganj	SC	42.6422	5	0	0	1	0	2
46	Silchar	GEN	55.6387	5	0	0	1	0	2
47	Autonomous District	ST	77.0654	10	0	0	1	1	2
48	Dhubri	GEN	20.6916	1	0	0	1	0	2
49	Kokrajhar	ST	33.3951	6	0	0	1	1	2
50	Barpeta	GEN	18.8916	5	0	0	1	0	2
51	Gauhati	GEN	49.0185	4	0	0	1	0	2
52	Mangaldoi	GEN	26.0452	4	0	0	1	0	2
53	Tezpur	GEN	30.8058	3	0	0	1	0	2
54	Nowgong	GEN	45.3422	1	0	0	1	0	2
55	Kaliabor	GEN	32.8601	1	0	0	1	0	2
56	Jorhat	GEN	39.0706	3	0	0	1	0	2

56	Jorhat	GEN	39.0706	3	0	0	1	0	2
57	Dibrugarh	GEN	22.1353	7	0	0	1	0	2
58	Lakhimpur	GEN	20.647	3	0	0	1	0	2
59	Bagaha	SC	20.2682	3	0	0	0	0	0
60	Bettiah	GEN	2.91112	0	0	0	0	0	0
61	Motihari	GEN	7.27395	0	0	0	0	0	0
62	Gopalganj	GEN	0	0	0	0	0	0	0
63	Siwan	GEN	2.34633	0	0	0	0	0	0
64	Maharajganj	GEN	3.14154	0	0	0	0	0	0
65	Chapra	GEN	2.21217	0	0	0	0	0	0
66	Hajipur	SC	0	0	0	0	0	0	0
67	Vaishali	GEN	4.27727	0	0	0	0	0	0
68	Muzaffarpur	GEN	0	0	0	0	0	0	0
69	Sitamarhi	GEN	2.12743	0	0	0	0	0	0
70	Sheohar	GEN	4.42162	0	0	0	0	0	0
71	Madhubani	GEN	0.86939	0	0	0	0	0	0
72	Jhanjharpur	GEN	10.4146	0	0	0	0	0	0
73	Darbhanga	GEN	2.91258	0	0	0	0	0	0
74	Rosera	SC	0	0	0	0	0	0	0
75	Samastipur	GEN	0	0	0	0	0	0	0
76	Barh	GEN	0	0	0	0	0	0	0
77	Balia	GEN	0.361031	0	0	0	0	0	0
78	Saharsa	GEN	5.19416	0	0	0	0	0	0
79	Madhepura	GEN	3.38848	0	0	0	0	0	0
80	Araria	SC	3.87573	0	0	0	0	0	0
81	Kishanganj	GEN	6.13396	0	0	0	0	0	0
82	Purnea	GEN	3.1134	0	0	0	0	0	0
83	Katihar	GEN	4.10308	0	0	0	0	0	0
84	Banka	GEN	33.1342	1	0	0	0	0	1
85	Bhagalpur	GEN	4.97837	0	0	0	0	0	0
86	Khagaria	GEN	3.88376	0	0	0	0	0	0
87	Monghyr	GEN	47.8898	4	0	0	0	0	0
88	Begusarai	GEN	12.7529	0	0	0	0	0	0
89	Nalanda	GEN	16.2416	0	0	0	0	0	0
90	Patna	GEN	0	0	0	0	0	0	0
91	Arrah	GEN	4.16235	0	0	0	0	0	0
92	Buxar	GEN	10.4214	0	0	0	0	0	1
93	Sasaram	SC	44.0798	4	0	0	0	0	1
94	Bikramganj	GEN	4.31556	0	0	0	0	0	1
95	Aurangabad	GEN	27.1162	1	0	0	0	0	1
96	Jahanabad	GEN	3.9745	0	0	0	0	0	1
97	Nawada	SC	39.1974	1	0	0	0	0	0
98	Gaya	SC	21.388	0	0	0	0	0	0
99	Kutch	GEN	22.1769	1	0	0	1	0	0
100	Surendranagar	GEN	18.4491	0	0	0	1	0	0
101	Jamnagar	GEN	33.5881	0	0	0	1	0	0
102	Rajkot	GEN	23.3856	0	0	0	1	0	0
103	Porbandar	GEN	40.7494	0	0	0	1	0	0
104	Junagadh	GEN	51.8456	2	0	0	1	0	0
105	Amreli	GEN	38.4318	0	0	0	1	0	0
106	Bhavnagar	GEN	42.6588	0	0	0	1	0	0
107	Dhandhuka	SC	11.517	0	0	0	1	0	0
108	Ahmedabad	GEN	32.2116	0	0	0	1	0	0
109	Gandhinagar	GEN	9.11851	0	0	0	1	0	0
110	Mehsana	GEN	9.33455	0	0	0	1	0	0
111	Patan	SC	15.5093	0	0	0	1	0	0
112	Banaskantha	GEN	13.7266	0	0	0	1	0	0
113	Sabarkantha	GEN	49.6512	1	0	0	1	0	0
114	Kapadvanj	GEN	16.7723	0	0	0	1	0	0
115	Dohad	ST	43.1441	1	0	0	1	1	0
116	Godhra	GEN	37.61	0	0	0	1	0	0
117	Kaira	GEN	5.80817	0	0	0	1	0	0
118	Anand	GEN	20.7384	0	0	0	1	0	0
119	Chhota Udaipur	ST	42.581	0	0	0	1	1	0
120	Baroda	GEN	54.123	0	0	0	1	0	0
121	Broach	GEN	43.3611	0	0	0	1	0	0
122	Surat	GEN	42.4297	0	0	0	1	0	0
123	Mandvi	ST	34.8502	2	0	0	1	1	0
124	Bulsar	ST	65.8936	3	0	0	1	1	0
125	Ambala	SC	29.4632	2	0	0	0	0	0
126	Kurukshetra	GEN	2.59012	1	0	0	0	0	0
127	Karnal	GEN	4.06091	1	0	0	0	0	0
128	Sonepat	GEN	1.41205	0	0	0	0	0	0
129	Rohtak	GEN	2.13637	0	0	0	0	0	0
130	Faridabad	GEN	16.2985	0	0	0	0	0	0

131	Mahendragarh	GEN	19.1407	0	0	0	0	0	0
132	Bhiwani	GEN	7.88003	0	0	0	0	0	0
133	Hissar	GEN	1.19009	0	0	0	0	0	0
134	Sirsa	SC	3.33039	1	0	0	0	0	0
135	Simla	SC	88.6434	9	0	0	0	0	0
136	Mandi	GEN	89.7548	1	0	0	0	0	0
137	Kangra	GEN	85.7156	9	0	0	0	0	0
138	Hamirpur	GEN	84.9797	9	0	0	0	0	0
139	Baramulla	GEN	87.0821	5	1	0	1	0	4
140	Srinagar	GEN	86.029	5	1	0	1	0	4
141	Anantnag	GEN	86.8385	5	1	0	1	0	4
142	Ladakh	GEN	88.9555	0	0	1	1	0	0
143	Udhampur	GEN	88.0122	8	0	0	1	0	0
144	Jammu	GEN	81.014	8	0.666667	0	1	0	4
145	Bidar	SC	39.876	0	0	0	1	0	0
146	Gulbarga	GEN	38.4582	0	0	0	1	0	0
147	Raichur	GEN	32.2387	0	0	0	1	0	0
148	Koppal	GEN	35.6784	0	0	0	1	0	0
149	Bellary	GEN	39.3872	1	0	0	1	0	0
150	Davangere	GEN	47.1024	0	0	0	1	0	0
151	Chitradurga	GEN	41.724	0	0	0	1	0	0
152	Tumkur	GEN	43.8778	0	0	0	1	0	0
153	Chikballapur	GEN	54.1469	1	0	0	1	0	0
154	Kolar	SC	49.4941	1	0	0	1	0	0
155	Kanakapura	GEN	67.8194	0	0	0	1	0	0
156	Bangalore North	GEN	25.1368	0	0	0	1	0	0
157	Bangalore South	GEN	27.2953	0	0	0	1	0	0
158	Mandya	GEN	42.9707	0	0	0	1	0	0
159	Chamarajanagar	SC	71.0062	2	0	0	1	0	0
160	Mysore	GEN	46.8008	1	0	0	1	0	0
161	Mangalore	GEN	74.1931	10	0	0	1	0	0
162	Udupi	GEN	61.8166	9	0	0	1	0	0
163	Hassan	GEN	55.1005	1	0	0	1	0	0
164	Chikmagalur	GEN	68.2873	6	0	0	1	0	0
165	Shimoga	GEN	60.4674	7	0	0	1	0	0
166	Kanara	GEN	72.3263	9	0	0	1	0	0
167	Dharwad South	GEN	30.0214	0	0	0	1	0	0
168	Dharwad North	GEN	31.825	0	0	0	1	0	0
169	Belgaum	GEN	50.8132	0	0	0	1	0	0
170	Chikkodi	SC	41.7102	0	0	0	1	0	0
171	Bagalkot	GEN	40.908	0	0	0	1	0	0
172	Bijapur	GEN	28.1381	0	0	0	1	0	0
173	Kasaragod	GEN	75.0332	5	0	0	1	0	0
174	Cannanore	GEN	80.7791	6	0	0	1	0	0
175	Badagara	GEN	72.5171	2	0	0	1	0	0
176	Calicut	GEN	73.8612	7	0	0	1	0	0
177	Manjeri	GEN	69.1404	7	0	0	1	0	0
178	Ponnani	GEN	67.5702	1	0	0	1	0	0
179	Palghat	GEN	75.3402	4	0	0	1	0	0
180	Ottapalam	SC	46.4616	2	0	0	1	0	0
181	Trichur	GEN	65.3198	2	0	0	1	0	0
182	Mukundapuram	GEN	57.3288	3	0	0	1	0	0
183	Ernakulam	GEN	48.5553	2	0	0	1	0	0
184	Muvattupuzha	GEN	57.6717	0	0	0	1	0	0
185	Kottayam	GEN	19.3505	0	0	0	1	0	0
186	Idukki	GEN	87.2384	1	0	0	1	0	0
187	Alleppey	GEN	57.0832	0	0	0	1	0	0
188	Mavelikara	GEN	33.3055	0	0	0	1	0	0
189	Adoor	SC	78.0502	8	0	0	1	0	0
190	Quilon	GEN	62.1146	0	0	0	1	0	0
191	Chirayinkil	GEN	68.6297	7	0	0	1	0	0
192	Trivandrum	GEN	72.4513	3	0	0	1	0	0
193	Morena	SC	33.8768	4	0	0	0	0	0
194	Bhind	GEN	12.6239	0	0	0	0	0	0
195	Gwalior	GEN	37.3236	1	0	0	0	0	0
196	Guna	GEN	27.7342	2	0	0	0	0	0
197	Sagar	SC	33.0242	3	0	0	0	0	0
198	Khajuraho	GEN	25.645	0	0	0	0	0	0
199	Damoh	GEN	45.6036	3	0	0	0	0	0
200	Satna	GEN	46.8393	2	0	0	0	0	0
201	Rewa	GEN	45.5236	1	0	0	0	0	0
202	Sidhi	ST	59.8188	3	0	0	0	1	0
203	Shahdol	ST	48.4732	3	0	0	0	1	0
204	Balaghat	GEN	59.321	6	0	0	0	0	1

205	Mandla	ST	71.068	5	0	0	0	1	1
206	Jabalpur	GEN	46.077	3	0	0	0	0	0
207	Seoni	GEN	47.1576	3	0	0	0	0	0
208	Chhindwara	GEN	66.194	4	0	0	0	0	0
209	Betul	GEN	56.695	3	0	0	0	0	0
210	Hoshangabad	GEN	29.3619	1	0	0	0	0	0
211	Bhopal	GEN	41.1472	2	0	0	0	0	0
212	Vidisha	GEN	35.7156	2	0	0	0	0	0
213	Rajgarh	GEN	27.7273	1	0	0	0	0	0
214	Shajapur	SC	29.9462	0	0	0	0	0	0
215	Khandwa	GEN	45.0544	3	0	0	0	0	0
216	Khargone	GEN	56.5429	2	0	0	0	0	0
217	Dhar	ST	45.6889	1	0	0	0	1	0
218	Indore	GEN	35.4301	0	0	0	0	0	0
219	Ujjain	SC	21.1197	0	0	0	0	0	0
220	Jhabua	ST	46.8595	1	0	0	0	1	0
221	Mandsaur	GEN	31.0336	1	0	0	0	0	0
222	Rajapur	GEN	81.8334	5	0	0	1	0	0
223	Ratnagiri	GEN	85.366	5	0	0	1	0	0
224	Kolaba	GEN	85.3956	5	0	0	1	0	0
225	Mumbai South	GEN	89.6929	0	0	0	1	0	0
226	Mumbai South Central	GEN	89.6846	0	0	0	1	0	0
227	Mumbai North Central	GEN	89.5199	0	0	0	1	0	0
228	Mumbai North East	GEN	88.9665	0	0	0	1	0	0
229	Mumbai North West	GEN	81.2825	0	0	0	1	0	0
230	Mumbai North	GEN	76.242	0	0	0	1	0	0
231	Thane	GEN	73.428	3	0	0	1	0	0
232	Dahanu	ST	76.3901	4	0	0	1	1	0
233	Nashik	GEN	57.8515	0	0	0	1	0	0
234	Malegaon	ST	62.5805	1	0	0	1	1	0
235	Dhule	ST	63.4596	0	0	0	1	1	0
236	Nandurbar	ST	62.8212	2	0	0	1	1	0
237	Erandol	GEN	33.8142	1	0	0	1	0	0
238	Jalgaon	GEN	43.7854	0	0	0	1	0	0
239	Buldhana	SC	39.1969	0	0	0	1	0	0
240	Akola	GEN	32.3891	0	0	0	1	0	0
241	Washim	GEN	42.8662	2	0	0	1	0	0
242	Amravati	GEN	52.7627	5	0	0	1	0	0
243	Ramtek	GEN	46.1327	4	0	0	1	0	0
244	Nagpur	GEN	15.9782	0	0	0	1	0	0
245	Bhandara	GEN	36.337	8	0	0	1	0	1
246	Chimur	GEN	33.399	8	0	0	1	0	1
247	Chandrapur	GEN	39.6413	7	0	0	1	0	1
248	Wardha	GEN	27.185	1	0	0	1	0	0
249	Yavatmal	GEN	39	3	0	0	1	0	0
250	Hingoli	GEN	45.234	2	0	0	1	0	0
251	Nanded	GEN	35.6693	0	0	0	1	0	0
252	Parbhani	GEN	24.4624	0	0	0	1	0	0
253	Jalna	GEN	35.6076	0	0	0	1	0	0
254	Aurangabad	GEN	49.7967	0	0	0	1	0	0
255	Beed	GEN	44.9079	0	0	0	1	0	0
256	Latur	GEN	30.5756	0	0	0	1	0	0
257	Osmanabad	SC	31.6842	0	0	0	1	0	0
258	Sholapur	GEN	26.4614	0	0	0	1	0	0
259	Pandharpur	SC	33.2548	0	0	0	1	0	0
260	Ahmednagar	GEN	41.3911	0	0	0	1	0	0
261	Kopargaon	GEN	48.2635	0	0	0	1	0	0
262	Khed	GEN	79.1377	1	0	0	1	0	0
263	Pune	GEN	59.3317	0	0	0	1	0	0
264	Baramati	GEN	37.4077	0	0	0	1	0	0
265	Satara	GEN	68.4911	0	0	0	1	0	0
266	Karad	GEN	80.4017	1	0	0	1	0	0
267	Sangli	GEN	43.4709	0	0	0	1	0	0
268	Ichalkaranji	GEN	74.2766	1	0	0	1	0	0
269	Kolhapur	GEN	78.9628	2	0	0	1	0	0
270	Inner Manipur	GEN	65.4533	0	0	0	1	0	1
271	Outer Manipur	ST	88.4607	9	0	0	1	1	1
272	Shillong	GEN	83.8979	8	0	1	1	0	0
273	Tura	GEN	71.4797	9	0	1	1	0	0
274	Mizoram	ST	88.4207	10	0	1	1	1	4
275	Nagaland	GEN	87.9414	9	0	1	1	1	5
276	Mayurbhanj	ST	64.4964	4	0	0	1	1	1
277	Balasore	GEN	35.5034	0	0	0	1	0	0
278	Bhadrak	SC	33.1675	0	0	0	1	0	0

279	Jajpur	SC	40.0971	0	0	0	1	0	0
280	Kendrapara	GEN	26.995	0	0	0	1	0	0
281	Cuttack	GEN	51.4752	0	0	0	1	0	0
282	Jagatsinghpur	GEN	22.8651	0	0	0	1	0	0
283	Puri	GEN	53.8555	2	0	0	1	0	0
284	Bhubaneswar	GEN	72.4252	5	0	0	1	0	0
285	Aska	GEN	73.6269	3	0	0	1	0	0
286	Berhampur	GEN	82.7558	5	0	0	1	0	1
287	Koraput	ST	81.1772	4	0	0	1	1	1
288	Nowrangpur	ST	56.7325	3	0	0	1	1	1
289	Kalahandi	GEN	69.7368	3	0	0	1	0	0
290	Phulbani	SC	73.4746	8	0	0	1	0	0
291	Bolangir	GEN	44.8369	1	0	0	1	0	0
292	Sambalpur	GEN	54.5348	3	0	0	1	0	0
293	Deogarh	GEN	64.3241	4	0	0	1	0	0
294	Dhenkanal	GEN	72.0824	1	0	0	1	0	0
295	Sundargarh	ST	66.4116	4	0	0	1	1	0
296	Keonjhar	ST	70.7577	4	0	0	1	1	0
297	Gurdaspur	GEN	22.7353	0	1	0	1	0	3
298	Amritsar	GEN	3.39903	0	1	0	1	0	3
299	Tarn Taran	GEN	3.66921	0	1	0	1	0	3
300	Jullundur	GEN	0.301946	0	1	0	1	0	3
301	Phillaur	SC	11.1324	0	1	0	1	0	3
302	Hoshiarpur	GEN	52.518	2	1	0	1	0	3
303	Ropar	SC	10.2272	1	1	0	1	0	3
304	Patiala	GEN	4.38099	0	1	0	1	0	3
305	Ludhiana	GEN	7.45321	0	1	0	1	0	3
306	Sangrur	GEN	6.73044	0	1	0	1	0	3
307	Bhatinda	SC	2.90243	0	1	0	1	0	3
308	Faridkot	GEN	2.37235	0	1	0	1	0	3
309	Ferozepur	GEN	2.02602	0	1	0	1	0	3
310	Ganganagar	SC	4.29835	0	0	0	0	0	0
311	Bikaner	GEN	9.89248	0	0	0	0	0	0
312	Churu	GEN	8.18011	0	0	0	0	0	0
313	Jhunjhunu	GEN	22.4776	0	0	0	0	0	0
314	Sikar	GEN	31.985	0	0	0	0	0	0
315	Jaipur	GEN	25.6351	0	0	0	0	0	0
316	Dausa	GEN	38.37	0	0	0	0	0	0
317	Alwar	GEN	51.6646	0	0	0	0	0	0
318	Bharatpur	GEN	17.4104	2	0	0	0	0	0
319	Bayana	SC	29.8991	1	0	0	0	0	0
320	Sawai Madhopur	ST	39.1912	0	0	0	0	1	0
321	Ajmer	GEN	33.7824	0	0	0	0	0	0
322	Tonk	SC	15.5867	0	0	0	0	0	0
323	Kota	GEN	25.1844	0	0	0	0	0	0
324	Jhalawar	GEN	29.4224	1	0	0	0	0	0
325	Banswara	ST	44.1765	1	0	0	0	1	0
326	Salumber	ST	62.4889	2	0	0	0	1	0
327	Udaipur	GEN	55.8415	0	0	0	0	0	0
328	Chittorgarh	GEN	40.7128	2	0	0	0	0	0
329	Bhilwara	GEN	25.3687	0	0	0	0	0	0
330	Pali	GEN	27.2191	0	0	0	0	0	0
331	Jalore	SC	40.3034	0	0	0	0	0	0
332	Barmer	GEN	16.128	0	0	0	0	0	0
333	Jodhpur	GEN	16.345	0	0	0	0	0	0
334	Nagaur	GEN	17.6617	0	0	0	0	0	0
335	Sikkim	GEN	89.8186	5	0	1	1	0	0
336	Madras North	GEN	30.538	0	0	0	1	0	0
337	Madras Central	GEN	57.8153	0	0	0	1	0	0
338	Madras South	GEN	62.9345	0	0	0	1	0	0
339	Sriperumbudur	SC	21.812	0	0	0	1	0	0
340	Chengalpattu	GEN	28.3509	0	0	0	1	0	0
341	Arakkonam	GEN	29.6099	0	0	0	1	0	0
342	Vellore	GEN	76.0802	3	0	0	1	0	0
343	Tiruppattur	GEN	67.4178	0	0	0	1	0	0
344	Vandavasi	GEN	41.2417	0	0	0	1	0	0
345	Tindivanam	GEN	25.6515	0	0	0	1	0	0
346	Cuddalore	GEN	38.4319	0	0	0	1	0	0
347	Chidambaram	SC	20.5613	0	0	0	1	0	0
348	Dharmapuri	GEN	74.5416	2	0	0	1	0	0
349	Krishnagiri	GEN	70.8395	3	0	0	1	0	0
350	Rasipuram	SC	69.3811	0	0	0	1	0	0
351	Salem	GEN	82.7583	0	0	0	1	0	0

351	Salem	GEN	82.7583	0	0	0	1	0	0
352	Tiruchengode	GEN	40.4109	0	0	0	1	0	0
353	Nilgiris	GEN	76.4048	5	0	0	1	0	0
354	Gobichettipalayam	GEN	63.5546	5	0	0	1	0	0
355	Coimbatore	GEN	34.558	0	0	0	1	0	0
356	Pollachi	SC	51.8263	3	0	0	1	0	0
357	Palani	GEN	54.4563	2	0	0	1	0	0
358	Dindigul	GEN	59.125	0	0	0	1	0	0
359	Madurai	GEN	29.9153	0	0	0	1	0	0
360	Periyakulam	GEN	82.2501	0	0	0	1	0	0
361	Karur	GEN	37.0509	0	0	0	1	0	0
362	Tiruchirappalli	GEN	12.4667	0	0	0	1	0	0
363	Perambalur	SC	32.5368	0	0	0	1	0	0
364	Mayiladuturai	GEN	19.2676	0	0	0	1	0	0
365	Nagapattinam	SC	21.8256	0	0	0	1	0	0
366	Thanjavur	GEN	12.4299	0	0	0	1	0	0
367	Pudukkottai	GEN	25.0217	0	0	0	1	0	0
368	Sivaganga	GEN	22.6994	0	0	0	1	0	0
369	Ramanathapuram	GEN	25.0132	0	0	0	1	0	0
370	Sivakasi	GEN	29.1905	0	0	0	1	0	0
371	Tirunelveli	GEN	32.2204	0	0	0	1	0	0
372	Tenkasi	SC	53.1769	2	0	0	1	0	0
373	Tiruchendur	GEN	59.5584	0	0	0	1	0	0
374	Nagercoil	GEN	78.2528	4	0	0	1	0	0
375	Tripura West	GEN	30.2633	8	0	0	1	0	3
376	Tripura East	ST	57.5705	9	0	0	1	1	3
377	Bijnor	SC	15.7373	1	0	0	0	0	0
378	Amroha	GEN	9.17037	0	0	0	0	0	0
379	Moradabad	GEN	1.45836	0	0	0	0	0	0
380	Rampur	GEN	4.48122	0	0	0	0	0	0
381	Sambhal	GEN	2.57378	0	0	0	0	0	0
382	Budaun	GEN	4.97759	0	0	0	0	0	0
383	Aonla	GEN	4.97644	0	0	0	0	0	0
384	Bareilly	GEN	2.12808	0	0	0	0	0	0
385	Pilibhit	GEN	5.47827	0	0	0	0	0	0
386	Shahjahanpur	GEN	0.232025	0	0	0	0	0	0
387	Kheri	GEN	8.0116	2	0	0	0	0	0
388	Shahabad	GEN	0	0	0	0	0	0	0
389	Sitapur	GEN	3.98093	0	0	0	0	0	0
390	Misrikh	SC	5.34914	0	0	0	0	0	0
391	Hardoi	SC	4.38162	0	0	0	0	0	0
392	Lucknow	GEN	9.31245	0	0	0	0	0	0
393	Mohanlalganj	SC	2.03541	0	0	0	0	0	0
394	Unnao	GEN	0.15996	0	0	0	0	0	0
395	Rae Bareli	GEN	0.023921	0	0	0	0	0	0
396	Pratapgarh	GEN	5.23963	0	0	0	0	0	0
397	Amethi	GEN	1.71506	0	0	0	0	0	0
398	Sultanpur	GEN	10.524	0	0	0	0	0	0
399	Akbarpur	SC	0	5	0	0	0	0	0
400	Faizabad	GEN	10.2692	0	0	0	0	0	0
401	Bara Banki	SC	3.73714	0	0	0	0	0	0
402	Kaiserganj	GEN	3.66158	0	0	0	0	0	0
403	Bahraich	GEN	10.0735	1	0	0	0	0	0
404	Balrampur	GEN	12.4773	1	0	0	0	0	0
405	Gonda	GEN	2.5537	0	0	0	0	0	0
406	Basti	SC	6.37518	0	0	0	0	0	0
407	Domariaganj	GEN	5.96803	0	0	0	0	0	0
408	Khalilabad	GEN	0	0	0	0	0	0	0
409	Bansgaon	SC	0	0	0	0	0	0	0
410	Gorakhpur	GEN	0	0	0	0	0	0	0
411	Maharajganj	GEN	0	2	0	0	0	0	0
412	Padrauna	GEN	0	0	0	0	0	0	0
413	Deoria	GEN	0	0	0	0	0	0	0
414	Salempur	GEN	8.37257	0	0	0	0	0	0
415	Ballia	GEN	0	0	0	0	0	0	0
416	Ghosi	GEN	1.50574	0	0	0	0	0	0
417	Azamgarh	GEN	0	0	0	0	0	0	0
418	Lalganj	SC	0	0	0	0	0	0	0
419	Machhlishahr	GEN	3.62637	0	0	0	0	0	0
420	Jaunpur	GEN	0	0	0	0	0	0	0
421	Saidpur	SC	1.85211	0	0	0	0	0	0
422	Ghazipur	GEN	15.2722	0	0	0	0	0	0
423	Chandauli	GEN	17.9871	4	0	0	0	0	0
424	Varanasi	GEN	0	0	0	0	0	0	0

425	Robertsganj	SC	44.9665	5	0	0	0	0	0
426	Mirzapur	GEN	20.7902	3	0	0	0	0	0
427	Phulpur	GEN	0.650917	0	0	0	0	0	0
428	Allahabad	GEN	23.7186	1	0	0	0	0	0
429	Chail	SC	15.4703	0	0	0	0	0	0
430	Fatehpur	GEN	9.01398	0	0	0	0	0	0
431	Banda	GEN	25.192	2	0	0	0	0	0
432	Hamirpur	GEN	10.3692	0	0	0	0	0	0
433	Jhansi	GEN	22.5774	0	0	0	0	0	0
434	Jalaun	SC	13.3857	0	0	0	0	0	0
435	Ghatampur	SC	7.2489	0	0	0	0	0	0
436	Bilhaur	GEN	13.0416	0	0	0	0	0	0
437	Kanpur	GEN	0	0	0	0	0	0	0
438	Etawah	GEN	11.2636	0	0	0	0	0	0
439	Kannauj	GEN	3.24156	0	0	0	0	0	0
440	Farrukhabad	GEN	0	0	0	0	0	0	0
441	Mainpuri	GEN	4.14152	0	0	0	0	0	0
442	Jalesar	GEN	4.81279	0	0	0	0	0	0
443	Etah	GEN	3.67475	0	0	0	0	0	0
444	Firozabad	SC	8.28628	0	0	0	0	0	0
445	Agra	GEN	14.4006	0	0	0	0	0	0
446	Mathura	GEN	1.99706	0	0	0	0	0	0
447	Hathras	SC	1.46255	0	0	0	0	0	0
448	Aligarh	GEN	0	0	0	0	0	0	0
449	Khurja	SC	2.19214	0	0	0	0	0	0
450	Bulandshahr	GEN	9.12401	0	0	0	0	0	0
451	Hapur	GEN	10.5031	0	0	0	0	0	0
452	Meerut	GEN	4.12779	0	0	0	0	0	0
453	Baghpat	GEN	3.55944	0	0	0	0	0	0
454	Muzaffarnagar	GEN	8.13974	0	0	0	0	0	0
455	Kairana	GEN	4.51876	0	0	0	0	0	0
456	Saharanpur	GEN	13.5114	1	0	0	0	0	0
457	Cooch Behar	SC	8.73386	0	0	0	1	0	0
458	Alipurduars	ST	47.4082	5	0	0	1	1	0
459	Jalpaiguri	GEN	14.0959	3	0	0	1	0	0
460	Darjeeling	GEN	60.2646	6	0	0	1	1	2
461	Raiganj	GEN	2.52231	0	0	0	1	0	0
462	Balurghat	SC	2.45793	0	0	0	1	0	0
463	Malda	GEN	14.9905	0	0	0	1	0	0
464	Jangipur	GEN	15.9397	0	0	0	1	0	0
465	Murshidabad	GEN	8.95517	0	0	0	1	0	0
466	Berhampore	GEN	7.36588	0	0	0	1	0	0
467	Krishnagar	GEN	0	0	0	0	1	0	0
468	Nabadwip	SC	0	0	0	0	1	0	0
469	Barasat	GEN	0	0	0	0	1	0	0
470	Basirhat	GEN	0	0	0	0	1	0	0
471	Joynagar	SC	39.6246	5	0	0	1	0	0
472	Mathurapur	SC	61.9453	0	0	0	1	0	0
473	Diamond Harbour	GEN	24.6326	0	0	0	1	0	0
474	Jadavpur	GEN	5.80609	0	0	0	1	0	0
475	Barrackpore	GEN	0	0	0	0	1	0	0
476	Dum Dum	GEN	0	0	0	0	1	0	0
477	Calcutta North West	GEN	0	0	0	0	1	0	0
478	Calcutta North East	GEN	0	0	0	0	1	0	0
479	Calcutta South	GEN	0	0	0	0	1	0	0
480	Howrah	GEN	0	0	0	0	1	0	0
481	Uluberia	GEN	5.01458	0	0	0	1	0	0
482	Serampore	GEN	0	0	0	0	1	0	0
483	Hooghly	GEN	2.78698	0	0	0	1	0	0
484	Arambagh	GEN	2.96994	0	0	0	1	0	0
485	Panskura	GEN	1.86111	0	0	0	1	0	0
486	Tamluk	GEN	21.5477	0	0	0	1	0	0
487	Contai	GEN	20.8198	0	0	0	1	0	0
488	Midnapore	GEN	10.327	0	0	0	1	0	0
489	Jhargram	ST	20.0133	3	0	0	1	1	0
490	Purulia	GEN	45.5063	1	0	0	1	0	0
491	Bankura	GEN	20.62	0	0	0	1	0	0
492	Vishnupur	SC	18.5866	2	0	0	1	0	0
493	Durgapur	SC	17.1363	1	0	0	1	0	0
494	Asansol	GEN	22.2964	0	0	0	1	0	0
495	Burdwan	GEN	7.7155	0	0	0	1	0	0
496	Katwa	GEN	2.6784	0	0	0	1	0	0
497	Bolpur	GEN	7.09379	0	0	0	1	0	0

498	Birbhum	SC	9.01639	0	0	0	1	0	0
499	Surguja	ST	64.2733	7	0	0	0	1	2
500	Raigarh	ST	67.1391	4	0	0	0	1	1
501	Janjgir	GEN	52.1541	4	0	0	0	0	0
502	Bilaspur	SC	45.2963	3	0	0	0	0	0
503	Sarangarh	SC	38.0503	3	0	0	0	0	0
504	Raipur	GEN	10.8002	0	0	0	0	0	0
505	Mahasamund	GEN	42.7043	4	0	0	0	0	0
506	Kanker	ST	52.6845	9	0	0	0	1	2
507	Bastar	ST	62.6934	9	0	0	0	1	2
508	Durg	GEN	10.4734	0	0	0	0	0	0
509	Rajnandgaon	GEN	41.5669	3	0	0	0	0	1
510	Rajmahal	ST	53.5187	2	0	0	0	1	0
511	Dumka	ST	32.5802	0	0	0	0	1	0
512	Godda	GEN	28.2537	0	0	0	0	0	0
513	Chatra	GEN	51.9686	4	0	0	0	0	1
514	Kodarma	GEN	39.0282	2	0	0	0	0	1
515	Giridih	GEN	59.1754	2	0	0	0	0	0
516	Dhanbad	GEN	31.8536	0	0	0	0	0	0
517	Ranchi	GEN	61.2472	1	0	0	0	0	0
518	Jamshedpur	GEN	58.5507	3	0	0	0	0	0
519	Singhbhum	ST	73.8929	5	0	0	0	1	0
520	Khunti	ST	68.2576	2	0	0	0	1	1
521	Lohardaga	ST	61.6411	5	0	0	0	1	1
522	Palamau	SC	51.1973	3	0	0	0	0	1
523	Hazaribagh	GEN	57.3861	0	0	0	0	0	1
524	Tehri Garhwal	GEN	88.9891	5	0	0	0	0	0
525	Garhwal	GEN	89.701	5	0	0	0	0	0
526	Almora	GEN	89.5071	5	0	0	0	0	0
527	Nainital	GEN	51.2621	4	0	0	0	0	0
528	Hardwar	SC	35.5498	3	0	0	0	0	0

ANNEX II

From: Sepp, Kalev USA
Sent: Friday, October 28, 2005 8:47 PM
To: Mitra, John IND
Cc: McCormick, Gordon USA
Subject: berming

John --
You wanted a note on "berming" in Iraq:

For the first time in centuries, Mosul became a "walled city" again when U.S. forces pushed up an earthen berm extending completely around the town of 1.5 million people. The berm is a wall of dirt six to eight feet high, scraped up from the barren hardpan desert beyond the inhabited areas, and extending continuously for dozens of miles. The purpose of the berm is to force all vehicle traffic to pass into and out of Mosul on paved roads, with traffic checkpoints set up at the gaps in the berm where the roads pass through it. Since the insurgents and criminals use vehicles to travel, transport weapons and explosives, and communicate via courier (to avoid using cellphones which can be monitored), they must go through the checkpoints. While the Iraqi police manning the checkpoints can be bribed to let a vehicle go uninspected -- for as little as a pack of cigarettes, but not more than five hundred dollars -- berming is problematic for the insurgents and criminal gangs. It lengthens their time of travel, limits their choices of routes, and increases their risk of capture, especially if they're shipping weapons. While the berm can be breached, it is not easy to do so, and it's obvious when it occurs. Even if the infiltrators are not caught in the act of breaching by a mounted patrol or by aerial surveillance, their tracks are readily followed. Berming was considered successful enough in Mosul that Tall Afar was bermed before the major coalition and Iraqi military operation in September to clear out the Serai neighborhood. Samarra, long a contested town, will likely be bermed next.

■ Dr. Kalev I. Sepp, Naval Postgraduate School, 28 October 2005

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