

CHAPTER-3

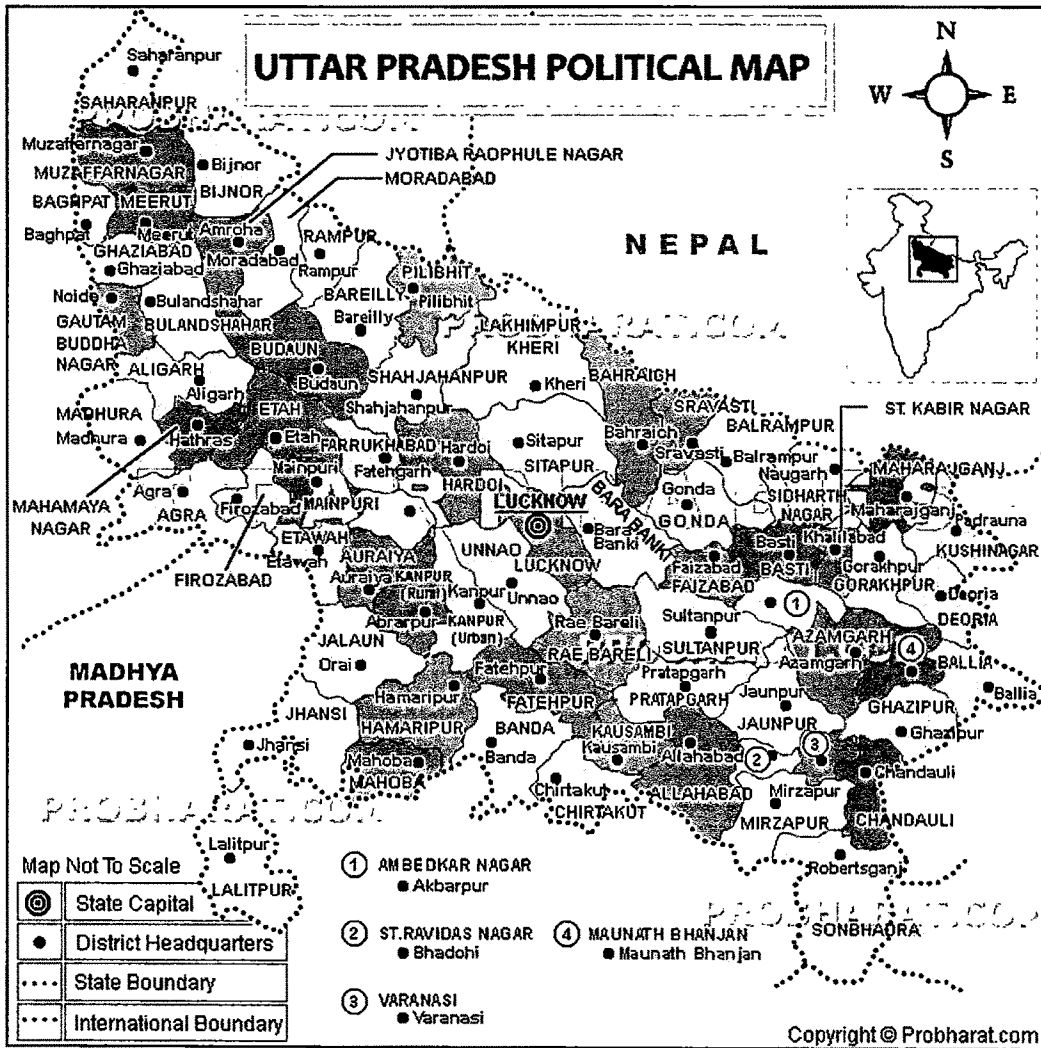
STUDY AREA

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It comprised various places of Azamgarh district in Uttar Pradesh, India.

Uttar Pradesh: Uttar Pradesh is India's fifth largest and most populous state, located in the north-central part of the country. It spreads over a large area, and the plains of the state are quite distinctly different from the high mountains in the north. The climate of Uttar Pradesh can also vary widely, with temperatures as high as 47 °C in summer, and as low as -1 °C in winter.

Uttar Pradesh is bounded by Nepal on the North, Uttarakhand on the Northeast, Himachal Pradesh on the Northwest, Haryana on the west, Rajasthan on the south-west, Madhya Pradesh on the south and south-west, and Bihar on the east. Situated between 23°52'N and 31°28'N latitudes and 77°3' and 84°39'E longitudes (Map-01), this is the



MAP-01 (Map of Uttar Pradesh)

fifth largest state in the country in terms of area, and the first in terms of population.

Physical Features:

Uttar Pradesh can be divided into three distinct hypsographical regions:

1. The Himalayan region in the North - Highly rugged and varied terrain; transferred to Uttrakhand. Varying topography; elevation ranges from 300 to 5000m; slope ranges from 150 to 600 m/km.
2. The Gangetic Plain in the centre - Highly fertile alluvial soils; flat topography broken by numerous ponds, lakes and rivers; slope 2 m/km
3. The Vindhya Hills and plateau in the south - Hard rock Strata; varied topography of hills, plains, valleys and plateau; limited water availability.

The Himalayan region comprises the districts of Uttarkashi, Chamoli, Pithoragarh, Tehrigarhwal, Almora and Nainital tehsil of Nainital District and Chakrata and a part of Dehradun tehsil of Dehradun district. High mountains formed of sedimentary

rocks broken by valleys and deep gorges, characterize the terrain. The perpetual snows in the higher reaches are the source of perennial rivers and rivulets which criss-cross the terrain and ultimately find their way together with their tributaries form a big river system which waters the entire Gangetic plain.

The prominent peaks in the hill region include Banarapunch, Mount Kamet, Trishul, Dunagiri, Nanda Devi, Badrinath and Kedarnath. The hill areas are sparsely populated. There are few trees that can grow in this terrain, and soil is thus subject to heavy erosion. Cultivation is done under intensive soil. Irrigation facilities are deficient and only a small fraction of the total area is under artificial irrigation. The valley areas have fertile and rich soil. There is intensive cultivation on terraced hill slopes. The higher altitudes are suitable for sub-tropical and temperate fruit culture. The Siwalik Range which forms the southern foothills of the Himalayas, slopes down into a boulder bed called 'bhadhar'. The transitional belt running along the entire length of the state is called the terai and bhabhar area. It has rich forests, cutting across it are

innumerable streams which swell into raging torrents during the monsoon. The bhabhar tract gives place to the terai area which is covered with tall elephant grass and thick forests interspersed with marshes and swamps. The sluggish rivers of the bhabhar deepen in this area, their course running through a tangled mass of thick under growth. The terai runs parallel to the bhabhar in a thin strip. The main crops are wheat, rice, and sugar cane. Jute also is grown. Tea is grown in the sub mountain area of the Dehradun. The most important area for the economy of the state is the Gangetic plain which stretches across the entire length of the state from east to west. The entire alluvial plain can be divided into three sub-regions. The first in the eastern tract consisting of 14 districts which are subject to periodical floods and droughts and have been classified as scarcity areas. These districts have the highest density of population which gives the lowest per capita land. The other two regions, the central and the western are comparatively better with a well-developed irrigation system. They suffer from water logging and large-scale user tracts. The Gangetic plain is watered by the Yamuna, Ganges and its major tributaries, the Ramganga, the Gomati, The Ghaghra

and Gandak. The whole plain is alluvial and very fertile. The chief crops cultivated here are rice, wheat, pearl millet, gram and barley. Sugarcane is the chief cash crop of the region. The southern fringe of the Gangetic is demarcated by the Vindhya Hills and Plateau. It comprises the four districts of Jhansi, Jalaun, Banda and Hamirpur in Bundelkhand division, Meja and Karchhana tehsils of Allahabad district, the whole of the Mirzapur district south of Ganges and Chakia tehsils of Varanasi district. The ground is strong with low hills. The Betwa and Ken rivers join the Jamuna from the south-west in this region. It has four distinct kinds of soil, two of which are agriculturally difficult to manage. They are black cotton soil. Rainfall is scanty and erratic and water-resources are scarce. Dry farming is practical on a large scale.

Climate of Uttar Pradesh:

The climate of the state is tropical monsoon, but variations exist because of difference in altitudes. The Himalayan region is cold. The average temperature varies in the plains from 3 to 4 °C in January to 43 to 45 °C in May and June. There are three distinct seasons - winter from

October to February, summer from March to mid-June, and the rainy season from June to September.

The Himalayan region has about 1000 to 2000 mm of rain fall. The rain fall in the plains is heaviest in the east and decreases towards the north-east. Floods are a recurring problem in the state, causing damage to crops, life and property. The worst floods were in 1971, when 51 of the 54 districts of the state were affected – an area of nearly 52,000 square kilometres. The eastern districts are the most vulnerable to floods, the western districts slightly less and the central region markedly less. The eastern districts susceptibility to floods is ascribed, among other things, to heavy rainfall, low flat country, high subsoil water level and the silting of beds which causes river levels to rise. The problem in the western districts is mainly poor drainage caused by the obstruction of roads, railways, canals, new built-up areas etc. There is water logging in the large areas. The major flood-prone rivers are the Ganges, Yamuna, Gomti, Ghaghara, Rapti, Sarda and Ramganga. The inadequate drainage capacity of the smaller western Sirsa, Kali and the Aligarh drain is also a cause of floods.

Tropical Monsoon Climate Marked By Three Distinct Seasons:

1. **Summer (March–June):** Hot & dry (temperatures rise to 45 °C, sometimes 47-48 °C); low relative humidity (20%); dust laden winds.
2. **Monsoon (June–September):** 85% of average annual rainfall of 990 mm. Fall in temperature 40-45° on rainy days.
3. **Winter (October–February):** Cold (temperatures drop to 3-4 °C, sometimes below -1 °C); clear skies; foggy conditions in some tracts.

Flora and fauna:

Forests constitute about 12.8% of the total geographical area of the state. The Himalayan region and the terai and bhabhar area in the Gangetic plain have most of the forests. The Vindhyan forests consists mostly of scrub. The districts of Jaunpur, Ghazipur and Ballia have no forest land, while 31 other district have less forest area.

Forests:

Near the snow line there are forests of Rhododendrons and *Betula utilis* (Bhojpatra). Below them are forests of silver fir, spruce, deodar, chir and oak. On the foot hills and in the terai-bhabhar area grows the sal and gigantic haldu. Along river courses the shisham grows in abundance. The Vindhyan forests have dhak, teak, mahua, salai, chironji and tendu. The hill forests also have a large variety of medicinal herbs. Sal, chir, deodar and sain yield building timber and railway sleepers. Chir also yield resin, the chief source of resin and turpentine. Sisso is mostly used for furniture while khair yields kattha, which is taken with betel leaves or pan. Semal and gutel are used as matchwood and kanju in the plywood industry. Babul provides the principal tanning material of the state. Some of the grasses such as baib and bamboo are raw material for the paper industry. Tendu leaves are used in making bidis (Indian cigarettes), and cane is used in baskets and furniture.

Species of grasses have been collected from the *Gangetic plain*. Herbs include medicinal plants

Like Rauwolfia serpentine, Viala serpens, Podophyllum hexandrum and Ephedra gerardiana.

Rivers:

Main Rivers of Uttar Pradesh are the Ganga, Yamuna, Gomti, Ramganga and Ghaghara.

Animal Life:

Corresponding to its variegated topography and climate, the state has a wealth of animal life. Its avifauna is among the richest in the country. Animals that can be found in the jungles of Uttar Pradesh include the tiger, leopard, wild bear, sloth bear, chital, sambhar, jackal, porcupine, jungle cat, hare, squirrel, monitor lizards, and fox. These can be seen in all but the highest mountain ranges. The most common birds include the crow, pigeon, dove, jungle fowl, black partridge, house sparrow, peafowl, blue jay, parakeet, kite, mynah, quail, bulbul, kingfisher and woodpecker.

Certain species are found in special habitats. The elephant is confined to the terai and the foothills. The gond and para also found in this region. The chinkara and the sandgrouse prefer a dry climate, and are native to the Vindhyan

forests. The musk deer and the brown bear is found in the higher Himalayas. Among the game birds resident in the state are the snipe, comb duck, grey duck, cotton teal and whistling teal.

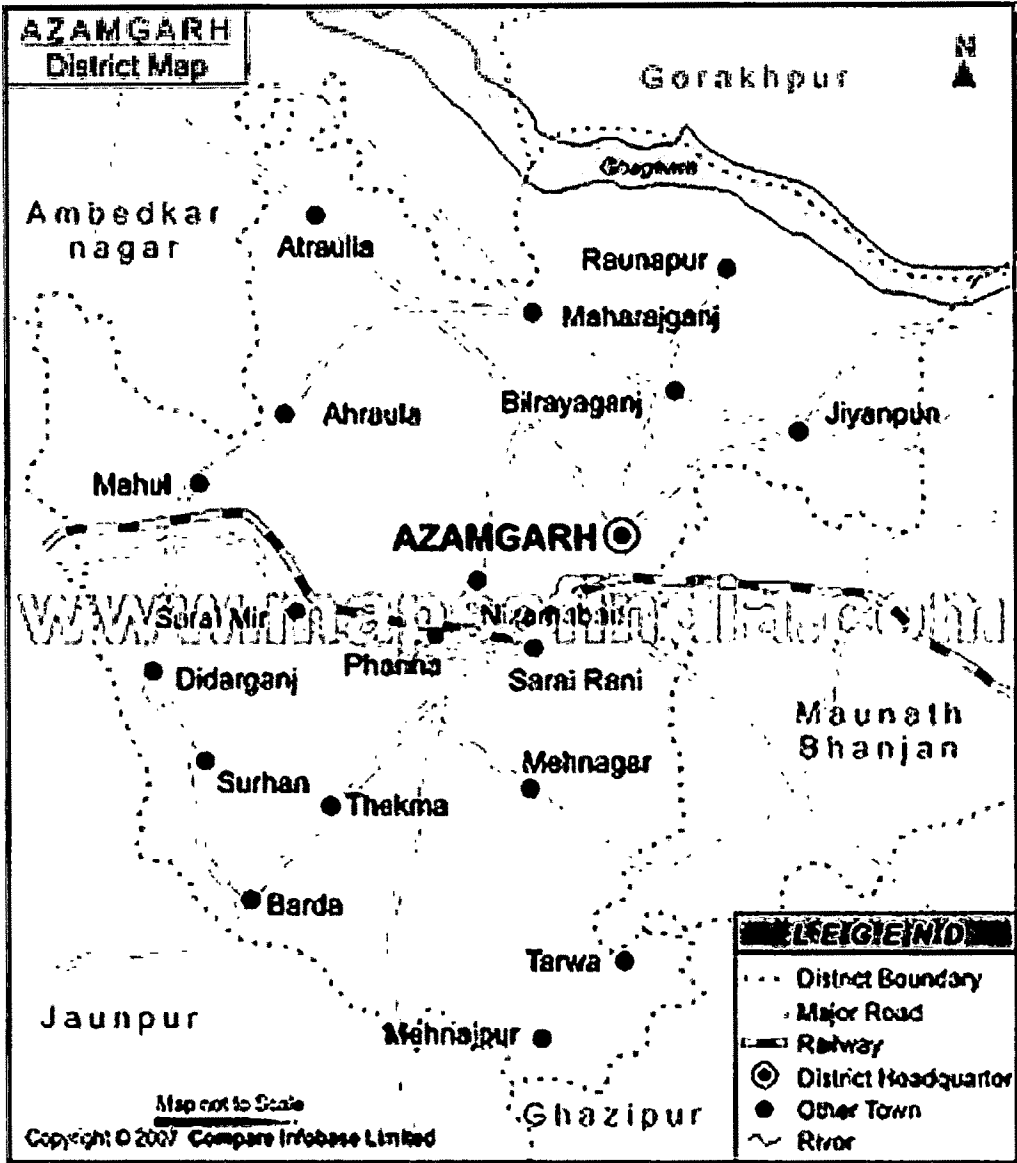
Several species of wildlife have become extinct in Uttar Pradesh. Among them are the lion from the Gangetic plain and the rhinoceros from the terai. The fate of many species is uncertain, including the tiger, black buck, serow, musk deer, swamp deer, bustard, pink-headed duck, chir and mural pheasants and four-horned antelope. Although a determined enforcement of laws against poaching and hunting has yielded some results, the wildlife population today is alarmingly low. Gharials are poached for their skin.

To preserve its wild life the state has established one National Park; Corbett National Park and 12 game sanctuaries. The Corbett National Park is situated partly in Ramnagar and partly in the Kalagarh forest division. It is one of the show pieces of the state.

Azamgarh district:

Azamgarh district is located in Uttar Pradesh. The district occupies an area of 4234 Km². It is located at 26°04'N 83°11'E / 26.06°N 83.19°E / 26.06; 83.19 (Map-02). It has an average elevation of 64 metres (209 feet). The district is bounded by Mau district on the east, Gorakhpur district on the north, Ghazipur on the south-east, Jaunpur on the south-west, Sultanpur district on the west and Ambedkar Nagar district on the north-west. Azamgarh consists of a series of parallel ridges, whose summits are depressed into beds or hollows, along which the rivers flow; while between the ridges are low-lying rice lands, interspersed with numerous natural reservoirs. The main occupation of the people of Azamgarh is agriculture. The soil is fertile, and very highly cultivated, bearing magnificent crops of rice, sugar-cane, wheat and orchards of mango and guava.

Geography of Azamgarh District comprises level plain without any hills, the only variations in the surface being caused by the dire lands along the streams that drain it. Except in the proximity of the Ghaghara River, the region slopes gently towards the south-east. Topography of Azamgarh



Map-02 (Map of Azamgarh District)

District also includes depressions of varying depth and extent in which the surface drainage of the interior collects. Further, there are some high lying plains.

Geography of Azamgarh district also comprises some major river system and water resources. Ghaghara River is the main river flowing through the district. The river has its origin in the mountains of Kumaon and Nepal. Ghaghara River makes the northern boundary of Azamgarh District and separates it from Gorakhpur. Among the minor channels which traverse the district is **Tons River**. This river takes its rise many kilometers beyond the borders of Azamgarh in Faizabad District. It flows parallel with the Ghaghara till it enters the district around 9.6 km north-east of Mahul. It is soon after joined by a small tributary called the Majhoi on the borders of Pargana Nizamabad. Tons River is perennial but during the dry months of the year only a sluggish current of water flows in the bottom of its bed. Lakes of the district are numerous but in many cases of considerable size. The more significant of them are, in the southern tract, those known as Kotail, Jamuawan, Gumadih, Kumbh, Pukh, Asaune and the largest of all the Gambhiran. In the northern section of Azamgarh

District, the prominent lakes are Koila, Kasila-Gasila, Kaili, Duhia Birna, Ara Telhnan and Manchhil.

The climate of Azamgarh District is moist and relaxing except in winter and hot seasons. The year may be divided into four seasons. The period from March to the mid of June is the hot season. The south west monsoon season continues up to the end of September. The succeeding period lasting till the end of November is the post monsoon or transition season. The period from December to February is the cold season. The average annual rainfall in the district is 1021.3 mm. On an average there are 50 rainy days in a year in this district of Uttar Pradesh. This number varies from 48 at Deogaon to 52 at Azamgarh.

Localities of the study area:

These include places (villages) of all the seven tehsils (namely Sadar, Sagari, Boodhanpur, Nizambad, Phoolpur, Mehnagar and Lalganj) of Azamgarh district as given in Table-1, Table-2, Table-3 and Table-4.

Table-1: Name of places/ villages of Azamgarh Sadar and Sagari Tahsils of Azamgarh district of U.P. from where spiders were collected for study.

1. Tahshil: Sadar				2. Tahshil: Sagari			
S.No.	Village	S.No.	Village	S.No.	Village	S.No.	Village
1.	Chandeshwar	14.	Mahua	1.	Abhanpatti	14.	Bakshipur
2.	Ukaura	15.	Ranipur	2.	Masooripur	15.	Ramnagar
3.	Devkhari	16.	Patahunwa	3.	Shahdeeh	16.	Haraiya
4.	Azampur	17.	Sewata	4.	Jamuari	17.	Ramgarh
5.	Baddopur	18.	Madhian	5.	Raunapar	18.	Bazargosain
6.	Balrampur	19.	Dharmalpur	6.	Khojauli	19.	Banawar
7.	Khemaupur	20.	Parmeshwarpur	7.	Chilbili	20.	Ghaghara
8.	Karanpur	21.	Baramadpur	8.	Batan	21.	Baidauli
9.	Basagit	22.	Unchagaon	9.	Belkundah	22.	Mohammadpur
10.	Belagar	23.	Belanadeeh	10.	Taahirpur	23.	Laatghat
11.	Mamarakhapur	24.	Dhanakpur	11.	Baghwar	24.	Bijarawan
12.	Samenda	25.	Manikadeeh	12.	Baijabari	25.	Bankut
13.	Saraishadi	26.	Mittupur	13.	Pathakauli	26.	Anzanshaheed

Table-2: Name of places/ villages of Boodhanpur and Nizambad Tahsils of Azamgarh district of U.P. from where spiders were collected for study.

3. Tahshil: Boodhanpur				4. Tahshil: Nizambad			
S.No.	Village	S.No.	Village	S.No.	Village	S.No.	Village
1.	Bharauli	15.	Bansgaon	1.	Dilauri	15.	Ghosari
2.	Kakarahi	16.	Sukulpura	2.	Kandhuwai	16.	Gothaon
3.	Koyalasha	17.	Ataraullia	3.	Phariha	17.	Arara
4.	Boodhanpur	18.	Pasipur	4.	Bragaon	18.	Chakisrauli
5.	Ranipur	19.	Kaptanganj	5.	Nizambaad	19.	Israuli
6.	Madiyapar	20.	Terahi	6.	Pandahan	20.	Shikandarapur
7.	Bihara	21.	Mharajganj	7.	Mukarayabaad	21.	Mirzapur
8.	Azgara	22.	Samadhipur	8.	Nadauli	22.	Godiyar
9.	Naupatti	23.	Gopalipatti	9.	Bairampur	23.	Jagdishpur
10.	Bhatawali	24.	Bhunkuna	10.	Semari	24.	Pattanpur
11.	Purukhipur	25.	Bilari	11.	Koinahan	25.	Sarayameer
12.	Baragaon	26.	Sookhipur	12.	Tahabarpur	26.	Maqdoompur
13.	Lala ki basahi	27.	Bhedaura	13.	Dttatreya	27.	Khora
14.	Deupur	28.	Denpur	14.	Nandaon	28.	Tahabarpur

Table-3: Name of places/ villages of Phoolpur and Menhnagar Tahsils of Azamgarh district of U.P. from where spiders were collected for study.

5. Tahshil: Phoolpur				6. Tahshil: Menhnagar			
S.No.	Village	S.No.	Village	S.No.	Village	S.No.	Village
1.	Ishoopur	15.	Palthi	1.	Mangaranwa	15.	Karauti
2.	Khanpur	16.	Khetapatti	2.	Ranipur razmo	16.	Kusamulia
3.	Bakhra	17.	Deehkaithauli	3.	Bau ki khajuri	17.	Basoopur
4.	Nonari	18.	Palia adai	4.	Kutat	18.	Shekhpur
5.	Chittepur	19.	Amarethoo	5.	Gaura	19.	Sirasa
6.	Surahan	20.	Maqsoodia	6.	Laudah	20.	Bachhawal
7.	Sangrampur	21.	Hazipur	7.	Dhaya	21.	Pawani
8.	Jagadishpur	22.	Ambari	8.	Dhodhia imadpur	22.	Khataee
9.	Bhormau	23.	Khanjahan	9.	Ganzor	23.	Jayanagar
10.	Bhatanipara	24.	Durbasa	10.	Raipur	24.	Benoopur
11.	Khojapur	25.	Samsabaad	11.	Beerbhanpur	25.	Shahdevait
12.	Kaneri	26.	Mahul	12.	Tilesara	26.	Nae
13.	Ishapur	27.	Ahiraula	13.	Ghinahapur	27.	Palia
14.	Azampur	28.	Pakkhanpur	14.	Gahani		

Table-4: Name of places/ villages of Lalganj Tahsil of Azamgarh district of U.P. from where spiders were collected for study.

7. Tahshil: Lalganj			
S.No.	Village	S.No.	Village
1.	Saraay	9.	Baalpur
2.	Narsinhpur	10.	Gadhaha
3.	Palhana	11.	Kharaila
4.	Pakari	12.	Bhawtar
5.	Lahuwankala	13.	Gambheerpur
6.	Maseerpur	14.	Utargaonwa
7.	Kamarahan	15.	Gosain ki bazar
8.	Devgaon	16.	Bindra bazar
		17.	Rambadhauna
		18.	Kothabuzurg
		19.	Khaniara
		20.	Razmon
		21.	Akoli
		22.	Upenda
		23.	Tahirpur
		24.	Thekama