Chapter - VI

TYPES AND PATTERNS OF RURAL SETTLEMENTS

Chapter - VI

TYPES AND PATTERNS OF RURAL SETTLEMENTS

6.1 Introduction:

In the previous chapter an attempt has been made to analyse the siting of rural settlements. This chapter aims to study the types and patterns of rural settlement of the study region. To identify the types of rural settlements, dispersal index has been calculated. Topographical sheets have been used to analyse the patterns of rural settlements.

A rural settlement is mostly an agricultural workshop and as such it cannot be separated from the land whose use it ensures. Its shape and understanding are often in strict accord with the kind of work, the agricultural technique and the way the soil is used Perpillou,(1966)[1]. According to Aurousseau(1920)[2] the arrangement of rural settlement as geographical entities express the grouping of dwellings and their inter-relationship, makes the different types of rural settlements.

Rural settlements are classified in different ways. Some geographers have considered site as important criteria for the classification of rural settlements. On the one hand the pattern has been guided by physical aspects such as nature of topography, source of water supply, drainage pattern, soil condition, etc. On the other hand it is also related to the socio- economic conditions such as land use, land tenure, crop association, means of transportation and density of population.

Many geographer have studied settlement types but they have not given their clear elucidation. Demanageon(1962)[3] tried to explain why rural settlements are dispersed or agglomerated. According to him, village are compact in plain areas whereas in rugged or broken area dispersed settlements are more common.

The physical factors have a greater control over the types of rural settlements. Therefore, river side settlement are mostly compact while high resource localization creates nucleated settlement type. In river

plains where resources are evenly distributed, water and fertile land are available everywhere, therefore, disperse type of rural settlements are observed.

Land tenure, security, density of population transport network etc. socio-economic factors also controls the settlement types. Conditions of onsecurity and need of protection promote compact and agglomerated village types. High density of population tends to create agglomerated types of villages.

Rural settlement types and pattern are used sometimes as synonymous. But they are sometimes interchangeable and one being element or part of other. According to Einch and Trewartha(a) isolated or dispersed and (b) the nucleated are two primary types of rural settlements. But Hadson(1976)[4] says that (a) nucleated and (b) dispersed are two major patterns in rural areas.

Pattern refers to geometric form and shape of the settlements which may be of different types and the type refer to relationship of number of dwellings and number of sites Singh, (1994)[5]. The analysis of patterns brings different classified types of settlements with various shapes and forms. The intra village analysis of inter dwelling distance shows the occupancy of village territory on one or more than one sites. It provides the picture of dispersion or nucleation; hence these are types of settlements. Pattern of rural settlement is related to geometrical attributes. Some patterns of rural settlement are related to non- geometrical.

6.2 Major Settlements Types In Latur District :

For purpose of classification a statistical method of Mandal (1979)[6] has been applied and the results have been presented during a table an a map. Considering size and spacing of rural settlements dispersal index is calculated as follows :

Settlemnt Formula :

a. Dispersal Index : $\frac{Average\ Population\ Size\ of\ Settlements}{Average\ Spacing\ of\ Settlements}$

b. Average Population Size of Settlements : $\frac{Total\ Rural\ Population}{Number\ of\ Settlements}$

c. Average spacing : $\sqrt{\frac{Total\ \ Rural\ \ Area}{Number\ \ of\ \ Settlement\ \ s}}$

Table No. 6.1 :
Talukawise Spacing, Size and Dispersal Index of Rural Settlement in Latur Tahsil (2001to2011)

Sr.No	Tahsil	Average Spacing		Average Population Size		Dispersal Index
		2001	2011	2001	2011	
1	Latur	2.90	2.90	2037.21	2037.21	4009.33
2	Renapur	2.70	2.70	1546.73	1799.83	2678.44
3	Ahamadpur	2.52	2.54	1327.21	1588.69	2093.95
4	Jalkot	2.74	2.74	1472.29	1855.34	2656.04
5	Chakur	2.84	2.84	1848.64	2093.06	3313.92
6	Shirur-Anantpal	2.54	2.54	1452.56	1637.80	2089.36
7	Ausa	3.07	3.13	1889.12	2153.17	4473.90
8	Nilanga	2.60	2.71	1641.46	2035.79	2976.40
9	Deoni	2.76	2.83	1550.21	1807.37	2803.48
10	Udgir	2.86	2.89	1766.54	2054.29	3105.53
Total of District		2.75	2.78	1684.34	1983.96	

Source: *Compiled by Researcher.*

Values of Dispersal index have been grouped according to median and quartile values (Table No. 6.1 and Map No. 6.1). The higher values indicate compact settlements whereas, lower values indicate sprinkled

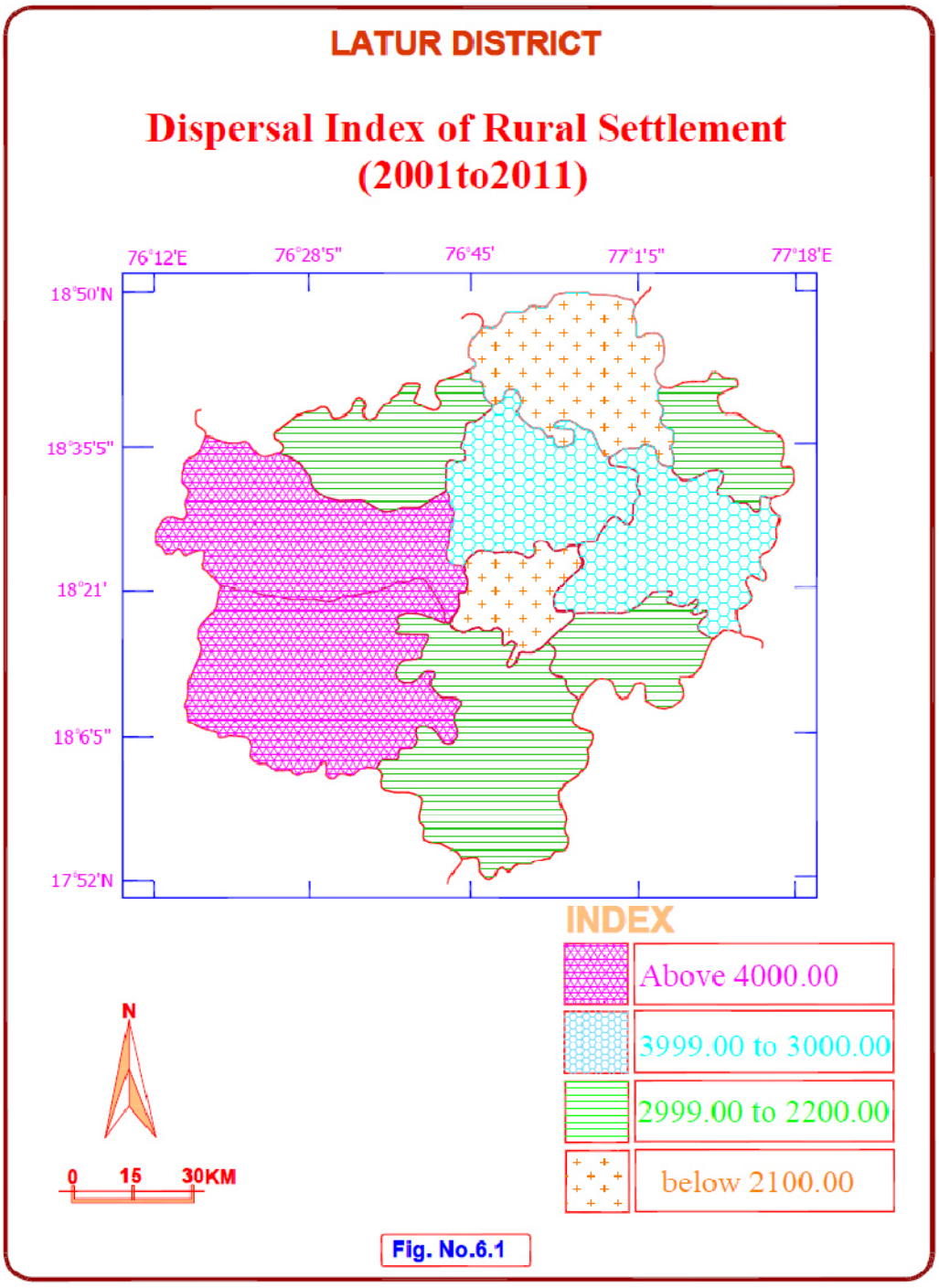
LATUR DISTRICT
Dispersal Index of Rural Settlement
(2001to2011)
76°12'E
76°28'5"
76°45'
77°1'5"
77°18'E
18°50'N
18°35'5"
18°21'
18°6'5"
17°52'N
INDEX
Above 4000.00
3999.00 to 3000.00
2999.00 to 2200.00
below 2100.00
N
0 15 30KM

Fig. No.6.1

settlements. The dispersal values range from 4473.90 to 2093.95. The spatial distribution of settlements according to types are as follows.

i) Compact Settlement :

Map. No. 4.6 clearly shows that the compact settlements are found in fertile tracts of the Manjara River this includes Latur tahsil. Rainfall and irrigation are important factor affecting settlements types. In areas of poor rainfall in Balaghat range, surface water accumulates in ponds therefore; compact settlements are built around these water-bodies. In areas where the ponds are frequent and deep wells and tube wells are constructed, the settlements are compact e.g. Latur rural, Latur urban and etc. Ausa is a old market centre in that reason average size of the rural settlements is compact.

In this group of tahsils the average size of the rural settlements are comparatively large. And most of the settlements located in these Taluka have dense population and close spacing between the houses. This is the area where agriculture is highly developed. The dispersal values in this group range Above 4000.00.

ii) Semi Compact Settlement:

The semi compact settlement is an intermediate type between the zones of compact and sprinkled settlements and is more common in the extensive fertile areas where the water table is high and wells can be sunk, easily. Such type of settlements is found in areas where the drainage texture is dense particularly in Chakur and Udgir Tahsil. Wadi inhabited by low caste people surrounding the main settlement is a peculiarity of this type. The range of dispersal values of this group is from 3999.00 to 3000.00 .

iii) Semi Sprinkled Settlement :

Semi sprinkled settlements are found in the areas characterized by adverse physical conditions as rugged topography with low rainfall. A Wadi inhabited by workers and low caste people surrounding the main settlement is a peculiarity of this types e.g. settlements inNilanga,

Renapur, Jalkot and Deoni Tahsil. These settlements are small in size and they are located near cultivable land. The dispersal values range from 2999.00 to 2200.00 for this group.

iv) Sprinkled Settlement :

Sprinkled settlements are scattered in the areas of forest and hilly areas by drier climate and poor soils. Houses are largely made of materials gathered from forest e.g. settlements in Shirul A.pal and Ahmedpur tahsil. The average population size in these tahsils are less than 2089.36. Most of the hamlet or wadi forms of rural settlements are dominant in these tahsil(Map No. 4.6). The dispersal values of this group range from below 2100.00.

6.3 The Patterns of Rural Settlements :

The morphology of rural settlements is the product of various physical and cultural factors. The forms of villages depend upon various geographical factors. The patterns of rural settlements can be studied beneath two sub heads as follows :

i) External form ii) Internal form

These aspects are connected to different physical and cultural conditions. Settlement site, water availability, vegetation, types of soil, agricultural partices and farm size are the important factors which influence the pattern of rural settlements, however, physical, historical and cultural factors affect on shaping the village form. The arrangement of houses, roads, provision of facilities also influences the form of village (Sinha. 1976)[7]. The nucleus rural settlements develop at the accessible site from where; the surrounding agricultural land can be easily observed (Duggal, 1961)[8]. Field pattern, types of soil and other elements like roads, temples, mosques, etc. affect on patterns of settlements (Singh, 1955)[9]. Rural settlement patterns are also governed by the tradition and culture. Important element of cultural landscape and their patterning have spatial as well as temporal variations.

Based on topographical maps, common village patterns of the study region are discussed below.

6.4 Common Village Patterns in the Region :

A) Square Pattern :

The square pattern is the later stage of the linear pattern. A square shaped village develops at the intersection of road and a cart tract as settlements occur simultaneously in all the four quadrants. A square shaped villages often turn into a rectangular shape. Such villages are found in the plain agricultural region. They have strong agglomeration and sometime villages are protected by walls. The entire village is divided into small squares of houses occupying the people of different castes. In the study area, fifty two settlements have square pattern villages, examples of such village pattern are Samangano and Budhada, etc. (Photo Plate No.6.1).

Square Pattern

[Budhada]

Photo Plate No. 6.1

Hallow square pattern is similar to the square village pattern except for the hollow or un-built space in the middle in hallow settlement. Open space occurs at the centre due to the presence of tank, playground and public space etc. Khandapur & Almlhala is a typical example of this type

which is shown in (Photo No. 6.2). In this village there is a temple at the centre and some open space is found close to the center of the village. Square and Hallow square pattern settlements are found on level plain areas where agriculture is paractied. Agricultural fields are mostly square and rectangular; therefore in such areas village patterns are square and rectangular.

Hallow Square Pattern

[Almalha]

Photo Plate No. 6.2

C) Circular Pattern :

Circular pattern villages are observed in study area. This village pattern results because of concentration of houses for purpose of defense and ease of accessibility etc. around a central point of the village. Rich people built their houses close to the centre of the village. Mahapur and Chalburga settlements provides a typical example of this type (Photo Plate No. 6.3).

Circular Pattern

[Mahapur]

Photo Plate No. 6.3

D) Trangular Pattern :

Trangular Pattern

[Bokangaon]

Photo Plate No. 6.4

Bokangaon and Ashvi settlements are examples of triangular pattern (Photo Plate No. 6.4). Topography also plays important role for the formation of such village pattern.

E) Hallow Rectangular :

Hallow rectangular pattern is similar to rectangular village pattern except for the hollow space in the middle in hollow settlement. Kasarkheda and Borphal is a typical example of hallow rectangular pattern (Photo Plate No. 6.5).

Hallow Rectangular

[Khopegaon]

Photo Plate No. 6.5

F) Irregular Pattern :

Irregular pattern is the most common pattern found in the region. In this pattern of irregular shape, the roads are curvilinear and the final form of settlement is irregular. Most of villages having irregular pattern are of dispersed type.Ankulga, Ranjani, Ranmala and Loladgaon settlements are examples of this type (Photo No. 6.6).

Irregular Pattern

[Ankulga]

Photo Plate No. 6.6

G) Regular Pattern :

The regular pattern is the most common pattern found in the region. In of regular shape, the roads are curvilinear and the final form is regular.

Regular Pattern

[Limbala Dau]

Photo Plate No. 6.7

Most of villages having regular pattern are of type Libala Dau settlements are of this type (Photo No 6.7). Features such as rivers, roads, tanks, undulating topography also contribute towards development of regular pattern.

h) Birds Leg Pattern :

The Birds Leg pattern is the most common pattern found in the region. In of Birds Leg shape, the roads are curvilinear and the final form is Birds Leg. Most of villages having Birds Leg pattern are of type Gadhawad settlements are of this type (Photo No 6.8). Features such as rivers, roads, tanks, undulating topography also contribute towards development of Birds Leg pattern.

Bird leg Pattern

[Gadhawad]

Photo Plate No. 6.8

i) Double Nucleation :

The twin village is a group of two settlement units grown up simultaneously or one after another, at a place. These villages occupy similar geographic sites but their revenue and administrative records are

separate. Physically they are separated by a natural obstacle like ‘nala’ or river. The best example of such type is Kitti Adgaon and newly settle Adgaon settlements located along the same road, but on either banks of River i.e. Nala (Phot No. 6.9)

Double Nucleation Pattern

[Kitti Adgaon**]**

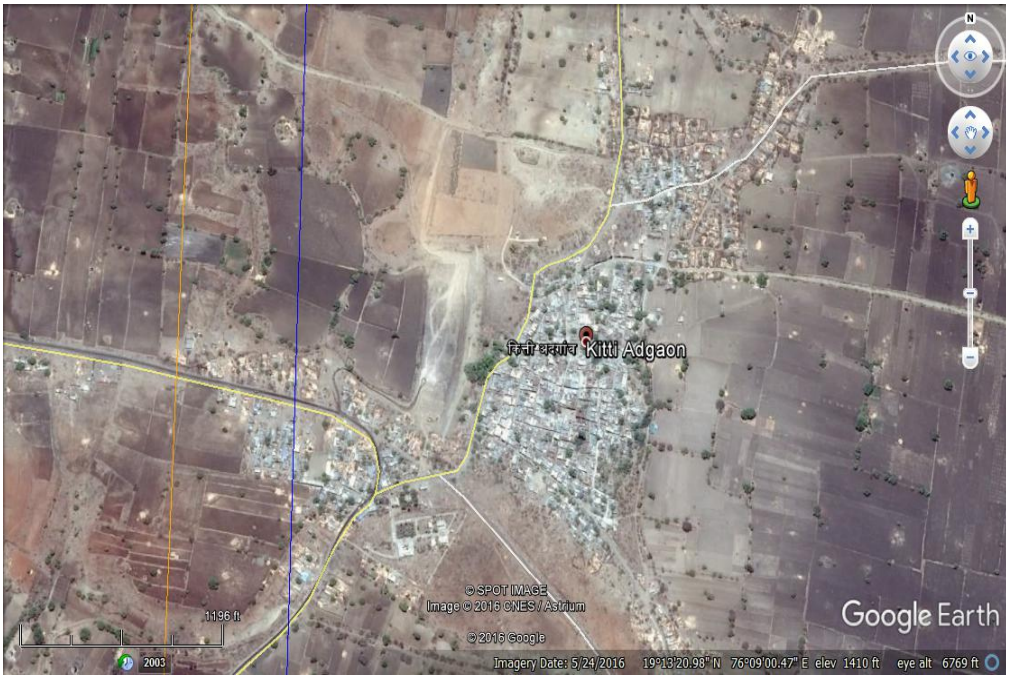

Photo Plate No. 6.9

j) Linear Pattern :

The linear pattern is a most common form of the rural settlements found in varied physical and cultural conditions. Normally, such pattern develops along the roads, rivers, nala’s and on hill terraces.

The influence of site is apparent in the development of this pattern. Hangarga Khurd and Khuntegaon settlement sare furnish good exam ples of linear village pattern. (Photo Plate No. 6.10).

Linear Pattern

[Harangul Khurd**]**

Photo Plate No. 6.10

k) Fan Pattern :

Fan Pattern

[Bakli]

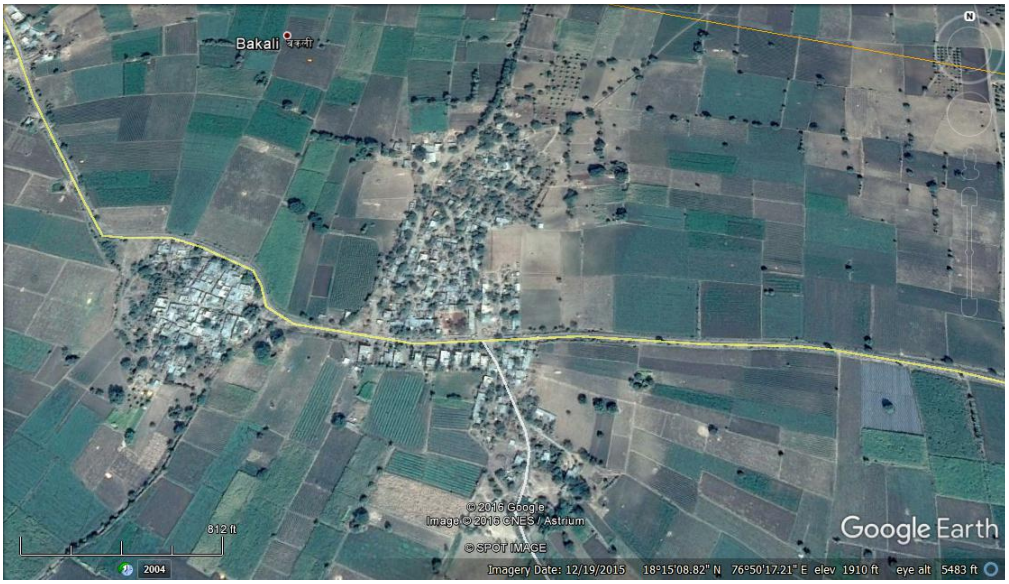

Photo Plate No. 6.11

The fan pattern rarely occurs in the region. Such villages have been developed near some focal points like temple, ghat and on the bank of rivers.

These features attract habitations in several directions following a convenient system of roads. Lanes or foot paths converge on such points. Due to convergence of lanes or foot paths on the focal point to avail amenities, the settlements assume the shape of fan. The dwellings develop along the cart tracts and lanes Bakli is a typical example of such type. The main settlement resembles a fan pattern (Photo Plate No 6.11).

l) Amorphous Pattern :

Amorphous Pattern

[Nalegaon]

Photo Plate No. 6.12

The amorphous form of village is found in the ares where several 'Wadi' and farm-steeds observed scattered and connected by cart-tracts. Suchirregular pattern is known as amorphous pattern of villages.

In the study area this form of pattern is found Nalegaon are good examples of amorphous pattern of settlements (Photo No. 6.12).

p) L Shape Pattern:

Along the road sometimes two rectangular blocks of houses meet at right angle, which from the L shape pattern. For example Ashvi. (Photo No. 6.13).

L Shape Pattern

[Ashiv]

Photo Plate No. 6.13

In the study region there are other different village patterns such as chess-board pattern, polygonic pattern, L Pattern, T pattern, Semi-circular pattern, radial pattern and double linear. Most of the newly developed settlements have chess-board pattern, in which cart tracts or lanes intersect each other at right angles (Kankure, 1986).

****

6.5 Reference Books :

1.) **Ahmad, E. (1952) :** 'Rural Settlement Types in the U.P.' Annals, pp.223-246.

2.) **Auroussean, M. (1920):** 'The Arrangement of Rural Population', Geographical Review' p. 223.

3.) **Blache Vidalde-La (1962) :** 'Principal of Human Geography', p. 316.

4.) **Demangeon, A. (1962) :** 'The Origin and Causes of Settlement Types'(eds.) P.L. Wagner and M. Mikesell, Readings in Cultural Geography' Chicago, Chicago University Press, pp. 89-101.

5.) **Desai, P.A. (1985) :** 'Special Aspects of Settlement Patterns A Study of the Narmada Command Area, Mahesana District, Gujarat, Concept Publishing Company, New Delhi.

6.) **Hudson, F.S. (1976) :** 'A Geography of Settlements', second edition, Macdonald and Evans, p.3.

7.) **Kankure, K.B. (1986):** 'Marathwada A Study in Settlement Geography' unpublished Ph.D. Thesis, University of Poona, Pune p.101.

8.) **Kumar (1968)** – 'A Study of Rural Habitat in Nira Valley', pp. 101-102.

9.) **Mandal R.B. (1979) :** 'Introduction to Rural Settlement', pp.94.

10.) **Perpillou, A.V. (1966) :** 'Human Geography' Edinburgh Longmans, pp. 406-414.

11.) **Singh R.L. (1955)** – 'Evolution of Settlements in the Middle Ganga Valley', N.G.J.I pp. 69-114.

12.) **Singh, R.Y. (1994) :** 'Geography of Settlements', Rawat publications, Jaipur, p.90 and 135.

13.) **Chisholm, M (1962) :** 'Rural Settlement and Land- Use'. Hutchinson, London, pp.126.

14.) **Haggett. P, (1965) :** 'Locational Analysis in Human Geography' Arnold London, pp. 95.

15.) **Ruberg, S. (1957) :** 'Odermarkerna Och den Perifera bebyggelsen iinre Nordsverige' Unsettled Areas and Frontier Settlement Areas in Inner Northern Sweden, Geographical Nr, 33, Uppsala.

16.) **Singh, R.L. (1961) :** 'Meaning, Objectives and Scope of Settlement Geography,' The National Geographical Journal of India, Vol. VII, Part-I, p.12.

****

Filename: 16_chapter 6
Directory: C:\Users\admin\Documents
Template: C:\Users\admin\AppData\Roaming\Microsoft\Templates\Normal.dotm
Title:
Subject:
Author: admin
Keywords:
Comments:
Creation Date: 08-Feb-17 11:27:00 AM
Change Number: 6
Last Saved On: 08-Feb-17 11:50:00 AM
Last Saved By: admin
Total Editing Time: 12 Minutes
Last Printed On: 08-Feb-17 12:51:00 PM
As of Last Complete Printing
Number of Pages: 19
Number of Words: 2,652 (approx.)
Number of Characters: 15,120 (approx.)