course to be adopted pending the occurrence of an opportunity to invest in less easily realisable securities. In the absence of any special reason to the contrary, all sums belonging to wards exceeding Rs. 500 and not required for investments in improvements or in land or for current expenses should be invested in Government paper until some better investment can be secured.

Treatment of tenants.

700. The 'treatment of the tenants in an estate managed by the Court of Wards should be an example to neighbouring landowners. Undue enhancement of rents must be avoided. There is often more than a mere business relation between landowner and cultivator—as is testified to by the favourable rents which tenants not unfrequently enjoy—and it is inexpedient to reduce all to a uniform level and to abolish privileges which the proprietor himself would wish to preserve. A system of cash rents undoubtedly reduces the difficulties of management and renders accounts easier to keep, and Government in the case of its own lands almost invariably adopts a cash rent system. But local circumstances and the custom of the estate must by considered.

The practice of putting leases up to competition is forbidden. No eatate can be let in farm without the sanction of the Financial Commissioner which will rarely, if ever, be given, as the practice leads to the rack-renting of cultivating tenants and other evils connected with the employment of middlemen. Government favours a policy of selecting suitable lessees and conferring on them a tenure of sufficient duration to offer an inducement towards the improvement of the land. Short term leases induce a lessee to make the most out of the land while he can. As already stated, the grant of loans to tenants is a useful way of investing surplus funds, but tenants will not take takavi to carry out improvements unless they enjoy in some degree stability Section 18 (2) of the Act which makes covenants, entered of tenure. into by the Court, binding on the ward, after the property has been released from superintendence, gives the necessary basis for the policy here set forth.

Instructions' issued in 1884.

701. The instructions on this subject issued in 1884 are still applicable:—

- (a) No tenant of such lands who cultivates his holding satisfactorily, pays his rent with regularity, and other wise fulfils the conditions of his lease, should be disturbed merely to make room for some new tenant.
- (b) If the lease has expired, or the rent be raised, the option of renewal of the lease, or of payment of the higher rent, should be given to the tenant in occupation, who, other things being equal, should always be preferred to a new applicant for the lease.
- (c) When it is proposed to raise the rent of such land, the grounds for doing this should be placed on record briefly but clearly, and should be explained to the tenants concerned.

- (d) It is the duty of officers in charge of such lands to see that fair claims of this nature are asserted from time to time. But this should always be done with due care and moderation; rents should not be arbitrarily raised, and the practice of putting leases up to auction or other forms of competition should never be resorted to.
- (e) When the time comes to renew a lease, the officer in charge of the land should fix a fair rent with reference to the letting value of land similarly circumstanced in the neighbourhood, and should offer it at the rate so fixed to the old tenant, and only on his refusal should it be offered to others.
- (f) The provisions of the Tenancy Act on the subject of tenants' claims to compensation on account of improvements, where applicable, should always be carefully observed.\*

<sup>\*</sup> Financial Commissioner's Circular No. 2 of 1884.

## BOOK VI.—State Lands.

CHAPTER XXI.—STATE LAND RESERVED FROM CULTIVATION.

Rights over Governments.

The large rights which the Native Governments that precedwaste claimed ed our own claimed in waste lands have been noticed in the 187th paragraph of the Settlement Manual. Even where the Raja did not claim an exclusive title in the soil he often asserted his ownership of certain "royal" trees, such as the teak in Southern India and the deodar in the Himalaya. The first attempt at forest administration in India was made in 1806 in connection with the supply of timber for the King's Navy.\* It is needless to observe that the close connection between successful agriculture and a reasonable system of forest conservancy was not in those early days recognized. The object of Section 8 of Regulation VII of 1822 quoted in paragraph 189 of the Settlement Manual was not to preserve waste lands for the growth of wood and grass, but to ensure their being rapidly brought under the plough. The present chapter will deal with the use to which State lands have been put in maintaining a supply of timber, fuel, and pasturage.

Classification

- The waste lands in the Panjab over which Government of State lands. has asserted rights varying from full ownership to a power of control exercised in the interests of the surrounding communities may be roughly divided into-
  - (a) Mountain forests.
  - (b) Hill forests.
  - (c) Plain forests.
  - (d) Grazing lands.

Mountain forests.

The first are timber forests of oak, pine, deodar, and fir, and consist mainly of the parts of the Himalayan Range lying in Kulu, Kangra, Rawalpindi, and Hazara.†

Hill forests

705. The shill forests occupy the lower spurs of the Himalayas below an elevation of 5,000 feet, the Siwaliks in Hoshiarpur, and the low dry hills of the Rawalpindi division and the districts of the North-West Frontier Province. The last, when nature is allowed to have its way, are covered with sanatha, khair, and garanda scrub, and with a taller but scantier growth of phulahi and wild olive. In the most favoured parts of these hills deciduous trees, such as the dhamman, kangar, kachnar (or kular), and various species of figs are found, and above 4,000 feet there is a scanty growth of the chil or chir pine. The Siwaliks in Hoshiarpur enjoy a cooler climate and a much more abundant rainfall, and deciduous trees such as those just mentioned are more common. The outer spurs of the Himalayas bear a strong forest of chir pine at elevations between 3,500 and 5,000 feet.

+ Large parts of the range are included in Native States, and in some cases Government manages the forests for the Raja.

<sup>\*</sup> See pages 64-66 of Ribbentrop's "Forestry in British India." An interesting account of the rise of forest administration in India will be found in that work, pages

706. The plain forests are chiefly found in the dry south-west-Plain forests ern districts. The central uplands between the Sutlej and the and grazing lands. Jhelam in that part of the province are known as the Bar. They were, as we shall see, with trifling exceptions recorded as State property at the first regular settlements. Much of the soil of the Bar is excellent, only requiring water to make it of great agricultural value. Left to itself it yields abundant grass in seasons of sufficient rainfall, and a good growth of jand, jal, farash, and karil. The poorer parts of the Bar, though grassless and treeless, are often covered with different varieties of the saiji plant, and afford admirable grazing grounds for camels. Vast changes have been effected in the Bar by the excavation of the Chenab and Jhelam Canals. The great sandy tract between the. Jhelam and the Indus known as the Thal is less valuable from every point of view than the Bar. Forest growth is scanty, but the country is naturally adapted for camelgrazing. The hill and plain forests of the Panjab are fuel forests.

The extent to which Government asserted a title to waste Sketch of exelands in the early days of the administration of the Panjab is briefly cutive and explained in paragraphs 188—191 of the Settlement Manual. It will legislative measures be necessary to deal with the matter here rather more fully, but taken for before doing so a short sketch of the executive and legislative action forest consertaken with a view to forest conservancy down to the passing of the vancy desirable. Indian Forest Act (VII of 1878) will not be out of place.

dislike felt by the early administrators of Measures 708. The curious Northern India to State property in the soil \* and their short-sighted taken by the indifference to forest conservancy was fifty years ago giving way Board of Adto sounder views. When Lord Dalhousie in his famous despatch ministration. constituting the Board of Administration † ordered excess waste to be formed into Government estates at the demarcation of village boundaries he was thinking of the most practical measure for spreading ocultivation and planting a new population in thinly peopled tracts. But two years later he addressed the Board on the necessity of preserving a supply of timber and fuel in the Panjab. ! Their reply is interesting as embodying the first scheme of forest conservancy in this province. They wrote:-

"3rd. - The Board are fully alive to the importance of the ends in view, and they are glad to have the opportunity, afforded them by the Governor-General, of bringing before the Government the question, not only of increasing the growth of timber, but of economizing the existing produce for the future wants of our large cantonments, for the steamers, which may hereafter ply, and for the inhabitants of the country generally.

<sup>\*</sup> See paragraph 188 of the Settlement Manual.

<sup>†</sup> No. 418, dated 31st March 1849, paragraph 60.

<sup>‡</sup> Government of India No. 645, dated 18th February 1851.

tracts of country, throughout the Punjab, are covered with low thick jungle, more or less dense, which yie ds good wood for fuel. This is the case in the centre of the Doabs, a money called the Bar, and the same kinds of jungle trees are to be found in different other localities where the ground has fallen out of cultivation, or is altogether unsuited for it owing to its broken and raviny nature. The Board have ascertained that near our large cantonments the supply of wood has, in several instances, been nearly exhausted by the demard made for fuel for burning bricks and lime, and for the troops and camp-followers; and, unless immediate measures are taken, they fear that the future supply, within any reasonable distance, will be impossible. They have ascertained that the jungle wood generally is reproducing, and that the wood cut down will be fit in two years to be cut again.

"5th. — The large cities and towns in the Panjab have hitherto been supplied with wood, cut from the Bars or jungles, convenient to their respective localities. The population of the country is rapidly on the increase, and cultivation spreading; moreover, the demand for fuel for the large cantonments and public works, now under construction throughout the Panjab, as also for the large masses of troops cantoned in the country, is enormous, and the persons who supply wood find it more convenient, as well as more profitable, to stub out the roots of the trees near at hand than to go to a greater distance for the standing tree. Hence reproduction is prevented, and the supply altogether fails, if the jungle is limited, or it is daily removed to a greater distance.

"6th.—The Board would, therefore, propose, with the sanction of Government, to select certain tracts of country, if possible unculturable, covered with low reproducing jungle, as near as may be convenient to the large cities, cantonments, and rivers (they mention rivers in view to the future supply of steamers), and to place these jungles under proper surveillance, so as to prevent trees being grubbed up by the roots. The wood should be cut about one foot from the ground, and no lower. A small tax sufficient only to pay the cost of a few watchmen to protect, and, if necessary, renew the trees, might be levied for cutting the wood; by this plan the Board would hope to economize it and prevent its being totally destroyed, the local agents in each district being charged with the care of it.

"7th.—The above general remarks refer to wood in the plains; but the Board understand that the ranges of hills from Hazara, which run down to Rawalpindi and end at the Jhelam, as also the base of the Rawalpindi hills, yield an immense supply of timber trees.

"8th.—Mr. Thornton states that all these useful products are being misused and destroyed, most recklessly.

"9th.—The Board propose, after defining the village boundaries, and allowing such reasonable extent of land as may suffice for the wants of the communities being included in each area, to declare the lands beyond these boundaries the property of Government. In

thinly peopled tracts it will probably suffice, to prevent waste, that the heads of villages bind themselvs to prevent injury to the trees, and, n return for this care, the people might be allowed to collect for their iown consumption, firewood to any extent, provided they confined themselves to dead timber. The District Officers should be empowered to grant a written permission to cut down a given number of trees of a specified size and age, when required by the villagers for agricultural or architectural purposes.

- "10th.—Near towns and cantonments, where the country is more densely peopled it will probably be necessary to entertain forest rangers, paid from the income derived from these woods, for whose guidance a code of rules can be drawn up."\*
- 709. These proposals were approved in a letter in which Lord Lord Dal-Dalhousie remarked:—
- "2nd.—Certain allotted spaces, calculated according to the ascertained rate at which the wood is reproduced, should be set apart near to the great towns and cantonments for the regular supply of fuel, in the same manner as grass preserves have already been told off for regular use. The area of the fuel copses should be made ample to secure a constant supply, and the regulations for cutting should, from the first, be rigidly enforced.
- "3rd.—Immediate measures should be taken for ensuring a supervision and guardianship of the hill timber in the Jhelam division. The want of these precautions elsewhere has produced, and is now daily producing a probable scarcity at no distant date which the Governor-General regards with some anxiety.
- sary for the protection of the small establishment, which will be necessary for the protection of the fuel copses and the hill woods, may be de frayed by the exaction of a small payment from the cutters.
- "7th.—From His Lordship's own observation during last summer and the preceding one, while traversing the districts from Chamba to Kunawar, he received the impression that vast supplies of timber exist, and that, with proper arrangements, much of it may be made available for use in the plains; whereas no exertions hitherto have enabled the officers to obtain it in sufficient quantities.
  - "8th.—The importance of securing, by every possible means, an additional supply of timber, demands a thorough examination of all existing resources." †

<sup>\*</sup> No. 60, dated 17th January 1852. In the same letter proposals were made for the preservation of shisham trees in islands on the Indus above Attock, for the encouragement of tree-planting by exempting lands under plantations from assessment (paragraph 506 of Settlement Manual), and for the planting of avenues or groves along public roads.

<sup>†</sup> Government of India No. 218, dated 13th February 1852.

710. In 1855 the Chief Commissioner, Sir John Lawrence, drew up a set of rules for the conservancy of forests in hill districts.\*

Their general scope may be judged from the three quoted below:—

(1) In any hill district within British jurisdiction the Civil authorities have power to mark off any tract, plot, or ground, wheresoever situated, which they may consider

specially adapted for the growth of timber or fuel.

(2) The tract, plot, or grownd so marked off may be declared to be a public preserve denoted by boundary marks, fenced and protected from trespass of all kinds. Within it the said authorities are empowered to prohibit, restrict, or regulate all felling and cutting, and to arrange for the development, preservation, and growth of the trees, shrubs, or brushwood in such manner as may seem to them expedient.

"(6) No person shall be entitled to object to the foregoing rules, whether relating to enclosures or to particular species of tree, shrub, or brushwood on the score of proprietary or manorial right, provided always that the Civil authorities do not interfere with the wood or fuel that may be really required by the occupants or owners of the

land for agricultural or domestic purposes."

The privilege of felling might be granted with or without payment of fees.† The firing of forest lands in order to promote the growth of grass might be absolutely forbidden, and in cases of fires the joint responsibility of the members of adjoining village communities might be enforced.‡ Grazing of cattle might be prohibited or regulated, "provided always that the proper grounds for the grazing or pasturing of such cattle be not interfered with." The penalty for a breach of the rules was a fine not exceeding Rs. 100, or in default imprisonment for a term not exceeding three months.

711. The Governor-General remarked—

"To any one accustomed only to European rights and regulations the general powers regarding forest trees which are assumed in these rules to belong to the Government would appear to be of an arbitrary character. But His Honor in Council believes that no question will be raised in this country as to the validity of the manorial right thus asserted for the Government in the hill districts, while certainly no person at all acquainted with the local wants of the districts referred to will question the existence of such a public exigency as would call for the assertion of the right." He therefore accepted the rules "as far as they go." But they were considered so general and not likely by themselves to do much good, and each Commissioner was to be directed to draw up a set of rules "adapted to the peculiar circumstances

|| Rule 12.

Government of India orders local rules to be drawn up.

<sup>\*</sup> Chief Commissioner's No. 196, dated 3rd March 1855. The rules are given in full on pages 368—370 of Barkley's "Non-Regulation Law of the Panjab." They are still in force (Section 3 and Schedule I., Act IV of 1872). The correspondence is printed as an Appendix to Forest Proceedings No. 7A of July 1883.

<sup>†</sup> Rules 3 and 5. ‡ Rules 8 and 9. § Rules 10 and 11.

of his division, and to report without delay to you for the final sanction of the Government of India the several steps which he has taken.\*\*

712. In July 1856 the Commissioner of the Jhelam division sub-Rawalpindi mitted rules † for the hilly and mountainous portion of the Rawalpindi Rules of 1856. district. The first of these rules is the most important. It ran-"In the mountainous and hilly portion of the Rawalpindi district all trees and shrubs of spontaneous growth are hereby declared to be the property of Government. They are available, as far as they are really required by the villagers, for domestic or agricultural purposes, but, with this exception, may not be cut or appropriated by any person. without the permission of the civil authorities. This rule, however, is to be liberally construed as regards the comfort and convenience of the villagers." Permits were required for felling trees and cutting brushwood, and fees were charged in both cases. Firing was restricted and regulated. One-eighth of the income from fees was to be paid to the village landowners to ensure their co-operation in enforcing the rules, to any breach of which a penalty of a fine not exceeding Rs. 100 was attached.

- 713. In January 1857 the Chief Commissioner sanctioned rules Hazara Rules for the management of the Hazara forests. Their chief provisions of 1857. were-
  - (1) that no trees, large or small, could be cut without permission;
  - (2) that all except agriculturists should pay fees for the wood they were allowed to cut, half the proceeds being used to meet the cost of forest conservancy, and half paid to the landowners;
  - (3) that ground should not be cleared of trees with a view to cultivation without leave being first obtained from the Deputy Commissioner;
- that firing of grass in the vicinity of forests was forbidden. These rules were imperfectly enforced, but even so they proved very useful.

714. In 1859 Major Lake, the Commissioner of the trans-Sutlej Kangra and States, submitted rules which Mr. Bayley, Deputy Commissioner of Hoshiarpur Kangra, had prepared for that district, and suggested that they should Rules. be adopted with certain modifications. These were sanctioned by the Lieutenant-Governor, and permission was given to extend them to the Hoshiarpur district. This was done by the Commissioner of Jalandhar next year. He remarked—" The right of Government merely extends to the timber. The right of grazing and to the spontaneous products of the forest appertain to the camindars, subject to the restriction prescribed in the rules."

1856. They were cancelled in 1903 (paragraph 749).

‡ Paragraph 38 of Chapter V of Captain Wace's Settlement Report of Hazara.

also paragraph 720.

<sup>\*</sup> Paragraph 7 of Government of India, No. 1789, dated 21st May 1855.
† No. 123, dated 24th July 1856. See Forest Proceedings No. of March 1876. The rules were sanctioned in a letter of the Chief Commissioner No. 1623, dated 4th August .

At the same time he pointed out that some forests in Hoshiarpur were the exclusive property of Government.\*

The rules forbade the felling of trees without permission of the Deputy Commissioner, but in the case of inferior kinds of trees required "bona file for agricultural purposes," the permission of the village headman was to be sufficient. Proprietors of land and hereditary Sultivators were entitled to cut whatever timber they required for building or agricultural purposes on paying a fee of four annas, while trees unfit for use as timber, but fit for fuel or fodder, were to be given free of charge. Persons having an ancient right to graze, gather dry wood, or collect leaves for manure were to be still entitled to these rights. But a third part of each forest might be closed entirely for three years or any less period. Firing was forbidden. Annual licenses were to be taken out by wood-cutters and charcoal burners. One-sixteenth of the receipts were to be paid to the forester, and three-sixteenths were to be divided between the lambardar, the patwari, and the village community.

It will be observed that rights of user (bartan) were clearly recognized as belonging to the landowners living in the neighbourhood of the forests.

Taking up of for forests

715. In 1855 the Chief Commissioner drew "the earnest attenalluvial lands tion" of Commissioners to a scheme proposed by Mr. Edward Thornton for extending plantations of useful timber trees by appropriating portions of alluvial lands newly thrown up by rivers. I Such lands are well suited to plantations of shisham trees like that at Shahdara near Lahore.

Conservator of Forests appointed.

In 1864 Dr. J. L. Stewart became the first Conservator of Forests in the Panjab. In 1869 he published a useful book on "Panjab Plants."&

Act VII of. 1865.

717. The first "Government Forests Act" (VII of 1865) was intended to enable Local Governments with the sanction of the Governor-General in Council to issue rules having the force of law like those described above. | A Local Government might notify any land covered with trees, brushwood, or jangal to be a Government forest, but no existing rights of individuals or communities were to be abridged or affected thereby. Torest rules for Rawalpindi were issued under this Act in 1873.

\* Extracts from the correspondence printed on pages 370-375 of Barkley's " Non-

t See paragraph 192 of the Settlement Manual. For rights claimed by Government in islands in rivers see paragraph 413 of the present Manual.

|| Sections 3 to 6. ¶ Section 2.

Regulation Law of the Panjab."

† See Rules 4, 5, 7, 19, 20 and 27. For the full text of the rules see Barkley's

"Non-Regulation Law of the Panjab," pages 375—378. They were not sanctioned by
the Government of India, or re-issued under Section 3 of Act VII of 1865, and they probably never had the force of Law.

<sup>§</sup> The book may be referred to as indicating where particular trees and plants are to be found, and showing the uses to which they are put by natives. It is to be hoped that it will soon be supplemented by a proper "Flora of the Panjab" like that now being issued for the Bombay Presidency.

718. In the Panjab Act VII of 1865 was supplemented by Section Section 48 of 48 of Act IV of 1872, which provided that "no person shall make use Act IV of 1872, of the pasturage or other natural product of any land being the property of Government except with the consent and subject to rules......prescribed by the Local Government."

By Section 50 of the Act such rules required the sanction of the Governor-General in Council, but existing rules were to be deemed to have been issued under and in conformity to that section.

• 719. Act VII of 1865 was very unsatisfactory to the advocates Defects of of a proper system of forest conservancy. Its main defects were that Act VII of " it drew no distinction between the forests which required to be closely reserved, even at the cost of more or less interference with private rights, and those which merely needed general control to prevent improvident working. It also provided no procedure for enquiring into and settling the rights which it so vaguely saved, and gave no procedure for regulating the exercise of such rights without appropriating them. It obliged you, in short, either to take entirely or to let alone entirely."\*

720. Indian legislation, like justice, has a limping foot, and the The Hazara of Hazara, which came under settlement in 1868, could not wait on Forest Regucase of Hazara, which came under settlement in 1868, could not wait on lations. its leisurely progress. Accordingly special forest regulations for that district were passed in 1870 and 1873 under the authority of Act 33 Vict., Cap. 3. While the general system of forest management in force under the rules of 1855 was maintained, these regulations directed that, due provisio having first been made for the ordinary wants of the villagers in whose bounds the forests stood, the more valuable forests should be reserved for the benefit of the public at large. Rather more than one-tenth of the whole waste area of the district, which then exceeded 2,200 square miles, was demarcated as reserved forest, and made over for management to the Forest Department. These State forests are mountain forests of pine and deodar situated in the higher hills. But it was impossible with due regard to the interests of the landowners to reserve all land yielding timber trees, while at the same time it was essential to prevent waste. unreserved forest lands in the higher ranges and the fuel forests in the lower hills in the west of the district were therefore treated as "village forests." The Hazara district has never been subject to the General Indian Forest Act, VII of 1878, and before describing its provisions it will be convenient to finish the history of the Hazara forests. Regulation II of 1873 was replaced by Regulation II of 1879. By the 8th section the Deputy Commissioner was given large powers of setting apart waste lands as "village forests." Within such forests squatting and the clearing of land for cultivation, the removal of soil or dead leaves, and the kindling of fires, were wholly forbidden. But the Deputy Commissioner could give special permission for the firing of lands producing only grass. Felling of trees, the lopping

‡ Section 16.

<sup>\*</sup> See Mr. (afterwards Sir Theodore) Hope's Speech in the Leg islative Council on 6th March 1878 quoted on page 109 of "Forestry in British India."

† Captain Wace's Settlement Report of Hazara, pages 134—37.

of trees for fodder, lime and charcoal burning, and grazing were to be regulated by "general management orders" issued by the Deputy Commissioner from time to time "ander the general instructions" of the Local Government.\* Joint responsibility of village communities, especially in the matter of fires, in the case of forests of both classes was enacted.† Illicit firing and illicit cultivation might be followed by suspension of all rights of user in the lands burnt or cleared for a period of two years or for such longer time as might be required to restore the lands to their former condition. Psecial powers were given for the protection of land from erosion and the prevention of landslips. § In 1882 Mr. Forrest of the Forest Department was entrusted with the work of demarcating village forests, locally known as "mahduda." The result was that 147,000 acres were set apart for the purpose, but the demarcation was not satisfactory, for numerous plots of cultivation were included. A revised demarcation was made at the recent resettlement of the district, and the area of the village forests has been reduced to 83,782 acres, all uncultivated. At present these forests are managed in accordance with the provisions of Regulation VI of 1893, which replaced Regulation II of 1879 and of rules issued under it. The rules are contained in Government of India notification No. 2212 G, dated 22nd December 1903. The breaking up of land without the permission of the Deputy Commissioner is forbidden. Right-holders are entitled to timber free of charge for their own domestic and agricultural requirements, but notice of intention to fell must be given. They can also utilize for fuel without restriction dry wood and brushwood. But the sale of trees and of fuel to outsiders requires the sanction of the Deputy Commissioner. A special naib tahsildar for the village forests has recently been appointed.

The Indian Forest Act, VII of 1878.

721. The late Mr. Baden Powell, a Panjab Civilian, who was Conservator of Forests from 1869 to 1872 and from 1876 to 1879, and who officiated as Inspector-General throughout 1873 and part of 1874 helped largely in putting forest legislation in India on its present basis. I In 1878 "the Indian Forest Act," which is still, in force, was passed.

This Act permits the Local Government to constitute "any forest land or waste land which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest produce of which the Government is entitled, a "reserved" or a "protected forest." It is sufficient, therefore, that the State should own the trees or some of them, even though it may have recorded the soil, as was imprudently done in the case of Kangra, as belonging to village communities.

<sup>\*</sup> Sections 14-15.

<sup>†</sup> Section 28. Compare also Section 24.

<sup>‡</sup> Sections 29-30.

<sup>§</sup> Sections 20-21,

<sup>&</sup>quot;Forestry in British India," page 116. He was the author of a book on "Forest Law" published in 1893.

<sup>¶</sup> Sections 8 and 28,

722. Chapter II of the Act deals with "reserved" and Chapter Reserved IV with "protected forests." Reservation must be preceded by a forest for ests. settlement in which a full enquiry is made into all private rights claimed or otherwise discoverable.\* The instructions at present in force in the Panjab regarding the making of forest settlements will be found in Appendix II. When once a forest has been notified as reserved no further private rights can grow up.† A reserved forest can only be disforested with the previous sanction of the Governor-General in Council.t

723. No special forest settlement is required before enotifying Protected waste land as "protected forest." But Government must be satisfied forests. that the nature and extent of the rights of Government and of private persons in the land have been enquired into and recorded at a survey or settlement or in such other manner as it deems sufficient. ad interim order may be passed to protect the rights of Government pending the preparation of a proper record. § By declaring waste to be "protected forest" the future growth of rights is not prevented. When land has been notified as reserved forest many acts regarding it at once become criminal. || But a notification of a protected forest to be effective must be followed by action under Section 29, which enables Government-

- (a) to declare any trees in a protected forest to be reserved;
- to close portions of the forest from time to time, and suspend the exercise of private rights, "provided that the remainder of the forest be sufficient, and in a locality reasonably convenient, for the due exercise of the rights suspended";
- (c) to prohibit quarrying, lime and charcoal burning, removal of forest produce, or clearing of the land for any purpose.

Rules for the management of protected forests may be made, ¶ and a breach of any of these rules and the doing of any act forbidden under Section 29 are criminal offences. \*\* Where the choice lies between action under Chapter II or Chapter IV, the former should ordinarily be preferred. There is no reason why the management of a reserved forest should be one whit more rigid and less considerate of the needs of the surrounding communities than that of a protected forest. Nothing prevents Government from allowing as privileges, to be revoked in case of abuse the enjoyment of forest produce to which no actual right has been established. ††

Sections 6 and 7.

Section 22.

Section 26.

Section 28.

<sup>||</sup> Section 25.

<sup>¶</sup> Section 31.

Section 32.

<sup>††</sup> See paragraphs 22-27 of Appendix II.

Interference in case of privately-owned forests.

724. The Act recognizes the fact that occasions may arise in which it is necessary to interfere with the use, or even to assume the management, of privately-owned waste land for the good of the public in general. Reasons for such action are the prevention of the spread of ravines, the protection of land from erosion or deposits of sand and boulders, the maintenance of the water-supply in springs or streams, and the like. \*

Assertion of excess waste.

725. Having sketched the history of the executive and legislative State's title to action of Government as regards forests down to the passing of Act VII of 1878, it may now be well to retrace our steps and to show how the claims of the State to excess wante have been dealt with in different parts of the province, and what use has been made of waste over which Government has asserted any sort of title.

Claims as a rule foregone in eastern and submontane districts.

726. Speaking broadly, in the plains and submontane districts east of the Beas and Sutlej Government admitted that the whole of the waste belonged to the adjoiring village communities. Little use was made of the provisions of Section 8 of Regulation VII of 1822. † This is equally true of the districts of Gurdaspur, Sialkot, and Amritsar lying to the west of the Beas. The weason was twofold. In the first place the villages lay much closer together than in the west of the Panjab, and the proportions between the cultivated and uncultivated areas were very different. In the second place the districts were for the most part settled before the advantages of keeping part of the soil of a country in its natural state were fully understood. Even in Karnal, where Government did take possession of excess waste, and in Sirsa, where much unoccupied land was at its disposal, the sole object of the administrators of the day was to get rid of the land as fast as possible by handing it over to any one who would bring it rapidly under cultivation. † But in 1813 a large tract of village land near Hissar, deserted 30 years before in the terrible chalisa famine, was appropriated as a Government vir. This in time became the Hissar Cattle Farm. It was notified as a reserved forest in 1887. Government therefore possesses few fuel or fodder reserves east of the Beas and Sutlej. Even the low hills of Gurgaon and Delhi were included in village boundaries, though those of the former might probably have been clothed with valuable forests of dhak.

The Hoshiar-

727. The same mistake was made with deplorable result in the pur Siwaliks. case of the Hoshiarpur Siwaliks. Government owns two chir pine forests in the Sola Singhi range\*\* and two bamboo forests at the north-west

\* See Chapter VI of the Act.

† See paragraph 187 of the Settlement Manual.

This famine occurred in 1783 (Sambat 1840).
See paragraphs 114-15 of Mr. Anderson's Settlement Report of Hissar.

<sup>‡</sup> For the leased estates of Karnal, see paragraphs 106, 109, 112 of the Karnal-Ambala Settlement Report. For the Sirsa estates, see paragraphs 253—258 of Mr. Wilson's Settlement Report of Sirsa.

This useful tree, also called the palah or palas, has a very wide range extending in the Panjab and North-West Frontier Province from Gurgaon to the point where the Indus divides British from Independent Territory. In their natural state all the stiffer loam soils in the Panjab plains, where the rainfall exceeds 20 inches yearly, must have been covered with it. It gives way to the jal and jand where the rainfall is less. It is also common in the jangals of the Deccan and is found in Ceylon. The name of the capital of Eastern Bengal is supposed by some to be derived from the dhak tree.

\*\* Panjeb Government Forest Proceedings, No. 6 A of June 1873.

corner of the Siwaliks, and chirtrees, wherever found, have been claimed as the property of the State. But here, as in Kangra and the hill tract of Gurdaspur, the first Settlement Officer, Mr. George Barnes, included the land of the forests, with the above-mentioned exceptions, in village boundaries.

728. A generation later the effect of the denudation of the low Effects of dehills, which inevitably resulted from the policy then adopted, on the nudation of Siwaliks on rich Sirval tract of Hoshiarpur and Jalandhar had become so great that cultivated the matter was forced on the attention of Government. The Deputy lands in the Commissioner, Mr. Coldstream, and the Conservator of Forests, plains. Mr. Baden Powell, united in urging the necessity of prompt remedial action, and the Commissioner of Jalandhar, Mr. Arthur Brandreth, strongly supported them.

729. His graphic description of the effects of neglect is worth Mr. Brandreth's prequoting :--

sentation of the case.

is a long low range "The lower Siwalik of sandy hills which stretch across the whole of the Jalandhar Doab, forming the northern boundary of that fertile and productive tract. In the days of the Rajas, when the village common was the property of the Raja or lord of the manor, and not made over to the peasantry, these hill slopes were covered with a low stunted brushwood with a few trees here and there This manor forest growth was not of great value to the Rajas or to their successors, the Sikh kardars, but it yielded a sort of cover for game, and was consequently generally protected; and as the towns were not then very wealthy, and peasantry had hard enough work to produce the heavy revenue then demanded, there was little demand for fuel, and few persons with leisure to cut it.

"The stunted brushwood had, however, once great value. It covered the sandy soil by its roots and by the grass which grew in its The cool air from the shaded hillside arrested the passing clouds and produced a constant and almost regular rainfall, which, checked by the leaves of the brushwood and grass, poured down the hillsides at a gentle pace, and, bringing with it all the soluble products of the decayed leaves and grass, spread its wealth-laden waters over the plains below, which thus became so renowned for their fertility as to be known as the garden of the Panjab.

"The scene how is far different.

"The hillsides were divided among the villages located on the hills, and the whole brushwood and minor forests declared to be their property village common open to every one.

"With the introduction of English rule, towns increased, wealth and property abounded, and the cessation of the continual demand for forced labour created a class of labourers with abundant leisure, and in search of employment. With the increasing wealth arose increased

wish for comfort, and a large demand for firewood of all sorts consequently soon sprung up, and the unemployed class found the brushwood and low jangal of these hillsides a mine of wealth open apparently to every one. . With our large public works and railways the demand increased still more, and the hillsides were consequently in a few years stripped of everything that could by any possibility be used for firewood. Where the distance from the towns was too great the still more destructive charcoal burner appeared on the scene and consumed three times the amount needed to render his firewood portable. It might be supposed that the new proprietors would have taken some steps to protect their quasi-forests, but the sense of proprietorship was new, and they were in doubts how far they were entitled to interfere. Most of the labourers and wood-cutters were residents of their own villages, and what is everybody's business is nobody's business, and consequently none of the former copyholders, now all become joint owners, endeavoured to check this waste; indeed, on the contrary, they rather encouraged it. Many persons paid them some little sum for the rights of cutting, and the charcoal burners generally paid Rs. 2 or Rs. 3 for a year's license. They could not be expected to consider the future loss to their children, still less to care for the villages below the hills, which were slowly being ruined.

"Yes, I may almost say ruined, the injury is so great and so increasing. As the bare hillsides have replaced the green forests, the heated air of the dry sandy soil drives off the rain clouds to pass on to the upper ranges. When, owing to the increasing pressure of the clouds, rain does at last fall \* the condensation pro-\* duced by its fall on the heated soil produces \* \* \* a great downward rush of "the heavily laden upper air, and the \* \* \* late rain soon descends in torrents. The fall is no longer arrested by leaves and brushwood and grass, and the increasing torrent pours rapidly down the sandy slopes, bearing with it thousands of tons of sand justead of the fertilising deposits of former days. These vast floods spread themselves over the village below, tearing away all the fertile fields which formerly lined the edges of the stream, and covering the rest of the country with a deep sandy deposit. For the first few years this sandy deposit was not so very injurious. It was fresh soil, and still held a good deal of the decayed roots of the grass and brushwood of the former vegetation. Moreover, a thin layer of sand is often a great protection to an Indian soil; it protects and supports the young and tender plants, and enables the soil below to retain its moisture for a long period. But gradually the tale became very different. Constant reports of deteriorated crops and distressed villages and tenants unable to pay their revenue replaced the uniformly prosperous report of former days; traffic and trade was checked by the great development of these vast sandy beds, which intersected allthe main roads; and further demands for remission began to pour in from villages beyond the action of flood, but whose fields were being buried by the masses of dry sand brought from these torrent beds by the windstorms of the hot weather. Nor was the injury confined to the agricultural peasantry only. The increased volume of waters thus

suddenly brought down soon carried away the bridges sufficient for former times, and compelled a speedy extension of "waterways" and further expensive bridging both on the Grand Trunk Road and the Railway, and when even these proved insufficient the waters submerged the country far and wide." \* \* \* "

The picture is highly coloured, but it can hardly be said Regults of to be exaggerated. Soon after in reporting on the assessment of the delay in taking action. Hoshiarpur tahsil Captain J. A. I. Montgomery pointed out that, owing to the destructive action of the chos or sandy torrents issuing from the Siwaliks, cultivation had decreased by 12 per cent. in 30 years.\* As we shall see, action was greatly delayed, and things went from bad to worse. In 1897 the Financial Commissioner wrote:-

"During the last period of ten to twelve years on account of the action of the chos in Hoshiarpur and Jalandhar 16,650 acres of land have been converted into cho beds, or have totally lost their productive power, while 23,260 acres in addition have been damaged. Government has remitted Rs. 11,855 land revenue, and has in addition suffered or is about to suffer by reductions in the rent rolls of the two districts an annual loss of Rs. 34,719 land revenue, while the people have lost at a low estimate over 20 lakhs of rupees in the market value of their lands."t

731. It is needless to tell the story of the causes led to a case which was urgent in 1877 not being finally dealt 1900. with till twenty-three years had elapsed. At last in an Act was passed for the better preservation and p 1900 protection of the Siwaliks and the lands affected by the chos (Panjab Act No. II of 1900). Its 3rd section empowers the Local Government to put the provisions of the Act in force in any local area "situate within or adjacent to the Siwalik mountain range or affected or liable to be affected by the deboisement of forests in that range or by the action of chos."

which Panjab Act

732. With respect to any notified area the Local Government Chief provimay regulate, restrict, or prohibit-

sions of the

(a) the clearing of land for cultivation not ordinarily under cultivation before the publication of the notification under Section 3:

(b) stone quarrying and lime burning at places where they had not ordinarily been carried on before such publica-

(c) the cutting of trees or removal of any forest produce other than grass, save for bona fide domestic or agricultural purposes;

(d) the setting on fire of trees or other forest produce;

(e) the pasturing of sheep or goats. ‡ .

\* The action of chos is not purely destructive. Far away from the hills, after the heavier sand has been dropped, the deposits they spread are often very fertilizing. But wherever the hills from which they run are denuded of vegetation and consist of sandstone rocks, loss must far exceed gain.

Paragraph 18 of Financial Commissioner's No. 511, dated 1st September 1897,-

Forest Proceedings, No. 14 of April 1898.

‡ Section 4.

(a), (c), and above all (e) are important: Quarrying and lime burning have never been much practised in the Siwaliks, and firing is hardly known. All these acts have been forbidden over a very large area by notifications issued in December 1902.\*

As regards any specified village or part of a village comprised within the limits of the area notified under Section 3 the Local Government may regulate, restrict, or prohibit—

- (a) the cultivation of any land ordinarily under cultivation before the publication of a notification under Section 3;
- (b) stone quarrying or lime burning anywhere;
- (c) the cutting of timber or removal of forest produce including grass even for bonâ fide domestic or agricultural purposes;
- (d) the pasturing of cattle other than sheep and goats.+

Previsions are made for compensating persons whose rights it is necessary to restrict or extinguish.

Power to declare that barren land in the beds of chos vests in Government.

733. For the purpose of preventing the extension of torrent beds, and of reclaiming the wide stretches of sand of which they at present mostly consist, Government is given power to declare the whole or any part of the bed of a cho, not being land under cultivation, or culturable, or yielding any produce of substantial value, to vest in itself either absolutely and in perpetuity, or for a time and subject to conditions to be stated in the notification.

Shahpur Kandi Forests in Gurdaspur.

As already noted Government at the first regular settlement claimed no rights in waste lands in the thickly-peopled district of Gurdaspur. An exception, however, must be made as regards the Shabpur Kandi tract in the north-east corner of the district, which is occupied by outlying spurs of the Himalaya. In 1850 this formed part of the Kangra district, and Mr. Barnes, the Settlement Officer, recorded all the waste as village common, but the property in the chir trees he claimed for Government. || Seeing that the soil undoubtedly belonged to the villagers it would have been inconvenient to form reserved forests in Shahper Kandi. As Mr. Baden Powell remarked :- "The main, if not sole, object of preserving the forest is to prevent these hot dry hills being denuded and turned into a veritable desert, and to preserve such soil as exists from being washed off the bare slopes ; while the inhabitants of the neighbourhood may have a supply of wood, of fuel, and of grazing accommodation; in short the value of the forest is purely local, and . . it should be maintained solely for the benefit of the people."

Sections 7 and 14-15.

Notification Nos. 643 and 644, dated 12th, December 1902.

Section 5.

Chir trees were expressly declared to belong to Government. The right-holders were entitled to cut other trees for their own use, but not for sale. (See paragraph 3 of a memorandum by the Financial Commissioner, Mr. (now Sir) J. B. Lyall, forwarded to Government with his Senior Secretary's No. 443, dated 9th April 1883, printed in Forest Proceedings of July 1883.)

See Section 10 of Act VII of 1878.

735. Accordingly the whole of the uncultivated land in Shahpur Waste lands declared pro-Kandi with some trifling exceptions has been declared protected forest tected forest by notifications issued under Section 28 of Act VII of 1878.\* Some 8.000 acres of the more valuable forest land have been demarcated. Records have been drawn up declaring the extensive rights of user in the produce of the forests which the owners and tenants of cultivated lands in the estates in which they are situated possess,† and rules have been issued under Section 31 of the Act defining the manner in which these rights may be exercised in the case of demarcated and undemarcated forests respectively. T Rules have been framed under Section 75 (c) for the preservation of chir trees belonging to Government, but standing on land owned by private persons, and not included in any protected forest. §

736. Before dealing with the hill and plain forests of the Western Mountain Panjab the action taken with reference to mountain forests in the forests in the Himalaya. Himalaya will be shortly noticed.

737. The respective rights of the State and the landholders in the Rights of uncultivated lands of Kangra proper and Kulu have been described State in unin paragraphs 149-155 and 190 of the Settlement Manual. In lands in Lahul the waste belongs to Government except in jagir estates of Kangra. the Thakurs, who are the descendants of the petty barons of Rajput times. In these the Thakurs own the waste.

738. For a number of years the Kangra forests were managed by Early adminthe Deputy Commissioner under the rules quoted in paragraphs 710 and istration of 714, which were enforced with more or less strictness. Under the forests. rule which enabled one-third of any forest to be closed for three years" or for such periods as the local authorities may determine, " certain areas were reserved. These were known as trihais. Doubtless the original intention was that the portions closed should be shifted from time to time, but in practice this was never done. In 1872 the management of the forests was handed over to the Forest Department. I Mr. Duff, the Forest Officer, proceeded to demarcate as reserves part of the uncultivated lands included in 59 estates in the Nurpur and Dehra tahsils.\*\* The consent of the people was obtained to an assertion by Government of an exclusive title in these reserves by making certain concessions to them as regards the rest of the waste included in their boundaries.

739. The area reserved formed a very small part of the area which Demarcation stood in need of protection, and in 1880 Government ordered a ordered in demarcation on a more extensive scale as a preliminary to a forest 1880. settlement under Act VII of 1878 or the introduction of an improved scheme of management under the Rules of 1855. The demarcation

<sup>\*</sup> Notifications Nos. 3 and 4 of 5th January 1904,

Forest Proceedings, No. 29 of January 1904. Notification No. 115, dated 7th March 1904.

<sup>§</sup> Notification No. 5, dated 15th January 1904.

See the 20th of the rules referred to in paragraph 714.

Forest Department Proceedings. No. 3 of July 1872. The management of the Kulu Forests was transferred in January 1873 (Forest Proceedings, No. 3 of January 1873).

\*\* Forest Proceedings, No. 7 of February 1875 and No. 6 of July 1875, and Notifications Nos. 111 and 112 F., dated 6th March 1879.

, was to be made jointly by a Civil and a Forest Officer. The Civil Officer chosen was the late Mr. A. Anderson, who afterwards made the forest settlements of Kangra, Kulu, Lahul, and Shahpur Kandi.\*

Decision to tected forests."

740. It was decided in 1883 that it was impossible to continue to make the manage the Kangra forests under the Rules of 1855 and 1859, and that procedure under Chapter II of Act VII of 1878 was "unsuitable to a large tract of country, of which the proprietary right in the soil belongs to the zaminagrs, and Government has only the subsidiary and ancillary right to the trees, and power of a limited kind to control their conservancy."† . It only remained therefore to use the provisions of the Act relating to protected forests, and notifications were issued under Section 28 appointing Mr. A. Anderson to enquire into and record "the nature and extent of the rights of Government and of private persons" in the forest and waste lands. I

Nature of the Kangra Forest Settlement.

741. The questions involved in this very difficult forest settlement were not finally decided till 1897. The arrangements adopted were on the same lines as those followed some years later in Shahpur Kandi. The small areas demarcated by Mr. Duff in 1874 and 1875 continued to be reserved forests. As regards the remaining waste in the estates out of which these reserves were carved rules have been issued under Section 75 (c) of the Act for the preservation of the trees which belong to Government. \ The rest of the waste in Kangra has been declared protected forests, | and for these records-of-rights have been drawn up. Notifications under Sections 29 (a) and (b) have declared certain trees in the protected forests to be "reserved," and considerable areas, including the former trihais, have been closed against the rights of private persons for twenty years. Lastly, rules have been issued under Section 31 to regulate the exercise of the rights admitted by the record-of-rights.\*\*

Forests of jagirs of Kangra Rajas. Forests in Kulu.

- 742. The trees in the forests include I in the jagirs of the jagirdar Rajas of Kangra (except Lambagraon) belong to Government. ††
- 743. It Kuluft Government as recorded owner of the waste had a freer hand than in Kangra, a fortunate circumstance as some of the finest deodar forests in the Panjab are to be found in that sub-A much larger area was therefore reserved under Chapter II of 1878. §§ But a great deal of the valuable deodar forest lay close to or intermixed with village lands, and in all waste which was easily accessible the owners and their tenants had extensive rights of user. The bulk of the waste in Kulu has therefore been

1 Notification Nos. 207 and 208, dated 27th April 1885. § Notification No. 61 of 26th January 1897.

§§ Notification No. 298, dated 12th May 1894.

<sup>\*</sup> Forest Proceedings, No. 3 of May 1880.

<sup>†</sup> See paragraph 6 of Panjab Government No. 298, dated 20th July 1883, in Forest Proceedings, No. 7 of July 1883.

Notifications Nos. 57 and 58 of 26th January 1897. Notifications Nos. 59 and 60 of 27th January 1897.

Notification No. 416 of 14th August 1897. †† Forest Department Proceedings. Nos. 1-7 of September 1897. †† Including Kulu proper, Inner and Outer Seoraj, and Waziri Rupi.

dealt with in the same way as in Kangra, and declared to be protected forest of one of three kinds:—

(a) first class demarcated forest.(b) second class demarcated forest.

(c) undemarcated forest.\*

The extent of rights of user to be enjoyed and the amount of regulation necessary differ for the different classes.

- 743. Lahul, though it is included in the Kulu sub-division, has Forests in not been dealt with in the last paragraph. It is too cold to yield Lahul. valuable trees in any great number, and, were it otherwise, it is too remote for their exploitation. The forest and waste lands are therefore protected solely in the interests of the people, though Government derives a petty income from outside shepherds who drive their sheep and goats into Lahul for pasture. The only trees of any value are the birch, the pencil cedar, and the blue pine. Seven small forests have been demarcated, and they with the rest of the waste have been declared protected forests.†
- 744. In the scattered patches of territory, except Kalka and Forests in Bharauli, of which the Simla district is made up, the rights of Govern-Simla hills. ment in the waste are the same as in Kulu. There are a few small reserved forests of "deodar" and "kail" (blue pine), but these are burdened with extensive rights of user. A moderate degree of protection is afforded to trees growing in the village waste, and fresh land cannot be broken up without permi-sion. The best forests in the Simla Hills are in the Native State of Bashahr, and these are managed for the Raja by the British Government, as are the forests of some of the smaller States.
- 745. The mountain ranges of Kulu are continued westward Chamba through the Chamba State to the borders of Kashmir and Rawalpindi. forests. The Chamba forests are leased to the British Government.
- 746. We have seen that the general rules issued in 1855 enabled History of the Civil authorities in hilly districts to mark off any tract as a public mountain preserve, and within its limits to prohibit various acts harmful to forests in Rawalpind. The local rules drawn up in 1856 declared all trees and to Regular shrubs of spontaneous growth in the mountainous and hilly portions Settlement. of the Rawalpindi district to be the property of Government, with the proviso that they were to be available as far as they were really required by the villagers for agricultural or domestic purposes. Provision was made for the issue on payment of fees of permits for the felling of wood and cutting of brushwood. The firing of grass in a way calculated to harm the forests was forbidden. A fine was attached to a breach of these rules. ‡ At the Regular Settlement of 1859-63, Major Cracroft explained to the people throughout the Rawalpindi district that "all waste lands were the property of Government, and that before closing the settlement such tracts would be demarcated."

will be found in Forest Proceedings, Nos. 29-30 and 41 of August 1897.

‡ The full text will be found in Forest Proceedings, No. 1 of March 1876.

<sup>\*</sup>The notifications declaring these three classes of forests protected are Nos. 280, 281 and 282 of 1st June 1896. There are ancillary notifications under Sections 29, 31, 51 and 75 (c) of the Act. These will be found in Forest Proceedings, Nos. 58-62 of July 1896, No. 7 of August 1896, and No. 3 of November 1896.

† Notifications Nos. 154 and 155 of 24th March 1897. The ancillary notifications will be found in Forest Proceedings, Nos. 20, 20, and 41 of August 1897.

But he was unable to touch the mountain forests in the Murree and Kahuta Hills.

Rules of 1873.

- 747. In \$2873 rules were issued under the authority of Section 3 of Act VII of 1865 for the mountain forests of Murree and Kahuta and the hill rakhs in the other tahsils.\* The most important rules, so far as the former are concerned, are queted below:—
- "Explanation.—Nothing contained in these rules shall in any wise abridge or affect any existing rights of individuals or communities in respect of the lands to which the rules relate.
  - Section I.—Of the Murree and Kahuta Forests, known as first class rakhs.
- "I.—The officer of the Forest Department authorised in that behalf by the Conservator shall select portions of the forest area not exceeding in the aggregate 80 per cent. of the whole, and shall demarcate the selected portions by pillars or otherwise as he shall deem necessary.
- "The portions so selected and demarcated shall thereupon be closed absolutely against all forest rights or privileges, and shall be called "Reserved Forests":
- "Provided that, if by the reservation of any tract, any community or individual, though not having any legal right, be in the judgment of the Conservator of Forests put to special loss or inconvenience, it shall be competent to the Conservator to make suitable provision for the exercise of grazing and for the supply of fuel and timber (for domestic and agricultural purposes only), either in the reserved tract or in some adjacent tract conveniently situated.
- "II.—The remaining portions of forest area, not being less than 70 per cent. of the whole, shall be called "Unreserved Forests," and shall be open to all existing village communities, as heretofore, for the exercise, free of charge, of the following privileges only:—
  - (a) grazing or cutting grass for their own cattle;
  - (b) cutting fuel for their own use;
  - (c) cutting timber or wood for their own domestic and agricultural purposes.
- "III.—In unreserved forests, land on which trees stand or a growth of young trees exists shall not be cleared for cultivation or for any other purpose except with the permission, in writing, of a forest officer duly authorised to grant the same.

Explanation.—Such permission shall not be requisite for the clearance in order to cultivation of land free from trees.

"IV.—In unreserved forests, no person "whatsoever shall be entitled to cut for sale or to sell fuel or timber, or to burn charcoal, lime, or surkhi kilns, except upon terms of paying the authorised dues to the Forest Officer in behalf of Government.

The first rule provided for demarcation. But as a matter of fact no demarcation was actually carried out till the question of forest conservancy had been put on a sounder basis by the passing of Act

<sup>\*</sup> Forest Proceedings, No. 3 of November 1873.

VII of 1878, and a revised Revenue Settlement of Rawalpindi had been undertaken.

The forest settlement was carried out by Mr. F. A. Robert-State of things son, who thus described the state of things existing when he began his existing work in 1882 :-

" No restriction whatever had been placed on grazing by the most destructive animals, and timber could be obtained by application to the tahsildar, and grants of trees were made with most extraordinary freedom and censurable carelessness by these officials. The zamindars were not allowed to break up and cultivate forest lands without permission, but besides the fact that such permission was very easily obtainable, the restriction was one which was readily and systematically evaded, and plots of cultivation were accordingly met with in the very depths of forests and in most out of the way places, and the existence of these plots very materially added to the difficulties of our work."

The final result of the settlement was shortly as follows. The forest set-One hundred and three square miles, comprising some of the best tlement, 1882 forest land, were gazetted as reserved forests.\* By far the larger portion of this area is free of all rights except rights of way and water, but in parts of some of the forests rights of free grazing, &c., were admitted. † By a rule issued under Section 14 (c) of the Act it was provided that not more than three-fourths of the whole area of any of the reserved forests should be closed to grazing at one time.

Sixty-seven square miles were notified as protected forests. They, like the reserved forests, are the property of the State, but they are subject to much more extensive rights of user. All trees of any value were reserved, and quarrying, burning of lime and charcoal, and cultivation were forbidden. Rules under Section 31 of the Act regulated the lopping of certain trees, and the removing of grass and fallen wood, &c., by right-holders, and provided for the grant to them at a nominal rate of permits to cut timber to the extent of their own actual They are also allowed to graze cattle, except camels, requirements. sheep, and goats, in the forests over which they have rights.

In the remainder of the waste area of Murree and of the mountainous part of the Kahuta tahsil Government gave up all claim to the ownership of the soil, but the trees were recorded as its property. Rules for their protection were issued under Section 75 of Act VII of 1878.\*\*

Generally speaking, every resident in a village was allowed to cut free of charge the wood he required for agricultural or domestic purposes from trees growing on the common waste lands of his village,

<sup>\*</sup> Notification No. 431, dated 27th October 1886.

<sup>†</sup> Notification No. 290, dated 11th August 1888. Notification No. 257, dated 9th May 1888.

Notification No. 63, dated 17th February 1887. Notification No. 64, dated 17th February 1887. Notification No. 65, dated 17th February 1887.

<sup>\*\*</sup> Notification No. 335, dated 24th September 1882.

but he could not cut for sale. Nor could he fell trees in order to extend cultivation without the license of the Deputy Commissioner. By subsidiary rules of procedure framed by the Deputy Commissioner a permit was required even for the falling of trees for agricultural or domestic proposes.

Murree and of 1903.

750. After the publication of the rules of 1889 much doubt was Kahuta For felt whether the rules of 1856 referred to in paragraph 712 remained est Conser in force. These rules asserted the ownership of the State in all trees vancy Rules in force. of spontaneous growth " in the mountainous and billy portion of the Rawalpindi district," and they applied equally to State lands, common village lands, and separate proprietary holdings. But in the revised settlement the fitle of the Government to trees in the separate holdings was not specifically asserted. Nevertheless the rules of 1889 were treated by the local officers as applicable both to common and to private, i.e., separately owned lands. Difficulties arose as to the legality of this construction. The Panjab Government ruled that there was no doubt as to the title of Government in the trees growing in private lands, and a notification, No. 66, dated 9th February 1903, was issued under Section 75 of the Forest Act which applied to all lands in the Murree and Kahuta tahsils except reserved and protected forests and municipal and cantonment areas. Felling for any domestic or agricultural purpose was allowed provided a permit was first obtained. The breaking up of land for cultivation in a manner calculated to injure trees or timber "was prohibited, unless the Deputy Commissioner granted a permit, but it was added that such permits would be readily granted where the trees are not numerous and the ground is sufficiently level to give hopes of good crops being raised." The setting of fire to any trees, or without permission of grass or other forest produce "the combustion of which is likely to cau e injury to such trees" was forbidden. The rules of 1856 and 1889 were cancelled.\* It was a mistake to make the rules issued in 1903 applicable to all lands in Kahuta, for the State has never claimed ownership in trees in the plain villages of the Rawalpindi district, and one-half of the Kahuta tahsil is in the plains. The only trees of spontaneons growth which it owns in the plain portion of Kahuta are the chir pines found in a few villages. So far therefore as plain villages are concerned the restrictions imposed by the rules relate only to chir pines.

Hill forests of Rawalpindi Division.

751. The hill forests of the district of the Rawalpindi division occupy the lower spurs of the Himalaya in the Rawalpindi district, the Kalachitta Range in Attock, the Salt Range in Jhelam and Shahpur, the Pabbi Range in Gujrat and some detached hills in Rawalpindi, Attock, and Jhelam. The nature of the forest growth has been described in paragraph 704. The local rules of 1856 applied to these hilly tracts, and the forests were demarcated partly during the first Regular Settlements and partly in 1864 and 1865. The history

<sup>\*</sup>Revenue (Forest) Proceedings, Nos. 32-64 of July 1901, 16-23 of July 1902, 5-9 of February 1903.

Panjab Government No. 154, dated 12th March 1907. The Regular Settlements were made between 1852 and 1865. For the reports on the completion of the settlement demarcations by the Deputy Commissioner in Jhelam and by M. Hukm Chand in Rawalpindi, see a collection of papers printed in 1868 on the "Demarcation of Rakhs in the Jhelam, Shahpur, and Rawalpindi districts."

of both mountain and hill forests in the Murree and Kahuta tahsils where no demarcation took place till the Revised Settlement of 1880-1887 has already been given.

752. Some ten years later the original demarcation in Rawal-Hill forests of and after the passing of Act VII of 1878 advantage was taken of its. 34th section to gazette as reserved forests nine of the ten hill forests in Rawalpindi and Attock. The enquiry into the rights of the large Kalachitta forest was not complete enough to allow of this course being followed, and pending a proper forest settlement, it .was made a protected forest.\* The settlement was made by Mr. F. A. Robertson in 1886. Seven forest blocks with an area of 84 square miles were declared to be entirely free of private rights except rights of way. and water. In sixteen blocks with an area of 64 square miles the ownership by the State is subject to rights of grazing enjoyed by the neighbouring villages on payment of light fees.† Under the authority given by the rules of 1855 restrictions have been placed on the partition of waste and the sale of wood in villages in the foot hills in the north and east of the Rawalpindi tahsil. (Notification No. 79, dated 24th January 1907).

753. In 1879-1882 the demarcation of the forests in the Salt Hill forests of Range and elsewhere in Jhelam was carried out by Mr. R. G. Thom- Jhelam and son, who has left an admirable account of his work in the VIIIth Shahpur. chapter of his report on the first Revised Settlement of the district. Owing partly to the neglect of Mr. Thomson's recommendations the question of management had to be reopened at the second Revised Settlement. The orders passed in 1901 are summarized in the 108th paragraph of Mr. Talbot's Settlement Report. \ To prevent hardship the boundaries of some of the reserved forests were rectified. Mr. J. Wilson made a forest settlement of the Salt Range forests in Shahpur in 1894—1896. Certain areas were transferred to adjoining. villages, and records-of-rights were drawn up and recommendations made for the grant or continuation of certain privileges. The basis of Mr. Wilson's settlement was described by himself to be the

<sup>\*</sup> The netification declaring 9 forests "reserved" and Kalachitta a protected forest is No. 97 F., dated 1st March 1879. In the same year the rules of 1856 were cancelled as regards hilly waste in Rawalpindi included in village boundaries and revised rules were issued under the authority contained in the general rules of 1855 (Notification No. 457 F., dated 10th November 1879. This notification has recently been cancelled.)

<sup>†</sup> For full particulars of the Forest Settlement see paragraphs 337—342 and Appendix III of Mr. Robertson's Settlement Report of Rawalpindi.

<sup>‡</sup> See also Appendices X and XI annexed to that report. The notifications relating to hill and plain forests declared to be reserved in the Jhelam, including Tahsil Talagang now in Attock, are quoted on page 1089 of Regulations and Acts applicable to the Panjab

<sup>§</sup> See also Forest Proceedings, Nos. 1-8 of February 1901.

<sup>||</sup> Forest Proceedings, Nos. 5-29 of May 1902, Nos. 7-17 of November 1902, Nos. 12-17 of December 1902, Nos. 1-6 of October 1903, and Nos. 1-9 of December 1903.

<sup>¶</sup> See Forest Proceedings, Nos. 36-66 of December 1897, Nos 1-4 of November 1898, and Nos. 20-34 of November 1899. The notification declaring the forests reserved forests is No. 670, dated 23rd December 1897, and rules regulating the manner in which certain rights are to be exercised have been issued under Sections 74 (c) and 75 (d) of Act VII of 1878 (Notification No. 444, dated 31st October 1899).

policy laid down in the 4th paragraph of Government of India Resolution No. 22 F., dated 19th October 1894, as to the treatment of "forests theo preservation of which is espential on climatic or physical grounds". \* "The objects to be kept in view," Mr. Wilson remarked, were only two—

- "(1) by the reservation of the ferest growth to protect the hillsides from destructive drainage so as to distribute the rainfall as gradually as possible on the lands below, which are almost entirely dependent on the drainage of the hills for their productiveness; and
- "(2) to preserve grass and wood for the supply of neighbouring villages.

"These rakhs have been accepted by Government as a trust to be managed for the benefit of the neighbouring population, and not in order to bring in a direct pecuniary profit or to supply a distant demand".

The same principles governed Mr. Talbot's proceedings in his forest settlement referred to above.

Hill forests in Gujrat.

754. At the first Regular Settlement of Gujrat the central portion of the Pabbi Range was declared to be a Government forest. Its area is about 39 square miles. It was declared in 1879 to be a reserved forest by a notification issued under Section 34 of Act VII of 1878.‡ The forest growth of the Pabbi hills consists of phulahi, with a few kikar, dhak, and shisham trees.

Distribution 755. The plain forests or rakhs of the Panjab are chiefly to be of plain rakhs. found in—

- (a) the arid south-western zone occupied by the districts of the Multan division, the Montgomery district of the Lahore division, the Khushab tahsil of Shahpur and the southern part of the Gujranwala district;
  - (b) the districts to the north of the Salt Range and between the Chenab and the Indus,—Attock, Rawalpindi, Gujrat, Jhelam;
  - (c) the district of Lahore, and the cis-Jhelam tahsils of Shahpur.

The upland tracts between the Jhelam and the Sutlej which consist principally of firm soil, are known as "Bar." Thus we have the Sandal Bar between the Chenab and Ravi in the old Jhang district and the Ganji Ear in Montgomery between the valleys of the Ravi and the Sutlej. The sandy uplands in Khushab, Mianwali,

<sup>\*</sup> See paragraph 778 below.

<sup>†</sup> This had been clearly recognized at a comparatively early period (see paragraphs 15-16 of the Review of the Report on the Regular Settlement of the Shahpur District by the Lieutenant-Governor Sir Donald Macleod, dated 27th August 18 67).

Notification No. 109 F., dated 6th March 1879.

and the northern tahsils of Muzaffargath, which stretch southwards from the Salt Range, are called the Thal.

756. There was no difficulty in dealing with the Bars" in the dry south-western zone. The rainfall is so scanty that at annexation we found cultivation almost wholly confined to the river valleys and a narrow strip of land above these valleys in which water was sufficiently near the surface to admit, of well cultivation. The Bars consisted of great grazing grounds of the kind described in paragraph 706 roamed over by nomad graziers and camel-owners. Here and there a deep well had been sunk to afford water to the cattle, and there were a tew quasi-permanent locations of camelmen known as jhoks and of graziers known as rahnas. At the regular settlements Government claimed the ownership of this no man's land and asserted its title by levying fees for grazing.

The Bar tracts.

757. As a grazing tract the Thal is far inferior to the Bar; it is treeless and has little scrub jangal growth of any value. Writing of the 800,000 acres of the Khushab Thal Mr. Wilson observed\*—

The Thal.

." This desert tract forms a marked contrast to the level loamy soil of the Bar uplands on the other side of the Jhelam. Although it appears to have a somewhat similar substratum of hard level soil. its surface is covered by a succession of sand-hills, one following the other like the waves of an angry sea. There is hardly a tree in the whole tract, the natural produce consisting of scanty grass and stunted bushes of lana (caroxylon fætidum), bui (panderia pilosa) and phog (calligonum polygonoides), all useful for goats and camels. and of ak (calotropis gigantea) and harmal (peganum harmala), which nothing will touch. Between the hillocks the harder subsoil appears in strips and patches, which in favourable years produce good grass and repay the cost of rude cultivation. At Regular Settlement about 1864 the population of the Thal was found to be only 14,907, hving in 25 villages scattered over the tract. They lived an almost entirely pastoral life, and owned about 3,500 camels, 16,000 cows and bullocks, and 60,000 sheep and goats. The area under cultivation was only 4,862 acres or less than one per cent. of the total area. The system adopted at Regular Settlement for reserving a portion of the waste for the State was much the same as that already described for the Bar, except that here, owing to the inferior character of the soil and rainfall, 10 acres of grazing ground were allotted to the villages for each head of cattle they possessed. The result was that about 270,000 acres were declared to be State land, and the remainder, amounting to about two-thirds of the whole Thal area. were allotted in proprietary right to the village communities." huge Thal area of the Mianwali district was till lately part of the Mianwali tahsil of Bannu and the Bhakkar and Leiah tahsils of Dera Ismail Khan. No final decision as to the respective rights of Government and the village landowners was made till the Regular Settlements of these two districts were carried out 30 years ago. Considering how little cultivation there then was in the Thal, the settlement was an extraordinarily liberal one. Roughly out of twenty-

<sup>\*</sup> Firest Department Proceedings No. 26 of September 1893.

six lakhs of cacres untouched by the plough Government claimed eight.\* In the Thal of the Muzaffargarh district the State owns over 11 lakhs of acres.

Rakhs in districts of Rawalpind division.

758. In the other six districts mentioned in paragraph 754 a Lahore and in larger rainfall had permitted the settlement in the uplands of a population which divided its attention, between cultivation and cattlerearing, though the latter was its favourite pursuit. Villages were scattered over the waste, but their boundaries, where they existed at all, were ill defined. The policy to be followed in such cases was laid down by the Board of Administration in the 9th paragraph of the letter quoted in paragraph 708. carried out in a liberal spirit. A certain nof waste for every acre under fillage was A certain number of allotted ownership to the proprietors of each estate, and the rest was demarcated as Government rakhs.† In Jhelam and Rawalpindi the demarcations were not carried out till 1864-65.

Treatment of plain rakhs.

It is needless to load these pages with a lengthy history of the proceedings taken by Government from time to time as regards plain rakhs. All that can be done with profit is to point out the main sources of information and to note the general result.

Rakhs in Gujrat.

The Gujrat rakhs were formed at the first Regular Settlement of 1858. A brief account of the demarcation will be found in the 12th paragraph of Captain Horace Mackenzie's Settlement Report.

Rakhs in old Rawalpindi district:

761. The plain rakhs of the old Rawalpindi district cover an area of about eighty thousand acres. Most of them are in the western tahsils, which now form part of the Attock district. A short notice of their history will be found in the 19th paragraph of the Financial Commissioner's Review of Mr. Robertson's Settlement Report of the Rawalpindi district. The latest orders about these poor rakhs, some of which contain no wood at all-while others show a scanty growth of phulahi and karil, will be found in Forest Department Proceedings Nos. 25-33 of April and 1-6 of September 1907. They are mostly under the charge of the Deputy Commissioner, and are of the class which should be managed entirely in the interests of the neighbouring villages.

Rakhs in Jhelam.

762. The VIIIth chapter of Mr. Thomson's Settlement Report of Jhelam should be read by any one who wishes to understand the methods, merits, and mistakes of our early rakh demarcations. At the Revised Settlement of the Jhelam districted was found that the people had still some legitimate grievances. One or two of the plain rakhs were given up altogether and the boundaries of others were rectified

<sup>\*</sup> See-paragraph 200 of Mr. Thorburn's Settlement Report of Bannu, paragraphs 518-533 and 535 of Mr. Tucker's Settlement Report of Dera Ismail Khan and paragraphs 29-30 of Mr. (now Sir James) Lyall's review of the latter.

<sup>†</sup> The proportions seem to have been 2 acres of waste per acre cultivated in Rawalpindi, 3 in Jhelam, and 5 in Gujrat. In the cis-Jhelam tahsils of Shahpur + acres of waste was given in ownership for every head of cattle. Many of the rakhs in the Lahore district had been reserved as hunting grounds by the Sikhs before our advent.

267

and a number of forests were transferred from the management of the forest Department to that of the Deputy Commissioner.\*

763. Mr. Wilson's reports on the rakhs of the Bhera and Shahpur tahsils of the Shahpur district contain full information as to their history, and illustrate the difficulties which arise when Government lands are brought under cultivation except in pursuance of some definite plan.

Rakhs in Shahpur.

Eakhe in Lahore.

764. The same difficulty arose in an acute form in regard to the Lahore rakhs. " Most of the reclamations of waste lands in these rakhs were first made about the year 1852 when the Commissioner of the Lahore division, wishing to see all waste land in the Lahore district brought under cultivation as soon as possible, issued an order that 'hopes should be held out to the cultivators that if they fully cultivate the land they would be treated as proprietors, and that if they sunk wells the land would be assessed at barani rates only'. Leases for cultivation were accordingly given upon very favourable terms, and security was constantly taken from the lessees. binding them to cultivate the land and not use it for grazing. This policy was followed for a period of ten years, when, owing to the rapid extension of cultivation which had followed upon the opening of the Bari Doab Canal, a change was made in the policy of Government, and the Financial Commissioner directed that for the future all land given for cultivation in the rakhs should be given upon \* \* \* These orders were gradually acted annual leases only. upon between 1862 and 1869. In the latter year the rentals of the various rakhs were re-assessed, and in 1870 the whole of them were handed over to the Forest Department. In 1872, however, many of the rakhs were re-transferred to district management. From those which remain under Forest management practically all the tenants were evicted. In the rokhs re-transferred to the Deputy Commissioner the system of annual leases was continued. \* \* \* Although . under the system of annual leases the tenure of each lessee was nominally terminated each year, yet in general the cultivators managed to secure continuity of possession, and, if ejected from one portion of a rakh through their right to cultivate being sold over their heads, established themselves on other land in the same rakh. Of a large class of these tenants Mr. Dane writes :- 'Tenants therefore who are the direct representatives of men settled on the land in this way by order of a Government officer, and who have since remained in continuous possession, have undoubted claims to be treated with consideration. In many cases the tenants own no other land, and have founded villages and located themselves permanently in the rakhs, and, although by receiving annual leases they have admitted the right of Government to oust them at pleasure, their eviction would be a somewhat harsh and arbitrary measure."

<sup>\*</sup> Forest Department Proceedings Nos. 1—8 of April 1898, 1—8 of Febr ary 1 0, 1—8 of August 1901, 5—29 of May 1902, 7—17 of November 1902, 12—47 of December 1902, 1—6 of October 1903, and 1—9 of December 1903.

<sup>†</sup> Forest Department Proceedings Nos. 24—45 of September 1893, 8—13 of May 1894, 1—4 of July 1894, 1 of September 1894, 25—28 of January 1896, 6—20 of August 1898, and 1—6 of October 1898.

The rights of the tenants in the Lahore rakhs were the subject of elaborate report by Mr. R. M. Dane in 1882, Mr. (now Sir Louis) Dane in 1885, and Mr. (now Sir W. O.) Clark in 1887, and final orders on the case were passed by the Local Government and the Gov. ernment of India in 1889 \*

Fuel rakhs management of Forest Department.

The construction of the railway from Multan to Lahore, 765. put under which was opened in 1865, made the fuel supply to be drawn from the rakhs in the Lahore, Montgomery, Multau, and Muzaffargarh districts an urgent question. In 1864 Dr. J. Stewart drew up an important report on the subject, t and in the same year the Forest Department in the Panjab came into being. Dr. Stewart showed that the larger part of the Bar waste was of little use except for grazing and browsing, and that the railway and the Indus Steam Flotilla must look for their fuel supply mainly to those rakhs in the Bar or in the lower lands adjoining the Bar in which the jand (prosopis spicigera) or the farash (tumar ix articulata) grew freely. In the discussion which followed the policy first emerged of handing over to the stricter management of the Forest Department the fuel rakhs and keeping the rest under the looser control of the Deputy Commissioner. When rakhs are managed by the Forest Department it is usually desirable to notify them as reserved forests, but those in charge of the Deputy Commissioner can generally be left as "unclassed forests," by which is meant Government waste which has neither been declared a "reserved forest" under Chapter II nor a protected forest under Chapter IV of Act VII of 1878. Of course a forest officer may be in charge of "unclassed forests" and a Deputy Commissioner of "reserved forests," and the limits of jurisdiction have often been re-arranged. The question is largely one of convenience of administration.

Relations of

But the nature of forest management is so vital to the 766. Deputy Cem- comfort of the rural population that, wherever the line is 'drawn, the missioner and Deputy Commissioner must be in constant communication with, and forest officer. in some important matters must control, the forest officer.

Instructions issued in 1888.

The following instructions on the subject were issued in 1888||:--

Scope of instructions.

(1). Nothing in these instructions applies to the working of the Panjab River Rules, to the collection of drift and stranded timber under Chapter IX of the Indian Forest Act, to forests in Native States, or to the Changa Manga Reserve. Neither do they apply to

† See correspondence printed in Forest Proceedings No. 1 of 1894. ‡ See pages 46 and 288 of Gamble's "Manual of Indian Timbers." The jand yields

far better fuel than the farash.

|| Later amendments have been embodied in the instructions as printed in the text.

<sup>\*</sup> Forest Proceedings Nos. 1-2 of January 1884, 9-10 of February 1885, 7-9 of April 1888, 3-4 of May, 1889, and 1 of August 1889.

The colonization of vast areas of Government waste in the south-west of the Panjab as a consequence of the excavation of the Chenab and Jhelam Canals has greatly reduced the fuel rakhs managed by the Forest Department. Proposals have been made in connection with the Canal schemes to hand over large areas to the Department to be worked as irrigated plantations.

limited areas in one district managed by a forest officer whose main duties lie in another district.

- (2). When the Collector considers it desirable that magisterial Magisterial powers for the trial of forest offences should be conferred on a forest powers. officer, the Local Government will be prepared to consider such a recommendation; but each case of this kind will be separately treated with reference to local requirements and the personal qualifications of the forest officer concerned.
- (3). (a) In respect of the matter's mentioned in clause (b) of Relation of this paragraph the district forest officer is under the control of the district forest Collector in his management oflector.
  - (i) Reserved forests.
  - Protected forests. (ii)
  - All unclassed forests and waste land owned by the (iii) State, or in which the State has forest rights.

In a subdivision of a district, as for example in the Kulu subdivision of the Kangra district, the control of the Collector may be exercised through the Assistant Collector in charge of the subdivision.

- The control of the Collector will be exercised in respect of the taking up of new forests, the recovery of monies due to Government, the prosecution of forest offences or the composition of such offences under Section 67 of the Forest Act, so much of the forest administration as affects the use of the forests and waste lands by the adjacent population, and the appointment, posting, and transfer of establishment, so far as they affect these questions.
- All proposals connected with the disforestation of reserved or protected areas should be submitted by the district forest officer to the Collector for an expression of his opinion.
- The Collector will see that tahsildars and the subordinate Assistance to revenue agency of all grades render assistance not only in the berendered by management of Government waste lands, and especially in the assets. the Collector's ment and collection of Government dues, but also in the management establishment. of all forests. All distinctions and practices which are likely to encourage the impression that forest work lies outside the ordinary duties of land revenue officials should be gradually abolished. Collector will also authorize the district forest officer to address orders to these officials direct in matters in which it may be convenient that he should, in ordinary cases, act without the intervention of the Collector.

(5). The district forest officer will keep a diary, in which will be briefly noted from day to day-

- (a) all occurrences of importance relating to duties discharged by him;
- (b) the substance of any reports or representations (verbal or written) addressed by him to the Collector, and all orders received from that officer.

Should a forest officer be district forest officer of more than one district, he will write a separate diary for each district.

Forest officer's diary.

The rights of the tenants in the Lahore rakhs were the subject of elaborate report by Mr. R. M. Dane in 1882, Mr. (now Sir Louis) Dane in 1885, and Mr. (now Sir W. O.) Clark in 1887, and final orders on the case were passed by the Local Government and the Gov. ernment of India in 1889.\*

Fuel rakhs of Forest Department.

The construction of the railway from Multan to Lahore, put under which was opened in 1865, made the fuel supply to be drawn from management the rakhs in the Lahore, Montgomery, Multan, and Muzaffargarh districts an urgent question. In 1864 Dr. J. Stewart drew up an important report on the subject, t and in the same year the Forest Department in the Panjab came into being. Dr. Stewart showed that the larger part of the Bar waste was of little use except for grazing and browsing, and that the railway and the Indus Steam Flotilla must look for their fuel supply mainly to those rakhs in the Bar or in the lower lands adjoining the Bar in which the jand (prosopis spicigera) or the farash (tumar ix articulata) grew freely. In the discussion which followed the policy first emerged of handing over to the stricter management of the Forest Department the fuel rakhs and keeping the rest under the looser control of the Deputy Commissioner. When rakhs are managed by the Forest Department it is usually desirable to notify them as reserved forests, but those in charge of the Deputy Commissioner can generally be left as "unclassed forests," by which is meant Government waste which has neither been declared a "reserved forest" under Chapter II nor a projected forest under Chapter IV of Act VII of 1878. Of course a forest officer may be in charge of "unclassed forests" and a Deputy Commissioner of "reserved forests," and the limits of jurisdiction have often been re-arranged. The question is largely one of convenience of administration.

766. But the nature of forest management is so vital to the Relations of Deputy Cem- comfort of the rural population that, wherever the line is drawn, the missioner and Deputy Commissioner must be in constant communication with, and forest officer. in some important matters must control, the forest officer. .

Instructions issued in . 1888.

The following instructions on the subject were issued in 1888||:--

Scope of instructions.

(1). Nothing in these instructions applies to the working of the Panjab River Rules, to the collection of drift and stranded timber under Chapter IX of the Indian Forest Act, to forests in Native States, or to the Changa Manga Reserve. Neither do they apply to

† See correspondence printed in Forest Proceedings No. 1 of 1894. ‡ See pages 46 and 288 of Gamble's "Manual of Indian Timbers." The jand yields far better fuel than the farash.

|| Later amendments have been embodied in the instructions as printed in the text.

<sup>\*</sup> Forest Proceedings Nos. 1-2 of January 1884, 9-10 of February 1885, 7-9 of April 1888, 3-4 of May 1889, and 1 of August 1889.

The colonization of vast areas of Government waste in the south-west of the Panjab as a consequence of the excavation of the Chenab and Jhelam Canals has greatly reduced the fuel rakhs managed by the Forest Department. Proposals have been made in connection with the canal schemes to hand over large areas to the Department to be worked as irrigated plantations.

limited areas in one district managed by a forest officer whose main duties lie in another district.

- (2). When the Collector considers it desirable that magisterial Magisterial powers for the trial of forest offences should be conferred on a forest powers. officer, the Local Government will be prepared to consider such a recommendation; but each case of this kind will be separately treated with reference to local requirements and the personal qualifications of the forest officer concerned.
- (3). (a) In respect of the matter's mentioned in clause (b) of Relation of this paragraph the district forest officer is under the control of the district forest Collector in his management of lector.
  - Reserved forests. (i)
  - Protected forests. (ii)
  - All unclassed forests and waste land owned by the (iii) State, or in which the State has forest rights.

In a subdivision of a district, as for example in the Kulu subdivision of the Kangra district, the control of the Collector may be exercised through the Assistant Collector in charge of the subdivision.

- The control of the Collector will be exercised in respect of the taking up of new forests, the recovery of monies due to Government, the prosecution of forest offences or the composition of such offences under Section 67 of the Forest Act, so much of the forest administration as affects the use of the forests and waste lands by the adjacent population, and the appointment, posting, and transfer of establishment, so far as they affect these questions.
- All proposals connected with the disforestation of reserved or protected areas should be submitted by the district forest officer to the Collector for an expression of his opinion.
- (4). The Collector will see that tahsildars and the subordinate Assistance to revenue agency of all grades render assistance not only in the berendered by management of Government waste lands, and especially in the assets. the Collector's ment and collection of Government dues, but also in the management of all forests. All distinctions and practices which are likely to encourage the impression that forest work lies outside the ordinary duties of land revenue officials should be gradually abolished. Collector will also authorize the district forest officer to address orders to these officials direct in matters in which it may be convenient that he should, in ordinary cases, act without the intervention of the Collector.
- (5). The district forest officer will keep a diary, in which will be briefly noted from day to day-
  - (a) all occurrences of importance relating to duties discharged by him;
  - (b) the substance of any reports or representations (verbal or written) addressed by him to the Collector, and all orders received from that officer.

Should a forest officer be district forest officer of more than one district, he will write a separate diary for each district.

Forest officer's diary.

This diary, written on half-margin, will be sent weekly to the Collector, and will be accompanied by a brief précis of any correspondence with the Conservator affecting the matters in respect of which the control of the Collector is exercised. The Collector will retain the précis, but will forward the diary without delay to the Conservator of Forests adding any remarks he may wish to make.

The Conservator of Forests will return the diary direct to the district forest officer, who will lay before the Collector any remarks that the Conservator may have made thereon.

Forests and ing plans and sanctioned plans of operations.

Working plans.

- (6). All the lands mentioned in paragraph 3 (a) shall be adminiswaste lands to tered in accordance with working plans sanctioned by Government, be adminis and with temporary plans of operations as provided in Chapter II, ing to work. Part I, of the Forest Department Code, and in the following paragraphs.
  - (7). It has not yet been possible to provide working plans for all But when the Conservator of Forests is in a position to these lands. provide a working plan, he will, in consultation with the Commissioner of the division, issue orders for its preparation. All working plans require the countersignature of the Collector, Commissioner, and Financial Commissioner, whose duty it is to see that a proposed plan is framed with due consideration to local requirements.
  - When the working plans are so countersigned, they will, if they relate to (i) reserved forests or to (ii) protected forests, be submitted by the Conservator to the Inspector-General of Forests for scrutiny and approval of technical points. The Inspector-General will forward hem to the Local Government with his opinion and remarks, and he' Local Government will pass orders upon them, furnishing a opy of the same to the Government of India for confirmation or ecord. But if they relate to (iii, unclassed forests and waste lands owned by the State, or in which the State has forest rights, they will be sent by the Conservator to Government through the Financial Commissioner.

Working plans, when sanctioned by Government, cannot be altered except under the procedure and sanction above prescribed.

- (8). In addition to such details as may from time to time be Annual plans of operations, prescribed by the Conservator of Forests, the annual plans of operations shall state-
  - (a) the grazing management, viz. :
    - absolute closings, · (i)
    - closings for part of the year or against certain animals only,
    - (iii) temporary closings for improvement of fodder,
    - grazing permits and leases;

- (b) temporary cultivation subsidiary to forest management.
- cuttings and sale of timber, fuel and other forest produce;
- protection from fire and from traspass.

It is not, however, intended that arrangements previously approved and found to work satisfactorily should be re-stated at length each year. It will be sufficient under such circumstances to state briefly that previous arrangements will be continued. annual proposals for the regulation and management of grazing will be in accordance with the system prescribed by the orders of the Financial Commissioner; and in framing proposals under this paragraph for the closing of areas which have not been declared reserved or protected forests under the Indian Forest Act, 1878, due consideration should be shown for the grazing convenience of adjacent villages.

Annual plans of operations will be framed by the forest year.\* Disposal of There will be a separate plan for each district. It will be prepared annual plans. in duplicate by the district forest officer, who, in respect of the matters mentioned in paragraph (3) (b), will, in preparing it, be guided by the instructions given by the Collector. The Collector will submit the plan to the Conservator for sanction.

The Conservator in framing his orders on the plan will consult the Commissioner in respect of the matters mentioned in paragraph (3) (b). If in regard to any of these matters he disagrees with the Commissioner he will refer the point at issue to the Financial, Commissioner for his orders, or for the orders of Government, as the case Final orders should be issued before the 15th June may require. in each year.

- (10). If during the currency of any annual plan of operation so Subsequent sanctioned, it becomes necessary to revise it in respect of any matter alterations. mentioned in paragraph (3) (b), the procedure laid down in paragraph (9) will be followed.
- The district forest officer will be consulted by the Collector Forestofficers with reference to all proposed alienations of forests or waste lands to be consultby grant, lease, or sale; and he will give such assistance in cases ed in certain of this nature as the Collector may require, especially in the selection of the sites and determination of the boundaries of proposed grants. No land, whether protected or unclassed forest, or waste, the revenue of which is 'credited to the Forest, Department, will be granted, leased, or sold until the consent of the Conservator of Forests to its alienation has been obtained.

This paragraph does not give the Forest Department authority to grant leases of unclassed forest land in regard to which the rules for the lease of waste landst must be observed. As to temporary cultivation subsidiary to forest management see paragraphs (8), (9) and (10).

+ See next chapter.

<sup>\*</sup> The forest year ends on 30th June.

Office and routine.

- (a). The offices of district forest officers will, so far as possible, be located in or in the immediate vicinity of the Collector's office.
- (b). Formal official correspondence between the Collector and the district forest officer concerning matters dealt with by these instructions should be avoided as far as possible; written communications, when necessary, being carried on by the transmission of original files and cases under the same rules as apply to the transaction of business between a Collector and his Revenue Assistants.
- (c). The Collector may direct the district forest officer to file in the district record, office such of the forest records as relate to forest settlements or revenue leases or other matters affecting the use of the forests and waste lands by the population adjacent thereto.

Important Groposals.

(13). Proposals of importance for the formation of new forests, or which affect the use of the forests and waste lands by the adjacent population, will be addressed by the Conservator to the Financial Commissioner for submission to Government.

Special assessments under Sec-Land Revenue

Nothing in the above instructions is to be understood as affecting the responsibility of the revenue officers in respect of the special assessments described in clause (f) of Section 59 of the tion 59 (f) of Land Revenue Act."

Act. Rules for management of unclassed forests.

767. The 48th section of the Punjab Laws Act (IV of 1872) provided that "no person shall make use of the pasturage or other natural product of any land being the property of the Government except with the consent and subject to rules to be from time to time, either generally or in any particular instance, prescribed by the Local Government."

No general action was taken till the year 1896.\* The rules issued in 1896 were republished with a few verbal alterations in 1900 when they were being extended to the Agror Valley in the district of Hazara. † They are as follows :-

- 1. (1) This rule, Rules 2 to 9 (both inclusive) and Rule 17 apply in the first instance to all waste lands which are the property of the Government in the local areas mentioned in the Schedule, except-
  - (a) protected and reserved forests;
  - (b) dands under the control of the Military, Canal, or Railway authorities;
    - (c) lands under the control of District Boards and Municipal Committees;
    - . (d) encamping-grounds;
    - (e) Government lands to which any special rules having the force of law under any Act for the time being in force in the Panjab apply;

+ Panjab Government Notification No. 1086, dated 11th August 1900.

<sup>\*</sup>Panjab Government Nötification No. 58, dated 1st February 1896. Rules applicable to the Muzaffargarh district had been issued in Notification No. 94, dated 21st March 1882, see paragraph 772.

(f) lands included within the area of any cultivating lease, or which have been allotted under the Government Tenants (Panjab) Act, 1893.

But the said rules may be extended to lands of classes (c) and (d) by special order of the Local Government published in the official Gazette.

(2) Rules 10 to 16 (both inclusive) apply in the first instance to the Multan, Montgomery, and Jhang districts only, but may be extended to any other local area by special order of the Local Government published in the official Gazette.

## 2. In these rules--

- (a) "Cattle" includes, besides horned cattle, camels, horses, asses, mules, sheep, goats, and the young of such animals.
- (b) "Collector" means the Collector of the district, and any person on whom the powers a Collector have been conferred under Section 27 of the Punjab Land Revenue Act, 1887.
- (c) "Forest Officer" means any officer of the Forest Department not below the rank of Ranger.
  - (d) "Farmer" means a person to whom the right to collect fees for the pasturing of cattle or to cut wood or grass, or to remove fuel or any other natural produce of any land to which these rules apply, has been leased by the Collector.
  - (e) "Graze" includes "browse."
- 3. Save as hereinafter provided in Rule 10, no person shall pasture cattle, cut wood or sajji plants or grass, or gather fuel or any other natural product in the above-mentioned lands, except—
  - (i) under the authority of and in accordance with the conditions of a license granted by the Collector or Forest officer; or
  - (ii) with the permission of a farmer and in accordance with the conditions of such farmer's lease.
- 4. Every license granted under Rule 3, clause (i), shall be in writing and signed by the Collector or Forest Officer, and shall state
  - (a) the nature, extent, and duration of the rights thereby conferred;
  - (b) the consideration paid or to be paid by, the license-holder; and
  - (c) the special conditions, if any, on which the license is grant-

- 5. (1) Every lease granted to a farmer shall be in writing signed by the Collector and the farmer, and shall state—
  - (a) the nature, extent, and duration, which shall in no case exceed five years, of the rights thereby conferred\*;
  - (b) the consideration paid or to be paid by the farmer; and
  - (c) the special conditions, if are, on which the lease is granted.
  - (2) Every such lease shall include-
    - (a) in cases where the consideration-money is payable by instalments, a statement as to the amount of the said instalments and the dates on which they will fall due,
    - (b) in cases where the lease relates to the right of grazing,-
      - (1) a specification of the maximum grazing dues which the farmer may levy, and
      - (2) a clause providing that the farmer shall not, without the written permission of the Collector, transfer the lease or close any portion of the leased area to grazing by any cattle in respect of which grazing dues are tendered under Rule 6; and
    - (c) in all cases a clause providing that, if the leased area or any part thereof is at any time required by the Government for public purposes, the lease shall be terminable on payment to the farmer of reasonable compensation to be assessed by the Collector.
- 6. (1) The owners of cattle grazing on any lands to which these rules apply shall pay to the Collector or Forest Officer, or to the farmer, as the case may be, fees according to a scale fixed from time to time by the Financial Commissioner for each district: provided that no fee shall be charged for any sheep or goat less than six months old, or for any other animal less than one year old.
  - (2) The fees to be charged for licenses to cut wood, sajji plants, or grass, or to gather fuel or any other natural product in any lands to which these rules apply, shall be fixed from time to time by the Commissioner of the division and shall be paid by the license-holder to the Collector or Forest Officer or such other person as may be authorised by the Collector in this behalf, or to the farmer, as the case may be.
  - 7. The Local Government may in respect of any local area exempt from all or any of the provisions of these rules any person or class of persons and any cattle or description of cattle.
  - 8. Every license-holder and every farmer shall be bound by the conditions stated in the license or lease, as the case may be, granted to him, and every person acting under Rule 3, clause (ii), shall be bound by the conditions of the lease granted to the farmer.

<sup>\*</sup> Grazing leases should be sold at the beginning of the rainy season.

- 9. (1) In case of any breach of the provisions of the Rule 8, the Collector may, at his discretion, cancel the license or lease, and thereupon the license-holder or farmer, and every person acting under the farmer under Rule 3, clause (ii), shall forfeit all claims to any produce or wood which at the time of the cancellation of the license or lease has not been removed from the land to which the license or lease applies.
- (2) On the cancellation of a license or lease under sub-section (1), the license-holder or farmer shall not be liable for any fees outstanding on the produce or wood so forfeited; but he shall have no claim to refund of dues already paid, and he shall not be thereby discharged from his liability for the payment of other dues in arrears or of instalments overdue under the terms of his license or lease at the date of the forfeiture.
- 10. (1) The Collector may, with the previous sanction of the Financial Commissioner, make an agreement on behalf of Government with the whole community of cattle-owners residing in any estate to pay such an annual assessment, by way of commutation for grazing dues, as may be agreed upon between the Collector and such community.
- (2) Such assessment shall not, without the sanction of the Local Government, be made for a period exceeding five years; and when such an assessment has been concluded and recorded in such manner as the Financial Commissioner shall direct, no person comprised in such community of cattle-owners shall be liable to separate assessment in respect of any cattle belonging to him and grazing during the period mentioned in such agreement on lands to which these rules apply within the limits of the tract regarding which the agreement is made.
- (3) Similar agreements may, under the orders of the Financial Commissioner, be entered into between the Collector on behalf of the Government and associations of cattle-owners, in respect of cattle owned jointly or severally by the members of such associations.
- (4) For the purposes of this rule, the consent of persons owning two-thirds of the cattle belonging to a community or a sociation as aforesaid shall be deemed to be the consent of all the cattle-owners of such community or associations.
- 11. If the cattle-owners of any community or association, which has accepted an assessment made under Rule 10, prove to the satisfaction of the Collector that the owner of any cattle, in respect of which the assessment was made, has with his cattle left that community or association and resides permanently with his cattle in another community or with another association in the same district which has accepted a similar assessment, the Collector may reduce the assessment payable by the former community or association and enhance the assessment payable by the latter community or association proportionately to the number and description of cattle removed from the ore and added to the other.

- 12. The Collector may require the headman of any community of association of cattle-owners with which an agreement is in force under Rule 10, to furnish him with a nominal roll of the cattle-owners belonging to such community or association showing the number and description of the cattle owned by each.
- 13. Disputes arising among the cattle-owners of any community of association which has accepted assessment made under Rule 10, regarding the incidence as among themselves, of the assessment, shall be decided by the Collector whose order shall be final.
- 14. (1) All sums due under an assessment made under Rule 10 shall be payable at such times and places and to such persons as the Financial Commissioner shall direct.
- (2) The amount assessed under Rule 10 shall be collected by lambardars of estates or headmen of associations of cattle-owners, or by such other persons as the Collector may appoint, and such lambardars, headmen, or other persons shall levy grazing dues from the cattle-owners in accordance with rates which shall be fixed by the Collector, so as not to exceed in the aggregate the total assessment and to apportion the incidence thereof among the cattle-owners as nearly as may be in proportion to the number and kind of cattle owned by each.
- (3) If the amount of the grazing dues leviable under this rule from a cattle-owner belonging to any community or association which has accepted an assessment under Rule 10, is not paid by such cattle-owner or by some other person on his account when duly demanded, the Collector may entirely rescind the agreement made under Rule 10 in respect of such community or association.
- 15. The persons arthorised under Rule 14 to collect the assessment shall be entitled to a drawback not exceeding 5 per cent. on all sums paid by them into the Government Treasury on account of such assessment.
- 16. Three per cent. of the net collections, after deducting sums payable under Rule 15, shall be credited to the District Patwari Fund, and shall be expended, under the orders of the Financial Commissioner, in remunerating the establishment maintained, and in paying the contingent charges incurred, in connection with the assessment and collection of grazing duties.
- 17. Any person acting in contravention of any of these rules shall be liable, on a first conviction, to simple imprisonment for a term which may extend to one month, or to fine not exceeding Rs. 100, or to both; and, on a subsequent conviction under this rule within three years of the first, to imprisonment for a term which may extend to six months, or to fine not exceeding Rs. 300, or to both.

## SCHEDULE.

Local areas to which Rules 1 to 9 and Rule 17 apply-

Hiri district. Rohtak Karnal Lahore Multan Jhang Montgomery Rawalpindi ,, Jhelam " Gujrat Shahpur 23 Gujranwala Dera Ismail Khan Dera Ghazi Khan Bannu Muzaffargarh

The Agror Valley in the Hazara district.

As regards Government waste lands other than those under the Forest Department these rules have been supplemented by the Executive instructions as following executive instructions\* :-

to rakhs under

- The Collector should some time before the beginning of agement. each agricultural year submit, for the approval of the Commissioner, a brief report showing generally the arrangements he proposes to make for the ensuing year as regards-
  - (a) grazing;
  - (b) cutting and sale of timber, fuel, grass, and other natural products.
- It is not intended that details of management should require the Commissioner's sanction, but it is essential that he should be in a position to exercise a general control over the treatment of Government waste lands in his division.
- No claim on the part of the residents in any estate to a right of grazing in Government lands adjacent to such estate or of obtaining leases or licenses connected therewith under the abovementioned rules should be admitted. But in granting leases or licenses the reasonable requirements of the population adjacent to the Government lands concerned should be carefully considered, and it is often expedient to select leading members of the rural community as farmers of grazing dues.

<sup>\*</sup> Panjab General Letter No. 235, dated 1st April 1896.

- (iii) Wholesale sales of wood from rakhs and forests under the control of Collectors is prohibited, except on special grounds, and with the previous sanction of the Financial Commissioner. Contractors and others applying to Collectors for a wholesale supply should first be referred by them to the Forest Officer. All applications for supply of wood for railway fuel and for large public works should be considered wholesale, and in other cases all applications for a quantity exceeding 3,000 maunds (Panjab Government No. 162 F., dated the 12th April 1880). The intention of these orders is that District Officers should co-operate with the Forest Department in an intelligent and economical administration of the rakhs and forest lands under their charge and in the prevention of indiscriminate cutting likely to injure the permanent supply of wood and the reproductive capacity of the rakhs.
- (iv) But licenses to cutewood should be granted under the rules issued under Section 48 of Act IV of 1872 and given in the last paragraph to the extent necessary to meet the reasonable requirements of the people residing in the neighbourhood of Government lands in the matter of timber and fuel when they are unable to meet these requirements from the produce of their own lands.
- (v) The Collector should insert in leases and licenses such conditions as he considers necessary for the prevention of waste and the promotion of good management.
- (vi) If a lease or license is put up to auction the Collector should notify that he will not be bound to accept the highest or any bid.
- (vii) No lease of the description mentioned in clause 5 of the rules in the last paragraph shall be given for more than one year without the sanction of the Financial Commissioner.

Tirni.

on account of the grazing of cattle in the large waste areas owned by the State in the west of the Panjab. These charges are known as tirni. In theory tirni is a rent paid for pasturage; in practice it has been partly that and partly an assessment levied on the profits derived from the rearing of cattle. In fact the word has sometimes been employed so as to include the land revenue paid by the proprietors of an estate on account of the village waste. The levy of tirni on account of grazing in Government lands has been regulated by the rules issued under Section 48 of Act IV of 1872, quoted in paragraph 767. The subject has lost much of its importance with the extension of canal irrigation in the west of the province and the colonization of the Bar tracts. But a brief sketch of its history should find a place in any book dealing with the administration of land in the Panjab.

Tirni in the Bar tracts of Jhang, Multan, and Montgomery. 770. In the south-west of the province an assessment on cattle was an obvious and reasonable way of raising revenue. Diwan Sawan Mal inherited the system of leving tirni from the Muhammadan rulers who were displaced by Ranjit Singh, and we inherited it from Sawan Mal. He was wise enough to make his collections through the leading men of the local tribes, and we continued the same plan, calling them

sadr tirni guzars. The Board of Administration in 1853 issued rules fixing rates for the assessment of tirni varying from Re. 1-8-0 for a female camel to half an anna for a sheep or goat. Payment of these rates made cattle free of the whole Government waste in the district. The rules contemplated an assessment of tirni on village cattle for the term of the short settlements then being made, and an assessment on the nomad graziers of the Bar on the basis of the old payments made by the sadr tirni guzars.

771. Colonel Hamilton, the Commissioner of Multan, reported Rules of on the subject in 1858, and rules proposed by him were sanctioned by 1860. The Government in 1860 for adoption in the old Multan and Leia divisions.\* system of annual The basis of the system then set up was direct collection by Govern-leases. ment with the help of the village headmen and sadr tirni guzars of a demand revise d annually as the result of enumeration. Of course a yearly cattle census was really impracticable, but every village or group of camel men grazing in the Bar was liable to have its assessment changed from year to year on reports furnished by a small and poorly paid tirni establishment or by tahsil officials. Nominally a village might declare its intention to graze its cattle solely in its own waste, and claim to be exempt from tirni. But if a single head of cattle was found in the Government waste the whole estate became liable. In practice very few villages were allowed to be recusant (inkari), otherwise the whole system would have broken down. The cattle of a tirni-quzar village could graze in any part of the State lands within the limits of the district.

The chak system.

The complaints made against the above plan were that it led to much official corruption, that it yielded a less income than would be obtained by dividing the waste into large blocks and leasing the right to collect the authorised fees within these blocks to farmers, and that it allowed the pastoral tribes to wander uncontrolled over the whole district, and thus fostered their criminal tendencies and their aversion to settled agricultural pursuits. Orders were accordingly issued about 1870 for the adoption of the chak system. Each chak or block of Government waste was to be leased yearly to a farmer, and cattle grazing in more than one block had to pay the full fees to the lessee of each. In Montgomery the introduction of the chak system was vehemently opposed by the grazing community, but they yielded when they saw that otherwise outsiders would be brought in as farmers, and most of the leases were at first given to leading members of the landowning tribes. Finally all or most of the contracts were combined in the hands of one speculative farmer, who had to be assisted in making his collections by the whole official machinery of the district. In 1879 the plan broke down under the burden of its unpopularity, and the old system of annual village leases was reintroduced, one payment giving the privilege of grazing over the whole district. The right to collect tirni at the authorised rates from " nau baramad" cattle or animals brought for grazing purposes from another district continued to be leased. In Jhang the introduction of outside contractors, which led to so much complaint in Montgomery, was avoided.

<sup>\*</sup> See Barkley's Non-Regulation Law of the Panjab, pages 321-326.

Mr. Steedman, the Settlement Officer, described the plan in force in that district as follows :-

"The grazing waste of the Bar is divided into chaks. The right of collecting the tirni in these chaks is nominally auctioned annually, but as a matter of fact the lessees are almost always from year to year the same body of influential zamındars residing in the neighbourhood of the chak, and the Deputy Commissioner fixes the amount of lease money . . . . All the villages in the district are either tirni guzar (paying) or ghair tirni guzar. In the former it is taken for granted that all the cattle graze in the Government Bar, and accordingly rates are levied on every head of cattle existing in the village. They are divided or allotted to one particular chak or other in which they are accustomed to graze. Some few situated close to the boundary of two chake have been allowed to graze in both on payment of a single fee, but as a rule cattle can only graze for a single fee in the one chak to which the village is allotted. The collection of the fees is left entirely to the lessees.

The non-paying villages are those which are not allotted to any chak, and the cattle of which, it is presumed, do not graze in the Bar. If they do, they become liable to punitive rates, treble or quadruple the ordinary rate. But these punitive rates are not levied in practice, for a lessele is glad to secure these and other outsiders, and even to offer them lower than the prescribed rates in order to attract them to his chak. The nomad graziers, who own herds but no village in the Bar, attach themselves to a chak, with respect to which they stand in the same relation as the paying villages. The chakdars collect the full fee from every head of cattle in villages assessed to tirni in connection with their chak, and also collect the tirni payable for the cattle of outsiders grazing in their chak, whether belonging to tirni-paying or exempt villages of their district or to another district. The latter collections are known as " nau baramad."

The system nial leases.

The chak system was quite unsuited to Multan with its of quinquen-scanty and capricious rainfall. The particular block of waste to which a village was attached might in any year be bare of grass, and the cattle had to be driven for pasturage to the other end of the district. The attempt to introduce the plan therefore proved abortive from the In 1878 Mr. (now Sir Charles) Roe, when Settlement Officer of Multan, proposed to substitute for yearly quinquennial village assessments, and four years later as Deputy Commissioner he carried out this plan with the sanction of the Financial Commissioner. The opportunities for extertion and corruption on the part of underlings were greatly diminished, and the reform was afterwards introduced also in Jhang and Montgomery. It is still in force, but in the Jhang Bar and in the part of Montgomery lying to the west of the Ravi\* tirni has become a matter of very small importance. The 10th to the 16th of the rules quoted in paragraph 768 relate to the quinquennial system of tirni assessment.

Tirni in the Thal.

The Thal has been described in paragraph 756. It is now included in four districts. The greater part of it is in the Mianwali, Bhakkar, and Leia tahsils of Mianwali. Until a few years ago the Mianwali tahsil was part of the Bannu, and the other two tahsils part of the Dera Ismail Khan, district. The rest of the Thal is in the Khushab tahsil of Shahpur, the Sinanwan tahsil of Muzaffargarh, and in the part of the Jhang district lying to the west of the Jhelam. In the Bannu Settlement Report Mr. Thorburn described the tirni as it existed before the regular settlement of 1872-78 in the Mianwali tahsil, and the description applies also to the Leia and Bhakkar tahsils— "On annexation, wherever a community was found, an enumeration of its cattle was made, and tirni imposed, after which graziers had

<sup>\*</sup> Revenue Proceedings, Nos. 11-16, of April 1905.

irrespective of residence, a right of pasturage over the whole Thal . . . . Thus tirni was a poll tax on cattle . . . . . As graziers are somewhat migratory, and murrain . . . is occasionally very destructive, the annual imposition of the settlement amount on each village caused serious inequality of taxation."\* As already noticed (paragraph 758) the greater part of the huge area of the Thal, which is best adapted to the grazing of goats, sheep, and camels, was included at the regular settlement in village lands. In Leia and Bhakkar a fixed grazing assessment was imposed on the Thal waste included in village boundaries. But in order to meet the case of camels which browse over large areas, it was decided that they should not be included in this assessment and should be free to browse in any Thal village. It was the more necessary to make this arrangement as the camels of the Powindah traders from Afghanistan, which pay tirni on entering British territory, pass through the Thal. tax on the camels belonging to the Thal villages is farmed to contractors, the estates being grouped in dags or chaks for leasing purposes. The farmers collect from camel owners at rates fixed by Government. Powindah camels grazing in village lands pay nothing. The Government rakhs are leased out yearly, generally to the headmen of neighbouring villages, who realize fixed fees from all animals including camels, whether belonging to residents of the district or outsiders, found in the rakhs. Foundah camels grazing in the rakhs pay the usual fees.† The same system was adopted at the regular settlement of Bannu for the Mianwali tahsil, but there Powindah camels were excluded from village waste except with the consent of the land-owners, and were charged half rates when browsing in Gov-The forty-five chaks into which the Government ernment rakhs.; land in the That of the Khushab tahsil of Shahpur is divided is sold annually at a fair assessment fixed by the Deputy Commissioner to the headmen of adjoining villages, the grazing fees which the farmers are entitled to collect being of course fixed. The Government waste lands of the Jhang Thal are also leased annually. There is no separate camel tirni . In Muzaffargarh too the plan of fixed grazing assessment for village waste and leasing of Government rakhs was adopted and special rules were framed under Section 48 of the Punjab Laws Act, IV of 1872, which were substantially the same as Rules 3 to 9 and 17 of the general rules issued many years later.

775. In the districts of Shahpur and Lahore, where the Government lands in the Bar tract consist of defined rakhs of moderate size Shahpur anp scattered among proprietary estates, the practice has been to leage out Lahore. the grazing of each rakh separately. Sound policy dictates the giving

<sup>\*</sup> Mr. Thorburn's Settlement Report of Banuu, paragraphs 300 and 202.

<sup>+</sup> Paragraphs 534-538 of Mr. Tucker's Settlement Report of Dera Ismail Khan and paragraph 72 of Mr. Hailey's Thal Assessment Report.

<sup>†</sup> Mr. Thorburn's Bannu Settlement Report, paragraph 202.

<sup>§</sup> Mr. Wilson's Khushab Assessment Report, paragraph 49.

Mr. Steedman's Jhang Settlement Report, paragraph 219.

Notification No. 94, dated 21st March 1882. The general rules given in paragraph. 768apply to Muzaffargarh,

of the least to adjoining villages if a reasonable sum is offered for it. There is no real difference between the tirni system of the Shahpur and Lahore Bar tracts and that of the Thal. In fact the latter was copied from the former.\* The Shahpur Bar has ceased to be a grazing tract in consequence of the construction of the Lower Jhelam Canal.

Forest policy laid down in Resolution No. 22 F., dated 19th October 1894.

776. This chapter may fitly be concluded with the important resolution on forest policy issued by the Government of India in 1894. It may fairly be claimed that the principles laid down had in the main been enforced by the Panjab Government for a considerable period anterior to the publication of the resolution, but Depaty Commissioners have been instructed to refer for orders any cases which seem to have been dealt with in a way inconsistent with its spirit.

Resolution No. 22 F. dated 19th October 1894.

In Chapter VIII of this Report on the Improvement of Indian Agriculture, Dr. Volcker dwells at length upon the importance of so directing the policy of the Forest Department that it shall serve agricultural interests more directly than at present; and in his Review of Forest Administration for 1892-93, the Inspector-General of Forests discusses in some detail the principles which should underlie the management of State forests in British India. While agreeing generally with the principles thus enunciated by the Inspector-General of Forests, the Government of India think that it will be covenient to state here the general policy which they desire should be followed in this matter; more ospecially as they are of opinion that an imperfect apprehension of that policy has, in some recent instances, been manifested.

nistration is the prolic beuefit,

The sole object with which State Forests are administered is The object of the public benefit. In some cases the public to be benefited are the whole forests admi- body of tax-payers; in others the people of the tract within which the forest is situated; but in almost all cases the constitution and preservation of a forest involve, in greater or less degree, the regulation of rights and the restriction of privileges of user in the forest area which may have previously been enjoyed by the inhabitants of its immediate neighbourhood. This regulation and restriction are justified only when the advantage to be gained by the public is great; and the cardinal principle to be observed is that, the rights and privileges of individuals must be limited, otherwise than for their own benefit, only in such degree as is absolutely necessary to secure that advantage.

Classification of forests.

- The forest of India, being State property, may be broadly classed under the following headings :-
  - (a) Forest the preservation of which is essential on climatic or physical grounds.
  - (b) Forest which afford a supply of valuable timbers for commercial purposes.
  - (c) Minor forests.
  - (d) Pasture lands. •

<sup>\*</sup> Paragraphs 525, 526 of Mr. Tucker's Settlement Report of Dera Ismail Khan.

It is not intended that any attempt should be made to class existing State forests under one or other of these four heads. Some forests may occupy intermediate positions, and parts of one and the same forest may fall under different heads. The classification is useful only as affording a basis for the indication of the broad policy which should govern the treatment of each class respectively; and in applying the general policy, the fullest consideration must be given to local circumstances.

The first class of forests are generally situate on hill slopes, (a) Forests of which the prewhere the preservation of such vegetation as exists, or the encourage-servation ment of further growth, is essential to the protection from the devastat-essential. ing action of hill torrents of the cultivated plains that lie below them. Here the interests to be protected are important beyond all comparison. with the interests which it may be necessary to restrict; and so long as there is a reasonable hope of the restriction being effectual, the lesser interests must not be allowed to stand in the way.

The second class of State forests include the great tracts (b) Large from which our supply of the more valuable timbers-teak, sal, deodar, timber forestsand the like—is obtained. They are for the most part (though not ed on comalways) essentially forest tracts and encumbered by very limited rights mercial lines of user; and when this is the case, they should be managed mainly on subject to the commercial lines as valuable properties of, and sources of revenue to satisfaction of the State. Even in these cases, however, customs of user will, for the the neighbourmost part, have sprung up on the margins of the forest; this user is ing populaoften essential to the prosperity of the people who have enjoyed it; and tion. the fact that its extent is limited in comparison with the area under forest renders it the more easy to continue it in full. The needs of communities dwelling on the margins of forest tracts consists mainly in small timber for building, wood for fuel, leaves for manure and for fodder, thorns for fencing, grass and grazing for their cattle, and edible forest products for their own consumption. Every reasonable facility should be afforded to the people concerned for the full and easy satisfaction of these needs, if not free (as may be possible, where a system of regular cuttings has been established) then at low and not at competitive rates. It should be distinctly understood that considerations of forest income are to be subordinated to that satisfaction.

There is reason to believe that the area which is suitable to the growth of valuable timber has been over-estimated, and that some of the tracts which have been reserved for this purpose might have been managed with greater profit both to the public and to the State, if the efforts of the Forest Department had been directed to supplying the large demand of the agricultural and general population for small timber, rather than the limited demand of merchants for large timber. Even in tracts of which the conditions are suited to the growth of large timber, it should be carefully considered in each case whether it would not be better, both. in the interests of the people and of the revenue, to work them with the object of supplying the requirements of the general, and in particular of the agricultural, population.

6. It should also be remembered that, subject to certain conditions Opening of to be referred to presently, the claims of cultivation are stronger than forest to cul-

the claims of forest preservation. The pressure of the population upon the soil is one of the greatest difficulties that India has to face, and that application of the soil must generally be preferred which will support the largest numbers in proprortion to the areas. Accordingly, wherever an effective demand for culturable land exists, and can only be supplied from forest areas the land should ordinarily be relinquished without hesitation; and if this principle applies to the valuable class of forests under consideration, it applies a factioni to the less valuable classes which are presently to be discussed. When cultivation has been established it will generally be advisable to disforest the newly-settled area. But it should be distinctly understood that there is nothing in the Forest Act, or in any rules or orders now in force, which limits the discretion of Local Governments, without previous reference to the Government of India (though, of course, always subject to the control of that Government) in diverting forest land to agricultural purposes, even though that land may have been declared reserved forest under the Act.

Condit i o n s on which cul-

Mention has been made of certain conditions to which the applicacivation tion of the principle laid down in the preceding paragraph should be should be per- subject. They have for their object the utilization of the forest area to the greatest good of the community. In the first place, the honeycombing of a valuable forest by patches of cultivation should not be allowed, as the only object it can serve is to substitute somewhat better land in patches for sufficiently good land in large blocks, while it renders the proper preservation of the remaining forest area almost impossible. The evil here is greater then the good. In the second place, the cultivation must be permanent. Where the physical conditions are such that the removal of the protection afforded by forest growth must result, after a longer or shorter period, in the sterilization or destruction of the soil, the case falls under the principle discussed in paragraph 4 of this Resolution. So, again, a system of shifting cultivation, which denudes a large area of forest growth in order to place a small area under crops, costs more to the community than it is worth, and can only be permitted, under due regulation, where forest tribes depend on it for their sustenance. In the third place the cultivation in question must not be merely nominal, and an excuse for the creation of pastoral or semi-pastoral villages which do mere harm to the forest than the good they reap from it. And in the fourth place cultivation must not be allowed so to extend as to encroach upon the minimum area of forest which is needed in order to supply the general forest needs of the country or the reasonable forest requirements, present and prospective, of the neighbourhood in which it is situated. In many tracts cultivation is practically, impossible without the assistance of forests, and it must not be allowed to destroy that upon which its existence depends.

Customs forests.

8. It has been stated above that the forests under consideration user in timber are generally, but not always, free from customs of user. When, as sometimes happens, they are so intermingled with permanent villages and cultivation that customary rights and privileges militate against their management as revenue-paying properties, the principles laid down at the end of paragraph 15 of this Resolution should be observed, and considerations of income should be made secondary to the full satisfaction of local needs.

Such restrictions as may be necessary for the preservation of the forest, or for the better enjoyment of its benefits, should be imposed: but no restriction should be placed upon reasonable local demands. merely in order to increase the State revenues.

9. The third class of forests include those tracts which, though true forests, produce only the inferior sorts of timber or the ests to be used smaller growths of the better sorts. In some cases the supply of chiefly for the fuel for manufactures, railways, and like purposes is of such supply of local importance that these forests fall more properly under the second needs. class, and must be mainly managed as commercial undertakings. But the forests now to be considered are those which are useful chiefly as supplying fuel and fodder or grazing for local consumption; and these must be managed mainly in the interest of the population of the tract which supplies its forests requirements from this source. The first object to be aimed at is to preserve the wood and grass from destruction; for user must not be exercised so as to annihilate its subject, and the people must be protected against their own improvidence. The second object should be to supply the produce of the forests to the greatest advantage and convenience of the people. To these two objects all considerations of revenue should ordinarily be subordinated.

10. It must not be supposed from the preceding remarks But revenue that it is the intention of the Government of India to forego all should not revenue from the large areas that are valuable chiefly for the fuel altogether be and fodder which they yield. Cases must be distinguished. Where foregone. the areas in question afford the only grazing and the only supply of fuel to villages which lie around or within them, the necessities of the inhabitants of these villages must be treated as paramount, and they should be satisfied at the most moderate rates, with as little-direct official interfernce as possible. But, where the villages of the tract have already ample pasture grounds attached to their clutivation, and owned and managed by themselves, and where the Crown lands merely supplement these pastures, and afford grazing to a nomad pastoral population, or to the herds that shift from one portion of the country to another with the changes of the season, Government may justly expect to reap a fair income from its property. Even in such cases, however, the convenience and advantage of the graziers should be studiously considered, and the inhabitants of the locality, or those who habitually graze over it, should have a preferential claim at rates materially lower than might be obtained in the open market. It will often be advantageous to fix the grazing demand upon a village or a nomad community for a year or a term of years. The system, like every other, has difficulties that are peculiar to it, but it reduces the interference of petty officials to the lowest point, and minimizes their opportunities for extortion and oppression. Where grazing fees are levied per capita, free passes are often given to a certain number of cattle. In such cases the cattle which are to graze free should include, not only the oxen which are actually employed on ... the plough, but also a reasonable number of milch cattle and calves.

A gow or a buffalo is as much a necessity to a cultivator, using the word necessity in a reasonably wide sense, as is a plough-bullock and in many parts the oxen are bred in the village.

Considera tions connected with the

• 11. In the portions of his report which are referred to in the preamble to the Resolution, Dr. Volcker strongly recommends formation of the formation of fuel and fodder preserves, and the Government fuel and fod- of India has repeatedly urged the same policy upon Local der preserves. Governments. The question whether any particular area can be made to support a greater number of cattle by preserving the grass and cutting it for fodder, or by permitting grazing upon it, is one that must be decided by the local circumstances of each case. But when it has been decided, the issues are by no means exhausted. It has been stated in paragraph 9 above that one main object towards which the management of these minor forests should be directed is the supply of fuel and fodder " to the greatest advantage and convenience of the people." In doing so, due regard must be had to their habits and wishes. It may be that strict preservation and periodical closures, or the total prohibition of grazing, will result in the largest yield both of fuel and of fodder in the form of hay. But that is of small avail if the people will not utilise the increased supply in the form in which it is offered them. The customs of generations alter slowly in India; and, though much may and should be done to lead the people to their own profit, yet if must be done gently and gradually, always remembering that their contentment is no less important an object than is their material advantage. It must be remembered, moreover, that the object of excluding grazing from the preserves in question is the advantage of the neighbourhood; and that the realization of a larger income than grazing would yield, by preserving the produce, only to sell it to the highest bidder for consumption in large towns at a distance from the preserve, is not always in accordance with the policy which the Government of India has inculcated. Here again circumstances must decide. It may be that the local supply of fuels or fodder, independently of the reserved area, is sufficient in ordinary years for the needs of the neighbourhood. In such a case the produce may legitimately be disposed of in such years to the greatest advantage, reserving it for local consumption only when the external supply runs short. Finally, the remarks regarding agency in paragraph 12, and the more general considerations that are discussed below in paragraph 13 of this Resolution, apply in full force to areas thus reserved for the supply of fuel and fodder.

land. Same

12. The fourth class of forests referred to are pastures and grazing grounds proper which are usually forests only in name. It is principles ap-often convenient indeed, to declare them forests under the Act, in ply as to class order to obtain a statutory settlement of the rights which the State on greater force, the one hand and private individuals or communities on the other possess over them. But it by no means follows as a matter of course that these lands should be subjected to any strict system of conservation, or that they should be placed under the management of the Forest Department. The question of agency is purely one of economy and expediency; and the Government of India believe that in some cases where these lands are managed by the Forest Department, the expenditure on establishment exceeds the revenue, that is, or at any rate he revenue that ought to be, realised from them.

The following remarks apply, not only to forest lands under the Act, whether administered by the Forest Department or not, but also to all Crown waste, even though not declared to be forest. Here the interests of the local community reach their maximum, while those of the general public are of the slightest nature. It follows that the principles which have been already laid down for the management of minor forests apply, if possible, with even greater force to the management of grazing areas pure and simple.

- The difficulties which arise in connection with these areas are Difficulties of apt to present themselves in their most aggravated form where the ten-management. ure of land is raiyatwari. In zamindari tracts the Crown lands generally assume the second of the two forms indicated in paragraph 10 of this Resolution. But where the settlement is reliyatwari, every survey number or field that is unoccupied or unassigned is in the possession and at the disposal of Government, and trespass upon it is prima facie forbidden. In some cultivated tracts, these unoccupied and waste lands are the only source available from which the grazing requirements of the resident population can be met. The Government of India are clearly of opinion that the intermixture of plots of Government land which are used for grazing only, but upon which trespass is forbidden, with the cultivation of occupancy or proprietary holders, is apt to lead to extreme abuses, and especially so when these plots are under the management of the Forest Department. The inferior subordinates of the Forest Department are perhaps as reliable as can be expected on the pay which we can afford to give; but their morality is no higher than that of the uneducated classes from which they are drawn; while the enormous areas over which they are scattered and the small number of the controlling staff render effective supervision most difficult. It is not right, in order to protect the grass or the grazing dues on plots of waste scattered over the face of a cultivated district, to put it into the power of an underling to pound or threaten to pound cattle on the plea that they have overstepped the boundary between their owner's field and the next. Still less right it is to permit the exercise of the power of compounding offences allowed by Section 67 of the Forest Act to depend upon the more report of a subordinate servant, or to expose him to the temptation which such a power holds out. Where the interests involved are sufficiently important, it may perhaps be necessary to accept the danger of extortion while minimizing as far as possible the opportunities for it. But in the case under consideration the interests involved are trifling, while the opportunities are unlimited.
  - 14. It is to be distinctly understood that the Government of Should gene-India do not desire that grazing should be looked upon primarily as a rally be leas-source of income. But it by no means follows that all revenue from ed to manage scattered Government lands should be relinquished. It is, indeed, the agency of inadvisable that this should be done, as to do so would give the raiyats neighbouring an interest in opposing allotment and making things unpleasant for community. new occupants. But the objections to direct management which have