

Question.—What class of people entertained for cooking and nursing?

Brahmins are the most suitable, or persons of the classes to which the gangs belong, provided the people do not object to their cooking. The friends of the sick can nurse their sick relations in some instances; in others trained assistants will be required.

Question.—What professional supervision should be provided over the Hospital Assistant?

The Civil Surgeon of the district; or if a special Commissioned Medical officer be appointed, the sole charge of the gangs would come under his control. The Hospital Assistant would be also subordinate to him.

Question.—What authority should be exercised over him by the Public Works Department Officer or the Civil Officer in charge of the work, if there is one?

The Hospital Assistant should carry out all orders issued to him by the Relief officer; should they clash with those received from his departmental superior, he may refer the matter through the relief officer, but meanwhile carry out the order.

Group 15. *Question.*—What system do you recommend for the admission of applicants for relief on works for securing that no hindrances are placed in the way of their coming, and no bribes taken for admission?

Answered by Mr. Nicholls.

If it be insisted on that daily rates and muster rolls be the system to be followed, with paid mates or headmen or the like, then I believe that no system and no possibly obtainable amount of vigilance will prevent abuses. Fictitious rolls will be kept, people, not workers, will be hired (I have repeatedly seen this done in Bengal) to personate, to leave adjacent villages and appear on the works for a few minutes when any superior officer is present, and men in the habit of contracting for work or who hope to get employment as overseers, moharrirs, mates and the like will assuredly beat up the country to bring recruits on to the works who have no business to be applying for relief.

Under a petty contract system where small gangs engage for small sections of work, all this trouble and abuse is obviated, such gangs being always at liberty to change their representative or head man as often as they like.

Question.—How would you provide for classifying them and placing them on gangs?

On works paid by daily rates I should leave all such minute details to be arranged on the spot by the responsible local officer.

Under the petty contract system no classification would be wanted, each new applicant would make friends and fall into some existing gang, or wait till another was made up.

The officer in charge would have discretionary power of personally giving gratuitous relief to any one whose condition rendered this necessary.

Question.—If payment is not made daily how would you arrange for their receiving advances till the first wage day came round.

Generally there would be a Baniya willing to supply on credit, otherwise the responsible local officer would have discretionary power of making moderate but absolutely necessary advances.

Question.—And, if paid daily, what pay should be given to those who come in during the day and work for a broken period?

If this should appear to be accidental and not by design, I would recommend his being paid a full day's wage to be charged to gratuitous relief. If it appeared to be by design, I would pay nothing at all.

Group 16. Question.—What arrangements would you propose for discharging laborers from relief works when the famine is declining or over, and when the work is closed?

I would keep myself well posted up with the demand for labour in the villages, and as this increased would, after notice, gradually lower rates. I would give the work-people continually the best possible information of the demand for labour in the villages, and as the malguzars sent word that they could again undertake their support and the giving of employment at sufficient rates of pay to their villagers, I would send the men to their homes or to the villages where they were required, giving them enough in cash to reach their destination and one day's pay in addition.

But as a rule the work-people on our gangs would never stay a day longer than they could help, and when men who had been working hard and behaving well wished to leave and return to their villages, if I thought it safe for them to go back, I would give them cash to reach their villages and one day's pay besides.

When a work is closed, that is finished,—I would help them to reach their homes or the nearest work in progress where they could be employed.

If a work were closed on account of bad behaviour, of course I would give no such gratuitous assistance.

Question.—How have persons been dealt with who to the end continue in a physical state in which they are unable to support themselves?

After sending to their homes all whose support and good treatment in the villages could be assured, the *residuum*, with the incurables, have been handed over to the charge of the Dispensary Committees.

Group 17. Question.—Under what circumstances would you recommend moving bodies of men on works over considerable distances? Should this ever be done as a preventive measure, to weed out those who are not in absolute want of relief or only as a step that is expedient for the sake of transferring them from less useful work, or to admit of their being more easily fed or supervised, or to prevent sickness or the like?

Such a measure for the purpose of preventing those who are not in absolute want of relief would be perfectly unnecessary in these Provinces, where, in addition to the standing rules of hard work and little pay, the apathy and detestation of the people in Chhattisgarh and on the rice lands generally, to such kinds of work as we could give them, and the independent spirit or the sense of shame in the people elsewhere, may be safely calculated on to keep the people other than those in absolute want of relief from asking for work.

Removals of bodies of men on works should only among us be resorted to to prevent sickness, to remove them from a locality of deep distress to one in which food was not so dear, water more abundant, regular supplies more easily assured, better supervision maintained, or the like.

Question.—Narrate the history of any case within your knowledge in which more than 500 people were moved, or attempted to be moved, more than 20 miles, and state any difficulties the movement involved, and how they might best be avoided.

At page 69 the account of the Deputy Commissioner of Raipur of such a measure is given:—

"The work on the Lown road continued for only one day in May, and there were 4,292 employed on it. On the 2nd May, the whole were ordered to be transferred to the Borlah road. On this 1,965 deserted, preferring to go back to their homes, and eke out a subsistence on jungle fruits and roots, to going so far from their homes. It is possible that many of these died, although the Police were always on the look-out for the famine stricken, to send them either to the poor-houses or the relief works; moreover the water-supply was getting very low and impure, owing to the continued drought. The numbers at the relief works on the Borlah road were recruited from the poor and needy of the neighbourhood, and rose by the 7th May to 3,473, but from that date the numbers gradually fell owing to desertions from heat and sickness, and on the 11th the number relieved was 2,924.

On the 12th diarrhoea broke out among the coolies, and 20 were taken ill. On the 13th 100 fell sick, of whom 82 died before the evening from unmistakeable cholera.

Deaths became more numerous, many deserted; and by the evening of the 14th the number of people at the works went down to 1,200, and on the 15th all had disappeared except the mates on regular monthly pay.

The wretched deserters spread themselves broad-cast over the country, and carried the disease with them wherever they went, and it raged with unexampled violence till the month of August.

Mr. Beresar Dutt was with the working parties when cholera broke out, and he sent an immediate report to Captain Twyford, who hurried out to the spot to keep up the confidence of all parties. By personal attendance on the sick, and by his encouragement and exhortation he somewhat re-assured all, but unhappily he contracted the seeds of the disease himself, and after a brief illness of 28 hours he died on the 19th May 1869.

The famished poor having fled in all directions, and cholera being abroad in the land, no people could be got together for relief works for some time, and work was stopped."

One measure of deportation will be found at page 29 of the Jubbulpore famine account:—

"In paragraph 18 I showed that at the end of June, and in the beginning of July, the number of paupers increased largely in Jubbulpore; this continued throughout the whole of July, the bulk of the recipients of relief being people from Rewah and Myhere, as well as a considerable number from the villages in the north of Jubbulpore, who had flocked in, hearing of the daily distribution of grain by the charitable inhabitants of the city; to these may be added many of the immigrants from the famine districts, who had fled southwards early in the season and were now, after the burst of the monsoon, trying to find their way to their homes.

Finding that the number of these people increased until they became almost unmanageable, it was thought advisable to make some attempt to convey them to their homes, or to places where they could obtain work. The Agent, Governor General for Central India, was consulted and the Political Assistant, Nagode, both of whom considered the Deputy Commissioner of Jubbulpore's proposal to land the paupers free of charge at Myhere, as well worthy of acceptance; so after the receipt of the written agreement of the Myhere Chief had been received, to accept the responsibility of, and provide for, all paupers belonging to his country who were landed at Myhere, 489 men and women, with a considerable number of children in arms were deported to Myhere by batches of 100 at a time, the East India Railway Board of Managers in Calcutta having liberally offered to convey these people at about $\frac{1}{2}$ of the usual cost. Mr. Nicholls went up to Myhere, to see that the arrangements for the reception of these people were such as they should be; and finding them somewhat defective, no further deportations were made; although subsequently the Political Assistant informed me that everything was duly arranged by that time, things had improved, and there was no longer any necessity for deportation, another out-let having been found for the superfluous hands on the Great Indian Peninsular Railway Works near Belpathar."

The people deported belonging to Rewah, Sohawal, and Nagode did not return to us. But before long a few wrecks, frantic and dying, struggled back to Jubbulpore, dying with a tale on their lips too horrible to repeat of their treatment after my visit to Myhere, on a day, I believe when the Chief of Myhere was invested with a Khillat on behalf of the Viceroy, for his care of his people.

In the paragraph above quoted Captain Ward writes of those sent to Belpathar in the Narsinghpur District that although when sent there by rail, most of the people declined to work, but dispersed themselves through the villages of the Narsinghpur district on the other side of the Nerbudda, where they probably found a new field for their begging operations.

These are the people regarding whom at page 49 I have noticed that some hundreds of labourers who had been sent from the poor-houses at Jub-

bulpore to work on the railway in the Narsinghpur district, became disorganized and spread over the country, begging and stealing. People would not prosecute.

They were collected at Chhindwara; the infirm were supported by subscriptions raised by the land-holders around Chhindwara, and the rest employed on a short road opened out by the District officers, from the town to the Railway Station. Twenty died from weakness and exposure; the rest were in a few weeks drafted on to the railway works.

I had charge of the carrying out of this deportation.

The Narsinghpur District officers had not been sufficiently informed of the intended move; the railway contractors had not made efficient preparations for sheltering the people; and the regular workpeople on the railway appeared to have given any thing but a welcome to these drafts.

Pitilessly the rain came down on them for two days, and the Railway European Officers, though ardently wishing to do all they could for them, were strangers, and had not the confidence of these people, who longed to get back to the protection of the Jubbulpore district officers. Their camp (to which they, with their belongings and ample stores of food, had been conveyed by ballast trains,) was in the Narsinghpur district. Between them and the Jubbulpore district rolled the Nerbudda, now swollen by the rains into a broad, deep and swift river, spanned by the piers and frame and open girder work of the railway bridge. To get to the Jubbulpore side, some few tried to walk, some few tried to crawl, across this open bridge work—a shriek, a splash on the surface of the eddies far below, and all was over with the poor creatures.

Nearly all the rest turned panic stricken to the west, and spread themselves as beggars through the villages. Immediately it was known at Jubbulpore that matters were not going on well at Belpathar, I went down and, I believe, brought back with me the remnant of the deported gangs.

Group 22. Question.—Have you had experience of any kind of relief work other than earth work? If so, describe it. Has any attempt been made to employ artizans, such as weavers, smiths, carpenters &c., in pursuing their own professions, and with what success?

In these Provinces smiths and carpenters are too few and too well-off to want relief; probably this is the case elsewhere. If they worked in connection with our relief works, it would be on contract or on daily rates, quite separate from the relief gangs.

The poorer classes of weavers in the villages are all accustomed to field work for short periods in ordinary years; and therefore earth work suits them well enough.

At Murwarra I saw the infirm paupers in the poor house employed, mostly for the sake of occupation, in spinning.

In Dinagore under my directions, much charitable relief was given to the women of poor but decent families in preparing cotton, in spinning cotton thread, and jute yarn, and in weaving and making up cotton cloth, and especially gunny bags. If we had paid daily wages, we should have been unable to get the work done without incessant worry. It appeared decidedly best, at as low remuneration as was possible, to arrange for the raw material being served out, and the manufactured thread, yarn or cloth being brought back. I believe the people behaved quite honestly with the raw material, which was only served out to those for whom some respectable person gave some sort of a recommendation. The recipients could work as much or as little as they liked. The rates at which they were paid was considerably under the ordinary rates of such labour.

SECTION 2.

GRATUITOUS RELIEF.

Group 23. Question.—What is the proper situation for a poor house, so as to secure accessibility, discipline, space, water, and proximity to food-supply?

Answered by the Sanitary Commissioner.

In the vicinity of towns where they would come under the supervision of charitable relief committees, the same conditions as regards site as already

given apply here, special care being taken that they shall not foul the catchment area of any water-supply, as tank or stream.

Question.—Is an enclosure wall or fence necessary, and of what should it be made?

A fence is necessary, otherwise the inmates will stray and wander about. Any prickly bush will answer.

Question.—What shape and material are best for the huts, and what sleeping space (in superficial area) should be provided for each inmate?

This need not differ from that fixed for relief camps; 30 superficial feet will be sufficient, or if the sheds are open, a lower amount of space.

Question.—How may they best be arranged with a view to ventilation &c?

In echelon, or in rows with broad streets running between them.

Question.—How should the latrines be placed and managed?

The experience of the Madras famine will be a guide as to the position. I may, however, add that the latrines should not be placed further from the huts than will admit of weakly persons reaching them. I have already given the management of the latrines as carried out here, omitting some details. I imagine that the general plan of management would not be unsuitable for a poor house.

Group 24. Question.—What should be the conditions of admission to relief in a poor house? The usual conditions are (1) inability to work on a relief work;

Answered by Mr. Nicholls. (2) willingness to reside within the enclosure; willingness to accept cooked food. Under what, if any, circumstances may these be relaxed or may the food be distributed without residence, or may uncooked food be given?

I look on the poor house as a standing pauper hospital. I hardly think we shall have any press of candidates for admission, and I have never seen willingness to remain. True we did not give port wine or delicacies, but good food, clothing, regular living and hours, good huts; but unwonted cleanliness was enforced. In spite of this, people who could get away would not stay.

In my opinion, people to whom it would be safe to give uncooked food, would not be fitting inmates of a poor house. They should be relieved, if gratuitously, either at some public building, or if unable to come for it, being lame, paralytic, blind, or the like, at their homes.

Into the poor house would be sent only those whom I could not otherwise possibly deal with, the sick, the men or boys who had been flogged for stealing, the beggars, orphans, waifs and strays. I should insist on residence in all cases. A few strong men and women might be kept here on double rations to do the hard and nasty work of what must be a centre of intense suffering and misery.

I would keep the poor who could be relieved in other ways from the sight of, and contact with, such sufferers; I would never allow an applicant to be refused, save by the order of an European Officer on the spot.

Group. 25. Question.—Under what circumstances does it appear desirable that entry into a poor house should be made compulsory on persons who appear to be

Answered by Mr. Nicholls. starving or to be in such a state of want as to show that relief in some form is essential to the preservation of their lives?

The point at which interference will be warranted, or rather will be imperative, will vastly differ according to the temperament or rather the sterling qualities of the people.

Passing by my experience in Bengal, for our own people, I have given the plain narrative of what was found necessary in these Provinces in 1869. From

an early period we had to lay down as the duty of the Police in out-of-the-way places, of all Government officials, and of the landholders, the forwarding *nolens volens* to our poor houses of all those who could not be properly supported and tended in their own villages. Mr. Olpherts and I had to send patrols into the villages to search out cases. They took with them stretchers and bearers, and when necessary would not have hesitated to impress men and carriage in removing the helpless to our relief centres.

Captain Bloomfield found the same necessity in Balaghat. He writes:—

“ Patrols were sent into the district, and all persons found in absolute distress, or likely to fall into that condition, were sent *nolens volens* into the poor house. The Police also were instructed to the same effect. This mode of procedure was perhaps not strictly correct, but it was absolutely necessary to prevent deaths from starvation, for I found that many poor wretches who had sold almost their last rag to buy food, would sooner starve on the miserable alms they could procure near their own homes than go a few miles to obtain substantial relief; or, in some cases, where they really wished to come for relief they had not in themselves the energy left to carry their wishes into effect; pressure was necessary to make them move to save their own lives. ”

In Bhandara the same necessity was found. The Deputy Commissioner writes:—

“ Strict injunctions were issued to the Police, land-holders, and village watchmen, to convey to the nearest relief house any person who was unable to work, or was in actual want; by this measure hundreds of lives must have been saved.”

Question.—Under what circumstances would you allow them the discretion of refusing to submit to this?

In the villages I would remove them, unless the head man and the “ punch ” would give me a written engagement that they should be supported and properly cared for.

In towns, I would observe the wishes of the leading men; if the sufferers could be satisfactorily cared for otherwise, I would let them be cared for by private charity or relatives. At Jubbulpore the beginning of each day’s work for me was to ride through the city, especially the open market places, and have the homeless wanderers, the deserted children and waifs and strays picked up and carried to the camp. It was the only way of keeping the streets and market-places clear. No one objected. Neither there nor in the villages was it that the unfortunates or their relatives or neighbours objected, but they lacked the knowledge of our arrangements, the strength, the means or the energy, or felt the shame of going or of being sent for relief to the “ Kangal Khana,” and relatives or neighbours, without the countenance of the Malguzars or of Government officials, would not assume the responsibility of sending in cases.

This reluctance was, I think, more conspicuous among the lower classes of the villagers towards the hills.

Question.—If compulsion is used to take them in, what steps are taken to keep them there?

Our relief camps were generally without enclosures, and as far removed from the town as was convenient. But the inmates would wander. At Jubbulpore I had patrols to bring them back, gently and patiently. After a little we knew what places they would instinctively make for.

Question.—How should such a rule be applied to vagrants, and how to persons on relief works, or seeking for relief otherwise?

I can only answer that people on the relief works and obtaining relief in other ways were in a marked degree different from those who belonged to our relief camps; such persons would not beg, and were efficiently relieved in ways quite independent of our poor houses. When matters got serious we desired that the promiscuous giving of alms by house-holders should be stopped as a public nuisance and an interference with our popularly approved plans of organized relief. Therefore we had the sanction of popular approval for all homeless people and beggars being taken to our relief camps.

Question.—Does it appear necessary or expedient to obtain legislative authority for such action as may be desirable in these respects?

As long as we have the responsibility of using our individual discretion, executive officers will act promptly, effectively for the saving of life, the mitigation of suffering, and the public welfare, and discretely; and any trifling mistakes we might make would no doubt be condoned by public opinion and by our superiors. But legislative limitations of his discretionary powers might place a zealous officer intent on saving life and mitigating suffering, at a time when his whole energy and time and care should be devoted to these objects, at the mercy of any pettifogging pleader or beggar.

I would rather stand on my responsibility to my superiors, and to public opinion, than be hampered with laws and rules.

If legislative action is necessary (and I think it is necessary), it would be in the direction of allowing the impressment of labour and carriage for food-supplies or for the sick and infirm. I have seen the best efforts of officers thwarted to a grievous extent, by the haggling of cart-owners and the like for shamefully extravagant rates, at a time when the saving of human life was the object aimed at. In the marching of troops, when the destroying, not the saving of life is in view, the requisite powers are given to us. At present, when an emergency arises, cart-owners know that the public officers must assent to any degree of extortion on their part. Between special correspondents and shrieking but foolish arm-chair newspaper philanthropists, insisting that executive officers are to be held personally responsible for any deaths from starvation, and those who, from greed, combine to extort public money under this pressure, the position of a district officer is far from being an enviable one.

Question.—Would there be any special objection to such legislation having in view the risk of exciting fears in the population, or for other reasons?

My opinion is that any legislation for the purpose of providing for the shutting up of the persons who really ought to be placed under the protection of the poor house organization would be gravely misconstrued, would be a terror to the people, and would suggest methods of extortion and tyranny, which, so long as we have no such law, could not be practised.

Group 26.—Question.—What ration should be given to the ordinary inmates of a poor house?

Answered by the Sanitary Commissioner.

The literature of this subject is extensive, and the experience of relief officers very large; to this I would invite a reference.

Question.—What as special diet to those who are much reduced by innutrition?

Mr. Elliot's views on this subject are contained in a "Supplement to the Gazette of India" of 22nd December last. The conclusions arrived at by officers based on experience in famines differ, and no definite minimum ration has, I believe, yet been fixed by general consent. In the famine in the Central Provinces in 1868-69, the subscribers to funds from which poor houses were maintained, were not desirous of imposing a minimum; but preferred leaving it to the discretion of the Medical officer in charge; the main object being to recruit strength so as to send the pauper to light work where he recovered health and spirits much more quickly than he would linger in a poorhouse.

Question.—Have you any experience of the effects of the ration for adults which consists of 1 lb. of raw flour with condiments?

None.

Question.—What is the proper quantity of condiments?

See "Supplement of Gazette of India" alluded to above.

Group 27.—Question.—State what the grinding task should be.

It is impossible to lay this down for the inmates of a poor house,

Answered by the Sanitary Commissioner.

I think, if wheat be ground there. In Jails one man sitting alone at a mill grinds 20 seers of wheat daily as a hard labour task; if ground in a poor house two should sit at a mill,

and the task be regulated according to strength; when ground by ordinary relief labourers in fair physical health 15 seers will be a fair day's work.

Question.—How should the food be received back and tested when ground?

One seer and a half is allowed on cleaned wheat, as wastage in grinding in jails per maund. This wastage consists of coarse bran, husk, &c., sifted out, when ground; this may be accepted as a fair wastage.

Question.—How given out to the cooking department?

The inmates of a shed or the members of a gang may have their supplies issued separately.

Question.—How information is to be given to the store-keeper or the head of the cooking department as to the number of rations required for adults and children, for ordinary, special, or sick paupers?

The daily diet roll will give this—specimen will be submitted in manuscript.

Question.—In what way and in what vessels the food should be cooked?

In properly constructed kitchens with grates, with a view to economise time and firewood, no open chulas should be allowed; they result in great wast of fuel and labour; wheat cakes should be baked on iron slabs permanently fixed over the fire grate, and grain should be boiled in iron boilers. In Ireland potatoes are boiled in wicker baskets slung by pullies over fixed boilers; when boiled, the basket is hauled up, and the water is let off from the boiler by a tap; this is done when they are boiled on a large scale. If rice were treated in the same way, time and fuel would be saved, and the boiled rice would be well drained of its "canjee water."

If the usual plan be followed, iron pots will be found cheaper than brass ones.

Question.—With how much water and fuel?

It is customary here to boil one seer of rice in about 2 seers of water; and to mix 1 seer of water with 2 seers of flour for dough. The amount of fuel required will depend on the construction of the fire grate; an open chula burns at the rate of six chattaks of wood to a full jail ration of 28 ounces plus vegetables.

Question.—What the weight of the cooked ration should be?

Mr Elliot's experiments recorded in the "Supplement to Gazette of India" of 22nd December 1877, give this very fully; as regards rice and similar grain I may note that 2 seers of rice boiled here in $4\frac{1}{2}$ seers of water weighed 5 seers when cooked; and 1 seer of wheat flour mixed with $\frac{1}{2}$ a seer of water weighed when cooked 1 seer and 3 chattaks.

Question.—What discipline should be enforced among the people while it is being served out and eaten?

All should sit in rows; none should be permitted to wander away; if this be allowed, the total ration will probably not reach those for whom it was intended.

Question.—What precautions should be taken to see that it is eaten when received, and not sold or exchanged, and that the children's portions are not taken from them by their parents or other adults?

Insisting on all eating in the places assigned to them.

Question.—Under what circumstances should warm clothing be given, of what description, and at what probable cost per head?

This may be given on the recommendation of the Medical Officer; it is difficult to specify the varying circumstances, but cold, sickness, absence of the required clothing are the chief reasons that would warrant issue; the cost here would be.

a coat, As. 6

a dhoti, „ 8

a blanket, Rs. 1-8 to Rs. 2-8, according to quality.

Question.—What arrangements should be made for personal ablution and washing clothes?

The sick and feeble cannot withstand the shock of much cold water. I would advocate the use of it very sparingly in the cold season, and even in the hot season it should be used with caution; a cistern, tub or nand placed at convenient sites outside the camp will contain all that the feeble require for this purpose; there also clothes may be washed.

Question.—What supervision is necessary to separate and take in time to hospital those who begin to sicken, or to distribute medicine to such as require it but are not sick enough for hospital?

If the Hospital Assistant move among these people daily, those requiring admission to hospital will come under his eye, and on the extent of the camp and general bodily condition will depend the number of dispensers of medicine and orderlies.

Question.—State what work the paupers can be set to, what is most suitable for what cases, and how labour is to be enforced?

Such people are unfit for work; when sufficiently recovered to be fit for labour, they should be drafted to a relief work; all that can be attempted is to prevent their minds, if possible, from brooding over their miseries.

Question.—What establishment is required (per hundred paupers) for cooking, grinding, sweeping the enclosures, cleaning the latrines, maintaining discipline, fetching water or wood or grass for thatching, removing the sick to hospital, or carrying out and burying the dead?

The following may be found sufficient:—

	Hired.	Paupers.
Cooking ...	3	
Grinding ...	According to ration 15 seers equals a fair day's work.	
Sweeping ...	—	Done according to their strength.
Cleaning latrines ...	As for relief camp.	
Discipline ...	None for a small camp.	
Water and wood ...	2	
Removing sick. ...	Cannot give rate. Paupers should not bury each other.	

Question.—What registers should be kept up as to cash outgoings, stores in stock and issued; daily number fed, and daily expenditure of food; sickness and death?

I append headings giving these in order, A, B, C, and D, (sent in manuscript).

Group 28. *Question.*—How far would the arrangements suitable for a hospital attached to a relief-work be applicable to a hospital attached to a poor-house?

If any difference of system seems desirable, state in detail what seems requisite?

Answered by the Sanitary Commissioner.

No change seems necessary ; a poor-house should be regarded as a standing hospital.

Group 29. Question.—What system would you pursue for drafting into a relief-work those inmates of a poor house who recover strength and health here, and become fit for labour ?

Answered by the Sanitary Commissioner.

This may be left to the discretion of the committee or of official visitors aided by the Medical Officer.

Group 30. Question.—What test can be applied to prove the necessity for the relief of any parda-nishin woman ?
Proof can hardly be looked for.

Question.—Would you enquire into their cases through an official or non-official ?

Whichever might appear, with regard to the available personnel, likely to be the more effectual and the more popular. The official and the non-official would, I presume, be alike contributors to the funds to be administered.

Other things equal, I should certainly prefer a committee of non-official native gentlemen, with one or two officials of good standing.

Question.—Supposing they have hitherto been dependent on a person who now refuses to support them, would you admit them to relief or require him to support them if he is able to do so, (1) if they have close natural ties to him, (2) if they have not ?

The committee in charge of this branch of relief would, no doubt, give relief at once, if necessary, and, in any case, would bring the matter to notice. Such cases would, I think, with us be almost unknown. However, if I had to deal with such a report, I would first ask the leading men of the caste or community of the delinquent to arrange matters; if they failed, and the case seemed a "test case," where the example might be pernicious, I would see the man. If this failed, I should continue the relief, and pass on to my more important work.

Question.—Supposing the necessity of relieving them to be established, how would you relieve them, with money or food, or by giving work, such as cotton to spin or grain to grind ?

I should simply give directions for relief to be given by the committee in charge of this branch of relief, leaving the details to them. My principle for such relief would be, to exact work, if possible; but I certainly would not suggest grinding tasks to those whose ordinary course of life was free from this drudgery. I presume that the funds to be disbursed are more or less the contributions of private charity.

Question.—How often should this relief be given, and in what quantity; when and under what circumstances should this relief cease ?

I would leave all such details to the discretion of the Committee in charge of this branch of relief. Without this, one could not expect them to undertake the toil and trouble, and as their contributions would be taken so long as the relief was continued, their interest would lie in stopping it as early as was practicable. A general guidance and supervision over their operations seems to be all that should be attempted by the European Officer in charge of the district. The first thing to be guarded against would be their wish to stop too early.

Question.—Have cases occurred in which dependants of persons in easy circumstances have claimed or obtained relief, and how have such cases been dealt with ?

I am not prepared to say that such cases did not occur under me in Jubbulpore, but I believe not, as I had the assistance of the native gentlemen who habitually gave to every beggar, of their private servants, and of two or three of

the habitual beggars. This plan I saw carried further in Dinagepore, where Lieut. Proudfoot, (IX. Bombay, N. I.) retained some this last class on "detective duty." In questionable cases, they unobservedly gave a sign to the circle relief officer, which resulted in due enquiry. They certainly well earned their double rations, or whatever was their recompense.

Group 31. Question.—How would you organize a system for relieving the sick, infirm, cripples and bed-ridden folk in towns or villages, who cannot leave their homes?

In the larger towns of the district charitable relief given from local subscriptions might well be controlled by a committee constituted in the way already indicated, and in the details of the working of such committees I would not ordinarily interfere.

In villages, I should have such persons sent into our poor-houses, for whom the leading men of their village would not engage to provide or to secure maintenance. If they were willing to do this, I would not interfere with them in the way in which they accomplished this task.

Group 32. Question.—What has been held to be the duty of Government in respect to orphans or deserted children, and what appears to be the correct principle to follow?

Such children were temporarily provided for in the poor houses. In many instances natives of approved character and position came forward, and under formal obligations for good treatment and education, and to produce the children when required by the District officers, adopted them or received them into their houses. Where the caste of the child was known it was a rule that an application from one of the same caste should be preferred. Mahomedan children were not given to Hindus, nor *vice versa*. There have never been heard, I believe, any whispers even that any abuse had been made of the charge assumed by the applicants.

But the majority of the orphans, about 300 in number, for whom no homes in private houses could be found were taken by the Jubbulpore branch of the Church Mission Society, and I understand that the children have done well. I understand that an allowance of Rs. 2 a month has been allowed to the Mission from Government,—for the girls till marriage, for the boys till they came to an age when they should maintain themselves. I can suggest nothing better than we did for the orphans in 1869.

Group 33. Question.—Was grain purchased and sold at or below cost price, and consequently below the retail market rate?

In Murwara, where there was a difficulty about getting sufficient and reliable supplies in the local markets, Mr. Olpherts purchased grain on easier terms in Allahabad, but to the best of my recollection, this was entirely used on our relief works and in the poor houses. In Chanda, on account of a belief that the export of grain from His Highness the Nizam's dominions had been prohibited, an advance of Government money was given to a trader to purchase grain for the consumption of those employed on the Government relief works. As soon as this was done, all the private traders and well-to-do people took courage, and made such efforts to import grain, that little more assistance in this district was required from Government.

In Damoh, the Deputy Commissioner found the holders of grain entirely refused to sell, as they would not listen to reason, and he sent an order for the purchase for Rs. 10,000 worth of grain at Jubbulpore. Some amount was bought, and on arrival in Damoh was sold at cost price. But the sending of the order followed also by similar private orders was sufficient to bring grain again into the market; either the panic ceased, or the combination of the grain holders was broken through.

The Deputy Commissioner of Balaghat supplied the following information:—

In September wheat got dearer, and though nominally at the previous rates, was more difficult to obtain. For the work-people on the ghats, special arrangements had to be made; by the end of the month Malguzars began to refuse to supply the villagers on the usual terms, and the agents of large firms at Nagpur

and Kamptee would not sell. Roads were impassable, and grain was being exported by river.

Zanindars and Malguzars were called in and consulted, and they placed some considerable amount of grain at the disposal of the Deputy Commissioner, which, later on, enabled the District Officer to continue his relief works and maintain his poor houses, and also to throw small quantities now and then into the markets at current rates.

I venture to extract three paragraphs from the Bombay report of Colonel Etheridge, to show that occasions may arise, when owing to the combined action of grain dealers, Government interference may become a necessity.

"In 1845 great distress occurred in Khandesh. It lasted only a short time, but such were its effects, that fears were entertained regarding the preservation of the public peace. This result was for the most part of a combination among the grain dealers, who would not bring sufficient grain into the market, though there was no scarcity of it, their object being to reap as large profits as possible at the expense of the poorer classes. The falling off in the cultivation of the edible grains in Malwa and other places which generally supplied Khandesh afforded the dealers a pretext for raising the prices, and not exposing sufficient quantities of grain for sale. The regiments stationed at Malligaum suffered greatly from the difficulty of procuring the requisite supplies of food, even at the highest prices which then ruled in Khandesh. The Collector used every endeavour to mitigate the evil, without interfering with the proceedings of the grain dealers or restricting the freedom of the market, but unsuccessfully. He accordingly reported the matter to Government, proposing certain measures for the relief of the sufferers; among which he suggested the advisability of Government taking steps to obtain grain from one of the neighbouring provinces where there might be an abundance. The adoption, or even the rumour of such a measure, he thought, would have the effect of opening the granaries and bringing forth the hidden stock at once.

On receipt of the Collector's report Government directed copies of it to be forwarded to the Military Board and to the Resident at Indore, who were requested to be good enough to give Government the benefit of their views as to the best means of obtaining the requisite supplies. In reply the Resident stated that there was abundance of grain in Bhopal, and that he would arrange to send as much as might be required. Meanwhile, however, the high prices which prevailed in Khandesh attracted the attention of foreign grain merchants, and a considerable quantity of grain was imported into the locality. This not only relieved the wants of the people, but it tended to break the combination of the grain sellers, and to bring down prices to the means of consumers. There was thus no occasion for Government to import grain on its own account for the use of the regiments stationed at Malligaum."

In order that Government might be in possession of full and reliable information regarding the state of grain markets throughout the mofussil, the two revenue Commissioners were directed to submit returns within stated intervals showing the state of prices of grain in the districts under their respective charge, together with the quantity of each kind supposed to be available for sale. These returns appear to have been regularly made until the opening of the new harvest."

In conclusion, my opinion is that the general welfare and special circumstances may demand such interference with trade, but it should be regarded as an extreme measure, to be restored to with great caution, and only to such limited extent as may serve to tide over a temporary crisis.

SECTION 3.

MISCELLANEOUS.

Group 35. Question.—To what extent has emigration been resorted to by the people voluntarily?

It must be borne in mind that several of our districts are so large that three may be a great deal of migration from one part of a district to another, which hardly amounts to emigration. In this way, many of the people of the Chandarpur and Phuljhar Zemindaris and of the Raigarh and Sarangarh Feudatory estates of Sambalpur, went into the Khalsa, or into the southern and eastern Zemindaris and states. In the same way it is believed that many persons from the Seorinarain and Hazur tahsils of Bilaspur, and of Simga tahsil and Lown, went into the Mungeli tahsil of Bilaspur, and into the Dhamtari tahsil of Raipur, and into the surrounding Zemindaris and Feudatory states, without leaving Chhattisgarh proper. It is impossible to say how many or what proportion of

them came back to their former villages with the return of prosperity. From the Wainganga rice fields many thousands of people emigrated to the Berars. But for some years previously, emigration to Berar had been going on, steadily from the Nagpur Province. I believe that this emigration began with the demand for unskilled labour in Berar, on the railway works, in a country then sparsely populated, but with a vast quantity of good land lying uncultivated. This was followed by an enormously enhanced demand for cotton. The high prices obtained during the American war for Berar cotton, gave the cultivators the necessary capital for greatly extending their cultivation by hired labour paid at high rates. Higher rates for the agricultural labour of weaker bodied and inexperienced hands could be given in Berar, than could be afforded in the Central Provinces for strong men, accustomed from childhood to such tasks. This happened at a time when the cost of living began to rise rapidly in the Central Provinces, and told heavily on the town population, and those who were not paid in grain. Moreover the cheaper fabrics of Manchester now began to successfully compete with the home made cloth, and brought pressure on the spinning and weaving classes. These classes could not compete in our Provinces for agriculture employment with the regular agricultural labourers, and so it was fortunate for our Provinces, for themselves, and for the Berars, that circumstances were favourable for emigration. During 1868 and 1869 the flow of people westward under the pressure of famine was very greatly enhanced, but I cannot give statistics for that year.

I have mentioned at page 22 in my account of the famine in Jubbulpore that I thought a rough census was taken, and that I had heard it mentioned that there appeared to be some 40,000 out of 120,000 not at their homes about the month of September. As yet I have not been able to find any corroboration of this, save that some papers since sent me from Jubbulpore lead me to think that the population of the Murwara Tahsil in 1867 stood at about 120,000. In January 1872 the population was found to be 108,000. I attribute what I believe to have been the decrease to deaths and to emigration. I think that by this time the great majority of those who went away or migrated from that tahsil at the time of the greatest distress had returned to their homes. Probably 25,000 emigrated or migrated from that tahsil, some to the valley of the Nerbudda, a few to Saugor, but mostly to the Chendia Kowrea country of Rewa, to the east of the Jubbulpore district, and to the north of Mandla. Since writing the above, the Tahsildar who was then at Murwara writes to me that he has a recollection of a rough census having been made by the Patwaris, and that his impression is that either 93,000 or 98,000 were enumerated. Further search is being made. At page 42 will be found all the available information regarding the Saugor district, and at page 40 mention is made of a rough census having been taken in some of the Shahgarh villages.

Last hot weather there was a good deal said about the emigration of the poorer classes

Letter from the Commissioner, Nagpur Division, to the Secretary to the Chief Commissioner, Central Provinces,—
No. 3756, dated 13th September 1870.

from Bhandara and Nagpur into Berar. I obtained demi-officially some general statistics regarding the emigration; and I mentioned

their general result to Mr. Morris. He then desired me to obtain fuller figures on the matter and to submit an official report.

In compliance with those instructions, I have the honor to submit (in original) reports from the Deputy Commissioners of Nagpur and Bhandara. When I asked for these reports, I desired that approximate figures might be furnished for the whole areas affected, and that precise figures should be obtained (by enumeration or otherwise) for some scores of villages, so that we might deduce the percentage at which the population had been decreasing since the census of November 1866.

It appears that the emigration from Nagpur has occurred mainly from the—

Umrer	...	} Tahsils.
Ramtek	...	

In the Ramtek Tahsil a fresh census was taken of 16 villages, and the result showed that

* 8,845 souls in 1866.	the population* is now 20 per cent less than it was in
7,177 „ in 1870.	November 1866. In the Umrer Tahsil a fresh census
† 26,077 souls in 1866.	of 35 villages was taken; and it showed that the popu-
17,447 „ in 1870.	lation† is now more than 30 per cent less than in 1866.

The Tahsildars report that, so far as they can ascertain, 19,760 souls, or 16 per cent of its population have left the Umrer Tahsil; and that 17,979 souls, or 13 per cent of its population have left the Ramtek Tahsil. Out of these emigrants only 3 per cent

were cultivators, and the rest were artizans, spinners, weavers, and field labourers. The Deputy Commissioner reports the causes of this emigration to have been,—

- (1.) The repeated shortness of the crops.
- (2.) The continuance of high prices.
- (3.) The cessation of public works or large employment of labour.
- (4.) The tightness of the market for petty loans.
- (5.) The constant falling off in the weaving and spinning trades consequent on the dear-ness of raw cotton and the increasing influx of Manchester goods.

In the Bhandara district the emigration was largest from the—

Tirora	...	} Tahsils.
Bhandara	...	
Pouni	...	

A fresh census was made in 22 towns and villages. In these villages 9,551 souls had emigrated out of 60,165, or about 15 per cent of the population. The Deputy Commissioner adds that the Police report that about 28,000 souls have emigrated out of the whole district, or about 4½ per cent.

My own impression is, that the figures now offered show an emigration larger than the truth for the villages where a census was held, and that the general estimates of district emigration offered by the Deputy Commissioners are below the truth. The census taken without precautionary measures this year is not likely to have been so searching and exhaustive as that of November 1866; and thus the population figures now obtained are probably below the truth.

I should estimate that the population* of the eastern parganas of Nagpur and the western parganas of Bhandara is now about 8 or 9 per cent lower than it was in November 1866. The causes

* In all about 4 lakhs.

of this decrease, are, I believe, exactly described by the Deputy Commissioner of Nagpur. And to this account of the matter must be added mention of the circumstance that a certain number of the poorer classes died either from want or from diseases aggravated by want in the famine year 1869. The area from which the emigration took place, is nearly identical with the area of the rice country. But it is also remarkable that very little emigration occurred from the Chanda rice country.

The emigration was largest from the small towns which are known to be seats of the weaving and spinning trades. Thus,—

BHANDARA.	Tomsur, population of 1866,	6,128	souls, lost	1,131	or	18 per cent
	Pouni	10,925	" "	620	or	6 "
	Andhurgaon	2,749	" "	562	or	20 "
	Moharee	5,745	" "	518	or	9 "
	Tirora	1,236	" "	373	or	30 "
	Sihora	2,634	" "	564	or	21 "
NAGPUR.	Sanghurhi	4,367	" "	1,605	or	36 "
	Mohoda	3,148	" "	600	or	19 "
	Koohee	3,305	" "	988	or	30 "
	Bheewapur	4,557	" "	832	or	18 "
	Mandhul	2,522	" "	856	or	33 "
	Welthoor	2,112	" "	614	or	29 "

There seems no doubt but that the trade in, and manufacture of, country cloth is falling off. The Nagpur Railway traffic returns did indeed seem to show that a large quantity of country cloth had been exported last year. But I noted at the time that so far as the common opinion of the country went, the trade in country cloth was steadily going down.

It is also true that we have had a cycle of five or six years short harvests; and that food has, until within the last few months, been extremely dear. There has also, for two years past, been more or less of a lull in road works and local fund works.

It is observable that there has been little or no emigration from the cotton and jowaree growing tahsil of Katol. From the Wardha district also there has been very little emigration. Indeed many of the Bhandara emigrants settle in the western parganas of Wardha, which are held by the people to be part of Berar. At more than one Wardha town I have, during the last two years, seen a little settlement of Bhandara people (*Jharri ke tog*) outside the village; these people generally say they hope, by and bye, to return to their homes in Bhandara.

The bulk of the emigrants, however, go across the Wardha into Berar. The peasant proprietors there seem to afford higher wages for field work than our ryots can give. And in the Poorna valley and the Akola districts, the land is, doubtless, more fertile than any part of the Wardha river country, except the pargannas of Amnair, Ashti and Arvi. While labour is well paid for in Berar, millet (*jowari*), the common food of the country, is cheap. For some two years past millet in Berar has been cheaper than any food grain in Bhandara or Nagpur. It is only within the last two months that rice in Bhandara has become cheaper than jowari in the principal markets of Berar.

If the people go away, as undoubtedly they do, for their own good, this exodus of the labouring classes from the rice country ought not to cause regret. But I cannot help feeling sorry that there should in any of our districts be such a state of affairs, as should drive large numbers of a population, which is confessedly sparse, into

emigration. If any of the causes for this emigration are removeable, we ought certainly to strive to take them away."

"From the reports received from the Deputy Commissioners of the division, I gather that no less than 53,678 persons, including men, women and children have emigrated into the East Berar division from the Central Provinces since the year 1868; of this number 5,815 have taken up their residence in the Ellichpur district, they are all employed as labours, and none have settled down as cultivators,—45,564 have taken up their residence in the Oomraoti district, chiefly in Taluks Oomraoti, Chandore and Moorsee, which adjoin the Central Provinces; of this number 129 have taken up land for cultivation; 2,299 emigrated into Woon; of this number 39 have taken up land and settled down as cultivators, and 643 have since left the district."

Question.—Have any gone beyond sea?

No.

Question.—Have any permanently gone off to settle in other parts of India?

My impression is that nearly all who left Murwara and who survived the famine, eventually returned. I have met instances where they had to serve for two and more years, in other parts of the country, to clear themselves of the obligations contracted in the famine time.

Regarding Berar, I give the following extracts from Government records bearing on this question:—

"The districts in Berar into which immigration from the Central Provinces has taken place are the neighbouring districts of Woon, Oomraoti and Ellichpur.

Woon.
2,683 labourers.

Into Woon 2,683 labourers are said to have migrated, of whom only 144 are known to have returned to their homes in the Central Provinces.

In the same district 70 cultivators, coming from the Central Provinces, have settled down, and have taken 707 acres of land, renting it partly from Government, partly from persons who had already taken it on lease from Government.

70 agriculturists.

The immigrants into the Oomraoti District numbered 50,428, of whom 8,965 are known to have returned to their homes, leaving 41,463. But of this number, only 125 were agriculturists, or at any rate took up land, and they took up 2,083 acres of land, the rent on the whole being Rs. 1,503. Two-thirds of these men, however, merely took up the land in a temporary or desultory kind of way, for of the 125, 87 who had taken 1,481 acres at a rental of Rs. 910, are reported as having either died, or having resigned their land, or as absent, or as having absconded.

Oomraoti.
50,428 immigrants.
125 agriculturists only.

The number of people who have migrated from the Central Provinces into the Ellichpur District, is given as 6,214, of whom 416 are reported to have returned to the Central Provinces. None of these were agriculturists or settled down to the cultivation of land.

Ellichpur.
6,214 immigrants.
No agriculturists.

As estimated by the Berar authorities, 59,595 people in all came to Berar, of whom 9,525 only returned to their homes.

It has been seen that the classes who emigrated from the Central Provinces were not agriculturists, at any rate that they have not sought to earn their living in Berar by agriculture, and this being the case it may be fairly concluded that the difference in the land Settlement of the Central Provinces and Berar, has not had much to do with the movement. There is moreover no tax on agriculturists or affecting them in the Central Provinces, which is not equally in force in Berar.

The great bulk of the emigrants being then of the labouring class, it remains to be seen what the motive to emigration was. It is well known that for several years past the harvests in Bhandara have been poor and that district suffered severely as did also the neighbouring Chanda District during the scarcity of 1868-69. At that time food grains were much cheaper in Berar than in the Central Provinces, so much so indeed that large supplies of jowari were imported by railway from Berar into Nagpur and Chanda. Emigration, which had been going on for several years previously, no doubt then received a powerful stimulus. In the Introduction to the

Administration Report for 1870-71, the matter was thus put:—"There had been in parts of Nagpur and Bhandara a cycle of five or six years short harvests, food was therefore comparatively dear, there were no railway works in progress, and road works and other works of the kind were not being pushed on to the same extent as had been the case; there was accordingly a smaller demand for labour, and wages were low; lastly, the opening of the railway between Nagpur and Bombay has cheapened English cotton goods, and has materially interfered with the occupations of the weavers of the Nagpur and Bhandara country. In times of scarcity these people were the first to feel, and also, when it was evident that they were able to better their prospects and live more comfortably elsewhere, the first to go."

These men cannot take to agriculture, and they became day laborers. The prices of food grains have since 1868 been perhaps much the same in Bhandara and the Woon, Omraoti and Elichpur Districts of Berar; but while in Bhandara the average wages of unskilled labour have been since 1868 2 annas a day, in Berar the average wages have been between 4 and 5 annas, and at certain seasons very much higher. It is known that every year a certain number of people cross the Wardha into Berar at the time the cotton crop ripens and return after it is gathered, and thus there has always been a connexion between the two Provinces."

Captain Bloomfield (see page 55) states that from the lowlands of Balaghat, some people, both cultivators and others, who happened, in search of grain and work, to go to the uplands, found land so cheap, labour so scarce and sought for, and Malguzars so ready to advance them grain, that they were induced to settle there.

Question.—Did they go alone, or with all members of the family, and with their cattle and property?

My impression is that in Murwara, it was chiefly the men who left their homes.

Those who went from the Wainganga rice fields into Berar, went in groups of families. In neither case were they people who had previously possessed cattle and they had very little property to remove. The women going into Berar carried, their spinning wheels on their heads and their infants on their backs.

Question.—How many (approximately) have not come back, and how many are supposed to have died?

Regarding the emigration to Berar, I have given an account of the numbers supposed to have remained. None are supposed to have died from starvation, even of those who went away during the time of famine.

There were changes in the administrative divisions of the Jubbulpore district in 1867 or 1868. A part of the Sleemanabad tahsil was added to Sehora, the rest was joined on to Bijragogarh to form the Murwara tahsil. We have a decrease for the whole district between the census of 1866 and that of 1872 of 70,358. Some 40 poor villages had been meantime transferred to Damoh. The famine and its accompanying diseases and migration is accountable for the rest. If I am right in thinking that at the beginning of the famine there were 120,000 people in the Murwara tahsil, if I am also right in thinking that there was a rough census or estimate indicating that in September 1868 there were only 80,000 found in their villages, then, seeing that in January 1872 the population stood at 108,000, and that probably all those who had migrated and were going to come back, had returned, I give, but as little more than a guess, the following estimate:—

Emigrated or migrated to other parts of the districts or inmates of poor houses in other parts of the district	...	25,000
Died from starvation and its attendant diseases, died from the cholera and small-pox epidemic	...	15,000
Returned to their homes	...	24,000
Permanently remained abroad	...	1,000

The difference between the 120,000, which I think was the population at the commencement of the famine, and the census figures for January 1872 is 12,000, I think that the normal excess of births over deaths would represent 3,000, and this would bear out my estimate of the deaths of the famine period. This is the opinion which I have always held. But I note that I entertain grave doubts as

regards the correctness of the figures of the census of 1866. I cannot bring myself to believe that after allowing for the villages transferred to Damoh, there could have been a decrease of 70,000 people in the whole district between 1866 and 1872.

Damoh shows a decrease of 14,000 people.

Group 36. — Question.—If famine-stricken people begin to emigrate to a part where it is known they would not find things better than in the country they left, or if they wander aimlessly from their homes, settling nowhere, should steps be taken to stop this, and how?

As the arrival of the emigrants in the locality they aim at would produce additional distress, and, if they went in large numbers, would probably turn distress in such parts into a fatal disaster, and as the intending emigrants would be more easily and effectually relieved near their homes and among those on whom they had some natural claims, I would do my best to stop them. If they would not listen to me, I should direct all subordinates, including the Police, to urge them to go on to the relief works or accept of any relief until some few from among themselves could be sent to the part they wanted to go to and bring back information for the guidance of the others. I would not put any in the poor houses unless they were too weak to work. I do not see that it would be practicable to endeavour to compel them to stop.

Question.—If they crowd into a town, say the head-quarters of the district or the province, would you do any thing to stop them on the way or to prevent them from begging and straggling about the town when they got there?

I would (as was done in Jubbulpore) establish poor houses and other relief measures on the roads by which they were coming into the town. I should try to get the house-holders to refuse to give alms promiscuously, and would send them to relief work, or, if requiring such treatment, to the poor house. The difficulty would be to know what to do with those who could work, but would not do so.

Group 37. — Question.—Is it a recognized feature of the revenue administration of your provinces to give relief by the remission or suspension of the demand for land revenue when the crops fail?

The policy of the Administration is fully set forth in the following Circular (No. 101 of the 18th December 1868):—

Recommendations having reached the Officiating Chief Commissioner from several quarters for suspension or remission of revenue, he desires me to indicate the conditions on which alone he will be prepared to sanction any relaxation of the Government demand. In the first place he wishes it to be understood that for the present there should be no question of remission under any circumstances, and that suspension, where required, should be granted only after full consideration and in a discriminating manner. The Land Revenue settlement has in most districts been but recently revised and equalised, and there is every reason to believe that it is generally moderate. Under these circumstances the ordinary rule would be that good years should pay for bad ones, but still there will be cases, in which land-owners have not had time to settle into their new position or where a succession of bad seasons has shaken their resources, and where some indulgence may very appropriately be shown. The Officiating Chief Commissioner, however averse to listen to indiscriminate proposals for suspensions of revenue which he considers at present premature and unnecessary, would be willing to entertain any well considered cases falling under the special conditions above noted, and I am therefore to prescribe the following procedure to be observed in the submission of applications of the kind.

If Deputy Commissioners have reason to consider that it would be injudicious to press in any particular case for payment of the revenue they should first of all satisfy themselves that the revenue debtor is really without means, whether from the high prices obtained from the residue of his present crops, or from previous accumulations to meet the Government demand. He should then ascertain how, if the Government demand were suspended, it could be arranged that the suspension should reach the cultivators; in short he should take means of securing that the indulgence conceded by the Government to the landlord should

be extended by the latter to his tenants. Lastly, he should arrange definitely for the collection of the suspended instalments at some fixed future period. Before forwarding any application for suspension to the Chief Commissioner, the Divisional Commissioner should thoroughly satisfy himself on all the above points.

The general remission of the land revenue on a large scale will seldom be necessary, although it may be proper to grant a temporary suspension of the demand. The complete failure of crops is most commonly confined to limited areas, and even in the worst seasons there will be some estates in which the loss is small, and more in which the deficiency of produce is compensated by the rise in prices. In 1860-61 the loss in the North-Western Provinces hardly exceeded 6 or 7 lakhs out of about 148 lakhs of rupees. At the same time the Government should be prepared to allow remission of revenue in every case in which it may be shown to be really proper.

When remissions of revenue are made they should be contingent on a suitable remission of rent being proved to have been made by the landlord. In some cases it may be expedient, when the destruction of crops has become an ascertained fact and under such limitations as may be named by the local Government to invite the landlords to remit or suspend the collection of rents, on the assurance that a corresponding remission or suspension of the land revenue will then be allowed to them."

In view of the increased numbers of transfers of estates which occurred during and immediately after the famine, of the small sums realized by the sale in a few instances, of the extraordinary smallness of the remissions and suspensions as compared with those given in other parts of India on similar occasions and with what had been given both by the Bhonslah government and in some districts of the Saugor and Nerbudda territories, I submit these considerations. First, the settlements were then quite new, assessments had everywhere been equalized, the proprietary body had just then been freely given a concession worth, commercially valued, over three millions sterling. Under the expired settlements, when assessments were not nearly so equally distributed, remissions and suspensions had been common. To have perpetuated a habit of seeking remissions at the outset of our new settlement would have been probably an act of culpable weakness, while firmness was likely to insure a general increase of prudence on the part of those concerned.

It was well known and duly considered that in special cases some of those on whom proprietary rights had been conferred, by reason of their inherited claims, were deeply involved, and were hardly fitted for the position of Malguzars, partly by reason of the burden of their inherited debt, partly on account of their own personal want of prudence. Such persons had, in some cases, to sell their property, and were at once replaced by others possessed of capital and of the personal qualities which qualified them to assume the position, and far better to do justice to the villages and lands which they purchased. However much, on sentimental grounds, we may regret such transfers, yet we must, I think, admit that the advantages more than outweighed the disadvantages. I do not remember any case in which any large estates, held by men possessed of any sort of political influence, suffered under the policy adopted.

The land revenue assessment is based on the principle of good and of average years, and of years below the average covering exceptional losses. A sufficient margin of profit was left to the land-holders to admit of the regular payment of revenue under much more than ordinary fluctuations of the seasons. Special cases will be dealt with, no doubt, with all justifiable leniency. A season of extreme drought, if very general, would be met according to the circumstances of the time. Practically, no great difficulty was found in collecting the land revenue, with a trivial exception in the parts of Chhattisgarh, where the cultivation is limited to rice, under a single year's total failure of the crops. The question of suspension on a large scale was discussed for Chhattisgarh, but it was found that the landowners considered this would be injurious to themselves, for then they would be unable to collect from their cultivators, and under the shifting tenures and migratory propensities of their ryots, they could not expect to recover any large proportion of the rents suspended. In Bhandara, Balaghat, Saugor, Damoh and Jubbulpore, where the famine was severe, the land revenue was paid up in full. In parts of Chhattisgarh suspension would generally be equivalent to remission, for the reasons I have given above. I do not say that I would never ask for remission, in consequence of the total failure of one year's crops, or perhaps of one harvest, but I may say, that with our present assessments, I think such recommendation could not be justified, save on very exceptional and strong personal claims. Except in these very rare cases, suspension would be the utmost which, were I in charge of a district, I could recommend.

In Appendix F. I have shown the transfers of land and prices obtained at that period and subsequent years in Murwara.

Group 38.—Question—Is the duty of searching out distress in time of famine in the villages and the people's homes one that properly belongs to Government, or is it sufficient for Government to offer means of obtaining relief, and to expect that the famine-stricken will come of themselves and make use of these means?

It is, I consider, the duty of Government to save life, and it is wise to do so. But it is beyond the power and beyond the means of any Government to raise the whole of the masses of the people, the lower strata of which are, at the best of times, not far above the "high-water level" of want, to a point beyond the reach of famine. It is in the power of Government to provide relief for not a few among our population who will not, or who cannot, or who do not, come to it. This has been proved by experience. Where private charity or the help of friends or neighbours fail, it being within the power of Government without incurring unjustifiable expenditure, it becomes, I think, the duty of Government to seek out such cases, and to bring the sufferers, who else must die, under the protection of its own organized relief measures.

Question.—If it is proper to depute special officers to inspect villages and urge the people to accept the relief offered, what steps do you consider necessary for strengthening the ordinary District staff and enabling them to carry out these duties?

Those who are able to work, and will not come to the works provided for them, have enough done for them when they have been told where they can obtain work. For this we want no special agency. Those officials who are employed for relief purposes generally, the Revenue officials, the Police, the village Kotwals, and the Malguzars, can give the necessary information in every village of every district.

For those who are generally more helpless, and for those who are reduced in strength, I think the same agency would suffice, during the early part of the distress. Even then it would be advisable to have a very few selected men going through the villages, to impress on the Malguzars, and on the villagers as a body their respective duties and responsibilities and the nature and extent of the Government arrangements.

Question.—What class of officers should be selected for such duties, and what areas assigned to them?

The most active, steady minded and trustworthy men obtainable should be employed; the area would be determined, first by the number of such men available; next by the nature of the country, by the density or sparseness of the population and similar considerations.

Question.—May these officers best be servants of Government, or should they be taken from the non-official class?

I have seen one or two instances of non-official volunteers in Jubbulpore, and I think several instances in Dinagepore, of sons of men of some position who voluntarily undertook such hard work. If such be available, all the better. But our ministerial staff at all times is too small to allow of their being indented on; the Police, except as volunteers, when off duty, have an extra amount of crime to deal with. All these can and will help, but for regular inspection, special men are wanted; Government servants, in preference to other than exceptionally eligible non-official volunteers must be employed. They have reputations to maintain, future expectations to look to; they have training and

discipline, matters of great importance. In Dinagepore we were most fortunate in obtaining the services of native officers from the Bengal Cavalry and also from the Infantry, and they worked admirably.

Question.—What should be their precise duties, and what supervision should be provided to see that they carry out these duties? At what period may it become expedient to organise such an extra famine establishment?

I would not attempt to set any limits to the duties of such Inspectors. They should have general duties and responsibilities as wide almost in their spheres and particular areas as the Officer in charge of relief operations, reporting to him personally and orally and submitting their written notes. As soon as it is known that a wide-spread famine of considerable duration has to be met, no time should be lost in providing such organized assistance.

Question.—To what extent, and under what general circumstances has there been any general tendency on the part of the people in distress to reject measures of relief offered to them?

There was no reluctance whatever observed by me in Bengal. But with our people, it is very different. I would refer to the recorded experience of (a) the late Captain Ducat, (b) Major Stewart, (c) Captain Twyford and (d) Major Bloomfield.

Question.—Where determined disinclination has been shown by any portion of the population to leave their villages and go to relief works or poor-houses, what has been the probable cause of such a state of things?

I attribute this in Jubbulpore to the shyness of the poorer people in remote villages, who had been brought but very little into contact with the world beyond their own and the immediately surrounding villages, and to their jungle instincts, leading them to prefer trying to subsist on the spontaneous produce of the forests. The apathy evinced on the rice fields of Balaghat and Chhattisgarh is remarkable. They seemed indeed to lack the spirit to try what they could do at unaccustomed work. They seemed to ask themselves, like the lotus eaters, "why should we toil?" and went off to seek for berries, leaves and roots.

Question.—Can it be traced to improper arrangements for the reception of applicants for relief, or for admitting them to employment on works, to an insufficient allowance of food, or wages, or to any such causes?

To the best of my belief, no such causes existed. Those who came for work or relief, and not a few who were brought to it, pulled through the trouble with health and strength almost unimpaired, save from cholera and other diseases subsequently contracted or previously engendered.

Question.—Can any other causes be named which may have conduced to the disinclination to seek relief, such as physical prostration or habitual want of confidence in officials, &c.?

I think the people did not lack in confidence towards us; there may have been something like moral or mental prostration, resulting from the presence of famine and pestilence, but as Major Stewart, the District Superintendent of

(a) Page 81.
(b) Page 67 and 73.
(c) Pages 67 and 68.
(d) Page 55.

Police in Raipur observed, "the attitude of the people was one of quite submissive suffering" What was fated would come to pass.

Group 39.—These questions are probably meant for the Madras and Bombay famine of 1877-78 only. As regards the Central Provinces I have already given all the available information at page 199.

Group 40.—These questions also are hardly intended for these Provinces. In case of severe famine, I think the present staff of Civil Officers would have to be considerably assisted.

Group 41.—For these questions again I shall hardly be expected to give an answer. But I hope I may be pardoned for observing that in Bengal orders or instructions occasionally reached me openly, and so became known to the public, which I thought would have been far better communicated in a less public manner, if not in cypher. For instance, where a maximum limit of relief was prescribed, a Circle officer was a few hours afterwards liable to be accosted and told by a well-informed beggar that Government had ordered such and such relief or support to be given to him; that he stood on his rights, and if they were denied him, he would send in a written complaint and otherwise give trouble to the Circle officer.

Group 42. Question.—Mention if any irregularities or frauds took place in the application of money, or were supposed to have taken place, and how and to what extent?

In the Central Provinces, I believe no serious cases which were talked of escaped without punishment. In Bengal there was much talk. I did my best, and prosecuted in every case where I possibly could, but I think, in every case of magnitude, without success.

I would not attempt a guess at the extent to which frauds may have been perpetrated.

Group 44—Question.—What has the effect of famine been in your experience on the subsequent condition of a district?

I served in Bilaspur in the years 1873-74. At that time there was not a trace observable of the preceding famine; it was seldom spoken of, unless questions were asked about it. I have very recently been in the Murwara tahsil, and the country appears to be much better off than it was before the famine.

Question.—Where villages were deserted, have they been permanently depopulated or has the population returned to them?

Apparently the population has generally returned to them. No villages appear to have been depopulated, except in Raipur, where the habits of the people are particularly migratory. "People left the distressed tracts in large numbers owing to the inability of the landlords to support them, and fourteen villages became deserted, and were recommended to be absorbed into the Government wastes. Other villages with 40 or 50 ryots are reduced to 2 or 3. In most cases the malguzars are poor, and will take years, perhaps will never, be able to recover, in consequence of the reduction in the number of cultivators, and reduction in the area cultivated. The poverty of the landlords will be an effectual bar for some years to come to their being able to replenish their agricultural stock or being their villages up to their former state of prosperity."

The fourteen villages mentioned above were brought into the District unreserved forest area.

Question.—Has much land been thrown out of cultivation, and for how long has this decrease in the cultivated area continued?

Notwithstanding the great exertions made at the sowings of 1869-70 to recoup by extending the area of cultivation, it seems that the cultivated area reced-

ed by 73,563 acres from what it had stood at in the year before. In 1869 the area was 1,849,874 acres. In 1876-77 it was in excess of 2,350,000 acres.

In Shahgarh (of Saugor) the cultivation receded from 15,188 to 9,983 acres.

Out of the 1,436 villages in the Bilaspur and Seorinarain Tahsils in the year 1869-70 only 466 villages were fully sown, and 534 were two-thirds, 405 half sown, and 31 were more or less waste.

Making every allowance for the effects of the cholera epidemic and the great losses among the cattle, beyond doubt a great portion of this decrease in the cultivation was due to the want of seed grain.

In the Murwara tahsil the course of cultivation is thus shown:—

1866-67	...	...	248,937
1867-68	...	...	240,165
1868-69	...	...	203,969
1869-70	...	...	171,681
1870-71	...	...	180,317
1871-72	...	...	185,543
1872-73	...	...	178,285
1873-74	...	...	199,867
1874-75	...	...	211,588
1875-76	...	...	222,768
1876-77	...	...	248,630

Question.—Has it been due to want of cultivators, of plough bullocks, or of capital and of seed grain?

The Deputy Commissioner of Saugor was of opinion that in Shahgarh it was owing to the neglect of the Tahsildar to urge the giving of Taccavi advances for the purchase of seed grain.

In Murwarra I attribute it to the loss of cultivators through the cholera and small-pox epidemics, perhaps also directly to deaths from famine, and in the second place to the great mortality among the cattle. The matter of seed grain was adequately met by Government help. I am inclined to think that it might have been better not to have looked strictly for security on such advances, for it appears to me that a loan of seed grain, especially if made by Government, would, as a matter of fact, be regarded as a sacred trust, and that bad debts would hardly be made. According to the custom of the country a debt for seed grain is allowed precedence over all others. In such cases the management of the total advance for each village had better be entrusted to the Malguzar. In Bilaspur much is believed to have been due to the want of seed grain, as well as to the losses of cultivators by death and migration, and the excessive loss of cattle.

In Raipur the same causes reduced considerably the number of cultivators and of agricultural labourers, while cattle disease or the effect of want of food and exposure swept off a third of the cattle of the district. The Deputy Commissioner noticed that "the seed grain difficulty, in so far as it could be met by the action of Government, had been dealt with, and up to the 30th June 1869 advances aggregating Rs. 10,135 had been made. The applications would have been much more numerous, but for the local custom called "barhi." No one who could get seed grain by this customary process would dream of borrowing money from Government to purchase it, because the great difference (perhaps 400 per cent) in price between grain now and at harvest time would necessarily entail a loss much greater in degree than that resulting from the payment being made "in kind."

CHAPTER IV.

IRRIGATION WORKS.

Group 25. Question.—Have any customary claims or prescriptive rights in the use of water from tanks or water-courses grown up in your provinces?

In the Bilaspur district, where tanks are common, the twelfth section of the village administration paper shows the rule prevailing as to cultivation of sugar-cane where it is grown; the thirteenth, the village custom as regards assistance rendered by cultivators to proprietors; the fourteenth, the village custom regarding the use and construction of tanks and wells.

“With the possession of the village lands passed all those works of material improvement by which the new Patel hoped to ensure the realization of the Government demands. I can recall but few instances where the old family continued to retain an interest in the tank that their forefathers had raised after they had ceased to engage for the village. The fact may be accounted for, that while all parties, Patel and cultivators, lend their aid to repair the tank, the obligation to do so rests primarily with the former; and it is only when he is an absentee, and when the ousted landholder's family have although evicted from the Patelship continued to live in the village in a position of comfort and respectability, perhaps even as the manager of the absentee landlord, that the former has contrived to retain an interest in the tank. This interest is shown by his realizing a separate water rent from the cultivators, and by letting out the fishery and gathering the water rents. But these instances are rare. There are hardly a dozen villages where any other than the landlord takes payment for the water. This tenure of the tanks is quite opposed to the custom that has ruled regarding wells and trees. Whoever, were he a cultivator, or were he the Patel, sunk the one or planted the other, his interest in them remained, even after he himself had given up the village or fields, and even if he did not continue to reside.”

I can give no further information, beyond that a clause has been entered in the Central Province Draft Revenue bill, withdrawing from the cognizance of the Civil Courts questions regarding submergence of lands due to the making of tanks or increasing of their storage areas.

Recently, with reference to proposed legislation relating to easements the Government of India enquired whether it would not be expedient to make the acquisition of prescriptive rights to draw up, pen back and divert water subject to the right of Government to regulate its distribution. To this it was answered that in the Central Provinces there is no trace of any right belonging to Government to regulate the distribution of water, but it seems expedient to reserve to Government a right of this kind.

The additional clause proposed—

“Nothing herein contained shall be deemed to affect any right or local usage recorded in the record of rights duly made or authenticated at a regular settlement or re-settlement of land revenue” was approved of by the Local Government as providing in an adequate manner for all rights enjoyed by rural communities.

Groups 26 & 27. Question.—If anywhere it be found that the tanks &c. are so small and numerous that Government cannot practically carry out their supervision and maintenance, would it be expe-

dient that steps should be taken for imposing on the cultivators or proprietors who benefit by the water the duty of carrying out all necessary repairs or works for securing the irrigation in an efficient condition? How far do obligations rest on Zemindars or other superior landholders to maintain tanks or other irrigation works?

It is certain that this could not be undertaken by Government in these Provinces. I consider that the interests of the landholders and of the villagers, together with the village customs as recorded in the village administration papers sufficiently provide for the due supervision and the full maintenance of all existing and utilized irrigation tanks, and that the obligations thus properly recognized by Government do not require to be specifically enforced. There are some instances in which proprietary right has been bestowed on condition that the grantee shall supervise and maintain a tank of public importance. Such cases require to be watched, to see that the responsible person acts up to his engagements.

APPENDIX A.

Statement showing rain-fall for each month in the districts of the Central Provinces
from 1868 to 1877.

District Saugor.

Years.	Months.												Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868	0.50	...	3.00	10.40	1.90	15.20	Famine in the North Eastern portion of the district.
1869	0.40	...	...	...	...	3.40	16.30	8.37	16.80	4.30	...	1.30
1870	1.60	0.10	0.65	0.20	...	7.81	19.22	12.30	7.97	3.65	...	...
1871	1.02	0.35	...	0.10	1.15	14.65	24.12	15.33	11.39	...	0.30	0.50	
1872	0.32	0.53	0.30	1.30	...	3.55	20.63	12.67	7.16	...	...	0.20
1873	1.08	...	0.18	...	0.23	1.15	10.22	11.00	17.75	...	...	...
1874	0.94	...	0.01	...	1.30	15.78	23.66	21.39	5.73	...	...	...
1875	...	0.51	...	...	0.31	5.19	28.60	19.26	5.70	1.18	...	0.55
1876	...	...	...	...	...	2.89	26.62	13.11	8.07	0.26	...	...
1877	3.04	0.47	...	1.04	0.36	5.97	7.19	4.29	0.36	1.34	...	*1.74	
Mean	0.84	.19	.11	.31	.33	6.34	18.69	11.96	9.61	1.07	0.03	.43	49.94

District Damoh.

Years.	Months.												Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868	0.70	...	0.30	3.00	13.30	0.60	5.10	0.20	Severe famine especially in Northern and Eastern parts.
1869	0.40	...	...	0.40	...	3.40	16.40	9.80	13.50	6.90	...	1.00
1870	0.80	...	0.80	0.40	...	6.00	10.50	10.20	12.70	6.80	0.10	...	
1871	0.60	0.10	...	...	1.10	11.90	13.95	13.60	14.80	...	...	...
1872	...	...	0.80	1.50	0.30	2.60	13.50	26.10	4.60	0.20	...	1.60
1873	0.80	...	...	...	0.40	0.90	18.66	18.45	20.15	...	...	0.05
1874	1.25	...	0.20	...	0.20	16.40	26.40	21.95	6.20	...	...	...
1875	...	0.80	...	...	...	6.05	26.75	10.10	12.20	0.05	...	...
1876	...	...	...	...	...	1.22	41.95	15.95	6.80	...	...	...
1877	1.75	0.40	...	0.35	1.05	9.73	4.61	8.27	2.26	2.50	...	*0.90	
Mean	.63	.13	.21	.26	.30	6.12	18.60	13.50	9.83	1.64	0.01	.37	51.62

District Jubbulpore.

Years.	Months.												Remarks.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.
1868	2.81	1.11	1.15	0.04	0.32	9.34	5.81	4.25	3.81	...	...	0.16	28.80	Severe famine in North of the district.
1869	0.08	...	0.68	...	...	3.37	28.25	8.90	16.97	5.06	0.14	...	63.45	
1870	0.62	0.22	1.47	...	...	14.16	27.39	18.75	12.63	2.27	0.21	...	77.72	
1871	0.37	0.61	...	0.02	0.71	12.41	19.71	11.20	13.19	...	...	1.00	59.22	
1872	0.27	0.14	2.04	0.65	...	5.45	28.67	21.95	6.14	1.48	...	0.40	67.19	
1873	...	0.49	0.24	...	0.76	0.93	17.64	11.67	14.24	...	...	0.21	46.18	
1874	0.36	0.13	...	...	0.97	18.52	25.33	36.99	4.38	0.20	...	0.05	86.93	
1875	0.20	0.08	...	0.10	...	7.49	22.60	8.80	11.54	0.82	...	0.05	51.68	
1876	...	...	...	...	0.99	3.26	26.99	15.23	10.16	...	...	...	56.63	
1877	2.33	1.09	1.98	3.32	2.53	18.07	6.63	10.60	4.94	1.07	...	*0.57	53.13	*Succeeding spring crops injured.
1878	0.38	.21	...	...	...	...	...	...	...	...	...	...	...
Mean	.70	.38	.75	.41	.63	9.30	20.90	14.83	9.80	1.09	.03	.24	59.09	

District Narsinghpur.

Years.	Months.												Remarks.		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.	
1868	0.30	2.01	6.87	2.05	6.00	...	...	0.40	17.63	Crops saved by the rain late in September.	
1869	0.30	...	...	3.30	16.51	7.70	13.90	5.70	...	0.90	48.31		
1870	...	0.30	0.10	0.83	0.30	...	9.00	12.80	10.30	2.80	...	...	46.93	
1871	...	1.00	2.40	...	...	1.90	21.20	20.70	9.80	13.20	...	...	70.20	
1872	1.30	2.00	...	8.50	13.90	25.50	5.00	4.10	...	0.30	60.60	
1873	...	0.40	0.50	0.20	...	0.10	1.60	15.20	11.90	17.20	0.46	...	...	47.56
1874	0.80	15.60	19.30	14.90	2.70	...	...	...	53.30	
1875	0.40	0.20	23.10	28.60	13.85	8.76	0.70	...	...	75.61	
1876	1.01	14.49	17.77	8.01	...	...	...	41.28	
1877	...	1.90	2.22	0.94	0.73	1.19	4.30	14.51	9.26	6.84	0.03	...	*2.11	44.03	*Succeeding rabi crops much injured.
187856	...	...	...	...	...	...	...	...	...	...	...
Mean ....	.36	.52	.35	.34	.45	8.96	16.29	12.30	9.21	1.38	...	.37	50.54	

District Hoshangabad.

Years.	Months.												Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868 ...	2.55	...	...	...	0.40	3.15	11.10	6.80	5.60	...	...	...	Crops saved by rain late in September.
1869 ...	...	...	...	...	0.20	3.60	11.60	13.60	11.20	2.10	...	1.80	
1870 ...	0.50	0.10	0.03	...	...	7.10	10.20	9.40	5.10	0.29	0.10	...	32.82
1871 ...	0.15	...	...	...	0.90	14.30	15.40	12.80	22.40	...	0.20	0.50	66.65
1872 ...	...	...	0.02	0.07	0.01	0.09	12.60	14.00	7.70	1.50	...	0.20	36.19
1873 ...	0.60	...	...	...	0.10	1.00	10.42	10.40	19.60	...	...	...	42.12
1874 ...	...	...	...	...	0.15	11.35	15.30	12.80	5.10	...	...	...	44.70
1875 ...	...	...	...	...	...	9.02	23.79	11.31	18.72	0.39	...	0.10	63.33
1876 ...	...	...	0.02	...	...	4.36	15.18	18.58	10.02	...	...	...	48.16
1877 ...	1.43	0.53	0.12	0.06	0.42	4.28	14.38	8.99	1.34	2.68	...	*3.26	* Wheat crop in spring of 1878 almost totally lost.
1878 ...	.12	.98	...	...	...	...	...	...	...	...	...	...
Mean ...	.52	.06	.02	0.01	.22	5.82	13.99	11.87	10.68	.69	0.03	.58	44.51

District Nimar.

Years.	Months.												Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868 ...	0.60	...	...	...	...	11.12	14.36	8.68	3.75	...	...	...	38.51
1869 ...	...	...	0.16	...	0.80	5.19	8.57	4.73	12.37	0.58	...	0.38	32.78
1870 ...	...	...	0.10	0.02	...	13.14	9.55	4.41	3.49	1.89	0.11	...	32.71
1871 ...	3.24	...	...	...	0.64	2.41	3.36	3.87	7.57	...	0.15	0.07	21.31
1872 ...	...	...	0.06	0.86	...	3.79	17.15	4.19	9.38	0.56	...	2.03	38.02
1873 ...	0.60	2.01	0.05	...	0.66	6.32	7.42	6.47	7.39	...	...	...	30.92
1874 ...	...	...	...	...	0.06	7.12	13.17	6.72	3.92	...	...	...	30.99
1875 ...	...	1.06	...	0.09	...	4.29	7.95	7.25	10.64	...	...	0.04	31.32
1876 ...	...	...	...	...	...	1.02	7.34	12.18	5.29	...	...	...	25.83
1877 ...	0.64	2.82	...	0.12	0.12	4.87	6.54	11.27	0.74	0.94	0.06	1.06	29.18
Mean ...	.51	.59	.03	.11	.23	5.92	9.54	6.97	6.45	.39	0.03	.36	31.15

District Mandla.

Years.	Months.												Remarks.		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.	
1868	...	2.10	...	0.85	...	0.10	4.30	10.10	8.00	4.95	0.30	...	0.10	30.80	Distress, but not famine, resulted.
1869	2.35	0.50	...	3.70	21.95	21.85	9.80	...	...	...	60.15	
1870	...	0.70	1.70	0.72	0.50	...	5.15	15.15	7.35	10.20	1.70	...	...	43.17	
1871	0.50	...	...	1.80	14.20	24.80	2.30	8.10	...	0.50	...	52.20	
1872	0.70	0.40	...	10.70	15.40	20.70	6.30	5.20	...	1.70	61.10	
1873	0.15	0.70	...	1.20	3.30	19.70	11.50	9.05	...	...	1.50	47.10	
1874	...	0.85	1.25	0.75	...	2.20	23.60	14.05	17.90	7.35	1.00	...	...	68.95	
1875	...	0.90	0.50	...	...	...	14.60	26.50	10.60	4.30	3.50	0.20	...	61.10	
1876	0.04	...	...	4.70	20.55	10.15	5.15	0.35	...	...	40.94	
1877	...	2.90	...	2.70	4.74	2.75	12.17	7.02	7.84	4.29	1.31	...	*0.66	46.38	*Much injury done to succeeding spring crops.
1878	...	2.82	.03	...	...	...	...	...	...	...	...	...	...	...
Mean74	.41	.88	.61	.80	9.64	17.52	11.82	6.95	1.33	.07	.39	51.19	

District Betul.

Years.	Months.												Remarks.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.
1868	...	...	2.35	...	...	2.50	6.00	4.61	5.28	...	...	...	20.74	Saved by the late rains in September.
1869	...	...	0.21	...	0.34	1.35	9.66	7.47	10.01	2.27	...	0.63	31.94	
1870	...	...	2.00	2.18	...	13.07	12.78	6.01	4.24	3.42	...	...	43.70	
1871	2.02	0.53	...	...	0.36	11.36	12.19	3.72	15.62	...	1.21	...	47.01	
1872	...	...	0.04	1.17	...	8.07	12.17	7.63	8.02	1.00	...	0.94	39.04	
1873	0.35	...	...	...	0.66	3.69	6.10	5.45	10.54	...	...	...	26.79	
1874	...	...	...	...	0.02	5.34	15.09	6.44	3.57	...	...	...	30.46	
1875	...	1.45	...	...	...	9.81	19.98	10.21	12.23	0.03	...	0.17	53.88	
1876	...	...	0.25	...	...	3.59	16.86	13.43	23.97	...	...	...	58.10	
1877	3.08	0.73	0.79	0.10	...	9.73	11.07	14.02	2.03	5.33	0.37	*2.72	49.97	*Wheat crop in 1878 almost a complete failure.
1878	.39	.30	...	...	...	...	...	...	...	...	...	...	...
Mean	.54	.27	.56	.34	.14	6.85	12.19	7.90	9.55	1.20	.16	.44	40.16	

District Chhindwara.

Years.	Months.												Total.	Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
1868	2.96	...	1.03	...	...	2.87	10.46	4.23	4.16	...	...	...	25.71	Distress resulted.
1869	...	...	0.10	...	1.00	7.59	13.77	12.82	14.71	0.71	...	0.80	51.57	
1870	2.22	...	3.29	0.55	...	12.32	10.12	4.49	6.31	6.77	...	...	46.07	
1871	1.02	0.85	...	...	0.80	12.36	8.96	2.46	7.41	...	0.17	...	33.97	
1872	...	...	0.48	0.91	...	10.10	11.03	12.20	11.26	1.08	0.80	0.58	48.44	
1873	...	0.76	0.48	...	0.12	7.65	6.50	3.94	10.17	...	0.26	0.48	30.36	
1874	...	0.06	0.04	0.04	0.52	14.16	17.73	5.10	7.55	0.16	...	0.12	45.48	
1875	0.15	0.70	...	0.27	0.18	9.79	14.50	4.59	16.73	2.71	...	0.52	50.14	
1876	...	...	...	...	...	5.07	11.11	14.95	9.34	0.25	...	...	40.72	
1877	6.29	1.52	0.37	1.97	1.46	7.49	5.49	11.93	4.97	4.03	1.74	*2.91	50.17	*Wheat crops of 1878 almost a complete failure.
1878	1.34	.37	...	...	...	...	...	...	...	...	...	...	...
Mean	1.26	.39	.58	.37	.41	8.93	10.96	7.67	9.26	1.57	.29	.55	42.26	

District Seoni.

Years.	Months.												Total.	Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
1868	2.00	...	1.40	...	0.20	5.50	13.00	4.50	4.40	...	...	0.40	31.40	Severe distress resulted.
1869	...	...	...	...	0.01	4.40	16.84	19.41	9.35	5.55	...	1.50	57.06	
1870	1.30	...	1.65	0.18	...	16.37	23.05	6.25	5.40	4.00	1.70	...	59.90	
1871	...	0.40	...	...	1.40	15.60	11.82	5.60	7.60	...	1.60	1.20	45.22	
1872	...	...	...	0.80	0.45	15.77	14.43	16.25	7.99	0.90	...	0.50	57.09	
1873	...	0.95	1.02	0.63	1.22	3.78	11.60	7.79	14.47	...	...	1.04	42.53	
1874	0.20	...	...	...	0.45	11.92	18.59	16.20	13.45	...	...	0.10	60.91	
1875	0.75	0.30	...	0.15	1.25	14.10	27.90	7.75	10.75	2.80	...	0.35	66.10	
1876	...	...	0.85	...	0.15	4.70	12.70	12.75	10.75	1.30	...	...	43.20	
1877	3.80	1.65	0.63	2.80	0.75	11.85	9.60	9.30	4.20	5.75	0.48	*3.10	53.91	*Wheat crops of spring of 1878 almost entirely lost.
1878	1.85	2.55	...	...	...	...	...	...	...	...	...	...	...
	.80	.33	.56	.45	.59	10.40	15.95	10.58	8.83	2.03	.38	.82	51.73	

District Balaghat.

Years.	Months.												Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868 ...	2.70	2.20	0.10	0.20	0.00	10.60	9.20	12.70	5.40	0.80	Famine in the lowlands of Balaghat resulted.
1869 ...	...	...	0.30	0.40	...	6.52	24.30	23.40	12.00	2.92	0.00	1.00
1870 ...	0.10	...	0.20	2.04	...	11.97	38.42	11.80	6.30	1.80	...	...
1871 ...	0.20	0.65	...	...	0.90	29.50	21.20	12.90	10.40	...	...	...
1872 ...	...	0.10	...	1.00	...	21.50	15.80	23.30	11.30	1.20	...	...
1873 ...	...	0.20	1.50	...	1.00	1.80	21.90	11.98	9.10	...	...	0.60
1874 ...	...	...	...	...	...	14.94	16.80	19.50	4.40	0.50	...	...
1875 ...	...	1.25	...	...	0.50	18.60	27.70	13.10	7.30	2.00	...	...
1876 ...	...	...	0.40	...	...	2.00	27.30	14.10	11.20	0.30	...	...
1877 ...	5.20	1.90	...	1.94	3.75	12.46	15.26	16.43	5.76	3.38	1.20	*0.90	
1878 ...	2.16	.41	* Wheat crops of 1878 were injured.
Mean ...	0.82	0.63	0.25	0.56	0.61	12.99	21.79	15.92	8.31	1.29	0.12	0.25	63.54

District Bhandara.

Years.	Months.												Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868 ...	3.93	0.90	0.96	0.00	0.02	5.11	11.11	5.99	2.70	Severe famine resulted.
1869 ...	...	...	2.54	0.17	...	4.17	17.11	13.82	6.21	1.15	...	0.80
1870 ...	4.99	...	0.30	0.58	...	12.74	15.20	3.77	6.60	2.40	0.40	...	
1871 ...	...	0.42	...	0.20	0.78	17.64	19.20	3.76	10.43	0.00	...	...
1872 ...	...	...	...	1.70	...	7.90	24.59	15.52	5.94	0.62	...	...
1873 ...	...	0.30	1.10	...	0.30	1.54	13.19	12.14	18.44	...	...	...
1874 ...	1.77	0.22	...	...	0.50	8.63	16.56	13.25	9.66	1.02	...	...
1875 ...	0.30	0.50	...	...	0.65	10.29	22.52	15.19	9.92	0.98	...	...
1876 ...	...	...	0.48	...	...	6.74	10.39	15.19	7.43	0.25	...	...
1877 ...	5.22	0.10	0.33	3.38	2.97	9.21	13.61	18.76	7.03	0.33	0.20	0.69	
187833	.85	
Mean ...	1.62	0.24	0.57	0.60	0.52	8.39	16.34	11.73	7.43	0.67	0.06	0.14	49.36

District Nagpur.

Years.	Months.												Remarks.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.
1868	4.84	...	0.72	...	0.65	4.00	8.87	4.66	1.67	0.08	0.00	0.00	25.49	Large importations of jowari from Berar were required.
1869	...	...	0.68	0.20	...	4.12	8.62	9.61	7.30	2.46	...	0.39	33.38
1870	2.14	...	0.98	0.57	0.01	9.49	18.98	1.78	5.00	2.09	0.59	...	41.63	
1871	0.17	0.20	...	...	1.33	12.20	17.15	2.04	12.86	...	...	0.20	46.75
1872	...	...	0.06	1.01	...	4.01	7.44	9.35	14.80	4.22	0.00	0.05	40.94
1873	...	1.02	0.70	0.35	0.58	4.80	6.03	8.02	9.11	...	...	0.02	30.63
1874	...	0.25	...	...	0.57	8.53	19.43	7.33	4.61	0.04	...	0.12	40.88
1875	0.39	1.50	...	0.11	...	12.57	20.84	8.73	6.84	3.88	...	...	54.86
1876	...	...	0.17	...	...	3.23	13.69	12.21	9.01	0.91	...	...	39.22
1877	4.23	0.69	0.22	2.08	1.17	9.88	11.25	16.84	4.06	4.76	0.24	*1.57	56.99	*Linseed lost ; wheat crop a comparative failure in spring of 1878.
1878	.66	...	...	...	...	...	...	...	...	...	...	...	...
Mean	1.17	0.36	0.35	0.43	0.43	7.34	13.23	8.05	7.52	1.84	0.08	0.23	41.07	

District Wardha.

Years.	Months.												Remarks.	
	January	February	March	April	May	June	July	August	September	October	November	December		Total
1868	... 2.02	0.15	0.03	5.28	7.95	6.98	3.27	25.68	*Linseed and wheat nearly all lost in spring of 1878.
1869	... ..	... ..	... ..	0.27	0.10	1.18	3.37	13.67	7.15	2.20	... ..	0.35	28.29
1870	... 2.90	... ..	0.95	0.70	...	4.90	22.59	6.20	4.50	4.43	0.62	...	47.79
1871	... 0.10	0.10	... ..	0.10	1.33	4.84	13.94	1.20	7.58	...	...	...	29.19
1872	... ..	... ..	... ..	0.99	...	4.67	10.08	6.04	7.51	3.84	0.00	...	33.13
1873	... ..	0.40	... ..	0.20	1.00	6.10	7.05	8.22	6.88	...	...	...	29.85
1874	... ..	0.45	... ..	...	0.44	5.68	14.01	2.22	6.78	0.38	0.22	...	30.18
1875	... ..	0.71	0.15	...	2.47	10.15	12.72	7.22	7.47	8.48	...	...	49.37
1876	... ..	... ..	0.05	...	...	2.22	11.17	11.85	6.79	0.03	...	...	32.11
1877	... 1.74	1.00	...	0.98	1.45	5.07	8.38	9.52	4.18	2.21	0.20	*1.82	36.54	
1878	... .37	.18	...	...	...	...	...	...	...	...	...	...	...
Mean	... 0.67	0.26	0.13	0.32	0.68	5.00	11.12	7.31	6.21	2.15	0.10	0.21	34.21	

District Chanda.

Years.	Months.												Total.	Remarks.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.			
1868	0.10	9.57	11.37	8.53	4.42	0.60	...	...	34.59	Distress on the N. E. rice fields.	
1869	2.22	...	1.05	3.25	10.23	11.92	12.55	5.56	...	0.52	47.30		
1870	...	0.25	...	0.95	0.65	...	10.06	29.92	6.57	6.73	2.98	1.50	...		59.61
1871	...	0.64	0.69	0.48	0.10	0.56	8.13	13.10	1.96	12.85	...	...	0.02		38.53
1872	0.32	2.05	0.20	6.93	18.84	8.19	10.88	0.77	...	0.52		48.70
1873	0.00	0.03	0.00	2.38	3.09	12.64	12.49	7.68	...	...	0.02		38.53
1874	...	0.06	0.49	0.10	0.41	0.68	11.20	11.11	10.24	10.95	0.43	0.19	0.03		45.89
1875	...	0.06	...	0.00	0.36	0.82	9.83	16.08	11.81	7.92	3.96	...	...		50.84
1876	0.03	...	...	1.76	10.22	12.88	4.99	0.12	...	...		30.00
1877	...	1.40	0.02	1.19	3.82	1.43	3.24	9.22	9.90	2.06	1.93	...	1.37	35.58	
1878	26	...	...	...	...	...	...	...	...	...	...	...
Mean	...	0.24	0.12	0.53	0.73	0.72	6.78	14.27	9.44	8.10	1.63	0.17	0.24	42.93	

District Sironcha.

Years.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1868	0.30	...	...	...	5.97	5.97	10.22	3.10	5.17	0.00	...	...	30.73
1869	...	0.50	0.70	0.70	2.62	5.76	7.96	6.89	9.92	13.54	0.30	0.28	49.17
1870	0.35	...	1.29	...	...	12.50	13.12	3.68	10.59	2.30	2.39	...	46.22
1871	0.10	0.30	...	...	1.20	4.14	9.46	5.80	8.52	2.40	...	...	31.92
1872	...	...	...	0.22	...	9.10	14.34	8.99	14.58	3.13	...	0.90	51.26
1873	...	...	...	0.20	1.79	0.94	11.75	11.92	6.11	1.97	...	...	34.68
1874	...	0.09	...	0.15	1.17	11.41	12.86	17.57	10.43	1.68	0.31	...	55.67
1875	0.29	...	0.21	0.03	0.59	6.10	12.24	8.80	12.27	2.92	...	...	43.45
1876	...	...	0.06	0.06	0.04	4.47	12.28	8.07	3.60	0.00	...	...	28.58
1877	0.31	1.43	1.57	2.05	8.69	3.52	10.60	4.82	2.77	4.44	...	0.76	40.96
1878	...	0.03	...	...	...	...	...	...	...	...	...	...	...
Mean	0.13	0.23	0.38	0.34	2.20	6.39	11.48	7.96	8.39	3.24	0.30	0.19	41.26

District Raipur.

Years.	Months.												Remarks.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.
1868 ...	1.31	0.29	9.68	11.03	10.78	2.73	35.82	Severe famine in N. E Tahsils.
1869 ...	...	...	1.39	0.02	0.22	3.08	22.78	23.74	8.23	2.41	...	0.15	62.02
1870 ...	0.91	0.00	1.39	0.70	0.22	11.41	14.66	11.94	8.42	4.77	2.74	..	57.16	
1871 ...	...	0.54	0.21	0.01	1.28	11.48	13.72	2.62	8.70	...	...	...	38.56
1872 ...	...	...	0.23	1.29	...	11.88	17.56	12.44	7.02	3.41	...	0.37	54.20
1873 ...	...	...	0.46	...	0.48	5.00	11.55	10.20	7.08	0.27	...	0.10	35.14
1874 ...	0.73	0.48	0.41	...	0.45	19.47	21.12	19.06	7.18	3.34	...	...	72.24
1875 ...	0.25	...	...	0.11	0.85	16.51	17.97	8.05	8.01	2.11	...	...	53.86
1876 ...	...	...	0.10	...	0.07	7.03	12.55	13.07	9.70	0.04	...	...	42.56
1877 ...	3.57	0.22	0.73	3.58	2.18	10.87	4.82	16.48	1.13	2.62	...	0.51	46.71	
1878 ...	...	0.03	...	...	...	...	...	...	...	...	...	...	...
Mean	0.67	0.12	0.49	0.57	0.60	10.64	14.77	12.83	6.82	1.89	0.27	0.11	49.82	

District Bilaspur.

Years.	Months.												Remarks.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.
1868	1.87	...	0.47	0.10	0.34	18.29	3.80	3.31	3.02	31.20	Severe famine in the centre and east of the district.
1869	0.20	...	2.06	0.36	0.41	3.13	22.96	12.23	9.08	3.95	...	0.80	55.18	
1870	2.38	0.15	0.94	0.41	...	13.63	7.32	13.69	5.84	3.89	0.33	...	48.58	
1871	0.00	...	...	0.20	1.05	10.93	14.71	6.07	8.56	...	...	...	41.52
1872	...	...	...	0.72	...	9.74	13.06	8.45	7.99	...	...	2.43	42.39
1873	...	...	2.13	...	1.03	2.38	15.36	6.83	5.84	...	...	0.31	33.88
1874	1.04	0.82	1.51	0.25	0.23	7.14	7.59	23.19	10.35	3.96	...	0.10	56.18	
1875	0.55	0.10	...	0.01	0.76	12.51	10.86	5.34	8.24	1.15	...	...	39.52
1876	...	...	...	...	...	8.10	18.51	10.86	7.31	0.15	...	...	44.93
1877	2.85	0.30	0.75	2.25	7.60	13.75	17.50	24.90	6.26	3.87	...	...	80.03
1878	1.15	10												
Mean	.89	.13	.78	.43	1.14	9.96	13.16	11.48	7.25	1.69	0.03	.36	47.34	

District Sambalpur.

Years.	Months.												Total.	Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
1868	1.20	0.10	0.50	...	22.50	7.68	7.78	4.52	44.28	Distress in the western Zemindaris.
1869 ...	0.50	1.80	0.98	0.20	0.25	10.45	18.12	7.75	7.20	7.30	...	...	54.55
1870 ...	1.60	...	0.82	...	0.20	13.62	10.92	8.87	8.19	3.81	0.46	...	48.05	
1871 ...	...	0.70	...	1.73	0.45	8.47	14.57	8.58	7.14	...	...	...	41.64
1872 ...	...	0.30	0.30	0.33	...	19.56	19.07	18.72	8.50	2.61	0.06	...	69.45
1873 ...	...	...	1.33	...	0.36	3.15	29.59	9.72	4.77	1.75	...	0.37	51.04
1874 ...	1.35	0.07	0.69	...	2.50	16.46	11.57	27.83	5.43	4.37	0.20	...	70.47	
1875 ...	1.17	...	...	0.29	0.44	7.38	23.36	15.44	14.65	2.51	...	...	65.24
1876 ...	...	...	0.80	...	0.97	6.59	21.40	17.18	11.33	3.77	...	...	62.10
1877 ...	4.97	...	0.20	0.49	1.71	16.96	13.08	21.07	6.03	1.50	0.00	0.37	66.88	
1878 ...	.37	.08	...	...	...	...	...	...	...	...	...	...	...
Mean ...	.91	.40	.52	.35	.69	12.51	16.94	14.29	7.77	2.76	.07	.12	57.37

District Pachmarhi.

Years.	Months.												Total.	Remarks.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
1870	9.85	15.19	7.81	12.45	0.28	45.58	
1871 ...	0.54	0.21	...	...	1.00	24.48	38.38	13.08	27.68	...	...	0.77	106.14
1872 ...	...	0.11	0.71	0.20	...	4.62	30.96	26.50	11.42	1.35	...	0.25	76.12
1873 ...	0.92	0.12	...	...	0.30	2.97	24.69	21.17	23.58	...	...	...	73.75
1874 ...	...	...	...	...	0.50	18.21	20.82	22.52	8.29	...	...	...	70.34
1875 ...	...	0.23	...	...	0.11	10.57	42.62	26.96	20.98	0.99	...	...	102.47
1876 ...	...	...	0.03	...	0.05	3.21	30.79	24.93	19.84	...	...	...	78.85
1877 ...	3.77	1.58	1.76	1.94	1.01	9.87	21.74	10.90	6.17	4.82	0.28	2.45	66.29	
Mean of 8 years ...	0.65	0.28	0.31	0.27	0.37	10.47	28.15	19.50	16.30	0.93	0.03	0.43	77.44	

APPENDIX B.

Answers to questions in Group 9, Chapter I. by selected officers.

Mr. Bapu Rao has been over 12 years employed in public service in Nagpur, Balaghat, Raipur and Wardha. He is now an Extra-Assistant Commissioner at Wardha, where he has been for over a year.

He considers that 15 years ago landholders and cultivators were deeply involved, but that they have gradually cleared off much of the debt. The money lenders have realized large sums on account of old debts during the past two years. Civil suits for money lent are now less frequent, and the rate of interest, for respectable cultivators and landholders, has become easier. Sales and mortgages of land are on the decrease, whilst claims for possession of land, even of a few poles, are keenly contested. The improvement began from the time of the American war. The cotton of this district was sold at high rates. This was followed by the opening of the Railway. For the last two years especially, the high rates for agricultural produce and large exports by Railway have done much towards the clearing off of old debts. Some landholders and cultivators through individual recklessness are, of course, on the high road to ruin, and still more have money debts bearing high interest; but on the whole the condition of the agricultural classes is much better than before.

It is believed that a large amount of gold has been absorbed in the District by villagers during the past two years. Many particularly wealthy men could be named whose riches are of comparatively recent date. The late Honorary Magistrate * * * is known to have died indebted; but it is said that he allowed his debt to stand to make people not notice that he had hoarded about a half a lac of rupees worth of gold. The late *malguzar*—was on the brink of ruin ten years ago. Although he died in debt to the extent of a few thousand rupees in consequence of his lavish charity, yet he left grain enough to cover most of this in a single payment. Rich cultivators, some of them belonging to the lowest caste, are often met with; but these are individual cases. As a class cultivators have advanced, because crops have been good and rates exceptionally high. If the worst were to happen for two succeeding years, the majority of cultivators would be again in difficulty. They will have to borrow money at high interest. The question arises how is it that they cannot stand two bad seasons. Except our urban population, we had but village communities, and that the institution though not well defined, still lingers on, is a fact that can be discerned in every village. Under this system the actual cultivator had limited duties and responsibilities. They tilled the land, but the village headman supplied cattle, seed grain, labour for weeding, food grains, and loans for marriages. He made such improvements as he thought best on the village lands. The actual cultivator never rose beyond the position of a landed serf. Recently the actual cultivators have obtained proprietary or occupancy rights, but at the same time they have lost their old claim on the feudal superior, hence wherever the recipients were capable by intelligence, means and pluck to carry on their agricultural affairs without the aid of others they have thriven remarkably well. But such was not the condition of the majority of the recipients of the boon. They had no capital, education or pluck, and from time immemorial were habituated to dependence on their landlord for every thing. When they were made almost independent of the landlord for agricultural purposes, the good feeling between the classes grew colder and often feelings of jealousy arose. A few years before occupancy rights were given by Government, a foreign money-lender—the Marwari—had appeared on the scene, and the needy cultivators flew to him for money and grain advances and an indigenous class of local usurers of the Marwari type also sprang up. It is needless to detail the results of such a state of things. The worst feature in their operations,—which brought almost hopeless ruin to the cultivators,—was the system of selling the coming crops at certain rates fixed at random, not for cash but on account of old debts. As a rule, the cultivators were unable to execute their agreements, or were not punctual in delivery, and had to pay damages, often under decrees of Court, at rates often involving the return of several fold what they received. They have since to a great extent recovered; but the causes of their recovery are not permanent. One or two bad seasons would see many reduced nearly to their former condition. They are not yet fitted by education, by the possession of capital, and by pluck to stand alone. The cultivator has still ingrained in his nature habitual dependence on others for capital and other help. He is still credulous and superstitious, and even now cannot understand the necessity of improved modes of cultivation. He still uses the refuse of his farm yard for fuel instead of utilizing it as manure. And in our Law Courts, in comparison with his creditor, he is helpless. If his *Malguzar* be rich and well disposed towards him, he would still have a chance of tiding over two bad years; but if his *Malguzar* be involved like himself or be non-resident, or has no sympathies with his ryots, then he cannot help going to ruin. Villages can be pointed out where the cultivators are prosperous, not so much because the seasons have been good and prices high, but because the *Malguzar* is himself well-to-do, and watches over the interests of his ryots in every respect. On the other hand, villages close to Wardha can now be shown, where the *Malguzars* themselves being in difficulties, money lenders have obtained a strong hold on the ryots, or where the *Malguzars* and ryots not being on good terms, the ryots have to surmount all sorts of vexations. But to provide the ideal *Malguzar* for every village is almost impossible, and therefore the ryots must learn habits of independence. The worst enemy of the ryot is the money-lender, and the land revenue assessment, bad seasons, extravagance and idleness do not contribute to embarrass them so

much as the system of selling coming crops in advance for money due, not for principal alone, but often mainly for interest. As a rule, the cultivator is patient, industrious and frugal. He and the members of his family work on during all seasons of the year in or for their fields, and in return they get sufficient produce. They seldom eat meat. Salt, red-pepper (chillies), onions, garlic, turmeric and oil are their condiments; and a few seers of gur suffices for holidays. As a rule they are temperate. Two dhoties and an occasional pagree and dopatta suffice for each male member of the family, and two sarries and four cholies complete the wardrobe of every female member.

A typical instance is Narayan Teli, an occupancy ryot, free of debt, holding 44 acres, of which 4 are fallow. He has 7 grown up persons in his family,—3 males and 4 females. He has fifteen head of cattle, of which 6 are bullocks. Last year his produce was worth Rs. 225. The women of his family work on his fields, and during spare times, are employed as labourers for other people, earning about Rs. 30. He cultivates about 21 acres in another village which last year produced crops worth Rs. 90,—thus his gross income was Rs. 345.

His expenditure was—

Produce of his own fields, consumed as food at home.	Jowari at $6\frac{1}{2}$ seers per diem = $10\frac{1}{2}$ Khandies	...	Rs. 84	0	0		
	Wheat	... 1 do.	...	12	0	0	
	Pulses	... $2\frac{1}{2}$ do.	...	36	0	0	
	Gur 22 seers	...	...	5	0	0
	Salt	...	...	2	12	0
	Oil	...	...	18	0	0
	Chillies	...	...	6	0	0
	Onions, garlic, turmeric, &c....	...	...	12	0	0
				Total	175	12	0

Clothing—

8 Sarries...	...	...	...	Rs. 16	0	0
6 Dhoties	...	...	...	6	0	0
3 Pagries	...	...	...	5	0	0
3 Blankets	...	...	...	4	8	0
Cholies...	...	...	...	0	12	0
6 Pairs of Shoes	...	...	...	4	0	0
3 Dopattas	...	...	...	3	0	0
Weeding expenses exclusive of the labour of his family	...	...	...	20	0	0
Rent	...	...	...	51	0	0

Total 286 0 0

This cultivator is the head of a prosperous family. He has two brothers as strong as himself. He sold the following produce which is included in the amount of his income shown above:—

Cotton worth	...	...	...	Rs. 57
Linseed	...	...	...	9
Kurbi	...	...	...	5
Grass	...	...	...	8

Total 79

There was a surplus income of Rs. 60.

Mannu, an absolute occupancy ryot has $22\frac{1}{2}$ acres, and is a tenant-at-will for 3 acres. He is free of debt. In his family of 6 members, 4 are grown up people. He has two plough bullocks and 7 head of other cattle. His crop was worth Rs. 178. His expenditure was:—

Grown in his own field, consumed as food at home.	Jowari 5, seers a day = $7\frac{1}{2}$ Khandies...	...	Rs. 56	0	0
	Wheat, 160 seers = $\frac{1}{2}$ do.	...	6	0	0
	Pulses	$1\frac{1}{2}$ do.	18	0	0
	Salt	...	3	6	0
	Oil	...	12	0	0
	Onions, &c.	...	9	0	0
	Gur	...	5	0	0

Total 109 6 0

Clothing—

2 Sarries	...	...	...	Rs. 4	0	0
3 Pagrees	...	...	...	4	0	0
8 Dhoties	...	...	...	7	0	0
4 Blankets	...	...	...	3	0	0
Cholies	...	...	...	2	0	0
Wages of boy servant	...	...	...	4	12	0
Weeding expenses	...	...	...	5	0	0
Rent	...	...	...	26	0	0

Total 165 2 0

There was a surplus of Rs. 12-14-0.

NOTE.—The cereals consumed by these two cultivators appear to be greatly over stated. The probable surplus I calculate at Rs. 50 and that of Narrain at Rs. 125.

Mannu sold cotton worth Rs. 38, linseed worth Rs. 5, and mung worth Rs. 3.

The houses of these ryots are mere huts with one room and a verandah.

There are one or two cattle-sheds close to the dwelling houses. Grain is kept above ground in basket work stores, thatched on the top. The cost of such a house is under Rs. 25. Every ryot sells produce first to pay rent and pressing debts. Generally there does not remain much to be stored. Cotton and linseed are all sold, and these are the crops which enable a cultivator to lay by some cash which is generally buried for safety as a provision against bad times. Few cultivators lend money or enter into trade. Expenditure on marriages or for purchase of cattle occur now and then. A marriage costs from Rs. 75 to Rs. 125, and it is mainly for this that recourse is had to the money-lender. If he had only to pay simple interest at 12 per cent he could often manage to pay off his debt in good seasons; but what keeps him struggling on are the devices of the money-lender which hardly allow a debtor, when once involved, to free himself.

Mr. Bhargao Rao, Extra-Assistant Commissioner in Narsinghpur, has served in that district under three years, and at Nagpur and Wardha under 10 years.

He considers that the agricultural classes of Narsinghpur are deficient in economy,—the land-holders especially—but the cultivators of fairly large holdings, not burdened with large families ought to be prosperous. Their style of living is not costly. Their food is of an ordinary kind, and their clothing not valuable. All the members of the family do not work to the full extent. A cultivator of some standing would expect to keep a servant though there may be members of his family fit to do the work themselves. The origin of most of the indebtedness is the costliness of their childrens' marriages or of their pilgrimages and such like unremunerative expenses. The debts of land-holders are increased by their maintaining useless retainers. Land-holders are thoughtless, and are ambitious of keeping up large and costly houses. They will build at heavy expense though not in a position to afford the necessary repairs. The cultivating classes have not learnt to adapt themselves to the changing circumstances of these times, and they do not care to proportion their expenses to their incomes. The folly of employing Mukhtiar and agents has prevailed to such an extent that even a cultivator of some standing keeps his Mukhtiar. These men are unscrupulous and bad servants, and apparently help to get their masters into debt or to keep them from getting free. A cultivator who once gets into debt find great difficulty in getting out of it. When grain is borrowed it has to be repaid with 25 per cent. in addition some 6 or 7 months after. Failure to deliver on the stipulated date carries with it a penalty of say from 50 to 100 per cent., and the cultivator notwithstanding all his exertions gets deeper and deeper into debt. They also frequently borrow and give agreements to sell their produce to the lender at very low rates, and in case of failure they are bound to pay the price at double these rates. A case was noticed a few days ago in which a Malguzar had received 11 manis five years previously—and had executed a deed for 51 manis. An enquiry into the indebtedness of the Malguzars of this district showed that out of 950 men, 634 were in debt; of the latter 6 per cent. had debts equal to one year's jama, 24 per cent. of more than one year's and less than five years' jama, 70 per cent. of more than five years' jama. The highest amount of the debt was 30 times the jama of the village. As regards cultivators the percentage of debtors is estimated at from 25 to 30 per cent. and their debts do not run so high, and exceed five years' rent in a very few cases.

The following are some typical cases in the Narsinghpur District:—

<i>Questions.</i>	CASE No. I.	CASE No. II.
	<i>Answers.</i>	<i>Answers.</i>
IV.—Area of holding.	Area 216 bighas and 10 biswas, but of this nearly half is rented out to others for Rs. 108 held on occupancy tenure.	19 acres with occupancy rights,
V.—Members of family.	Nine members of the family.	Seven members of the family, including two children.
VI.—Amount and value of food grain raised in an average year.	100 manis of wheat and other grain, valued in all at Rs. 800.	Wheat and gram 20 manis valued Rs. 150.
VII.—Amount and value of other produce ordinarily raised.	Cotton and linseed, valued at Rs. 100.	Linseed, &c., Rs. 25.
VIII.—Annual rental, including cesses,	Rs. 229.	Rs. 56 rent.

IX.—Amount paid in money or kind for hired labour.	One servant for the whole year, and one of four months. Total cost Rs. 39, besides grain paid for laborers in cutting, &c. valued Rs. 75.	One servant all the year round Rs. 24. Temporary men employed for sowing, Rs. 3. Value of grain given to laborers in cutting and the quantity of seed with sewai, Rs. 75.
X.—Amount spent annually in purchasing necessities.	No grain is purchased; salt, &c. at a cost of Rs. 20 annually.	About Rs. 50 in purchasing kodo and rice and other necessities.
XI.—Description of house and out-houses.	Two tiled houses, one 50 cubits in length by 15 in breadth; divided into four rooms, one a cook room, other to keep clothes and other valuables, and two other rooms used by the family members; bullock shed is a tiled one having walls of sticks, plastered over with mud, the dimensions being 25×9 cubits, the value of the houses with compound Rs. 500.	One tiled house 16×9 cubits having only three rooms, one of which is used for cattle, a small compound, value of house about Rs. 30.
XII.—Number of cattle and other livestock.	Eight bullocks and three buffaloes and a cow.	Two bullocks and three other cattle, a cow, and two calves.
XIII.—Detail of other property.	A rather well-to-do cultivator, having the necessary gold and silver ornaments and clothing, &c., valued Rs. 1,000.	Has no ornaments of any value, ordinary cooking, and other utensils and clothes valued Rs. 50.
XIV.—Detail of grain in stock.	60 manis of grain in store.	No grain in store.
XV.—Estimated annual surplus of income, after allowing for expenses of living, cost of cultivation, &c.	Annual surplus is estimated at Rs. 300.	Has no surplus for his maintenance; he is obliged to let carts on hire to go to the jungles and fetch firewood, and sell the same.
XVI.—How was surplus income of any given years disposed of, viz. hoarded, lent, devoted to marriage expenses, &c.	It is very difficult to ascertain this precisely; but what the cultivator does is to save the surplus to convert into ornaments, spend on marriages and the like. Grain is not sold, but is reserved sometimes to meet contingencies.	Any savings go towards payment of debt.
XVII.—Have debts been contracted? If so, state amount, and how debt originated, payments since made, and how the account now stands?	No debt borrowed for many years past.	Is indebted to the extent of Rs. 150 original debt out of Rs. 200 contracted six years ago, since which time he has been able to pay off only Rs. 50 and interest.
XVIII.—If grain has been borrowed, on what terms? and is the account one always running with a balance against the borrower?	Has his own seed grain, and does not borrow from others.	Grain is always borrowed for seed, the usual rate of interest is 25 per cent or sewai. The Malguzar advances grain and realizes it with interest in kind at the time of harvest; no grain debt in arrears.

CASE III.

CASE IV.

Questions.	Answers.	Answers.
IV.—Area of holding.	Area 31 bighas 17 biswas, held on occupancy tenure.	Area 34 bighas, held on absolute occupancy tenure.
V.—Members of family.	Eight members all grown up.	Seven members.
VI.—Amount and value of food grain raised in an average year.	40 manis of wheat, gram, bajra—valued Rs. 240.	75 manis of grain of all sorts, valued Rs. 550.
VII.—Amount and value of other produce ordinarily raised.	Cotton and linseed.	None produced.

VIII.—Annual rental including cesses.	Rs. 95 rent.	Rs. 67.
IX.—Amount paid in money or kind for hired labour.	One laborer all the year round and one for six months; total amount of wages Rs. 45 paid in cash. Besides at harvest cost of cutting, &c. Rs. 50 paid in kind.	No servants employed permanently; cost of watching, cutting, &c. Rs. 75.
X.—Amount spent annually in purchasing necessities.	About Rs. 50 including salt, ghee, oil, &c., and rice.	No grain purchased, other necessities worth Rs. 50 purchased.
XI.—Description of house and out-houses.	One tiled house 20 cubits in length by 9 in breadth with verandas on two sides, the house having a cooking room and two other spacious rooms; another tiled house for cattle 16×10; this has only one room with enclosure walls. Both the houses have a small compound in front and rear, covering an area of 500 square yards. Valued in all Rs. 250.	Has a dwelling house 20×9 with verandah and compound with a small tiled shed for cattle 12×9; the house being divided into three rooms, value of the two tiled buildings together is estimated at Rs. 200.
XII.—Number of cattle and other livestock.	Six plough bullocks, one mare and ten other head of cattle.	Six bullocks and twenty-five other head of cattle including buffaloes, cows and calves, &c.
XIII.—Detail of other property.	It is very difficult to get the details of property, the cultivator has gold and silver ornaments, pots, utensils and clothes at the estimated value of Rs. 800.	Gold and silver ornaments, clothes, brass and copper utensils of the aggregate value of Rs. 1,000.
XIV.—Detail of grain in stock.	About 40 manis of wheat and gram in store.	50 manis of grain in store.
XV.—Estimated annual surplus of income, after allowing for expenses of living, cost of cultivation, &c.	The estimated surplus income from cultivation would be Rs. 50, but the cultivator lets out carts on hire. He also goes to the jungle and sells fire-wood and thus earns an additional income of Rs. 100.	Surplus income is estimated at Rs. 200, including sale of ghee, cart hire, &c.
XVI.—How was surplus income of any given years disposed of, viz., hoarded, lent, devoted to marriage expenses, &c.	Surplus is converted into ornaments and is also laid by to meet expenses of marriages among his children.	Surplus stored to meet unexpected charges and expenses of marriages, &c.
XVII.—Have debts been contracted? If so, state amount, and how debt originated, payments since made, and how the account now stands?	No debts borrowed.	No debt borrowed for many years past.
XVIII.—If grain has been borrowed, on what terms? and is the account one always running with a balance against the borrower?	The cultivator has his seed grain and does not borrow from others.	Has his seed grain and does not borrow; sometimes advances grain to others at 25 per cent interest.
	CASE No. V.	CASE No. VI.
Questions.	Answers.	Answers.
IV.—Area of holding.	Area 183 bighas and 14 biswas (absolute occupancy tenure.)	11 acres and 3 roods in this village on occupancy tenure, and 7½ acres in the adjoining village as tenant-at-will.

V.—Members of family.	Twenty members.	Ten members including 4 children.
VI.—Amount and value of food grain raised in an average year.	Wheat, gram, &c., 300 manis valued Rs. 2,000.	Paddy, wheat, kodo and kutki, 22 manis valued Rs. 150.
VII.—Amount and value of other produce ordinarily raised.	Tilli, linseed, &c. Rs. 200.	No other crops grown.
VIII.—Annual rental, including cesses.	Rs. 325.	Rs. 25-11-0
IX.—Amount paid in money or kind for hired labour.	Six servants throughout the year, and eight for a month or so, total cost Rs. 250. Besides value of grain paid to laborers for cutting, &c., Rs. 200.	No permanent servant employed. Value of grain paid to labourers at the time of harvest, as also the seed grain, and interest in kind amounting to 12 manis. Rs. 70.
X.—Amount spent annually in purchasing necessities.	No grain is purchased; salt, oil, &c., purchased at a cost of Rs. 200.	No grain is generally purchased, but when the yield runs short or the produce is taken away by Malguzar in payment of interest then Rs. 100 worth of grain and other necessities are purchased, or grain is borrowed from the Malguzar.
XI.—Description of house and out-houses.	Owns ten houses, small and large, all are tiled; three of these are used as human dwellings; these are very spacious ones 40×16 cubits with verandahs and compound. Each house has a cook-room, four other rooms and hall; the other houses are also tiled ones, used for cattle, storing grain, straw, implements, &c. All estimated at Rs. 2,000 in value.	One tiled house 16×9 cubits with verandah having walls of mud and three partitions; one of which is used as shed for cattle; a small piece of ground 30 by 10 cubits serves as a compound, which is hedged all round. Valued Rs. 30.
XII.—Number of cattle and other livestock.	Thirty bullocks and 90 other cattle, including buffaloes, cows, calves, &c.	Two bullocks, and three cows and two calves.
XIII.—Detail of other property.	Has gold and silver ornaments, clothes, pots and utensils, &c., estimated value Rs. 3,000.	Has the usual cooking and other utensils, clothes and silver ornaments. In all the value of other property is estimated at Rs. 100.
XIV.—Detail of grain in stock.	200 manis of grain in store.	No grain in store.
XV.—Estimated annual surplus of income, after allowing for expenses of living, cost of cultivation, &c.	Surplus income is estimated at Rs. 1,000, this includes income from grain and money dealings that the cultivator carries on.	No surplus, what is required for maintenance is earned by cart hire and other labor; his two sons work as laborers at the Malguzar's house.
XVI.—How was surplus income of any given years disposed of, viz., hoarded, lent, devoted to marriage expenses, &c.	Income laid by to meet unforeseen expenses; marriages, &c.	Any surplus is devoted to payment of debts.
XVII.—Have debts been contracted? If so, state amount, and how debt originated, payments since made, and how the account now stands.	No debt incurred.	The amount of debt at present is Rs. 400, bearing interest at one and half per cent per month besides 16 manis of wheat; has been in debt for the last ten years; original amount was Rs. 200; since then bonds have been renewed three times.

- XVIII.—If grain has been borrowed, on what terms? and is the account one always running with a balance against the borrower?
- No seed borrowed, has seed grain of his own, and lends to others occasionally.
- Grain is borrowed at "sewai" * 25 per cent rate of interest; at present the tenant owes 16 manis of grain.

<i>Questions.</i>	CASE No. VII.	CASE No. VIII.
<i>Questions.</i>	<i>Answers.</i>	<i>Answers.</i>
IV.—Area of holding.	Area 11 acres and 3 roods, on occupancy tenure; and 10 acres as tenant-at-will.	Area 57 acres 3 roods, held on occupancy tenure.
V.—Members of family.	Six members.	Seventeen members.
VI.—Amount and value of food grain raised in an average year.	Wheat, gram, paddy, &c., 30 manis=Rs. 200.	75 manis of wheat, gram, paddy, &c., valued at Rs. 65C.
VII.—Amount and value of other produce ordinarily raised.	No other crops produced.	None.
VIII.—Annual rental, including cesses.	Rs. 51-8-0 paid as rent.	Rs. 110 rent.
IX.—Amount paid in money or kind for hired labour.	No servant permanently employed, but value of grain given to laborers employed in cutting the crops, also price of grain paid to village servants, and the seed with sewai amount to 12 manis valued Rs. 75.	Two servants at 4 manis per annum and one man employed in grazing cattle for four months, his wages in wheat amount to 1 mani and a quarter. Total quantity of grain paid to servants, also that paid to labourers employed in watching, the seed with sewai repaid to malguzar amounts to 30 manis. Valued Rs. 250.
X.—Amount spent annually in purchasing necessities.	No grain is purchased, other articles valued Rs. 15.	No food grain is purchased but other necessities worth Rs. 25.
XI.—Description of house and out-houses.	Has a tiled-house 15×9, with veranda. The house has walls all round and has three partitions used for cattle; small compound hedged in, valued Rs. 50.	Three tiled houses, two of which are used for dwelling, each being 22×15 cubits having four rooms, attached to these is a cow-shed a tiled one, all of the value of Rs. 150.
XII.—Number of cattle and other live-stock.	Three bullocks, and no other head of cattle.	Eight bullocks and 12 other head of cattle.
XIII.—Detail of other property.	Has the ordinary cooking utensils and clothes, valued Rs. 50.	Ordinary cooking utensils and clothes, and few silver ornaments valued Rs. 100.
XIV.—Detail of grain in stock.	No grain in store.	15 manis of wheat for seed.
XV.—Estimated annual surplus of income, after allowing for expenses of living, cost of cultivation, &c.	Hardly any surplus from cultivation. Lets carts or hire and earns about Rs. 50	Hardly any surplus from cultivation is left; any deficiency is made by earnings of cart-hire, sale proceeds of ghee and the like.
XVI.—How was surplus income of any given years disposed of, viz., hoarded, lent, devoted to marriage expenses, &c.	Surplus if any goes towards the payment of debts.	Should any surplus remain it is spent in making ornaments.

* NOTE.—An old cultivator, but is too much involved; is a simple and ignorant man, does not know how much he owes, and what he pays, and is at the mercy of the Malguzar, his creditor.

XVII.—Have debts been contracted? If so, state amount, and how debt originated, payments since made, and how the account now stands. Is now indebted to the extent of Rs. 150, bearing interest at one and half per cent per mensem. The debt was borrowed nine years ago when the crops had failed; the original amount was Rs. 150, the money was partly raised for marriage expenses of his children. The cultivator estimates that he has paid about Rs. 250 in these 9 years, but the original amount still remains unpaid. Indebted to the extent of Rs. 150 borrowed last year for marriage expenses of his child.

XVIII.—If grain has been borrowed, on what terms? and is the account one always running with a balance against the borrower? Grain (seed) is borrowed at sewai or 25 per cent rate, in the case of wheat, &c. Paddy is borrowed at double rate *i. e.*, 100 per cent. The cultivator pays up the seed regularly with interest. A part of the seed grain is borrowed and is repaid with sewai.

CASE No. IX.

CASE No. X.

Questions.

Answers.

Answers.

IV.—Area of holding.

Area 29 acres, with occupancy rights.

110 acres held on absolute occupancy tenure.

V.—Members of family.

Nine members, including 3 children.

Twenty members.

VI.—Amount and value of food grain raised in an average year.

60 manis of wheat, gram, paddy, &c., valued Rs. 550.

Gram, wheat and paddy, 175 manis, valued Rs. 1,300.

VII.—Amount and value of other produce ordinarily raised.

None.

Sugar-cane, Rs. 150.

VIII.—Annual rental including cesses.

Rs. 86 rent.

Rs. 259, paid as rent.

IX.—Amount paid in money or kind for hired labour.

No permanent servant; quantity of seed grain repaid with sewai together with that paid to labourers employed in reaping, the harvest amount to 20 manis valued Rs. 170.

Two permanent servants who are paid in kind; total quantity of grain paid to servants, labourers, seed grain and interest, &c., amounts to 60 manis, valued Rs. 400.

X.—Amount spent annually in purchasing necessities.

No grain purchased for food; but other articles purchased worth Rs. 20.

No grain is purchased; salt and other necessities, worth Rs. 50.

XI.—Description of house and out-houses.

A tiled house 25×15 cubits with a tiled cowshed attached to it; the house having four compartments. Value Rs. 75.

Owns four tiled houses, three of these are large, 25×15 cubits; one of them is the main house divided into four rooms, one is used for cooking, the other dining, and two other rooms used by the elderly female members of the family; the two houses are on the sides, joining the main building; each of these are divided into five rooms; some of which are used as store rooms and also as the sleeping apartments of members. In front is a large house 50×15, having walls all around, with a verandah which is used as office room, or kacheri; these four houses enclose a fine open square. The cost of the buildings is estimated at Rs. 800, but I am inclined to think that when built, these houses must have cost Rs. 2,000.

XII.—Number of cattle and other live stock.	Four bullocks and 7 other heads of cattle.	20 bullocks, and other heads of cattle.
XIII.—Detail of other property.	Pots and clothes and a few silver ornaments valued Rs. 200.	Considering the grand appearance of the houses the cultivator has not many ornaments, he possesses the ordinary silver ornaments and few of gold, pots and clothing all valued at Rs. 800.
XIV.—Detail of grain in stock.	No grain in store.	Has no grain in store.
XV.—Estimated annual surplus of income, after allowing for expenses of living, cost of cultivation, &c.	Surplus about Rs. 100.	Surplus is estimated at Rs. 200.
XVI.—How was surplus income of any given year disposed of, viz. hoarded, lent, devoted to marriage expenses, &c.	Surplus laid by to meet unforeseen charges.	Surplus applied towards payment of debts.
XVII.—Have debts been contracted? If so, state amount, and how debt originated, payments since made, and how the account now stands?	Rs. 200 borrowed two years ago for the marriage of children; the cultivator has not paid even interest, and the debt comes up to Rs. 300.	Is involved to the extent of Rs. 1,200. The amount was borrowed three years ago for marriages and building a house; has been able to pay off interest alone.
XVIII.—If grain has been borrowed, on what terms? and is the account one always running with a balance against the borrower?	Seed grain is borrowed at sewai rate of interest. It is repaid at the harvest time.	Seed grain is borrowed; the rate of interest being sewai or 25 per cent. for wheat and other grain; for paddy the rate is 100 per cent. The cultivator is not in debt so far as grain (seed) is concerned.

The following account has been also given for the Wardha district by Mr. Laurie, C. S., He has served in these Provinces as an Assistant Commissioner since 1873, in the Jubbulpore, Bilaspur and Wardha districts. He has been Assistant Commissioner in Wardha from February 1877. He has only sent up the details for three cultivators although he had compiled many more. The manifest untruthfulness of their details and their variance from the Patwari's records both as to area under crop and as to outturn, were so great that Mr. Laurie could not trust to them:—

“ The ordinary economic condition of the portion of the agricultural population directly engaged in cultivation and possessing proprietary or occupancy interest in land, is, I take it, capable of being briefly stated as under. They are fairly well housed, clothed and fed, but their standard of comfort is low, and there is no broad margin of difference distinguishing their economic *status* from that of peasants having no such interests in the soil. It would hardly be possible by simple inspection to tell the house and holding of a *maurusi* ryot or a *malik makbuza* from that of a tenant-at-will. If any distinction is observable, it is in the occasional substitution of tiles for thatch and in the greater number of brass pots and platters which the superior house contains. Extra furnishings there are none, and the rough box in which the family ornaments and fine raiment are deposited, is as insecure as the suspended bundle which contains the little all of the daily labourer. It is in this box that we must look for the evidences of superior means. Comfort does not pass into luxury in India as in Europe by almost insensible gradations; there is a sudden bound from providing a better class of household utensils to the purchase of earrings and bracelets of gold, and the indulgence in expensive clothes. It must be noted, however, that what seems extravagance is most commonly the outcome of a different impulse. There are isolated cases on tradition where an unusually profitable year has led a cultivator out of mere bravado to get a silver ploughshare made for his plough, and another to go daily clothed in garments of as fine thread as a Prince would wear. These instances, however, are quoted as absurd by the ryots themselves. Commonly great economy is exercised in the use of those articles which to our ideas were unthrifty purchased. Only on occasions of ceremony or festival are the fine dresses and jewellery brought forth from their rude receptacle. The articles themselves are always capable of being reconverted into cash. From one point of

view, therefore, the buying of these things is but a mode of fixing capital ; but I am inclined to consider that the directing cause is ignorance of any other advantageous objects of expenditure owing to the lowness of the standard of comfort which prevails ; nor is it to be expected that a class of people who but sixty years ago were liable to be stripped of all movables not capable of speedy concealment by the incursions of Pindaree raids, should be imbued with the desire of improving the fittings of their dwellings in proportion as their fortunes improved. We find then, as I have said, that the *malik makbuza* or the occupancy tenant has a house which keeps out most of the rain and wind, although its chambers are few (rarely more than two in number) small and gloomy ; that he has generally food enough for himself and family and good vessels to cook it in, and that in addition to work-a-day apparel he has store of holiday raiment and some fixed capital in the form of jewellery. His clean but naked house shows no signs of the comforts which good means can buy. Outside, all is filth and disorder ; he performs his ablutions on two slabs in his back yard as he surveys the refuse which he accumulates as manure for his fields.

High cultivation is not practised in these parts, and the holding of the permanent tenant is not to be distinguished from that of the tenant-at-will by any such indication. The *malik makbuza* though attached to his land, does not display in dealing with it the painful economy and close attention to the capabilities of every work which the French peasant proprietor displays. He does his ploughing regularly and sows in the usual fashion, but no extra trimness shows the fond pride of the proprietor of the plot.

Here and there an occupancy tenant is found, who has so far profited by his thrift, as to have a little store of rupees laid by, which he lends out at interest to the less prosperous. Ordinarily, however, there is little difference between the man who has an interest in his holding and the tenant-at-will in the matter of command of cash. The state of indebtedness seems to be common to all classes of ryots. The Registration returns show that documents affecting *malik makbuza* holdings are a considerable item in the total of instruments relating to land, and both from personal knowledge and from enquiries made of many respectable Malguzars I am assured that the proprietorship of a holding by no means carries with it an insurance against the need to borrow. In one or two instances I have traced the beginnings of the need to the effects of an ill-judged pride on the part of the independent farmer, which led him to look upon personal toil as dishonorable, and to sit at home while hired servants looked after his land to the loss of half his profits ; but in general the number of relatives, in addition to his family, which the man of means has to support so considerably, straitens those means that the holder of the land has to work as hard as his own ploughman, and to compel his family to work also. The common cause of indebtedness is a well-known one, the practice of wasteful expenditure on marriages and domestic occasions of like importance. In obeying this custom, the well-to-do are not more fortunate than the poor, for it requires that the prodigality displayed shall be proportionate to the income of the spender. As at Irish wakes, the credit of the family depends upon a due observance of the proportion. The more daughters there are the more the need of borrowing. In fact it may be said, I think, that this custom has done more than anything else to familiarize the people of India with the idea of debt as an inevitable and almost natural experience for every household.

What is the common misfortune of all classes carries with it no dishonour. The sentiment against borrowing which is so strong in the West, has here, therefore, no existence, and from contracting a loan upon special occasions the transition is easy to the practice of borrowing whenever the smallest need of money is felt. There are few ryots of either the occupancy or the non-occupancy class who do not every year obtain an advance from the *mahajun* before their sowings begin, which they repay in the main out of the produce of their tillage. They do not seem to consider the necessity a hardship, but rather feel that they have made friends with "the mammon of unrighteousness", who will stand by them in the time of need by letting his advances run on without demand. In fact, I know of a native gentleman of means who was urged by his friends to run into debt for that very reason.

When indebtedness is no disgrace, facility of borrowing money makes the greater debtor. It is for this reason that owners of their holdings are not less incumbered than tenants-at-will, despite their advantages. The recent changes in the law respecting the sale of land will check the readiness of usurers to advance money to this class. Difficulties in the way of realizing debts may make interest higher ; but if this dearth of money balks the tendency to borrow and makes thrift take the place of the *Sowkar*, the result will be on the side of good.

I have endeavoured to form some opinion of the proportion of agriculturists who are in debt in this district, by consulting trustworthy Malguzars of different parts. An examination of *Sowkars'* books sufficient for this purpose was not to be attempted within the time allowed. Among those questioned, were the *Patels* of Chitora, Pounar, Mohgaum, Kaserkera, Salor, and the *Kamdars* of Deoli and Barbari. As *Malguzars* their means of obtaining information on the point is of course second only to that of the *Sowkar*. The general opinion was that in every village one or two ryots would be found deeply in debt and that of the rest about 50 per cent would be found more or less incumbered. I do not think this was an excessive estimate. Of the *malik mak-*

buzas I examined, the majority confessed to at least Rs. 100 of debt. There are two points upon which a ryot will never give exactly correct replies, the one being the amount of the produce of his fields, and the other the sum total of his debts. Without the examination of *Sowkars'* books which I have already said could not be effectively made within the time allowed, all estimates of the average proportion of debts to income must be of the character of guess-work. A man will acknowledge that he is in debt, but will not give the details, lest the statement might hereafter be wrested against him. From what I can make out, the debts of those ryots who are not excessively incumbered range from Rs. 30 or 40 to Rs. 100, and as the average gross income of the cultivating class may be said to range from Rs. 100 to Rs. 300 per annum, the proportion on this calculation falls at about one-third of the gross income.

I now proceed to give some typical instances of the economic condition of *malik makbuza* and occupancy tenants, answering to that end in a tabulated form the various particulars demanded in query 3 of group 9. The facts noted down were obtained by personal enquiry of the deponents, and checked, as far as possible, by reference to the *Malguzar* and to the *Lagwans* of the village concerned. For all that there can be little doubt that the crops are to some extent understated.

In the foregoing description of the economic condition of the ryot, reference was omitted to be made to what in some countries (such as Flanders) is an important supplement to the income which a peasant proprietor derives from tillage, I mean the keeping of kine. An occupancy tenant very often possesses two cows and two buffaloes; but as the grazing they get and the artificial food they obtain out of the grazing season is not always sufficient, they do not yield a large return to their owners. They supply his household wants. And little more trading in ghee and butter is the speciality of the *Ganlis*, who live in the hilly country where forage is abundant. A cultivator rarely leaves part of his holding in grass for the sake of his cattle, as it would not pay him to do so. The cattle are fed in herds on the common pasture ground of the village waste land, which is gradually taken up by the plough.

Instance of Malik Makbuza tenant No I.

Name, &c.	Area held.	No. of family.	Food grains raised.	Value of other produce.	Rent paid.	Expenses on hired labour.	Purchase of necessities not raised on soil.	Kind of house, &c.	Livestock.	Stock of grain.	Debts.
1	2	3	4	5	6	7	8	9	10	11	1
	(a)	4, i. e. himself, 2 wives, and a son of 10 years; himself and two wives work a field.	15 khandis <i>Jawari</i>	2 khandis <i>Kapas</i> at Rs. 40 the khandi = Rs. 80.		2 ploughmen at 6 kurnas each per mensem and Rs. 10 in cash = Rs. 74.	Clothes Rs. 20. Salt Rs. 3-4-0. Oil Rs. 15-0. Ghee Rs. 8. Miscellaneous Rs. 10.	Two roomed tiled house with verandah; no out-houses but has one cattle shed.	4 plough bullocks	None.	None.
	(b) Maafi field; area 16 acres 3 roods. Maurusi fields (c) = 31 acres 2 roods 16 poles. Total area held 55 acres 16 poles.		(b)	(b) About Rs. 20 worth of minor produce, such as <i>Mirchi</i> & <i>Baigana</i> 3 khandis linseed value = 60.	Rs. 32-4-0	(b) Weeding Rs. 25. (c) Picking Cotton Rs. 6. (d) Village dues Rs. 5.					
		(c) 10 Khandis wheat. (d) 1 khandi <i>tur</i>									
		N. B. The rates being Rs. 9, and 13 per khadi, the value of above = Rs. 265. <i>Tur</i> was consumed at home, value about Rs. 2									
			Total Rs. 267.	Total Rs. 160; total (4) + (5) Rs. 427.		Total Rs. 110 Total + (6) + (7) (8) Rs. 198-8 Balance Rs. 228-8 from which deduct Rs. 48 value of 20 maunds of food grain, leaves net savings Rs. 180-8.					

Instance of Malik Makbuza tenant No. II.

Name &c.	Area held.	No. of family.	Food grain raised.	Value of other produce.	Rent paid.	Expenses on hired labour.	Purchase of necessaries.	Kind of house &c.	Live stock.	Stock of grain.	Debts.
1	2	3	4	5	6	7	8	9	10	11	12
(a)	Malik Makbuza, area, 5 acres and 3 roods.	9 viz. 2 brothers, 2 sons 4 women (wives of himself, of his brothers, and of a son).	7 khandies jowari kandi 4 wheat, 3 kuras of tur = value of about Rs. 115-0-0	4 khandies cotton; 2 khandies linseed = value about Rs. 200.	Rs. 31-8-0.	Ploughing done with-out hired aid; only assistance in reaping jowari & wheat cost about Rs. 8-0-0, village dues Rs. 2-0-0.	Oil, Salt, masala, &c Rs. 30; clothing Rs. 40; Total Rs. 70.	Two room ed thatched house (the brothers pay their keep & supply milk lit-tle profit. One cattle shed.	4 cows, two plough bullocks. They keep & supply milk lit-tle profit.	None	None
(b)	Tenant-at will; area 11 acres, 20 poles. Total acreage 16 acres 3 roods, 20 poles.			Total (4) & (5) Rs. 315.		Total Rs 10	Total (6) (7)&(8) Rs. 111-8 Balance Rs. 203-8 From this, food and seed must be purchased. Cultivators mostly sell all their produce and buy for their home consumption.				

Though the acreage is not a third of that in Instance I, the soil is about 3 times as good; 2 roods 20 poles were left uncultivated:—

NOTE.—I calculate the family's consumption and any extra seed at 10 khandis, which at 11 Rupees=110, leaving a saving of Rs. 93-8-0. G. J. Nicholls.

Instance of Malik Makbuza tenant No. III.

Name, &c.	Area held.	No. of family.	Food grain raised.	Value of other produce.	Rent paid.	Expenses on hired labour.	Purchase of necessaries.	Kind of house &c.	Live stock.	Stock of grain.	Debts.
1	2	3	4	5	6	7	8	9	10	11	12
Field malik makbuza, area 15 acres, 24 poles.	4 viz. himself, 1 brother, 2 women.	12 khandis jowari, 1 khandi of tur, 1 khandi of Mung = about Rs. 120.	2 khandis of cotton = Rs. 80.	Rs. 25.	Rs. 2 to weeders.	Oil, salt & other masala Rs. 20, clothes Rs. 30; total Rs. 50.	Two-roomed tiled house with verandah, no out-houses. One cattle shed.	Two plough bullocks	Rs. 10 in current building, tiled houses 2 years ago.	None	
				Total (4) & (5) Rs. 200.			Total (6) (7) & (8) Rs. 77; balance Rs. 123. From this food and seed have to be provided.				

NOTE.—I calculate the household consumption at 4 khandis=Rs 44 and seed Rs. 4; Total Rs. 48, leaving a saving of Rs. 57 on the year's operations. G. J. Nicholls.

Mr. Imrie, C. S., joined the Central Provinces' Commission in 1876, and has served as Assistant Commissioner in Nagpur and Narsinghpur. He was transferred to the Saugor district in March last, and has been in camp for about two months in different parts of the district. He, like the other selected officers who are answering these questions, has had no experience in famines or relief measures. With the aid of intelligent *Malguzars* resident on their estates, he has examined 19 cultivators belonging to 5 selected average villages. Two villages belong to the south eastern tahsil, in one the cultivators have been unusually fortunate, in the other the reverse. Of the three villages in the Saugor Tahsil two are owned by the same *malguzars* and the cultivators are rather above the average; the other is a fair specimen of a village held by many sharers, having a great variety of soils, and differences of condition among the ryots.

The conclusion arrived at by Mr. Imrie and the *malguzars* whom he has consulted is that 80 per cent of the cultivators of the district are believed to be in debt, between 20 and 30 percent hopelessly so. But it must not be supposed that those who are burdened with debt greatly exceeding their annual income, are therefore in a wretched state. No depth of debt could make a cultivator live more cheaply than the run of his fellows. His habits remain the same; he spends little in luxuries at any time; his house and fields remain as neat or neglected as it suited the task of their owner in better times. His expenditure at marriages and fairs must be curtailed, and if nothing can help him, at last his fields must be taken away.

There appears to have been little or no decrease since the settlement in the number and extent of the holdings of the privileged classes of cultivators. There are some villages where there has been a decrease of such holdings to the extent of 30 per cent, but in others there has been a still greater increase. In one of the five specimen villages taken by Mr. Imrie, every cultivator has acquired occupancy rights. If the land thus remains in his hands, the inference drawn is that his debts do not weigh very heavily on him. He may never be able to liquidate them, but if they do not rapidly increase at compound interest, they simply keep him from useless expenditure and stimulate him to work to keep his ancestral fields, and it may be presumed that the creditor takes care that justice is done to the land.

Such debts, stationary in amount, and always just too high to be paid off, or brought under, would be for the benefit of both the land and cultivator, were it not for the custom which requires an absurd outlay on marriages. As things go, this nominal indebtedness must be the normal state of the cultivator. Excluding years of unusual demand for other parts of India, or of local famine, (and even in such years it is the trader and the money or grain lender who have profited) excluding such rare seasons, the profits of agriculture cannot be great. The cultivator's gains are slow and uncertain, and when he has gathered in some money, he cannot turn it to good use. "It is generally a dead weight to him till he spends it in festivals or in building temples." Few of them lend their savings. The honest hardworking cultivator who has made his land pay, does not know how to invest his savings. When land can be purchased, he buys it. In this district much land, the petty holdings of *malik mak-buzas* and others, is increasingly bought by cultivators, rather than by traders and money lenders. The desiderata, in the interest of cultivators and under present conditions of feeling, are free sale in small holdings, every thing less than a village, and knowledge of modes of sinking money in land.

Whether he be in debt or not, the economic condition of the tenant remains pretty nearly unaltered. He has a house of mud walls with a tiled roof. It costs from 15 to 20 rupees to build, and needs petty repairs each year as the rains set in. His household may consist of two or three women, and say a couple of children, unable to do any paying work. These do all the household work. At certain seasons hired labour must be employed. This is during the ploughing, sowing and weeding times and at harvest, and the time for cutting grass. The growth of the "kans" grass must be carefully checked.

Hired labourers at these times earn enough to feed their families. Perhaps a third, sometimes a half, of these come from Bundelkand and the hilly parts of Saugor, the rest are villagers. They are mostly paid in kind, and what is given is not counted in reckoning the gains of the season. It is from what is shown on his threshing floor that the produce per acre is deduced by the official and the harvest returns by the cultivator. It is still more difficult to calculate his other expenses. Little rice or sugar is produced. These he must purchase at from 5 to 15 rupees, and salt for his family and cattle costs about 5 rupees a year. He smokes tobacco if he can get it. Fuel is never a heavy item.

The women of the family likely come provided with a many years' store of clothing on their wedding, but even these may have been got through or succumbed to white ants. For the coarser cotton clothing, it is the custom where cotton is grown to have, at a small charge, so many seers worked up in the village, if not in the house. Then there are little contributions to the village temple, to the *patwarri* and the *kotwal*, to the baid and the midwife, the barber and the cobbler, the fisherman and the scavenger, the idiot and hunchback, and the *yogi* and *byragi*, whom the cessation of the rains has let loose from the city. Then too there is the great fair at Rangir or Garhakota, and the annual pilgrimage to the Nerbudda,* if the

* I have frequently noticed the marked preponderance of the people from Saugor, Damoh, Jubbulpore, and Narsinghpur, passing through Bilaspur to or from a pilgrimage to Jaggernath at Pooree.

women of the family have any influence. The offering may be only a handful of grain, but the long journey "of many axles," would be thought an extravagant one in any other country. At least a quarter of the population of the district attend each of these annual fairs.

Mr. Imrie remarks that it would be most difficult to give exactly the income and expenditure of a cultivator who keeps no reckoning of the many small payments he makes and expenses he may incur or of the days for which he gives wages. He sows what he thinks will be the best crop, and he works as the weather allows him, and his expenditure must vary with the weather as his crops do. It never enters his imagination that a poor cotton crop may pay him better than a good crop of jowari: or, though one crop sown with another,† may shield from blight or frost in January, it may be better policy to keep them apart. The weather is his dictator, and not any thought of a future market price.

Cotton is becoming the most important *khariif* crop, and a failure of the jowari and rice is becoming of less importance.

The relief works of last year were required for the very many thousands of famine immigrants from Gwalior and Bundelkand not necessitated by the scanty rainfall in Saugor.

In conclusion Mr. Imrie observes that though he considers 80 per cent of the cultivators to be in debt, and something less than 30 per cent, to an extent exceeding their yearly income, he would put the average indebtedness at less than half the yearly gross returns of their lands. The general indebtedness may be on the increase, but not rapidly. While the cultivators hold their fields, they live in the usual simple way, supplied by their *malguzars* with grain, when their own store is exhausted. A season of drought increases their debts and reduces many to the condition of labourers, and their indebtedness keeps them from expending money in clothes,‡ and jewels. But generally their condition is far from wretched, and they are as apathetically contented as need be.

Mr. Imrie has given the result of his inquiry in the cases of 19 ryots, and has taken great trouble in the matter, but it seems of no use for me to tabulate these results, as the details of returns of income and expenditure are not reliable or are not clear.

Regarding the debts owed by these men the following particulars are of some value:—

- A. owes Rs. 250 to a creditor, and pays interest at 24 per cent. The debt was contracted some 10 or 12 years ago on account of marriage expenses. It has varied in amount from Rs. 100 to 400.
- B. borrowed Rs. 50 two years ago to meet the expense of a marriage. He has since paid it off.
- C. owes 100 or 125 rupees bearing interest at 24 per cent. Last year the debt was only Rs. 75, and is due to a bad harvest.
- D. some 6 or 7 years ago borrowed Rs. 40 for marriage expenses. It has now reached Rs. 150 bearing interest at 24 per cent.
- E. owes Rs. 100 to the lumberdars of his village; the cause of incurring the debt is unknown.
- F. owes Rs. 200 on a very old account, increased by two marriages.
- G. owing to marriage expenses owes Rs. 100.
- H. owes Rs. 40 borrowed for the purchase of bullocks.
- J. owes Rs. 200 on an old account, which is being cleared off.
- K. owes Rs. 12 borrowed on account of a bad harvest.
- L. owing to two bad harvests had to borrow Rs. 350.

One man is putting by his savings to provide for the marriage of his daughters.

One employs his savings by making petty loans. Others are increasing their live-stock.

Mr. Wasadeo Ballal Kher has served as an Extra-Assistant Commissioner in Seoni for about a year, and previously for three years in Nimar, Hoshangabad and Mandla; in other capacities in these provinces for eleven years.

He takes the case of a man owing 4 plough bullocks, being a holder of land on privileged tenure and as tenant-at-will in equal quantities having a wife and three children, besides two relations or dependents. He would farm about 15 acres. The two pairs of bullocks are worked alternately and grazed on or near the fields. For two months or more they are used in bringing fuel, timber, grass and fencing materials from the jungles. They have to trample out the corn on the threshing floor. They rest about a month in the year. Besides grass, they have the chaff, about 100 seers of teora and about 2 rupees worth of salt. They should last in vigour 5 years. A pair cost from 35 to 40 rupees. A well-to-do cultivator would have half a dozen cows enough to give a new pair of bullocks every second year. They would pay for their keep without trenching on the produce of his fields. The typical cultivator employs hired labour only at harvest time, which is remunerated in kind. So many sheaves become the right of the labourer. These are threshed on the employer's threshing floor, and he is bound to see that each man gets not less grain than 2 seers of grain a day. If the weather be unsettled he may have to offer so much as 4 seers wage.

† Mixed crops on the same land.

‡ The people in Damoh and probably in Saugor are somewhat extravagant in the matter of dress. In Damoh it seems to be a proverb that the *Lodhi*, one of the most numerous castes, "will put on his back what ought to be put in his belly."

Mr. Wasadeo Bullal Kher gives the following out-turn factors, which are probably in most cases very far below the mark :—

Wheat	3½ fold
Teora	} 4 fold.
Masur	
Batera	
Linseed	
Rice	} 10
Cotton	
Gram	
Urad	
Jowari	} 10
Kodo	
Kutki	
Sama	

But on account of the husks of rice, kodo, kutki and sama, one-half of this will represent the food return. Apparently he reckons the food out-turn of 15 acres at 24 khandis of 140 seers each. This again seems to me under-estimated. He raises his own tobacco chillies and vegetables, of which crops also he sells a part.

For his own consumption he gives over a portion of the oil-seeds he raises to the oil-presser. If the Teli keeps the oil cake he charges only ¼ anna on each seer of oil. If the cultivator takes back the oil cake he charges ½ anna per seer.

The 24 khandis of grain are thus disposed of—

Seed	...	...	6 Khandis.
Kotwal, Smith, Carpenter, Barber, washerman each 28 seers of grain	...	...	1 do.
Food of 7 persons at ½ seer a day	...	...	9 do.
Total	...	16	do.
To the 8 khandis surplus, at 5 rupees a khandi=	...	Rs. 40	
Add Rs. 5 for cotton sold, Rs. 5 for vegetables &c.	...	„ 10	
Total	...	Rs. 59	

EXPENDITURE.

Rent at R. 1 an acre for occupancy tenure land, and 1½ for other land	...	...	Rs. 16 12 0
Cesses and Patwariis fees	...	...	1 4 0
Gur	...	...	2 0 0
Salt	...	...	2 0 0
Spices &c.	...	...	3 0 0
Clothing at Rs. 3-8-0 for each adult and Re. 1 each child	...	...	17 0 0
Total Rs.	42	0 0	

Leaving a balance of Rs. 8.

Now and then a pair of bullocks past their prime come to be sold.

It seems that Mr. Wasadeo Bullal Kher, like Mr. Imrie, regards the grain saved after all expenses of cultivation and harvesting have been deducted as income. The balance saved, if it is not devoted to the liquidation of debt is turned into ornaments. The home consumption of grain is augmented by fruits, roots and other minor forest produce, or raised in the "bari." "But the saving of cereals may be left out of the account as a set-off against the additional expenditure of occasional festivals and dinner parties on a small scale." For meeting the cost of marriage ceremonies or the deficiencies of bad years, the ryot must trust to the more bountiful harvests of exceptional years. If he wishes to increase his scale of operations his first idea is to take more land under cultivation; secondly to employ more labour; lastly, to raise some special crop, such as sugar cane, which requires extra care besides the additional cost of irrigation.

Jowari yields the largest returns, but it stands longest on the ground and requires more labour and expenditure for weeding and watching; jagni, the oilseed mentioned as cultivated in Betul and Chhindwara in lands somewhat exhausted, yields about 5 fold.

Mr. Wasadeo Bullal Kher explains that he has been obliged to take a suppositious case, though he had done his best to get at facts from individual cultivators selected from different villages. The people were partly unwilling and partly unable to give him the facts required to judge of the economy of village life.

Caste of cultivator.	1 and 2			3			4		5		6	7		8		9 and 10		
	How much land does he hold.			What his family consists of.			What amount of food grain he raises.		The value of other produce of his land.		Rent or Revenue and cesses.	Expense incurred in hired labour, other than his labour and that of his family.		What amount he spends in buying necessities which he cannot raise on his land.		What kind of house and how many rooms.		
	Acres.											Workmen.		Wages.			Object.	Amount.
	Total.	For tillage.	Grazing.	Male.	Female.	Children.	Kind.	Khandis.	Kind.	Value.								
A Bagri ...	47	47	...	2	3	...	Rabi. Kharif.	60 5			Rs. 35		R. 18	Clothing. Salt ... Gur ... Tobacco.. Opium ... Miscellaneous...	50 15 15 24 12 25	Tiled. 2 Stories.	5	
A Bagri ...	48	48	...	2	4	2	Rabi. Kharif.	76 5	Sugar-cane. Cotton.	50 5	84	Harwar Charwar Miscellaneous.	15 4 4	Cloth ... Salt ... Miscellaneous ..	25 6 10	Grass. 1	1	
A Kachi ...	4	4	...	2	1	2	Rabi.	5	Sugar-cane.	40	20		5	Clothing. Salt ... Miscellaneous ..	10 2 3	1	1	
A Kachi ...	12	12	...	2	2	2	Rabi. Kharif.	16 2	Sugar cane.	20	18		2	Clothing. Salt ... Tobacco..	10 2 2	Grass. 1	1	
An Ahir ...	51	51	...	2	4	2	Rabi. Kharif.	60 6	Cotton	5	53		20	Clothing. Salt ... Tobacco.. Miscellaneous... Opium ... Liquor...	25 6 2 15 6 2	Grass 1 Tiled 1	1 1	
A Kachi ...	37	37	...	3	2	2	Rabi. Kharif.	56 5	Cotton- Sugar-cane. Vegetables.	5 125 10	...		20	Clothing. Salt ...	30 8	Grass 1	1	
A Bohi ...	17	17	...	2	1	3	Rabi. Kharif.	25 2		...	20		7	Clothing. Salt ... Miscellaneous...	20 4 6	1	1	
A Kachi ...	36	36	...	2	2	2	Rabi. Kharif.	40 5	Sugar-cane. Vegetables	40 10	48		18	Clothing. Salt ... Miscellaneous... Opium ...	20 5 2 3	1	1	
A Bagri ...	25	25	...	3	4	4	Rabi.	70			65		17	Clothing. Salt ... Gur ... Miscellaneous...	50 6 5 5	2	1	

11	12		13	14	15	16	17	18
How many out, houses.	Quantity of livestock he possesses.		What other property does he possess.	Stock of grain he possesses.	How he spends or disposes of any surplus income.	What are his debts.	To what are they due.	Remarks.
	Kind.	Number.						
2	Bullocks.	8	Theka of one vil-	None.	Invests in in-	Rs. 1,500	Built a house	
	Cow ...	1	lage yielding		creasing or		and construct-	
	Horse ...	1	profits net Rs.		improving		ed a pucca well;	
			125.		landed pro-		spent Rs. 700	
			Cattle in that vil-		perty.		in marriage.	
			lage Rs. 300.					
			Ornaments Rs.					
			1,000.					
			Acts as muktar to					
			a patel Rs. 129.					
2	Bullocks.	12	Jewels Rs. 200.	None.	In buying or-	„ 200	To supply food	
	Cows ...	15			naments, in-		grain for him-	
	Buffalo...	1			creasing his		self on account	
	Mare ...	1			land, and im-		of failure of	
	Pony ...	1			proving a		last crops.	
					well.			
1	Bullocks.	2	None.	...	...	„ 25	Failure of	
	Cows ...	4					crops last	
							year.	
1	Bullocks..	3	Jewels.	25	No surplus.	None.	...	
2	Bullocks	8	Sells Milk.	50	None.	„ 75	Newly incur-	
	Cows ...	6					red for food	
	Buffaloes	6					supplies ow-	
							ing to failure	
							of last crops.	
2	Bullocks	8	Jewels.	175	No surplus.	„ 500	Bought half	
	Cows ...	2	Half share of a vil-				share of a vil-	
	Pony ...	1	lage net profits.				lage.	
1	Bulls ...	2	Works as a car-	...	Paying inter-	„ 500	Rs. 100 due to	
	Cow ...	1	penter and earns		est on debt.		marriage of a	
			Rs. 10.				son. The rest	
							to interest and	
							losses in culti-	
							vation.	
1	Bulls ...	4	...	...	...	„ 400	Originally Rs.	
							100 for marri-	
							age; cannot di-	
							minish; it	
							grows faster	
							than he can	
							pay.	
							...	
1	Bullocks.	8	Outstanding debts	...	Lends money	None.		
	Cows ...	3	Rs. 200.		and takes in-			
	Calves...	2	Jewels Rs. 300.		terest.			
	Buffaloes.	7	Mukhtari of Moti					
	Mare ...	1	Patel Rs. 50.					

Caste of cultivators.	1 and 2			3			4		5		6	7		8		9 and 10.	
	How much land does he hold.			What his family consists of.			What amount of food grain he raises.		The value of other produce of his land.		Rent or Revenue and cesses.	Expense incurred in hired labour, other than his labour and that of his family.		What amount he spends in buying necessities which he cannot raise on his land.		What kind of house and how many rooms.	
	Acres.											Workmen		Object.			Thatched or tiled.
	Total.	For tillage.	Grazing.	Male.	Female.	Children.	Kind.	Khands.	Kind.	Value.		Wages.	Amount.	Amount.			
A Bagri ...	25	25	...	2	1	3	Rabi.	30	...	...	28	...	5	Cloth ...	15	1	1
														Salt	4		
														Miscellaneous...	5		
A Bagri ...	25	25	...	1	2	1	Rabi.	30	...	...	28	...	5	Cloth ...	5	Tiled.	1
														Salt	2	1	
														Miscellaneous...	6		
A Bagri ...	12	12	...	3	3	4	Rabi.	20	...	..	13	...	2	Cloth ...	16	1	1
														Salt	6		
														Miscellaneous...	5		
A Mussalman.	80	80	...	3	5	6	Rabi.	80	...	...	92	...	...	...	...	...	...
Of the Pân cultivating caste ...	42	29	13	4	4	...	Rabi.	42	...	...	44	...	..	Cloth ...	15	1	1
														Salt	3		
														Miscellaneous...	4		
A Bagri ...	26	26	...	3	4	3	Rabi.	32	...	...	19	...	...	Cloth ...	25	Tiled.	1
														Salt	12	1	
														Miscellaneous...	5		
A Bagri ...	117	105	12	3	4	5	Rabi.	175	Sugar-cane.	60	162	...	52	Cloth ...	50	Tiled.	1
														Salt	13	2	
														Miscellaneous...	25		
														Gur	15		
A Mussalman.	130	130	...	3	6	5	Rabi.	140	...	...	243	...	70	Cloth ...	50	2	1
														Salt	10		
														Miscellaneous...	15		
														Gur	5		
A Bagri ...	12	12	...	2	3	2	Rabi.	16	...	...	11	...	...	Cloth ...	15	1	1
														Salt	4		
														Miscellaneous...	5		
														Gur	4		

11	12		13	14	15	16	17	18
How many out-houses.	Quantity of livestock he possesses.		What other property does he possess.	Stock of grain he possesses.	How he spends or disposes of any surplus income.	What are his debts.	To what are they due.	Remarks.
	Kind.	Number.		Khandis.				
	1 Bullocks..	6	Outstanding debts	...	Lendson interest.	...	...
	Cows ...	1	Rs. 55.					
	Buffalo...	1	Jewels Rs. 80.					
	Mare ...	1	Cart for hire.					
	1 Bullocks..	4	...	...	...	Rs. 20.	Due to last year's bad crops.	
	Cows ...	2						
	Mare ...	1						
	1 Bullocks..	6	...	...	Spends in paying interest.	Rs. 200.	Loss of cattle and bad crops.	
	Cows ...	2						
	Mare ...	1						
	Buffaloes.	4						
...	
	2 Bullocks..	6	None.	...	Pays to his creditors towards interest.	Rs. 250.	Debt once incurred cannot be overtaken.	
	Cows ...	3						
	Calves ...	3						
	3 Bullocks..	6	Jewels Rs. 200.	...	In ornaments and in securing additional landed property.	Rs. 150.	...	
	Buffaloes	2	Has about 17 acres					
	Cows ...	8	of land in another					
	Mare ...	1	village yielding					
	Pony ...	1	net profit of 30					
		1	Khandis.					
	3 Bullocks..	26	Jewels Rs. 500.	...	In good year may save about Rs. 200; but this goes towards payment of interest on borrowed capital.	Rs. 2,100.	Rs. 300 for a marriage ceremony.	
	Cows ...	16	Two anna proprietary share in a village, profits about Rs. 25				Rs. 1,800 cost of two anna share of villages.	
	Mare ...	1	Two anna proprietary share in another village, profits being Rs. 60.					
	Pony ...	1						
	Buffaloes.	5						
	1 Bullocks.	24	Jewels Rs. 300.	...	...	Rs. 500.	Two marriages. Does not personally manage or work his land.	
	Cows ...	16						
	Mare ...	1						
	Pony ...	1						
	Buffaloes.	4						
	1 Bullocks.	2	Jewels Rs. 30.	...	...	Rs. 200.	Marriage of himself and brother.	
	Cows ...	2	Partnership cultivation in another village profits may amount to 10 Khandis.					

Caste of cultivator.	1 and 2			3			4		5		6	7		8		9 and 10			
	How much land does he hold.			What his family consists of.			What amount of food grain he raises.		The value of other produce of his land.		Rent or Revenue and cesses.	Expense incurred in hired labour, other than his labour and that of his family.		What amount he spends in buying necessities which he cannot raise on his land.		What kind of house and how many rooms.			
	Acres.											Workmen.		Wages.					
	Total.	For tillage.	Grazing.	Male.	Female.	Children.	Kind.	Kharif.	Kind.	Value.				Object.	Amount.		Thatched or tiled.	Rooms.	
A landholder.	100	100	...	6	15	7	...	130	...	...	50	...	37	Cloth ...	150	Tiled.	1
														Salt ...	30	3			
														Gur ...	50				
														Miscellaneous...	25				
														Ghee ...	60				
A landholder.	...	...	...	4	4	5	Rabi.	170	Gur.	100	135	...	51	Cloth ...	100	1	2
							Kharif.	155		...	6			Salt ...	25	1	1		
														Miscellaneous...	60				
														Oil ...	36				
A Puar Rajput	8	8	...	1	1	5	Kharif.	30	...	...	14	...	...	Cloth ...	8	1	1
														Salt ...	4				
														Miscellaneous...	2				
A Gaoli	81	81	...	1	2	6	Rabi.	50	Cotton.	5	56	...	22	Cloth ...	30	1	1		
							Kharif.	30						Salt ...	10				
														Miscellaneous...	5				
A Gond	48	48	...	2	3	7	Rabi.	30	Cotton.	5	38	...	9	Clothing.	20	1	1		
							Kharif.	10						Salt ...	10				
														Miscellaneous...	3				
A Kallar	2	2	...	2	1	...	Rabi.	9	...	4	4	...	...	Cloth ...	5	1	1
							Kharif.	6						Salt ...	2				
														Miscellaneous...	2				
A Gond	13	13	...	2	5	2	Rabi.	10	Gur.	30	7	...	...	Clothing.	15	1	1
							Kharif.	3	Cotton.	10				Miscellaneous...	2				
														Salt ...	1				
A Gond	75	75	...	3	3	5	...	50	...	...	24	...	25	Clothing.	25	2	1
														Salt ...	12				
														Miscellaneous...	5				
A Gaoli	89	86	3	5	4	...	...	50	Gur.	150	46	...	20	Clothing.	100	Tiled.	1
									Cotton.	25				Salt ...	13	1			
														Miscellaneous...	10				

Labourer.	Wages.	Remarks.
1. Ploughman (regular i. e., employed all the year round.)	60 to 70 seers of jowari <i>per mensem</i> , now worth, from Rs. 3 to Rs. 3-8-0.	He also often gets a pair of shoes and a <i>kamat</i> or blanket as perquisites. When not ploughing he is employed in <i>rakhwali</i> and other jobs.
2. Ploughman (occasionally employed by the day for some special work.)	2½ to 3½ seers of jowari a day, now equal to from 2 to 3 annas a day.	
3. Sowing i. e., feeding the drill.	5 to 6 pices a day.	Usually work for women.
4. Weeding— (a) Men. (b) Women.	1½ to 2 annas a day. 3 to 4 pices a day.	The rate varies according to the supply of labour. The payment is made daily for such as are very needy; for those who can afford to wait it is made weekly. The demand for pice at the beginning of the weeding season sometimes causes the coin to sell at a premium of a pice or more in the rupee with the local money-changers.
5. Stubbing (i. e., clearing ground of roots, &c.) <i>In Arvi.</i>	1 rupee for 20 cubits of land stubbed in Arvi. This work is done elsewhere with the plough.	
6. Watching. (<i>Rakhwali.</i>)	60 seers a month for two months, or 2 seers a day. When on daily rates 3½ seers a day.	Usually the ploughman is employed.
7. Reaping— (a) for jowari. (b) for wheat. (c) for tilli.	3½ to 5½ seers of jowari a day = 2½ to 4 annas a day. One out of every 20 "pendies" or big sheaves of wheat cut, i. e. 5% of the amount cut by the reaper. A man is generally able to cut 20 pendies in a day. Daily labour rate.	
8. Winnowing.	3½ seers a day.	Work generally done by the cultivator and his regular servants.
9. Cutting hay.	From 10 or 12 annas to 1 rupee the 1,000 pullas.*	3½ to 5 seers of jowari is thus the average daily wage that is paid in kind. Most hired field laborers are thus paid, weeding alone demanding the use of coin, as the work does not itself bring in anything immediately useful.
10. Picking cotton.	1-12th or 1-10th of the quantity picked; generally amounts to 1½ to 2 annas worth of cotton a day.	As the food of a man in full work day 40 or 50 pendies. There is only a 1½ seer, there is a possibility of laying by two or three days' food for every day of work.
11. Picking gram.	1 pendi out of every 20 picked. A man can pick in a day 40 or 50 pendies. The pendi holds 2½ to 3½ seers.	If the harvesting periods (at both seasons) do not extend beyond three months, a man could ever thus subsist himself in the slack time. But he has generally children to maintain, and there are other needs to supply, so that he probably gets into debt, if any one is rash enough to lend to him. The fact that weeding is paid <i>weekly</i> shows that the weeders have something on hand to help them going at first.
12. Gathering Als.	Pendi rate about 3½ seers a day can be thus earned.	
13. Herdsman.	60 seers a month if a regular servant; occasionally employed men get 4 pices or one anna per head of cattle <i>per mensem</i> in the district; at head quarters much more.	

*The pulla of Wardha is about equal to 3 of the ordinary pullas of the Nagpur district.

†But there is no necessity for his idling during the rest of the year.

For Narsinghpur, Mr. Bhargo Rao supplies the following notes :—

"Permanent servants engaged all the year round are employed in ploughing, sowing, cutting the crops, watching the fields, and doing all the business which a cultivator would do himself if he had no servant.

Servants employed to watch the fields are often employed for six months, or for two or three months at the lowest at a time, as their services may be required.

Additional labourers employed for cutting the harvest are paid at daily or contract rates.

Additional labourers are also employed in ploughing and sowing. These are not employed for longer periods than a month at the most.

For permanent servants the wages in this district are either paid in grain or in money. Ordinarily the wage is equal to Rs. 2 a month; sometimes the rate varies from 2 to 3 rupees, but these rates are for ordinary years. This year they have risen to rupees 4 per month, as grain now sells at greatly enhanced rates. When wages are paid in kind the usual rate is 16 maunds of wheat and gram in equal proportion for the year.* In addition to this a permanent servant gets a pair of shoes, one blanket, and at the time of sowing and reaping a small quantity of grain; not more than a rupee's worth altogether is given to him.

Watching of the fields is often given on contract; two or three neighbouring cultivators join together and engage a servant on a salary of Rs. 2 to Rs. 3 per month. When payment is made in kind a labourer gets on an average one seer and a half per day. If they are employed for six months the wages are eight maunds of wheat and gram, besides a blanket and a pair of shoes, and a small quantity of grain at the time of harvest.

Servants employed in ploughing and sowing get from three to four rupees per month, or at a daily rate of one anna and a half to two annas. Persons employed at the time of cutting are paid the daily rate above mentioned, or they are paid according to the quantity of work done, i. e. one bundle for every twenty cut by them. Cutting is also given on contract, and this plan is generally preferred.

The labourers, as I have said above, are paid in cash and also in kind. The payment one way or the other is fixed with the consent of the contracting parties.

The labourer generally gets enough to live on, but he is seldom without a family of children and his earnings are not enough for the family; but his wife and child if grown up assist him and they earn a part of their living. Men who are not employed all the year round by one master need not be idle for the rest of the year, as soon as the ploughing and sowing operations are over, weeding follows; preparations are made for cutting the autumn harvest; then follows watching and cutting of the rabi crops. When cultivators are at leisure, if they have the means they employ labourers in embanking their fields. It is only in cases where a labourer has a family and small children that he is obliged to borrow, and in such a case his condition is very hard."

For Saugor, Mr. Imrie gives the following note :—

"Hired field laborers are paid according as their labour is given in the weeding, the grass-cutting, and the harvest season. Ploughing and sowing are done by the members of the family or by house servants, the latter receiving Rs. 2-8-0 or Rs. 3 a month; or in some cases 2½ seers grain a day.

The ploughing and sowing are soon over after the first burst of the rains. The weeding season extends over four months, but only two months' full labour is expended. At that time the hired labourer is paid in kind except in some villages near Saugor or one of the larger towns. There the market price of labour, say 6 pice a day, is given, but all my informants state that even near Saugor it is rare to pay wages for weeding, save in kind. The amount given varies from (1¼ to 1½ seers) 2½ measures of kodo and kutki being held equivalent to 1½ wheat. Apparently 1½ seers is the general rate, except at a distance from Saugor, where 1½ seer is more commonly given.

Then for cutting grass. This is almost everywhere paid for in money at 1 per 4,000 pulas and at 5,000 when the money is advanced, or in distant tracts 5,000 pulas. In one of the villages payment is made in kind at 2½ seers a 1,000. Grass is cut in December and the months before and after.

Then at the wheat harvest payment is rarely made in money. Payment is almost always in kind, by the armful of crop cut. The usual rate is one pur (armful) for the working day, i. e., from 11 o'clock till evening: or 2 purs from morning till evening. The sheaf-binders get double of this, as their labour requires more skill. Ploughs are driven by members of the family or house servants. In a good harvest year almost double is given, and some Malguzars say they sometimes give treble.† From one pur 1½ seers generally is threshed out; but sometimes 3½ seers of grain.

For the cotton picking the rates are those for weeding; and for the jowari and rice harvests as for the rabi.

House servants get a blanket as the rains set in, and one or two pairs of shoes in the year.

The average hired labourer of the average village finds work in the village for almost the whole year, only between the harvests, when, however, he may be guarding the crop; and in the hot season, his labour is dispensed with. And taking the number of labourers' houses in a village as generally equal to that of cultivators, I think a labourer with a small family dependent on him is quite able to subsist on his gains in those intervals. In harvest time he

* This amounts to 3 1-5th kandelis of wheat and gram and compares favourably with the 4 kandelis of jowari earned by the ploughman in the Nagpur district.

† I imagine this can only be when the Bundelkhand labourers are fewer than usual, and when the weather appears to be threatening.

obtains as much grain a day as will last him three, and at other times not much less. Of course if he has a large family solely dependent on his labour, or any unusual expenses like a marriage, he must incur debt. And I am told by all I have asked on the subject that not 10 per cent of the labouring population are out of debt, while very few are in debt over 10. This explains itself. The labourer has no landed interests in the village, neither profits to toil for nor security to give.

But though in debt I do not imagine that, receiving wages as he does in kind, the cultivator ever curtails his allotment; and while there is work for him, and the grain he gets can feed his family and more, the labourer is safe.

The problem is, however, complicated by the fact that at harvest time only half the labourers employed belong to the village, and of the other half perhaps half do not belong to the district. My information allows me to state generally that in March numbers amounting to one-fourth of the labourers actually employed come from the surrounding districts, particularly Tehri, where it is said the insecurity of tenures permits of little outlay on the fields. And as many labourers as come from foreign territory do not belong to the village of which the crops are being reaped though they belong to other parts of the Saugor district, these therefore share in the harvests of at least two villages.

I am of opinion on the whole that in ordinary years the labourer is able to, subsist with fair ease on his payments in the harvest and other seasons. As to those who come from other districts, I know nothing; but I am told that they take back enough grain with them for their own wants.

Many labourers are of course compelled to borrow. If 90 per cent be in debt then I presume 90 per cent have to borrow. But this indebtedness is what they cannot help, and is rarely very deep. It is a condition they tend to; it simply means that they have nothing to spend in luxuries, and that does them little harm. Where there is work, there they have subsistence, which enable them to weather the year with fair ease. If they have children to support and many, the evil cures itself as these grow up."

Mr. Wasadeo Bullal Kher gives the following answers for the Seoni district:—

"Hired field labourers are of the following descriptions:—

The Barasiya,—employed by the year. He is required to do any work which the employer may point out to him in respect of cultivation. The whole of his time and skill are at the disposal of the employer. The annual wage varies from 6 to 3 khandis or 2 to 1 seer per day.

The Pakhiar,—employed by the fortnight, must work in the same way as the Barasiya, and may be retained or discharged as each fortnight is completed. The wage is 4 kuras for two weeks, or 2 seers per day.

Harwaha,—ploughman—is employed for the whole year. But he will only drive the plough, bring in grass for thatching the house, and will fence and hedge the Bari, &c. He will not do any thing else. He* receives 1-5th share of the profits in grain crops, 1-32nd of gur, half the share of cotton and this way the individual plough men get different shares in different kinds of crop.

Bardia,—Cowherd—grazer of cattle, exclusive of plough bullocks. He takes† 4 kuras per cow=28 seers, 8 kuras per buffalo=56 seers.

Charwaha,—grazer of plough bullocks,—takes 1½ khandis per annum. This man must graze the bullocks without taking them at a distance from the fields to be ploughed. He must take charge of the bullocks as they are disengaged from the yoke in rotation and bring fresh pairs to the yoke. Generally a boy does this work.

The Banihars,—the day labourer, employed occasionally, on work which the standing servants or home labourers could not accomplish, as for instance in cutting the crops, gleaning, weeding, transplanting rice crops, &c. The daily wage is not less than 2 seers, whether for man or woman.

All these labourers receive their wages in kind. The rate does not vary with the market prices of the grain.

The permanent servant adds to his own wages those of his wife and such of the children as can do field work, so that unless the unproductive members of his family are not too many, or unless he is kept at home by sickness for some time, he ought, and, I believe, does subsist with fair ease on his and his wife's earnings. Any disturbance of these conditions tends to drive him to borrow, and the debt may grow faster than he can manage to pay off. Instance are by no means rare of a cultivator's servants being compelled to steal the grain of his employer, because having already spent his advances of grain, the master will not advance any more.

The day labourers generally remain pretty well occupied for about 5 months of the year.

2½ months in cutting and gathering the crops of both seasons.

½ month in gleaning.

2 months in weeding, transplanting, &c.

—
5 months.

And as the daily wage of these is 2 seers—to the average requirements in food grains of 3 to 4 souls, it may be assumed that the savings of the working season should suffice for the

*No doubt this must be limited to the produce only of such land as the individual ploughman has been employed, or the 1-5th will be divided among all the ploughmen of the same employer.

† This can hardly be the rate in villages, probably only what is paid at the head-quarter of the district.
G. J. N.

food requirements of one or two souls ; the other necessities of life, such as clothing, &c. are easily procurable by the proceeds of other labour which is available during the remaining months of the year. Bringing in fuel, grass and other jungle produce to the market for sale or collecting mhowa for its owner, are the principal kinds of additional work which might be performed during the intervals of field work. In many cases spinning and weaving the roughest country cloth is followed when field labour is slack. On the whole, this last class of hired workmen seem to do well. They often are able to lay by savings, and when they accumulate, can provide the means of starting themselves as independent cultivators. It not unfrequently happens that a broken ryot when he sees no chance of raising his head above his debts or can no longer bear the losses of bad years he looks forward to the life of a day labourer or permanent field servant, in order to secure that relief which his improvident management of the land prevented him from achieving. This would prove that the labourers are more successful in their aims than the general run of cultivators.

APPENDIX D.

Mhowa consumed as food by Hill tribes.

At page 107, when writing on the consumption of mhowa and jungle produce, I observed that I hoped to get further information on this subject. Several of the Deputy Commissioners have given me information and estimates of the quantity of cereals saved by the substitution of such forest produce as food which I abstract below.

In view of the particular interest which this subject must possess, especially as the reboisement of parts of the Deccan will probably be brought under consideration, I have endeavoured to get reliable information from the Assistant Conservators of Forests in Nimar and Hoshangabad, and I still hope to further supplement my present information. The mhowa tree (*Bassia latifolia*) is apparently a native of the Sautpura and Vindhya ranges, and extends to the Khand country towards Hazaribagh and the Cuttack Mahals to Oudh, the Panjab and Gujarat. Besides supplying a considerable quantity of food, even in years of plenty, to our people, the spirit distilled from its flower yields an annual revenue in the Central Provinces of nearly ten lakhs of rupees, and some direct revenue is raised from it by the Forest Department. It is a handsome tree growing to the height of 30 to 40 feet. It probably will begin to bear when about 18 years old, and will continue to bear steadily for 60 years. I believe it was a common practice with the Mahrattas to cut down these trees in the Bhil country, in order to keep down turbulence and struggles for independence among the lawless hill people in the west, and I think in Campbell's account of the suppression of Mehria sacrifices among the Khonds a similar practice is mentioned. This shows how greatly these hill tribes were dependent on its produce.

In Chanda the wood is much used for making pipes or conduits for letting water out through the bunds of tanks. Mhowa oil is valuable. It is used for adulterating butter and ghee. I understand that the Mofussil Company at Amraoti in Berar intended this year to press the oil largely, intending to consolidate the extract under hydraulic pressure, and in the shape of stearine to export it to Europe.

The consumption in the Balaghat district of mhowa has been estimated at 80,000 maunds a year. In Bhandara it is supposed that 18,000 maunds are consumed between April and September by one-eighth of the population.

The Deputy Commissioner of Chhindwara writes :—

"In the Southern Tahsil mhowa is consumed in ordinary years by 6,000 persons in Cheyt and Bysakh, each person consuming one kuru per mensem, or a total consumption of 3,000 maunds.

"In the Northern Tahsil it is consumed from Cheyt to Srawan, and a total consumption is estimated of 10,000 maunds."

For my part, I think that none would be consumed in Cheyt or Bysakh, and that the quantities are vastly under-estimated.

The Deputy Commissioner of Saugor writes :—

"About 90,000 maunds of mhowa are consumed by the poorer classes during the rains, July, August and September, when the food possessing heat producing substances, does prove injurious to health, but is rather stimulating and beneficial. The number thus consuming mhowa being estimated at 65,000 out of 527,725 souls is one-eighth of the population.

In the north of the district, such as Baretta, Shahgarh, &c., the lower classes live mostly on mhowa and forest produce.

The following jungle products are largely consumed by the people :—

Ber,	Achar,
Karonda,	Makhora,
Tendu,	Umar.

Said to be about 42,000 maunds during the year.

There is probably a saving of about 165,000 maunds of cereals consequent on the consumption of mhowa and forest produce noted above."

In the Southern Tahsil of Jubbulpore it has been estimated that 33,000 people consume mhowa between March and September, using 37,000 maunds; and that this replaces 75,000 maunds of cereals. Other forest produce is consumed as fruit, not as a substitute for grain. The consumers are mostly Gonds, Pardhans and Patharis.

In the Sehora Tahsil about 20,000 people consume mhowa from July to October, using 33,000 maunds. Thus saving an equal quantity of cereals.

In the Northern or Murwara tahsil about 27,000 Kols, Bharias, Gonds and Bassores in this season are supposed to consume 25,000 maunds of mhowa, and 20,000 maunds of other fruits, thus saving 20,000 maunds of cereals.

Major Temple for Nimar writes :—

"The following classes, Bhils, Bhilalas, Kolis, Kurkus, Nahals, Gonds, Meenas, Balahis and Mbangs for four months of the year exist almost entirely on mhowa, even making cakes out of it, and my enquiries further lead me to believe that not less than a quarter of the agricultural classes also for four months of the year exist on mhowa. Other minor jungle produce is gathered and consumed too, but, in comparison to mhowa, is insignificant.

Taking the above and estimating the consumption per head at 2 maunds we arrive at the following results :—

Bhils, &c., as per Census	...	40,000
Agricultural classes, including servants, one-fourth of total	...	13,000
Total	...	53,000

This figure multiplied by two gives us 106,000 maunds, and in calculating the amount of saving through consumption of mhowa, I think, at least the above number of maunds might well be deducted from the total quantity of cereals consumed."

For Seoni it is estimated that in ordinary time about 6,000 maunds of mhowa are annually consumed by the poor people in the district, chiefly during the months of Srawan and Bhadon, and 18,000 by the cattle.

There are about 16,000 persons* who use it. In years of distress the number of consumers increases considerably, and the quantity of mhowa which in ordinary time is given to cattle or used otherwise is largely substituted for human food.

There are no other forest products in the district which can be used as an article of food. Of course tendu, char, &c., are eaten by the people generally when they are ripe, but these can hardly be said to afford any substantial relief to the people in times of distress. Gond and other classes accustomed to live in the jungles also devour many kinds of roots and bulbs which are not known to the mass of the population.

6,000 maunds of cereals may be calculated to be the quantity saved in an ordinary year on account of mhowa being used as food.

For Raipur the Deputy Commissioner writes :—

"The total population of the district as per last Census is 1,093,405, and of this number about 40,000 people, as a rule, Gond, Binjwar, &c., &c., use mhowa for food, and the quantity consumed by them may be estimated at 40,000 maunds yearly. During the months of June, July, August, September and October, the mhowa is chiefly used, as at this season of the year, the stores of grain run low, and it is necessary to eke them out as best they can. No other minor jungle produce is largely consumed by the people as food, though of course Chirongi, Ber, Tendu, &c., &c., supplement the ordinary food-supply of the people in the wilder parts of the district, when they are in season. 40,000 maunds of cereals may therefore be struck out from the total quantity calculated for the district on account of mhowa."

Mr. Bartlett has given me the following account for Sironcha :—

"Mhowa is consumed for 5 or 6 months in the year, that is from March to August, by about two-thirds of the population of this district. From this I infer that about 70,000 maunds of mhowa are consumed ordinarily by the inhabitants of this district every year. The fruits of tundi, ber, palmyra, &c., a root called "samagadhi," and other roots, the leaves of many kinds of herbs, and plants, and certain grass seeds are consumed by two-thirds of the people here. They are eaten in ordinary years from July till October. I should say that supposing the average consumption of grain were put down at 5 maunds per person, were he to exist on grain the whole way, about 3½ maunds could be deducted from two-thirds of the population of this district by reason of the consumption of mhowa, and other jungle produce."

Major Ricketts supplies the following estimates for Hoshangabad :—

"The quantity of mhowa consumed by the people throughout the district may be estimated at 112,500 maunds. It is very difficult to give a correct estimate since no statistics are available. It is merely an estimate calculated on the number of Gonds and other classes who generally consume mhowa.

It is used by the people for 9 months of the year, save October, November and December. In ordinary years it is used by about 50,000 people out of the total population, 449,000 souls. Mhowa is generally used by Gonds, Kurkus, and other low classes. Other minor products of the forests are not largely used for food by the people, but some roots (called kands), chirongis, and other minor products are used with other food to a small extent.

About 225,000 maunds of cereals should be deducted as a saving on account of consumption of mhowa."

The Wardha account is as follows :—

"In this district in ordinary seasons mhowa and jungle products are not used as food to the extent of becoming a substitute for cereals. Mhowa does not even enter largely into the dietary of the Gonds of this district. In May and June it forms an ingredient in an occasional meal, or is eaten parched like gram, but it does not in any important degree take the place of cereals.

For one thing mhowa here commands about three-fourth the price of jowari, which is the common food grain of this district.

Jungle fruits and products are taken more as a relish, or extra, than as a substitute for a regular meal. It would be different in famine times, but the data for an estimate of the consumption under such circumstances are wanting. It would not I think be safe in the case of this district to make any very large deduction on account of relief to be expected from this source in the event of famine."

*16,000 persons will consume 6,000 maunds of mhowa in two months at ½ seer per day. It is to be understood that the food of the poor people generally consists partly of mhowa and partly of grain. Mhowa alone is seldom used as food.

Colonel Ashburner, the Deputy Commissioner of Narsinghpur, has carefully considered this subject. He is of opinion that "it is chiefly consumed by the Gonds and other hill tribes. The total number of aboriginal or hill tribes in this district according to the last census returns, is 43,332. The mhowa is chiefly used as food during the rainy season. It is not taken alone, but is mixed with the flour of some cereal, and after being well pounded and then boiled in a large quantity of water. The preparation is called "*Pench*" and then about a pound will suffice for a whole family for one day.

Besides mhowa the only description of forest produce which is stored as food, is the 'chironji' nut. The supply is generally plentiful, but it is generally eaten more as a delicacy than as a regular article of food."

The Deputy Commissioner of Nagpur, Mr. F. Venning, c. s., writes thus:—

"The only information I can give on such short notice concerning the consumption of mhowa is the following:—Mhowa forms a portion, perhaps one-third part, of the diet of the Gonds and of certain low castes, such as Dhers and Dhimars during 6 months of the year, during the rains and cold seasons, or from July to January. What the numbers of the people who habitually consume mhowa are, it is impossible to say. According to last census there were close upon 100,000 Dhers in this district, but it is quite clear that they do not all consume mhowa. Only those probably who inhabit the less thickly populated parts of the district consume to the extent above indicated, i. e., to the extent of about one-sixth of their total food-supply. To take the numbers of these castes and to assume that they all consume mhowa to the above extent would be most fallacious. My informants have estimated the proportion of the population who habitually consume mhowa variously at 1-16th and 1-32nd. Such guesses are obviously of very little value. Supposing we adopted 1-20th we should get about 33,000 people consuming about 1 maund annually. Probably the quantity annually consumed as human food is between 10,000 and 50,000 maunds.

There are no data at hand for making any closer estimate than this. No other jungle products enter appreciably into the food-supply of the people."

From the information now available and from enquiries I recently made in the Betul district, I am led to believe that all of our hill tribes without exception (save perhaps the individual cases of a chieftain's or patel's household), consume the dried mhowa flower for five or six months of the year, and probably one maund per head is thus consumed. These tribes in the khalsa and zamindaris in January 1872 numbered 1,494,087 souls.

Besides these, it is no doubt largely consumed by the following tribes or castes:—

Basor, numbering at the census	...	...	54,000
Burad	...	...	43,000
Gowali	...	...	19,000
Mhang	...	...	26,000
Dhers and Mhars	...	...	612,000
Chamars	...	...	298,000
Total			1,052,000

No doubt there would be portions of other castes, such as Dhimars, but taking those enumerated I think we might consider that 350,000 among them consume one maund each during ordinary years.

Probably then we have 1,850,000 maunds or a little over 68,500 tons of the mhowa flower consumed as food for human beings in ordinary years. In times of scarcity the consumption would probably be more than doubled.

Major Lugard, (quoted at page 106), mentions the case of Gulab Singh of Darasi having in this year, purchased 1,000 khandis to feed his tenants, and others have done the same.

The question arises, what amount of cereals is thus set free. Major Ricketts, Deputy Commissioner of Hoshangabad, and some other officers consider that one measure of the mhowa flower thus used as food is an efficient substitute for two measures of cereals. This also is my belief, though I am not able to prove it. But it is very evident that this article is a very important element in the food-supply of our people in ordinary years, in a time of scarcity it becomes of vital importance. I am glad that I shall be able to supplement this note by a contribution promised by Mr. Fernandez, the Forest officer of Nimar, who has made the food-supply of the Hill tribes his special study. It will be evident from what I have written, how important the utilization of this product must be, and how necessary it is to remove any prohibitive restrictions or impediments to this spontaneous produce of our forests being gathered and stored, during the short period of the year when it is lying on the ground. The money saving on the ordinary consumption as food of mhowa can hardly be less than 7 lakhs a year. We take only the market value of the commodity or close on 28 lakhs if we grant that it substitutes one and half times its weight of cereals of the lowest class and value. A large quantity also is used for the consumption of cattle in cold raw days in the rainy season.

APPENDIX E.

Supplementary questions asked by the Secretary to the Famine Commission.

In what months does Chhattisgarh receive a portion of its rain-fall from a north-easterly direction? Is this the South-Western rain diverted and brought round, or a separate current from the Bay of Bengal?
Page 1, lines 1 and 2 from bottom. Where do the two meet? Is there a dry tract between?

Dr. Barter would not venture on going beyond what is in the text. The matter has not been specially observed. See my further remarks at page 52 on the Bhandara rain-fall. Dr. Barter appears to agree in the theory that the easterly rains are due to a branch of the South Western monsoon travelling up the Bay of Bengal and checked and turned back by some cold currents far to the East. They are spoken of commonly as the "return" showers. The rains which fall about or after the 15th September generally come from North East. Natives call this the "uttara." We are now (September 3rd) in the fortnight in which natives call the rains "purbiya" and have had rains from the East. The uncertain Hathi showers are looked for in the 1st week of October from the South East. This subject has not, I think, been fully studied. The winter rains come from north or north-east, and indeed from all quarters, but seldom from the South-West. I do not think there is any dry tract between the indraft areas; rather that early in the monsoon the rain is from South-West, later from the North-East last of all from South-East.

Page 2, lines 1 and 2.

What about the winter rain?

Winter rains are uncertain. The Northern districts get more, I think, than those in the South. Chhattisgarh gets rain at this time as well as the other parts. The rain mostly comes from the North-East; rarely from South-West.

Please give this separately for each district if possible: where the District figures vary so much, the average of the whole Province does not carry much weight.
Page 2, Statement of average rain-fall for the Central Provinces.

This will be given in an Appendix at the end of the work. It was not given here, as it would have delayed the printing work.

Page 3, line 15.

"The nature of the crops governs the minimum required." Just so: where is the rice?

The rice fields are described at pages 92-94 and 120. Sambalpur, Chhattisgarh, Bhandara, lowlands of Balaghat, North-East of Chanda, &c.

Page 3, lines 22, 23.

"Excessive rain in the past cold season, &c." This is the main danger of the Nerbudda Valley, is it not?

Certainly. A long continuance of cloudy weather even without rain will greatly injure gram, lac, and linseed when blossoming. But this will not touch the wheat. Cloudy weather with cold winds after rain will rust the wheat.

Surely 3 or 4 inches would be too much for Hoshangabad in the cold weather?
Page 3, lines 10 to 14 from bottom.

This is the maximum. If the rain came down in three or four days, much would run off and do no damage. But if the rain, say even 3 inches or less, were distributed over 12 to 15 days, the danger would be greatly increased.

In 1877, Hoshangabad had in January and February over two inches. Narsinghpur, in January, February and March had 5 inches, and Jubbulpore in these months had 6 inches but no harm was done.

But on the other hand our rabi in Hoshangabad was lost this year with 3.26 in December 1877, and .12 in January 1878; while Narsinghpur suffered greatly with 2.11 in December 1877, without rain but with cold cloudy weather in subsequent months. Jubbulpore suffered almost equally with .57 of rain in December 1877, and .38 in January 1878. Chhindwara was not injured with 6.29 and 1.52 in January and February 1877, but ruined by 4.25 in January and February 1878. Betul, Seoni and Nagpur show similar results. The Nagpur wheat was lost with 2.23 this year. Thus it is not the quantity of rain-fall which injures.

This seems to be excessive; indeed for the Nerbudda valley, I should say it was more than could be borne; and that a vastly less quantity would be sufficient. See previous answer, 27-35 inches. Why 39? This question asks for the minimum sufficient, supposing none to run off. I should say 25 inches was more like the minimum.

I am not prepared to fix the exact minimum. I think perhaps I may have rather over-estimated for the exact areas of *regar* soil, but all these districts have some other than black soils; for example there is much sandy soil in the Sohagpur Tahsil of Hoshangabad, which would require more rain; also under the hills. Probably my minimum of 27 inches would do for Nimar, and perhaps for Wardha, if well distributed and none ran off. Seoni, Chhindwara, Mandla and Betul would require a minimum of 35 to suit the whole of each district. But our wells would even then suffer. The embanked fields of Jubbulpore to be Narsinghpur and Mandla would very greatly suffer with less than 38 or 39 inches. The *Mhowa* give very little rice and poor crops of rabi; I think 25 inches too little for Hoshangabad. In the year of drought they were in great danger with 26.05. Heavy rain (5.60) at end of September alone saved them. I give the Hoshangabad falls from May to December for 10 years:—

Rainfall Years. in inches.	Remarks.	Rainfall Years. in inches.	Remarks.	Rainfall Years. in inches.	Remarks.
1868, 26.05.		1872, 36.10.		1876, 48.14	No damage.
1869, 44.10	No damage.	1873, 41.50	No damage	1877, 35.40	Of this 3.26 in December with
1870, 32.20.		1874, 44.70	No damage		what followed in January 1878
1871, 66.50	No damage.	1875, 63.33	No damage		ruined the rabi of the past
					spring.

Page 2,—4th para from bottom.

Where do the Hathi showers fall?

These uncertain rains are looked for I believe all through the Provinces, including Nimar, between 27th September and 10th October. They are often very partial, *i. e.* when Bhandara gets them perhaps Nagpur will not.

All this is interesting, and if the information has not been collected before in one place,

Page 5 and the following pages.
The famine narrative.

it would be valuable; but still as far as the Famine Commission are concerned it would be sufficient to say that there was a famine due almost entirely to war and rapine, not to climatic influences.

This has never before been made available to District officers. It is intended now to do it once for all. I have given a summary for the Province at pages 85—86 without showing too much detail.

This account of Jubbulpore is interesting, but rather too full. I should be much obliged

Page 20, opposite para at bottom.

if an abstract of it could be added at the end showing the statistics as to numbers relieved, cost of relief, revenue remitted or suspended, prices, stocks, &c.

I cannot give the numbers relieved, nor for each district the expenditure. Remissions and suspensions are shown as fully as I can give them in the narrative and in answer to special questions further on; stocks were not specially reported on. I have shown prices in the narrative, and in preparing the index will particularly bear these points in mind.

APPENDIX F.

Statement showing the price for which the villages in Tahsil Murwara and Pergana Bijeragogarh were sold from 1868-69 to the present time.

Years.	Whole villages.			Villages in part.			Malik makbuza holdings.			Total.			Remarks.
	Number.	Government demand.	Price for which sold.	Number.	Government demand.	Price for which sold.	Number.	Government demand.	Price for which sold.	Number.	Government demand.	Price for which sold.	
1868-69	8	3,210	9,025	2	550	600	10	3,760	9,625	Umrao Sing purchased 51 villages, Government demand of which is Rs. 3,000 at a price of Rs. 7,900.
1869-70	11	1,908	2,580	3	139	1,275	...	...	...	14	2,047	3,855
1870-71	11	2,169	8,900	2	145	750	...	...	...	13	2,314	9,650
1871-72	7	904	4,561	13	904	3,513	123	625	2,131	143	2,433	10,205	No information of sales prior to 1863-69 is available.
1872-73	8	924	2,837	9	726	2,406	2	8	15	19	1,658	5,258	
1873-74	4	566	1,640	15	436	2,263	...	...	...	19	1,002	3,903
1874-75	1	125	750	10	509	4,572	3	28	70	14	662	5,392	Owing to the rent being paid partly in kind, no figures can be given for occupancy holdings.
1875-76	1	410	2,000	24	1,536	15,656	2	44	55	27	1,990	17,711	
1876-77	...	...	...	12	685	2,001	5	19	98	17	704	2,069
1877-78	{ 4 *7	{ 790 229	{ 18,250 3,647	{	{	{	{	{	{	11	1,019	21,897	Sold to pay off the Talukdar of Murwara's debts; all these villages are in Murwara proper, and none in Bijeragogarh.

* In these 7 villages the Talukdar was only the superior proprietor and his yearly profits Rs. 229 only were sold.

Heu
e of is to be
grain. Mhowa

APPENDIX G.

NOTE BY E. E FERNANDEZ, Esquire.

Assistant Conservator of Forests.

Forest products used as food by the Hill tribes of the Satpura hills.

The hill tribes of the Nimar, Hoshangabad and Betul districts depend for a considerable portion of their food supply on forest fruits and other produce. Of these the flower and fruit of the mhowa tree are the most important, both on account of their highly nourishing properties and the large quantities in which they are consumed. Except when variety is required, or when the ber is still in season, the sun-dried mhowa flower forms a part of every meal, being eaten with boiled rice and the lesser millets or kneaded with dough to make bread. The proportion of sugar in the fleshy corolla is exceedingly large, combined with a small quantity of some nitrogenous compounds. This gives it great nourishing powers, and its general use effects a considerable saving in the consumption of cereals. I am unable to state exactly what this saving is, but it cannot be put down at less than 20 per cent, after making allowance for the increased quantity of the cereals consumed on account of the improved flavour imparted by it to the latter. The seed of the mhowa, or rather the cotyledons of the seed contain about 25 per cent by weight of oil. This oil is expressed by the hill people themselves by a very simple process. The testa or skin being removed, the seed is pounded and boiled, wrapped up in two or three folds of an old blanket and pressed between two boards. Besides being used for lighting, the oil forms a very inexpensive substitute for ghee, which it resembles in colour and consistency. Taking the flower and the fruit together, a provident family can live well and save at least 30 per cent of cereals by laying in a sufficient supply of those products for the year's use.

As already mentioned, the ber also enters largely into the food of the hill tribes. Besides being eaten as an ordinary fruit, it is stoned and mashed into a kind of thick sauce or purie with a little water, salt and cayenne pepper and used with bread or boiled cereals. For this latter purpose, the ber is of course as good dried in the sun as when broken off the tree, and thus an inexhaustible supply of it may be stored up every year irrespective of drought and scarcity.

The roasted seed of the Mahol (*Banhinia Wahbi*), a common, hardy, gigantic creeper, is eaten with great relish, many making a complete meal of it. This bean is in season from January to February. The whole bean is roasted in hot embers until the woody pod is nearly charred through. The seed has not a disagreeable taste, but is slightly astringent, and highly indigestible for those unaccustomed to it.

During the rains and cold weather the tubers of some wild species of arum, curcuma, and yam are extensively eaten, and can form a complete substitute for the cereals, at least for a limited period.

The above are the more important forest products which make up a considerable part of the diet of the hill tribes here. There are many other trees and shrubs of which some part is edible, and which are used by these people during their respective seasons. Some of them are given in the following list, which I have drawn up with a few summary remarks:—

Name of species.	What parts eaten.	How eaten.	Season.
<i>Argyreia uniflora</i>	... Flower bud	... Cooked ...	May to August.
<i>Moringa pterygosperma</i>	... Flowers	... do. ...	January to April.
	... Young leaves	... do. ...	March to April.
	... And leaf buds	... do. ...	do.
	... Tender fruit	... do. ...	do.
<i>Indigofera pulchella</i>	... Flowers	... do. ...	January to June.
<i>Bauhinia variegata</i>	... Flower buds and tender leaves	... do. ...	February to March.
Do. <i>purpurea</i>	... Flower buds	... do. ...	December to January.
Do. <i>malabarica</i>	... Tender leaves	... do. ...	April to November.
<i>Randia dumetorum</i>	... Young fruits	... do. ...	June to July.
<i>Randia turgida</i>	... do.	... do. ...	May to June.
<i>Randia latifolia</i>	... Fruit	... do. ...	November to February
<i>Randia cctoria</i>	... Young shoots and fruit.	Cooked and uncooked.	May to June.
	... do.	... do. ...	April to July.
	... Fruit	... do. ...	do.
	... Fruit (in times of scarcity)	... do. ...	April to May.
	... Fruit	... Uncooked.	do.
	... do.	... do. ...	May to June.
		Raw and	
<i>Thus emblica</i>	... Fruit	... cooked ...	October to March.
<i>Thus sylvestris</i>	... do.	... Uncooked.	March to April.

Name of species.	What parts eaten.	How eaten.	Season.
<i>Cordia Myxa</i>	... Fruit	... Uncooked..	May to July.
<i>Diospyros melanoxylon</i>	... Fruit	... do. ...	March to May.
<i>Buchanania latifolia</i>	... Fruit and seed	... do. ...	April to May.
<i>Alangium Lamareckii</i>	... Fruit	... do. ...	May to July.
<i>Eugenia Jambolana</i>	... do.	... do. ...	June to July.
<i>Schleichera trijuga</i>	... do.	... do. ...	do.
<i>Egle marmelos</i>	... do.	... do. ...	October to April.
<i>Grewia polygama</i>	... do.	... do. ...	November to December
<i>Do. laevigata</i>	... do.	... do. ...	do.
<i>Do. vestita</i>	... do.	... do. ...	August to November.
<i>Do. asiatica</i>	... do.	... do. ...	April to May.
<i>Flacourtia Ramontchi</i>	... do.	... do. ...	May to June.
<i>Ulmus integrifolia</i>	... Seed	... do. ...	May to July.

No. 3276.

FROM

J. W. NEILL, Esquire, C. S.,

OFFICIATING COMMISSIONER,

Nagpur Division.

TO

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

Dated Nagpur, the 8th August 1878.

SIR,

Your letter No. 2783 135, dated 17th July, invites my opinion on questions put by the Famine Commission. So very little time is allowed (Mr. Nicholls having informed me that replies to your letter are wanted by the 20th of August, and all papers having to be before the Famine Commission before the 1st October (and my time being otherwise much occupied) that I shall be unable to do more than record very briefly my experience and opinion on the specific points to which attention was particularly asked in your letter; and I cannot hope to be able to state any thing which is unknown to the Chief Commissioner or to advance opinions with which he is not already acquainted.

2. I take paragraphs 11 and 12, Chapter I. of the Commission's questions. I do not think there is anything in the land tenures of the Central Provinces, which is at present inimical to the carrying out of material improvements by the person occupying the land. But my impression is that not much is done in the way of improvements. Wells are no doubt dug in fields, but well-irrigation is not extensive.

Material improvements of the land as affected by the existing law and land tenures.

the rice districts there is naturally shown the largest area of irrigated land, but irrigation is wholly from tanks which are greater or smaller, and from the "bundling" fields. The tanks are very numerous, and the majority have long been in existence. Configuration of the ground has been taken advantage of in their construction, and while they have not been costly works. Of course there are some exceptions; the Nawe-tank, the largest in the Province, undoubtedly cost a large sum of money, on the other hand it irrigates comparatively speaking but a small extent of land. In years I do not think that much money has been spent on material improvements. One reason is, that there is not much accumulated capital, and the people could not invest money on the land if they would; another is, that the population in all our districts is smaller than the land could maintain; and a third reason, and this perhaps the most important, is that there is still so much uncultivated land available that people have found it more profitable to break up fresh land than to improve land already under cultivation. Whether they know it or not, there is undoubtedly much more land under cultivation now than at the time of Settlement. Such being the circumstances of our districts, and the rapidly increasing population, and a large amount of culturable land still to be brought under the plough, it is not astonishing that the Land Improvement Act has not had the effect of inducing many people to come forward to obtain advances. Why should they do so, when the advances are comparatively dear; such improvements as the people could undertake require unskilled labour, and labour is dear. Other reasons have been assigned for the want of people in applying for advances under the Land Improvement Act. One is, that they like to take money from government, because government insists on regulated time, and will accept no excuse and grant no delay; also that the delay before an advance can be obtained deters people; but I am not convinced that these reasons count for much or have such a determining influence. The people are not acquainted with the actuality with which the land revenue has to be paid, the settlements are made so that the revenue is collected without difficulty,—in other matters the government does not prevent the same classes from making their applications to the Commissioners; and I should, therefore, doubt that the experience of the people is not to apply for, or take loans from government. I think also that the people will bear me out in saying that, if advances could generally be obtained under any law, the Land Improvement Act for the construction of wells, or for the improvement of the land, would be of great service.

I conclude therefore, that there is nothing in the law, or in the conditions on which land is held in these Provinces, which checks the improvement of the land. Material improvements of the land belong to a later stage than this Province has yet reached.

3. I pass now to paragraph 26 of Chapter I. Here it is asked whether the taxation on account of famine expenditure cannot be made more strictly local, whether when expenditure has been incurred in succouring a distressed locality, such expenditure might not be recovered from the locality which had benefited in a manner that should bring into operation a sense of local responsibility,—first in securing the lives of the people,—and secondly in protecting them from unnecessary expenditure on relief; and it is asked could the expenditure in a single, district, or sub-division of a district, be wholly or in part recovered from that district or sub-district; and could any plan be suggested by means of which a Municipality might be compelled to bear the cost of feeding its own poor. Lastly it is asked what would be the probable effect on the minds of the people, and on the temper of officials, of the knowledge that the cost of famine relief expended on their behalf or by them would be recouped by local taxation. I will answer these questions very generally. I consider the plan of having a Mutual Assurance fund, such as the additional rates acts recently applied to Northern India create to be expended on any part of the country on which famine falls, thoroughly sound. If the principle of assurance of any kind is accepted and it seems to be generally accepted and to be more and more acted upon, then it appears to me that this system of assurance on a large scale against famine is proof against hostile argument. The arguments on which this year's famine taxation were based are still fresh in every one's recollection, and I will not waste time in repeating them. When it comes, however, to suggesting that local taxation should provide for local famine expenditure, I venture to express my opinion that such local taxation would under the present conditions of provincial government and provincial financial responsibility be unfair, if it be not impracticable.

First, it has to be remembered that some parts of India are more liable to famine than others, that it is not the wealthiest districts which are most liable to famine,—that all provinces do not contribute in the same proportion to the Imperial exchequer, and that taxation is not equal all over India. In many respects it has been admitted that the wealthier provinces must, out of their surplus, provide means for the good government of those provinces which are too poor at present to pay their way; and I can conceive no object to which the wealthier provinces could be more properly asked to devote a portion of their surplus than the relief of a province stricken with famine. It seems to me that in such cases the empire at large must succour the sick member. Certainly I conceive this to be right and proper, unless it be distinctly recognized that every province must provide for its own wants of all kinds, that it must ask for nothing and get nothing except what its revenues will enable it to pay for. But it will I fancy be long before that principle is recognized. Our way of looking at things must be much changed before it could be accepted. India would cease to be one empire, and would be made up of a number of separate states like the different Australian colonies.

Secondly, the difficulty has to be considered of getting from an impoverished province which has recently passed through the ordeal of famine not only the same revenue used to pay in the days when it was well off, but also a considerable amount of taxation to pay off the debt incurred to other provinces for famine expenditure. This will I think be readily admitted. It has further been admitted that there is no way at present of increasing the Indian revenues generally by fresh taxation. The same thing in one and all of the provinces which make up British India would be difficult to resort to fresh taxation in all? In order to raise the great present Mutual Assurance fund it has been necessary to go to the land. It would be the same thing in each individual province—additional taxes would have to be levied on the land. But in the case of famine the land tax would have to be in a suspension of revenue, if not remissions, would have to be granted. And even so, over, the land would have to make up the arrears of the suspended tax. Would additional taxation over and above that? I think not. Certainly not in the case of a land settlement, were unduly light. I see indeed that in the question of the Commission it is said the local taxation suggested is to be “in modification of that recently adopted, and not in addition to it”; but I do not see how it can be managed without pressing more heavily on the suffering province or provinces. If the adopted taxation does, and doing so at a more unseasonable time, the Mutual Assurance principle would be to some extent abandoned. The cost of a famine should be diffused over as large a population as possible. The individual tax payer thus pays less and feels the burden less, and the province becomes enriched at the expense of the impoverished part composed to

that the localization of famine taxation is proposed. It is asked what would be the effect on the minds of the people, and on the temper of officials of the knowledge that famine relief would have to be repaid by local taxation. On the people I believe the effect (at the time when the famine is on them), would be *nil*. Who are those who have chiefly to be relieved? the poorest. They take no thought for the morrow—they pay no taxes (that they know of, the effect of indirect taxes and state monopolies being hidden from them), they have nothing to fear from fresh taxation even if they thought of the matter at all. On the better classes the effect would not be greater. They would no more than the others *realize* that they would have to pay for the expenditure that was being incurred—they still believe the government purse to be inexhaustible, and they cannot even now always understand why the government is so grudging in its general expenditure. In famine times the better class of natives are liberal, they would expect the government to be so also, and they would not count the cost even if they could count it, and I doubt if they could even form an estimate of the rate of expenditure being incurred, and the pressure of taxation which they would subsequently have to submit to.

Neither do I think that the effect on the temper of the officials would be great. They are not permanently attached to localities. They are moved from place to place as the exigencies of the government service demand. It is not by any means sure that they would have to raise the additional taxation which the famine expenditure involved; even if they had to do so it would not necessarily be a concern to them. It seems to me they can have no motive in knowingly spending more money than is necessary, and if they are mistaken in their views as to the amount of relief necessary, the knowledge that the expenditure will have to be provided for by local taxation would not give them a truer insight into matters. An honest official would do what he considered necessary regardless of consequences. I am inclined to think that lavish expenditure is not more to be feared than niggardliness; that officials are as a rule careful of the government money, and that generally speaking they would look for, and try to obtain the approbation of the government by doing what appears much at a small cost. Officials generally take their cue from the government which they serve, and it depends very much on the nature, and tone of the instructions issued by the government whether a famine is encountered in a calm and sober, or in a flustered and extravagant manner. This being the case, I admit that in the interests of the Imperial exchequer it may be desirable that a province which has suffered from famine should meet from its own resources a portion of what has been expended on famine relief, and should not draw on the 'Mutual Assurance fund' and the Imperial treasury for the whole. What proportion of the whole expenditure should be thus made good, would I think have to be settled by the Government of India in each case as it arose, and would depend on the severity of the famine—the condition of the province—the extent to which it had permanently benefited by the famine works, and its contribution to the Mutual Assurance fund; and the way in which the repayment would be made would be by the Government of India demanding from the Local government a larger contribution on account of the sources of revenue and departments made over to it, than it now receives. This larger contribution would be paid for so many years, until thereby the provincial contribution to the famine expenditure had been made up. The Local government would then have the choice of reducing its expenditure on administration—of proceeding more slowly with public works, or of resorting to fresh taxation. In this manner *Provincial* responsibility would I think, be sufficiently enforced without the general principle of mutual assurance being departed from, and without the difficulty noticed as attending an attempt to localize taxation on account of famine relief being entered.

With regard to a Municipality bearing the cost of feeding its own poor. I think Municipalities would generally do in that way all that could fairly be required of them. Experiences shown that in times of scarcity or famine the poor from the rural districts make their way to the towns where they beg for relief, and in the towns not only are large numbers relieved by private charity, but Municipalities also organize relief houses. I do not think it would serve any good purpose were the duties of Municipalities more strictly defined. There can be no doubt that they would always co-operate with Government in times of distress, and that no compulsion is necessary.

In dealing with Chapter IV, I can offer only a few general observations. I do not see exactly how schemes of works suitable for execution in time of famine can always be kept ready prepared. There is this difficulty that schemes cannot well be kept prepared for all parts of the country; and schemes both great and small, in order to meet the case of a greater or lesser famine. It seems to me too that if famine relief by means of employment on public works is to be given, it is idle to discuss whether the works to be undertaken shall be sanctioned under ordinary circumstances, or whether works of doubtful utility could be also attempted. If work has to be found, then it must be found. The only point to be laid down is that such works shall be undertaken.

time before hand that a famine is impending, and where it is likely to be severe, to permit of works being fixed upon and preparations made. Generally speaking the Public Works Department moves along in a very leisurely manner, and large works are years and years in execution. Take all the great roads in these provinces, the Northern road, the Eastern road, the Saugor road, and now the Mandla road. Comparatively little progress was made from year to year because only small sums of money were available for any single work. In famine time such works would be pushed on rapidly. I do not think there will ever be a time when there will not be large schemes on hand in almost every part of the country which are thus slowly being prosecuted, but which in time of famine could be rapidly carried through giving occupation to thousands. If this be true, it is needless to form special projects in view to future famines—to do so would be merely to employ a number of engineer officers and others in a useless way. Even now the cost of preparing a large number of abortive projects must cost the Government a very large sum of money, and I fear that if, say now, any particular scheme were prepared in view to a famine and estimates &c. framed, but a famine were only to occur 10 years hence, it would be found that all the preparations were valueless, that the estimates were untrustworthy, and that the work would have to be done over again.

You have especially directed my attention to paragraph 6 of this Chapter, in which it is asked what number of persons is likely to be thrown on relief works in an extreme case; and could a scheme be framed so as to shew what portions should be taken up on any particular occasion, in order to provide for the employment of the anticipated numbers and for the length of time required. It would I think be a waste of ingenuity to attempt to answer the latter part of the question. No doubt some wonderful work might be conceived which would seem to admit of being treated in the manner suggested, but practically such treatment appears to me impossible. Again, it is difficult to say what number of people might be thrown on relief works in an extreme case. Is one to presume there is famine throughout India, so that the whole of India should be as was Madras last year. In that case who could say how the people could be fed at all. If past experience is to guide us, then I say our experience in this province is wholly insufficient to enable to pronounce with any thing like safety. The experience of former times is of little avail, since communications have been so greatly improved.

5. The last paras: "to which my attention is directed are 25, 26, and 27, but I do not think the matters discussed in those paras:" affect us in the Central Provinces very nearly.

There are no doubt many small tanks in various districts, but the Government could not look after these tanks, if it would, and it is unnecessary that it should. The villagers look after them themselves, and are quite alive to their value. I am not disposed to recommend any interference on the part of Government.

6. I trust the Chief Commissioner will excuse the looseness of the foregoing remarks.

I have the honor to be,

Sir,

Your most obedient servant,

J. W. NEILL,

Officiating Comm'r.

to be
Mhowa

	PAGE.
Improved condition of people to withstand high price	95
Improvement of land by agriculturists	144
Inability to come for relief among villagers	194
Incidence of land revenue	149
Increase of trade	160
Incurables	23, 190
Indebtedness of agricultural classes	132, 133, 223, 245
" of cultivators in Chhattisgarh	58, 65
" of labouring classes	156, 246, 250
" of landholders	133
Independence of hill tribes	56, 171
" " in Rehrakol	107
Indications of distress	178
" among rural population	179
" among urban population	ib.
" " imminency of famine and temporary distress	183
Indolence and apathy of ryots in Chhattisgarh	59
Inferior proprietors, definition of term	136
Inspection of villages	182
" " staff for	207
Instalments of rent and revenue	132
" of revenue in relation to harvest	152
Interest on arrears of land revenue	153
" on grain loans	133
" rates of	132
Investments in permanent improvements of land	144
" of surplus savings, ignorance regarding	133, 223, 245
Inundations	9, 95
Irrigation, importance of Government loans for	101
" large schemes impracticable	117
" neglected in Raipur	65
" " in Sangor	40, 42
" " in Balaghat	57
" statistics of	107
" tanks in Sambalpur	58, 64
" " supervision and maintenance of	212
Isolation of Sambalpur and Chhattisgarh	92, 163, 172

J.

Jagirdar, definition of term	135
Jagni, oil seed plant, for rotation in exhausted ground	121
Jowari, cultivation of	119
Jubbulpore, distress in, 1866-67	14
" severe blight in 1855	12
Jungle fruits fell short in April	25
" resorted to	35, 37, 43, 46, 79, 81
" " in Chhindwara	49
" " in Jubbulpore	21
" " in Seoni	45
" produce resorted to in Damoh	43

K.

Khandeish, scarcity in 1844-1845	12
Khans grass	89, 130
Kodo and kutki as staple food	40, 119
" country of upland of Balaghat	54
" importance of, to poorer classes	58, 78
" replacing rice, reasons for	70
Kutki and kodo, staple food	119
" second crop of	29

Kutki, early ripening of importance	...	...	PAGE. 70, 80
Kymori range, diverting rain	...	...	91

L.

Labour, impressment of	...	...	195
„ test	...	...	186
Labourers, agriculturists, statistics of	...	...	132
„ condition of	...	...	156
„ partnership of, with employers in Chhattisgarh	...	...	155
„ wages of field	...	...	154
Labouring classes, indebtedness of	...	...	156
Land, alienation of	...	...	174
Landholders charged to send sufferers to poor-houses	...	...	194
„ indebtedness of	...	...	13, 133
Land Improvement Acts, operation of	...	...	145
„ „ of, by agriculturists	...	...	144
„ price of	...	...	153
„ „ in Murwara, as shown by sales	...	...	256
„ revenue assessments, when made	...	...	151
„ „ collections, no difficulty experienced in	...	...	152
„ „ demand, incidence of	...	...	149
„ „ remissions	...	...	205
„ „ suspensions	...	...	ib.
„ sales of, to non-agriculturists	...	...	153
„ sold for arrears of revenue	...	...	ib.
„ „ under decrees of Court	...	...	ib.
„ tenures	...	...	134
Latrines for poor-houses	...	...	193
„ in relief camp	...	...	186
Legislative authority not requisite for relief purposes	...	...	194
Linseed and oil seeds exported	...	...	168
„ grown on freshly broken ground	...	...	122
Loans by Government for land improvements	...	...	145
Loans, disadvantage of, taking from Government	...	...	70
„ from Government, difficulties attending	...	...	82
„ of grain in Betul, system of	...	...	47
Local charities	...	...	182
„ Financial responsibility	...	...	175
„ Fund Committees, aid from	...	...	182
„ Rain, dependence on	...	...	116
„ Taxation for famine expenditure	...	...	60, 176
Localities most exposed to famine	...	...	86
Locusts	...	...	95
Loss of life among deported paupers in Narsinghpur	...	...	49
„ concomitant on famine	...	...	174
„ from epidemics in Saugor	...	...	42
„ „ starvation	...	...	48, 53, 39
„ „ „ in Bilaspur	...	...	80
„ „ „ in Mandla	...	...	47
„ „ „ in Seoni	...	...	46
„ „ „ not ascertainable	...	...	44
„ „ „ in Balaghat	...	...	57
„ „ „ in Chanda	...	...	51
„ „ „ in Chhattisgarh 1834-35	...	...	12
„ „ „ in famine camps, details of	...	...	22
„ „ „ of 1868-69	...	...	98
„ „ „ in Jubbulpore, Nagpur, and Saugor, in 1818-19...	...	...	8
„ „ „ in Nagpur in 1825-26	...	...	9
„ „ „ „ country 1832-33	...	...	10, 11
„ „ „ in Narsinghpur in 1818-19	...	...	7

	PAGE
Loss of life from starvation in poor-houses	23
" " " in Saugor in 1854	89
" " " " 1855	13
" " " " 1869	39, 40
" " " in Seoni district 1833-34	11
" " " in Raipur 1844-45	12

M.

Maafidar, definition of term	137
Maintenance of irrigation tanks	212
Malguzars, attitude of	44, 51, 55, 56, 59, 63, 85
" contracting for works to employ their villagers	34
" debts of	133
" definition of term	136
" place grain at disposal of Deputy Commissioner	54
" the centre of relief measures and support of the village	84
" to send in sufferers to poor-houses	53
Malik Makbuza, definition of term	137
" " numbers of	140
Mandla, distress in 1868-69	46
Manufactures, relief by	192
Manured lands, area of	121
Market rates, grain sold below	199
Marriage expenses, evil of	133
Marwaris, character of	133
Medical officer's discretion regarding rations	195
Merchandise, cost of carriage of	162
Mhowa, as an article of food, value of	47, 49, 79, 84, 106, 251
" consumption of, in Chhindwara	49
" crop, importance of	57
" price of, doubled in a few days	49
" high price of, in Seoni	45
" saved hill tribes from want	47
Migration, extent of	200
" in Raipur	73
" to Balaghat uplands	55
Migratory habits of people in Chhattisgarh	59, 64, 99, 100
" " of population of Nimar	7
" " of Gonds of Seoni and Mandla	9
" propensities of people	95
Model Farm at Nagpur	123
Money-lenders, character of	133, 223, 231
Monsoon, excessive rain-fall of 1867-68	14
" late continuance in 1852	12
" meeting of S.W. and N.E.	254
" of 1868, scanty	14
" rain-fall	1, 213, 222
Mortality in 1869	97
" of cattle	28
Mukassadar, definition of term	137
Mukhtiars, ruinous results of, employment of, by cultivators in Nar-singhpur	225
Muktadar, definition of term	137
Municipal Committees, aid from	182
Municipalities, liabilities of, for relief	176
" relief works of	52
Murwara, centre of relief in Jubbulpore district	21
Muster rolls, fabrication of	189
Mutiny of 1857, effects in Saugor district	89

N.

	PAGE.
Nagpur, condition of, in 1868-69	51
" country, famine of 1818-19	7
" " relief operations, 1868-69	50
" famine of 1832-33	10
Narsinghpur, distress in, 1868-69	48
" excessive rains, October and November 1852	12
" famine of 1818-19	7
Navigation, inland	169
Necessity of Chhattisgarh railway as a protection against famine	163
Nerbudda division saved from famine	47
" valley, distress from 1831-34	10
" " famine of 1771, 1783 and 1809	4
Nimar, condition during distress of, 1868-69	50
" difficulty of retaining water in tanks of	111
" distress of, 1844-45	12
" drought of 1833	10
" famine of, 1802-3-4	5
Note on forest produce used as food by hill tribes, contributed by Mr. Fernandez (Assistant Conservator of Forests)	257
Number of inmates in poor-house	30
" of people relieved on works and in poor-houses	35, 36, 39
" of persons on relief works in Bilaspur	78
" on relief works in Raipur	68
" by gratuitous distribution of grain	23
" relieved in Balaghat on works	54
" " in Mandla	47
" " in poor-houses at Jubbulpore	23
" " on works in Damoh	44
Nursing at camps	189

O.

Occupancy ryots viewed with jealousy by Malguzars	59
" tenures	138
Officials charged to send sufferers to poor-houses	194
Olpherts, Mr., first started relief in Jubbulpore	21
" his voluntary services	27, 32
" report on relief operations	34
Oobaridar, definition of term	137
Opening up of Balaghat high lands to cart traffic	54
Orders of Government communicated too publicly	209
Ornaments, surplus invested in	133
Orphans	30, 48, 80, 199
" in Saugor	43
" in Seoni	46

P.

Pack bullocks, rates for carriage by	162
" " use of	161
Pardanashin women, relief of	198
Partnership of labourers in Chhattisgarh	185
Patel, definition of term	137
Patrols sent to bring in weak persons from homes and villages	22
" " to search out sufferers	55, 194
Patwaris, option of appointing, in Wardha	142
" papers	106
Payments for broken periods	190
" of wages, method of	185
Periodical redistribution of lands	99

P.

	PAGE.
Permanent improvement of land by agriculturists	144
Persian wheel for wells	109
Petty contract system	186,189
Petty works, advantages of	184
Piece work system	186
Pilgrimage, mania among women of Saugor	235
Police aid in relief operations	27,35
Police and Malguzars ordered to search out and send in sufferers	53,194
" assistance	39
Poor-houses	182
" as a standing hospital	ib
" employment in	197
" establishment for	197
" in Bhandara	53
" in city of Jubbulpore	27
" in Damoh	44
" management in Balaghat	55
" number of inmates	30
" opened at Tahsils and Police stations	82
" registers for	197
" relief	23
" routine in	55
" sheds for	34,37
" site for	192
Population, agricultural, statistics of	131
" normal increase in	96
" scantiness of, does not call for high cultivation	145
Poverty of population in Raipur	64
Prejudice against working on roads	67
Prevention of frauds	185
Prices equalized by Railways	166
" fluctuations in	159
" in Betul in 1868-69	47
" Bhandara in 1868-69	52
" in Chhindwara in 1868-69	49
" in earlier famines in Bilaspur and in normal seasons	75
" in Hoshangabad in 1868-69	48
" in Nagpur	52
" in Narsinghpur	48
" in Nerbudda Valley during 1868-69	18
" in Nimar in 1868-69	50
" " Wardha	51
" obtained in Murwara for land	256
" of food staples	157
" of grain in Balaghat	54
" of grain in Bilaspur, 1844-45	12
" " Chhattisgarh, 1834-35	ib
" " Chhindwara, 1844-45	12
" " famine of 1771	4
" " " " 1818-19	7,8
" " " " 1854-55	13
" " " " Hoshangabad in 1803-4	7
" " " Jubbulpore 1833-34	11
" " " " 1868-69	23
" " " Khandeish	6
" " " Nagpur in 1825-26	9
" " " Nimar in 1803-4	5
" " " Raipur and Bilaspur, 1828-29	9,10
" " " Raipur, 1844-45	12
" " " Saugor	40,42

	PAGE.
Prices of grain in Sambalpur	62
" " " " Wardha 1833	11
" " " " towards Poona 1803	5
" " land	153
" " Mhowa in Seoni	106
" " rise in September 1868	77
" " tightening of	76
Principles of land assessment as regards years of exceptional loss	206
Private charity	30,39
" " contracted	55
" " extent of	180
" " in Jubbulpore	23
" " in Narsinghpur	49
" " in Raipur	73
" " in Sambalpur	64
" " relieved of strain	26,27
" " suitable field for	182
" " individuals start relief works in December in Bilaspur	77
" " individuals undertake works	52,68,82
Produce, proportion of, to land revenue demand	149
" " value of gross	150
Progress of famine in Raipur	65
Promiscuous distribution of alms	194
" " " " danger of	182
Proportion of produce to land Revenue demand	149
" " of sexes and children in poor house	55
Proprietary rights, value of the gift	134
Protection by irrigation	116
Public Works Department Officers, harmony of working	37
Purchase of grain for relief works	35
Putrid fever	22,34

R.

Rabi of 1869, total failure in Jubbulpore	25
Railways, development of	162
" " effect of, on prices and trade	166
" " feeder roads	25,31,35
" " necessity of Chhattisgarh Railway as protection against famines	163
" " new trades created by	168
" " works in Narsinghpur employed 35,000 people daily during famine time	49
Rainfall, annual, registered for 10 years	2
" " at Hoshangabad for 10 years	215
" " excessive in 1867-68	14
" " for ten years of each District	213,222
" " in Bilaspur in 1868	53
" " late continuance in 1852	12
" " maximum which could be borne without injury	3
" " minimum required	2
" " " " for black soils...	254
" " of 1868, scanty	14
" " of Chhattisgarh from N. E.	254
" " system of	1
Raipur, famine of, 1834-35	12
Rates of cart hire	162
" " of interest	132
" " of interest in Saugor	235
" " pack bullock hire	162
Rations in poor house	195
Realization of Land Revenue, no difficulties experienced in	152
Recruiting in the villages by expectant overseers, &c.	189

	PAGE.
Re-distribution of fields in Raipur	64
" " lands on Revenue quotas in Sambalpur	137
Refusal to accept relief	82
" " go to relief works in parts of greatest distress	78
" " work	81,82
Registers at poor-houses	197
Registration of rain-fall	2
Regar, soil, analysis of	129
" " description of	87
" " of Chhattisgarh	94
Rehrakol Raja's account of safety of his people from famine	107
Rejection of applicants	184
" " of measures of relief	208
Relief at homes in towns	199
" by manufacture	198
" camp in city of Jubbulpore	27
" food distribution, cost of	29
" in Saugor, cost of	36
" in villages of the infirm, cripple, &c.	199
" measures adopted	31
" of Pardanishin women	198
" road works in Jubbulpore	21
" works	82
" " chosen for their future utility	25
" " for various classes	184
" " grain purchased for	35
" " huts at	186
" " in Balaghat	54
" " in Bhandara	52,53
" " in Bilaspur	78
" " in Chhattisgarh, cost of	60
" " in Chhindwara	49
" " in City of Jubbulpore	27
" " in Damoh	48
" " in Raipur	68
" " in Saugor	3,741
" " petty advisability of	181
" " projected in Sambalpur advantage of their not being commenced	63
" " special	181
" " " management of	ib
" " " ready made schemes for	ib
Reluctance of ryots to work	78
" to accept of relief	194
" " come to relief	55,57
Remissions in 1819, Nagpur state	8
" in Betul, 1832	10
" in Bilaspur	84
" in Chhattisgarh, 1828-29	10
" in famine of 1868-69	86
" in Jubbulpore, 1833-34	11
" in Narsinghpur 1831	10
" in Nimar prior to 1846	12
" in Raipur in 1834-35	ib
" in Saugor and Nerbudda territories in 1855	13
" in Seoni and Mandla, 1827	9
" not asked for in Seoni	46
" not granted in Balaghat	56
" " " Damoh	44
" of Land Revenue	74,205

	PAGE.
Removal of labourers to distant work ...	69
Rent and Revenue times for paying ...	132
Rents, enhancement of ...	139
" " " in Nimar and Chanda ...	ib
" payment of, relation to harvest ...	152
Reservoirs for large irrigation works impracticable ...	118
Revenue arrears, land sold for ...	153
Revenue assessment when made and conditions of period ...	151, 152
" collections in Seoni ...	46
" " of Land ...	84
" demand ...	149
" ease of collection of, in Sambalpur ...	64
" instalments, relation to harvest ...	152
" " time for paying ...	132
" land, paid up in full ...	56
" remissions ...	205
" suspensions ...	ib
Rice as staple food ...	120
" country of Bhandara, famine in ...	52, 93
" cultivation of in Chhattisgarh, peculiarities of, ...	101
" cultivation in Sambalpur, system of ...	61
" fields of Chhattisgarh ...	94
" " Bhandara, Balaghat and Chanda ...	93
" growing areas ...	58, 88
" lands, maximum and minimum rain-fall ...	3
" the staple of Chhattisgarh ...	58
Rights in land, value of the gift ...	134
" to water from tanks for irrigation ...	211
Rise of prices indicating scarcity ...	159
" " wages ...	156
River-borne traffic of Balaghat ...	54
River communications ...	170
Rotation of crops ...	121
Rules under Land Improvement Act, deterrent effect of ...	147
Rural population, classes first effected ...	179

S.

Safeguards that indications of distress are noticed ...	178
Sale of children in Damoh in 1855 ...	13
" " " " famine of 1818-19 ...	8
" " " " Nagpur country in 1832 ...	11
" " " " Seoni 1833-34 ...	ib
" " Land to non-agriculturists ...	153
" " " under decrees of Court ...	ib
Salt imported ...	169
Sama or Sawa grass, importance of ...	29, 33
Sambalpur, condition of ...	60
" famine of 1834 ...	12
" inability of ordinary trade to supply during famine ...	172
" isolation of ...	92, 172
" peculiarities of rice cultivation ...	93
Sandy soils, distribution of ...	87, 88
Sanitary arrangements for camps ...	186
Sanitary inspection of labourers ...	188
" " " paupers in poor houses ...	197
" works executed ...	31
" " in villages ...	34
Satnami chamars of Chhattisgarh ...	94
Saugor and Nerbudda Territories, blight in 1854-55 ...	12
" cost of relief in ...	36
" District, relief measures in ...	35

Scantiness of population, does not call for high cultivation	...	I
Scarcity of water not felt in Saugor	...	
" " supply during, by unassisted trade	...	
Schemes for irrigation, impracticable on large scale	...	
" (ready made) for special relief works	...	
Searching out of sufferers	...	51
" " the distressed, a duty of Government?	...	2
Seed grain, advances for	...	26,56,60,79,
" " disadvantages of taking from Government	...	14
" " for Jubbulpore, rabbi sowings	...	31
" " in Raipur	...	70
" " loans, terms of	...	133
" " question neglected in Shahgarh	...	42
" " requirements for	...	106
Seed, selection of	...	122
Selling crops before harvests	...	223
Seoni, distress or famine in, 1868-69	...	45
Servants, agricultural, first to feel famine	...	77
Service holdings	...	139
Settlement of emigrants in other Provinces	...	203
Settlement Proclamation principles of Settlement	...	136
Settling of low landers in Balaghat plateau	...	55
Shifting tenures in Chhattisgarh	...	64,99
Sickness, temporary, treatment of	...	185
Sick, treatment of, at relief works	...	188
Small-pox epidemic of, 1868-69	...	48
Soil, analysis of black,	...	129
" deterioration of,	...	87
Special relief works	...	181
Spinning work, relief by	...	192
Staple crops in Murwara	...	91
" " in North-East of Saugor	...	89
" food grains	...	118
" " of Gonds and Bygyas	...	54
" " price rates of	...	157
" products of the black cotton soils	...	87,88
" " " sandy soils	...	87,89
Statistics of famine of 1868	...	85,86
" " trade	...	168
Stimulus to trade from railways	...	166
Stocks of grain in Bilaspur	...	76
" in Narsinghpur, 1868-69	...	48
" in Raipur	...	64,65,67,73
" in Sambalpur	...	64
" Shortness of, in 1867-68	...	14
Store-houses for sale of grain at cost price in Chanda	...	51
Store-keeper's diet roll	...	196
Stores of grain in Lown	...	73
Storing grain in Damoh, improved system desirable for	...	123
Strike for wages on relief works	...	49
Subscriptions for relief in Saugor	...	37
" realization of, stopped in northern part of Jubbulpore	...	26
Sugar-cane producing areas	...	88
Summary of operations in the Central Provinces during the last	...	
famine	...	85,86
Superior proprietors, definition of term	...	135
Supervision of irrigation tanks	...	212

Supplementary questions by Secretary Famine Commission	...	254
" Wajibularz	...	143
Supply of food in bazars insufficient	...	66
Supply of grain and its conveyance in scarcity	...	177
" " in bazar of Balaghat withheld	...	53
Surplus income of cultivators	...	133
Suspensions in Jubbulpore, 1831-32	...	11
" not sufficient in Narsinghpur in 1835	...	10
" of April kist in Bhandara	...	52
" of land revenue	...	60,74,205
" of revenue in Bilaspur	...	77,84

T.

Taccavi	...	32
" advances for rabi seed	...	33
" " in Bhandara for seed grain and works	...	52
" facilities for giving, required	...	148
" for irrigation, importance of, in Bilaspur	...	101
" for land improvement	...	145
" for plough bullocks	...	28
" for rice seed	...	26
" for seed grain	...	56,60,82
" " " in Raipur	...	70
" " " in Seoni in 1827	...	9
" " " refused in 1855	...	13
" " wells in Betul	...	47
" grants for relief works by private individuals	...	180
" " in Balaghat	...	54
" no great demand for	...	28
Tabsili Wajibularz, translation of	...	140
Talukdars, definition of term	...	135
Tank and field embankment work by private individuals	...	49
Tanks, beds of, dug up for roots of aquatic plants	...	69
" Cleansing of	...	73
" Construction of by agriculturists	...	143
" for irrigation, supervision and maintenance of	...	212
" irrigation from	...	107
Tank work done by Taccavi advances	...	44
" " for relief	...	31,34
Task work	...	22,180
Taxation, local, for famine expenditure	...	60,176
Telegraphic communication	...	173
Temporary distress, suitable measures for	...	180
" distress, test of	...	ib
" sickness, treatment of	...	185
Tenants at will	...	81,139
" " in Bilaspur	...	99
Tenures, areas cultivated under different	...	139
" features of absolute occupancy	...	138
" of land	...	134
" Shifting in Chhattisgarh	...	99
" Should any conditions of, be changed?	...	140
" transfers of occupancy, in Raipur famine	...	74
Test of character of distress	...	180
Trade, activity of	...	160
" centres	...	ib
Trade new branches created by Railways	...	166
" unassisted, capabilities of	...	171,172

Trading classes, character of	...	...
Traffic by river in Balaghat	...	...
Transfers of land in Murwara	...	...
Transfer, right of, limited in Nimar and Chanda	...	...
Trap, faults in under strata of	...	...
Trees in Damoh withered from drought	...	...
" " Saugor	...	...
Twyford Captain, Deputy Commissioner of Raipur, death of..	...	...

U.

Urban population, classes first affected among	...	179
------------------------------------------------	-----	-----

V.

Vagrants, treatment of	...	194
Value of gross produce	...	150
" " Mhowa as an article of food	...	521,257
Village agricultural returns	...	106
" inspection	...	182
" " and searching out of the distressed	..	207
" inspection, staff for	...	ib
" inspectors, beats of	...	ib
" " class of	...	ib
" " duties of	...	ib
Villages, number of settled and maafi	...	139
Village sanitation	...	34
" " petty works for	...	31
" Wajibularz, translation of	...	142

W.

Wages bare subsistence in Chindwara	...	41
" during the distress in Seoni	...	45
" for chief kinds of labour	...	156
" general rise of	...	ib
" given early in relief measures in Raipur	...	67
" method of payment	...	185
" of hired labour	...	154,246
" " labourers paid in kind in famine	...	71,73
" " spinners and weavers	...	56
" on relief works in Bilaspur	...	79
" on relief works in Damoh	...	43
" on reduced scale on relief works	...	68
Wajibularz supplementary	...	143
" Tahsili translation of	...	140
" Village " "	...	142
Wandering paupers how dealt with	...	33
Wardha in 1868-69, freedom from distress in	...	51
Wards, estates under Court of	...	123
Wastage in grinding	..	196
Water communications	..	169
Water drawing, ordinary plan of	...	109
" supply, deficiency in	...	57,69,76
" " distress from deficiency in	...	79
" " in Betul	..	47
" " in Damoh	..	44
" " in drought in Saugor	..	42

	PAGE.
Water supply in Narsinghpur ...	49
„ „ in Raipur ...	67
Weaving, nad spinning classes, emigration of, to Berar ...	202
„ classes mostly affected in Bhandara...	52
„ classes first broke down in Saugor ...	20
„ „ relief for ...	192
Waingunga rice field ...	93
Wells at length resorted to ...	83
„ digging and cleaning of ...	31,34
„ digging of, how regulated ...	148
„ Irrigation from ...	107
„ resorted to in Bilaspur ...	79
Wheat as staple food ...	120
„ rice, &c exported ...	168
„ wastage in grinding ...	196
Wilderness of Bastar ...	94
Winter rains ...	?
„ „ damage caused by in Narsinghpur, 1831 ...	10
„ „ drainage from in 1831 ...	11
„ „ excessive in Chhindwara 1846-47 ...	12
„ „ mahoot or Christmas rain, importance of ...	90
„ „ of 1854, damage from ...	12
Women of respectability, relief of ...	198
Work for poor-house paupers ...	197
Works of permanent utility by private persons ...	180
Work suitable for different classes ...	184

Z.

Zeinabad and manjrod, desolation of 1802-4 ...	5
Zemindars, definition of term ...	135
Zemindaris, general independence of people in ...	171



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