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THE PROBLEM OF RURAL UPLIFT IN INDIA.

THE PROBLEM OF RURAL UPLIFT IN INDIA

(With Special Reference to the United Provinces of Agra and Oudh)

BY

M. B. AHMAD

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PREFACE.

I have tried in these few pages to put the case for the Indian villager, particularly that of Hindustan proper. The conditions obtaining in different parts of the country, both social and economic, although vastly divergent, have this much in common that they spring from the same set of causes and converge to the same effect. The account may be characterised as a bit outspoken, but it signifies only the extent of my own reaction to the conditions as I came across them. It is the strength of feeling that has impelled me to inveigh against certain orders of things.

The several attempts made to present the problem to the public have dealt, so far, only with the instructional, sanitary and vocational requirements of the villager. The relation of the masses to the established institutions of the country and the situation as it has developed, since the economic depression set in, have not naturally been treated in other works on the subject.

The activities of the General Council of Agricultural Research have been touched upon here and there in the text. A fuller exposition, however, of their labours and the good work they have started doing could not be entered upon in view of the preliminary nature of their task which makes it too early to look out for miracles from them. I have similarly referred to the immense possibilities of the Hydro-electric scheme inaugurated in the west of the United Provinces. In fact the existing opportunities for the people to better their condition are many and varied. It only rests with them (the zemindars and the tenants) to take up the work in earnest and with sufficient determination.

My aim in writing this book is to present to the general reader or worker the problem as it is and the different ways in which the work can be taken up with as little expense of time and money as possible.

My scheme of rural uplift given at the end has had two years of life and the results so far achieved are very encouraging.

I have to offer my thanks to Mr. D. L. Drake Brockman, I.C.S., and Mrs. Drake Brockman for their help and encouragement shown to the movement in various ways.

I am deeply indebted to Mr. R. Milner White, I.C.S., for his active support and guidance. His immense popularity with the masses and his enthusiasm for the welfare of the people in his charge are assets in him that ensure the success of any improvement work that has his moral support.

I am also very grateful to Mr. P. M. Kharegat, I.C.S., for his kindly giving me very valuable suggestions concerning this book.

My thanks are also due to Dr. Mittra, Assistant Director of Public Health, United Provinces, and Dr. Abdul Hamid for kindly supplying me information regarding the activities of the Public Health Department. Mr. Murtaza Ali, Assistant Registrar of the Co-operative Societies of Fyzabad was also good enough to send me his reports, the result of village uplift activities he has been so zealously carrying on in the Masodha area.

Last but not least my thanks are due to my cousin, Mr. Aziz Ahmad, for his constant hard work in getting up this book in its present form. I had practically no time for revising the text or correcting the proofs and the most difficult part of the work has really been done by him.

FYZABAD :
30th May 1932.

M. B. AHMAD.

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PART I.

THE PROBLEM BEFORE US.

APPRECIATION.

With the recommendations of the Royal Commission on Agriculture and the later developments in the country culminating in wide-spread agrarian unrest, the village problem in India has come to the forefront. The coincidence with the resumed sitting of the Round Table Conference is specially propitious at this juncture as the true worth of constitutional reforms will be gauged in the light of opportunities they offord the ryot to come to the surface. The unprecedented economic depression and the total collapse of agricultural prices have brought out more forcibly than ever the absolute helplessness of the cultivator in the face of adverse conditions. This points to something fundamentally at fault with the entire system of agricultural labour in this country. Closely allied and in a way leading to it are other aspects of rural life, social, educational, and sanitary, for instance, that call for immediate attention if things are sought to be set aright in this vast sub-continent

Reformers there have been with all sorts of pretensions to uplift and with local and spasmodic attempts to bring home to the royt the tale of his woe but the very fact of such endeavours being limited in place and time has tended to revert the villager to his former ways. To be successful a movement ought to be sustained and widespread. Moreover it must be spontaneous.

There has gone out, of recent years, an impression that mass amelioration can best be effected through legislation. For a proposition of such gigantic magnitude and involving, as it does, so much, any hypothesis must be accepted with reserve. Legislation may bring about much; but it also may not; it might recoil upon itself. The fate of the Sarda Act has been an only too glaring eye opener to those who wanted to thrust their standards upon an ignorant and strictly conservative community. You cannot impose conditions. They have to be evolved.

The theory of legislation as it is understood in the West has no parallel in the East. A variable code and the right of the community to amend or repeal any of its laws is nothing short of sacrilege to the oriental. His faith is too firmly embedded in the past, he has a too highly exaggerated notion of the infallibility of his law-givers to entertain for a moment the thought of change. All his requirements and broad lines of action have been chalked out for him somewhere about the beginning of the Christian Era or at a later date. What he could do now with them is only to expound them and to expand them, and of course to comply with them. For the rest he has the traditions of his forebears to fall back upon,—a set of loose and uncommitted principles often relying on chance for their origin. In the few, the very few problems of daily life where the scriptures are silent, he looks for guidance to the customs and practices in vogue among his wider brotherhood. These vary from district to district according to the accessibility of the place to the main routes of bygone civilisations. Successive waves of invasion, together with the cultural upheavals witnessed time and again in India such as the movements sponsored by Buddha, Shankaracharia, Chaitannya, the Moslims, Kabir, and Nanak, have left behind a legacy of bewildering heterogeneity among the masses. A village upon the plains may quite conceivably be composed of as many different castes and creeds as there are families in the locality.

These then are the main channels along which life has flown for centuries in rural India—no outside interference tolerated, content to live and die as did the ages gone by. To introduce sweeping reforms and bring about a different outlook upon life through the medium of a common legislature is taking serious risks with state-craft.

The character of the Indian peasant is a very complex phenomenon. Centuries have taken to mould it. Geographical features no less than the historical background have contributed to make what it is—superstitious ignorance coupled to a deep solicitude for the hereafter. He has been taught through the

ages to look upon life like a bird of passage, as though it were a fleeting sojourn, a halfway house between two eternities, a thing altogether unworthy of serious concern. Life is not to be lived for its own sake, a bright buoyant gift of God ; but rather as a super imposed affair in which the obligation lies as much on the one side as on the other. If it goes on cheerfully, well and good, if not, why it makes little difference so long as the incumbent is careful to look after his interests in the life to come. He is heroically regardless of sufferings and pains. These he attributes to the 'Lord's Will'. He cannot think that his own conduct or neglect could be responsible for his misfortunes. The only course open to him is patiently to put up with them which might incidentally improve his prospects after death.

This indifference to the realities of life has encouraged a spirit of stolidness and fatalism. He does not mind if his house is dirty, his crops failing, his children ailing. He can just as well carry on without the amenities of life thrown in:—no ambitions, no initiative, and no curiosity to learn—; his only concern so far as the world goes is how to procure food and keep the race going. This he contrives to do with the minimum of industry, intelligence and forethought. Grinding poverty and ignorance. do not allow him to employ better means, while the absence of method in any of his undertakings keeps him poor and ignorant. This vicious circle has continued since the beginning of history. Dynasties have come and gone, revolutions have worked around him, governments changed hands, but he has remained true to his colours, as he was say two thousand years ago.

A rich soil, the clock-like regularity of seasons and the comparative ease in raising crops and rearing cattle have thrown him completely on the mercies of mother nature. People in harder climes have to struggle hard to bend her to their wants. They are constantly put to it to devise means to earn a living. When they find the usual methods unavailing, they look out for fresh means to carry them through. They try one device, probe into another, take up this, leave out that, until the right course is determined. This is what they call initiative and enterprise,

co-operation and self-help. The kindness of nature to its children in Hindostan has been their undoing. The native resources of the land have been exhausted by a constant and intermittent draw upon them until by sheer exhaustion they now refuse to respond to his meagre call.

Where will all this lead to? The race is certainly not going to become extinct by decreasing numbers. The decennial census shows a regular increase all along 1891, 1901, 1911, 1921 and 1931. No! there is no fear of that. But the decreasing productivity of land and the shortening span of life points to another and a grimmer impending fate. They are to be exhausted, the land becoming barren and the men pigmies with butterfly lives.

The moral and material progress recorded in the periodical publications of the Government, both, local and central is all very good and provides refreshing reading; but lukewarm and perfunctory measures break very little ice, specially where so much is involved and the task so stupendous. A sympathetic sense of responsibility is what is most needed, and a thorough grasp of the situation. The government have been quite sincere in doing their bit towards alleviating the ryot's hardships; but they have on their own admission been always handicapped for want of funds and the paucity of suitable men to carry the schemes into fruition.

There are over twenty six experimental and demonstration farms in the United Provinces, a full paraphernalia of office and organization, and still the methods in vogue everywhere are almost primitive, the average yield per acre for the principal crops being as low as heretofore. The number of co-operative credit and other societies is quite large enough: yet the agricultural debt of the provinces remains as immense as ever; marketing and disposing off facilities are totally unknown to the average producer; while commercial syndics and trading societies are still to come. Similar is the plight of sanitation and veterinary departments, education and general

uplift,—everything proclaiming a waste of public funds with perhaps the doubtful grace of providing jobs for a fraction of the educated unemployed. The reason is not far to seek. The functionaries are generally speaking, not imbued with the right spirit and the country ill prepared to take to it. The actual worker within the masses is too much pampered with the red tape, finds himself an alien, a stranger. He does not impress them nor can he persuade; his school room training equips him ill for the all important task he is called upon to handle and the government's good intentions fall flat upon those who are apt to connect every thing *sarkari* with the ways of police or revenue officials.

The work ahead is too pressing to be dallied, too important to be swerved away from. A race is to be saved, a land made habitable. No amount of wisdom and imagination is too much for the task. Institutions and traditions are dynamic storm centres. They cannot be safely tampered with. Leave time to do that. Meanwhile customs and usages, ignorance and lethargy are to be attacked. The right type of men and women should be found to plan it and to work it. No exertions are to be grudged, no money spared till we are well on the road. A generation or two count for little in nations' lives. And God helps those who help themselves.

In the following chapters an attempt has been made to present as faithful a picture of conditions in rural Hindostan as the variable nature of them from district to district allows. The figures and charts where given are derived from government administration reports and other sources specified in the text.

AZIZ ERFANI

CHAPTER II.

ADRIFT.

Ignorance rampant.

Ignorance has ever been a curse to humanity. There have been dark ages, cruel ages, ages in which people have feared most, suffered most and erred most. They feared because they knew not how or when an evil might overtake them, they suffered because they were not aware of the ways to avoid and the means to fight the evil. Lastly they erred because of their anxiety to escape rather than face the evil. The past however, has not been without its gleams of light and the semblance of order that has sustained society through the ages owes its existence to the great thinkers and lawgivers who endeavoured with varying degrees of success to reduce things into a working cosmos. Indeed it is on their crude enunciations of nature's laws that the present edifice of science and philosophy is largely broad-based, it is owing to them that men have common standards and local conventions everywhere. But ignorance with the attending evils has in the main kept the race in a sort of moral bondage. Undeserved anxieties and unjustifiable neglects have embittered lives and the blessings of nature have only sparsely been enjoyed. Man, in short, has been a slave because he has been ignorant.

Yet the amount and duration of ignorance have varied from place to place and been graduated in time. There have been nations that maintained a fair standard of light and culture even when the rest of the kind were benighted. The Egyptians, Assyrians, Greeks and Romans, Persians and Arabs known to us have in different stages of their growth transcended in uplifting humanity's lot. They were never slow to take up a clue nor dogged in their loyalty to the past. And history has so much to tell of their greatness. Whereas there are others who so much cherished their past that they virtually refused to move with the times. The ancestors had during their day taken proper, even a conspicuous share in the advancement of knowledge. This made them (the predecessors) infallible with the succeeding genera-

tions, who therefore only hugged their memory and slumbered away their opportunities. Living on past glory served them for a time and then of course the reckoning was to come. It came upon them with a vengeance and left them limp.

India's past greatness

The story of the race in India answers more to this latter description than the former ideal. Since times immemorial, Hindostan, the Arya-Varta, has been renowned for its ancient culture, for its great thinkers, for its contribution to religion and philosophy, for its Budhas and Shankeracharyas, Paninis, and Kalidasses. Those were great days. The land of gods can well afford to look back with pride on them—but only where comparative history allows this. Live upon it and you are lost. Again greatness was only incidental to the particular era wherein it was associated with a people. It compared favourably with the contemporary culture in other lands. Outsiders looked on with awe and fascination. Then they were prompted to approach it, learn it, master it and finally improve upon it. While the great, proud in their heritage, refused to be guided by their ex-pupils. So they remained where they were. Centuries, tens of centuries passed on and they were still there. Indeed they are still there.

The Age of Science.

Meanwhile science has penetrated almost every sphere of human activity. Men are no longer content with half truths and conjectures, and although it is too early yet to acclaim the present as the ideal age—knowledge is by no means complete and what is more it can never be—, yet allowing for all imperfections, things have for the most part been thoroughly sifted, analysed and adjusted. So that nothing is any longer isolated and arbitrary. Even religion, spiritual subtilties and what are popularly called occult sciences are sought to be explained according to human needs and possibilities. The advance of science has signalised the dispelling of the forces of darkness and ignorance, fear and superstition. Whatever comes must be due to causes that can be ascertained and steps taken to remove or mollify them. There is no danger to life or happiness that

has not been attacked and brought within reasonable bounds no pleasure or blessing but has been explored and examined till it is more thorough and widespread. Corporate pleasure seeking, embodied in public gardens, zoos, libraries, carnivals, health resorts and a thousand other collective enjoyments point to an increasing tendency to share together the delights that God conferred upon man. Verily science has made it easier to live and squeeze out of life its maximum value.

The Modern Nations.

Nations are more and more adapting themselves to science and regulating their lives in the light of experience thus gained. Thus the peoples of Western Europe with few exceptions, Japan and America (United States) have mechanised their lives and live, so to say in veritable laboratories. It is significant that there are no defections. Once come into it they are come for all time. The blessings of light and knowledge are too real, too elevating to be given up. Vast sums are regularly spent and the utmost resources, both public and private, put forth to make each member of the community as complete a man as science can make of him. Thus the expenditure on public education in the United Kingdom excluding the vast endowments on the Universities comes up to the tune of 62 million pounds sterling,* about $1^1/_4$ £ per head of the population. Similarly France, U. S. A., Germany, and Japan realise the value of universal up to date instructions and spend vast sums to keep up the pace in national development. And if there are any peoples who don't take to science and hold fast to traditions it is only those who are actually going down in the world. The Turks, for example, were a dying race before the present regime and could hardly have survived the loss of empire had they not been well led and inspired by their own prominent nationals. Russia again is a world force now. Before 1917 she was a decaying overgrowth, the differentia being only organization and application of scientific method. The Arabs, the Persians and many other

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*Daily Mail Year Book 1924-25.

Eastern peoples are decadent in proportion to their tenacity to the past. They will be eliminated in the natural process of things,—weeded out, unless they come up with the times.

Mechanisation and Modern tendencies in Industry.

Expert talent and method now rule the day. Organisation and co-operation have come to replace individual effort. Modern inventions and in particular those embodying man's victory over time and space have brought in an era of mechanisation and rapid turn over; while research and experiment open up from day to day, new fields for enterprise. With better methods, persuasive powers and sometimes even force they successfully exploit the undeveloped resources of such peoples as have not been able to harness science in their service. Industry and commerce have been brought in line with current knowledge and the result is a staggering gain over old world methods. Thus banking, stock-broking, specialised mass production, skilled labour, efficient transport, intelligent marketing, extensive advertising, trade commissions in foreign lands and a bevy of other facilities tend to make it an art of industry and mean, in comparative worth, a really tough struggle for unskilled everything. The latter has to give way on every point save perhaps the cheap labour question which too does not count for much, seeing how inefficient cheapness cannot carry it far enough. Hence competition is hard, much too hard for backward peoples.

Invasion of Raw products by Machine.

But the hardship was not particularly acute so long as there was the broad basic division of manufacturing and raw-producing countries representing respectively the scientific and non-scientific methods in industry, for the latter managed somehow to get the maximum price over their produce without fear of serious competition from efficient and organised production of their own commodity. But times have changed since, and the increasing pressure of population in industrial countries has driven a good deal of genius, energy and enterprise on to the colonies—vast virgin tracts of continental land with almost

unlimited possibilities of development. These prompted and patronised by parent nations have taken to agriculture and such other pursuits as lead to the preparation and export of important commercial products such as wools, skins, ores, oils, rubber and pulp etc. for which the markets had been relying chiefly on the less advanced countries. With better commercialised methods, organisation and state backing they are growing cheaper and cheaper every day and may at any moment oust the older supplier from the principal markets. Indeed there is a marked tendency to this effect, and Australian wheat, American oil and cotton, Canadian pulp and Russian timber are already flooding the world ports. Besides there is a steadily growing tendency to combine and cartel—amalgamation of big business interests to reduce cost of production, ensure a high standard of efficiency and facilitate distribution. The most radical form of this experiment is the nationalisation of industries and the abolition of private enterprise. How far this succeeds in revolutionising conditions of trade is still to be seen in view of the five years programme launched in Soviet Russia. But apart from its social and political aspects, the movement epitomises the latest and most radical application of scientific thought to human affairs. This throws the chances of disorganised society still further into the back ground. Soon may its members cease to produce for commercial purposes and it is unthinkable how they might fare in the future order of things. The trend of recent trade developments in India already shows a decreasing acreage under cultivation for the principal export crops such as cotton, jute, wheat and rice.

Survival of the fittest coming.

It is thus going to be a survival of the fittest problem for the coming generations. And the average cultivator in India, for he forms the bulk of the population, is still quite ignorant. The figures of literacy for the whole of India including Burma correct upto 1925-26 are 9·4 per cent. in the case of males and 3·8 for the females of all ages. Those for Hindostan proper

for the same year are 5·8 and 0·45 per cent. respectively.* The figures tell their own tale.

The cradle of Aryan civilisation, the scene of Kashi, Muttra and Ajodhya's greatness, the main area of Mediaeval Moslim influence is also the hottest bed of superstition and ignorance. It is because the proportion of those dependent entirely on land is also the highest in this province. It follows hence that agriculture and illiteracy go hand in hand in this country.

Illiteracy of the masses.

Yet all accounts and existing records go to show that the number of those able to read and write as at present has never been exceeded in the annals of India. The art of printing, the public press, cheaper books and the Western conception of free primary education have all contributed to making it more universally accessible. But apart from the quality of the instruction provided, the quantity too is very misleading. The figures come upto that level because of the much higher proportion of literacy in the cities and urban areas, among the higher and middle classes as also among the Christians and Parsis. These figures bear a rough analogy to those of the urban and rural populations; but although that cannot be a correct apportionment, literacy may safely be associated with the higher and urban classes, while those known as cultivators, farm labourers and low castes are generally speaking quite innocent of any approach to letters.

Traditional indifference to letters.

This is no deterioration however; their lot has ever been so. The ancient divisions of Varnas into Vidyarthi, Brahmachari, Grihastha and Sanyasi was never meant for the cultivator. It was fundamentally a Brahmin conception, for the Brahmin alone. The banyan shed school was to train priests and theologians only. The toiler on the fields or his accessary, the craftsman had of course nothing to do with learning. This persistent denial to him of soul's elementary requirement made him, in the course of time indifferent, even hostile to it. He has learnt to go without too long to have any desire for learning lingering in him.

* Times of India 'Year Book,' 1929-30.

The village ideals and how they are come by.

With no knowledge of things beyond his immediate environs, and with an inherent prejudice against everything not already known, no wonder the ideals of his life are anything but high and inspiring. His visions of dreamland too carry him no further than good soil, heavy monsoons, successive crops, herds of healthy cattle, dutiful and clever sons and perhaps owning of villages and lands. These with local additions make up the sum total of village aspirations. More he has not been told to want. From early childhood his training is such that he is made to take many things for granted. Every child is inquisitive and the village child no less so. He wants to know the why and how of things. But there is no one to satisfy his curiosity; his mother and others around him explain as they best can in the light of their own ignorant and superstitious beliefs and the child grows with a pronounced bias in favour of imputing all things to the will of gods, or evil influences, devils, demons and other extra-natural agencies. Thus smallpox is represented as '*Mata*' (mother—unnatural of course), infant disease as Jamoga, another malignant agency, and hysteria as the visitation of some departed soul. Similarly cholera, plague, famines and other scourges are explained in a like manner; but the most copious referendum is the Master's Will. If the crops fail or the cattle die, children suffer, rains slack, government oppresses, always the ubiquitous '*malik ki marzi*' is there to stand incriminations and head shakings. This engenders a spirit of desperation in youth and calm fatalism in age. After all things are to happen one way or the other, so it is hardly worth the while to do a thing in a particular manner and anticipate events. Surely the ancestors were no fools to have lived as they did. It is their own neglect in not minding their clear precepts that misfortunes come. So goes on life generation after generation, each successive stratum relying for guidance on the foregoing one and leaving behind its own quota of ignorant beliefs and superstitions.

Childs's training for life.

There is another factor in children's upbringing which wields considerable influence in moulding village character. Boys and girls are from their infancy fed up with the stories of

supernatural powers as exercised by mythical heroes, Vedic saints and mystic devotees. They are shown to have been rescued in some mysterious way out of dire difficulties. This coupled with the miraculous tendencies abounding in literatures and traditions, ordinary conversation and religious beliefs engenders in the child mind a deep faith in the Providence which is ever ready to prop him up at every turn in his adult life. He looks to a divine or demonish agency to do for him what he thinks he cannot do himself. This naturally leads to a relaxation of effort and arousing of false hopes which are never realised. Such is the unhappy lot. He fears in ignorance and hopes in ignorance.

Hold of religion.

The conception of life as has already been said is deeply tinged with an anxiety for soul's fate in the hereafter. The moral structure of the Indian society is entirely based on religion, which however is not uniformly subscribed to by all classes and individuals. The less knowing of the community are also less aware of the letter and spirit of religion. It has a comparatively weak hold on them so far as the actual tenets and rituals are concerned. On the other hand it has served to harden them in their social customs and superstitions. They are very particular about the caste divisions, untouchability, woman's position in society, and joint family system. They celebrate the annual festivals and go through the whole length of rites and ceremonials prescribed. But very few really know the moral utility, the ultimate collective gain underlying such practices as river bathing, pilgrimage to shrines, fasting and congregational worship. They are too enamoured of the symbol to look about for fact in religion.

Resignation and fatalism

But the most formidable evil that religion or rather its misconception has brought about in the country-side is the idea of resignation to fate which fosters indifference to the problems of life, indolence and inertia. It is no part of piety to live clean, happy and healthy lives. Better conditions and physical comforts only strengthen the attachment to this world which is hardly good for the soul. Spiritual heights are attained by constant denials to body. The pains and sufferings of life

are only transitory and not worthy of serious concern. Besides all losses and privations suffered in the quest of truth are sure to be liberally compensated in the life to come. Pains therefore are not merely to be endured: they must be courted. The fasting '*Fuqirs*', the recliners on nail beds and the self torturing '*sadhus*' have always been known and revered in India.

Mysticism and soul development.

This trait in the national character has been built up in the course of centuries. The great mystic saints of yore, who were to do them justice, fully aware of the principles involved and the spirit requisite to such orgies of self-sacrifice, took the course exclusively and after a set purpose. It was a hobby with them, a passion. They never meant it to be applied to domestic life and village standards. As a matter of fact they avoided public gaze and when put to it they only exhorted people to be kind and helpful to each other and live useful lives. Still the lure of spiritual attainments was too great and the divines' own precedents too clear for the admiring masses not to mimic their ways.

Drift

Thus the evil is come to stay, and poverty has no sting in it nor degradation a stigma. The will therefore to be better is essentially lacking and so all life is a drift. At the tender mercies of the constituent elements of his being, the villager passes his days, happy some times (relatively though), chequered at others, and uncertain always. Between his moral anxieties and material cares he is never able to decide which to give precedence to and passive resistence is often the most convenient course. But nature is not to be denied and the routine of life has to be gone through.

Misplaced diligence and elementary co-operation.

Agricultural pursuits, domestic pre-occupations and local interests divide his attention piecemeal. He is capable at times of very hard labour and concentration. The sowing and reaping seasons are times when he revels in work; he knows how to economise time and redouble energy when so required. But then he always relapses and lets things go their way. He cannot exert his powers at a stretch, neither does he know how to regulate the spare hours so as to minimise the strain on the full

ones. In a word he brings little of imagination and forethought to alleviate his sufferings and hardships. Such elementary co-operation as has the sanction of usage behind it has been mutually bartered for long in the villages; bnt there are no obligations and rights as such securing uniformity of application and regularity of treatment to this conventional practice. As a rule it is some family rites or ceremonials, marriages, death or the various anniversaries that call forth mutual help. Or else common dangers and anxieties such as epidemics, fires, floods, and dacoities are occasions when village sympathy is freely offered and taken. But business, health, profits, loss and all other vocational concerns are matters strictly private and men are expected to handle them according to their own lights and wits. So that they are thrown much on their own resources and they don't complain.

Rank Conservatism.

They don't complain because they don't realise the depth to which they are sunk. And since the will is not there, they don't want to learn. They resent any interference with their ways of life, social customs and matters of faith. Conservative to a degree, they cherish even the evils of the good old days rather than experiment with unheard of doctrines; for while the former did not always turn right, they had at least the satisfaction of knowing how they worked: while these new things—no body can tell what ultimate miseries they may not bring.

"In the vast majority of villages he (the ryot) does not want because he has never known such amenities as modern sanitation, pure drinking water and expert medical aid. Outbreaks of seasonal diseases such as cholera and malaria do not prompt him to action, since he does not connect them with the absence of such amenities. He regards visitations of epidemic as part of the natural order of the world". (Linlithgow Commission Report, 1929).

If fortune favours them they attribute it to the wisdom of their ancestors and their own cleverness. If on the other-hand something goes wrong, why it is so natural with the

many forces up against them and their own failure to propitiate them.

The Government Efforts at Uplift.

Meanwhile conditions all over the country have changed with the times. The contact of over a century with the British people has brought them into closer proximity with modern thought and practice. The system of education with the medium of English has inculcated among the literate classes new doctrines and an altogether different theory of social relations. Added to this is the modern tendency of rationalisation both in administration and industry which has brought the uplifting and well-being of the ryot more immediately within the perview of the State. So that although belated, attempts have nevertheless been made to launch a frontal attack upon the difficult situation. Departments of Agriculture, Public Health and Sanitation, Co-operation, Veterinary and Education have in different provinces achieved different measures of success. But on the whole work is hardly begun and odds are still to the debit side of things. The greatest hinderance to a more unqualified success, it must be admitted, is the ryot himself. He refuses to believe in the good intentions of government, whom he associates, with the tyranny of the police official, the revenue agent, and the petty peons, with the corruption and extortion in many of the courts, offices and tahsils, and last but not least with the higher taxation and commodity prices. These are the reasons for his not taking the government seriously. But his own narrow prejudices are more potent reasons why no headway has been made. Uplift agents have been belaboured in some of the more refractory villages. They won't simply have anything to do with them, the satanic agents. To think Thakurs and Rajputs lowering themselves so much as to send their grown up girls to schools, deprive the women folk of their jewellery and do all the unconventional things they are told. And one family takes infection from another, a village from the neighbouring one and so on and on. The joke is appreciated and the thing forgotten. This is not happily a common picture; but it points to how your theoretical reasoning may fall flat upon unwilling ears.

Conclusion.

So that prejudice nurtured on superstition and ignorance is the stumbling block in the way of this custodian of the past taking advantage of the various facilities placed primarily in his interest and for his good. Let him know first and take stock of the situation. And slowly he may be brought round to see that better methods, cleaner living, happier homes and healthier children conduce more to a contented soul and ultimate salvation; that lethargy and laziness are the greatest of sins, never forgiven by God, that the long past was not necessarily the 'Satya Yoge' (a visionary period in Hindu mythology when there was no evil and no pain) of his dreams, and that it rests entirely with himself to make his the best of 'Yoges'.

CHAPTER III.

THE VILLAGES.

Distribution of population.

India is a land of villages. Over 87 per cent of its inhabitants live in villages and hamlets none of which contains more than five thousand souls. Not that it has never known cities. Pataliputra and Indraprastha, Taxila and Muttra belie any such suggestion. Administrative centres and Empire Capitals there have always been which have bequeathed the nucleus of many of our present cities. But the main industry of the people being agriculture, populations have tended always to scatter on the land and only such numbers have grouped together as could make a living out of the adjoining tracts. With the increase of population there has been no corresponding enlargement of the township area, for the homes could not naturally be placed far away from the farms. Hence the increase of population has only meant the multiplication of villages. This process has continued unstinted through the preceding centuries until there are at present about 7,00,000 geographical names standing for human habitations of from fifty to five thousand beings.

No corporate life.

These constitute what is called our rural problem. Already there is a talk of enfranchising the masses and investing them with all the powers and privileges that an enlightened electorate alone can usefully wield. But their more immediate interests are pressing enough concerns and deserve all the energy and pluck they can be made to muster. Their standards of life have no room just at present for such extravagances nor can their thoughts countenance anything beyond the very local requirements. They know not the rudiments of corporate self help and have no idea that their lot could be improved through representation. Besides there is very little awakening to the incongruities of their own surroundings. They love their birth places, but the love is only an animal attachment to familiar scenes and not a desire to betterment, their own or their neighbours' Doing good to others is thoroughly enjoined upon them as a matter of faith and what must be admitted they are very

kindly and charitable. Indeed they are known to give away quite a lot to alien beggars and sadhus; but their charity never begins at home. They fall out with each other on the smallest pretext and nurse petty grievances for a long time often culminating in costly litigation and bad blood. So that public spirit and the essential co-ordination of interests is wholly wanting which is so necessary to make a beginning with democratic institution.

State and the ryot.

The villages as they are at present are nothing if they don't reflect the whole history behind them of their social evolution, economic stages and administrative variations. The ryot in India has never been a part of the state. Successive administrations have taken charge of him as an element in the wealth of the country just as they did the monsoons, the soil, the cattle. To them he has been matter of concern only so long as he has helped in filling their coffers, manning their armies and doing, so to say, the chores of the rulers. With the realisation of revenue and other demands interest in him wanes, until so long as the next instalment falls due. On his part the ryot does not mind much who his superiors are and what right they have to share his produce. He takes it as a matter of course that the rents are to be given and the landlord propitiated. Did not his fathers before him also do the same thing and surely it is none of his business to see if the government (sarcar) he pays allegiance to is an English Company or a King of Delhi or a Rajput chief. Besides he was never so self-conceited as to think the great sarcar in duty bound to look after his well being.

Villager's own attitude.

Neglected by the state he has neglected himself. No ideas come to him from outside, and when they do he suspects them, has no faith in them; for coming down from the hereditary oppressors what could they signify but so many fresh devices to flay him out of the fruits of his labour. Thus left to himself he takes the least resistance course, the one in which he has least to do, least to think. His immediate needs are preoccupations enough and whatever comes by rotation or chance to be

the most pressing concern is taken to without much ado. The repairs to a dwelling or a cattle-shed would be left incomplete for the weeding or reaping of a standing crop; and this may be given up for the tending of a sick child who in his turn must be left alone if the landlord or a police officer wants his services elsewhere. Little of imagination or forethought, even such as have been gifted to him are brought to bear upon the problems of his daily life.

Comparison with other countries.

There is nothing gratifying or exhilarating about an Indian village. The charms of a country side and rural surroundings are severely set at nought by the conditions obtaining in an average Indian village. There is no picture of blooming, happy homes, no cottages worth the name, nor gardens, nor flower beds, play grounds, village greens and pastures. These are western ideals. Little approaching to them exists anywhere in India except where some features have been put up for demonstration purposes by government or other agencies. Each cottage within its own farm lands with cattle yard and manure pit sequestered away on the grounds is a too distant ideal not to be thought of just yet. More causes than one operate to make it impossible in the present state of affairs in this country.

Tiny holdings.

The village holdings are nowhere compact. Each farmer has a number of pieces, quite small often, scattered asunder over the village area. This is the negation of consolidation and it is not difficult to see that the diligence and care invested on different farms must be divided under such an arrangement and the abiding interest in ones farm land be essentially lacking. They cannot be properly watched and attended to and the outlay on the crops is much higher severally than had they been at one place. Besides the small intersecting divisions and uncertain partition lines lead to constant bickerings and ultimate litigation. Hence little boys are forced, to the detriment of their education to look to the cattle not straying into the neighbour's fields and watch their own against similar aggression by others.

Causes.

This is due in the first place to the joint family and inheritance laws which tend to break up property into infinitismal

shares generation after generation and since different soils are to be evenly distributed among the shares, some times very ridiculous apportionment is allowed under the rules. The tenancy and ejectment laws too have until quite recently been flexible enough to let the proprietor transfer a particular plot or a portion thereof to another tenant, thus admitting more claimants to an already crowded tillage; while local conditions and personal delinquencies make the position more complicated. The absence too of specialised farming is responsible for much of the run on a particular soil; for every cultivator wants to produce by bits all kinds of crops grown in the vicinity; and since different soils are needed for such variety farming, the holdings must need be small so as to allow each cultivator raise the particular crop. This actually happens where the area is not specially a staple crop one such as paddy, jute, cotton etc. and can admit of different kinds of produce. Large scale production methods are not appreciated or afforded to which promise a distinct chance of concentrated farming. The old idea of producing sufficient of everything for family use still persists in many places.

Crowded living.

Thus for one reason or other farms are not compact and there can be no farm-living in the true sense of the word. Besides security of life and property having always been problemetical in rural areas villagers find it safer to live together and at each others beck and call. But the congregational instinct of the Indian peasant has not been tampered with, as in other countries, by considerations of hygiene and health and there is acute congestion and cramming together of houses in most villages. This is occasioned also by the common anxiety to utilize as little of land for non-agricultural purposes as they possibly can.

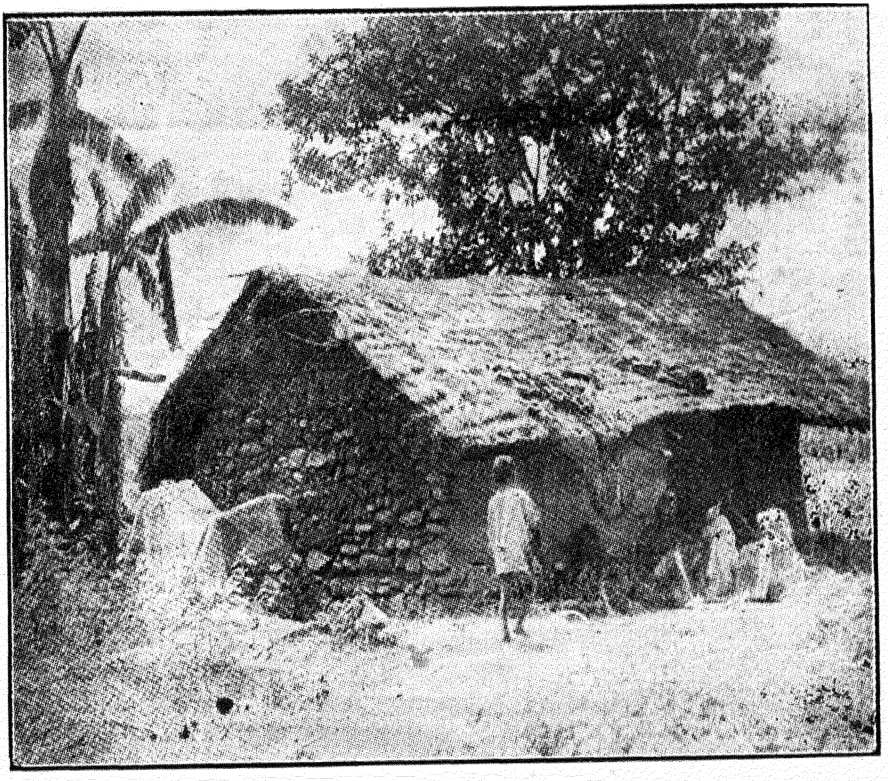
Village dwelling

So that the village is necessarily a narrow place, unimpressive in form, uninviting in substance and barely sheltering life through the climatic extremes it is subject to. It is built, generally speaking, round a common watering place, well or some object of public veneration such as a temple, an image or even a banyan or pipal tree. The cite is about the middle or

some other convenient corner of the cultivations. It is often hedged in with groves of mango, tamarind or other tropical plantations which are so many shady resorts for village gossip and boys' arborial sports. A dry season cart track serves for ingress or egress out of the locality while pedestrians use foot tracks which crop up every where. The village itself is a collection of dwellings irregularly planned, indifferently built and often kept in the worst of repairs. There are exceptions no doubt : the landlords, the money lenders and the higher classes in general have brick or stone houses with two or more stories and even a garden. But these only serve to emphasise the wretchedness of the commoner sort. Besides the characteristic short comings of a rural residence are common to every class. Lack of ventilation to admit air and light, congestion, absence of flooring, cowdung coating, dust sheltering niches and the general look of filthiness are some of the features unfortunately too common every where. The word slum has come into fashion in connection with the housing of industrial labour in cities. It is bad enough there ; but it is positive rump in the villages. Narrow mud hovels without light, without air are thought as good for human beings as for goats and cattle and actually man and beast are huddled together among the poorer class of the tenantry.

Absence of proper drainage.

These huts are roofed with straw, long grass, palm leaves or cheap tiles whichever is more handy. The mud is dug out of the neighbouring water hole or tal as they call it. This is a permanent feature of every village, big or small. It drains the rain water of the locality and remains for the rest of the year a stagnant dirty pool breeding swarms of mosquito and malaria anopheles. There is practically no drainage arrangement and the dirty water from each home pollutes the mockery of streets that are there in the village. During the rains in particular it is almost untreadable for the slippery lanes and the swampy water courses along which one has to pass. They do feel the discomfort and topples-down are frequent, but no one has the public spirit to come forward and remove the evil. They put up



A typical village hut.

with this as they would do with any other misfortune, until nature more merciful than man dries and smooths it out in its own way.

No conservancy arrangement

There is no conservancy sense among the villagers. Latrines are provided in the higher class dwellings to clean which a special sub-caste of untouchables is maintained in every substantial village. This functionary, often a female, is responsible for removing all kinds of refuse from house precincts, sweeping the yards and looking after the house drains. There are other and more important duties connected with the office (to be dealt with later): but the cleaning part of them she performs least efficiently using the oldest crudest methods imaginable. She may have taken the cue from her employers and actually goes about her task in a careless half hearted manner. The latrines, therefore are proverbially the dirtiest part of a village. This is particularly so because they are often built of mud and are without a metalled floor so that the foul water soaks freely into the ground and keeps it damp and stinky.

The sweeper again does not scruple nor is she objected to in her practice of heaping the muckloads within the residential area where it is allowed to rot and decompose for the manuring season. Bad as the condition is in latrined houses, those without are still worse. The lower classes and smaller villages cannot afford to pay the sweeping wages and don't keep separate accommodation for the purpose. They avail, instead, of every shelterd corner, hedge, hole or open field within or close about the village. The women specially if they are parda bound have to wait till night fall or before dawn to take their turn in the fields. While the children are allowed to sit anywhere they like, and dogs and cats, cattle and goats and all other live stock add their daily quota to the village stock of refuse. There seems to be an idea rooted among the community that fields get automatically manured by such *excrementing* visits. But the fact is that even if swine or crows or cows don't wholly eat it up the first day it is deposited in the fields, it loses all its

manuring value by being exposed to sun and wind. In order to be effective it must be covered in a pit to get putrified, or else it should be ploughed the same day so that the soil may assimilate it.

Manure for fields.

As a rule the manure meant for fields is heaped on some corner of the village exposed to sight and smell as well as to weather. It is liable to be washed away in the rains or blown away by winds thus scattering more filth about the village. Cattle dung which is most important soil nourishment is allowed to be wasted in fuel cakes and floor or wall coating while the accumulations for such purposes stand in a brave show on every house front. Very little of it ever goes to the fields. Kitchen ashes, decaying vegetable remains and a variety of other rubbish constantly swell the compost heaps on every side. These if carefully collected and concealed within pits, are sufficient for the village cultivation requirements; but they serve only to contaminate the air, water and food of the inhabitants by blowing about with wind.

Bazars and Markets.

Bazars are only in the larger towns and weekly or bi-weekly markets too are held in important villages only. Ordinarily an area of from ten to twenty sq. miles is served by one market place and there may be as many as fifty villages and hamlets all round transacting business there. This system is almost as old as history only with the increase of security they are more frequent and abundantly distributed. All kinds of vegetable produce, corn, fruit, butter, tobacco, articles of daily use and cloth are brought in to change hands. Dealers have to pay a small duty to the landlord and stalls are occupied by the order of precedence except where they have been leased out permanently to particular vendors. For the rest they squat on the ground at random with their wares heaped before them or ranged in baskets. As the crowd thickens and business becomes more brisk, there is left not an inch of space for the pedestrians to get along and very often he has to step over the heads of peasant hawkers, one or more of whom getting kicks in the process. But this is only by the way and fully anticipated.

For do they not say in the proverb that bazars and fares are places where one gets a topple-down and another a kick in the face. The vendors are anxious to crowd where the customers are the thickest, while the latter quite clever on their part, know they would get cheapest where they could set one dealer against another. Then each customer has to go through the whole length of bargaining before he agrees to part with his couple of pices. There are altercations, quarrels and sometimes even blows are freely negotiated. All this going on at a number of places makes the concerted rabble a hellish sight. Market regulations have penetrated very few places and there is no attempt at co-operative handling of the bazar The articles and commodities put for sale are mainly for local consumption and the parties to all kinds of transaction are essentially rustic. They don't mind much how they come up with their dealings so long as the money is fair and the value unimpaired. The petty producer cannot think of taking his modest commodities to the city market or anywhere not near enough to carry them as headloads. He has to get rid, so to say, of his surplus produce and the next door market is the most natural outlet for it.

The village " baniya " (grocer), the pan seller and the confectioner make up the trading community of such villages as can afford to purchase on other than market days. The shops are in keeping with the rest of the village and present an untidy and slovenly appearance in every thing. The sweet-seller in particular, who also caters for the chance visitor to the village, is very careless so far as cleanliness is concerned. His shop-window is a fond resort of flies, bees and red wasps which hum about the place in large numbers, while dust from the way side constantly settles upon the unscreened trays of sweetmeat placed prominently for show. The process of their dressing too behind doors is anything but wholesome to the senses and there is no knowing what liberties an unscrupulous confectioner may take with articles not for his use. But the village standards do not demand any extra care in the business and these things are allowed much as other irregularities are let go within the houses.

Such in short is the place that accommodates rural life. The people make the environs and the environs make the people. One reacts upon the other and poverty and degradation continue to hold the field. The social customs, the home life, the inter-family and inter-caste relations all speak of an entire lack of appreciation as to the necessity of regulated standards of life, that is those that tend to make life happy, healthy, and useful. The customs and ordinary usages have come, in some mysterious way to be regarded as commensurate with religious precepts, so that individual attempts to weed out the unhealthy ones meet with ridicule or more serious opposition such as social boycott, ex-communication and the like. The communal sense translated in the verdict of the panchayat is heavily conservative and blindly protects all that has the stamp of time over it. Queer observances and crude customs are upheld for no better reason than their long standing. While injustice in family relations and domestic tyranny have entered into the body politic and evoke no protest.

Women.

The position of woman has if anything gone down in society since the days she was arbitrarily disposed of by Manu. Weak and unasserting by nature she has submitted to whatever dictation the sterner sex thought fit to place her under until by now she is convinced that woman from the nature of her being is not fit to think of equality with man. She is content to be called foolish, fickle, faithless; content to be deprived of education, training and respect, her own or that of others. She has not objected to being secluded within walls nor to being possessed like livestock. While the laws after all have not been so very sweeping, her very meekness has emboldened others to let her down in everything. The injustice however, has not gone without its repurcussions upon the whole aspect of village life. Woman as mother, as wife, as daughter could not but wield a vast influence in making the man. In degrading her he has degraded himself. Happy homes are fundamentally the creations of wise and enlightened women, those who know their duties and their rights, who can keep the houses clean and

their inmates healthy, who are capable of bringing up children as they ought to be.

As things are she has no position, no prestige (that is to say in practice) and what little latitude is allowed by convention is nulled by petty jealousies within the household. The joint family system gives rise to such redoubtable institutions as the mother-in-law, (sassa) and sisters-in-law (nanand) whom it is the duty of every girl wife to propitiate: and since the respective rights are not well defined and the parties all supremely ignorant, one or the other of them has to bear the worst tyranny imaginable. It is generally the daughter- in-law who by reason of her young age and inexperience suffers most. These things coming down since the beginning of family relations and being ubiquitous in their scope are regarded as part of human nature and looked over in any scheme of social reform. A good deal of a girl's training, such as it is, consists of how to get over the difficulties to be met with in her future home, the songs she is taught to sing deal with the petty quibs and quarrels of her husband's joint family. Most of a married woman's time is spent in defending her position among the new relations who are quite alien to her and with whom she has most to do. She has no opportunity to make a home, nor has she a need to. It is already made for her: she has only to adjust herself to it. The duties she has to perform are domestic drudgery and attending to the comforts of those who have a prior claim in the household. With different shades of temperament, no doubt, the lot of women varies everywhere, but generally speaking they are little better than serfs among a majority of the rural classes. Their thoughts are low and unambitious, their talk commonplace and their interests local; and these react in no small measure upon their charges, the generation in making.

Lure of Gold.

The feminine instinct for the artistic finds vent in the universal desire for possessing jewels and finery. But while this could be effected in a less expensive way gold and silver provide a kind of tangible surety to an esteem which is not otherwise hers. Girls almost from their infancy are taught to

love ornaments and display. Well to-do men give their women good and abundant jewellery which the latter love to exhibit and get talked of signifying the extent of regard by their husbands. This sets the poorer folk to envy and long for them and the rivalry becomes at times and in places so acute that instances are known where debts are incurred at exhorbitant rates to maintain the family prestige or peace; while the rich resenting any approach to their standards provide themselves with still more and so the evil goes on recurring. This, needless to say, depletes men's resources and such necessaries as health, children's education and investment in trade remain neglected. There is a tendency to regard jewellery as the wisest and safest method of putting by for emergencies in that it shows them off in society, is always handy to be broked or mortgaged with the *baniya* and as a rule is free from the changing fortunes of business. The fallacy of such a belief although brought out time and again fails to impress the average villager with whom jewellery stands for all that can be done to make women happy and contented.

It has been estimated that over five thousand million rupees worth of India's capital is permanently lost to trade in gold and silver ornaments, ten per cent of which is annually depreciated by use and other causes. This with the fluctuating bullion quotations and the markedly low level touched by silver (which by the way is the predominantly possessed precious metal among the rural classes) makes the popular way of investment more or less a waste of money. On the other hand with a portion only of the capital thus served the entire system of agriculture could be placed on a sound footing, a good deal of debt paid off and village conditions everywhere improved. But so long as the woman is not placated in a better way no headway is likely to be made in this respect. She should be given her natural place in society, respected, protected; and it will not be long before she sees the unwisdom of embellishing her person with gold and silver as against good health, charming manners, and refined ideas. She will then realise

her responsibility in making home the sweet home and children fit citizens of the motherland. With the emancipation of woman the drawbacks of village society will be removed automatically.

This could be done by treating girls like boys, giving them proper education which should be compulsory until a specified age and refusing to marry them before they know how to handle a home; for while the boy is expected to earn the family's money, the girl should certainly be prepared to make the best use of it. Spending is oft times as difficult as earning and every pie well spent is well invested. It is no use getting richer unless proper use for riches is found. Ignorant mothers spoil their children, ignorant wives coerce the men into useless expenses — in marriages, ceremonials and unhealthy rivalry with neighbours. Superstitions and ancestor worship come more frequently from women. Fifty per cent of the average villagers' income is thus mis-spent This could make the homes tidy and the fear of death and disease less over hanging.

CHAPTER IV.

SANITATION AND PUBLIC HEALTH.

The health of the villager, as can be deduced from the above narrative, is far from satisfactory. The expectation of life at birth in India is only 23. In England it is above 55 while in New Zealand it goes up to 65. These are staggering figures. If however the capacity to work with years could be measured it would reveal greater disparity in the comparative labour value of the populations. The man after fifty in India is a cripple, while the woman is much earlier so. The advantage of numbers is thus grotesquely discounted in this country. From birth to death, speaking generally, there is no period which could be marked "secure". Still births and infant mortality account for quite 25 per cent of the children born. The figures for infant mortality alone as compared to births for the decenniums 1901-10, 11-20, 21-30 are eloquent testimony to the fearful loss to human family going on year after year in the districts of the United Provinces. The following table is taken in extenso from the Sanitary Commissioner's Report for 1926 and

Year.	BIRTHS.		
	Male	Female	Total
Decennial average.			
1901-10.	1,027,110.	949,374.	1,976,434.
1911-20.	1,030,750.	940,901.	1,977,651.
1921-30.	1,243,241.	1,178,965.	2,420,206.

Year.	Deaths.			Death rate per mille.		
	Male	Female	Total	Male	Female	Total
Decennial average.						
1901-10.	263,635.	240,436.	504,671.	256.7	235.8	255
1911-20.	243,564.	213,676.	457,237.	237.2	227.1	232
1921-30.	280,644.	262,312.	542,956.	225.0	222.7	224

Compared to these it is refreshing to note the infantile mortality returns of England which did not show a higher average than 65.0 per mille in 1928 and came down to 60.0 in 1930 Still births in the United Provinces for years 1928-29 were 24,620 as compared to 21,406 in the preceding one. After the one year stage the danger to life though mitigated is still persistant and another 15 per cent of the remainder are lost before they exceed five years. Cholera, smallpox, measles and fevers claim a large number of victims from this stage every year. Thus only a fraction of the children born live to grow into mature age. The people know this and seem to allow for this. They attribute it to the natural order of things. Not all the plants that are sown in the fields are expected to thrive and bear fruit. The few that survive are relied upon to give a fair return. But the belief has taken root only for the habit of ages. It is the essential weakness of human nature that allows imperfections to exist. Else whatever is born is meant to live and grow and give the best account of itself. No child should die if it can be helped.

Infant mortality.

But the conditions of health obtaining in the Indian villages make it more or less a matter of chance if a particular child is to live or not. By far the most numerous deaths among infants come through the irregularities of pre natal and post natal stages, confinement hours and maternity periods in general.

Ignorant old matrons and other such attendants superintend the operations of the maternity room and rely upon their own sorry experience for any developments that may arise. Trained mid-wives and dais there are very few in the country side, only in the notified areas and some of the bigger villages a beginning has been made with visiting and lecturing mid-wives, who however don't actually go into particular cases, but only advise the indigenous dais that is those few who don't resent interference with their ways. For the most part the village mid-wife is an untouchable woman, a sweeper, chamar or domar who finds time besides her ordinary duties to attend to a mother. It is a very hard time with every woman and with prematernity neglects it becomes a very delicate process in many cases. Left to the tender mercies of ignorant low caste women the wonder is not how so many babies die, but that how they survive at all. The sweeper reserves the dirtiest clothes she possesses for the maternity room and touches the babe with her dirty greasy fingers. So that what with its careless handling and with other irregularities and ceremonious practices the tiny thing gets such dangerous maladies as titanus, fevers, diarrhoea etc. which almost invariably result in death and incapacitates the mother for a long time to come. Titanus and convulsions account for quite half the infantile mortality recorded in the districts. The utter helplessness to cope with it and the dread with which it is regarded are manifest from its being commonly attributable to demonish agency —Jamoga or the evil one. This state of affairs cannot be cured unless the indigenous dai is herself trained in upto-date methods and none but licensed midwives allowed to take up a case. The curriculum for girls schools should provide for lessons in general hygiene and child-welfare methods.

Maternity and Child Welfare Leagues.

The measures taken to cope with the problem under the aegis of government departments are still in their infancy and require to be extensively supplemented by public support. The Lady Chelmsford Maternity and Child Welfare Leagues are now established in practically every district and carry on such useful

work as the training of dais, handling of difficult cases, organization of baby weeks and child welfare shows. But in point of fact the out turn of skilled dais is hopelessly inadequate in view of the large number of maternity cases involved every where. An increasing number of girls or preferably young widows should come forward to take up midwifery as a lucrative profession and there should be no more loss of dignity in this calling than is tolerated in attending other sick. The organization and duties of these leagues are not much varied in the different districts and proceed more or less on the following lines :---

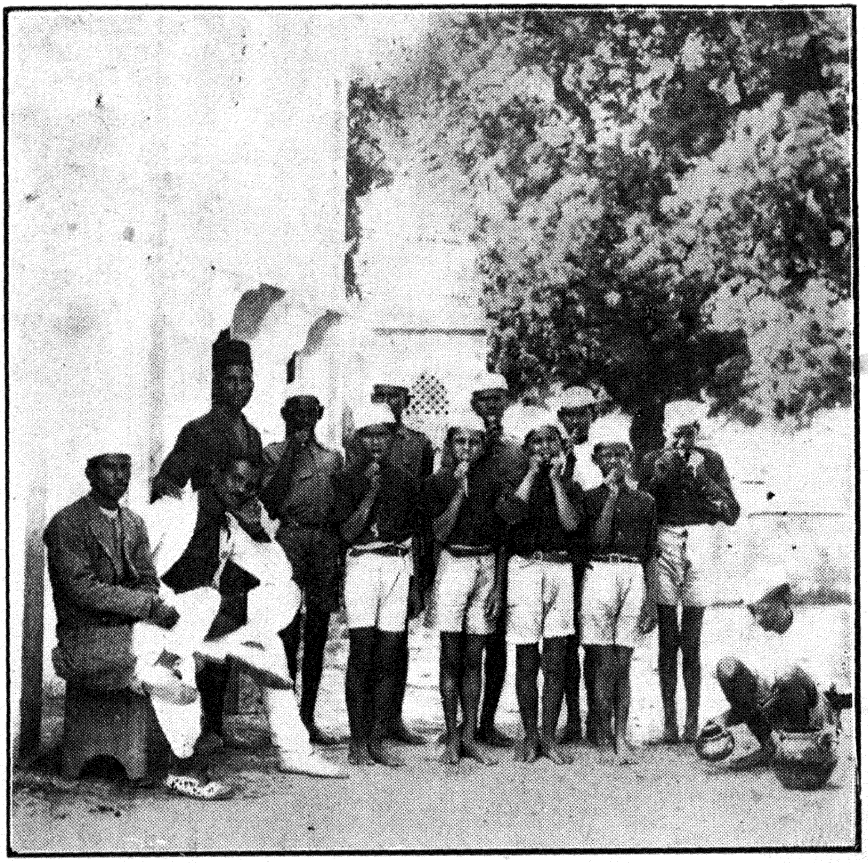
(1) Distribution of welfare literature containing instructions to mothers and midwives.
(2) Employment of health visitors.
(3) Training of dais and employment of trained midwives.
(4) Delivering of lectures by maternity supervisors and resident midwives.
(5) Issuing to dais of standard outfit for confinement rooms.
(6) Organization of baby weeks and child welfare shows.

The almost entire absence of women's associations in this country and what directly leads to it the lack of female literacy make it very difficult to reach out improvement propaganda in their midst. What impedes progress in the case of men in all their concerns of life, that is prejudice, works to a greater extent in the home-bound sex. Women are by far more conservative than men and sporadic changes in enlightened families, in matters of hygiene and health do very little to relieve the mass of ignorance settled every where. Again since village houses are the back waters of the community very strong and sustained agitation is necessary to move them a little. Education and good breeding automatically bring in conditions that go to make healthier men and women of them. But until that is achieved, until they learn all that the sciences have to say, a way should be found to make the women less a prey to their own superstitions. It is these considerations that make it doubly expedient for the maternity and child welfare work to be pushed vigorously in villages.

If the infants are thus liable to death and disease, the older ones are not very safe either. It is notoriously known that men in India become old and beyond repair before they reach fifty. The struggle for existence is so acute and enervating, the conditions under which they live so far as removed from any sanitary standards, and themselves so ignorant and helpless that it takes little of imagination to see that they fall an easy prey to the various epidemics and seasonal diseases that make regular visits to the country side or rather arise out of the conditions obtaining there. The figures of death for any year in the last decade taken at random indicate the utter vulnerability of human life in the face of such seasonal troughs, as plague, cholera, malaria etc. Thus the ruturns for 1925 speak for themselves:—

Name of disease.	Seizures.	No. of deaths on the data supplied by professional agency.	Actual number of death reported by ordinary agency.
Cholera.		40,878	6,952
Smallpox.		8,123	6,354
Plague		46,905	24,872
Dysentry.		129,448	7,937
Enteric fever.		23,300	68,593
Relapsing fever.		19,653	5,243
Malaria.		184,214	1,010,614
Kala Azar.		4,455	4,666
Pneumonia.		248,839	5,676
	Total ...	705,815	11,40,907

Sanitary Commissioner's Report United Provinces.



Tooth cleaning Parade in a village school.

These figures are by no means complete. The reporting agency everywhere is the illiterate choukidar who is not very reliable where epidemics are under computation, since people in the more virulent visitations tend to scatter or take to encampments in which cases many of the deaths remain unreported. A history of the chief diseases brings out the fact that one or more of these grim agents of mortality dominate the village horizon all the year round. Thus pneumonia in January, plague in February and March, smallpox and respiratory fevers in May and June, cholera in July and August, malaria September to November and pneumonia again in December mark the trail of death in the country. No class of men is safe from their ravages and the poorer the health of a locality, the less resistance it can offer to their inroads. There are not unknown instances where an apparently prosperous village was visited one fine morning by plague or cholera or influenza and within a fortnight it had swept clear all vestige of human life from the place.

The general debility on account of bad living, insufficient nutrition, impure drinking water and diverse other causes makes it possible for every disease to claim so many victims from the villages. Government dispensaries are few and sparsely distributed and acute cases cannot be brought to them from a distance. So that as a rule they have to fall back upon indigenous system of treatment which in the smaller villages is none other than the quake. Unauthorised ingredients and mushroom herbs are freely used for one or more ailments. Even where there are the 'Vaids' and 'Hakims', the latter only prescribe certain drugs which the local grocer supplies as he thinks best. He is not a licensed dealer and the drugs are often useless, even harmful.

The Government sanitation and public health departments extend such relief during epidemic seasons as is compatible with the funds granted to them for the purpose which are generally inadequate. Quinine pills, cinchona febrifuges and potassium permanganate are distributed (more for demonstration than for relief), whole villages are inoculated against plague and small-

pox, travelling dispensaries provided to go about sparesely served areas and emergency staff added to the existing ones, while pamphlets and handbills are freely distributed to educate the people to fight the epidemics. But on the whole the measures are grossly insufficient to effect any marked improvement in the general health conditions of the country. As a matter of fact so long as the villager is not himself alive to the needs of his physical welfare and prepared to fight death and disease on a co-operative basis, no outside help can save him.

The establishment of Hygiene Publicity Bureau has been very useful. But so far the lorry exhibiting public health films has only visited the towns and owing to lack of funds and roads has not been able to go about the villages. Thus unless this effort on behalf of the Government is supplemented by public support no improvement is possible. Propaganda coupled with effective steps to be taken by local authorities and the people can eradicate this evil to a very large extent.

Factors governing village health.

On the face of it, the health of a village depends upon such inherent factors as the nature of locality and dwellings, the mode of life, the nutrition and drink standards, physical culture and the general approach upon life and its problems. The geographical position determines climatic regions and the nature of the subsoil which is responsible for the variation in health conditions as from district to district. Thus Azamgarh and Ballia are notoriously plague districts and the Tarai tracts are subject to a particularly virulent type of malaria: while the dry sandy plains of Itawah and Agra districts are comparatively immune from malarious fevers. But on the whole people of a particular tract become inured to the peculiarities of the soil and being neutralized to it are less likely to go down to unhealthy elements on the place. It is the strangers from other districts that are mainly liable to suffer under new conditions. The presence of swamps and water logged hollows close about a village is the most potent cause of seasonal fevers: but since they retain water for the dry season which is not otherwise easily available, the nuisance is more or less indispensable. The model

village of the future will have its water supply from small metalled tanks built specially for the purpose while the surplus water will be drained out into the neighbouring nullah or be absorbed by the village farms.

Housing

Dwellings as has been shown in a previous chapter play an important part in making or unmaking health. India enjoys a good deal of reputation for its architecture, both Saracenic and the ancient Hindu. The cities and towns are studded with magnificent piles of buildings, mosques, temples, palaces and tombs that can vie with anything standing on stone and mortar. All the best skill of the times, art and intelligence seem to have been lavished on these monuments and climatic considerations have never been lost sight of in these engineering feats. But the country side has through the ages been content with the same primitive hovels as common now in the twentieth century as they were in the days of Akbar and Asoka. Economic debility coupled with the common apathy has prevented comfort and good taste being considered in the housing and living of the peasants. Farm hands, labourers and the owner himself dig out clay or ordinary mud which they leaven with water and pile mound upon mound until what looks like a wall is erected. No shape or symmetry is sought and finally a roof is tethered to the projections of the walls and they move into it. So built these dark and dingy quarters, narrow and damp shelter the village population in torrential rains as well as in chilling winters and scorching summers. In tropical countries where humidity is often tense, buildings should allow for a free passage of the air and overcramming avoided. Damp, in the same way is the precursor of many diseases and very persistent after the rains; the flooring therefore of houses should be as much raised above the common level as possible, drainage should be efficient and ventilation abundant. Model villages and houses have recently been built under the aegis of improvement departments in some districts, notably Gonda and Lucknow but they will have to put greater inducement in the way of the average villager to bring him round to see his own advantage.

Nutrition.

Much depends upon a proper dietary in preparing the body for resistance to waste and disease. Generally speaking people in every clime hold a very high opinion of their own diet and pooh pooh those who have not been so fortunate in nature's dispensation. Thus the Chinese who has such delicacies on his menu as the green lizard pie and white mouse jelly has nothing but a sigh for the Arab who revels in his dates and oatmeal bread and camel milk: while the French peasant cannot think of a meal that has not the purest Garronne beverage as one of its chief contents. This is perhaps highly Providential since otherwise a bone of contention might be permanently flung between the different races of mankind.

The Indian peasant on the same principle is quite satisfied with his dal (inferior cereals) and Chapati (corn loaves) and refuses to hear of a substitute. Onions, pungent peppers and certain other spices go to make what amends they can in an otherwise plain fare. A majority of the more orthodox Hindus is permanently debarred from all animal food with the rather picturesque exception of milk and its various preparations. Ghi a form of purified butter is universally regarded as taking the place of all vitamins necessary for the human body, but the grim irony of it, -the elixir is not afforded to by the poorer class of peasantry and the latter have to be content with inferior substitutes such as linseed or groundnut oils, fat and grease. Of late years vegetable oils are being freely adulterated with pure Ghi and although it does not make much of a difference, the substitution tells a great deal where no other animal food is admissible.

The locally grown cereals and coarse corn that form the staple food of a predominant section of the village population are barely sufficient to hold together the body unless subsidised by vegetables, sweets and fruits. The vegetables although often rich in saline composition are spoiled so far as their food value is concerned by over cooking or dressing with harmful ingredients. The art of cooking is thoroughly developed in cities and among certain classes of the people; but with the

average villager the process simply consists in spicing the edibles over a quick fire and softening them with water. Sweetmeats are very popular and there is no village big enough to hold a shop but has one or more confectioning vendors plying an active trade. But these too are prepared and put for sale without due regard for the health of consumers. Sanitary inspectors have been recently appointed by Government to examine food meant for sale; but so far only cities and the larger towns have been favoured with their services. It it increasingly being realised, in view of the heavy toll regularly taken by cholera and other diseases, that some kind of control should be extended in the rural areas and circle inpectors be authorised to issue licences and visit each of the villages at least twice a year.

Water Supply.

The water supply system of a village is also in close conformity with its general sanitary conditions. Drinking water is one of the primary necessities of life and much depends upon the adequacy of its supply and purity of substance in ensuring the health of a locality. For the most part villages get their water from wells which vary a great deal from place to place in the depth of boring, masonary work and perennial connections as also in flavour and degree of chemical salts in the water. Canals where they exist are for irrigation purposes alone, while ponds and water holes are utilised for cattle drink, irrigation and water crops. Wells, on the other hand are used both for irrigation and household requirements and are an indispensable factor in rural life.

Wells.

As a rule well-to-do houses and the bigger villages have their wells built of brick or stone and mortar with more or less constant spring connections; while those in the smaller hamlets are mere mud holes standing on reed windings or other cheap devices. These are liable to collapse during the rains or get their spring connections blocked by sliding mud and the sherds of broken earthenware daily dropping into them. Tube wells and Persian wheels are very sparsely used. Indeed the latter is little known east of the Jumna river. The old method of drawing with a rope and jar persists every where and the rather

romantic conception of village maidens with a water vessel on the head and two more under each lap trooping back homeward is a sight commonly met with in every village.

There are very few wells with any kind of covering over them and since they are commonly provided with one or more shady trees to keep off the sun, twigs, leaves and ripe berries are constantly falling into them and contaminating the contents. Moreover there is much foreign matter carried into them by wind, dirty buckets and flower offerings. People wash and bathe close to them, rinse their cooking pots and do a number of other objectionable things which are however allowed by long standing usage. All these different factors contribute to make the drinking and cooking water more or less germ-infected and this in the main is responsible for generating and spreading of such epidemic diseases as cholera, hook-worm and dysentry. There is a general prejudice against treating the wells with permanganate of potash and they do not allow this until the epidemic is actually raging among them. The village well in common with the village temple has too sacred associations connected with it to be defiled with unauthorised ingredients. The Brahmin priest who, during the hotter months, treats the passers by to a refreshing drink out of his bucket, also sees to it that the sanctity of the well is not impaired by unholy practices and that no untouchable approaches too near it. An elementary knowledge of the laws of health together with an ounce each of care and public spirit may go a long way towards eliminating many of the dangers rural life is always a victim to. Government or the landlord could be approached for a loan to get a decent well built within the village. (This is being done but the progress appears too slow partly owing to financial stringency and partly on account of the illiteracy and ignorance of the majority of cultivators.) It should be complete with a shed, raised platform and bathing places at a convenient distance. Further it should be cleaned every two or three months, while common buckets should be provided which alone might be used for pulling water. There should be regular drains all around the

well to carry away the water always splitting there so that the place may not become damp and malarious.

Fly nuisance

Another nuisance common to every village is the fly. Born and bred upon dirt, it carries germs and disease from every decomposing object in the village to human and animal bodies, food, water and indeed all unprotected surfaces. Swarms of them buzz about a house from dormitory to kitchen, kitchen to cattle yard, latrines, drains and back again to kitchen, store room, nursery and lounging places. Children and infants get sores, swollen eyes, pimples and fever by their constant attention while the adults are pestered out of their noon slumbers and put to other discomforts for the same reason. Really it is unbearable to the villager himself but he is, or persuades himself to be powerless against a pest that cannot be killed, netted or otherwise destroyed. The only consolation is that a severe winter banishes them inspite of themselves and there is a respite of some months at least.

Parasites and mosquitos

Similarly the parasites of whom mosquitos, bed-lice and head-lice are the most common, take there share in making life something of a trial. These too spring from dirt and neglect and are removable with cleanliness and active habits. The mosquito is responsible for more debility and death regularly each year than any other single cause. Malaria not only takes its annual toll from every village but incapacitates half the population for months after its visitation. The number of deaths registered in United Provinces accruing to this malady was in the year 1928, over 1,1500 which is only a fraction of those not registered while seizures may safely be multiplied by a hundred. An organized campaign has been launched by the Public Health Department to deal with the scourge; but so far the villager has failed to take advantage of the advice offered to him. This like all epidemic diseases is better prevented than cured and unless such effective measures are taken on a co-operative basis as are suggested from time to time by health agents no substantial abatement will be possibls for a long time to come.

Play Grounds

There are strictly no play grounds in the villages. Games in any form are thought to be a waste of time and energy. Indeed in the present state of village economy, there can be no room for any extra vocational activity. Each member of a family, excluding of course the children, has something or other to keep him busy, or rather keep his mind busy. The time that he or she takes to perform a particular piece of work is as nothing to what they do away with in beating about the bush, in deliberating and discussing over it. Then there is always the farm with so many in season and off season activities connected with it, weeding, for example, watering, and fencing that take up all the time not spent in idling and gossiping in the Chaupal. Boys and girls, on the other hand, of quite tender age, are disciplined into hating games and doing all the sundry farm and domestic work, looking after the cattle and carrying out such little commissions as their elders think desirable in preparing them for life. They are not to live upon play; they have to work to live. Good boys and dutiful girls mind their work better than play, since how else would they learn doing things. But nature asserts itself in spite of all their logic and boys play, girls romp and elders whine their bits all in turn.

Village schools have now introduced games in pursuance of instructions from the boards and indigenous games are partially encouraged. Usually it is some waste land on the outskirts of the village or a Chaumasa field that is requisitioned for the purpose. Trees and bushes also provide venues for certain popular sports; and openings before house fronts where they exist are utilised for such little games as 'goli,' 'gulli-danda' and 'gairi.' But if there is any form of exercise that the villager does not object to and allows himself to be drawn into it, it is wrestling. There are small theatres in almost every village with soft sticking sand dug all over where two or more parties of younger adults enter into a trial of strength and the rest of the village stands round to witness and applaud the performance. But it is only occasional and confined to the

rainy season when they have comparatively little to do on farms. Kite flying has its own attractions for the boys and the pastime has been sufficiently developed in parts of the country. Playing cards are gaining more and more in popularity although they deserve much less hold on rural fancy; for there is always a tendency of sliding into gambling and the lure of easily getting to riches has corrupted more intelligent society elsewhere; while the element of chance beguiles honest folks into idle and pernicious preoccupations that ruin every body in the end. It is such activities that ought to be discouraged.

Recreations then, are a part of human nature and they cannot be dispensed with under stress of moral usage or economic stringency. The withholding from them of social sanction only serves to engender a spirit of disobedience to authority and restriction often leads to immoderate indulgence in harmful pursuits. While a regulated routine of work and play keeps either from becoming odious, stimulates healthy competition and ultimately makes them better fitted to face the struggle for existence.

CHAPTER V.

EDUCATION IN VILLAGES.

Scope and History.

It has been recognised on all hands that an intelligent system of childrens' education based on the nation's requirements is the very first requisite in any scheme of political, social or economic reconstruction. As has been brought out elsewhere in the course of this volume ignorance is the main block in the way of Indian cultivators appreciating the true worth of modern methods. The problem has been for the last hundred years engrossing the attention of theorists, reformers and the Government and although a good deal of pioneering work has been done, organisations formed and money provided, the mass of illiteracy and prejudice still remains intact.

"In British India," says the Montague-Chelmsford Report, "6 per cent of the population, male and female together were "able at the last census to comply with the test of literacy which "consisted in reading and writing a letter in their own script".

Education in U. P.

This includes the urban areas and the highly educated communities of Parsis, Bengal Brahmans and Madras Christians. The figures for the villages and specially those for the United Provinces, if they could be made out would take one's breath away. The population of these provinces at the last census was 48 millions and odd. Out of this the boys and girls of school going age are quite 10 millions. The total number of primary schools of every description in the year 1930 was 20,068 and the number of pupils 155,142 that is to say ten boys out of every 100 get a schooling.

Inadequate as these figures look there is a great deal of improvement on past records and the last twenty years have seen unremitting exertions in this direction due partly to the postwar agitation and partly to the Minto-Morley reforms of 1909 which invested Local Bodies with part responsibility for primary education. This tendency has received a fillip by the passing in

various Provincial Legislatures of Compulsion Acts that lay down rules for introducing free Compulsory education in specified areas. The following table shows the Urban and Rural areas in which compulsion had been introduced by the year 1928-29.

Province.	Acts.	Areas under Compulsion.	
		Urban.	Rural.
Madras ...	Elementary Education Act	25	7
Bombay ...	Primary Education Act 1918	4	...
	City of Bombay P. E. Act, 1920	1	...
	Primary Education Act 1923	3	1
Bengal ...	Primary Education Act 1919	...	...
U. P. ...	Primary Education Act, 1919	35	...
	District Board Education Act, 1926.	...	320
Punjab ...	Primary Education Act, 1919	57	2351
Behar ...	Primary Education Act, 1919	1	4
C. P. ...	Primary Education Act, 1920	10	275
Assam ...	Primary Education Act	...	...

It is premature yet to gauge the progress of Education under these measures. A good deal of spadework, propaganda and persuasion will be required to put forth before the average villager becomes alive to the needs and possibilities of the situation. Yet the quinquennial Index figures for 1923-29 as borne out by the following table indicate so far as the quantity of education is concerned the results since the reforms :—

Province	Primary Institutions				Enrolment				Percentage of Scholars to Population			
	For Males		For Females		Males		Females		Males		Females	
	1923-24	1928-29	1923-24	1928-29	1923-24	1928-29	1923-24	1928-29	1923-24	1928-29	1923 24	1928-29
Madras ...	37,718	50,108	2,872	4,731	1,379,153	1,890,328	392,539	599,811	7·5	10·0	1·9	2·9
Bombay ...	11,132	12,940	1,446	1,688	668,487	830,683	166,734	221,049	7·55	9·42	1·91	2·62
Bengal ...	36,583	41,240	12,842	16,416	1,206,358	1,496,111	340,044	462,987	6·84	8·61	1·58	2·01
U. P. ...	16,514	20,014	1,496	1,709	853,643	1,094,655	80,138	105,417	4·13	5·43	0·46	0·62
Punjab ...	5,679	5,520	1,016	1,409	350,293	359,844	51,579	77,583	6·1	8·91	0·69	1·15
Burma ...	3,561	4,215	607	636	106,576	156,495	70,715	122,625	3·31	4·61	1·88	2·97
Bihar & Orissa	24,186	27,046	2,580	2,627	679,616	830,489	96,023	110,219	4·77	5·80	0·58	0·68
C. P. ...	3,956	4,168	324	353	231,577	268,475	31,646	40,869	4·6	5·35	0·54	0·72
Assam ...	4,120	4,906	366	513	166,750	208,565	25,292	38,663	5·25	6·8	0·80	1·2
Coorg ...	98	98	9	9	5,217	6,207	2,280	2,571	6·62	7·74	3·32	3·82
N. W. P. ...	500	621	60	82	24,022	33,363	3,893	5,626	3·7	5·6	0·5	0·8
Delhi ...	131	163	21	4	6,847	16,053	740	3,942	5·4	10·8	1·2	3·2
Ajmer Marwara	138	169	9	27	6,551	8,533	551	1,991	3·6	4·89	0·58	1·09
Balochistan ...	67	77	4	3	1,799	1,875	205	230	1.67	2·06	0·43	0·68
	144,383	171,285	23,652	30,207	5,686,889	7,209,676	1,262,379	1,793,583	5·07	6·86	0·95	1·75

Relapse into Ignorance.

But although the statistical returns show a fairly large number receiving the benefits of public education, the figures if taken at their face value are grossly misleading. A vast majority of these thousands never get beyond the primary stage. So soon as a boy is thought big enough to handle a spade or drive a team of oxen he is called back to the plough and there his schooling ends with a strong presumption that he gets over, in the course of time any extra intelligence infused into him by letters. Over 76 per cent of the pupils in schools belong to the lower primary stage and of these some 80 per cent are thus accounted for. So that to get a correct idea of school education in India the figures are to be multiplied by the average number of years attended. It would be illuminating in this connection to pursue the comprehensive table prepared by the Board of Education for the year 1926-27.

SCHOLARS BY CLASSES AND AGES 1926-27.

(Quinquennial.)

Class Ages.	Primary.				Middle				High.				
	I	II.	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
Below 5	192,329	1,491	44	2	...	...	...	...	...	...	...	...	193,866
5 to 6	968,187	52,486	1,995	48	...	2	...	...	...	...	...	...	1,022,718
6 to 7	1,306,612	186,166	25,669	1,532	87	3	...	...	...	...	...	...	1,520,069
7 to 8	1,063,902	307,614	113,532	20,457	1,485	172	6	...	...	...	...	...	1,507,168
8 to 9	711,699	325,063	187,598	67,378	11,964	1,482	157	14	5	...	...	...	1,305,360
9 to 10	430,117	271,764	219,167	112,088	43,323	9,054	942	86	2	1	...	...	1,086,537
10 to 11	252,742	193,250	200,793	145,847	70,705	28,229	7,147	874	23	9	...	...	899,619
11 to 12	140,655	123,777	153,912	140,964	83,670	47,410	23,260	5,438	459	40	...	...	719,585
12 to 13	78,547	72,609	100,233	113,571	76,794	57,125	37,341	81,739	3,925	365	31	...	559,280
13 to 14	42,484	38,655	58,971	76,887	60,710	50,769	42,353	25,914	13,667	3,128	309	6	413,835
14 to 15	24,804	20,255	29,790	43,159	38,713	37,571	36,650	28,555	18,277	11,418	2,528	83	291,803
15 to 16	14,797	10,529	14,295	21,215	21,494	23,508	27,329	24,729	19,592	16,475	10,044	459	204,466
16 to 17	11,584	7,625	7,538	10,552	10,175	13,380	17,942	16,961	15,505	16,128	13,077	1,153	141,620
17 to 18	9,090	5,820	4,355	5,206	4,308	6,454	9,682	10,321	10,504	13,209	11,035	2,052	92,096
18 to 19	7,475	4,826	3,187	2,790	1,576	2,648	4,944	5,042	6,078	8,761	7,941	2,283	57,551
19 to 20	8,238	4,894	3,168	1,928	859	958	2,196	2,474	2,926	5,183	5,064	2,034	39,922
Over 20	16,737	11,154	6,544	3,987	904	590	1,285	1,383	1,699	3,987	4,580	2,736	55,566
Total ...	5,279,999	1,637,978	1,130,791	767,584	426,827	279,355	211,234	140,530	92,662	78,704	54,609	10,806	10,111,079

Work of the Local Bodies.

Primary education has been made over to the local boards since the inception of the statutory reforms (1919) and although the Department of Public Instruction still maintains a general supervision and control in lieu of the very substantial state grant, the conduct of schools and business connected therewith rests primarily with the education committee of the boards concerned. It depends upon the education sense of the district and the quality of members how long the strides in mass enlightenment are taken in a particular tract. As a rule members have not imbibed the requisite spirit of responsibility and zeal and often private interests are allowed to mar the efficient carrying out of public duties. Thus the D. P. I's report for 1930-31 remarks :—

"Tension between the chairman of the education committee and the chairman of the board, between the board and the members of education committee, and between the Chairman of the education committee and the district inspecting staff is not uncommon."

The comparative figures for the two latest years under report as given below point to a stagnation in the opening of new institutions ; while it is satisfactory to note that the progress in enrolment has been maintained.

	NUMBER OF SCHOOLS				ENROLMENT.			
	1928-29	1929-30	Variation.	Percentage of variation	1928-29	1929-30	Variation.	Percentage of variation
Government ..	14	13	-1	-7	1,081	976	-107	-1
District Board..	14,803	14,793	-10	-.08	904,898	913,029	+ 8,131	+ 89
Municipal Board	770	792	+ 22	+ 5	80,414	84,516	+ 4,102	+ 5
Aided ..	4,325	4,377	+ 52	+ 1 2	149,175	151,685	+ 2510	+ 1.7
Un-aided ..	101	93	-8	-8	4,403	4,956	+ 535	+ 12
Total ..	20,013	20, 68	+ 55	+ .27	1,139,971	1,155,142	+ 15,171	+ 1.33

The figures for girls' education during the same period are:—

	NUMBER OF INSTITUTIONS.				ENROLMENT.			
	1928-29	1929-30	Increase	Rate of Increase	1928-29	1929-30	Increase	Rate of Increase
Vernacular Middle Schools of all description.	148	166	+ 18	+ 12 2	17,675	21,706	+ 4,029	+ 22 7
Primary Schools	1,696	1,711	+ 15	+ 0.9	59,451	63,446	+ 3535	+ .6
Total ..	1,844	1,877	+ 33	+ 13 1	77,126	85,152	+ 7624	+ 28 7

Director of Public Instruction U.P. 1930-31.

District Boards Handling

Schools in rural areas are run by District Boards. Almost all of these have an education committee elected out of their numbers that looks after the educational interests of the district. But while the Government departments, heretofore controlling them had been exclusive organisations more or less specialised in the theory and practice of education, the new set are lamentably lacking in the essential qualities of management and control. The election to the committees is not as a rule conducted on an educational zeal ticket, but is rather swayed by party, local or even communal considerations. So that if the Chairman happens to be a capable person with a sufficiently wide grasp of affairs all goes well and the district prospers in its educational policy; but in too many instances such unfortunately is not the case. The committees newly arrived by power resent any interference on the part of Government inspectors or departmental heads; while inwardly they are often handicapped for want of funds or party shufflings. So that teachers' pay is sometimes in arrears, discipline at schools is lax or unworthy men are admitted into service, while the ideal conception of mass education is no where kept in view. The commissioners' strictures when they concern education in the district or the deputy inspector's reports are talked off in the committee's sittings and things get on much in the same way year after year. Indeed so long as the public sense is not sufficiently developed, so long as a true appreciation of the country's requirements is no forthcoming, there is always the risk of degeneration in a

too independent course of action. The people are jealous over their hard earned powers and are not amenable to discipline in these early days of constitutional change.

Difficulties encountered

The ideal kept ahead by each provincial government (or rather legislature) has been to make every citizen able to read and write. But with the mass of prejudice still lingering, with the legacy of past neglects heavily weighing and with the inexperience and inefficiency of local bodies on whom much of the work now devolves, there is no wonder so little has been achieved. The position of Government vis a vis the problem of providing suitable education to the masses cannot be stated better than in the words of the Hartog Commission Report:—

"In rural areas, school units are usually small; adequate staffing is more expensive; the conditions of life are not attractive to teachers unless they are specially selected and trained; woman teachers cannot, as a rule live in villages unless circumstances are especially favourable; the teachers are isolated and the difficulties of administration, supervision, and inspection much greater; and it is more difficult to secure regular and prolonged attendance of children. In India the majority of parents who live on the land are poor, and their poverty is aggravated by improvidence and debt. Being illiterate, and having an outlook confined entirely to their own surroundings and the daily routine of life, much persuasion is needed to convince them of the advantage of sending their children to school and keeping them there long enough to receive effective education, however rudimentary. Even if schooling is free, or school fees are small the temptation to take a child away from school as soon as he is old enough to mind cattle and goats (which in a country of unfenced farms must be done by some body) is great. In India more than in most countries, the general economic condition of the villager is unfavourable to the spread of education, or an appreciation of its advantages. If an appeal to him, to educate his children is to be successful it must rest on a concerted effort to make the school an instrument of village up-lift—economic and social as well as intellectual."

Education as desired and as put before in the national programme cannot be achieved unless two factors are first secured.

1. Relief to the cultivator in his vocational duties so much so that he can spare the children till at least fourteen years of their age.
2. Provision of adequate funds, by the imposition if necessary of a super education tax and abolition of tution and other fees.

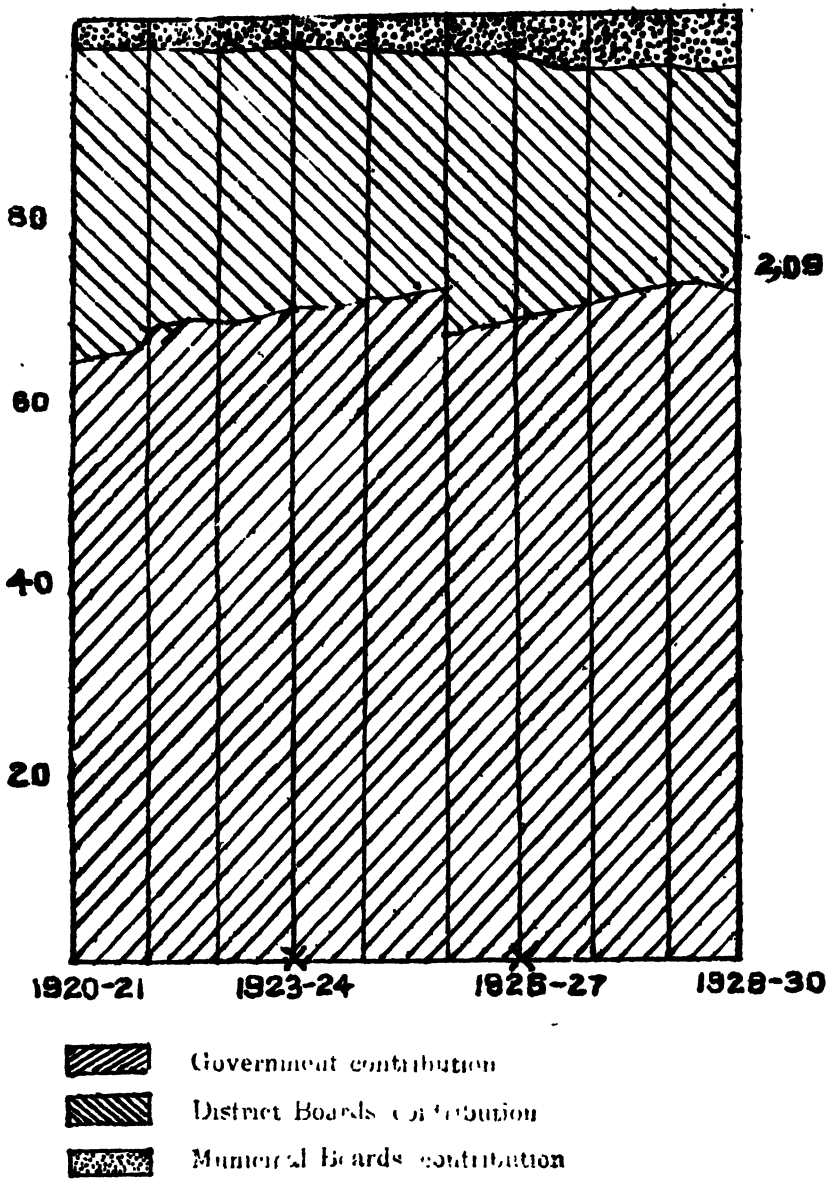
Situation in the villages.

The chief reason why the villager is reluctant to send the children to school is that he cannot afford it. If he does send, it means he should employ a permanent handy man to help him in the diverse activities on the farm and the house such as looking after the cattle, chopping and preparing fodder for them, assisting him at watering, weeding and other minor duties. No doubt with the improvement of his means it would be the better course; but in the meanwhile a way should be found. There are suggested two outlets to the impasse. The village holdings must, in the first place be consolidated, separated and fenced so that boys may not be wanted to watch cattle from straying into their own or neighbours' fields. Then the method of co-operation and mutual help should be so far pushed in day to day work that the employment of a spare hand be obviated. All the cattle of the village, for instance, may be kept and cared for co-operatively and such small assistance too as may be indispensable, should be extended and accepted on a reciprocal basis. For the rest if he is not too indolent he should learn to do the details of his work himself and let the children prosecute their education as they ought.

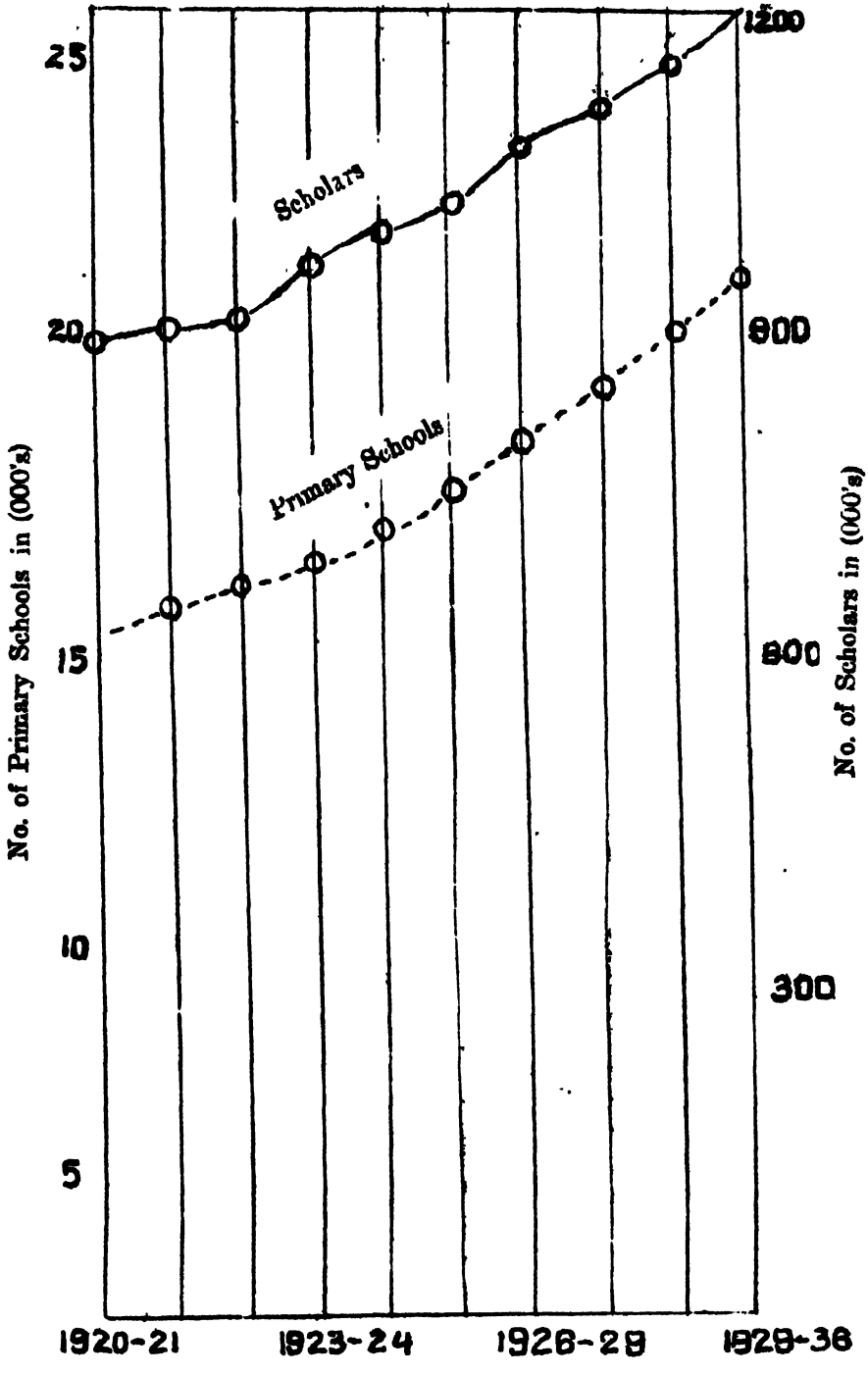
Paucity of Funds.

The lack of funds hampers every movement from growing to its natural and necessary length. Strictly speaking village education can never expand enough to make any impression on the problem of uplift unless the supply of funds is based on perennial sources. The local boards cannot be relied upon to keep up a satisfactory supply and their share at that, in subsidizing primary education has been none of the largest as would appear from the graph below.

Portion contributed by Government, District and Municipal Boards for primary education



Progress of Primary Education in the United Provinces 1920-1930-



The expenditure on education in United Provinces as graduated during the past decade has been in lakhs of rupees.

	1920-21	1924-25	1928-29	1929-30
Provincial Revenues ...	105	165	209	215
District Board funds ...	40	35	35	34
Municipal funds ...	9	11	14	15
Fees ...	35	36	56	61
Other Sources ...	50	50	60	51
Total ...	239	297	374	376

It would seem that over 75 per cent. of the expenditure is already upheld by provincial revenues and fees. There are 48 district boards in the province and the total contributed by them did not exceed 34 lakhs in the year 1929-30 which puts the average per district at Rs. 75,000; and a rough average in each district of boys and girls waiting to be educated is 250,000. So that the districts proceed to educate their children with about 5 annas per head annually. This is not enough. Then the general administration, the supervision, the training of teachers and other technical exigencies are only met with by the Government. Generally speaking the local bodies lack the requisite spirit and proficiency to handle this important item of national reconstruction at the present emergency stage so to say. It would be much better in the interest of all concerned, that for a specific period education of the masses be taken up as a national compaign regulated and directed by the Government with the active co-operation of local boards which factor is necessary to give local colouring to the instruction provided. The question of funds may be tackled, after the present financial crisis is relieved to some extent, by imposing a new education tax on all incomes or exploring the possiblities of death duties. In any case the revenues thus

obtained might be earmarked solely for mass education and instruction in public schools will thence forth be automatically free.

Higher Eduentiun premature

Too much attention has been riveted on University and high school education and the body politic has been burdened with a class of men who know more than they do and consume more than they contribute to the wealth of the country. Secondary and high school education, although with modifications the minimum to be aimed at in any system of public instruction, is however much up the ladder and calls for adequate provision of careers to the young men so treated. As things are the Universities and high schools throw out their annual quotas of more or less efficient youths to swell the number of unemployed in the country. The public services cannot absorb them all. There is a limit to office jobs and teacherships, while the professions are already abrim with able brains that have been long in the field. The problem will continue to baffle the attempts of politicians and economists at a solution unless the industries and the ordinary business accept them enmasse. The education provided is not directed to that end and if educated men take to business at all they form the exception rather than the rule. To starve the nation then, of its primary nourishment in order to provide a few with a more wholesome fare is not calculated to improve the lot of all and will sooner or later lead to a socio-economic deadlock. Indeed there is no knowing but that the present crisis in agricultural prices may not bring matters to a head, and then they will be face to face with the rather harrowing spectacle of university men swindling the uninformed producer for a bare pittance and the producer gradually going down for want of proper information. Thus it is amply made out that public expenditure on education should be more equitably proportioned as between university and high school education and rural mass enlightenment.

Mixed Schools for boys and girls.

Compulsory primary education for the districts although enacted in 1926, has not been able for various obvious reasons to make a head way. Most of the boards have not funds for

the purpose and the others are not keen over it. The public enthusiasm too is on the wane if private contributions to education could be a true index. Trained teachers and specially those imbued with the right spirit are not forthcoming in large enough numbers. It is particularly acute in the case of those for girls schools. Villages are no place for outside female teachers and conditions are to be made peculiarly favourable to induce sufficient numbers of them taking to the villages. Much easier it would be to send local girls for training and to employ them in their respective villages.

Primary education more-over and the secondary too in earlier stages would much better be imparted in mixed schools for boys and girls. The emphasis on sex distinction must not be laid so early in their lives. Besides the work of uplift in the villages is primarily considered in its relation to man and woman and the common school should be the first place to inculcate a spirit of respect and chivalry; and the girl in particular must learn to respect herself, to think herself as equal in importance to the boys, and become prepared for the responsibilities of her adult life. After the primary stage and when they are able to read and write, it would be desirable to separate the plans of their study, the girls being taught subjects calculated to help them in domestic life and the boys of course the usual things with a blending of vocational knowledge.

Formation of Character

A great advantage in mass co-education which will be more apparent in actual practice, is that boys will learn to live together, work together, play together, and have common standards and ideals. This more than anything else will pave the way to a healthy co-operative spirit in grown up life. The educators will have only to see that a true spirit of sacrifice, service and good fellowship is engendered. The syllabus should contain matter, the hours of study should be regulated, the teachers should tend their activities and personal influence, games, exercises, plays, dialogues,—all to this end. The school should be the epitome of future life and each boy a model of service

and self help. The Baden Powell Scouts, no doubt are a move in the right direction; but there is an impression abroad that pupils are not bound to take up the course as part of their studies, that the subjects for the examination are the real thing and that scouting is after all a jolly pastime. That would be going astray. Rather make it a regular subject including elementary hygiene, and broad moral principles culled from every religion as part of the lessons daily given. This will naturally and effectively take the place of sectional religious training so much desired by the parents.

Courses of Study.

The courses in secondary classes have been made to introduce instructions in agricultural economy but there are not yet forthcoming text books of the right type to make it sufficiently attractive as well as useful. Instructions for the lower classes must as a rule, be couched in good short stories liberally illustrated with pictures of familiar life. Care should also be taken that the curriculum be not overloaded in secondary classes. Arithmetic for example could be curtailed to more modest exercises and Geography to strictly District needs, or India in outline. It should be in the nature of an emergency training cut and dried, to make practical men of them. The idea all through should be to give them sufficient familiarity with letters to make the uplift and improvement literature intelligible in after life. They should be able to peruse for themselves such easy scripts as the district gazettes, co-operative society reports and the like. Then they should know so much of writing as to easily write ordinary letters, orders and invices in their own vernacular.

PART II.

THE WORK THAT IS BEING DONE.

CHAPTER VI.

AGRICULTURE IN INDIA.

Grinding Poverty

Poverty they say is the greatest evil that can afflict a people. It is at once the cause and the ultimate effect of all those unhealthy elements in the social and economic life of a community that tend to sap its energy, curb initiative and bring about that queer sense of disability called the 'inferiority complex'. The victims lose all capacity to help themselves and co-operate for the common good. They look to others to give them work and bread, to direct them how to conduct themselves and to prop them up at every turn of life. Ignorance and superstitions work in their midst, insanitary conditions prevail, children are deprived of suitable environments, women are depressed and neglected,—all because they have not the means to elevate themselves. Give them money,—ay and breathing space, and despite their conservatism, despite all the forces to the contrary they will emancipate themselves in practically no time. What education and a life-time of propaganda often fail to effect is brought about quite imperceptably with the advent of prosperity in a community. They take to education, uplift their women and improve their standards of life as though by magic: while conversely speaking the latent qualities they possess in the ordinary course of nature's dispensation too often get blunted by disuse, are caste away by the struggle for existence claiming every phase of their attention in vocational pursuits. They really have no time or energy left to improve their lot. Their intelligence and enterprise are throttled down by the persistent anxiety to make the two ends meet. In a word poverty begets poverty and perpetuates misery, and there is no getting out of the vicious circle until adequate outside help is lent to straighten things at any point.

Per Capita Income.

*The average daily income per capita in India is only one anna and ten pies, about 2 d.. As compared to this the per head income for instance in England, Japan, Australia and U. S. A.,

*Agricultural Statistics for the Punjab 1924.

stand out in bold relief being no less than 3 s. and 4 d., 2 s. and 2 d., 1 s. and 8 d. and 3 s. and 6 d. respectively. These figures denote in terms of British money the relative worth of a day's labour in the various countries quoted. Out of this negligible income (in the case of India), the cultivators share, if it could be made on would come to very small proportions indeed considering the vast incomes accruing to the capitalists and monied classes. The Indian bourgeoisie is as distinct and uncompromising in its relation to the proletariate and class cleavage as sharply marked here as anywhere else; for while the main producer of wealth in India is the farmer, the other professions directly or indirectly subsisting upon his toil are by reason of being better organised and informed able to appropriate more to themselves and leave him out in the cold. The disparity however is natural under the circumstances and not confined to India alone.

The annual land revenue returns of the United Provinces government (in the preceding prosperous years) amounted roughly to 1,125 lakhs of rupees which is 45 per cent. on an average of the total rent collections in the province. These in their turn are 20 to 25 per cent. of the total crop value accruing to the cultivators. Worked in round figures the gross earnings of the population dependant solely on land are 12,500 lakhs of rupees. The cost of production varying from 40 to 60 per cent. of the value of produce comes at 6,000 lakhs leaving a total net income of 6,500 lakhs to be distributed over a population of forty millions of agriculturists and farm hands. Thus for Hindostan proper the income per head is not very much over Rs. 16 for a normal year. Supplemented with farm and other wages it may go up to Rs. 20 per annum, at which rate too it is ridiculously inadequate to support any life any where. And yet the villager has to allow for lean years, famines, epidemics, litigation and a score of extra-ordinary necessities. So that all his requirements of life have as per necessity to be run on a permanently reduced ration basis. His diet, clothing and dwelling standards represent the last limit on destitution beyond which there is nothing but starvation and death.

The economic Rot.

But he is not poor by choice. He is rather crippled by conditions around him in bringing about which he too is in part responsible; as also those who were meant to shepherd him. The principal factors contributing to the economic rot in the villagers are: -

(a) The essential nature of the land tenure system.

(b) The absence of credit facilities and the profiteering spirit of the existing ones.

(c) The uneconomic methods employed in the trade and lack of information as to modern requirements.

(d) Disposing off difficulties and the ravages of middle men.

To these must be added the suspicious nature of the villager himself who has no faith in the *bona fides* of uplift departments connecting them with the system that oppresses him.

It must not be supposed, however, that these factors are uniform in their incidence to any particular area, village or person. There may be one or more of them working in different degrees that would be quite sufficient to impugn the chances of prosperity at any given place. Thus for example suburban villages and those served by railways have excellent transport and marketing facilities, and yet in so far as they are influenced by other disintegrating forces, they are as poor and backward. Indeed cities are no exception to the rule and society is a continuous and mutually interspersed organism so far as general agricultural practice is concerned. Anon the four disrupting forces attending the agricultural situation as enumerated above are so wide in their application and far reaching in effect that they require separate treatment each to apprehend their respective bearing on the conditions of the trade.

(a) System of Land Tenure:—

Much has been said on the subject in the councils and the country and the law of the land amended as fresh incongruities have come to the fore. It is not intended, however, to enter here upon the merits of the case, nor is it possible, on the face of it, to effect any sweeping changes in the system in vogue.

Life in this country both economic and social has run too long along these lines not to be seriously dislocated by a drastic tampering with of them. But in so far as certain inherent features of the system prejudice the efficient working of the agricultural industry, they deserve a more than passing mention. The land tenure laws in the districts of the United Provinces are a compromise between the Permanent Settlement of Bengal (1791) and the ryotwari assignments in the Madras Presidency (1799-1807). In the eastern districts it is a continuation of the Bengal system while Oudh is under a Talukdari settlement. Bundelkhand is ryotwari, but in practice it embraces all the evils of a zemindari tenure. The rest of the province is settled upon hereditary proprietors called zemindars who are responsible to the state for its dues.

History of Land Tenure.

The gradual evolution of this class since the days of Moghal administration is now a matter of history. The land survey even in those early days although not so elaborate was well defined enough to form the basis of all subsequent settlement. All land then as now belonged to the state: but in dealing out particular tracts to *mamlatdars* as they were then called, the government did so with the tacit proviso that all or any landed interests could be resumed at will by the state, or transferred to another person. The fact that in very few cases such recourse was taken together with the loose nature of lower administration made it possible for the incumbency to take the course that other services under the state usually did. They became hereditary. But it was only a convention and a revenue *mamlatdar* could count upon the office running down his descendants with no more confidence than a Kotwal (Police chief) could or a Qazi (Judje) or any other functionary. Administration in mediaeval India was restrung only with the change of dynasty or at the will of a super-arbitrary potentate and not necessarily that in the lower strata of public services. The British Company inherited the system and let things get on, for various reasons pretty in the same way. Later on when the laws came to be enacted, it was found that the Zemindars formed a distinct class by themselves and could not be deprived

of their title without the most serious social upheaval and a possible rebellion. It was thus thought safer to give statutory standing to what had been going on for generations as a matter of administrative convenience. So that no sooner was a province annexed to the territorial acquisitions of the East India Company than a Revenue Commission was appointed with almost unlimited powers to deal out the entire *Dewani* lands to the various claimants whose titles seemed most uncontested; while religious endowments, trust and freeships were left entirely untouched. It was at best a makeshift arrangement and perhaps all that could be done at the time.

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The Zamindars now possessed as private property what they had had only on the sufferance of the provincial Dewani. They could mortgage or sell or dispose it off in any way they might choose. With their titles so secured, it was only natural that any sense of duty to the state or the cultivators should gradually be whizzed out of them, and after the too recent precedent set by the nabobs and civil-war chieftains, once the immediate danger to their order was removed, they took to the harem or other idle pursuits or worse still became entangled in costly litigation,—all of which preoccupations cost the fraternity most of its assets in land and zemindari rights: until by now the major portion of cultivable land is owned or held under mortgage by other than the original holders. The economic distress to which the Zemindars as a class are victims is in no small measure due to their intemperate habits and the failure to make hay while it was bright sunshine.

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Now of course the government finds itself in a quandary. The men who purchased their titles from the former holders paid large sums for them and were guaranteed full protection of the laws. They cannot be dislodged without the greatest injustice being done to those who invested their money on what looked sound security. They invested as they might have done on any other trade and expect a return for which they are naturally more solicitous. They may or may not have

any interest in the well-being of the cultivators or the land, but they must have their profits: and this is where the trouble comes in. The evil was not looked in the face at the moment and now they will have to wait till Doomsday to have it repaired.

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The Present State in the country.

The system, as it is, is the last word on efficient book and record keeping. All land is assessed periodically to adjust government revenue in the light of current prices and general trade conditions. Land-lord is the unit the government deals with, the cultivator himself being overlooked in theory at least. While this may redound to a vaster variety of agricultural enterprise in more enlightened society, conditions in India as commonly prevalent tend only to make the toiler on the fields a victim to his own irresponsible habits and the not uncommon clashes with his neighbours and the land-lord. While on the other hand a sympathetic and for the matter of that wise handling of their own affairs in relation to the ryots would have been a sounder line of policy with the land owning community in this country. The uniform, almost mechanical process of collecting rents together with the protection afforded it by law, has created in the course of years what is in effect a privileged class in rural society. Till very recent times educated and progressive elements in their midst were exceptions rather than the rule and the same happy go lucky spirit characterised their approach upon life and its problems. Even now they form the right wing in the country politics and stand for stability and patience in its counsels ... ...

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As things are at present sometimes the land-lord and the cultivator both are actuated with unconcealed motives of profiteering. Intensive unprofitable farming is the order of the day brought about no doubt by the universal anxiety to force out of the tenure its last drop of moisture. This recoils upon themselves and they are progressively poor and the zemindar and the government stand wandering why arrears run so frequently from one year into another. The government must

have its dues to run the machinery of state and the land-lord his share out of a land over which he has property rights. Thus the cultivator in despair, as it would seem, tries to raise as many crops as he thinks could secure to him a fair residue after paying off the various costs. But alas! he miscalculates too often, is in rags and starves for the most part of the year.

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Inheritance Laws in India

The Hindu and Muslim inheritance laws together with the other proprietary regulations as related to landed property also tend to disrupt the economical working of agricultural activities in that the new claimants to the titles are often mutually unaccommodating and the interests of the tenants are allowed to go down in their personal bickerings. Moreover the less conscientious of them are quite capable of keeping any particular tenant from acquiring occupancy right over his tenure by a number of clever manipulations of revenue regulations and although the state professes to protect the ryots' interests against over-bearing land owners, the latter are too versed in their trade, too informed of the loop-holes in the law to get caught any where. The anxiety of the government for example, to let the proprietor cultivate and improve his own lands is exploited by keeping on records a particular 'sir' or 'muafi' as a 'khud-kasht' (self-tillage), while all the time it may stand out on a fat lease in all but name. Moreover the actual rentage is often covered and effectively concealed under such surreptitious items as 'nazrana' of special levy and the revenue officials are apprised of only a nominal surcharge that is to be the basis of all subsequent settlement. Indeed there can be no limit to the ways and subtle devices an unscrupulous man may employ to oppress the tenants and hoodwink the state agents.

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Thus in practice it would seem the system is inherently beset with the usual weakness of private ownership, but which at the same time is indispensable in the present state of affairs in the country. The proprietors act as liaisons between the government and the innumerable tenants who multiply with each generation without the holdings expanding in proportion. And despite what has been said about them in the foregoing

discussion, it must be remembered, the zemindars have served a very important and a very real purpose in the administrative machinery of the land. The cultivator by himself is too ignorant, too unbusiness-like to come into contact with a highly organised body such as that of the state, and after all the element of private enterprise has been the mainstay of economic life in India as every where else. That the order of landed proprietors is comparatively less alive to the strict principles of profitable business is only to admit the relative laxity of unscientific methods in any industry: While the great argument in favour of individual enterprise, that is the greatest reward to the best attempt and encouragement of genius holds good in agriculture as well as in other industries. It is a happy sign of times too that the zemindars as a class are gradually coming into their own and availing themselves of the opportunities provided by modern conditions. The pressure of population has driven them into seeking careers elsewhere than on their estates and with an extended vision consequent upon liberal education, they have come to realise that their prosperity in the ultimate recourse rests entirely with the well being of the ryots. So that increasingly they are associating themselves with the interests and activities of their tenants and since in the vast majority of cases the land owners are themselves engaged in agricultural activities, they cannot but exert a healthy influence upon those who are directly subservient on them.

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The land tenure system therefore, as it stands today, is essentially designed for the purpose of revenue and has so far answered well save in that the personal factor in land proprietorship gives rise to endless litigation as is evidenced from the numerous revenue cases coming up before the courts. The personal factor too is responsible for the divergence from place to place in the condition of the ryots and their relations with the landlord. While therefore since it is tending to improve through education, propaganda and representation, it can be trusted to make itself felt in the improved lot of the peasant. True the odds are still heavy against a scientific handling of the situation and swayed by rank old world ideas as both the

tenants and the proprietors are, the elementary law of self-preservation will exert itself in the end and they will have to concentrate upon common interests and mutual accom nodation.

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(b) Financing of Agriculture.

No industry can be carried on without funds,—funds to lay out in the course of the different processes of production to ensure a good value for the produce, funds to keep up during the period of diminishing returns, and funds to place it on the best market available. And since in these days of heavy competition and easy accessibility only the best and cheapest material can compel the fancy of the purchaser, third rate or even second rate produce has but little chance of paying its way. So that it is never wise to stuntify the preparation of your stocks and the utmost length of resources is required to be put through in order that a swift and fair return may be guaranteed. True for the highly organised industries it is no less so in the case of small individual undertakings which if any thing are even more liable to collapse in the absence of adequate financial backing; for they have no credit to go upon, they have to meet their liabilities forthwith and must provide for running expenses.

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Since India is not essentially a manufacturing country, it has not to lay upon such big items as plant and premises, raw stock and propaganda, nor has it to deal with the tough problem of labour in the sense it is presented in the west; but in so far as no industry however small can be carried on single handed, and the patient soil itself cannot yield to nothing, funds ore indispensable even to primitive farming. In the countries with an advanced economic sense necessity has paved the way to

elaborate provisions for meeting every variety of financial requirements. There is no person however obscure, no scheme however fantastic but will find men and concerns to back it up, guide it or ensure it against mishap. This has been carried to such an extent that catering for financing others business is one of the most flourishing lines of trade in the present day and no body can doubt that much of the progress made by the great modern nations of the day is directly due to the promptitude and ease with which individual enterprises have been assisted by interested parties. In India, on the other hand banking and broking are of comparatively recent growth and confined to urban areas alone where too it is not sufficiently developed to replace entirely the old sowkari methods. Hence in dealing with the problem in the villages these modern terms are to be dispensed with; for in the vast majority of cases there is a complete ignorance as to the existence or efficacy of such devices. ... ...

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Want of proper funds,

One reason and the main one of agriculture in this country not being quite so prosperous as it ought to be is the handicapping of every activity for want of proper funds or where they are forthcoming, the usurious rates and crushing conditions at which they are advanced. No decent industry can survive if it has to pay over its investments a recurring interest, often compound, of any thing between 60 and 150 per cent. per annum. Yet compelled by the exigencies of his trade and sometimes goaded to it by the incessant demands of the land lord, the cultivator is feign to approach the local sowkar (money lender) who, complacently enough, places such sums at his disposal as he thinks would with interest be covered by the debtor's entire assets computed at a discount. Then he lets things drift for a while: crops come and go, weather and trade fluctuations set in, a chance litigation or son's marriage is gone through,—and then, say after the laps of three years or four the day of reckoning has arrived. Ignorant of the tyranny of

figures, bewildered and confounded, the debtor sees his cattle and tools, the silver bangles and ear rings of his wife and daughter, beds, utensils, and even the old hut ranged before the liquidators' men. He is crushed--annihilated and must for the rest of his miserable life either beg his existence from door to door or if he is a brave fellow, rough it in farm labour or cattle yard drudgery.

Such incidents common to every locality discourage new enterprises and maim the existing ones. People do not love to take chances and say in a familiar proverb:—

Adhi chhor sari ko dhavey: Adhi rahe na sari pavey.

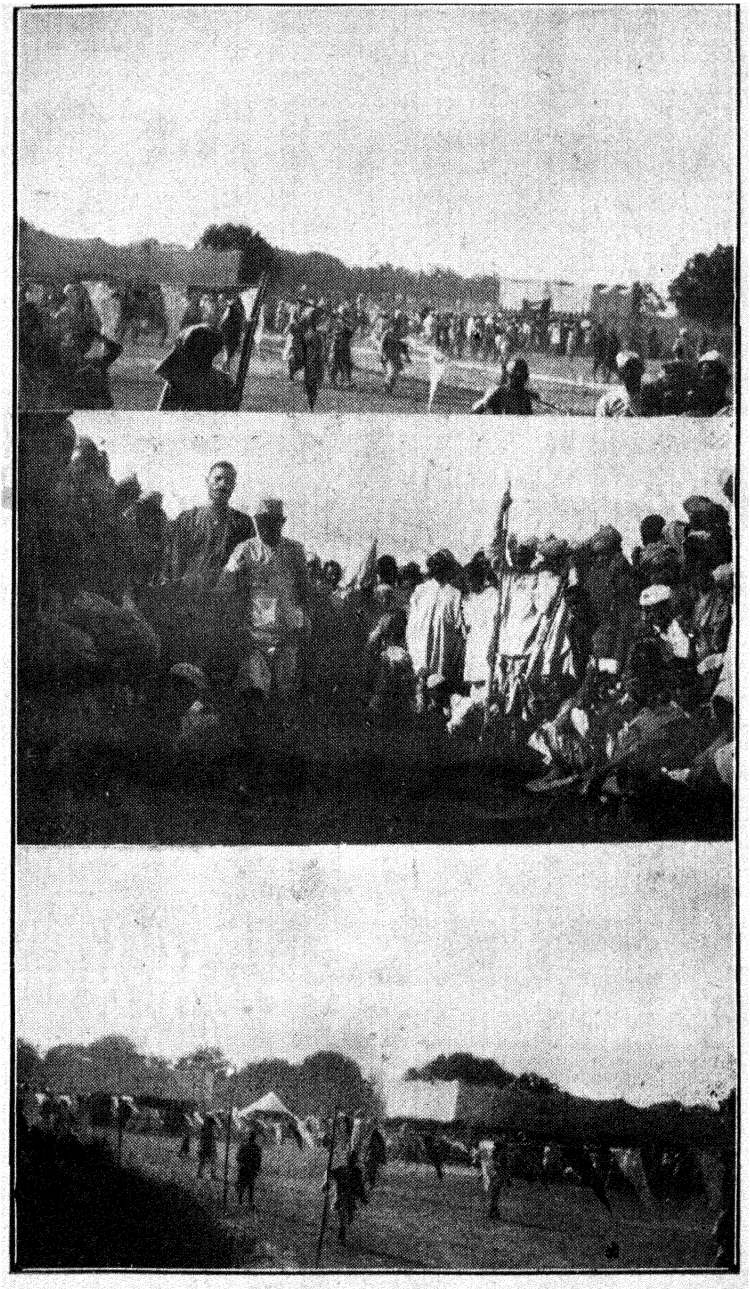
(not content with half a loaf, he covets the whole and finds in the end he has lost both)

Large scale production is not ventured upon, supplementary cottage industries are unknown, cattle and implements are suffered to remain at the minimum utility level—all because people have no funds and would not borrow for their lives. Those who do, are destroyed. Hoardings are small and most often they are transformed into jewellery which brings only half the value. As a rule the tenants have no transferable rights over the land under tenure, nor in many cases over the house they inhabit; so that there is very little after all that can be counted upon to raise money. There was such time in the annals of yore, a prospective debtor would say, when one could get a loan by placing with the sowkar ones women and children; but now of course no such facilities exist. The famished cattle are a negative value and the mahajan (money lender) refuses to consider them.

Causes of inaction.

Such straits are by no means uncommon in rural areas; and since the crops are to be financed somehow, and the zamindar is untractable, the old 'banya' is the only recourse; for does he not distribute seed on the promise of harvest season, supplies sundry necessities and asks no questions? Surely it is due to him if he sees fit to take your thumb impression on certain pieces of paper. So is the evil entrained,

and the rest follows as sure as it is day. The village 'banya' who is the money-lender, the grocer, the druggist and the grain merchant all blended into one, is the most important factor in the economic life of a village. Patient, hard-working and self denying, he works his way often from very meagre beginnings upto the most affluent position in the village society. He lends his money at a usurious interest, sometimes to the risk of his principal, but always very exacting and inexorable in his demands. He builds up his fortune on the ruins of a hundred families in the neighbourhood and is by far the greatest creditor to the agricultural debt of India. For generations it has been none but he was who has financed all kinds of rural activity, marriages and ceremonials. He lays out his money on very sagacious principles and has been helped to a large extent by the regularity and unflinching nature of the present transfer of property laws. But important as his position is in the rural economic structure, he is at best a necessary evil; and so long as co-operative credit and land mortgage facilities are not fully developed, he is bound to exploit the ryot, for he cannot be forced to lend money on unsound security; while the measure of his speculative genius in determining the ultimate solvency of a particular debtor is also the measure of his unbounded gains in the trade. A collectively controlled body on the other hand, cannot from the nature of its composition be expected to take undue risks: and so the 'banya' is to continue. The only consequence of a statutory control in the matter would be to deprive the poor cultivator of a chance of financing his crops.



Some camera snaps at the Akberpur Exhibition.

CHAPTER VII.

CO-OPERATIVE METHOD

(b) *Continued.*

Co-operation as envisaged for the country in general and rural areas in particular is collective self-help in its broadest import, systematised and a bit officialised, which is its chief weakness at least for the time being that the government is taken by the masses as not strictly belonging to themselves. It is a new experiment and strange gospel to a heterogenous medley of classes and creeds often antagonistic within the precincts of the same village; but in so far as the problems of life and the approach to them is mostly similar, people could be relied upon to accommodate each other sufficiently to take to a common line of action. Collective work is so much the better in that it is subscribed to and deliberated upon by many who are less likely to make a mistake than a single individual. But there is a danger also of congestion of counsels and over-responsibility which should be guarded against. It has been found by actual experience both in India and other countries that co-operative work conducted on right lines inculcates team spirit, self reliance and habits of thrift. It throws men more together and common interests provide excellent venues for the play of sympathy and good will. Co-operative purchase and sale, co-operative efforts at education and uplift, better living and farming and indeed every thing people may make a common object of has much better chances of a continuity of pursuit and therefore of success. It is as though a thing is to be done with a single will assisted by the resources of many; and in so far as the element of self determination is co-extant with the idea of co-operation, it forms the basis of all corporate life.

Provision of cheap credit

The main plank, however of the co-operative movement as contemplated for the villages is the provision of cheap credit and the removal of agricultural indebtedness which is so much bearing upon the land. As a rule the cultivator after paying off

his rent and meeting the various charges on the late harvest has not so much left as to finance the new crop. At times too he is not able to gain any market for his last produce or has to redeem past debts with what little he gets out of discounting it with the 'banya'. In all such cases the need of raising funds for the crop in hand cannot be over emphasised and co-operation consists in relieving each other's wants through a collective body recognised as such by the state. The composition is simple. Certain members of a locality, craft or caste undertake to bind themselves for the supply of such capital by easy instalments as would guarantee them individually short term credits when necessary. The state of course comes in where the stability of assets, regularity of procedure and inter relation with other societies and central organizations is called for. Independently, it is evident no society can carry along nor inspire confidence. The audit, supervision and general guidance, more over of such bodies can be efficiently undertaken by an extraneous agency, which in the circumstances can be only the government. It is thus that co-operative departments with a hegemony of central and district organisations have been established in all the provinces and have functioned so far with varying degrees of success.

Primary unlimited liability societies have sprung up in most villages or groups of villages as a result of propaganda carried on by the department and other agencies. But ignorance and other restrictions being still predominant, the requisite co-operative spirit has not been permeated sufficiently to the masses or for that matter among the members themselves to ensure a smooth running and efficient working to these societies. Generally speaking people do not take them seriously and there is a tendency among the members to leave every thing to the secretary or the chairman. The borrowers are in most cases unpunctual with the repayment and at places there is the objectionable practice of making book adjustments and taking 'benami' (unregistered) loans. With a better sense of responsibility and business habits these deficencies will gradually be removed. Where borrowings are heavy and the assets insufficient, the local

banks have to apply to central societies which in turn are upheld by provincial 'apex banks' so called because they have also commercial dealings at the other end. Departmental officers and sometimes central office bearers are deputed to inspect the working and accounts of local bodies and maintain so far as possible a uniformity of policy. As a rule loans are granted only for productive purposes and strictly agricultural needs, as for example cultivation expenses, purchase of live stock, fodder, seed, manure and agricultural implements and sinking of wells. But considering local and periodical peculiarities no hard and fast rules can be drawn for the advance of credit and such other needs too, may be met as house building, education, uplift and famine relief.

Popularisation of Co-operation.

But another and a more important use to which primary agricultural societies can be turned is the dissemination through them of development propaganda and expert advice from government technical institutions and research centres. Ordinarily the masses are not impressed by itinerant lectures and placard propaganda. They want the protagonists to live in their midst and show by practice and precedent the worth of their doctrines. Sanitation, education, improved farming and other uplift work must have been pushed to an appreciable extent if there had been a network of improvement societies pledged to experiment on advice tendered by specialists. Thus the agricultural commissions' report (1928) in suggesting lines of action for the various government departments says : --

'Naturally these departments can work best through co-operatively organised bodies of cultivators rather than through isolated individuals. The co-operative society should be the unit through which the various departments of government concerned with rural welfare carry on their activities. As example may be quoted the better farming societies in the Punjab, the sale societies in Bombay and the irrigation societies in Bengal.'

Improvement Societies.

For their part the Co-operative Department in the United Provinces have come forward with a number of 'better living' societies in place of the co-operative credit ones. While in

the latter case a tendency has been evinced of funds being misappropriated and work suffering for want of a proper civic sense, the co-operative improvement associations, where they exist, promise a longer lean of life. Providing the agriculturists with hard cash on securities which are losing value every day, has become an extremely risky affair. As I shall illustrate in my chapter on suggestions, the only feasible device in the hour is the substitution of 'mutual help leagues' in place of co-operative societies. This scheme is being tried in the Fyzabad district and I have had occasion to examine the working of a number of such societies. It appears that the people have imbibed the spirit sufficiently well for the word of the 'Central Panchayat' to be respected. Similarly in a number of villages in Partabgarh, Ghazipur, Benares and Allahabad districts similar schemes have been introduced with varying degrees of success.

* * * *

Debt redemption

Even more important than the supply of short term credits to the cultivators is the question of debt redemption. The ravages of the old sowkari system may be gauged in terms of the huge agricultural debt in every province of British India. This has been incurred in the past years for productive as well as non-productive purposes on the security of landed property. The creditor is for the most part the local money lender who exacts an exorbitant interest on his advance or takes pronote undertaking for a bigger sum than he actually lent. The transaction often culminates in the ultimate alienation of property from its original owner. So that there has been a marked tendency of recent years for the land passing from agrarian classes to those who are unequivocally pledged to making the utmost profits out of their investments. The fate of the land and the toiler upon it can be best imagined under such a dispensation. To fight this chronic state of affairs they have placed on the statute book in the Punjab the Land Alienation, the Sowkara and the Keeping of Accounts Acts. But elsewhere the monied interests are too strong for a legislative interference in the matter, so that the evil continues unabated in most parts of the country.

The co-operative movement so far as it goes, has endeavoured to tackle the problem frontally; that is by the slow direct process of providing long term loans (which may be for larger amounts than usually allowed by primary societies) on the security of landed property which is thus held under mortgage by the society concerned. It is evident that such a big and important undertaking cannot work until adequately provisioned with a working capital and the state guaranteeing interest on the debentures issued. In the Punjab and Bombay a beginning has been made with land mortgage societies, and the provincial banks after entering into agreements with the government have issued long term debentures bearing interest at 6 per cent. to the extent of 5 lakhs each. These loans are in certain cases also granted for the improvement of land and large scale production experiments. But on the whole the societies are too few and the credit at their disposal too limited to make any mark on the dimensions of the problem in different provinces and drastic measures will have to be taken if a real relief is sought to be extended.

Comparative backwardness in U. P.

In the beginning of its career as the whole co-operative movement in India is, the comparative figures for different provinces reveal a most palpable backwardness in the case of the United Provinces. It may hardly be said to have begun there: for while the proportion of members to 1,000 of inhabitants in the neighbouring provinces is 29.2 in the case of the Punjab, 15.0 that of Bengal, 7.0 that of Bihar and Orissa, it is only 3.2 in the United Provinces. Similarly the number of societies, their working capital and resources etc., all disclose a marked disparity between the actuals and the needs of the most agricultural of provinces.

The following table briefly shows the latest available figures on co-operation in different parts of India:—

Province.	Total Number of societies.	Number of societies per 100000 inhabitants.	Total Number of members of primary societies.	Number of members per 1000 inhabitants.	Total working capital involved.	Number of annas per head of population.
					Rs.	As.
Madras ...	15.078	35.6	937.274	22.2	165.934	63
Bombay ...	5,472	28.4	536,998	27.8	119,179	99
Bengal ...	19,816	42.4	669.620	14.8	127,826	44
Behar and Orrisa ...	9.188	27.0	255,337	7.5	56,512	27
United Provinces ..	5.805	12.8	151,785	3.3	21,697	8
Punjab ..	19,429	93.9	604,097	29.2	167,884	130
Burma ...	4,166	35.6	106,325	9.1	31,478	43
C. P. and Berar ...	3,954	28.4	75,275	5.4	50.686	58
Assam ...	1,820	17.2	65,401	8.6	6,463	14
N. W. F. Province ...	101	4.4	3,815	1.7	618	4
Delhi ...	208	56.0	6,387	12.8	2,267	73
Mysore ...	1,902	32.7	113,996	19.9	15,237	41
Baroda ..	975	46.4	32,904	15.7	6,833	52
Hyderabad ...	2,073	16.6	54,683	4.4	18,439	24
Bhopal ...	1,150	164.3	19,259	27.5	2.096	48

This means either that the hold of the money lender in these provinces is very extensive and people cannot free themselves from his clutches morally as well as materially or that the people themselves are recalcitrant and loth to allow innovations in their midst, and what is more they do not trust each other. The essence of co-operation is good will and self discipline. They ought to learn reaching out to each other in mutual difficulties. Vocational and economic problems are the main pivots of life today as ever. The joint family system known so much every where should be extended in sense to one of joint community and gradations in society might only serve to determine the amount of work and part assignments to different members. There is nothing in the local village problems that cannot be done and well too by each member knowing his duty and exerting himself for the common good. Provisions for this sort of good neighbourliness are laid down in every religious code and are recognised on all hands, but their application to actual life is back-slided in the course of day to day relations.

Thrift and Economy.

The situation therefore, as it is, demands a more effective and speedy treatment. The co-operative method is the most healthy method, there is no doubt; but it will take time, and a great deal of work, propaganda and self sacrifice will be required on the part of members to make it sufficiently widespread to be of any real service in removing indebtedness. Besides the supply of easy credit in itself will not relieve matters much and may, for aught else it might do, encourage waste. It is absolutely necessary that habits of thrift and husbanding of resources be imbibed by the peasants; for the savings thus resulting will form the soundest basis of the capital they require, and prosperity on these foundations will be much surer and more lasting. It is no good getting money if it is to be thrown away on useless expenses in marriages and ceremonials. Personal requirements and social standards should be regulated according to the length of the purse, and if necessary, legislation should be introduced prohibiting extravagance in marriage ceremonies. There are so many other and better methods of getting rid of

surplus money and people should be disciplined into earning and keeping and spending with a sense of responsibility to themselves and to the posterity.

CHAPTER VIII.

EXPERIMENT AND SPADEWORK.

Uptil now I have discussed in general the principles on which the activities of the various nation-building departments have been based. I shall now deal with the actual experimentation carried on by such departments as the Agricultural, Co-operation etc.

Work by the Department

The Department of Agriculture is run by a Director with six Assistants and a number of other officers who look after the work and encourage agriculturists in taking to modern methods by means of propaganda, demonstration and exhibitions. According to the latest report of the department there are 16 seed and demonstration farms which have been in a way, teaching the agriculturists the advantages of improved methods. In the year 1930-31 five farms showed large profits and they were able to sell their produce to a large number of people. The figures given below will show the farms and plots which were paying and those that were not. In seeds and demonstration the number has gone down by one while the rest have shown improvement :—

Names of farms and plots.	1928-29		1929-30		1930-31	
	Total No.	No. of paying farms.	Total No.	No. of paying farms.	Total No.	No. of paying farms.
Instructional and Research ...	5	3	5	2	6	...
Experimental ...	6	3	6	3	7	1
Seed and demonstration ...	17	14	17	15	16	5
Demonstration plots farms etc.	9	8	10	9	12	8
Total ...	37	28	38	29	41	14

The Agricultural Department has also undertaken to train a number of students in agricultural pursuits. There are two Government Schools and an Agricultural College in the U. P.

besides a few association farms, run on more or less private lines, where such training is given. Closely allied to this is the carrying on of research work in Economic Botany, Entomology, Plant Pathology, Agricultural Engineering, Cattle-breeding and Gardening undertaken by the Department. A number of bulletins also were issued by the Director which gave all sorts of information to the agriculturists and Rs. 17,700 were spent in making grants to the zemindars and others interested in the improvement of agriculture.

This really applies to big zemindars and farm owners who can afford the upkeep of an up-to-date agricultural farm. The main question still remains how to improve the lot of the average cultivator and the tiller of the soil. For this we shall have to look to the indigenous system and devise means to improve it.

Agricultural practice.

Indigenous system.

Apart altogether from the evils attending the profession in general, the methods pursued in most parts of the country are any thing but conducive to agricultural prosperity. Not that the requisite effort or care is lacking —the Indian farmer is as industrious and long suffering as any—; but the old traditional practices of by-gone ages still persist and the rural population has not been able to adjust itself to modern conditions. So long as India was economically isolated, so long as the absence of transport facilities made any large movement impossible, local practices every where were quite sufficient to ensure a peaceful living to the peasant; but with the British connection and all that it implies, the old rules are really become antiquated and exploded. For while nature is always the same and responds equally to human effort, the requirements of the people may and do change with the times, and a thing quite tolerable or even desirable at one time may become absolutely worthless at another. The old stone 'chakki' for instance grinded corn for centuries and no body was the worse for the delay in its performance; but it has run out of its usefulness in the present age of speed. Similarly farming in olden days was sub-

sistence farming, that is in which enough was produced of everything to last a family for a year and pay the rental in kind. But now of course such crops alone are to be raised as the soil can rear best and the nearest market has a demand for. Otherwise the cultivator will not be able to dispose it off and in case of keeping it for himself, he cannot meet the cost.

Intelligent farming.

It follows hence that agriculture to be profitable, must be intelligent. Some knowledge of the conditions prevailing, of rates, freights, demands, public facilities and other useful data must leak in to the peasant so that he may prepare his crops unsparingly and make the best of them. It is no good growing wheat and barley where sugarcane or tobacco could procure double profits for the same amount of labour and money. Again at particular periods of the year, in the harvesting and sowing seasons when the whole country side is engaged in these occupations, labour is abnormally dear and the cost consumes any margin of profits that could accrue. Under such circumstances it is much wiser to grow such crops as harvest off season and have the additional advantage of providing work for the idle hours. Intelligent farming also consists in keeping few but strong draft cattle, few but compact and intensively worked acres, rotation of crops, insisting on good seed, choice of the cheapest and best manure and so many other things they have not to give much to learn. As a matter of fact cultivators every where know very well the ideal conditions under which agriculture can be carried on most profitably. It is indeed a matter just of experience, and a man on the spot, if he is also endowed with a sprinkling of common sense and intelligence, can arrive at conclusions which are not very wide of what laboratory and farm-yard researches establish after protracted operations. But the habit of ages is too strong and the legacy of past practices too pertinent to let them budge effectively from the old rut.

To live useful and prosperous lives they ought in the first place to know, to know what is going on all around them, to know and determine what exactly should be their respective

lines of trade, what has more chances of securing them money and the esteem of their brethren. Too often, almost always, the son of a shepherd or cowherd would take up his fathers' calling irrespective of his temperamental tendencies, irrespective of the opportunities that may be thrown in his way, regardless of the loss or handicap his father suffered under, anxious only to walk in the foot prints of his forebears..... Then again they ought to know the essential co-operative spirit of the times, the mutual social understanding among classes and individuals which makes their role as the main producers of wealth specially important. They ought to avail themselves of and claim the amenities provided by government as their due and insist upon their extension into the neglected parts of the country. They should know the modern devices to simplify and cheapen labour, weather and trade forecasts, market fluctuations, land revenue regulations and government policy. Equipped with such information and with a will to face and conquer difficulties together with co-operative self-help, there seems no reason why the profession should not be as lucrative and as honourable as any.

Divergence of Agricultural conditions.

There is a vast range of conditions as affecting the agricultural practice in this great sub-continent. These are influenced chiefly by the nature of the soil, seasons, distance from the seaport and other trade centres and even local requirements. The net work of irrigation canals and the great systems of railways too have come recently to exert considerable influence on moulding the characteristics of regional cultivation. The Sukkar Barrage irrigation works for example, and the South Sutlej extensions into Bikaneer and Bhawalpur, have opened up numerous tracts of desert land for agricultural enterprise and regions that never yielded any thing but wild palms and ferns, may very soon grow rich crops of wheat, barley and sugarcane, even as the most fertile parts of the Punjab and U. P. and with the proximity to Karachi and therein to Europe may ultimately beat down the rich vallies further up. Similarly tracts lying close to great cities or within easy reach of them by rail or road can regulate their production more to the

needs of foreign markets and city consumption. It is more profitable thus to grow vegetables, fruits and drugs close about the urban centres than the usual staple food crops. Even horticultural produce is known to have given far better returns to the acre than any other form of vegetation and in certain places in the districts of Farrukhabad and Jaunpur flower gardening has been successfully developed to implement the scent and odoriferous oil industry. In this way, too, local manufactures for inland consumption provide incentive to certain kinds of produce which have no specified area of their own nor can admit of marketing for export trade. Thus rope making encourages the cultivation of 'sanai', an inferior hemp in many parts and jams, jellies and salads absorb the surplus fruit supply of the districts.

Pressure of Population on Land.

Now the problem facing agriculture in this country is how and to what extent can the indigenous system be improved upon or amplified so as to yield results proportionate to the labour, privations, and expenses laid out on it. The pressure of population on the resources of the country, that is on land is growing in intensity with every decade. The latest increase is 6 per cent. for the U. P., which means the increased numbers will have to subsist upon resources that have not grown accordingly. There has been a tendency more marked during the foregoing decade for large numbers to migrate to cities to swell the labour ranks there or even over-seas where they are no longer wanted and have only helped to create new difficulties for the mother country; for coming from the most conservative classes they carry with them their old traditions and ways and cling to them with all the doggedness of a homesick wanderer. They do not get assimilated with the other sections of the population and give rise to new racial problems. Those who stay at home have their own peculiar anxieties to contend with. As a rule the paternal holdings are sub-divided among the many joint family claimants and there is no serious attempt at co-operative extension of the area of their activity. The total area under crops in the United Provinces is 29·3 millions of acres which is

about 26 per cent. of the land available. If carried to the full length of its utility, the land can support in extensive farming alone another 48 millions of population. There are so many barren uncultivable tracts, 'oosar', 'banjar' and those under water on the skirts of every village that with moderate diligence and enterprise can be turned to yielding additional crops or fruits or better still providing pastures and grass lands for the village cattle or play grounds for boys and girls. There is a general apathy and lack of interest towards planting orchards or trees of long period fruition because they are so long and unsteady in giving returns and afforestation for fuel and timber purposes is comparatively unappreciated. The rigour of revenue demands also discourages the sequestration of suitable plots for gardening and hygienic purposes. It would be in the fitness of things if keeping in view the value of forests and duration plantations, all attempts at improvement in this direction were awarded with whole or part remissions of revenue. The great wastage of valuable manure in cow dung cakes and other non-agricultural uses in itself justifies drastic legislation on the subject. But before penalising the burning of manure ways must be found to replace it with cheap and abundant fuel everywhere. Oil and coke are out of the question in the districts, the cost being prohibitive. There must be some thing indigenous, strictly local that can to any extent relieve the pressure on manurial substances. The dry stalks of harvested crops, the chopped off boughs of standing trees and forest clearings should provide material for as much of fuel as can be locally required; and although people in the villages are not used to paying for their fuel, they will come in the course of time to realise the great difference in their means once they take to heart the manuring of their fields with every thing in the village that can be turned to the purpose. Incidentally it will clean the houses and cattle yards and enrich the soil to an extent they have no idea of. But the manure thus to be utilised should not be exposed to the sun and weather as it loses much of its strength by such a treatment. The best thing as experimented on many farms is to conserve the daily supply in pits dug specially for the purpose with narrow

mouths and flat bottoms. When the land is treated with it, care should be taken to plough the field the same day so that it may not lose any of its nourishing properties. The other manures advocated from time to time at the various experimental farms, such as synthetic chemical preparations, combined nitrogen and phosphate or ammonium sulphate are hardly worth considering since they will have to be purchased and cannot stand comparison on other grounds too.

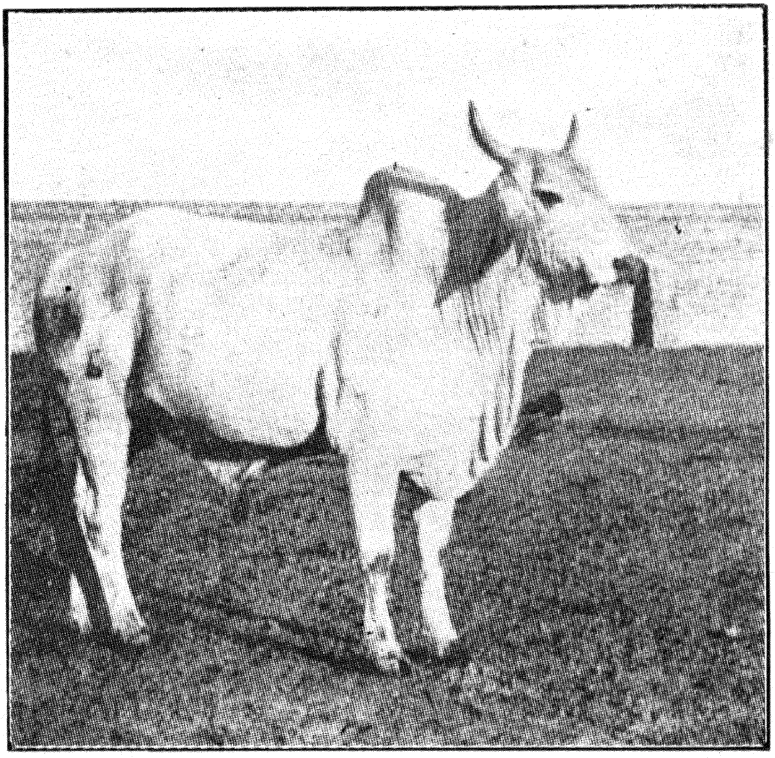
Village cattle.

One special reason for keeping and carefully developing forests and grass land around a village or for that matter a group of villages is the humanitarian purpose of providing sufficient pastures for the village cattle. In most villages and with most farmers grazing of cattle is not seriously regarded as a particular item of concern. They decide any thing on the spur of the moment. In the rainy season, they seem to argue, the cattle may graze where they find grass, while they grow so much of 'chari' or 'karbi' that might last until 'bhoosa' comes in to feed them in the dry season. But on actual facts half of the cattle are never fed out side the monsoons, more than half-bellyful and quite a proportion of those dying in the dry season sink down for sheer starvation. The draft cattle problem is one requiring the utmost care and circumspection on the part of those who want to uplift the village population because they constitute the preponderating source of power in India. Steam or electricity has not yet been harnessed to any but a negligible extent and bullocks and buffalo bulls will continue to hold the field for a long time to come. Generally these animals are castrated diminutive weaklings hardly worth the fodder that is wasted on them. A team of four or six of them does less of ploughing and consumes more of fodder than a pair of well bred Hariana or Hissar cattle. They are sprung from country cows, famished and diseased, and the desi Brahmani bulls left at large by pious Hindus, and even these are so sparsely distributed in the country that there are over two hundred and sixty cows to every breeding bull for the U. P. at least. The cattle survey taken by the U. P. agricultural department gives the following interesting

figures in respect of the heads of live stock for the whole of the province:—

Stocks	1925	1930
Bulls	26,555	28,669
Cows	6,184,187	6,232,522
Bullocks	10,197,540	10,071,108
Young Stock (calves) ...	6,197,709	6,578,746
Male buffaloes	784,044	780,984
Cow buffaloes	4,072,332	4,081,515
Young Stock (buf. calves) ...	3,583,460	3,690,093

Thus leaving out the draft animals, the province has only 28,669 bulls for 95,873 villages: or only one for about four villages. It is evident that the progeny of such over-strained breeding can neither be good milkers, nor efficient draft-heads, and the pedigree will go on deteriorating with each succeeding cross. The multiplicity of bad cattle moreover, only taxes the resources of the cultivator in fodder and feeding while strong and well bred animals would on the whole take less to maintain and do double the work. But the main difficulty is the way and the means to replace the existing stock with suitable breeds. The peasant would be ready enough to possess and rear good cattle but the supply of such to the vast area contemplated is out of question by the direct process nor does the purchasing power of the tenants give much to hope in this regard. Cattle breeding as a commercial enterprise has not been tried so far with any prospect of a brisk and profitable business and since the disposal of home bred heifers presents its own difficulties and the cheapest is still thought the best transaction, there seems no real opportunity for the development of an improved cattle trade. The Department of Agriculture has taken up extensive breeding only recently and the amount of work hitherto carried out gives rise to hopes that they would popularise the importation of such foreign stud animals as the Hissar, the Montgomery and the Sind breeds. The annual issue of specimen bulls from the Madhurikund farm has been as follows :—



A Hissar breeding bull.

1922-23	... 19
1923-24	... 48
1924-25	... 46
1925-26	... 90
1926-27	... 196
1927-28	... 468
1928-29	... 547
1929-30	... 347
1930-31	... 512

With the gradual increase in the number of high bred bulls the old Brahmani breeders must be correspondingly eliminated either by castration or sale to the butcher, so that there may not be further intermixture with lower blood. The experimental farm scheme should be expanded into demonstration or even distribution farms in each district, and the Veterinary Department might examine the feasibility of allotting particular areas for the purpose and the people should co-operatively undertake to improve the quality and bring down the numbers of their farm cattle. There is still a great deal of prejudice in favour of bulls set at large through pious motives. These should certainly not be breeders left out for piety's sake; they should be left out altogether. It is no good piety continuing to employ them one way or the other. Then they should be taught easy and practicable devices to preserve fodder for their animals. Chari, karbi and even the monsoon grasses might be profitably kept in silage pits which help to retain the juice and the nourishing properties of the preserve. The cheap recipes tested and verified at the farms such for example as goldnil, oxide of iron, lime, salt and sulphur might be distributed free of charge just like quinine and cinchona pills. Once aware of the improvement they bring in the general health of the cattle, it may be hoped that the cultivators will come to use them permanently.

Agricultural Implements

Closely related to the subject of draft cattle and subservient to it is the all important problem of agricultural implements. It is a matter of no small wonder that despite the great strides taken by India in the utilisation of modern inventions and

labour saving devices the old patriarchal single furrow plough still reigns supreme in the country side. People may be told lots about the efficacy and convenience of modern tractors—Meston ploughs and other patent inventions; they may be treated to demonstrations of high power pumpings, rice-hullers, oil mills, winnowers, chaff cutters and what not;—but each audience takes it to be meant for others besides themselves. They have so many hinderances and special circumstances attending that they are finally left to decide against any innovations. Their small holdings neither require nor can afford costly apparatus while on their part they are not pressed for time, themselves or their cattle and what they have to cultivate and raise is easily enough done by the old methods; no extra energy or intelligence is needed to pit against odds that are sufficiently tractable as they are.

But the cost of modern implements is as nothing to what they lose by poor crops and having to be engaged for themselves and employ labour at a time of the year when every body wants his task to be speeded up; when for example water can not be carried from the low-lying or far off water holes to isolated fields; when the old oil crusher can not cope with the work it has to perform or when all time is taken up in chopping Karbi for the cattle. In all such cases the presence of machinery is hailed with relief and such departmental help as is extended for demonstration is availed of with enthusiasm. But the object underlying these experimental measures is the popularisation and gradual adoption of all those implements that have been tested in foreign countries and on government farms and found to satisfy all the existing conditions. Deep tractors, machine driven ploughs and other modern implements are specially suited to big and compact plots where the work is sufficiently heavy to justify the intervention of machinery.

The Agriculture Department has done something to popularise scientific implements and the figures given below illustrate the work of two years namely 1928-29 and 1930-31 They show a slight improvement in the demand for modern agricultural

implements. It must be admitted that the progress has been very slow. The reason for such backwardness is obvious. As I have stated above the innate conservatism, lack of demonstration agencies and paucity of funds are the chief factors that have hindered improvement in this direction. A number of districts have organised agricultural exhibitions from time to time. In Akbarpur Tahsil, District Fyzabad, I personally supervised two such agricultural exhibitions and the people undoubtedly appreciated the utility of improved implements. But they were slow to purchase them for two reasons. Firstly, they wanted some zamindar to use the implements for a certain period first, so that they might be able to examine the advantages and secondly they complained that they had no funds. When demonstrations were organised and a loan arranged the demand naturally increased.

The following tables as supplied by the agricultural department for two consecutive years denote the attempts of government to popularise modern machinery among the rural classes, but so far, it must be admitted, it is the bigger zamindar alone who has cared to avail himself of it.

Figures showing the distribution of implements and manures during 1928-29.

Implements.	Central circle.	Western circle.	Eastern circle.	North eastern circle.	Rohil-khand circle.	Bundel khand circle.	Hill circle.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
Meston ploughs ...	2,279	876	134	73	561	4	...	3,927
Konkon „ ...	7	660	...	114	6	22	...	809
Watts „ ...	55	50	...	4	...	...	...	109
Kirloskar „ ...	...	19	...	...	...	...	...	19
Parr „ ...	...	45	...	...	...	...	...	45
Others „ ...	122	7	...	7	4	...	...	140
Shares for ploughs ...	3,269	1,246	216	...	671	14	...	5,416
Kibblers ...	1	...	2	...	...	...	...	3
Levelling karhas ...	8	23	3	...	...	...	...	34
Chaff cutters ...	52	4	...	...	2	...	...	58
Screw pumps ...	...	18	...	...	...	...	...	18
Harrows ...	17	16	5	2	...	...	...	40
Persian wheels ...	...	24	...	...	...	...	...	24
Sugarcane mills ...	120	1	...	2	...	7	...	130
Cultivators ...	6	30	3	...	...	...	...	39

Chain pumps	...	2	...	1	...	...	...	...	3
Pans ...	...	42	1	...	...	...	2	...	45
Screw water lifts	...	3	...	...	...	...	1	...	4
Maize shellers	...	...	...	1	...	...	...	...	1
Reapers	...	3	...	...	...	...	...	...	3
Hand pumps	...	...	25	...	...	...	...	...	25
Miscellaneous implements	...	1,073	602	601	426	57	67	...	2,826
Total	...	7,059	3,647	966	628	1,301	117	...	13,718
Manures.		Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Castor cake	...	3,053	102	6	4,915	2,891	...	...	10,967
Nim cake	...	...	32	1,855	613	...	...	...	12,500
Mahua cake	...	1,000	13	1,208	...	...	...	...	2,221
Sulphate of ammonia	...	280	115	...	...	967	...	...	1,262
Nitrate of soda	...	193	561	91	...	...	...	...	845
Superphosphate	...	...	20	...	...	32	...	...	52
Gypsum	...	...	660	...	...	...	...	...	660
Calcium Cynamide	...	...	16	...	...	...	...	...	16
Potash	...	...	18	...	...	...	...	...	18
Bone manures	...	...	20	...	...	...	...	...	20
Others	...	103	...	...	28	...	...	...	131
Total	...	4,629	1,557	3,160	5,556	3,890	...	...	18,792

Distribution of implements and manures during 1930-31.

Implements.	Central circle.	Western circle.	Eastern circle.	North Eastern circle.	Rohil-khand circle.	Bundel-khand circle.	Hill circle.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
Meston Ploughs ...	2,961	393	240	79	520	42	...	4,235
Konkon „ ...	...	395	4	120	...	10	...	529
Watts „ ...	15	39	6	2	...	...	...	62
Kirloskar „ ...	...	26	...	...	...	...	...	26
Parr „ ...	...	14	...	...	...	...	...	14
Others „ ...	17	11	...	12	24	1	23	88
Shares for Ploughs ...	3,672	1,152	273	...	531	96	18	5,742
Kibblers „ ...	1	...	3	...	...	1	...	5
Levelling Karhas ...	13	38	4	...	...	...	...	55
Chaff-Cutters ...	55	32	35	2	9	4	...	137
Screw Pumps ...	...	1	...	...	...	...	...	1
Harrows ...	10	13	7	3	2	1	...	36
Persian Wheels ...	13	92	143	39	...	4	...	291
Sugarcane mills ...	74	1	101	38	...	3	...	217
Cultivators ...	17	16	7	...	...	...	...	40

Chain Pumps	...	2	...	3	...	...	...	...	5
Pans	...	4	...	4	18	...	1	...	27
Screw Water lifts	...	12	...	...	...	...	...	...	12
Maize sheller	...	1	...	26	...	...	...	...	27
Miscellaneous	...	1,013	994	98	481	257	63	...	2,906
Total	...	7,880	3,217	954	794	1,343	226	41	14,455
		Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Castor cake	...	1,366	706	351	3,367	1,640	...	...	7,430
Nim cake	...	...	556	6,458	609	...	...	...	7,623
Mahua cake	...	13,561	1,239	350	709	...	...	...	15,859
Sulphate of ammonia	...	216	839	3,104	444	943	...	...	5,546
Nitrate of soda	...	713	872	4,346	120	123	...	...	6,174
Superphosphate	..	11	39	85	...	100	...	...	235
Potash	...	...	40	...	...	2	..	...	42
Bone manures	...	...	671	...	...	...	...	...	671
Others	...	245	42	...	...	..	...	3	290
Total	...	16,112	5,004	14,694	5,249	2,808	...	3	43,870

Consolidated holdings.

Consolidated holdings with individual farmers or co-operative farming is essential to bring the improved implements into full play. The advantage and economy of tube bores or Persian wheels can not be sufficiently stressed considering the precarious water supply of kutcha mud wells or the frequent droughts in many parts of the country. Important as the extension of cultivated area through reclaiming waste lands certainly is in the present state of increasing population, it must not be forgotten that intensive and efficient farming which would redouble the quantity of produce is far more conducive to agricultural prosperity. The sorest point in the agricultural situation in this country as brought out by comparative figures is the remarkably low yield per acre of the land under crops. While it is some thing like 16 mds. in England, 13 in Australia 9 in Russia and Egypt, it is only $5^3/_4$ in India. The soil is certainly not to blame. It is as fertile and leguminous as any where else ; nor are the seasonal changes oppressive : they are quite regular out here. The defect however is inherent in the system and lack of knowledge on the part of the cultivator. The principle accessories to good agriculture as dealt with above, if properly utilised are sure to create conditions that would be beyond recognition in a few years. Together with these certain other rules now common knowledge, which are disseminated from time to time by the experimental farms and agricultural departments, should also be brought in constant practice. The rotation of crops for example, the sowing of wheat after a full term crop of sugar cane, the alternation given to oilseeds with barley and gram, the frequent insertion of vegetables rich in nitrogen such as cabbages, carrots and reddish etc., in food grain fields and many other alternatives automatically provide respite and nourishment to the soil. Then the various undesirable parasites might be attacked with the help of suggestions from expert bodies. Rats, hedgehogs, locusts and the different caterpillars could be eliminated by co-operative action amplified by government placing public facilities at their disposal. Similarly fields and holdings must be fenced, barwired or otherwise

protected against the intrusion of wild animals and where the latter are more ravageous the farmers might be supplied with muzzle guns to kill or scare them away.

Good seeds.

A very important factor in improving the quality as well as quantity of agricultural produce is the problem of good seed for sowing. The indigenous corn and other soil turn over is liable through local influences to deteriorate or lose some of its embryo value; while specialised soils grow the best possible seed corn which if adopted to climatic and other conditions are most likely to multiply the quantity and greatly improve the quality of the produce. But generally speaking the cultivator is not quite sure of the superiority of foreign seed in the particular circumstances of his tillage or he is too much within grips of the local seed merchant who advances his inferior seed on the promise of harvest season ; so that the hard pressed tenant finds it more convenient to borrow from the grain merchant who it is plain keeps for sale only the cheapest material to reap as much profit out of the transaction as possible. But the agricultural department too has come forward with seed distribution on a commercial basis and many well known varieties are within reach of the cultivator although these are naturally more expensive than the grain merchants' seed corn which as a further attraction may also be had on credit.

The following figures indicate the extent to which the government undertook to distribute improved seeds during the years 1928-29 and 1930-31.

Distribution of improved seeds in the United Provinces during the year 1928-29,

	Central circle.	Western circle.	Eastern circle.	North-Eastern circle.	Rohilkhand circle	Bundelkhand circle.	Hill circle.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Wheat ...	20,720	31,134	12,042	3,398	6,190	17,184	34	90,702
Gram ...	1,773	4,799	6,603	371	406	1,435	...	15,387
Cotton ...	99	3,532	...	...	41	22	...	3,694
Barley ...	636	1,122	5,224	112	...	1,274	1	8,369
Arhar ...	38	7	...	...	...	12	...	57
Maize ...	25	89	...	...	...	1	...	115
Groundnut.	139	...	...	9	9	8	...	165
Juar ...	67	16	...	...	...	9	...	92
Bajra ...	8	...	...	...	...	2	...	10
Sugarcane...	21,728	295,627	...	6,050	73,098	292	...	396,795
Sanai ...	235	282	...	11	...	22	...	550
Rice ...	21	663	3,042	49,512	31	752	...	54,021
Peas ...	89	211	1,130	116	...	12	...	1,558
Jute ...	1	...	..	...	...	...	...	1
Potato ...	...	9	...	...	...	...	...	9
Lucerne ...	2	22	...	...	...	...	...	24
Linseed ...	...	...	...	6	...	26	...	32
Other crops.	24	410	322	35	...	12	..	803
Total ...	45,605	337,923	28,363	59,620	79,775	21,063	35	572,384

Distribution of improved seeds in the United Provinces during the year 1930-31.

	Central circle.	Western circle.	Eastern circle.	North Eastern circle	Rohilkhand circle.	Bundelkhand circle	Hill circle	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Wheat ..	42,126	62,629	10,696	5,198	15,845	6,097	111	142,702
Gram ...	3,056	2,431	3,806	303	843	1,109	...	11,548
Cotton ...	383	5,087	12	8	60	1	...	5,551
Barley ...	1,492	2,256	4,833	487	248	249	...	9,565
Arhar ...	57	2	21	3	.	4	...	87
Maize ...	26	161	67	10	.	...	3	267
Ground nut.	128	...	25	37	...	20	...	210
Juar ...	67	135	32	2	...	4	...	240
Bajra ...	12	...	10	...	...	...	...	22
Sugarcane...	94,708	603,297	67,117	8,602	100,580	1,744	3,154	879,202
Sanai ...	247	568	...	3	...	38	...	856
Rice ...	179	101	3,758	1,018	103	1,030	3	6,192
Peas ...	131	265	1,388	563	...	17	1	2,365
Jute ...	2	...	...	...	...	...	...	2
Potatoes ...	...	5	...	...	...	4	65	74
Lucerne ...	9	13	...	1	...	...	..	23
Linseed ...	...	...	...	10	...	29	...	39
Others ...	32	770	65	21	...	7	...	895
Totals ...	142,655	677,720	91,830	16,266	117,679	10,353	3,337	1,059,840

A comparison of the years 1928-29 and 1930-31 shows an enormous increase in the use of better seeds among the agriculturists. The increase in the demand of wheat, sugarcane and rice has more than doubled. In the Akberpur Tahsil of Fyzabad District, as a result of two successive agricultural exhibitions the demand for Coimbatore cane went up by 60 per cent. The old Unkh is being given up and in regular consolidated farmings it has become non-extant.

In 1930-31 there has been an increase in almost every crop and the tendency shows manifest signs of expansion. But there is no regular improved seed business in the villages although it promises fair returns. The bania, who caters for this, is not very particular about getting the best material for sale and of course the department cannot reach everywhere. It seems better under the circumstances that Departmental officers might issue licences to dealers after satisfying themselves that they put the right kind of things for sale. The most popular and highly recommended seeds hitherto supplied are the Pusa wheat varieties.—A and B, the Egyptian long staple cotton seed, the Coimbatore cane No. 213 and many varieties of improved grain.

Electric Power.

Electric power has laterly been supplied to various districts in the west and the charges per unit for industrial purposes made studiedly low so that the cultivators may come to see the advantage of employing this new factor at their farms and in their homes. So many things can be done effectively and well and in a very short time too with moderate intelligence; while special machines for every purpose could be installed in each village either by co-operative payment or on easy instalment system and the land owner or a prominent tenant who operates them might collect small charges from the users. The time that will be spared as a result of machine aid should be carefully husbanded and spent on supplementary cottage industries such as weaving, basket-making, knitting, poultry farming, carpentering and a score of other practicable callings. The introduction of electric

power in the villages of Europe has revolutionised conditions there and they are becoming more and more urban minded. They grow and manufacture on their own accord and have sprung good business locally.

Cottage industries.

The problem of supplementing village incomes by means of simple indoor industries has been taking up attention for some time now, and both copious and varied have been the suggestions put forward on this behalf. But the villagers' wants should be multiplied in the first place to provide a ready market for their own craft; for although poultry produce, moonj string, honey, ropes and nettings etc., manage to get some sort of a sale in the cities, the individual turn over can never be so great as to defray transport and other charges or compete on equal terms with imported substitutes. Local consumption moreover, will give impetus to cross country trade and improvement in the quality of produce. The idea should be all along to produce for themselves all that they require for ordinary use.

Most of the industries apart from poultry farming and bee-hiving require a certain amount of skill which, with village traditions, is proverbially late in coming. The second question is the capital to be laid on and the initiative to embark upon new experiments. As things are at present the villager has not got sufficient means to invest on his own paternal calling and improve it. How can he be brought to purchase accessories for your experimentation with his capacities? The panacia as has been shown elsewhere of all village evils is co-operation vigorously assisted by public aid. Co-operation will provide the money and initiate new schemes, bear the risks, cover the losses and do all the necessary pioneering in the business.

A vast majority of farmers can never bring themselves to keep and rear ducks, hens and turkies. These are dirty animals with them and their homes get polluted with their breath. So they don't countenance poultry farming on any terms. Bee-hiving is very little improved in India and promises excellent chances to the peasantry. Goat and sheep rearing is not essentially an industry and in one way or other is carried on all over

the country. The number of these animals according to the two foregoing quinquennial surveys in the United Provinces was as following :—

	1930	1925
Sheep.	2,230,887	2,153,074
Goats.	6,563,003	7,473,411

These are reared more for the meat market than any regard for their wool which for the matter of that is not fit for foreign trade. Local spinning and weaving is carried on in places like Muzaffarnagar and Baraut; but it is not important and also does not encourage indigenous wool. The Goats and sheep, however, as meat can absorb more men and promise better returns if facilities could be provided for their cheaper transit to such cities as Calcutta, Bombay and Delhi. The demand for these animals increases in certain seasons and particularly at the occasion of the Muslim festival of Iduz Zuha. The railway rates at such periods could very profitably be lowered to give zest to meat trade and through it to local rearing.

Fishing as a profession is not popular in the U. P. since it has no sea board and there are no traditions connected with fisheries. Some classes such as Mallah, Kahar, and Kewat do it as a side profession and dispose the fish locally. Since the orthodox Hindus have an aversion to it as an article of diet there is no great demand either. But lately with the acceleration of parcel traffic and better methods of refrigeration, fresh water fish has been exported to Calcutta in larger quantities.

The ultimate problem.

On the whole then it comes to a question of bending mother nature to respond to your call, of propitiating her in the best known ways. It rests entirely with human initiative and effort whether the response ultimately forth-coming is effulgent and copious. The experience gained in the past and by other peoples should point the way in which efforts should be directed. Scientific inventions and modern implements are calculated to force the pace or degree of nature's gifts. The resources of the earth are unbounded. We have only to adjust our actions to the conditions as they develop. The tenant with his narrow environs and limited outlook can not be expected to take in

all that is involved and all that is required; he should therefore be prepared to listen to counsel, which fortunately for him is gratis, and try to mould his circumstances to fit in with the expert guidance provided primarily for him. The agency through which this is to be imparted will naturally have to take some such shape as a co-operative union 'Punchayat' or social club which must put self help and uplift of members above every thing in their programme. The nuclei of such organisations already exist in many forms in most villages. The question is merely of their development on right lines so that the resulting progress and prosperity might induce all and sundry to unite for the common good.

Disposal of Crops: Marketing and Trade.

The old ideal in India for times immemorial in regard to harvested crops has been to store the produce in mud garners built specially for the purpose after paying with it (in kind) the reaping and other charges and meeting the demands of charity which are as indispensable. This was regulated with a belief that diet constituted the first and the main head on domestic expenditure, while the other and more 'casual' necesssities were to be met by chance incomes, wages, sale of cattle produce and the like. With the filteration of better standards of life into the village community and the growing of wants, money has come more definitely in demand and the produce is no longer kept exclusively for family consumption. Moreover it is found more economical to purchase for home use inferior kinds of corn with the proceeds of their own produce sold at the best price possible. There may be many factors governing the endurance of individual cultivators in waiting for the best sales period of the season. The zemindars' rent or the government revenue may be overdue, the pressure of domestic necessities may be too great, the succeeding crop may require immediate financing or the creditors may be over vociferous: in all of which cases the cultivator is constrained to do away with his produce to the local grain merchant at any price available. Inexperienced and unaware of the Bazar cant

the poor villager is easily imposed upon by glib-tongued 'banias' and market brokers who induce him to part with his wares for much less than he might have got if he had intelligently transacted business.

Small producer's plight.

The farmers are for the most part unaware of the intricacies of business and the small producer in particular has not the time nor the inclination to go about from place to place in search of a good market. Much of the vegetable produce and other non-storable material such as milk, butter, fruits etc. is locally disposed of at ridiculous rates where towns are too far off to procure a good market. This discourages the cultivation of fruits and vegetables in the districts and only marketable crops are raised which can be transported on country carts and mules to the nearest railway station or the district centre. Ordinary weekly or bi-weekly markets are held in the bigger villages that serve for an area of six to twelve square miles. Local purchasers and those from the neighbouring villages buy much on their own terms such commodities as the various corns, oil seeds, coarse unpurified sugar (Gur), tobacco, and any other special product of the locality. The farmers themselves take it as more convenient to dispose of their commodities in this way than taking the trouble of packing and transporting them all the way to the city market place. Besides the commodity for sale with individual dealers is more often than not too small in quantity to allow for carting and similar charges to the town and the villager feels rather nervous over transacting business at a strange place so that for one reason or another the small holders produce gets its marketing in or about the village of its origin where it is least likely to command a favourable price.

Unsteady Market.

The bazar in India more specially in rural areas is a very unsteady thing. There is no knowing how or when the demand for any particular commodity may go up or slack to make it reasonably certain for the peasant to transact a good bargain. He carries his produce to the market more or less unsuspecting of the fate in store of it and since carrying back involves additional

expenditure and a lot of trouble he deems it convenient and even profitable to sell it for what he can get. Too often it is the 'bania' or a town agent who is the gainer in all such transactions. There can of course be no question just at present of a weekly or periodical market report being supplied to villagers. The peasant, even if he could be made to understand, will not be prepared to act upon it. He has no faith in advice not specially meant for him. Besides individual farmers acting upon scientific information culled from periodical publications is a too distant ideal in the present state of literacy in India. The only feasible scheme in this regard is the one advocated by the Linlithgow Commission Report on the lines of a central marketing board and affiliated bazar committees or purchase and sale societies worked co-operatively as at places in Bombay and the Punjab.

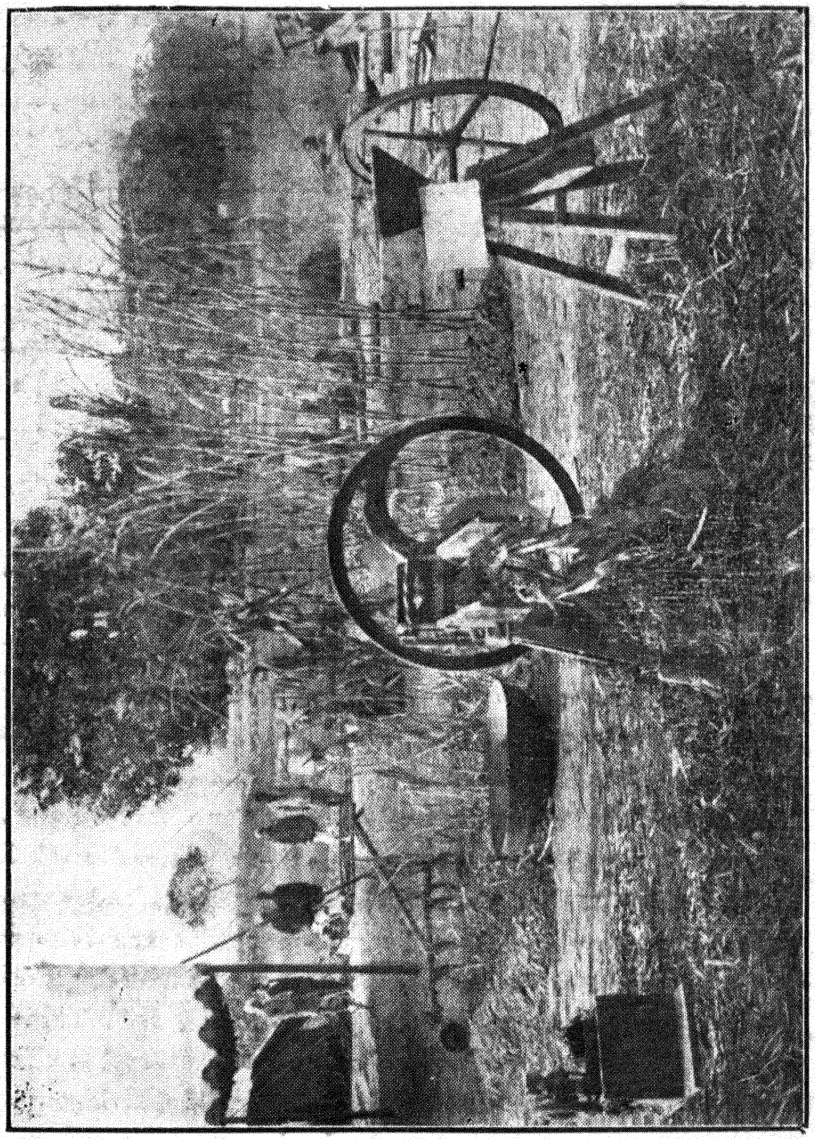
Bazar Committees, their functions.

The village producers may be encouraged to rely for the disposal of their crops upon bodies co-opted by themselves whose exclusive functions must be to find markets, arrange for transport, transact all kinds of business and keep in touch with government departments and commercial banks. These may in time become specialised concerns employing well informed functionaries who will see that the members' produce gets the best selling possible as soon as and wherever they deem advisable. Individual cultivators under such a dispensation will be freed from the anxiety to do their own marketing and enter into an unhealthy competition with their fellows. But this presupposes the existence of mutual trust and the securing of the society by government against breach of trust both within the organisation and without. Some such arrangement is desirable at least for the time being in view of the fact that the average cultivator is a simple and ignorant person who can not overcome unaided the intricacies of business transactions. Moreover the markets, as at present constituted or set by convention, are scarcely calculated to inspire confidence in the parties concerned. There are no rules or regulations governing the conduct of business in the bazars and every body is intent upon securing the utmost profit by any means. There are frequent

broils and rows and what is worse no body is forthcoming who could settle the affair amicably between the contenders. Authorised weigh-bridges are not known anywhere and there is a bewildering divergence in weights and measures that is unfairly taken advantage of by trade agents and others. Reforms in respect of market conventions and the establishment of uniform weights throughout India are now overdue and motions have been standing in many legislatures to bring them to effect, but local practice has defied till now all attempts in this direction. The unrelenting old bania has still a vast say in all matters pertaining to the disposal of agricultural produce and while no body can contest his right to initiate bargains with any number of needy peasant sellers, he ought not to be allowed to dominate them unfairly or take advantage of his exclusive position in any other way. With this end in view it is desirable that bazar committees be established every where with powers to adjudicate upon minor issues and regulate local conventions. It should also be within their province to provide for such facilities as the arrangement of stalls, weigh-bridges, transport etc., which are at present the concern of no body and people do what they think best at the spur of the moment. These may be financed from the proceeds of a common toll to be collected on every market turn. If organised on these lines the bazar will soon cease to be a dread for the unwary and a field of profiteering for the crook.

Transport facilities.

Railways and motor transport have much spurred trade in recent times and specialised cultivation zones are a feature of this development. But inspite of the 56,500 miles of railways and twice as much of trunk roads, the bulk of country communications is still restricted to unmetalled and bridgeless cart tracks which are of little service in the rainy season, so that much of the produce in out of the way areas is deprived of profitable marketing and since local consumption can never be sufficiently heavy the tendency in such places is to produce for non-commercial purposes and there is no inducement to grow quality crops The yield is restricted and often poor, nor for want of easy



Some useful exhibits at the Akberpur agricultural show.

access can improvement propaganda find its way upto them and the area remains backward for all intents and purposes. Then there are certain economic assets in the place that are of no value if not exported, such for example as hides and skins, horns and hoofs, bones, forest produce and the like. These are excellent sources of supplementing income, yet for want of proper communications they are left unheeded or bring no returns worth the name.

Export trade.

Foreign trade gives the fillip to mass production, improvement of quality and curtailment of cost. Production can be carried to its full length if the demand forthcoming is sufficiently regular and effulgent. This depends upon the quality and cheapness of the wares put for sale. Sentiments do not play in economics. If your rates are the cheapest at destination, if your goods give the fullest satisfaction and what is more if they are widely known to possess those qualities you are sure to capture the markets whatever else is there to subvert your cause. Therefore the fullest stress is naturally laid upon making the produce as irresistible in quality as possible, at the same time not going up in price. The first factor is local and personal; as much of diligence and care are invested in the process of production it would give surer results; so they say in an Indian proverb. 'The more the sugar the sweeter'. But the other factor is not wholly within individual control. Apart from the existence of prohibitive tariffs (on non-agricultural produce), in different destination countries, the heads of cost in the land of origin govern to a large extent the ultimate level of prices that a commodity can be set at. The most important of these heads and bestriding others is the transport charges upto the wharfs. Railway freights constitute the heaviest single head that tells most in a country of distances like India and up country places such as those in the United Provinces suffer under a permanent disadvantage so far as export trade is concerned. Special concession rates have been conceded by the Railway administration to and from such inland trade centres as Delhi and Cawnpore, but it is still too hard for this province to vie on

any terms with Sindh and the Lower Punjab in wheat trade, with Bombay and the Deccan in cotton fibre, or with Bengal and Burma in the export of rice. And this is with regard to places within easy reach of the railways while the plight of those others that are far flung and have to engage carts and camels upto the nearest railroad station can best be imagined. Thus it seems necessary that a thorough overhauling of railway rates be carried out with a view to removing the more glaring instances of transit discrepancy between the various agricultural regions of India. And at the same time a comprehensive scheme of constructions in feeder lines and country roads might be taken up by the Railway administration conjointly with the local boards so as to provide within a reasonable length of time a net work of effective communications. The policy should be so far as possible to avoid chances of competition between rails and roads. They should rather be supplementing each other's work than dividing it,

Trade Legations.

Since so much depends upon a constant and recurring demand of India's agricultural products it is increasingly plain that High Commissioners and Trade Legations be installed in as many foreign lands as could be induced to purchase from India. A vigorous and intelligent propaganda must be kept up and reciprocity allowed where necessary. Industrial exhibitions should be organised in India with copious propagandist literature and those in foreign countries attended with a view to searching avenues for increased trade relations with them. The economic resources of India are fairly vast: they have not been worked properly; foreign trade will supply the initiative and the desire to excel. In this connection the decisions arrived at by the Ottawa Conference will be awaited with interest.

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Value of statistics.

The value of correct statistics in all modern business is undisputed. No part of the world is any longer isolated or out of reach. The distance factor has been almost eliminated, so that the problems of production, demand and capacity to consume are considered as a whole and an intelligent business must take

stock of these facts in determining the extent of its own activity. Thus the production of cotton for instance, is regulated by computing the surplus stocks in hand of past years together with the standing crop areas in producing countries like United States, Egypt, India and China. Then the extent of bale consumption in the different manufacturing countries and the average turnover is compared. So that allowing for unknown factors a rough idea is formed of the future requirements, which helps to forecast the prospects of trade in the coming year. The collection of such important data is a momentous development in modern methods of industry and is calculated to eliminate the element of chance from all commercial production. Nations, individual firms and growers regulate their production in the light of information thus gained. There are regular state departments in all modern countries that maintain such records and issue them from time to time for public information. In an agricultural country like India a knowledge of such statistics is invaluable and should be utilized by cultivators and business men alike, so that there may arise no occasion for dumping surplus produce in home markets or abroad.

The crop and weather reports, market prices and such other economic data as the government is able to publish weekly or at intervals is availed of only by the English knowing public. The vernacular press and the agricultural producer in general has no idea as to the conditions prevailing in his own country or abroad: and although it is doubtful at this stage what use he can make of such information, the digests and summaries in proper local setting, will in the course of time help them, to take a broader view of their business.

Middle man's tyranny.

To sum up the disposal of produce is the culminating and also the most important stage in every industry, since getting the best price over it is ultimately the end of all business enterprise. It is no longer an easy matter considering the wide range of choice provided to the purchaser. The Indian village producer on the other hand with his limited knowledge and worse methods is very ill-equipped to make the best of his

labour and privations. Much of what he ought to have got is invariably retained by the middle man, who therefore is an inordinate growth, howsoever indispensable his position might be deemed in the body politic. Barring the cultivator's own efforts in the matter, local bodies or the department itself should come forward to his rescue. It is necessary that bazar regulations be imposed and a provincial marketing board be set up with affiliated market committees everywhere : communications should be improved and inter provincial trade given impetus to by cheapening railway freights. And there should be as few links between the consumer and producer as possible. This will in each case depend upon a wider knowledge and better grasp of the situation on the part of the village producer.

PART III.

HOW THE PROBLEM CAN BE SOLVED.

Chapter IX.

Conclusion.

Self-government and the masses.

The British connection with India of over a century together with the inevitable diffusion of Western thoughts, and theories of social relations concomittant upon the commercial contact with other nations has brought about a complete change of perspective in the intelligentia of this country. Within the latter term are included all those classes or sections of the community that by virtue of modern education, wealth and social status must form the oligarchy or governing class in any constitution that may be evolved for India. This fringe of population has grown in ideas and political capacity out of all proportions to the seething millions in the country that are working day and night to propitiate the mother soil to yield the common bread. It is the intelligentia that demands the right of self government or rather the governance of the masses whose interests it claims to represent and for whose good it is ostensibly agitating. But it will come only to a change of yokes for all practical purposes unless the very masses are brought to a position where they can determine for themselves. Democracy connotes self determination for the largest number. They must be able to influence those who have the direction of affairs in their hands. They must know their interests, their power and how to wield it. This cannot be achieved so long as the struggle for existence takes up all their time and energy, all their thought and initiative, all the best qualities of endurance and fortitude they possess, to force out a bare living. And since the justification for all self-governing institutions is the moral advancement and material prosperity of the constituent units, it goes without saying that the first and foremost care should be devolved upon the easing of that struggle, the improving of agriculturists' lot in general. Once brought to the surface there is reason to believe that the inherent good sense of the villager will rise up to the necessity and produce sufficient consciousness to defend his interests against any odds.

The Problem in the villages.

Now the problem in the villages is twofold. Firstly the amplification and extension of the existing economic resources, and secondly uplift. Precedence cannot be given in the strict sense of the word to any one of these in the order of aspiring and working for them. Each ought to react upon and supplement the other. Without a sound economic standing there can come no improvement in the standards of living and thinking, nor for want of proper enlightenment and vocational knowledge can they succeed in getting over their present difficulties and ensuring fair returns to their labour. Then again without adequate help both monetary and advisory they cannot stand upon their own legs, while in over stimulating and constant rescuing there is always the danger of making them too dependent, helpless and irresponsible.

All the same their important position in the general social structure, their forming the backbone of all economic life in the country makes it incumbent upon any order of things to give them the first consideration. They cannot be left behind in an attempt to forestall autonomy and Western ideals. Rather would they drag down the immoderate climbers by sheer weight of numbers. It would be much wiser to go slow than to be constantly pulled back. If the ordinary methods to improve their lot fail, others and yet others should be devised, tested and administered unceasingly. A regular campaign extending say to two generations should be set in motion, all avenues explored, all crucial points attacked and the entire force of national organisations brought to bear upon this most momentous of problems.

Will to improve.

First of all, with this end in view, a desire, a will to be better should go forth among the masses; so that whatever they are made to do is done with a good heart and is prompted from within; for nothing that has an appearance of an imposed duty has any chance of impressing them. The vulnerable sides of his character should be approached and the traditional prejudices might be appealed to. He is religious-minded;—he ought to be told that the gods favour only those who do good to

others and themselves by helping themselves in this life—real and earnest. Or if he has hero-worship as a trait, the services of all the greatest leaders of the past and present be put before him in their most vivid colouring to carry conviction and exhort them to action. It is very necessary that the propagator should be of the same neighbourhood as the audience for he can propound his message the better in terms of local usage. The workers moreover, should be imbued with a spirit of service. They should do their part with an unfaltering zeal and courage, and must not be deterred by disappointments and rebuffs. It is much more desirable in this connection that as many of the villagers themselves might turn to be the bearers of light as may be converted to the cult. The campaign should be launched either on the lines of the Boy Scout and Girl Guide movements as advocated recently by some authorities on the subject or with some more indigenous and inspiring title, but putting before the same ideals and methods. Every boy or girl passing out of an educational institution must be pledged to devote at least a portion of his or her leisure to the service of their brethren. No occasion, no social gathering should be let go without an appropriate demonstration of the new method. Marriages, ceremonials, festivals, bazars and melas should provide venues for uplift propaganda. There is also much truth in the idea that modern spectacular devices should be utilised to show off the efficacy of new processes in agricultural practice accepted as most suited to the locality. Thus broad-casting and lantern slides, dramas and films, exhibitions and demonstration trains are likely to leave a lasting impression on the rural mind for novelty and fun if not for any more tangible reason.

Propaganda.

Such intensive and extensive propaganda is meant primarily for adult education, for those who have had no opportunity of learning the principles of good and useful life from books and pedagogues. But the basic value of all uplift movement must lie in the compulsory primary education of boys and girls—more of girls than boys—on well chosen lines. It is commonly regarded that boys as the future bread earners should know

more of the world and its ways than the girls who have only to look after the homes, that homes are the natural schools for girls, and that the latter should learn only domestic duties to serve them well with their husbands. But the notion is based on a false conception of womanhood and its duties. Woman is first and last the mother of children whose earliest and most important impressions are collected in the mother's lap and the period immediately following. Ignorant and superstitious mothers cannot but bring up unworthy children, morbid and soulless, the pride of nobody and a burden on society. Women set the pace to standards of life and reflect the culture and enlightenment of a family. In uplifting the woman you uplift the community and freeing them from drudgery is tantamount to raising the entire calibre of life. So that in any scheme of rural reconstruction, the emancipation of women is the first requisite, and nothing should be allowed to stand in the way of female education. Tradition, social usage, mistaken sense of modesty, even religion, whatever hinders progress should be left out summarily and finally if a real beginning is to be made with lasting social reform.

In this connection the scheme for village schools of Domestic Economy as outlined by Mr. Braynne of Gurgaon fame is worth recounting. Advocating the establishment of classes for training female workers he says: -

"To remedy the appalling error of our present system and 'to begin the work of training the women to fit them for their 'future life as wives and mothers the school of Domestic Economy 'has been evolved. The main function is to train teachers for 'the boys schools, but it also caters for the few girls schools we 'have:

"The Domestic school is really a finishing school to teach 'some of the things that a girl should know to make her home, 'husband and children comfortable. At present the education 'of girls is so deficient that it teaches them few of the things that 'are useful in the home such as cooking, washing, ironing,

'sewing, knitting, the care of children, first aid etc. How is the 'mother to know how to discipline her family if she has not 'learnt it herself and been taught how to teach it.....".

School curricula.

The choice of subjects in the curriculum and the books prescribed should be such as to be the most conducive to making the girls fit wives and mothers in the spheres to which they belong. Apart from domestic duties and motherly cares they should be prepared to inculcate in their children the elementary principles of moral life, good manners, habits of industry and cleanliness. They should know sufficient of hygiene and patent medicines to serve them in their work a day life. They should know when and where to apply for help and how to eliminate chances of disease from the family. With wider knowledge and a more extended sphere of responsibility the petty prattlings and injurious 'competition in ornaments' will cease: and expenditure will run more uniformly in constructive channels. Boys will be given better training for life : homes will be made cleaner, brighter and more comfortable, and it would be altogether a happier existence for all concerned.

Village clean up.

In the wake of female uplift will come better sanitation, lesser mortality and disease and greater prosperity: because clean villages imply abundant manure for the farms and if there is any one factor that can improve beyond recognition the productivity of land and which will take less of money and labour, it is the wholesome treatment of the soil with good strong manure. Once the villagers imbibe a passion for cleanliness it is plain to see that the supply of manure cannot slack. Private pits for every house or group of houses, screened and sequestered away in a corner, will obviate the sufferance of a sweeper class, will keep manure in a good state of preservation, and provide excellent laterines for the people. Similarly village drains will be cleaned, damp corners closed and water holes filled up, so that the malaria menace will lose much of its sharp end : and with people knowing the ordinary laws of health, it is not too much to hope that the scourge will in time be a thing of the past.

Higher standards of life.

Then again clean houses, education, and respected women will usher in an era of good taste. The housing and apparel, diet and recreations will be brought to a level more consonant with civilised standards; for knowing is aspiring and willing, and where there is a will there is a way. To afford the increased expenditure and better living they will have to devise and work,—to invent, and what is more they will be willing to shoulder the responsibility. Cottage industries such as hosiery, knitting, basket making, and many others will spring up to supplement the agricultural income. Of course the funds will be lacking at first and state aid as well as co-operative credit will have to be requisitioned to set them up at a fair footing; but the greatest advantage gained will be the side-slinging of apathy and inertia, the application of a vast reserve of domestic talent to useful ends and last but not least infinitely quieter homes.

Adult Education.

The main work however of agriculture and cognate problems is connected with wider issues and involves a country wide appreciation. It should be borne in mind that the value of instructions provided in primary and secondary schools, albiet on agricultural subjects, is seriously discounted by its necessarily being of the most general character. Book information, moreover, lacks the practical touch, and on the whole boys get better insight into the profession by actually working with their elders on the farms. If they glide back into the old ways it is because the pervading influence they come across is much too strong for their impressionable age. Simultaneous instructions to boys in the schools and adults by means of occasional lectures, demonstrations and other forms of propaganda may be depended upon to introduce conditions that will in the long run place the agricultural profession on a stable and sound basis.

Joint effort.

The secret of success in all rural work lies in joint effort. The villagers have lived too long under artificial segregation each to each to know the value of co-operative self help. It is now high time to experiment with the reverse method. Poverty, the common foe, is at their doors and nothing but combined effort and sustained energy will save the situation. The utmost

resources of goodwill, sympathy and service are to be called forth in the course of their day to day life to let them escape the doom that is imminent. They should he prepared to exert themselves and work out their own salvation as best they can with the suggestions extended now and then by government departments. The spirit underlying ought to be self help, for it would be no credit to them if at all they could be propped up by outside help. The healthiest cure comes from within and since they will work on it themselves, they will know how to maintain it and improve upon it. The government and other organised assistance will have to be in the nature of general guidance or loans or 'taqavi' advances, or again expert advice and protection of the law. The transformation of these facilities into tangible results will depend upon the enthusiasm and the spirit of service with which the workers will be imbued and the ideal of village advancement will be reached when every body in the village will act and think as a worker.

Co-operation

Co-operation within villages is no new doctrine to be forced upon the people. The earliest organisation of the Indian village society was inherently based on mutual service. The village in ancient times was an entity complete in itself and the inhabitants managed their affairs for themselves on a division of labour system with individual responsibility on each member in a particular sphere. What is sought now is joint responsibility on all the members in every sphere of common problems: so that everybody may come to have an interest in everything. It will broaden their outlook and make each member an all round enthusiast. With this end in view every head of a family should be induced, even compelled, to become a member of one or more co-operative societies and uplift unions. No doubt the initiative will have to come at first from government and district board functionaries and national organisations, but once the people learn the advantages of mutual help, there will be no difficulty in continuing and pushing on the work. Funds will be gradually available with the inculcation of habits of thrift and the knowledge that any money invested in the common improvement

funds will yield better returns and give fuller satisfaction than if it is squandered away on show and quarrels and women's fancies. Then a wise disposal of these things may bring about much towards the amelioration of their material resources. Persian wheels or tube wells may be installed at central places for the common irrigation of village farms or useful labour saving implements may be purchased that might be lent to members on a rotation basis, the working expenses and depreciation charges being divided betwixt them. Or again village streets and drains could be cleaned and kept in repair, boys and girls educated or sent to town for training, pedigree bulls and cows purchased, experimental manure and seeds procured, and a thousand other schemes financed which cannot be afforded to or ventured upon by single farmers.

Mutual help societies.

Such mutual help societies should be multiplied as fresh requirements come to the fore. Ample advice, literature and guidance will always be ready at hand through the government departments and even part time specialists could be had for the asking and a small payment.

An idea of the extent to which the government have already assisted collective or individual village enterprises may be formed by the various figures put up in the Agricultural Department annual reports. Some of the following may be instructive.

Tube Wells.

bored in different districts with departmental assistance.

Total number of wells bored in	1928-29	1,416
Do. do. do.	1929-30	1,543
Successful borings	„	1,137
Percentage of success	„	73.6
Number of feet bored	„	92,089
Average cost to government per well		Rs. 94/-/-
Cross cost per foot		„ 4/4/-
Average cost to owners including footage allowance to borers	...	„ 205/-/-

(Continued on the foot of the next page)

Thus the government may be reckoned with to go in as far as possible with the villagers' attempts to create conditions that will bring in an era of peace and prosperity to the cultivator.

Statement showing the nature and area of assistance extended by way of demonstration during the year 1929-30.

Circle.	Total previous year acres	Improved seed acres	Green manuring acres	Improved implements acres	Total.
Central	42,489	30,268	599	3,926	34,791
Western	118,305	207,990	2,060	4,571	214,627
Eastern	41,309	26,312	871	10,635	37,819
N. Eastern	6,409	11,945	19	209	12.173
Rohilkhand	30,865	40,168	...	8,442	48,600
Bundelkhand	22,715	12,603	8	2,329	14,940
Total	271,182	329.276	3,503	30.111	362,950

This has progressed since 1924 in the following order.

Area brought under improved cultivation.

1924	1925	1926	1927	1928	1629	1930
56,910	79,218	125,838	122,125	195,430	271,182	362,950

The issue of green manures during the foregoing year has been:—

1928-29	18,795 mds.
1929-30	31,619 „

1924	1925	1926	1927	2928	1929	1930
4,570.	7,707.	9,062.	9,687.	11,582.	13,705.	17,760.

Let him only organise himself. Organisation spells power and efficiency. Gradations there are, and are bound to exist in society while the caste system is going to stay, but that need not take away from the value of co-operation. Common interests are similar to the Brahmin as well as to the Sudra and a plague epidemic will not spare either, nor does poverty make any distinctions. Therefore people may help each other and still retain the privileges of their ancestry, and who knows but that the spirit of co-operation may not in the end wipe out this phenomenal evil. India has had too much of it already. Surely it is time to look the other way.

So that co-operation is going to be the order of the day in coming years. There have sprung up in recent years many improvement societies under the aegis of the government. But their number is much too small considering the 48 millions of population and about a lakh of villages. There is a great scope for their multiplication and they may be run on about such lines as :- -

1. Better farming and general agriculture.
2. Dairying and cattle breeding.
3. Better living and village improvement.
4. Education and health.
5. Cottage industries.
6. Purchase and sale (marketing).
7. Mortgage redemption.
8. Co-operative credit.
9. Social Reform etc. etc.

Any man or woman could be a member of one or more of these societies in proportion as he or she can devote time and membership charges for the purpose. It should be made incumbent upon every member to take a live interest in the work and influence non-members to take advantage of it. Then these societies should be co-ordinated to central ones in district or tahsil centres, so that they may remain in touch with the wider interests of the country and one may come to the others assist-

ance when desirable. Weekly or bi-weekly papers may be published from central places that should voice local opinion and put their needs before the public and government. These will do excellent propaganda and relieve the monotony of village life. Another advantage of village societies lies in a quite different direction. These will form excellent clubs for men and women, who may discuss village problems there or meet for social purposes. With the advance of literacy they may come to possess small libraries of their own which are thought indispensable to modern life, and reading for recreation as well as for sober study may soon come into fashion.

So much for the co-operative effort which is indeed the pivot of all rural reconstruction schemes. But the problem cannot be tackled effectively unless the whole organisation of the state is brought in to make the rural areas more productive and the rural population less destitute. The Royal Commission on Agriculture maintains that,

" If the inertia of centuries is to be overcome, it is essential 'that all the resources at the disposal of the state should be 'brought to bear on the problem of rural uplift. What is 'required is an organised and sustained effort by all those 'departments whose activities touch the lives and surroundings 'of the rural populations. "

The economic depression.

That efforts have been made in the past years and they are bearing fruit no body will deny. The General Council of Agricultural Research and the corresponding bodies in each of the provinces have been doing valuable technical and advisory work since their inception following upon the Royal Commission's report, and while it is too early to forecast any brilliant achievements, handicapped as they are by the world wide slump, they have entered upon it in the right spirit. Expenditure on the departments has been multiplied since the reforms, and research work pushed on at all the centres. Yet the sum total of all these activities has not saved India from the recent debacle of trade and industry, nor the tenants' sliding enmasse

to the non-cooperator's call. The villages are as dirty and poor as ever and their moral and material position as dispiriting. Of course the economic depression is more directly due to world causes than any thing inherent in the village system as such; but the defects in the rural conditions as have been pointed out in the course of this treatise stand aggravated against the lurid colours of international industrial unrest. And the ryot with his poor antecedents is certainly ill prepared for the impasse. All that the government can really do is to place the facilities of modern knowledge at his disposal. Credit is very scanty every where and financiers loath to back a dark horse. Therefore reconstruction on any wide scale is not feasible just in the present circumstances.

Industrial development Schemes.

Industrial development in more countries than one has been taken up as a national campaign to last three or five years as a tentative plan. Government in such cases has taken the wheel of affairs in its own hands and either directs and controls individual enterprises or itself organises and works them. But this as a rule, is determined by the state of political institutions and civic consciousness in a people. In a semi-primitive society, specially if it is unwieldy, such a centralisation may be fraught with very real dangers. Nevertheless if individual provinces embark upon schemes modified to suit local conditions, it would carry a great deal of public support and would for aught else give a much needed impetus to trade and industry.

Such emergency measures as are calculated to bring instant relief to the tenantry or stamp out long standing evils may safely be entered upon at this stage. The consolidation of holdings, for example, the penalising of the burning of manure, the afforestation of ravines and barren tracts etc. will encounter less opposition in the heat and flush of a big drive than under ordinary conditions. Similarly cultivators may be encouraged to set apart the weaker soils for growing grass and fodder and making pasture reserves, so that scarcity may not be felt on the score of cattle feeding. This could be done by remitting a certain

percentage of dues on the land so treated. Similarly horticulture and fruit-culture may be given zest to by cheapening fresh fruit freights on the railways and assessing gardens at lower than arable land.

Public support essential

The government, however can do little in ensuring prosperity and better living to the village community without a solid backing of public opinion in the country, the sympathy and active co-operation of those who think for the people. The hold of the upper classes and the intelligentia over the masses is very considerable as demonstrated by the recent political disturbances; and before embarking upon destructive courses of action which after all muzzle the professional activities of the agricultural classes, it is meet that they should try the method of constructive co-operation in a common endeavour to uplift the country's lot. The advantages of modern education and scientific methods can be best reached out to the peasantry by young efficient men taking to the national industry and showing by their example and precept the superiority of intelligent work. It has been found by actual census figures in Europe and America that University men are more successful in any sphere of work that they chose to take up than laymen sprung from the bottom of the ladder. A knowledge of the prevailing conditions in the economic world together with a moderate grasp of the laws of nature invests any trade with an invaluable asset of foresight and common discretion. The acute unemployment in educated classes moreover, makes it increasingly apparent that careers are to be explored and found more in the sphere of developing the country's inherent resources than in catering for the administration of the crowded departments of government or swelling the ranks of practising lawyers.

Products of agricultural colleges.

The out-turns of agricultural colleges and co-operative classes will much better settle upon the land, improve its productivity and take the country-side with them by the silent unostentatious propaganda of facts. The spoken word has never that appeal to the villager as has the eloquent

testimony of tangible results. And however recalcitrant, the villager has enough good sense to recognise the superiority of intellect and regulated talent. It would be much easier to push the work of village uplift under the guidance and general supervision of these passed products of vocational institutions; and it deserves cool planning how sufficient inducement can be thrown in their way to let them take up the task. The stringency of funds handicaps every movement in the direction and a stage has certainly been reached when the whole expanse of public expenditure should be scoured to see if much more could be directed to this most crying of national needs.

The malady is extraordinary and chronic; therefore the remedy too must be drastic. It is no good doing things with half the heart and once it has been decided that the well being of 75 per cent. of the population is the primary concern of any government, patriotic, imperial or otherwise, there remains in fact little to choose between a forward earnest action and just procrastination. The changes that are coming in the constitution are likely to deflect attention for some time from the drama of rural life, but if they bring relief and hope to the peasant the delay will be endured with delight and gratitude.

CHAPTER X.

THE AKBARPUR RURAL UPLIFT SCHEME.

I have endeavoured in this chapter to give in the briefest outline my own attempts in the Akbarpur Tahsil to translate my ideas into a working shape. But the area being one of the backwaters of the province, and the tenants intensely conservative, allowance must be made for their taking to innovations with some sort of a mental reservation. The doses must of necessity be restricted in the beginning and regulated according to the needs of the district. The greatest handicap to any improvement in the rural areas is the rank illiteracy of the masses, and since periodicals and weekly or bi-weekly papers are almost unknown the necessary propaganda has to be only vocal. I don't think these limitations are confined to this district alone and as the nature of difficulties encountered are every where about such, any compaign in these provinces could be carried on with sinews that are not greatly divergent from those advocated here.

My first care has been to make it as little imposed as possible. Of course at this stage the department officers cannot be dispensed with and whatever comes along naturally falls in the specific sphere of one or the other of them, but by and by as the people learn the motives propelling the government in their action, they may organise themselves to do without. As at present constituted the executive of the Uplift Committee consists of at last one officer from each of the Government Improvement Departments functioning in the district. Thus a Co-operative Inspector, an Agriculture Department official, a Sanitary agent, and a possible Revenue officer are *ex-officio* members of the committee. Their work has been in a way co-ordinated and promises brighter results for the reason. The crux of the position lies where the people cease to take it as an outside agency and come to realise the value of self help.

So that the work has been divided under two sub-heads, (1) General and (2) Specialised.

1. General.

The Tahsil of Akbarpur has been divided into six convenient centres where the local panchayats have agreed to work as better living societies on co-operative lines. At the tahsil headquarters the S. D. O., the Tahsildar, the Veterinary Assistant, the District Medical Officer, an Agriculture Expert and five non-officials form a committee to supervise the work of the panchayats and send instructions to them.

The six panchayats are at

1. Kataria Saimmanpur,
2. Khemapur,
3. Rampur Chandideeh,
4. Jalalpur Sehra,
5. Bewana, and
6. Lawayya.

Each of these villages contains a school and its panchayat keeps the following things.

1. Improved agricultural implements:—

They are

1. Meston ploughs,
2. Cane crushers,
3. Chari crushers,
4. Rice hullers etc.

The funds for purchasing them were raised locally and the Government Agricultural Department lent a few things. These implements are really for demonstration purposes but any tenant living within the area allotted to the panchayat can borrow them without payment. It is intended that after a year or two when the people become used to it they shall be asked to pay some hire for borrowing the implements. The number of implements will also be increased.

2. Improved Seeds:—

The panchayats keep specimens of the best varieties and have been authorised to send indents to the Government

seed depot. The borrower shall return the amount to the depot. The panchayat shall keep accounts which will be checked by touring and other officers on the spot.

3. Literature:—

The panchayats are provided with easy bulletins and booklets on the subject of better living, agriculture etc. They also hold khatas and do as much propaganda work as possible. The expenses for publishing extra bulletins will be met with locally but such publication is not encouraged unless its existence is urgently required.

4. Medicine Chests:—

(1) *Human diseases.* The District Medical Officer of Health is ever ready to supply boxes containing non-poisonous medicines along with instructions at Rs. 4 per box. They are very handy and have been in great demand in Akbarpur Tahsil.

(2) *Cattle diseases*:—I am just getting one medicine chest prepared to cure cattle diseases. The members of the local Better Living Society will subscribe to both these chests and will be given medicines free of charge.

5. Funds:—

The panchayats in theory keep a certain amount allotted to them by the central panchayat. The money actually is kept at the tahsil in order to avoid bungling and dishonest expenditure.

Whenever the panchayats are in need of money they will have to report to the tahsil for permission to accept donations and on receipt of sanction from the Central Committee might take subscriptions from local men.

At the end of the year an agricultural exhibition is held for demonstrating improved methods and in order to encourage village idustries, crafts etc.

The main idea is to induce people to improved methods and to make them uplift-minded so that their taking up of

specialised work later might become easier. There can be no two opinions on the subject that the villager is generally too slow to adopt scientific ways. He wants to see everything first and wait for the results. Once he is convinced, he will follow you blindly. For this propaganda and demonstration as outlined above are very necessary.

II. Specialised.

The second item on the programme was to convert with the consent of the zemindars, the existing agricultural farms into demonstration farms. I was able to induce the zemindar of Yarki Farm to try the modern methods of agriculture and he has done it with wonderful success. The figures for his farms are also given in the appendix. With Yarki as centre and 18 villages all about it, 8 better living societies have been formed. The Central Panchayat being at Yarki, the zemindar is the *de facto* sarpanch and the uplift work is done under his supervision. The Masoda experiment is being tried at the places (See Appendix B).

In effect the scheme embodies two features (1) general, which covers the entire tahsil and (2) special, which is intended to expand only gradually. The third main item is the holding of an annual exhibition for the encouragement of local industries and also for demonstration purposes. I have organised so far only two exhibitions. The results have beyond doubt established the utility of exhibition for demonstration purposes; but the only question is of funds. The officials should not ask for funds, they might at least give such encouragement to the local people as may enable them to appreciate the value of exhibition in terms of tangible profits, and then let the people do the thing of their own accord.

I have for the sake of comparison given the figures of the Akbarpur exhibitions of 1931 and 1932 which speak for themselves. (see Appendix E.)

THE PANCHAYAT.

The entire work in this section is to be done by local men. They do the spadework and whenever there is a difficulty the

officials help them. Great stress is laid on the increment in per capita income of the villager. His women and him-self are encouraged to work on some auxiliary pursuits and at the end of the year liberal awards are given. The question of providing funds in the beginning may be of some difficulty but the people on getting some fun in the exhibition would themselves ask for it. This really becomes a sort of investment and if you could make the exihibition sufficiently interesting no one would grudge paying for the 'Tamasha.'

I now recount below the various duties the Panchayats have been entrusted with.

Education.

The Panchayats will be responsible for inducing the boys and girls in their respective circles to go to school. When and if the parents of the girls object to such a course, the services of an aged teacher will be requisitioned to collect the girls in a place reserved for the purpose and give them elementary lessons.

The teacher's remuneration will be given from the contributions in money or kind, which the panchayat will receive from the locality including the parents of the students.

The school vacations will be in the cultivating seasons, one month in rabi and another in kharif. This enables the parents to spare their children for the rest of the year. This can be arranged everywhere with the chairman of the District Board Education Committee.

In the curriculum of these schools books on agriculture, domestic economy etc. will be included. This has been arranged with the District Board and I think it can be done in every district.

The Panchayats organize games, and wrestling competitions for improvement in the physical health of boys and girls.

Lectures on village uplift.

Once a week the teachers of a school collect the people of the neighbouring villages or they go to the village bazar and

deliver lectures to the people on the ideals of better living and better farming. The Government bulletins are sent to the teachers directly. The most effective lecturer is granted rewards by the Central Committee.

Co-operative Societies.

The Co-operative Department is ever willing to register better living societies. Efforts should be made whenever the opportunity arises for forming such unions.

At present the villages round about Erki Farms have formed these societies and it is expected that this work will expand out soon.

Duties of the Panchayats.

1. To popularise the improved methods of agriculture.
2. To encourage local industries and to induce the people to sell their products in the annual exhibition or in the town.
3. To supervise the sanitation of the village. They are advised by the Sanitary Inspector on the spot.
4. To take an effective part in fighting the epedemics.
5. To encourage education among boys and girls.
6. To encourage social reforms.
7. To keep accounts entrusted to them.
8. To organise villagers conferences for the purpose of common uplift.
9. To look after the general welfare of the public.

General.

The Kanungo of the circle will always be available to the local Panchayat for advice. In other matters if the Panchayats have any difficulty they must report to the Tahsildar.

CHAPTER XI.

VILLAGERS OBITER DICTA.

1. Listen attentively to the people who spend their time and energy in coming to you in order to improve your condition.

2. Whenever you are in trouble consult your Panchayats on general matters, the local school head on education, the sanitary inspector on epidemics and the zemindar on the betterment of your holdings.

3. Use.

1. Improved seed.
2. Improved agricultural implements.
3. Good manure.
4. Keep good cattle.

You will get information from the local Panchayat or the Tahsildar concerning the above.

The result will be

1. You will get good crops.
2. You can sell them at a higher rate.
3. You will be able to save more money to buy clothes which will protect you from cold and your wife and children will put on nice clothes on different occasions.

4. Manure your fields well.

1. Pit the manure.
2. Stop making dung cakes. Use wood, cane, etc. as fuel.

The result will be

1. You will get good manure.
2. You will improve the quality of your soil.
3. You will protect yourself from disease.

5. Keep your villages as clean as the inside of your house.
2. Get yourself vaccinated and inoculated in time.

The result will be

1. Disease will not come.
2. You will have no fear of blindness and the crippling of your children's health.

Remember, diseases come where you know *gobar* or filth is kept.

6. Honour your women and educate them.

The result will be

1. Your home will be the sweet home.
2. Your money will be saved.
3. Your children will be strong and well developed.
4. Yourself will live happy lives.

7. Organise yourself into unions. Develop a corporate life; the result will be
   1. You will become strong;
   2. You will not go to the courts and thus save your home and your wife's jewels from being mortgaged. Your cattle will not stray into others' fields and will not be taken to the Pound.
   3. Prosperity will come to you and you will be happy.

A poem in Urdu on improvement in agriculture recited on the occasion of the Agricutural Exhibition at Akbarpur, district Fyzabad.

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1. Ai Hind ke Kisano kya hal hai tumhara,
Hai muflisi tumhari shaklon se ashikara,
Kheti ko tum ne dil se kuchh is tarah utara,
Nay tan pa kapra baqi nay pet ka sahara,
Sari tumhari daulat ab lut gai bahar kaif,
Phir bhi agar asar kuchh tum par naho to sad haif.

2. Gaflat ko abto chhoro, ay bhaiyo khudara,
De do fane zira-at ko tum zara sahara,
Bajne lage ga danka alam men phir tumhara
Kheti taraqqi dada ban jai gar guzara,
Aisi ho kasht apni Hindostan ke andar
Gulhai zar khilen phir is gulsitan ke andar.

3. Ab zindigi guzaro achchhe kisan ban kar,
Kheton men tab tumhare faslen hon sab se behtar,
Bharat men jiska charcha ho jai harsu ghar-ghar
Tumko jahan ki qaumen kahne lagen hunarvar,
Alat-o-tukhm kohna jo hain kharab-o-bhaddey,
Unki jagha kharido yeh sab jadid-o-achchhe.

4. Lazim hai tumko ab yeh, kheti ko do taraqqi,
Dunya men ta ki rahat tumko mile haqiqi,
Ho jain dur tumse aflas-o-tangdasti,
Ifrat ho gharon men anaj, mal-o-zar ki,
Himmat se ghar bharo tum ho shane kashtkari,
Hone lage jahan men izzat bahut tumhari.

5. Kheton ko apne achchi karne lago jotai,
Gahri jotai kar ke achchhi karo kamai,
Umda chunida tukhmon se phir karo boai,
Do khad pans achchhi, achchhi karo jotai.
Lag jao gar kamane is taur apni kheti,
Qismat tumhari hargiz kahlae phir na heti.

6. Tan se utar dalo gaflat ka ab labada,
Kheti ki hai taraqqi jitni taraqqi dada,
Faslon ko apni unse paida karo ziada,
Himmat barhao apni uncha karo irada,
Hindostan ke andar range bahar hoga,
Har ek kisan is ka jab maldar hoga.

APPENDICES.

APPENDIX A.

A note on the administration of the Public Health Department in the United Provinces.

Introduction:—The department was created in 1868. Till 1920 the administration was vested in the Sanitary Commissioner under the Local Government, assisted by a civilian secretary. In 1912 a regular service of medical Officers of Health and Sanitary Inspectors was instituted who were till then recruited by the local bodies on their own terms; and to give a security of tenure to men of proper stamp a pro-forma Government service of Medical Officers of Health was created in the year 1914, and the Municipal Boards concerned made a contribution. The service of Sanitary Inspectors was also constituted but not provincialised. It was prescribed that one Sanitary Inspector should be employed for a population of 20 to 25 thousand or a fraction. The Municipality that did not employ the prescribed staff was not entitled to contribution from the Government. The department expanded gradually but received a temporary check during the war.

After Reforms:—After 1921 the constitution and status of the department changed considerably. The department was placed under a minister who is responsible to His Excellency the Governor and the Legislative Council for its proper administration. The minister is assisted by a civilian secretary.

The Engineering branch of the Public Health Department is under the Public Works Department.

Constitution:—The head of the department is the Director who is an officer of the Indian Medical Service, re-employed after his retirement. There are six Assistant Directors of Public Health, each holding a British diploma in Public Health. There are Medical Officers of Health in municipalities and districts who are assisted by officers of the 2nd class in districts and also Medical Officers in charge of travelling dispensaries. Chief

Sanitary Inspectors, Sanitary Inspectors, Assistant Superintendents of Vaccination and Vaccinators are employed by the local bodies, but they are under the general control of the Director.

The Director:—The Director directs, initiates and organises all public health measures in the province, co-ordinates the activities of different branches of the department and makes local inspections of the health conditions in large towns and important centres of pilgrimage, and performs other inspection duties connected with the post.

Administration of Ranges:—Three of the Assistant Directors of Public Health are employed on general duty in charge of the ranges into which the province has been divided. They inspect sanitation and vaccination in local areas, advise local bodies on their public health problems, and hold sanitary and medical charge of all large fairs. They supervise the work of the Medical Officers of Health and other public health personnel in their ranges and organise measures against the various epidemic diseases.

Malariology:—There are three Assistant Directors of Public Health on special duty. One is in charge of malariology who carries out malarial surveys and recommends schemes for the reduction of malaria in towns and villages. He is also to direct the preparation of quinine tablets for the province. He has two assistants who are members of the first class Provincial Health Service.

Provincial Hygiene Institute:—One Assistant Director of Public Health is in charge of the Provincial Hygiene Institute under whose direction training classes are co-ordinated for the diploma in Public Health, License in Public Health, License in Midwifery and Domestic Hygiene, Sanitary Inspectors and Health Visitors besides the under-graduate, the post-graduate and the post licentiate classes. Over and above the teaching duties he carries out the regular testing of water supplies and does research and investigation work and the preparation of cholera

vaccine. He has two assistants belonging to the class I of the Health Service.

Hygiene Publicity Bureau:—The third Assistant Director of Public Health is in charge of the work of publicity for which a large number of magic lanterns with slides, illustrated posters, booklets and leaflets are used as a routine measure all over the province by the municipal and district Health Staff and other agencies. Exhibits, cinema films on health subjects, prepared in the Bureau and loud speakers are also used for the purpose, and apparatus is taken about in a motor van fitted up for the purpose. The Assistant Director of Public Health has two assistants and one or two reserve officers in the Bureau. The officers also deliver lectures on methods of publicity to the various classes in training. Under their instruction lectures in hygiene are given in Patwari Schools, Teachers' Training and Normal Schools, and to Inspectors and Supervisors of the Co-operative Department, etc. The Assistant Director of Public Health is the Honorary Secretary of the provincial branch of Indian Red Cross Society and his senior assistant Deputy Director, the Honorary Secretary of the Junior Red Cross as well as the Joint Honorary Secretary of the provincial branch of the St. John Ambulance Association. The Village Aid Scheme and the Health Unit work are some of the other activities of special nature which are controlled by the hygiene Publicity Bureau. Last, but not least, the Bureau also controls the work of school medical inspection and school Health work in the province. The Junior Red Cross activities are essentially health activities in schools and the Hygiene Publicity Bureau is happily well suited to co-ordinate the School health work with the activities of the Red Cross.

Public Health organisation in Municipalities:—The municipalities are divided into four classes, in accordance with their area, population and sanitary importance. Under class I are included such towns as have a population of 150,000 or over, together with the hill municipalities of Nani Tal and

Mussorrie. There are seven such municipalities and all of them have a Medical Offcer of Health with a British diploma in Public Health. Class II municipalities comprise of towns with a population of over 50,000 and under 150,000. In this class there are 14 towns including those of importance as pilgrimage centres. Class III municipalities are those with a population of under 50,000 but with an annual income of not less than Rs. 50,000. There are at present 10 such municipalities.

Class IV municipalities comprise of all others of which there are 54. In these the executive public health arrangements are in the hands of the Municipal Secretaries, assisted in some cases by trained Sanitary Inspectors. The public health arrangements of 'Notified', and 'Town', areas are similar to class IV municipalities, with the exception that no trained sanitary inspectors are employed in the majority of them owing to their small size.

The basis of appointment of sanitary inspectors in municipalities is roughly one for every 20,000 of inhabitants and one Chief Inspector for about 100,000 of inhabitants.

Under the Sanitary Inspectors are employed Jamadars who occupy the position of a mate, and the required number of sweepers, watermen, cart drivers etc.

Public Health Organization in rural areas:—In each of the 28 districts there is a District Medical Officer of Health with an Assistant Medical Officer of Health under him and a Sanitary Inspector for each Tehsil. This skeleton organization is barely adequate considering the area, population, widespread epidemics, ignorance and other problems of public health. In the remaining 20 districts where the scheme is not yet in operation the charge of public health arrangements including vaccination continues to rest with the Civil Surgeon.

Provincial Public Health Service :—For the efficient and proper working of the department a full control of the State over the service has been found necessary. The Director of Public Health, subject to the sanction of Government, has full discretion in posting members for the service in order to

provide men with special qualifications being posted to apointments for which they are particularly suited. The service is now divided into two main divisions. Class I comprises of officers with a degree in Medicine and Surgery registrable in the United Kingdom and in addition a British or Indian diploma in public Health. Officers of this class fill in appointments to Municipalities of the I and II classes. Medical Officers for Malaria, Hygiene, Publicity and Teaching duties in Schools and Health Officers in the larger towns are taken from this class. Officers of class II are required to possess a qualification in Medicine and Surgery registerable in these provinces, and in addition the Licence in Public Health awarded by the Provincial State Medical Faculty. Officers of this class fill appointments of Medical Officers of Health in class III municipalities, as Assistant Medical Officers of Health in Districts, as Junior Assistants in the Hygiene Publicity Bureau, as officers on epidemic duties under the Assistant Director of Public Health and as School Health Officers in smaller towns.

At present there are only thirteen whole time School Health Officers in the important towns, while in other areas the Municipal Medical Officer of Health or the District Medical Officer of Health is the ex-officio School Health Officer. Under this scheme all school boys in English, Middle, and High Schools, whether government or aided, are examined periodically and treatment provided. Medical examinations and school inspections in vernacular schools are also carried out as far as possible. School Health Officers in addition give training in hygiene to the teachers in training institutions and hold examinations in the Mackenzie School Course in First Aid, Hygiene and Sanitation.

Sanitary Inspectors:—They are selected by the Director of Public Health and deputed for training at the Provincial Hygiene Institute. The training is equivalent to that given by the Royal Sanitary Institute in England and extends over a period of 13 months. Sanitary Inspectors with five years approved service are eligible to sit at the departmental examination for the Chief Sanitary Inspectors.

Health Work In Rural Areas :—The amenities of a healthy life in urban areas have in all countries been enjoyed on an extensive scale by the municipalities that are fortunate enough to afford them. As a vast majority of people in India live in villages the problem for the rural areas is deserving of greater attention. In the United Provinces a good deal of spade work has been done in this connection by the public health department and a definite line of work has been chalked out to suit the conditions in rural areas and in quasi-rural or suburban areas.

The success of all health work in whatever area it is carried on depends mainly upon education in health and it is true with greater force for rural areas. The Village Aid Scheme already mentioned aims at doing such health work through education and it has been found to be the most useful means devised so far for purely rural populations.

Under the scheme the question of installing a pure water supply is tackled by providing at least a parapet wall and a pulley to protect the well-water from outside contamination which is the most common source of pollution. In better class villages hand driven Persian-wheels or pumps can be fitted up.

Drainage of household waste water has been effected by means of soakage pits prepared by the householder himself; and these have conduced greatly to the reduction of the breeding places of mosquito within the "abadi". Manure and rubbish are stored in pits outside the village boundary, and thus the breeding places of flies have been wiped off the inhabited areas and the well-water further protected. In larger villages the use of bored-hole latrines is strongly recommended which can be kept clean without the agency of sweepers, as the squatting plate is fool-proof and can not be soiled even by the most careless user. The disintegration of nightsoil in deep holes is brought about by septic action and the hole is kept dry. It has proved the cheapest and safest type of privy which will afford protection from infections of intestinal origin in smaller towns and rural areas if it is not too near the well.

To combat the epidemic diseases, village aid dispensaries have been opened and teachers in schools and others have been trained in what has been called first aid in epidemics and common accidents. These dispensaries are also equipped with a few simple indigenous drugs for common ailments and they are most popular during the epidemic of malaria when demand for quinine cinchona becomes heavy. It is to the credit of this village aid scheme that the few thousand villages where such intensive work was carried on have been kept free of cholera and plague, while these epidemics had been raging in their close vicinity or used to visit them as well in previous years.

In order to ensure infant and maternal care under the existing conditions the indigenous " dai " has been trained in the principles of clean midwifery and the householder is also taught their importance so that a cleaner practice may be demanded of the " dai ".

A number of exhibitions have been arranged in the remote parts of the districts where models explaining the ways of spread and prevention of diseases, prepared locally, have been put up for educating the people and lantern lectures or cinema shows have also been provided wherever possible.

The education, the agriculture and the co-operative departments have co-operated in this work of uplift and the last has done very useful work by introducing the scheme in the societies. There are groups of people at many places that have readily responded and taken it up.

The Health Unit scheme is suitable for suburban and the more prosperous rural areas. It should however be remembered that these nation-building schemes cannot bear fruit in a few years' time. They are the work of generations and the aim of education in health is not only to rid the country of epidemics or treat ailments but to secure a better next generation and still better successive ones. The Junior Red Cross activities and the school medical inspections which are confined to the school-going population, aim at securing this end. The enaction

of suitable laws and bye-laws for sanitary measures is also recommended with the awakening of a "sanitary conscience."

Dr. Abdul Hamid.

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Extract from 'the Health of the School Child' Annual Report of the Chief Medical Officer of the Board of Education, England for the year 1930.

In regard to the more formal teaching of hygiene, it is generally agreed that there is little or no value in set lessons for children of the age span of seven to eleven, but this period represents the years most favourable for habit formation by training in all those practices which form the foundation of the healthy life, and five or ten minutes once or more often each day should be allotted to this training, apart from what may be given individually. Such instruction may take the form, among other activities, of the practice in cleanliness of hands and face, hair and teeth, of breathing exercises, of keeping tidy the class rooms and cupboards, and of periods of rest and quiet. Throughout the whole period of school days from seven to eleven should be laid the foundations of self-government in matters relating to health, which assumes so great an importance in the next educational stage."

APPENDIX B.

CO-OPERATION IN MASODHA.

GENERAL.

The area is mainly populated by the Kurmis. As a class they are very good cultivators but are at the same time extremely conservative, suspicious and opposed to change. It was not easy to gain their confidence or to make them open their hearts to discuss their problems without reserve. The main difficulty was to make them look upon us as friends. In this primary aim we have succeeded to a great extent. Their angle of vision towards us has greatly changed and their reserve has to a great extent been overcome. They do not hesitate to put their difficulties to us and seek our advice. The success can be judged from the fact that practically every village in the area has or wants to have a better living society of its own and the Registrar has been pleased to allow us to extend our area of operations and given substantial help from the Provincial and other funds at his dispoal. The good work done by adult school teachers during the cholera season has greatly helped us in gaining this confidence and the vaccination of all children in six villages who remained immune from small pox also helped it. The opening of village dispensaries, the supply of medicine for cattle disease and bi-weekly attendance of the Vaid in complicated cases have all contributed to the creation of trust.

It has however always been kept in view that anything supplied free does not appeal to the people and it is being insisted that every convenience provided should be paid for in some form or other and should not come as pure charity. The cultivator cannot in his present financial circumstances be expected to bear all the cost, but he is being made to bear part of it in one form or another. The trust of the people is our greatest asset and it is hoped that this would help us in doing some real work.

SCHEME OF WORK.

2. The experiment in the area was the first of its kind in the province and there was nothing to guide us in framing our programme of work. After an experiment of about two years our ideas have crystallized into a definite shape and now it is hoped that the development will be quicker.

Every society is managed honorarily by its local panchayat and secretary, with the assistance of any other worker from the neighbourhood who is willing to help. In ten of the societies the local secretary will in addition work as an assistant village guide and take preparatory classes for the education of adults in the village, and shall get Rs. 2/8 p. m. in addition to the usual charges. In another ten societies qualified teachers, (village guides) will take primary classes for adults at Rs. 7/- p. m. in addition to their allowance. The qualified teachers will also work as village guides for four villages, one of which shall be the one in which the local secretary is working as preparatory adult school teacher and village guide. For this purpose the teacher will get if fully trained and passed Rs. 5/- extra, while those who have not passed would get only Rs 2/8 extra. The Assistant village guide would, besides looking after the better living activities, take the preparatory classes, i. e. impart literacy, teach a little of arithmetic, some recitation and songs etc. This would be done for one year after which the village guide will conduct the school for another year. In the 3rd year the school will be converted into a reading club and the assistant village guide who will continue to work as the secretary of the reading club will get an honorarium not exceeding 2/8 p. m. for another 2 years. The village guide will continue to supervise the reading club during these two years. Thus in the current year we would have 10 preparatory and 10 primary adult schools. The Court of Wards grant of about Rs. 1,900/- would not suffice to meet all the expenses of the scheme, so that the Registrar has already sanctioned Rs. 800/- from the Provincial funds for the purpose. It is also hoped that some further help would be

obtained from him but the expansion will have to be limited according to the funds available.

So far we are tackling thirty villages but with the additional help, the work is being expanded to sixty villages. It is being done mainly in the Court of Wards villages, but the intervening non-Court of Wards villages would not be left out if the people are anxious to join the movement. The Court of Wards grant would however be spent on its own villages.

Adult Schools.—3. The first and foremost thing in popularising the movement is to improve the outlook of the cultivator for which adult education is necessary. The ten existing adult schools had a total enrolment of 182 on 30th June 1931, and the average attendance was 116. Some sixty adults had finished their 3rd book, forty their second and the rest were in the preparatory class. In addition to literacy, general information regarding agriculture, co-operation, hygiene etc. was given. The outlook of the Kurmis towards education is very narrow; their utmost ideal is to be able to sign their names. Keeping in view the mentality of the people it can be said that the progress has not been discouraging, but much more has to be done in the direction. Efforts are also being made to induce the cultivators to send their children to primary District Board schools and as a result the number of boys attending such primary schools has appreciably increased. The library maintained for the area is not being availed of by the villagers on account of extreme backwardness in literacy. It is being used by the teachers to improve their own knowledge and passages from books are occasionally read out to adults. With a view to create a taste for reading among adults a weekly news sheet was started; it could however not be continued and will be restarted as soon as possible.

Agricultural Improvement.—4. What appeals most to the cultivator is the increase of his income by means of better farming and the following steps have been taken in the direction :—

(a) Introduction of green manures. For the first time green manures have been introduced and Sanai was sown in 138 bighas for the purpose, and it has been ploughed down in fields which are being prepared for Rabi sowings.

(b) Artificial manure worth Rs. 125/- was used in 2 societies for paddy and has been a success. Manure worth Rs. 400/- has been ordered for Rabi and more indents are being secured.

(c) For the first time Meston ploughs were introduced in the fields of the cultivators, 29 being used and 17 of these have been lent by the Agricultural Department while the rest were supplied from the Rural Improvement Fund of the district by the Registrar.

(d) Construction of improved furnesses for preparing "Gur" was taken up by two societies and boiling pans were supplied by the Agricultural Department. These furnesses were appreciated by the people and there is a demand for them. Arrangements for the supply of improved pans are being made with Messrs Bhannamal, and the Registrar has approved of the appointment of a special mistri for erecting improved furnesses at the next crushing season.

(e) Cultivators had certain objections to the introduction of Pusa No. 4 and the increase in the area under it last year was not very large. To remove the objection it has been arranged to exchange the seed kept by the cultivators of a chak who want to oust their Desi wheat and agree to rouging and separate thrashing of their produce. The transaction is bound to cause some loss to the societies and the Registrar is ready to bear the loss in supplying 250 maunds of pure Pusa. The arrangement will enable us to get a large quantity of pure seed for distribution next season. It is also intended to start a seed depot for co-operative societies. Cultivators other than those of the 'chaks' mentioned above are being asked to approach the Agricultural Department for advances on the sawai system. Constant help was received in the agricultural part of the work from Thakur Bhoop Singh and the Deputy Director of Agriculture also helped us with his advice and guidance.

Sanitary improvements.—5. (a) Besides the supply of medicine chests to the societies an arrangement has been made with *a vaid* to visit the area twice a week to look into complicated cases. The vaid is not paid anything except the cost of medicines. Village guides also keep a quantity of ordinary medicines. For the cost of the medicine supplied, cultivators have promised to contribute something every Fasil. So far medicines were by the Registrar and some were also received from the Health Department. Rs. 100/- have recently been sanctioned for the central dispensary by the Registrar.

(b) About 40 cases of cholera were treated by the village guides of whom 35 were cured.

(c) The children of 6 villages were vaccinated and it is hoped that this would be done in a very large number of villages this year as the suspicions have been quelled.

(d) Village dais have been trained in a number of villages and some societies gave dhoties to them.

(e) About 12 wells were parapetted with the help of the Court of Wards.

(f) Some veterinary assistance was also given and the village guides were trained in the work. If funds permit some veterinary medicines would also be stocked.

(g) The majority of the drinking wells in the area were frequently permanganated during the cholera season. I am exceedingly thankful to Dr. Pattani, the District Medical officer of Health for all that he did for us. Besides supplying a large quantity of medicines he gave a number of magic lantern lectures in the villages, arranged for the training of adult school teachers at the training and refresher classes as village aiders and sanitary scouts. M. Aziz Elahi, the Sanitary Inspector organised Public Health demonstrations at Masodha exhibition and has to be thanked.

Scouting.—6. The Court of Wards has appointed a scout master to teach scouting to boys of the District Board schools. The idea is to form scout troops of boys in each village so that the troops may clean the houses of a few boys every week. The

scout master is controlled by the Sub Deputy Inspector of Schools and I can not say much about the work done by the scout master or his troops. A camp for Scout training of adult school teachers was called by me for a fortnight at Zamuradganj with the help of the authorities of Seva Sameti association. At the end of the camp a scout rally of the troops of village schools was held and was a success. The arrangements in the camp were entrusted to M. Hakimuddin Sahib, Sub Deputy Inspector to whom our acknowledgments are due for their successful termination. The District Board contributed Rs. 100/- towards the expenses of the rally and thanks are due to Thakur Naresh Singh Sahib for the keen interest taken. The adult school teachers trained at the camp have in turn organised scout troops in their societies. These troops are a great help to the Sanitary committees which arrange for the cleaning of the whole village once a week. Members clean their own houses and the portion of lanes just in front of their houses while the whole troop tries to clean the remaining portion of the village. The duty of every inhabitant to keep his village clean is being preached, but it would take time to be fully realised.

Training of adult school teachers. —7. The success of the whole scheme depends upon the work done by the adult school teachers, and with a view to train them in their duties a training class was started at Masoda. It included Civics, Agricultural, Sanitary Scouting, Co-operative and Veterinary trainings. The class was conducted for over four months and the training was fairly thorough. Instructions in various branches were given by the officers of various departments concerned and by Mr. Asthana of the Government Inter college. Our thanks are due to the gentlemen concerned.

Physical culture and other activities.—8. Physical culture is not being neglected and in several villages training in '*Lathi*' and '*Phari Gatka*' is given.

Improvement in the housing conditions of the villages is not being neglected. The Court of Wards has at my request

ordered that no aid would be given to cultivators for building new houses unless proper arrangements for light and air are made in the new htus. A scheme for transforming an existing village into a model one is also being arranged. In each village an arbitration committee has been formed and about 50 disputes were so decided.

Group conference and exhibition.—9. Although the work in the area was started in April 1930, it was thought desirable to postpone registration of societies till their work had been seen for some time. On the 30th March 1931 a group conference was attended by the Registrar and the members of the Executive Committee of the U. P. Provincial Union. The education of the societies was tested and the Registrar was pleased to register 20 societies. A small exhibition of agricultural and industrial products was also arranged and a better living drama was also staged which was much liked. The exhibition too was generally appreciated and owes a great deal to the assistance extended by the Agriculture and Health Departments.

S. Murtuza Ali,
Asstt. Registrar Co-op. Society.

APPENDIX C.

CO-OPERATIVE ADULT SCHOOLS AND VILLAGES OF AJODHYA COURT OF WARDS.

The Department was asked to start adult schools on Co-operative lines in April, 1930 and the adult Education Inspector of the Department was immediately deputed to the work. Various localities in the district were suggested and the possibilities of success in each examined. After careful consideration the Masodha area (5 miles from Fyzabad) close to the Government Agricultural Farm was chosen for the work. The people of the area were however very suspicious in the beginning and their confidence had to be gained in the first instance. This suspicion has been removed to a great extent but mischief mongers even now try to raise doubts in the minds of simple villagers. The residence of the adult education Inspector with his family, however, in the locality and the close proximity of the Agricultural Farm has been very helpful in removing the suspicion. The villages in which the possibilities of starting Better Living activities were the greatest were chosen for starting adult schools.

It was originally planned that the schools should be in the charge of District Board teachers of the neighbouring primary schools. The Chairman of the Education Committee was approached for help and he deputed some of his best men to the schools of the locality. The work however did not appeal to the teachers most of whom were not residents of the place and were only transferred from distant parts of the district. These teachers had no heart in the work and wanted all school holidays and Summer Vacations besides the various closures during the busy agricultural seasons. It was calculated that their working days would barely come to 150 days a year. Besides this they were often found unpunctual and absent from the work. One or two of the teachers even did not join their new posts under one pretext or another inspite of the orders of the Chairman. Partly on account of the reluctance of the

District Board teachers and partly for the small number of their working days, it was thought necessary to find some other agency for the work. Fortunately we were able to secure the services of vernacular passed local men to conduct the schools In passing it may be mentioned that the District Board teachers have generally not proved ideal ones for Co-operative Adult Schools in other districts too and are being slowly replaced. The local teachers, it has to be admitted are less qualified than the selected Board men and are comparatively lacking both in training and teaching experience. The Board teachers are however accustomed to a type of school discipline which makes it difficult for them to treat the adults not as pupils but as friends. The local teachers mix more freely with the village people and are better able to secure confidence. The Adult Education Inspector has therefore to supply the necessary guidance and training to local teachers. In addition to supervising the schools run by local teachers, the Inspector is therefore holding training classes of teachers himself.

The aim of Co-operative Adult Education is not only to impart literacy, its main object is to broaden the outlook of the people, and to make their life fuller and happier. The adult has to be educated with a view to improving his moral, material, physical, social and intellectual capacities. Interest has to be created in him to better his position and ways of life. Education is to be imparted not only by means of books but by stories, songs, demonstrations and the like. Indeed a very liberal type of education has to be provided which should be such as would not prove dull and uninteresting to a cultivator after the days hard work. It should be so comprehensive as to influence the daily life of the villagers, and should create real community of life in them. The adult school should become the real centre of all village activities and be the nucleus of a rural reconstruction programme or that of a better living society. It is ultimately to develop into a village club where schemes for rural development are to be framed and carried out by the people themselves. The school should be run in such a way as would

attract the people. Group singing, games and educative stories are a great help in the direction. When the people have been attracted, programmes for their progressive development and that of their villlage can be prepared. The actual work is carried out by means of a general committee consisting of all the village people.

This committee draws out the programme and entrusts its execution to different sub-committees. Each committee then draws up a detailed programme for its work and each carries it out under the directions of the general committee. The following sub-committees are generally framed :—

(1) The Education sub-Committee which looks after the literary education.

(2) Physical culture sub-Committee which organises 'akharas', 'lathi play', village games and the like.

(3) Arbitration sub-Committee to decide village disputes,

(4) Agriculture sub-Committee to look to the improvement of agriculture.

(5) Sanitary sub-Committee to look after the cleanliness of the village, draining of rain water, filling up the insanitary pits, removal of manure heaps from the 'abadi' and improvement of village lanes etc.

(6) Sales sub-Committee for the joint sale of the produce of members.

(7) Social committee for removing bad customs and extravagances.

(8) Scouting or Seva Samiti.

Similar other committees are formed according to the needs of the village. The general committee co-ordinates the activities of the various sub-Committees and is the chief executive body.

To carry out this work properly much supervision, guidance and expert advice is necessary in the beginning. To provide for this the Department has deputed a Supervisor for the area in addition to the Education Inspector. Detailed programme for work to be done in each village is being prepared by the Inspector

and the Supervisor and it is hoped would be complete soon. The actual carrying out of the programme has however not been put off. The Adult Education Inspector looks after the training of teachers and the supervision of schools. He is preparing some 250 instructive lessons on various subjects. Charts for imparting literacy and for the teaching of arithmetic and geography are also being prepared for being introduced. These charts are based on the "look and say method". In most of the villages the various sub-Committees specially for arbitration, agriculture, physical culture and public health have been doing useful work. Most of the villages are regularly cleaned, and Fasli subscriptions are being raised from the people for the work. In several villages, the village lanes have been improved by the members themselves and a large amount of earth work has been done free. The District Officer of Public Health has parapetted a number of wells in three villages and has given a number of lectures on village sanitation. He has also given several magic lantern lectures on village cleanliness, plague and cholera. Every village has been supplied with simple medicines and their use has been explained to the people and a regular account is maintained. Arrangements have also been made to record births and deaths. The training of village dais in better methods will soon be undertaken. The training of village teachers, supervisors, and adult education inspectors as sanitary scouts has been arranged with the Health Department and will take place some time in the month of November.

The Agricultural Inspector has also been going round the villages with a view to popularise improved seed, implements and artificial manure. Some of the Agricultural Committees are taking seed in bulk from the Agricultural Department and would look to its distribution and recovery. The scout master appointed by the Court of Wards trained the teachers and other adults in scouting. The training however did not appear to me to be quite suitable for the needs of village adults and the Chief Organising Commissioner of Seva Samiti association was requested by me to

draw up a programme for the scouting of village adults. The gentlemen (Pandit Sri Ram Bajpai and others), kindly took the trouble of coming over to Fyzabad and spending two days in the locality. He is convinced that the ordinary Scouting programme is unsuitable for our needs and has promised to supply me with a detailed programme in about three weeks. He has also consented to give me a special man (free of cost) to train the school teachers as troop leader for about a month. As far as possible this training in scouting would be undertaken along with the Sanitary Scout training by the Health Department.

On behalf of the Ajodhya Court of Wards we have been conducting 8 adult schools in the Masodha area. A school was also run by a District Board teacher outside the area. This school has now been closed for want of proper arrangements for supervision and guidance. Two more schools are being started within a week. Some 125 adults are at present on rolls. The average attendance is 75%. The schools have been working regularly for three months and within that period about 60 adults have finished their first book and are ready to take up the second. The Sub-Deputy Inspector of Schools has been requested to examine them and certify their proficiency but he has not been able to come so far.

On the whole the progress of literacy has been fair, but our greatest success is the creation of a consciousness of their needs among the people.

The staff employed in the area has been asked to undertake propaganda in the neighbouring villages for the formation of better living societies without adult schools and it is hoped that the number of societies will soon develop. The number of adult schools will not exceed ten, as the available funds do not permit further expansion of the activity. The adult schools have so far not been registered under the Co-operative Act. This would be done after December when they have been established on a stronger footing.

Rs. 600/- were placed at my disposal by the Court of Wards for expenses in the village schools. The actual expenditure was as under :—

(a) Pay of teachers	...	...	Rs. 317-13-9
(b) Books			
(i) for adult classes	19-14-0		
(ii) for library	60- 7-0		„ 80- 9-0
(c) Furniture ...	...	...	„ 183- 7-0
(d) Contingencies and Miscellaneous		...	„ 12- 5-0
			194- 2-9

The Registrar made a grant of Rs. 150/- for the preparation of charts. He also supplied primers for schools and some other books. Some medicines were also supplied by him from his stock. A magic lantern (with a few sets of slides) has been placed at the disposal of the area.

The Health Department too supplied some medicines like Potassium Permanganate, Quinine, and Essential Oil. The work in the area was greatly facilitated by the help received from Dr. Pattani and B. Bhoop Singh, the Agricultural Inspector to whom my sincere thanks are due.

Appendix D.

Profit and loss in the Agricultural farm at Yarki, Tahsil Akbarpur, District Fyzabad for the year 1335 Fasli.

Name of farm.	Owner of farm.	Number of bighas in farm.	Crops sown.	Area.		Produce.	Estimated value.		Expenses.		Profit.	Loss.	Remark.
				Big.	Bis.	Mod.	Rs.	a.		Rs.	Rs.		
Yarki.	Bh. Mahadeo Prasad.	80 Big.	Details	101	14	319	1,402	0		950	452		
			Paddy	21	0	84	250	0	Wages	350			
									Seed				
			Late Paddy	23	0	92	275	0	sown	200			
			Urd	5	10	22	80	0					
									Rent of				
			Wheat	23	0	140	500	0	the area	400			
			Big Peas	1	5	4	20	0					
			Gram	26	0	50	175	0					
			Masur	0	4		0	8					
			Churry			Fodder for cattle.	0	8					
			Sugarcane	0	18	„	0	8					
			Potato	0	1								
				101	14	319	1,402	0					

Profit and loss in the Agricultural farm at Yarki, Tahsil Akbarpur, district Fyzabad, for the year 1336 Fasli.

Name of farm.	Owner of farm.	Number of Bighas.	Crops sown	Area.	Produce	Estimated value.	Expenses.	Profit.	Loss.	Remarks.
				B. B. B.	Mds.	Rs.	Rs.	Rs.		
Yarki.	Bhaiya Mahadeo Prasad.	94 Bighas.		126 19 5	652	2854	2320	534		
			Paddy	24 16 10	74	296	Seed, 457			
			Late Paddy	22 0 5	132	528	Wages, 450			
			Churry	0 18 10	Fodder for cattle.	...	Ploughing charges, 150			
			Desi Wheat	8 0 0	66	330				
			Wheat Pusa No. 4	7 5 0	174	870	Building charges, 150			
			Wheat Muzaffarnagar	8 5 0	3	65	Construction of wells, 125			
			Desi Peas	10 13 0	53	212				
			Foreign Peas	0 4 0	...	14				

		Gram	19	6	0	30	120	Cost of bullocks Rs. 225			
		Jao	2	13	0	26	78	Pay of servants Rs. 98			
		Kesari	4	0	0	...	21	Fodder etc. for cattle Rs. 175			
		Desi Sugarcane	1	3	0	20	80	Rent of the area Rs. 490			
		Coimbatore Sugarcane No. 3 & 4	2	6	0	50	200				
		Urad	1	7	0	5	40				
		Bihnor. Fallow area	3	1	0	...	...				
			126	19	5	652	2,856				

Profit and loss in the agricultural farm at Yarki, Tahsil Akbarpur, district Fyzabad for the year 1337 Fasli.

Name of farm.	Owner of farm	No. of Bighas.	Crop sown	Area.	Produce.	Estimated value.	Expenses.	Profit.	Loss.	Remarks.
Yarki.	Bhaiya Mahadeo Prasad.	99 Bighas.		B. B. B. 124 14 10	Mds. 789	Rs. 2,817	Rs. 1890	Rs. 927		Due to shortage of rain the late paddy crops were very scanty all over the locality.
			Paddy. ...	32 10 10	160	400	Rs. Seed 389			
			Late Paddy...	25 10 0	50	125				
			Churry. ...	3 10 10	Fodder for cattle.	...	Wages 570			
			Arhar ...	3 7 0	26	108	Ploughing 150			
			Kesari ...	2 7 0	6	18	Pay of Servants 98			
			Gram ...	13 18 5	60	150	Fodder etc. 185			
			Desi Peas ...	7 10 0	65	162				
			Foreign Peas.	1 16 0	14	56				

		White big peas	5	17	15	71	213	Rent of the area	498				
		Desi Wheat...	0	12	0	6	20						
		Wheat Pusa No. 4 ...	19	0	0	205	715						
		Wheat Muzaffarnagar ...	19	19	5	104	490						
		Coimbatore Sugarcane No. 3 & 4 ...	0	10	10	22	70						
			124	14	10	789	2817						

Profit and loss in the Agricultural farm at Yarki, Tahsil Akbarpur, district Fyzabad for the year 1338 Fasli.

Name of farm.	Owner of farm.	No. of Bighas.	Crop sown	Area.	Produce.	Estimated value.	Expenses.	Profit.	Loss.	Remarks.
				B. B. B.	Mds.	Rs.	Rs.		Rs.	
Yarki.	Bhaiya Mahadeo Prasad.	101 Bighas.		136 9 5	782	1,615	1,837		222	130 Maunds of wheat (Desi) was burnt and remitted in an approximate loss of Rs. 325.
			Paddy ...	16 5 10	48	...	Seed 369			
			Late Paddy...	22 4 10	90	...	Wages 575			
			Kesari ...	21 16 10	10	20	Ploughing 150			
			Gram ...	13 18 5	56	94	Pay of servants 96			
			Desi Peas ...	1 8 10	14	22	Fodder 145			
			Chitauna peas.	7 2 10	85	140	Rent of the land 502			
			Foreign peas.	1 0 0	9	18				
			Desi Wheat...	23 12 10	56	140				

Pusa Wheat No. 4 ...					315
Wheat Muzaffarnagar ...	10	16	15	105	345
Coimbatore Sugar-cane No. 3 & 4 ...	2	1	10	115	531
Desi Sugar-cane ...	1	0	0	48	168
Churry ...	4	8	0	Fodder for crops.	...
				782	1,615

APPENDIX E.

THE AKBERPUR AGRICULTURAL EXHIBITION 1931.

This was the first Agricultural Exhibition organized in the District in order to launch the village uplift movement. It was held at the headquarters of the Akberpur Tahsil, District Fyzabad, on the 3rd of April 1931. There was a gathering of about 8,000 tenants and zemindars and the number of exhibits was about 6,000.

The following is the list of prizes presented for the show:—

I. Agricultural Section.—

(1)	Best seeds	... Rs. 40	... 15 prizes
(2)	Best ploughing	... „ 10	... 3 „
(3)	Best Gur	... „ 5	... 3 „

II. Educational.—

(1)	Best poems on village uplift.		... 3 prizes & one gold medal.
(2)	Penmanship and drawing of model sections and cottages by students in the District Board schools.	Rs. 25	... 5 prizes.

III. Local Industries.—

(1)	Weaving	„ 10	... 3 prizes & one gold medal.
(2)	Carpentry	„ 8	... 4 prizes.
(3)	Basket-making	„ 5	... 5 prizes.

IV. Public Health Section.—

(1)	Best poem	...	... one medal
(2)	Wrestling	... Rs. 25	... 1 prize.

V. Co-operative Department.

(1) Best lecture on Rural Uplift. Rs. 10 and a certificate.

VI. Cattle.—

Best Cattle „ 28 ... 5 prizes.

Tangible results 1930-31.

(1) Approved Stud Bulls	... Increase	... 5	per cent.
(2) Iron ploughs (Meston)	... „	... 15	„
(3) Persian Wheels	... „	... 5	„
(4) Vaccination	... „	... 10	„
(5) Pits for village refuse	... „	... 5	„
(6) Cultivation of improved sugar-cane	... „	... 50	„

Pamphlets on improved methods of agriculture were greatly in demand and were distributed free.

For the expenses of the exhibition the tenants of Akberpur Tahsil, contributed Rs. 180, and on behalf of the landlords, Raja Syed Tawakkul Husain of Lorepur very kindly took upon himself the responsibility of defraying all the expenses. He had in fact to spend more than Rs. 500. His selfless and laudable efforts were later on emulated by other members of the Taluqdar community.

THE SECOND ANNUAL AKBERPUR AGRICULTURAL EXHIBITION, 1932.

The second annual Agricultural Exhibition at Akberpur in aid of the village uplift movement was organized by the zemindars and tenants of Akberpur themselves. The Exhibition Committee consisted of the S. D. O., the Tahsildar, Bhaiya Mahadeo Prasad, Rai Bahadur B. Tirloki Nath Kapur and Rev. Swechama.

The Exhibition had the following Courts :—

I. Agriculture :—

The zemindars and tenants sent about 2,000 exhibits of various kinds of seeds. Judging was undertaken by the officers of the Agricultural Department. The villagers were shown (1) the working of a Persian wheel, (2) modern methods of gur making, (3) raising of sugarcane, (4) pressing of sugarcane, (5) a Meston plough working and several other methods of improved agriculture.

About Rs. 60 were distributed in prizes.

Two prize-winners requested that Meston ploughs be given them and it was arranged accordingly.

II. Cattle Show. —

About 100 picked bulls were sent for show by the people of the Tahsil. Judging was done by officers of Veterinary Department. The following things were shown :—

(1) Model watering Troughs.
(2) A bad watering Trough.
(3) A good stud bull of Hissar breed.
(4) A good calf by an ordinary cow and a Hissar bull.
(5) A bad cow.
(6) Bad Calves.
(7) A good cow.

III. Public Health.

The Public Health Show was organised by Dr. Mitra, Assistant Director of Public Health. It was supervised by Dr. Pattani, the zealous District Medical Officer of Health, who took a keen interest in the Exhibition. He showed three films on two successive nights on Tuberculosis, plague and cholera. There was a Baby Show which was immensely popular and drew a huge crowd of babies. Clothes worth Rs. 30/- were distributed in prizes and lectures were delivered by the staff of the Public Health Department on personal and public hygiene. The following things were exhibited.

A. *Village Improvement.*

(1) Manure pits with latrines.
(2) Refuse heaps.
(3) Soakage pits.
(4) Latrines in Melas.
(5) A good well.
(6) A bad well.

B. *Epidemics.*

(1) Posters and literature.
(2) Models illustrating infection and cure.

IV. Education.

The Assistant Inspector of Schools and the Head Master, B. Nanotam Das, were in charge of this section. Specimens of penmanship, drawing etc. were sent by the students of the Tahsil schools. Drawings of model sanitary houses were much appreciated and 15 prizes were given. Three poems on village uplift were recited by the students and they appealed to the villagers to an enormous extent.

V. Co-operative Court.

The Assistant Registrar of Co-operative Societies, Mr. Murtaza Ali, was in charge of this section. He was very active and his band of village guides staged a drama on village uplift which was very much appreciated by the village folk. They understood the subject thoroughly well and were immensely pleased. A gold medal was awarded to the best lecturer and certificates of good work were given to those who organised meetings and encouraged villagers to take up the uplift movement.

VI. Arts and Crafts.

There were two courts, one for gents and the other for ladies. Judging was done by the local leaders of the gentry. There were about 3,000 exhibits and Rs. 65/- was distributed in prizes. The show created a great interest among the tenantry. A large number of exhibits consisted of '*Garha*' cloth prepared by the villagers. 80% of these got prizes.

VII. Wrestling.

It was supervised by a Local *Rais*. About 37 matches were arranged and prizes of the value of Rs. 30/- were distributed.

The following landlords contributed voluntarily towards the show :—

1.	Raja Syed Tawakkul Husain of Lorepur M. B. E.	Rs. 300/-
2.	Raja Syed Mohammad Mehdi M. L. C. of Pirpur	„ 200/-
3.	The Taluqdar of Dhaurawa (Ekwan brand)	„ 100/-
4.	The Taluqdar of Dhaurwa	„ 50/-
5.	The Taluqdar of Teghra	„ 25/-
6.	Bhaiya Kandhai Pershad ... five medals and	„ 25/-
7.	Syed Yawar Husain of Lorepur ... ... one gold medal.	

This show attracted about 15,000 to 20,000 people from Akberpur Tahsil alone, and 50% of the exhibits were sold. The Exhibition Committee was very much grateful for the help which Raja Syed Tawakkul Husain of Lorepur rendered the village uplift movement. The exhibition of 1932 was effectively helped by him and it was attended by almost every noted official and non-official of the district from the Commissioner downwards.

Some Tangible Results.

(1) Cultivation of Coimbatore Sugarcane crop.....
.....increase.....60%

(2) Persian Wheels.....Increase.....5%

(3) Use of standard medicines.....Increase.....10%

(4) Demand for books on Agricultural and Cattle-deseases.....Increase.....25%

The following books will be found useful :—

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ERRATTA.

Page.	Line.	For.	Read.
1	8	'offord'	'afford'
1	20	'royt'	'ryot'
7	29	'subtilties'	'subtleties'
8	22	'1¼ £'	'£1¼'
18	8	'nucleus'	'nucleii'
19	8	'institution'	'institutions'
19	15	'He has been'	'He has been a'
20	18	'cattle yard'	'a cattle yard'
25	8	'] ices'	'paisas'
28	6	'exhorbitant'	'exorbitant'
34	6	...	Remove 'as' after 'so far'
35	17	'clear'	'clean'
35	19	'makes'	'make'
36	30	'neutralised'	'naturalised'
39	9	'it it'	'it is'
50	Last	'no'	'not'
58	Last	'invices'	'invoices'
62	6	'made on'	'made out'
64	29	'Judje'	'Judge'
72	12	...	'Remove 'was' after 'none but he'
81	3	'Uptil now'	'So far'
101	31	'with them and'	'and with them'
120	19	'and a small payment'	'and on a small payment'
153	3	'htus'	'huts'
169	Last but one	...	'cut for'
175	27	'Agricultural'	'Agriculture'
175	28	'deseases'	'diseases'

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