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The land and its alternative uses

by GERALD WIBBERLEY

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THE BRITAIN of the years ahead will be very much an urban society. We need not argue about the exact number of millions who will be living in these islands in the future. It is enough to know that most of these will have their employment and their interests in the city and town, even though they may have scattered their homes and many of their recreational interests much further across rural Britain as compared with today. Certainly, the numbers of people who earn their living by using natural resources, such as land, will be even lower than today and basically we will have a rural Britain which caters essentially for people with urban attitudes and urban needs. Those who are directly involved with rural Britain will be far fewer in number than those in urban Britain, though their influence might be even stronger than today. If, as we shall see later, there is likely to be a greater area of land which could be classified as "wilderness" then this wilderness will have to be the sort of wilderness that urban people want.

Let us look at the size and nature of the physical urban pattern we are likely to have over the next 30 years. We can give it in fairly absolute terms quite easily. My senior colleague on Land Use Studies at Wye College, Dr. Robin Best, has been making a series of studies as to how the land of this country is being used and he has been looking into the nature of future land requirements, particularly for urban growth. The overall picture is quite simple. Whereas in 1960 about 11 acres out of every 100 acres in England and Wales were in some form of urban use, it seems probable that by the turn of the century this proportion will have risen between 15 and 16 per cent. Though this seemingly leaves a large area of land in rural and agricultural use, it must be remembered that one acre out of every six as urban is a high proportion, and it will produce a landscape in many parts of the country which will appear to be very metropolitan and dominated by urban uses.

The important thing here is not the overall nature of urban land use, but the pattern of it from one region to another. It is very variable at the present time and by the end of this century there will be even greater disparity between those areas which are heavily urbanised and other areas

which are extremely urban. In the year 1960 the standard region of London and South-Eastern England had 35.6 per cent of its area in one urban use or another. Other heavily urbanised regions were the North-West at 28.7 per cent, the East and West Ridings at 14.2 and the Midlands at 12.7. In contrast, other regions were very lightly urbanised with, for example, the Northern Region being only 5.9 per cent, the South-Western at 1.8 per cent and Wales at 4.4 per cent.

These rates of change are widening the difference between thickly populated areas and those which are very lightly urbanised. For example, in London and South-Eastern England the percentage rate of urban growth in each 10 years seem to be running at just over two per cent increase in the total urban area. The North-Western is at 1.8 per cent and the East and West Ridings just below the national average for England and Wales, which is 1 per cent for each 10 years. The Midlands and the Southern Region, together with the Eastern, seem to be urbanising at about the 1 per cent rate, whereas the North is at 0.5 per cent, the South West at 0.5 per cent and Wales at 0.2 per cent—a rate of urbanisation obviously well below the average. This means, therefore, that the urban area in the south west is likely to be only about 5 per cent of the total by the year 2000, whereas, in contrast, the south-eastern part of England is likely to have a large part of its land in urban usage by the turn of the century.

This means that contrasts between areas are going to grow more severe. Anyone who wishes to farm in the Midlands and the south-east will quit obviously have to accept a farming existence in the future which is very metropolitan in character. These farmers will therefore face a very competitive position, not only in relation to their land, but also in relation to skilled farmworkers and trespass they will, however, benefit from the increasing scale and variety of urban services which will be available all around them and close to many of their farms. On the other hand, those who are left to farm in the south-west, the north and in Wales will be farming in areas where the competition for land and for workers will be light. It could well be that trespass would be more difficult, but this depends on how the wave of outdoor recreation is

s. There will be the environmentalists. It may be that in many areas the remuneration of farm specialists to

s by wishing the present Congress would like to see the Duke of

nodes to mechanical critical period of management in particular

29 June 1971.

handled in the future. (We will be discussing this somewhat later). It means also that areas of the west, Wales and the north will have relatively greater problems of rural depopulation, of human isolation, of surplus rural settlements and relatively poor social services in the future than they have had in the past, unless a marked change is secured in the efficacy of regional development policies whereby population, employment and services are materially steered to the more remote and thinly populated rural parts of these islands.

We must also face up to the probability that there will be a marked change in the pattern of urban growth in the next 30 years. So much of our urban network is based on a fairly dense nucleated type of settlement, with the main shopping and commercial area in the centre and its residential and more thinly scattered use appearing on the periphery of these settlements. This type of nucleus, eminently satisfactory in the days of the horse and the wagon and of a light car and lorry population is obviously very badly geared to a situation in the future where we must expect that nearly every family in the country will have at least one private motor car. The motor car, which provides a tremendous freedom to the individual and the family, is something which takes up a relatively large amount of room, to park as well as to move. Because people will want to use it at a time and in places of their own choice and because they will try to avoid paying the true economic value of the space which it uses or controls, we must expect the environment to change to suit the car, rather than the car changing to suit our own environment.

I am not over-emphasising the importance of the car. Studies made specially for the new city, Milton Keynes, about half-way between London and Birmingham, suggest that the private motor car will dominate the urban scene at least until the end of this century. Other modes of private transport may come in after that time but it does not seem probable that we will see them very strongly developed before the year 2000. The uncontrolled private motor car will shatter the nucleated town or city. Planning a town which suits the car and the lorry will obviously give a much more dispersed type of settlement, with the emphasis being on the saving of time rather than the saving of distance. It means that employment, shopping and residential areas can be dispersed, rather than put close together.

This puts the emphasis on new types of urban development, such as the loose grid-iron pattern which is being suggested for the Milton Keynes new city and the corridor type of growth suggested by the South-East Regional Economic Council as basic to the strategy for London and south-east England. The latter council has suggested that urban development should be encouraged along the main road

and rail arteries leading out from London with the rural areas between the corridors, or segments, being kept for rural purposes such as the growing of food and the provision of outdoor recreation.

I can see many reasons for this type of development and very few factors which will restrict this sort of change in the urban pattern. This is because it is in line with so many of the physical and economic forces which are bending our society at the present time. The new pattern does, however, raise many problems for those of us who are concerned about the best use of rural and agricultural land. It will mean an even greater concern that the areas of very good and adaptable agricultural land are kept free from the tongues of urban development and it also means that we will have to develop new forms of protection for agriculture and other rural interests against the bad effects of urban pressure and trespass. The 'green belt' concept will probably not be sufficient. The green belt was, after all, a device developed during a time when most towns and cities were essentially nucleated in pattern so that a ring of protected green land around the circumference of the city did effectively separate urban areas from rural and agricultural parts. This green belt could be maintained inviolate by zoning arrangements at a time when the only movement through it was by slow moving transport, by relatively few cars and by the suburban and weekend commuter trains.

Where and when tongues of urban development push out into the countryside in the future, then a new form of green belt will have to be devised. This will mean careful planning of urban areas to take advantage of natural and man-made boundaries and fences, such as motor roads, electrified railway lines and rivers and the like. It will also mean types of management agreements by farmers and land-owners whereby multiple uses which combine rural and urban needs are allowed on certain areas of open land with the landlord and farmer being aware of this decision and being compensated for it, either in terms of lower rent or by cash payment for certain types of multiple and recreational use activity. We are at the beginning of experimenting with new forms of managed rural land in Britain and the Countryside Commission is already trying out certain pilot schemes. As the agricultural consultant to the Milton Keynes New Town Development Authority, I am also hoping that certain experimental types of contract and multiple use farming will be introduced into the lay-out of this 250,000 population new city. There are precedents in relation to the Nature Conservancy and various other organisations who have protective agreements with owners and tenants and this principle needs to be extended into areas of land threatened by the new forms of urban growth.

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We in agriculture must not continue to retreat before urban growth and townspeople. We need new ways of living and farming together.

Land needed for food production in the near future

Obviously this will be the main function of rural land in the future as in the past, though it is curious that many people, when the food supply seems satisfactory, somehow forget the dominant role of the countryside in producing the greater amount of Britain's supply of temperate foods. Looking ahead at the area of land needed for food production is a difficult field of research because it involves so many estimates, but we have been looking at this matter constantly in my Department at Wye College over recent years. The results of these researches are encouraging, providing we are able to make changes in a reasonable manner.

The area of land needed for food production in a country like Britain is increased by the operation of certain factors and diminished by others. As the total number of people increase more mouths mean more food, and therefore more land under food production if everything else remains the same. As we become richer our diets also change so that we use more foods which use extensive areas of land, such as meat proteins and less of the intensively grown crops, such as potatoes and bulk vegetables. Many people forget the pressure of these two factors to increase the area under food production. As present rates of population increase and changes in food habits, we calculate that approximately eight per cent more land is needed in food production because of these factors each 10 years. There is also another important factor which is of growing significance and this is the relationship of British home food production to the balance of payments situation. We seem to have decided that this situation is long-term rather than short-term in its difficulties and, as you know, the decision has been made to increase the proportion of food grown by British farmers in the near future. The pattern of this increase is not yet clear and the rate at which it is developed depends very much on a complex of interactions between investment, prices and costs in commercial agricultural production. It obviously means an increase in arable production and it will mean great competition between urban growth and agricultural expansion in the better land areas of the Midlands, south and eastern parts of this country.

Population growths, changing food habits and a slightly increased emphasis on home food production will all increase the area of land needed for commercial food production. But in practice we know that we will be losing land out of agriculture to urban growth at the rate of something like 400,000 acres each 10 years and about as much

again of poorer land to afforestation. Does it mean therefore that we shall be running short land? The answer is No, providing that the rates increase in physical agricultural yields and in t value added by agricultural production continue increase from year to year at the rate they have shown of recent years. These rates were about 1 per cent increase in physical yields each year and about 2.5-3 per cent in the overall value of agricultural production on an annual basis. If this kind increase continues, then we can satisfy our increased food needs of the future and yet release land for urban purposes and for purposes of outdoor recreation, even if the nature of the latter demands for land are still not clear. This favourable picture for the future in relation to our land budget is or true if the following conditions continue to be realised:—

- (i) that there is no sudden explosion in the nature of urban demands so that there is very big increase in the area of land taken out of agricultural production:
- (ii) that we go on trying and succeeding in diverting new urban growth on to the area of medium to poor agricultural significance rather than taking the land which is fertile and very adaptable and where we can produce large amounts of food at low cost:
- (iii) that the balance of payments situation does not become chronic so that it means a very large increase in home food production:
- (iv) that the nature of outdoor recreation demands are not such that they reduce the effectiveness of food production in major areas.

But the pattern of agricultural production is obviously likely to change. The larger farm and the moderately sized family farm will come to dominate more and more of the farming scene. The very small full time farm and the farm employing one or two men are likely to stay under pressure. Part time farmers will surely continue to increase; that is, people who farm holdings which may be small or very large but who are not wholly dependent on the size of their farming incomes for their standard of living. These sort of people already hold and farm about 40 per cent of the agricultural land within about 40 miles radius from London. Long term trends also, to my mind, strengthen the comparative advantage of the farms that are well structured for arable production or that have really efficient systems and potential for grassland production. Economic pressures are likely to be heaviest against the land and farms which have only moderate qualities in either cereal or grass production.

And over all this looms the threat to the rural environment of mechanised agro-industrialisation

the undue enlargement of fields and removal of hedges, shaws, copses and individual trees, the growth of industrial type buildings with, often, their siting, layout and materials used all handled in an insensitive manner, the emotive problem of large scale intensive livestock units, with their attendant problems of effluent disposal.

This threat is a severe one but the challenge is being accepted by the National Farmers' Union and the Ministry of Agriculture. In particular, the Ministry of Agriculture is being given a wider remit so that it becomes more of an organisation for the creation and management of an agricultural economy that is efficient and yet retains and increases the charm and beauty of a countryside used and enjoyed by all British citizens and visited by so many people from abroad. This strengthening will surely involve grant aid for the three-fold function of better farm incomes, an improved rural economy in the difficult farming areas and the protection and improvement of the amenities of farmstead and field.

Rural land and outdoor recreation

Let me conclude this paper with some comments about the recent development of outdoor recreation. We know quite clearly the reasons why we are seeing a switch in people's leisure habits from indoor passive types of leisure activities to a large increase in active outdoor types of behaviour. Such a movement occurs when various factors of a specific nature all tend to increase together. These are an increase in the total population of the country, an improved real standard of living, a shorter working week, an increase in the proportion of people with paid annual holidays, and an increase in private mobility, such as the motor car provides and, lastly, an increase in the number and proportion of the population who have formal education over the age of 15. Research, especially American research, has shown that when all these factors are increasing strongly, separately and together, they then show themselves in a marked increase in outdoor recreational activities.

The pattern of these recreational developments is, of course, different in this country as compared with North America. The pattern of annual holidays is still largely to the coast and to the continent, but in relation to continental holidays it appears that these lead indirectly to an increase in second and third holidays which are taken within this country. Week-end and daily car travel and holidays seem to be concentrating partly on the coast and partly inland. Studies have shown that much of this traffic is to selected areas where people move only short distances from their cars. Much of this week-end and day car travel is still short distance in character, but we must be careful to realise that we have not

really seen as yet the full effect of mass private motor car use on a road system with considerable mileage on fast motor roads.

Recent experience has given us some insight as to the requirements of areas for mass recreational use in the countryside which will take the heat out of a situation where the danger is a very dispersed and damaging use of the countryside by many people. It seems that a large number of people will travel to and stay very close to certain areas at the week-end and during the day if these areas have certain facilities available. These facilities are good parking places, quick direct road access to them, comfortable chairs, good facilities for snacks, especially cups of tea, plenty of good, clean toilets, adequate space for children to play without hindrance. The facilities listed seem to be the important ones, but other things can be added as attractions and often as money-spinners. These include the provision of wild animals in a controlled environment, attractive scenic views, the provision of facilities for the use of some nearby water, either inland or sea, and careful guidance and conservation of different types of natural fauna and flora. It must be emphasised, however, that many of these extra attractions are marginal to the basic provision of simple human comforts, such as conveniences.

The situation is therefore quite hopeful. If we can provide enough of these so-called 'honeypots' in different parts of the British countryside within reasonable access to the crowded centres where people live, then the bulk of the people who want to use the countryside can use it without severe damage, and with a real increase in human enjoyment.

This will mean that the remainder of the countryside could well be much more thinly populated by the turn of the century because of the continual reduction in the numbers of farmers and farm-workers and a movement of rural service personnel out of the countryside into nearby towns and other centres so that the countryside will be thinly populated and available to the still small number of people who want to have countryside pleasures of an isolated nature.

It is argued that the development of outdoor recreation could bring in an added source of income to existing small farms in areas where agricultural developments are not sufficient to bring in farming incomes which are high enough in comparison with the earnings of people in the better farming areas and in towns and cities. Some preliminary studies which were made of this matter suggest that the location of the individual farm is all important here. Farms which are close to the coast, or at the edge of attractive inland water, are able to develop farmhouse accommodation, small camping sites and caravan sites, and that these provide useful supple-

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mentary incomes. On the other hand, farms which are in reasonably attractive countryside but away from attractive water often incur the same costs as other areas, but their revenue from visitors can be very small and can fluctuate tremendously from one summer to the next. Again, the development of pony trekking farms has been valuable, but there is a real limit to the number of of such developments that can arise which will bring in reasonable and consistent incomes throughout the year.

Another difficulty with the parts of Britain which are called the hills and uplands is that it is, in many parts, very thinly covered with trees so that only a small increase in the number of people using it during holiday periods gives the impression that the hills and ridges are heavily crowded with people. Other parts of the world where valleys and slopes are more thickly forested, large numbers of people can use the countryside, well-planned week-end cottage development can go ahead and yet an impression of rural isolation can be kept. I am thinking here of parts of Austria, and Switzerland, and the New England area of the United States.

The conflicts of opinion and action that have taken place in relation to sheep farming and afforestation do mean that large parts of the hills and uplands of Britain are not well prepared for absorbing, profitably and aesthetically, the rising wave of people who want to use the countryside from time to time and spend money within it.

Where are we going?

The Britain of the near future will be one with much greater contrasts than today. Certain areas will be highly urbanised and town and country will be inter-mixed to a much greater degree than present. Many urban areas will be pulled apart in new linear forms by the advent of private air public mobility and they will pose severe planning problems if they are going to be areas in which people will be happy, both to work and to live. Other regions will be more thinly populated and some will become wilderness areas. The remoter rural areas have no future if they try to continue with just agriculture or even agriculture and forestry combined. They must somehow be organised so that they have the benefits and the income of outdoor recreational developments. This will involve multi-use planning and it will need much greater tolerance among rural people for townspeople and their problems. The remote rural areas need the concept of development to be dominant in their planning, not that of preservation.

Yet in the lowlands and the valley bottoms, especially in the east and south of England we are obviously moving into an agricultural industrial landscape—with all its advantages and dangers. We in agriculture have, in the past, prided ourselves on our 'good husbandry'. We must bring this concept back into effective practice in rural Britain as a threat to our rural heritage is from urbanisation and urban mobility and also from recent changes in agricultural technology.

THE LAND AND ITS ALTERNATE USES

DISCUSSION SUMMARY

1. Mr. Hughes opened the discussion by thanking Professor Wibberley for putting the broad issues of land use before the Congress. Mr. Hughes emphasized his concern over the assumption that agricultural production would go on increasing indefinitely into the future. He also asked what sort of recreational development ought to be encouraged, and posed the question as to whether the development should be for profit for the few, e.g. shooting, or whether it should be for recreation for the many, e.g. country parks

Professor Wibberley, in reply, assured Mr. Hughes that the required increases in agricultural production were on a modest scale. He went on to describe the idea "honey-pot" to attract urban visitors to the countryside as: good toilets, cheap teas, comfortable chairs, and somewhere for the kids to play. Apparently flora and fauna and scenic views were not of great importance.

2. Mr. Rufai pointed out that the conditions in Nigeria were totally different from those in the United Kingdom and that land had a different role to play in a developing economy. Professor Wibberley agreed that the position in Nigeria would be

very different from that of the United Kingdom. The problem in Nigeria was to keep the rural population from straying into the towns by intensifying labour use.

3. Mr. Nix questioned if the University farm management teams should be involved in the sphere of land use. Professor Wibberley pointed out that in essence the problems of farm management's involvement in land use was a question of money.

4. Mr. E. G. Baker (UK) felt Professor Wibberley was in danger of abandoning too easily the concept of multi-land use. He felt that an extension of country parks, rights of way, etc., particularly in arable areas would be advantageous. Professor Wibberley doubted the value of such suggestions for multi-uses of land. He warned that forests in cold climates such as the United Kingdom might not be so successful in absorbing people as they were in the warmer Central European countries.

5. In reply to a question by Mr. Vlieland about the sacrifice of first class agricultural land to industry, Professor Wibberley assured him that such land should only be taken by industry where it was the only way of arresting rural depopulation.