

FORESTS FOR USE AND BEAUTY

The then Food Minister, Mr. Jairamdas Daulat^rgam, in his inaugural address to the Asian Forestry Conference, had lamented the fact that whereas the ancient Indians went to Forests for spiritual needs, in modern times only ^{material} ~~material~~ needs were sought to be fulfilled from forests. Mr. Daulatram was unfortunately using the word "spiritual" in its most limited sense, that indetical with "religious". The spiritual role of forests and nature is richer today than ever. That is one of the curious facts of human history, that love of nature has a tendency to increase in direct proportion to industrialisation. More people go to forests today for relaxation, amusement and enjoyment of aesthetic experience than in the days of the past.

The odd singular rishi, whose spiritual indebtedness to the forests Mr. Daulatram was obviously referring to, did not get to forests in a healthy sense, inasmuch as he sought them as a means of escape from the realities of the life of his age. However, discussion on this point may be barren of results, for in many minds the word "spiritual" is too rigidly tied to faith and religion to be applicable to emotional states pertaining to aesthetic and ethical experiences. Again others might say that the intensity of the emotion of a single rishi was so high - pitched and so rich in content that it would weigh the scales against the comparatively superficial emotions of thousands of holiday seekers visiting the forests today. ^{That} ~~The~~ may be true qualitatively, but in a world of large numbers quantitative factors do need attention.

And it may be wrong to assume that all who derive pleasure from nature are just holiday ^{seekers} ~~scanners~~, or modern versions of the escapist ^{rishis} ~~rights~~, but even more superficial. There may be those who divide their time between humanity and solitude, between the busy thoroughfares of a metropol^{is} and the lanes of the countryside, between the crowded city square and the hushed clearing ^{of} ~~for~~ a deserted lumber camp or a carter's ^{bivouac} ~~biroliae~~ in the forest. And these may divide their time between the different different alternatives or all of them without a sense of escape, just taking delight in the diversity of an expansive home. We do not feel a sense of escape when we leave the kitchen to go into the sitting room, and then leave this for the study.

My point in drawing attention to the increased spiritual role that nature has to play in our life today, is that it is the best means of educating people to the need for nature conservation. Almost every individual receives emotional satisfaction of some sort from the contemplation of sylvan scenery, the quiet homeliness of the countryside, placial ^d ~~h~~ stretches of water or the vigorous bubbling of a brook, and the grace and beauty of the lithe movements of wild animals. Once that individual is made aware of the nature of his emotions, he develops a taste for it and goes for more of it. All aesthetic and moral pleasures (including those of the ascetic) are really indulgences, and have to be cultivated from small beginnings to the stage when they make one's character. Love of nature is not different from enjoyment of food, conversation, wine,

books, pieces of art and the desire to do the right. It has to be cultured, and unless it is cultured mankind^d will not do anything on a large scale for the rehabilitation of the countryside not even for the decided economic advantages.

Let me illustrate this poin^tt. The English countryside is one of the most beautiful today. Its evolution, however, is illuminating to those who will build up a better countryside in India too. At first England was covered with forests. The early settlers cut it all down, for in their primitiveness they hated the forests that harboured wild animals. Again land hunger contributed to the denudation. A little was preserved by the Norman aristoc^{ra}arcy^{hh} for the pursuit of its blood-sports. In the seventeenth and eighteenth centuries and a movement of 'love of nature' spread over that country, and found expression in the creation of woods, parks, and avenues. Foreign trees were imported and patiently naturalised. Even the planting of hedges, of which a mile is now found to every 40 acres of land, was begun then. And lately Government have been planting up forests. Industrialisation and economic factors helped, no doubt, but the taste for beauty in the countryside was the main impetus.

In India we are at a similar stage. The cultivation of taste for the beauties of nature and for the beautifying of our countryside may achieve much more than conservation plans. The latter might be wrecked on questions of political expediency; even when carried out they might appear as impositions

on the population, might be carried out half-heartedly by a bureaucracy which did not understand the implications of the programme, and might be continually exposed to petty Sabotage by the population which did not grasp the full meaning of the plans.

On the other hand the aesthetic and understanding approach would not be exposed to these dangers. If a proper taste is developed plans will be easier of accomplishment. The development of taste for the beauties of nature, including understanding of the ways of nature and need for nature conservation, cannot be taken straight away to the masses. In the preliminary stages an attempt must be made to imbue the educated sections of the population with it. The process is essentially individual and can be begun with individuals only. Newspaper articles and illustrations might be the best means. An interest in natural history and landscape gardening would enrich the taste and help it outgrow wordsworthian sentimentalities.

Nature features are the back-bone of scenery, trees are its flesh and water its life-blood. Wild life wakens it into moments of animation and emotion. Man has neglected and despoilt nature, but it is within him today to develop a science of scenic hygiene, just as he developed one about his own body after the neglect of the Middle Ages.

This science might be called scenic management - it partakes of forestry, agriculture, landscape gardening, tourism, natural history and irrigation. Its development represents the attempt by man to achieve bionomic balance at a higher level

than heretofore. Management of scenery is Eynonymous with integrated nature conservation.

Lately there have been complaints that hill-stations and holiday resorts are not being maintained properly. Letters in the press say that Mahabaleshwar, near Bombay, has suffered on account of neglect. The Government of Madras tried to shift the burden of the unkeep of Ooty to the Government of India, and in the process deterioration in that place was only expected. In Ranchi roadside trees in the city, especially along its shady Main Road, have been filled indiscriminately. A beautiful ghat road, climbing down the 2,000 ft. high edge of the Ranchi plateau, has been spoilt by clear felling of forests along it. On the Calcutta Midan trees^s have been injured and are now decaying fast as a result of fungus attacks, and no attempts are made to improve the health of the trees or to replace them. All these instances call to mind the need for some attention to scenery.

Before scientific management of scenery can be undertaken, the study of the constituents of scenery is necessary. The back-bone or skeleton of scenery are natural features, and Prof. J.E.Marr, in his admirable book "The Scientific^c Study of Scenery", not only describes the geological basis of scenery but also its main lines of evolution. Any person interested in management of scenery must study that book, and also the Penguin publication "Geology of British Scenery". In India we have not yet a good photographic catalogue of our landforms, though its production would not be difficult from the photographs that are already in the stock of the Geological and the Topographical

Surveys. Such an illustrated publication might initiate proper study of scenery in the country and also encourage tourist traffic.

Management does not involve any detailed geological study of physical features and landforms, but it would not be scientific management unless it understood the skeletal structure of the piece sought to be managed. Information about any area is easily forthcoming from the "Memoirs and Records of the Geological Survey of India". Where more specific information is required enquiries might be addressed to local teachers of geology or geography, or to the Geological Survey.

If natural features are the framework of scenery, trees are the flesh, and water is the life-blood. So knowledge of the trees, their identity and their calendar - behaviour becomes necessary. One must know when some trees will be in flower, others will be leafless, some green with new leaves and others yellow with old leaves. One must also know which trees prefer dry localities, and which will not grow at any distance from water. Then there are the aesthetic aspects of trees. There are three excellent volumes entitled "Sylviculture of Indian Trees" by R.S. Troup. Though written for the forester, there is a wealth of detail in that book for the landscape gardener and those who look after the maintenance of hillstations, health resorts, natural parks or even city parks.

The management of water in a landscape is more technical. It calls for some knowledge of engineering, river-

training, and landscape irrigation. There are also aesthetic considerations in the distribution of water in a landscape besides just insuring that the scenery continues to be green and healthy and does not become emaciated and brown. The aesthetics of the matter will have to be judged by the person responsible for the management, and the engineering information can always be obtained from local engineers. Books on landscape gardening, however, do have some discussion of disposition of water in a park. They deal with ornamental waters mostly, and things are on a small scale.

The constituents of scenic beauty are comparable to those of the fine arts. In a landscape there is beauty of form, line, colour and tone. The formal values of a landscape are sculptural. They lie in the distribution of big masses of hills and rocks. An understanding of these formal values is necessary if scenery is to be opened up from the proper view-point. In fact road alignments and location of rest-houses, seats and sheds should take into account this and the other factors indicated hereafter. The forms in scenery are rarely plastic (confined to plains and rural scenes) and mostly glyptic. Pure form is more frequently met than people would expect. Conical hills are frequent, many rocks weather into huge spheroidal or cubical masses, and valley openings from the top do have a cylindrical look. Some rocks weather into hexagonal columns. Many rock exposures have a beauty which you associate with architecture.

Line is more apparent, because landscapes have been etched and drawn but never represented in sculpture. The crest of a range of hills is an obvious line. More elusive and intricate are the lines that may be seen in a meandering stream, or in trees and creepers. Colour is still more apparent, because even if people are blind to the beauty of a line drawing, they generally do see something attractive in a painted landscape. The elements which contribute to colour are trees, leaves, flowers, bark, soil, exidrich mineral content, veins of coloured rocks, houses, animals, birds, crops and people.

Tone is less apparent than colour, but people can always see the contrast between a well-lit peak and the shaded valley. The floor of the forest is frequently a chiaroscuro. But tones are best seen in glades and openings and along watercourses.

Landscape has a poetic or literary quality - its mood. Trees are its reflective and contemplative moods. The mood is conveyed in paintings, and is called atmosphere. That is no doubt a more correct name for just light and shadow, but mood is the animist element in the atmosphere, rather the projection of human feelings into the landscape. Atmosphere depends on light, which is controlled by the sky on the one hand, and on the other the natural features, trees and water. The sky cannot be managed, nor the natural features, but the effects of these can be accentuated or decreased by the manipulation of trees and water. Here we are at the main point in scenic management - accentuation or diminishing of existing effects. The arrangement of masses,

form, architectural elements, linear pattern, distribution of colour, throwing up of contrasts, reliefs and tones, introduction of the mirroring benefits of water, letting in more light or shutting out what is there by cutting trees or planting more, these constitute scenery management.

The importance of light is great. Dr. Vaughan Cornish, a British scientist and nature ^{sv}conservationist_{h h}, has made several studies of the effect of light on a landscape. Since light can be measured, and a photographic impression can be had, accurate management of it is possible. The amount of sky that should be visible, as a source of over-headlighting, and darkening or lighting up of side features can also be determined.

Scenery management begins with scientific studies but in the end becomes an art, the art of exhibiting nature at its best. The more one understands the basic constituents of the scene, and the more one has cultivated one's sensitivity to the beauties of the fine arts, the more successful one would be at the job. Man since his primitive days has projected anthropomorphic ideas into nature; he still plays with them. And in the last resort the list of scenery management would be the projection of a mood in the landscape. That is pure aestheticism and can hardly be discussed.
