

The Fruitless Exploitation of Sinharaja

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In the last 2½ decades, extensive cutting down and destruction of forests of the dry zone and the wet zone have taken place, unprecedented in the history of the country. In earlier years, i.e. before the forties, forest exploitation was limited and in British times, very little of the forest cover was touched and that was mainly for chena cultivation. The country depended on imports of timber for a good part of its requirements. It is important to recall that the British imported timber from other Asian countries such as Burma and Thailand, because they realised the value of preserving forests and were of the view that unlimited supplies could not be obtained from the forests in Sri Lanka. After the country gained Independence, a clear-cut policy on the exploitation of forests and reforestation has not been laid down and economic development policy itself paid little or no attention to the conservation of natural resources. Plans prepared so far for economic development have not dealt with the urgent problem of conserving existing forest resources and rapidly introducing a nation-wide program of conservation and reforestation.

In the fifties and after, much less attention was paid to this aspect, because there was a school of thought in the Island that there were adequate forest reserves both in the wet and in the dry zones, particularly in the former, to meet the country's requirements of timber, as fuel, for railway sleepers, for building construction, plywood making and other uses. In relation to the size of the population in the period before the forties, the level of industrial and agricultural development of the country and the requirements of fuel, it is presumably correct to say that the forest reserves then available, were adequate. But since then the extent of exploitation has gone up considerably. After the commencement of river valley development schemes that started with the Gal Oya project, extensive areas of the dry zone forests were cleared for land alienation to the peasantry and to increase the availability of land for domestic agriculture. Every successive river valley development scheme has resulted in the extensive clearing of dry zone forests, in addition to the continuing destruction of forests for chena cultivation.

It is presumably a correct estimate that today approximately two-thirds of the wet zone and dry zone forests no longer remain. From the point of view of timber yields, the dry zone forests provided only limited quantities of economically useful timber. According to an estimate made in 1961, out of a total forest area of 6.12 million acres, 5.3 million acres are in the dry zone. However large this area is, the quality of the natural forest in the dry zone is far inferior to that in the wet zone. According to the Forest Inventory of Ceylon (1961), 96 per cent of the dry zone forest is categorised as low or unproductive.

The most popular varieties of timber from the dry zone forests have been species such as satin and halmilla. The natural regeneration of these varieties have been extremely slow and it has not been possible for man to propagate these species in plantations.

In the late fifties, the Hunting Survey Corporation estimated the area of wet zone forests at 619,800 acres, and in 1970 the estimate of the Forest Department was 557,000 acres. But these seem to be overestimates considering the phenomenal destruction of forests that have taken place. In the case of the wet zone, the removal of a good part of the forest cover in this region has taken place since the early fifties. The main factor behind this has been alienation of land to peasants and the opening up of land for agriculture. Since the mid-sixties, however, the major factor behind the reduction of the wet zone forest cover has been the exploitation of the limited timber resources in this region for the two plywood complexes of the Plywood Corporation located at Gintota and Kosgama. Had the Plywood Corporation not proceeded with the manufacture of plywood and timber products, it is very likely that a considerable part of the wet zone forests may have still been preserved, despite the fact that land alienation for settlement and for cultivation purposes went on indiscriminately from the fifties onwards.

The establishment of the second plywood factory at Kosgama, resulted in the mechanised logging of the oldest primeval forest in Sri Lanka, the Sinharaja forest. To feed the first plywood factory, established in the 1940-45 period at Gintota, the State Timber Corporation and the Plywood Corporation had proceeded with the exploitation of other rich wet zone forests at Kaneliya, Dediagala and Nakiadeniya.

The exploitation of these forest groups in the wet zone were based on wrong estimates and false notions about the availability of timber. The correspondence between ministries and government from 1965 to 1970 clearly shows that certain bureaucrats had a vested interest in giving incorrect estimates and wrong advice to the authorities because they were anxious to proceed with the expansion of the Gintota factory and the establishment of the elaborated wood working complex at Kosgama. The Kosgama factory which has been referred to as the largest plywood and woodworking complex in Asia obviously had to tap the richest sources of timber in the Island. Although at that time, the Sinharaja forest covered about 25,000 acres, the impression given to the authorities was that this 25,000 acres could on a continuing basis feed the large complex at Kosgama, whose main object was to make the country, in the first instance, self sufficient in plywood for tea chests and also to make a wide range of other products from the timber that was used for the plant.

The proposal to exploit the Sinharaja forest should have, from the outset, been looked upon in the context of Sinharaja as a unique national asset not to be touched by man but handed down to posterity and to the world at large as one of the few remaining tropical rain forests. Quite rightly, this proposal engendered much controversy and tremendous opposition from the public, and the government in power at that time, took little heed of the public outcry that arose from the decision to exploit the Sinharaja forest.

The Sinharaja forest consisted of about 25,000 acres of tropical rain forest and it is situated in the regions of the Southern and Sabaragamuwa Provinces which receive over 200 inches of rainfall every year. The forest itself is unique and a visitor to this forest is impressed by the distinctive characteristics of the vegetation found nowhere else in the Island. Most of the trees stand well above 100 to 150 feet, and unlike trees in other forests they have very straight trunks with an average girth in most cases in excess of 8 to 10 feet. The rich vegetation at the bottom is so dense, that people cannot easily walk through the forest. Villagers in the area have cut little known paths through the forest to get from the Kalawana and Veddagala side of the forest to the southern parts bordered by Deniyaya and Morawaka and to a few isolated hamlets on the fringe of the forest.

The proposal made by the Plywood Corporation in 1966 was to set up the second plywood factory at Kosgama with the object of producing 60 per cent of the 4 million tea chests required by the country, while the balance 40 per cent would be produced by the expanded Gintota factory. The estimates then made indicated that the Gintota factory would require 1.2 million cu ft of timber and the second Kosgama factory would require 1.8 to 2 million cu ft of timber making a total of approximately 3.2 million cu ft. In the integrated second mill, the waste timber consisting of cores and waste veneer would be converted into chip board. Other off-cuts of timber would be used to make battens for plywood chests and furniture.

This proposal was made by officials of the Plywood Corporation, who had in earlier years worked in the Forest Department as specialists. Apparently a controversy developed at this time between the Forest Department officials, who were more knowledgeable about the forest resources in the country and who were conservationist oriented, and the Plywood Corporation officials who were primarily keen to build up a huge industrial empire. The plywood could not only feed the tea export industry but also be used to make a variety of other wood products. These could easily be exported if the domestic market could not absorb them.

Throughout 1967, the Forest Department cautioned the officials in the Plywood Corporation who had given advice to the Ministry of Industries and Fisheries, that adequate raw material was not available to feed the gigantic Kosgama factory. The Forest Department virtually advised against embarking on a new project which

would require additionally some 1.8 to 2 million cu ft of timber, annually. The latter requirement was in addition to the growing demand for timber both from the wet and dry zone forests for building construction, railway sleepers, other woodwork and as fuel. By the end of the sixties, the timber requirements for all these purposes had gone up rapidly mainly due to the increase in the size of the population and the progressive diversification of economic activities which involved a more extensive and wider use of timber. Despite this, the Ministry of Planning and Economic Affairs had been in favour of this project as far as the manufacture of plywood chests was concerned. The Ministry of Planning and Economic Affairs however, repeatedly pointed out that the Kosgama site for the factory was unsuitable since the bulk of the raw material had to come from the wet zone forests and because of the heavy additional cost of transporting timber.

In a memorandum addressed to the Permanent Secretary of Land Irrigation and Power, dated February 1960, the Chairman of the Plywood Corporation at that time indicated that he had obtained approval for an integrated plywood complex and that he would proceed to establish this factory which would go into production by 1970. Apparently, at this point, even a World Bank report had given support to this project. This Report had recommended "Erect a new plywood plant (near timber supplies) which would be double the size of the expanded Gintota, provide adequate capacity for the production of battens and install a chip-board unit". The Ministry of Planning and Economic Affairs, however, was keen on ensuring that the project should be restricted to the manufacture of plywood and chipboard, which would curtail timber requirements, because the Ministry of Planning seems to have been aware that timber was inadequate to feed the proposed complex.

With regard to the exploitation of Sinharaja forest, the Ministry of Industries and Fisheries in July 1967, requested that the Sinharaja forest should be handed over to the Ceylon Plywood Corporation to supply the new mill. At the same time, the Chairman of the Plywood Corporation in February 1968, requested the release of this forest to the Plywood Corporation or that the Plywood Corporation work as a contractor for the Forest Department for the supply of timber. The request of the Plywood Corporation for the release of the Sinharaja forest was not accepted.

In October 1968, the Plywood Corporation had put forward a further proposal to increase the all round capacity of the project. But the Ministry of Planning and Economic Affairs repeatedly advised against increasing the scope of the project and particularly the establishment of the furniture plant. With the proposed increased capacity of the mill, the timber requirements of this project which was originally estimated to be in the region of 2 million cu ft went up to 4 million cu ft per year and what was intended to be the second plywood factory by then had turned out to be a massive woodworking complex.

With a view to meeting the timber requirements for the Island, the State Timber Corporation had in 1968, requested Canadian aid for the establishment of a logging project for timber supplies. This request resulted in a team of Canadian consultants arriving in Sri Lanka in November 1970. They submitted a report entitled "On Site Study and Plan of Operation for a Mechanised Logging Project in Sinharaja Forest, Ceylon". Soon after, a loan agreement was signed between the government of Sri Lanka and the government of Canada, in February 1971, to assist financing the project. This was followed by the signing of a contract between the State Timber Corporation and Messrs Reid Collins Associates of Canada on 1st November 1971 for carrying out the mechanised logging project, and the agreement indicated that the exploitation of the forest would start in October 1972.

By the time the mechanised logging had commenced at Sinharaja, the total timber requirements of the Ceylon Plywood Corporation had gone up to 5.5 million cu ft. This was in addition to the large quantity of timber required for other purposes such as housing construction, railway sleepers and fuel. The timber required by the Plywood Corporation to feed its two factories at Gintota and Kosgama had to be supplied from the wet zone forests because there was no timber available in the dry zone and furthermore, the species available in the dry zone being hardwoods were not suitable as raw material for the plywood factories. By this time, i.e. in 1972, over 70 per cent of the harvestable timber in the wet zone had already been exploited and these included smaller forests such as Kaneliya, Dediyaigala, Ruhunukanda, Morapitiya and Nakiadeniya. Of what remained, Sinharaja was the largest unexploited forest in the wet zone.

Arguments were presented by interested parties that unless Sinharaja was exploited it would not be possible to provide the timber requirements of the Kosgama complex. The government in power at that time, seems to have accepted this view. While the Canadians who were overenthusiastic about the conservation of natural resources in their own country did not consider it wrong to enter into a contract with the State Timber Corporation to start a logging project in the only remaining primeval forest in Sri Lanka.

The irony was that while the Kosgama complex alone required 4 million cu ft of timber, the maximum amount that could be harvested from Sinharaja under intensive exploitation was only 3 million cu ft and to ensure the balance requirements further cutting down of the other denuded wet zone forests, such as Dediyaigala, Ruhunukanda and Morapitiya, had to be undertaken. All this resulted in plans for the more intensive exploitation of Sinharaja. Had the production of the plywood complex at Kosgama been limited to the manufacture of plywood only about 1.4 million cu ft of timber as planned originally would have been required. In which case, the proposal for logging Sinharaja could have been confined to modest dimensions and the project itself could have been spread out over a much longer period.

The Canadian logging contractors indicated that Sinharaja like other wet zone forests that were being exploited would not be clear felled and that trees would be cut down according to the felling rules of the Forest Department. This means that felling would not be permitted on either side of streams within 2 chains and trees of only 4 feet in girth and above would be felled and extracted. Furthermore, an adequate number of seed trees of large size as well as all trees with a girth of less than 4 feet would be left unfelled. The Forest Department throughout its long history has adhered to its own rules; and up to this time hardly any wet zone forest had been exploited by mechanised means. In fact, visits to the Kaneliya, Dediyaigala and Nakiadeniya forest reserves, showed that elephants were being used in harvesting timber and this had been done very systematically with minimum damage to the rest of the forest cover. Vehicles have been used only for the transportation of timber from the site to the factories.

Repeated visits to Sinharaja showed that the Canadian methods of exploitation were not only most unsatisfactory but that if proceeded further, in ten years it would result in the clear felling of the entire Sinharaja forest complex. For the first time, mechanised logging on an extensive scale was practiced in the Sinharaja forest. The Canadians used power driven chain saws to cut down trees and these were hauled away by timberjacks which weighed from 7 to 8 tons and each having driving wheels which were about 5 feet in diameter. The first destructive element in the felling operation came with the felling of the larger trees sometimes 12 to 15 feet in girth and standing more than 120 feet clear of the base. Since the foliage in the Sinharaja was very dense, and large trees stood close to each other, the felling of the huge trees resulted in extensive damage to trees that were of less than 4 feet in girth which were not cut down under the terms of the contract, and those that were earmarked as seed bearers.

Furthermore, once the trees fell on the ground, the second generation of the plants which were coming up were completely crushed and destroyed. For the operation of timberjacks, an extensive network of logging roads and skidder tracks had to be carved out. The operation of the timberjacks had serious ecological effects and tended to destroy ecosystems that had existed for centuries. For one thing, the heavy machinery tended to compress the soil, thus inhibiting rapid regeneration of the forest. Furthermore, the mechanical dragging of the huge logs, sometimes 25 feet in length resulted in enormous gullies and furrows. The extensive network of roads and skidder tracks precipitated heavy erosion and the removal of the rich top soils which had been responsible for nurturing the unique vegetation. The gullying and the furrowing effect of the rains resulted in a complete imbalance of the natural ecosystem and resulted in a progressive change in the character of the forest with very low prospects of the natural regeneration of indigenous species of trees.

The streams of Sinharaja before the Canadians started logging operations used to be quite clear, free of sediment and one could see the bottom of the streams with pebbles and fish, even at times when it rained very heavily. With the mechanised logging the streams for the first time, became muddy carrying away large quantities of mud, gravel and suspended material into the main rivers. The skidder tracks and roadways turned into new streams which tended to greatly reduce the absorptive and water retentive powers of the forest, discharging much larger quantities of water rapidly into the Kaluganga, Nilwala and Ginganga causing flash floods in the lower reaches.

The original plan was to exploit the whole of Sinharaja on a selective basis to feed the Kosgama complex over a period of 10 to 12 years and then to rest the exploited areas for the next 10 to 15 years. Knowing well of the disastrous consequence of this program, the Ministry of Agriculture and Lands which was in overall charge of the exploitation of Sinharaja, indicated that it would take action to demarcate a 1000 acre reserve within Sinharaja under the International Biological Program and this block was to be kept free of exploitation and would be left intact as a part of Sinharaja in its natural condition. It later indicated, that it was willing to extend this area to 2500 acres and this was on the basis of representations made by the Wild Life and Nature Protection Society. Professor Ashton of Aberdeen had also pleaded for a reservation of at least 2500 acres.

By the time the mechanised logging project had commenced in 1972, the original estimated acreage of Sinharaja of about 25,000 acres had got reduced to something like 20,000 acres. This was because the villages in the vicinity, both on the Kalawana, Veddagala side and the Deniyaya, Morawaka side, had encroached into the forest with their chena and other cultivations and the perimeters of the forest had rapidly receded. To those outside the few villages on the periphery of the forest, before 1970, Sinharaja had not been accessible because there were only a few little known jeep tracks and paths but the Canadian contractors before they commenced the logging project built an enormous highway some 40 feet wide from Vedagala, which in turn was linked to the Colombo Ratnapura road, into the heart of the forest. This road was so wide, that buses and cars in good weather could have cruised into the center of the forest at 40 m.p.h. This road was built to facilitate movement of heavy machinery into the forest, including timberjacks, tractors, mechanical loaders and for the 60 feet long Hayes timber carriers that carried the harvested logs through Veddagala to Kosgama.

The accessibility to the heart of Sinharaja through this all weather road, resulted in a large number of visitors into the forest, quite apart from the contractors and officials of the Timber Corporation. Along with these visitors, the original vegetation and the

ecological balance came to be upset. For the first time, man had taken with him species of plants and creepers which were not found in the ecological systems in Sinharaja but was found in the rest of the country. Biologically and ecologically, this was one of the most serious adverse affects of the opening of Sinharaja, because natural vegetation in the area came no longer to be preserved but foreign, and non-indigenous species took firm root. What was more, approximately 8.5 per cent of the exploited area, consisted of skidder tracks with its hard compressed soils initially, which with the onset of heavy rains became the beds of new fast-flowing streams.

Since more than 10,000 acres of Sinharaja were exploited by the Canadians, the conclusion is inescapable that the forest that will regenerate itself, now that the logging program has been belatedly terminated, would not have the same characteristic as the original forest which was inaccessible to man. Furthermore, the Forest Department which was partly responsible for the replanting of exploited areas started to plant species like mahogany and jak which were not at all indigenous to Sinharaja.

The present Government took early steps to terminate the Canadian project, but in the preceding 4 to 5 year period, intensive exploitation of Sinharaja had taken place and not more than 5000 acres of the original forest presumably remained unscathed. The writer who was a member of the George Rajapakse Committee, that reported on the Sinharaja forest and the Kosgama Woodworking complex in an unpublished report to the Committee in 1972, stated "I am not sure what the views of the other members of the Committee are, but as for me I am totally opposed to the exploitation of Sinharaja in any form. This is not based on sentiment but on a much broader, economic understanding of the problem."

As the writer anticipated in 1972, the economic gains from the Kosgama complex have been minimal, if not negative. A shortage of timber, despite the exploitation of Sinharaja, in the period 1974 to 1977, has plagued the Kosgama complex. The latter has not been able to work even to 50 per cent capacity. The writer had stated earlier "Even if Sinharaja is exploited, there is no guarantee that adequate timber supplies will be available to feed the complex, after the sixth year. The Canadians will be exploiting more than 75 per cent of Sinharaja in the first four years; thereafter, the 25 per cent of the forest left over may be sufficient for a further two years only. This will be all that will be left for the Ceylonese to do." After the fruitless project on Sinharaja and its prudent termination, though belated, Sri Lanka is perhaps left only with much less than 25 per cent of the original majestic forest, and that too, is bereft of the best species of trees and the very best examples of large flora which Sri Lanka was proud to possess before the foolish expedition to Sinharaja was approved by an ill-advised administration.