

Donald R. Jones, the Training Officer of the Development Bank, Fiji referring to the article by B. M. A. Balasooriya on the Brain Drain in Vol. 1, No. 6 of the September 1975 issue of this Review made these observations.

Gentlemen,

Reference: Economic Review, Volume 1, No. 6
September 1975

As an expatriate who has been working in several developing countries for the past eight years, I was especially interested in the article, "The Brain Drain", by Mr. B. M. A. Balasooriya. This article brings many factors to light but it prompts me to believe that some of the underlying problems behind the brain drain might be emphasized. We see these factors in the following manner:

Faults in Foreign Education - Aid programmes which provide grants and aid to send students abroad are, in many cases, the cause for the brain drain. Developing countries should insist that such aid should be used to upgrade local university staff rather than sending students abroad. Let's face it, the student who goes abroad to live in a sophisticated developed country cannot help but be tempted by the high standard of living. If he was not exposed to foreign living, he would not be so eager to leave his own country.

Misdirected Education - While industrial development is the goal of most developing countries, the priority concern (in most cases) is to increase the productivity of their agricultural and natural resources. The basic educational need is not just for engineers but for agronomists and general agriculturists. Yet the local universities seem to ignore this factor—and local governments seem to condone this educational practice.

Over-Education - While we acknowledge the critical need for doctors, the need in most developing countries is for a practical, down-to-earth medical corps to work in rural and agricultural sectors. These men do not require lengthy foreign training—what they need is a year or so of basic medical training from a qualified doctor. This same over-education of engineers and other specialists, is a needless waste of time and money.

Poor Educational Planning - Long range government planning in many instances, is based on the various types of foreign aid available (plus local financing) rather than upon the specific educational needs of the economy. If, as example, the need is for 200 doctors 300 teachers 100 engineers, etc., per year for the next five years, the educational programme should be based upon this need. Instead, the universities continue to pour out graduates in literature, economics, history and the like which have little regard to the fundamental needs of the struggling economy. Such graduates, together with surplus engineers, etc. wish to leave the country due to unemployment or under employment. They create student unrest.

Preferential Education - Those students going abroad for their education, in many instances, come from wealthy families with political influence. These students are able to "buy their way" out of the country and some of them have little intention of ever returning if they can find foreign employment. Political influence and preferential treatment could be stopped if the developing country really wanted to control this practice.

With all respect to Mr. Balasooriya, we feel that the underlying factors which cause the brain drain from many developing countries can be observed by reviewing the points listed above. It boils down to improper use of foreign aid and the lack of purposeful educational planning in many of the developing countries.

Sincerely,

Sgd. Donald R. Jones
Training Officer
Fiji Development Branch

"The Brain Drain", More Views

Dr. Balasooriya's Observations on
Comments made by Donald
R. Jones

I am thankful to Mr. Jones for his valuable comments and wish to make the following observations on some of the factors that have been emphasized by me.

In my opinion the migration of professionals to the developed countries from the 'third world' is not primarily due to their being educated abroad. The basic cause is the staggering disparity in the standards of living between the developed countries and the third world which is a result of unfair terms of trade that have prevailed, and the international recognition of local qualifications and the ready marketability of professional skills in most parts of the world. It would be futile to attempt to keep the Third World ignorant of the standards of living existing in the developed countries. Of course although it is not the solution to the problem I agree with the writer that the developing countries should insist that aid programmes should be used to upgrade local universities and other such institutions, for it would help to stimulate and increase scientific activity locally, on problems that are relevant and urgent in the local context.

While agreeing with the writer that poor educational planning could be one contributory factor for migration of qualified personnel one must also bear in mind that although the immediate needs of the economy may not warrant running the stream of tertiary education at its full capacity, apart from expanding it, the aspirations of the people in seeking higher education should be given the consideration it deserves. Further, if it cannot be helped, it would be better if the unemployed mass has satisfied its thirst for the highest levels of education, for they would then be better equipped to seek gainful employment somewhere, further, if necessary even force structural changes in the economy and in society which may in turn help to remove existing disparities.

**Mr. S. A. Karunaratne comments on the article by
B. M. A. Balasooriya in the Sept. 1975 issue of the
Economic Review**

Dear Mr. Editor,

I have read with interest Dr. B. M. A. Balasooriya's feature article in the September 1975 issue of the Economic Review. I wish to make some comments on the amazing claim that has been made (which received wide publicity in the daily papers) that, the emigration of 320 professionals would result in a loss of Rs. 128 million per year to Sri Lanka. I shall try to show that the conceptual basis of this estimate is incorrect, and that in fact the 'loss' involved could be very much smaller.

Firstly we note that the stock of such professionals is greater than (in fact nearly 70 times) the annual drain; therefore the correct concept to use when estimating the consequent drop in production would be the marginal product of a professional and not the average product as Dr. Balasooriya appears to have done. In a situation where the stock of the other co-operating factor of production: capital, is either constant or is growing at a slow rate, the addition to the total product that can be made by using one more unit of professional service i.e. the marginal product of the professional's service, is likely to be very much lower than its average product, specially so if there are indications that certain classes of professionals are in over-supply. For what contribution we may ask, could an engineer make if there are not enough work-sites or factories where he could be gainfully employed. If we can place some value Rs. X (say) on his contribution, then the loss to the total product that is caused by his departure would also be Rs. X; and the average product is a different matter altogether.

Further, the real fallacy in Dr. Balasooriya's argument is that an emigrating professional is considered only in his role as the owner of a factor of production; what about his role as a consumer of goods and services? Let me elaborate. We shall for the moment assume that Mr. P. the professional is paid a wage equal to his marginal product: Rs. X per annum in Sri Lanka. What does he do with the money? He buys and consumes goods and services produced by others and perhaps by himself. When Mr. P. emigrates, truly it is a cost to the country, since the total product is reduced by Rs. X; it is also a benefit to the country in that Rs. X worth of goods and services which Mr. P. would otherwise have consumed can now be enjoyed by the rest of the population. Therefore the costs and benefits cancel off? By the same argument, in the country to which he migrates, if he is paid a wage equal to his marginal product no surplus benefit is created there either. Therefore I submit that the suggestion that one consequence of the Brain Drain is a flow of disguised aid from Sri Lanka to the developed countries is the outcome of a bit of confused thinking. My reasoning is not essentially affected if the professional in question saves a part of his income. What he saves is nothing but a claim on goods and services produced in the future. It is not a benefit that he transfers to the rest of the population.

In order to show that a country incurs a net loss by allowing a professional to emigrate, we must show that he is paid a wage that is less than his marginal product. Suppose Mr. P's wage is Rs. Y then the net loss to the country would be Rs. (X-Y). Common sense tells us that in terms of its magnitude this difference cannot be anywhere near the average product figure used by Dr. Balasooriya in his calculation.

I am willing to agree that for many professionals working in this country (X-Y) is positive. In other words they are paid a wage less than their respective marginal products. If this position is accepted why do we grudge their departure? We are, after all not paying them a "fair" wage. However this kind of reasoning begs a definition of the marginal product. There are two possible approaches. One is to take purely static and narrow views where only the traded benefits and costs in a given short run context is measured. The other is to take a broader and perhaps a dynamic view, where even untraded benefits and costs of production activity is included. When we take the latter approach, which I think is the more appropriate one in this context, we are talking about what are called 'externalities' in the province of Welfare Economics. Thus one question that may be asked is whether only that part of our professional's product, which is traded in the market is taken into account or whether the untraded benefits that his services may confer on the society are also added on. One example of such an untraded benefit is the research and thinking that the presence of a well qualified and active professional may stimulate. Such benefits are of course, hard to evaluate.

The point I wish to make finally is that any calculation of the loss to Sri Lanka from the Brain Drain should proceed from an evaluation of such external benefits wherever practicable. Such an evaluation will no doubt prove very fruitful in finding solutions even to other wider problems of economic policy.

May I also refer your readers to a very informative further discussion of the subject in Mishan, E. J., 21, Popular Economic Fallacies, Pelican Paperback, 1971.

Thank you.

Sgd. S. A. Karunaratne

Colombo, 16-10-75.

**DR. BALASOORIYA'S
OBSERVATIONS ON
COMMENTS MADE BY
S. A. KARUNARATNE**

I am thankful to Mr. Karunaratne for his valuable comments.

However, I cannot fully agree with the writer's contention that 'the correct concept to use when estimating the drop in production due to emigration of a professional would be the marginal product of a professional and not the average product'.

My reasons are as follows:—

1. (a) A very large majority of those who emigrate are those who are in employment and who have gained varying degrees of experience in their respective professions. Although there may be an over-supply in any one profession as a whole, an experienced person cannot be replaced with immediate effect. Therefore, there is bound to be a drop in production.
- (b) At one end of the scale, we have lost a large number of very experienced and senior professionals too, eg. reputed surgeons, engineers and administrators. Their productivity would be many times more than the average taken in this exercise. The void left by the departure of some of them may in fact never be filled. At the other end of the scale we have those comparatively young professionals whose production would be marginal as the writer claims. Therefore, on the whole it would not be wrong to estimate the loss in production on the basis of the average productivity.
2. I disagree with Mr. Karunaratne's argument that when a professional emigrates the costs (in terms of his consumption) and benefits (in terms of his production) cancel off. If the professional Mr. P is paid a salary equal to Rs. X per year, his consumption of goods and services, I agree would be about Rs. X per year. But it is fallacious to assume, as Mr. Karunaratne has done, that if his salary is Rs. X, his contribution to production is also Rs. X only. In fact, his production would be many times X. (Except of course, the exceptions.

One always finds those in any society who may spend a whole day in an air-conditioned office but whose contribution to production could hardly justify the salaries they receive). Therefore when a professional emigrates the net result is a loss to his country. The same argument holds in respect of disguised aid to developed countries as a result of 'brain-drain' which again has been questioned by me.

One of the assumptions made by B. M. A. Balasooriya in his article was based on the figures computed by Nath Amarakone. Dr. Amarakone adds his observations to Mr. Karunaratne's comments.

Editor,

The comments made by Mr. S. A. Karunaratne, which you have sent me for my observations, seem to arise from the reference that Dr. B. M. A. Balasooriya has made in his article on the computation of the economic loss to the country as a result of the brain-drain of the professionals. I find that Dr. Balasooriya has used the figure of Rs. 400,000/- as the economic loss to the country on account of the loss of a professional, a figure used in my address to the Organization of Professional Associations.

In the arguments that are submitted by Mr. Karunaratne he merely contends that the loss would not be as much as the figure quoted by Dr. Balasooriya and adduces factors that would be considered in a more exact analysis. However in the end, in his own words, he states that "the point I wish to make finally is that any calculation of the loss to Sri Lanka of the brain-drain should proceed from an evaluation of such external benefits wherever practicable. Such an evaluation will no doubt prove very fruitful in finding a solution even to other wider problems of economic policy".

While I would agree with the writer that to attempt an evaluation of the loss incurred by the country is necessary any detailed analysis in my view would not either be practicable or useful. In making an evaluation of the possible damages it was not my intention to produce any set of exact statistics. The factors that have to be considered are in themselves subject to such deviations,

internal and external imponderables, that any attempt to be precise would be almost impossible and futile. The final result that one would arrive at too would be of no consequence. As it appears to me, the calculations based on very crude assumptions and statistics in themselves prove that the losses are enormous compared to the gains and remedial measures have to be found in any case. My assumptions, however crude, have been made with a view to pointing out the seriousness and the gravity of the situation and the evaluation based on these assumptions is therefore intended to shock the reader and the policy maker which will in turn drive him to find a solution.

For purposes of further clarification I may state that the model of employment and contribution to national production was based on the following broad assumptions:—

1. The estimated unemployment in the country being in the region of 1 m. out of a working population of about 4.5 m. is an extremely grave situation which should concern the professionals as much as the policy makers.
2. Under this situation any professional has tremendous opportunities extended to him to make use of the vast pool of unemployed in order to increase the national productivity.
3. The resources of the country can promote such a process of productive employment.
4. The policy and procedural problems as they exist today can be solved in order to promote the above.
5. The manpower requirements to ensure an efficient model of employment as outlined in my detailed analysis presented in the "Dilemma of Higher Education" a report submitted to the Minister of Education in 1971 are applicable and the number of professionals who are found in the country are inadequate to meet the requirements if the earlier exercises are to be put into practice.
6. Every employed person does yield a minimum return of Rs. 10/- per day according to the current value of money in the country. This is attributed to entrepreneurship brought

about by the professional categories and improvement in efficiency in their productivity by technological processes introduced by them.

7. The useful working life span of a worker is considered as 25 years.
8. A minimum level of consumption takes place whether a person is employed or not.

On the above basis you will see that the total productivity per individual over his life time amounts to a figure in the region of Rs. 0.5 m. after allowing for leisure and holidays although I have used the figure of Rs. 400,000/- in my estimates.

However, it would appear that the above factors are idealistic and unreal according to the exact set of socio-political conditions as they exist today. Various factors such as unemployment of professionals or their under-employment, or being frustrated about the conditions prevailing in the country or being eager to benefit by more favourable conditions that exist outside the country are all factors that will in any case reduce the efficiency of the professionals and result in a loss to the country. Under these conditions the emigration of such persons may even result in economic gain to the country. Parkinsonian laws are not without their place even among professionals. However an argument based on such premises is a negative, defeatist and politically unacceptable thesis. Besides, the state and the people which cannot grapple with the problems which are in the way of development would be held up as doomed and without a future. I cannot agree that this is the case of Sri Lanka. Finally it appears to me that Mr. Karunaratne in his desire to be accurate and theoretically realistic, fails to recognize the purpose of the whole exercise. If some of the professionals hang up their gloves and depart or are stopped in their activities, then it is time that the others discover their potential in finding a solution in the broader realm of national decision making and wider political activity, rather than justify pessimism and political impotence.

Nath Amarakone

Colombo.
29th October, 1975.