DISCUSSION

I. Johnson (Jamaica) :

I'd like to suggest a correction, make an observation and ask a question.

In your paper, Prof. Sauer, reference is made to the Land Use Office in Jamaica which deals with Soil Conservation problems. We actually have a Land Use Division which is responsible for Soil Mapping and Land Use Capability Plans. In addition, agricultural engineering asists through programmes of irrigation and drainage in Soil Conservation Programme. Soil conservation is carried through by the Extension Staff who advise farmers on plans on their farms. We have taken the view in Jamaica, that conservation on the individual farm is largely a part of what should be good farming practice.

Now this raises the question of what happens in terms of the individual approach as against the national approach. I do not think anywhere in this paper reference has been made to the high cost of instituting some of these practices which are necessary for conserving land. I think it is true to say that in the United States and elsewhere, the view has sometimes been taken that the present population is not going to expend a lot of money for posterity. And the question has always been a difficult one in terms of getting conservation practices 'set in the ground'. I'd like to hear your comments on that, Prof. Sauer.

E. Sauer :

Thank you for the correction regarding Jamaica's Soil Conservation Programme. Regarding the economics of conservation, there is often a difference in the individual interest and the national interest. Conservation that is in the national interest in some areas is so costly that the individual farmer certainly could not afford it. Some of the conservation work in Barbados may be a case in point. There's work going on there that the individual farm operators could not afford, though from the standpoint of the national interest it's a good investment, and the country is making this investment.

I. Johnson :

The question arose from my observations on conservation practices followed in Jamaica — the fact that there are two scales, the national scale and the scale on the individual farm. Bearing in mind that some practices like terracing are not normal farming practices and may be costly, the question of who pays the cost of this in terms of the deferrment of income — expenditure today for posterity becomes important. I think this question arose when the United States Department of Agriculture (U.S.D.A.) first started soil conservation practices and programme. They found trouble with this. How would you see this applying to the West Indian situation in which land definitely is more scarce than it is in the United States.

E. Sauer :

We in the United States felt that there were certain investments that we could afford to make nationally to improve land and maintain it for posterity that the individual farmer could not do. In our small watershed programme in the United States, where a conservation programme is applied to the entire water-shed, the United States government (the public) shares with farmers the cost of those conservation practices that are in the public interest. The farmers bear the cost of such things as fertility treatment, contouring, terraces, and grass waterways, and the government pays the cost of major water impoundments and erosion control structures. In Caribbean countries where the man/land ratio is not as favourable as in the United States, you are justified from the standpoint of national interest in having the governments make substantial investments in conservation measures.

B. Yankey (Dominica) :

I'd like a clarification. There's a very confusing term used in the literature — that term is 'peasant'. Some people mean by it small scale farmers ; others use it to refer to the attitude of the farmer. I see Dr. Sauer has made a reference to that term but I don't understand what he really means by it. I'd like him to specify what he means by the term 'peasant' in this context.

E. Sauer :

I note that the farmers in this part of the world, of a scale smaller than estate operators, are generally called 'peasants'. We have in this area excellent farm operators that aren't estate operators. I prefer to classify "tillers of the soil" as farmers. The dictionary definition of 'peasant' is "a person of low social status" and I contend that this European "old-world" idea that a farmer is a peasant is out of place in modern agriculture. In the United States farming is a business and a farmer is on equal level with any other business or professional man.

Mrs. Rawlins (Trinidad):

Dr. Sauer, you suggested the real test of conservation measures is their effect on yields, production and earnings, but you omitted to say over what period. You make an inference that benefits of conservation could be felt quite quickly in terms of farm earnings. This is new to me and I feel that conservationists tend to be like foresters and think of 30 years as a rather short time. If conservation could yield fairly quick results we might be able to provide capital to help small farmers to apply conservation measures. If it's a long term thing they can't afford it and neither can governments.

E. Sauer :

We in the United States regard conservation as land improvement and better use of the land as well as preservation of it. A number of conservation measures yield prompt returns. One of these is the application of needed fertilisers and limestone, which results in higher yields from the first year this practice is applied. Improvements such as terraces, waterways, erosion control structures, take

a longer time to pay off. The timing of results for these conservation practices varies with the soil conditions and the degree of erosion of the United States conservation practices usually increased net when the practices are applied. We found in the corn belt area incomes in one to four years after they are started, depending on their extent and the need for them. Larger erosion control structures may take much longer to pay off, while fertilisers and contouring increase incomes the year they are applied.

Chairman :

May I at this stage ask Mr. Mc Connie of St. Vincent, if he could tell us something on this question. I know they have done a fair amount of Soil Conservation work in St. Vincent. Have you found that this has paid off in a short time or is it still a long liability ?

H. McConnie (St. Vincent) :

Mr. Chairman, that's a very difficult question to answer. We in the Agricultural Department feel that it has paid off. But we still find it most difficult to convince the farmer that soil conservation works, that it will bring about improvement in fertility, so you find we still have to adopt the method of a direct subsidy to most of the small farmers to get them to do anything at all. For each two steps forward we take, sometimes I feel we go back three. Because what happens is : say on a farm of ten acres, the owner might get a little in need of cash, or he decides that he is going to England to live, and he sells part of his farm. The new owner, immediately the first thing he does, is to dig out all the grass that the former owner planted as a barrier to prevent soil erosion. And, soon all the drains that were put beneath those grass barriers are filled with soil ; but this doesn't convince him that his soil is washing down the hill. So in our case, I would say that the economic benefits of soil conservation, in general, have not been appreciated.

C. John (Trinidad):

It is easy for the farmer to appreciate conservation if within the future his income rises above his costs. Should economics be involved in the consideration of soil conservation and if so should it be returns per dollars worth of inputs ?

E. Sauer :

Both the economic and social benefits must be considered. I feel that government should provide the major erosion control installations and require the farmer to provide minor installations plus fertility treatments and those measures, such as contour farming, that do not require large capital inputs.