ABOUT GLOBAL ECOLOGICAL PROBLEMS

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Currently coping with ecological problems is limited to curbing pollution and to removing anthropogenic wastes from man's immediate environment. The natural biota (fauna and flora) is considered simply as an alternate genetic pool and a manifestation of biological diversity.

The real cause of deterioration of the environment lies with the destruction of a natural mechanism, which existed during millions of years and stabilized the environment, instead of with direct anthropogenic pollution. Such a stabilizing mechanism is the unperturbed biota, i.e. the community of the natural species of the biosphere which has been destroyed on most of land by now. The genofond of the natural species contains information about the program of action — of work — each individual has to perform to suppress external perturbations and restore the environment. Performance of such work is the only reason of an individual existence.

Were we able to restore the natural biota across a larger part of land area, the present-day anthropogenic wastes would be absorbed by the biota so that the global and most

regional changes of the environment would be stopped (see Fig.). On the other hand, were we able to stop emission of direct anthropogenic wastes, for instance, terminating completely the combustion of fossil fuel, but continued to destruct the wilderness, deterioration of the global environment would continue due to improper functioning of the perturbed biota (see Fig.).

The solution to ecological problems lies only with restoration of the natural biota.

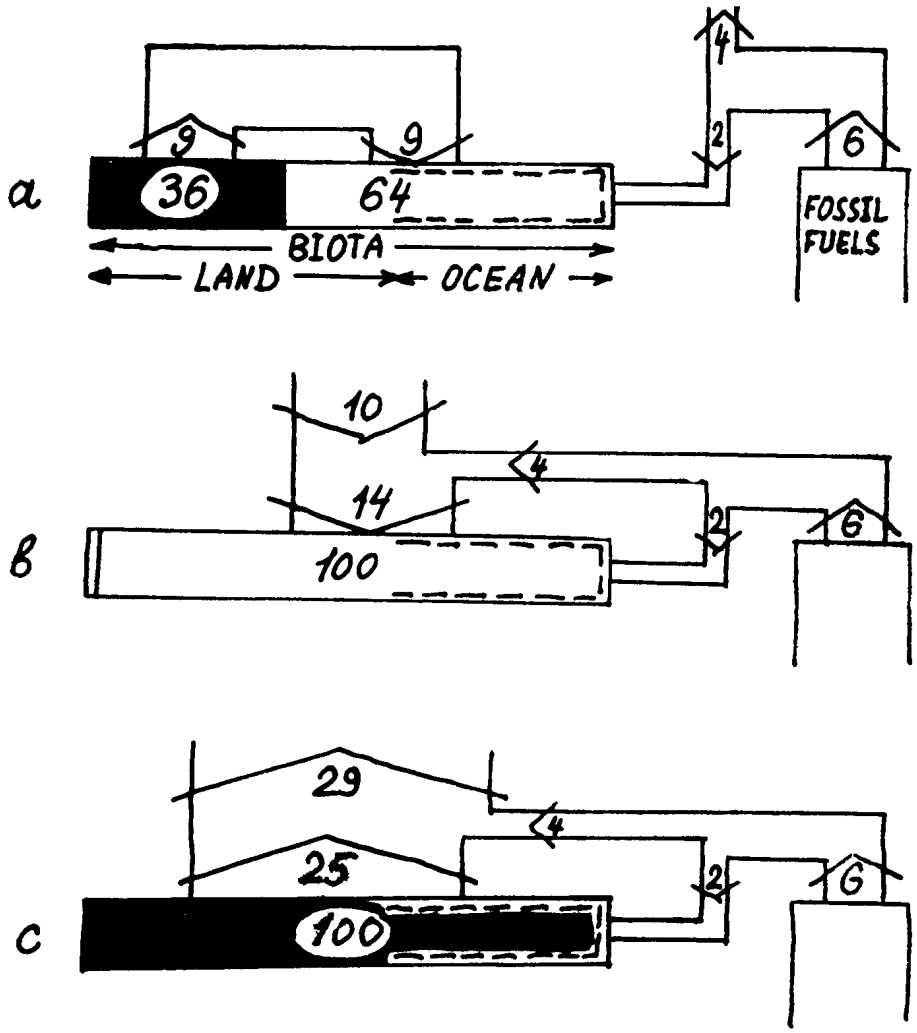

Fig. Interaction of cultivated and virgin biota with the perturbed environment. Figures in arrows are net global carbon fluxes in GtC/yr. Figures in blocks are the net primary production of cultivated (black) and virgin (blank) biota.
a) Modern net carbon fluxes: biota of whole biosphere is neither spurce nor sink of atmospheric carbon.
b) Totally virgin (natural) biota: biota of whole biosphere is the large sink of atmospheric carbon.
c) Totally cultivated biota: biota of whole biosphere is the largest source of atmospheric carbon

REFERENCES

1. Paper presented to 4th Int. CO_2 Conf.Corueiranne, France, Sept.13–17, 1993. P.98.