



Now, if agricultural products are consumed at a place nearby the site of production, then the nutrient may return through the complex process of recycling. But if it is consumed at a geographically distant place the nutrients can never come back to the production field through the natural cycling. Thus the fertility of soil becomes undone that we may call a metabolic rift.

One may argue that the transfer of agricultural product is a historical event, so is the transfer of nutrients. Whether the issue is also historic? It is historic beyond any doubt, but magnitude plays a key role in the current scenario. With the advent of city-centric civilization, there is an exponential increase in population, urbanization and city-centric resource gathering practices which affect nature and natural resources in different manner.

A very basic calculation on rice and wheat consumption in Indian household shows that yearly ~ 80013 metric ton potassium (K) transfers from agricultural field to cities (based on 2001 census data and 1999-2000 consumption profile). Adding other crops, the amount will be increased manifold. This amount of potassium never comes back to the soil through natural nutrient cycling and external application of fertilizers. The fate is the same for the other elements absorbed by the crops from the field and exported to the town. In this way, several tons of different micronutrients (i.e., Fe, Ca, Mg, Cu, Mn, Mo, Zn names please) are regularly lost from the agricultural field causing soil impoverishment at a massive scale.

To many, chemical fertilizers seem to be a solution but they invite several other problems. Major fertilizers (N P K) can't supply micronutrients. Recommendation of micronutrient fertilizers is a matter of dispute as there is very little difference between the density of micronutrient ideal for production and the density which bring toxic effect. After six decades of green revolution different agricultural field of our country is now suffering from over density of some nutrients and deficiency of others. The festive season could be silent in not-so-far future.

*Source : Foster J.B. (2000) Marx's Ecology Materialism and nature, Monthly Review Foundation*

*Photo: [http://www.uq.edu.au/\\_School\\_Science\\_Lessons/6.65.2.GIF](http://www.uq.edu.au/_School_Science_Lessons/6.65.2.GIF)*

**Collector : Abhra Chakraborti**