reach the six billion mark, the most marked increase being felt in the developing world. Against the background of diminishing arable land as a result of erosion, desertification and other truly menacing environmental problems, it goes without saying that future demands for food will only be met by improved technologies and intensified production particularly through increased fertilizer application. The current average annual amount of industrial nitrogenous fertilizer load of about 30 kilograms N per hectare of cropland in the world varies considerably; some developed countries recording a few hundred kilograms of N fertilizers, and some developing countries having minimal deposits. There is no doubt that the greatest growth in fertilizer use will be realized in the developing countries in the future.

Central to this issue of increased fertilizer usage will be a number of problems such as the need to promote the proper and efficient use of fertilizers in order to reduce those potential and real environmental impacts attributed to them or search for alternative sources of nutrients.

Therefore, proper attention will have to be paid to increased fertilizer use in the developing countries if they are to avoid those consequences that developed countries have experienced. This may not be easy, and the small farmer will need to be given proper information on the technically and economically correct types and quantities of fertilizers for the respective crops and climate and soil conditions and to ensure that the proper fertilizer reaches him.

Together with efforts to increase production and use of industrial fertilizers it is clear that there will also be need to look for substitutes. One of the more promising alternatives is the use of biological nitrogen fixation. In collaboration with other UN agencies, particularly UNESCO and FAO, UNEP has over a number of years now promoted the application of biological nitrogen fixation technology by initiating and supporting certain MIRCENS (Microbiological Resources Centres), and although gaps still exist between research and field application of biological nitrogen technology, efforts are underway to demonstrate in a few developing countries the potential benefits of this technology.

Organic fertilizers also play an important, complementary role in food production and ought to be encouraged. The total amount of nutrient elements, NPK, in organic waste in developing countries is impressive and has been shown to exceed that of chemical fertilizers by several times.

Mr. President, going through the work programme of this congress, one notices a number of specific topics both in the plenary as in the working group sessions that are of particular interest to UNEP. UNEP is sure that the deliberations and recommendations emanating from them will be of much assistance to UNEP in its future programming.

With these few words, Mr. President, Ladies and Gentlemen, allow me to wish the 9th World Congress much success. Thank you for your attention.