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PROPOSAL FOR INCREASING THE FOOD PRODUCTION AND ECONOMIC SELF-SUFFICIENCY OF CUBA BY SOIL REMINERALIZATION AND OTHER NATURAL SUPPLEMENTS FROM LOCAL SOURCES.

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# Warning Notice

Persons contemplating cooperation with the Republic of Cuba on the project described below should seek legal counsel as to the restrictions placed upon U.S. Citizens by:
(1) the absence of diplomatic relations between the United States and the Republic of Cuba, and
(2) the U.S. Embargo against trade with Cuba (including travelling to Cuba).

There are exceptions to the embargo for the press and for scientific research. Legal counsel can obtain the appropriate U.S. Government forms to file to claim the appropriate exemption for travelling to Cuba for scientific research on remineralization and organic agriculture.

A report is available on the INTERNATIONAL SCIENTIFIC DELEGATION AND FACT FINDING MISSION ON LOW INPUT SUSTAINABLE AGRICULTURE IN CUBA of November 20 to 29, 1992 from Global Exchange, 2017 Mission St., Rm. 303, San Francisco, CA 94110 (415) 255-7296, as "Two Steps Backward, One Step Forward: Cuba's Nationwide Experiment in Organic Agriculture" ed. by Peter Rosset (Stanford University) and Medea Benjamin (Global Exchange), July 1993, 70pp., \$7.95.

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PROPOSAL FOR INCREASING THE FOOD PRODUCTION AND ECONOMIC SELF-SUFFICIENCY OF CUBA BY SOIL REMINERALIZATION AND OTHER NATURAL SUPPLEMENTS FROM LOCAL SOURCES.

Fred Bernard Wood, Ph.D.(elec.engin.)
Earth Regeneration Society
Berkeley, CA & San Jose, CA

#### Abstract

A PROPOSAL FOR BIO-MINERAL-REMEDIATION OF AGRICULTURAL SOIL IN CUBA WITH BOTH INCREASING AGRICULTURAL LAND AND INCREASING FORESTS TO INCREASE THE FOOD SUPPLY FOR CUBA, INCREASE THE TIMBER SUPPLY, REDUCE ATOMOSPHERIC CARBON DIOXIDE TO CONTROL CLIMATE CHANGE, MAINTAIN A CARBON DIOXIDE BUDGET WITH CITIZEN PARTICIPATION, AND HELP THE PEOPLE OF CUBA BE ECONOMICALLY SELF-SUFFICIENT. PROGRAM TO START WITH IMPORTED MATERIALS TO BE REPLACED BY LOCALLY PRODUCED MATERIALS IN THREE YEARS.

This proposal consists of 14 steps to demonstate that Cuba can be made self sufficient in regards to agricultural production. The end product is to substitute minerals from rock dust in place of the petroleum based chemical industry fertilizers which have to be imported. The use of the mineral type fertilizer would greatly eliminate the need for pesticides. The rock dust minerals needs biological organisms to chelate the chemical elements for absorption by plant roots.

## FIRST YEAR PROGRAM

- Step 1: Select 10 agricultural test sites on the Island of Cuba, of 80 acres each. Prepare soil samples from the ten sites and run soil tests. (For first batch, send samples to a laboratory in the USA for testing, so scientists in USA can recommend supplements for trials: (a) rock dust, (b) anti-oxidants, (c) microbials, (d) fish emulsion.
- Step 2: Find international foundation to contribute money to purchase enough supplements for use on half of each test site. Arrange transportation from USA to Cuba. It is against present USA and Canadian rules to ship these to Cuba. Strategy has to be planned to get USA exception for humanitarian reasons. If USA refuses, we make world appeal for other countries to help. Possibly try trucking materials to Mexico. It may be illegal for USA to stop shipments after NAFTA goes into effect.
- Step 3: Run tests using rock dust and associated supplements on ten 40 acre plots with nearby reference plots using present system.
- Step 4: In parallel plant plots of fast growing trees, also using rock dust, so that the trees can be harvested for fuel in steam electric generating plants to provide the electricity to run the rock crushers at the rock quarries to start providing local sources of rock dust.
- Step 5: Set up conversion system to use wood burning in place of oil or coal at a few electric power generating plants.
- Step 6: Expand present metallurgical laboratory and custom machine parts manufacturing facility for making spare parts for existing rock crushers and electric generating plants.
- Step 7: Make laboratory tests of amount of minerals, vitamins, amino-acids, and enzymes in vegetable from control plots and rock-dust plots for comparison.
- Step 8: Arrange with the Philosphy Department at University of Havana to analyse how this program provides a base for studying the application of science and technology for the people.

#### SECOND YEAR PROGRAM

- Step 9: Expand use of rock dust to half of agricultural land in Cuba.
- Step 10: Switch to locally prepared rock dust as fast as possible.
- Step 11: Negotiate with USA producers of (a) anti-oxidants, and (b) microbials for setting up production on Island of Cuba.
- Step 12: Substitute local fish emulsion and compost for USA produced fish emulsion.

### THIRD YEAR PROGRAM

Step 13: Expand use of rock dust to all major crop production.

Step 14: Organize a citizen produced carbon dioxide budget for Cuba to show United Nations Commissions how this system can also help reduce atmospheric carbon dioxide and show how Cuba is doing more than its share of controlling climate change.

Technical reports on rock dust and remineralization can be

obtained from: Ms. Joanna Campe, Remineralize the Earth, 152 South Street, Northampton, MA 01960 USA. 1-413-586-4429.

Information on USA West Coast suppliers of rock dust, antioxidants, microbials, and fish emulsion can be obtained from Alden Bryant & Associates, Bio-Remediation Center, 1442A Walnut Street, #57, Berkeley, CA 94709 USA, 1-510-849-4155.

Technical consultation available from Don Weaver and John Hamaker, Hamaker-Weaver Publications, P.O. Box 1961, Burlingame, CA 94010, 1-415-347-9693.

I am available for consultation on this proposal through the San Jose Office, Earth Regeneration Society, P.O. Box 5095, San Jose, CA 95150, 1-408-723-7818.

Fred Bernard Wood
PeaceNet: csiri
Internet: csiri@igc.apc.org