48th ANNUAL OHIO PASTORS CONVOCATION Veterans Memorial Building Columbus, Ohio January 24, 1967

Remarks of Honorable Bob Dole

FOOD FOR PEACE AND WORLD HUNGER

IT CERTAINLY IS A PLEASURE TO HAVE A PART ON YOUR PROGRAM. DR. ROGERS,
WHO EXTENDED AN INVITATION TO ME, HAS BEEN MOST HELPFUL TO ME AS A MEMBER OF
THE HOUSE COMMITTEE ON AGRICULTURE, AND I WAS, THEREFORE, PLEASED TO RECIPROCATE.

WE ALL SHARE A COMMON CONCERN AND A COMMON DEDICATION. WE ALL ARE CONCERNED WITH THE TREMENDOUS POPULATION GROWTH TAKING PLACE THROUGHOUT THE WORLD, AND THE WORLD'S CAPACITY TO PROVIDE ENOUGH FOOD TO MEET THE NEEDS OF THE NEW HUNGRY MILLIONS. WE SHARE A COMMON DEDICATION TO DO SOMETHING ABOUT THAT PRESSING PROBLEM WITHIN THE FRAMEWORK OF GOVERNMENTAL POLICY, PUBLIC RELATIONS AND ACADEMIC DISCUSSION.

ONE NEED ONLY LOOK AT THE ARITHMETIC OF WORLD POPULATION GROWTH TO GRASP
THE ENORMITY OF THE PROBLEM. IN 15 YEARS, BY 1980, PRESENT POPULATION TRENDS
INDICATE AN INCREASE IN WORLD POPULATION OF ONE BILLION PEOPLE. BY THE BEGINNING OF THE 21st CENTURY, ONLY 34 YEARS FROM NOW, WORLD POPULATION IS EXPECTED
TO DOUBLE. IN LATIN AMERICA, ASIA, AND AFRICA, THE GROWTH RATE IS MUCH MORE
RAPID AND IN A NUMBER OF COUNTRIES IN THESE AREAS, THEIR POPULATIONS WILL
DOUBLE WITHIN 20 YEARS.

IN 1850, THERE WERE 750 MILLION PEOPLE IN THE WORLD; IN 1900 THERE WERE 1.5 BILLION; IN 1960 THERE WERE 3 BILLION. IN 2000, IF PRESENT TRENDS CONTINUE, THERE WILL BE 7.5 BILLION.

-INDIA-

THE SCOPE OF THE PROBLEM WAS MORE NARROWLY, BUT MORE DRAMATICALLY DEFINED FOR ME DURING OUR RECENT TRIP TO INDIA. CONTINUATION OF PRESENT POPULATION TRENDS IN INDIA WILL MEAN A POPULATION INCREASE FROM 432.7 MILLION IN 1960

TO ABOUT 1.3 BILLION BY THE YEAR 2000. (IN OTHER WORDS, NEARLY TRIPLE). IF INDIA'S BIRTH RATE IS CUT IN HALF, HER POPULATION BY THE YEAR 2000 IS EXPECTED TO MORE THAN DOUBLE TO 908 MILLION.

TODAY THERE ARE 500 MILLION PEOPLE IN THAT NATION...OR APPROXIMATELY ONE OUT OF EVERY SIX HUMAN BEINGS THAT RESIDE UPON OUR PLANET.

THERE ARE MORE PEOPLE IN INDIA THAN IN SOUTH AMERICA AND AFRICA COMBINED,

OR MORE PEOPLE LIVE IN INDIA THAN IN CANADA, THE U.S.A., CENTRAL AND SOUTH

AMERICA COMBINED. WE VISITED THE STATE OF BIHAR, WHERE THE CURRENT DROUGHT

EXISTS. THIS ONE STATE HAS A POPULATION OF 40 TO 50 MILLION PEOPLE...OR NEARLY

AS MANY PEOPLE AS A COUNTRY LIKE FRANCE OR ITALY.

EVERY YEAR THERE IS A NET GAIN OF 11-12 MILLION MORE INDIANS---OR A

CITY THE SIZE OF NEW YORK ADDED EACH YEAR. SINCE INDIA GAINED HER INDEPENDENCE
FROM GREAT BRITAIN ABOUT 20 YEARS AGO, THERE HAS BEEN A POPULATION INCREASE
OF 125 MILLION PEOPLE. WITH A LAND MASS OF ABOUT 40% THAT OF THE UNITED STATES,
INDIA HAS A POPULATION 2 1/2 TIMES OURS.

HEARINGS ON WORLD POPULATION

HEARINGS BEFORE OUR COMMITTEE LAST YEAR REVEALED THE COLD, BRUTAL AND REALISTIC FACT THAT THE UNITED STATES, AND OTHER DEVELOPED COUNTRIES, WILL NOT BE ABLE TO FEED AND CLOTHE THE UNBORN MILLIONS DESTINED TO POPULATE THE EARTH IN THE NEXT FEW DECADES. THEREFORE, THE CLEAR MANDATE EXISTS THAT WE MUST DO EVERYTHING WITHIN OUR POWER TO HELP THESE MILLIONS HELP THEMSELVES MEET THEIR OWN BASIC NEEDS IF WORLD PEACE AND STABILITY IS TO BE MAINTAINED.

HOW IS THIS TO BE DONE? HOW DO WE HELP NATIONS LIKE INDIA TO HELP

THEMSELVES? HOW IS THE TOUGH, PRACTICAL QUESTION. UNFORTUNATELY, THERE IS

NO EASY, SIMPLE ANSWER. IN MY OPINION, HOWEVER, THERE IS A GENERAL APPROACH
WHICH CAN BE TAKEN TO THE PROBLEM. THIS APPROACH INCIDDES ACCELERATED AGRICULTURAL TECHNICAL ASSISTANCE, INCREASED EMPHASIS ON VOLUNTARY FAMILY PLANNING
PROGRAMS, AND CONTINUED SUPPORT FOR MARKET DEVELOPMENT ACTIVITIES IN UNDERDEVELOPED COUNTRIES.

P. L. 480 EXTENSION

BILLION "FOOD FOR PEACE ACT OF 1966" WHICH EXTENDED PUBLIC LAW 480 FOR TWO MORE YEARS. IN ADDITION, THAT NEW LAW CODIFIES VERY IMPORTANT CONGRESSIONAL POLICY MANDATES IN REGARD TO FURTHER FOOD AID:

FIRST, IT PLACES HEAVY EMPHASIS ON SELF-HELP, PARTICULARLY AGRICULTURAL SELF-HELP.

SECOND, IT CHANGES THE BASIC THEORY OF THE PROGRAM FROM ONE OF SURPLUS
DISPOSAL TO ONE OF PROGRAMMED AVAILABILITY.

THIRD, IT RETAINS THE FRIENDLY NATION CONCEPT WHICH PROHIBITS U. S.

FOOD AID TO THE GOVERNMENTS OF COMMUNIST COUNTRIES AND OTHER NATIONS HELPING
OR TRADING WITH NORTH VIETNAM OR CUBA.

FOURTH, IT EMPHASIZES MARKET DEVELOPMENT FOR U. S. FARM COMMODITIES OVERSEAS.

FIFTH, IT ACCELERATES THE SHIFT AWAY FROM SOFT CURRENCY SALES TOWARD DOLLAR SALES; AND

SIXTH, IT PROTECTS AMERICAN CITIZENS IN FOREIGN NATIONS FROM EXPRO-PRIATION: AND FINALLY, IMPLEMENTATION OF VOLUNTARY FAMILY PLANNING PROGRAMS.

LET'S TAKE A QUICK LOOK THEN AT THREE OF THESE POINTS, AGRICULTURAL TECHNOLOGY, POPULATION CONTROL AND MARKET DEVELOPMENT.

BREAD AND BUTTER CORPS - POINT ON TECHNOLOGY

I HAVE A SPECIAL INTEREST IN THE POINT ON TECHNOLOGY. LAST FALL, AFTER RETURNING FROM THE FOOD AND AGRICULTURAL ORGANIZATION'S 20th ANNIVERSARY CON-FERENCE IN ROME, ITALY, WHERE I SERVED AS AN ADVISER REPRESENTING THE U.S. HOUSE OF REPRESENTATIVES, I BEGAN TO EXPLORE THE FEASIBILITY OF EXPANDING U.S. TECHNICAL ASSISTANCE IN PRODUCTION AND DISTRIBUTION. I CONFERRED WITH MANY PERSONS, IN AND OUT OF GOVERNMENT, ON THIS PROBLEM. WHEN THE HOUSE COMMITTEE ON AGRICULTURE BEGAN HEARINGS WITH 10 EXPERT PUBLIC WITNESSES, THEIR COMMENTS STRESSED THE NEED FOR IN-CREASED TECHNICAL ASSISTANCE. DURING THE SAME PERIOD, I CONTACTED EACH STATE EX-TENSION DIRECTOR AND PRESIDENT OF EVERY LAND-GRANT COLLEGE BY LETTER, TO SOLICIT COMMENTS AND SUGGESTIONS ON HOW TO BEST MEET THE GROWING WORLD FOOD PROBLEM THROUGH INCREASING TECHNICAL ASSISTANCE. AS A RESULT OF THESE CONTACTS AND SUG-GESTIONS FROM MY COLLEAGUES, ON BOTH SIDES OF THE AISLE ON THE AGRICULTURE COM-MITTEE, I INTRODUCED A PROPOSAL ON MARCH 17, 1966, TO ESTABLISH A "BREAD AND

BUTTER" CORPS. MY PROPOSAL WAS CONSIDERED AT LENGTH BY THE COMMITTEE. AND AT THIS POINT I WOULD ADD THAT DR. ROGERS DID A GREAT AMOUNT OF MISSIONARY WORK ON BEHALF OF MY AMENDMENT WITH THE CHAIRMAN OF OUR COMMITTEE AT THAT TIME, CONGRESSMAN HAROLD COOLEY OF NORTH CAROLINA. IT WAS REVISED, AMENDED AND

YEAR. CONGRESS AUTHORIZED \$33 MILLION FOR THE PROGRAM, BUT ADJOURNED BEFORE APPROPRIATING ANY MONEY LAST YEAR. THERE ARE NO FUNDS RECOMMENDED IN THE BUDGET THIS YEAR, BUT I AM HOPEFUL THE APPROPRIATIONS COMMITTEE WILL CONSIDER THE MERITS OF THE PROGRAM THIS SESSION.

THERE IS SOME OPPOSITION TO THIS NEW PROGRAM WITHIN THE ADMINISTRATION,

SPECIFICALLY AMONG PEACE CORPS AND A.I.D. ADMINISTRATIVE PERSONNEL. APPARENTLY

THEY SEE THE "FARMER TO FARMER" PROGRAM AS A THREAT TO SOME OF THEIR PROGRAMS.

IN ADDITION, SECRETARY OF AGRICULTURE, ORVILLE FREEMAN, HAS SOME RESERVATIONS

ABOUT THE PROGRAM, BUT DESPITE THESE PROBLEMS, I AM STILL HOPEFUL THE APPROPRIATIONS COMMITTEE WILL PROVIDE ENOUGH MONEY TO AT LEAST GET THE PROGRAM

OFF THE GROUND THIS YEAR.

THE CONCEPT OF TECHNICAL ASSISTANCE HAS BEEN AROUND FOR A LONG TIME
WITHIN THE FRAMEWORK OF OUR AGRICULTURAL AND FOREIGN ASSISTANCE POLICIES. THE
TECHNICAL ASSISTANCE PROGRAM DURING PRESIDENT TRUMAN'S ADMINISTRATION, THE
INTERNATIONAL VOLUNTARY SERVICE PROGRAM OF THE EISENHOWER ADMINISTRATION,
AND THE PEACE CORPS OF PRESIDENT KENNEDY'S ADMINISTRATION HAVE ALL INCORPORATED
THIS CONCEPT TO SOME EXTENT. IN ADDITION, VARIOUS FOREIGN ASSISTANCE ACTIVITIES ADMINISTERED BY A.I.D. HAVE BEEN DIRECTED TOWARD THE EXPANSION OF AMERICAN
"KNOW HOW" AND "SHOW HOW" THROUGHOUT THE WORLD.

THERE ARE, HOWEVER, TWO BASIC INNOVATIONS WHICH HAVE BEEN IMPLEMENTED IN THE "FARMER TO FARMER" PROGRAM. THE FIRST IS BETTER COORDINATION. THE SECOND IS THE STRUCTURING OF THIS PROGRAM THROUGH LAND-GRANT COLLEGES AND OTHER UNIVERSITIES.

THE COORDINATION EFFORT PROPOSED BY SECTION 406 IS DIRECTED FIRST

AT THE U. S. DEPARTMENT OF AGRICULTURE ITSELF. THE TECHNICAL ASSISTANCE

PROGRAM WOULD BE LOCATED IN AND UNDER THE DIRECTION OF THE DEPARTMENT OF

AGRICULTURE. THE DEPARTMENT NOW HAS RESPONSIBILITY FOR THE COORDINATION OF

THE ACTIVITIES OF THE FEDERAL EXTENSION SERVICE WHICH INCLUDES THE 4-H CLUB

PROGRAM, THE FEDERAL-STATE COOPERATIVE RESEARCH SERVICE, AND THE FOREIGN

AGRICULTURAL SERVICE, TOGETHER WITH OTHER USEFUL AND APPROPRIATE AGENCIES.

SECOND, THE LEGISLATION CALLS FOR THE COORDINATION OF THIS TYPE OF
TECHNICAL ASSISTANCE WITHIN THE FRAMEWORK OF THE U. S. GOVERNMENT. THE
SECRETARY OF AGRICULTURE IS DIRECTED TO CONSULT AND COOPERATE WITH THE
DIRECTOR OF THE PEACE CORPS, THE ADMINISTRATOR OF A.I.D., AND THE SECRETARY
OF STATE. IN ESTABLISHING THIS LINE OF COORDINATION, ANY PERSONNEL WHO ARE
TRAINED AND PREPARED FOR OVERSEAS SERVICE COULD BE MADE AVAILABLE TO AGENCIES
OTHER THAN THE USDA (OR VICE VERSA) IF THE PRESIDENT THOUGHT THEIR SERVICES

WOULD BE MORE VALUABLE WITH SOME OTHER AGENCY. ALSO, THE LEGISLATION IS DIRECTED TOWARD PRESERVING THE TRADITIONAL RESPONSIBILITY AND AUTHORITY FOR

THE CONDUCT OF THE FOREIGN AFFAIRS OF THIS COUNTRY TO CONTINUE TO BE LODGED

IN THE HANDS OF THE SECRETARY OF STATE. A COORDINATED PROGRAM OF THIS NATURE

HAS ALREADY BEGUN IN SOUTH VIETNAM.

THE SECOND PART OF THIS PROPOSAL, WHICH IS NEW, IS THE STRUCTURING OF THE MAJOR RESPONSIBILITY THROUGH LAND-GRANT COLLEGES AND OTHER INSTITUTIONS OF HIGHER LEARNING. ON A CONTRACT OR GRANT BASIS, THESE COLLEGES WOULD HAVE THREE RESPONSIBILITIES. THE FIRST WOULD BE TO TRAIN OR RETRAIN PEOPLE WHO ARE EITHER SKILLED IN AGRICULTURAL SCIENCE AND HAVE A FORMAL EDUCATION IN AGRICULTURE OR HOME ECONOMICS OR TO PREPARE PRACTICAL FARMERS, FARM WIVES, OR OTHERS WHO HAVE A WORKABLE KNOWLEDGE OF FARMING AND HOME ECONOMICS FOR SERVICE OVERSEAS. FOUR DOZEN YOUNG COUNTY AGENTS ARE NOW TRAINING FOR SOUTH VIETNAM AT THE UNIVERSITY OF FLORIDA.

A SECOND FUNCTION WOULD BE TO SET "AGRICULTURAL SHORT COURSES" HERE
IN THE UNITED STATES AND OVERSEAS. THESE SPECIALIZED AGRICULTURAL INSTITUTES
WOULD BE DIRECTED TOWARD THE TRAINING OF PERSONS WHO SERVE AS VOLUNTEERS IN
THIS PROGRAM AND FOREIGN NATIONALS. TO THE MAXIMUM EXTENT POSSIBLE, FOREIGN

CURRENCIES GENERATED BY THE SALE OF FARM COMMODITIES WOULD BE EARMARKED FOR THE PAYMENT OF EXPENSES INCIDENTAL TO THE CONDUCT OF THESE ACTIVITIES.

THE THIRD FUNCTION WOULD BE TO CONDUCT SELECTIVE RESEARCH ACTIVITIES
IN CONJUNCTION WITH THE AGRICULTURAL INSTITUTES, EMPHASIZING TROPICAL AND
SUBTROPICAL AGRICULTURE. DURING OUR COMMITTEE'S HEARINGS, ONE OF THE POINTS
MADE BY SEVERAL OF THE EXPERT WITNESSES THE COMMITTEE HEARD WAS THAT THERE
IS A REAL LACK OF FIRST-CLASS LOCALIZED RESEARCH FACILITIES IN TROPICAL AND
SUBTROPICAL AREAS. MANY TIMES THE TECHNOLOGY OF THE NORTH TEMPERATE ZONE
OF THE GLOBE IS NOT READILY AND FEASIBLY TRANSFERRED TO A TROPICAL AREA.
AGAIN, USING LOCAL CURRENCIES AS MUCH AS POSSIBLE, IT SEEMS FEASIBLE TO
CONCENTRATE ON LOCALIZED CONDITIONS AND THEN DEMONSTRATE TO THE AGRICULTURAL
INDUSTRY IN THE RECIPIENT COUNTRY THE VALUE OF THIS NEW TECHNOLOGY.

I MADE IT A POINT IN INDIA TO ASK FARMERS AND AGRICULTURE OFFICIALS
ABOUT THE NEED FOR TECHNICAL ASSISTANCE. WITHOUT EXCEPTION, EVERYONE THERE
FELT THAT, IN THE LONG RUN, INDIA WILL BECOME SELF-SUFFICIENT BY IMPROVING
THEIR AGRICULTURAL TECHNOLOGY. THEY SPECIFICALLY PRAISED THE EFFORTS OF
BOTH THE FORD FOUNDATION AND ROCKEFELLER FOUNDATION IN THIS AREA.

FAMILY PLANNING

THE SECOND POINT, DEALING WITH FAMILY PLANNING, IS A MOST DIFFICULT,

AS WELL AS MOST DELICATE, SUBJECT. RELIGION AND CULTURAL BARRIERS, COSTS,

DIFFICULTY OF COMMUNICATION AND ACCEPTABILITY BY THE GENERAL POPULATION ARE

ALL REAL AND PRACTICAL PROBLEMS. LET'S REMEMBER THAT EVERYBODY WHO IS GOING

TO BE 33 YEARS OLD WHEN THE WORLD'S POPULATION DOUBLES IN THE YEAR 2000 IS

ALREADY BORN. THERE IS NO SUCH THING AS RETROACTIVE POPULATION CONTROL,

SO THE PROBLEMS OF TOMORROW ARE ALREADY HERE. IT'S THE PROBLEMS OF THE DAY AFTER

AGAIN, GOING BACK TO INDIA AND A VISIT WITH PRIME MINISTER INDIRA GHANDI,

I WAS ENCOURAGED THAT SHE INDICATED INDIA'S NUMBER ONE PROBLEM -- AS IM PORTANT,

FOR EXAMPLE, AS FOOD PRODUCTION -- IS THE PROBLEM OF FAMILY PLANNING.

TOMORROW THAT FAMILY PLANNING ACTIVITIES ARE AIMED AT.

DR. IRENE TAUBER OF PRINCETON UNIVERSITY HAS POINTED OUT THAT THE
MEASURING DEVICE TO DETERMINE WHETHER A COUNTRY IS DEVELOPED OR UNDERDEVELOPED
IS ITS BIRTHRATE.

NO DEVELOPED NATION HAS A BIRTHRATE OVER 3 PERCENT PER YEAR. IF A NATION HAS A BIRTHRATE OF 3 PERCENT OR MORE, ITS POPULATION WILL DOUBLE WITHIN A GENERATION AND MULTIPLY BY 18-FOLD WITHIN A SINGLE CENTURY.

THE DIRECTION IN THE NEW BILL TO ENCOURAGE VOLUNTARY FAMILY PLANNING IS CLEAR. LET US HOPE THE ADMINISTRATION WILL NOW GIVE THIS POLICY ITS PRIORITY ATTENTION.

MARKET DEVELOPMENT

IN THE AREA OF MARKET DEVELOPMENT, WE SHOULD KEEP IN MIND JUST HOW IMPORTANT THIS ASPECT REALLY IS.

THE UNITED STATES, DESPITE THE GENEROUS AND HUMANITARIAN IMPULSE OF ITS PEOPLE, JUST WON'T HAVE THE ECONOMIC ABILITY TO PROVIDE FREE WORLD WELFARE TO EVERYONE. WE HAVE TO HAVE A SOLID ECONOMY BOTH DOMESTICALLY AND IN OUR OVERSEAS MARKETS, AND AGRICULTURAL COMMODITIES ARE OF GREATER AND GREATER IMPORTANCE IN OUR BALANCE OF TRADE AND BALANCE OF PAYMENTS PICTURE.

WITH NATIONS LIKE JAPAN BECOMING A ONE BILLION CASH DOLLAR FARM

MARKET, WE CAN TRULY SAY THAT MARKET DEVELOPMENT HAS PAID OFF HANDSOMELY.

ENCOURAGING ECONOMIC REPORTS FROM SOUTH KOREA AND TAIWAN HAVE FORTIFIED OUR

POLICY TOWARD EMPHASIZING MARKET DEVELOPMENT. THREE OF OUR CROPS -- WHEAT,

FEED GRAINS, AND SOYBEANS -- ARE OR WILL SOON BECOME BILLION DOLLAR EXPORT

CROPS.

IT'S SOUND EXPORT MARKETS WHICH ARE NECESSARY FOR US TO HAVE IF WE

EXPECT TO BE ABLE TO MAKE GIFTS TO OTHER COUNTRIES THROUGHOUT THE WORLD.

LET'S REMEMBER THAT EVERY BUSHEL OF GRAIN OR EVERY BALE OF COTTON THAT'S

GIVEN AWAY OR SOLD ON A CONCESSIONAL SALE, COSTS THE TAXPAYERS OF THIS

COUNTRY THEIR HARD-EARNED MONEY. IT'S DOLLARS, NOT SOME ABSTRACT SURPLUS,
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THAT IS BEING DONATED. THAT IS WHY A SOUND ECONOMY IN AMERICA IS ESSENTIAL

TO THOSE THROUGHOUT THE WORLD WHO DEPEND UPON AMERICA'S GENEROSITY. I KNOW

THAT THE COST OF FURTHER FOOD AID TO INDIA IS A MATTER OF DEEP CONCERN TO

THE PRESIDENT AND CONGRESSIONAL LEADERS.

THE TOTAL COST OF ALL AMERICAN AID TO INDIA DURING FISCAL 1967, FOR EXAMPLE, WAS \$945 MILLION, OR NEARLY \$1 BILLION. AS EVERYONE HERE KNOWS, THERE ARE GREAT PRESSURES TO REDUCE DOMESTIC SPENDING; THEREFORE, IT IS LIKELY THAT THE EXECUTIVE BRANCH IN THE CONGRESS WILL TAKE A HARD LOOK AT REQUESTS FROM ANY COUNTRIES BECAUSE, AS INDICATED EARLIER, THERE ARE LIMITS ON WHAT OUR COUNTRY CAN DO.

WORLD'S FOOD POTENTIAL

WITH THE NEW EMPHASIS PROVIDED BY EXTENDED PUBLIC LAW 480, WE STILL MUST ASK:

WHAT ABOUT THE FUTURE?

WILL THERE BE ENOUGH FOOD FOR PEACE?

WILL THERE BE AN AMPLE SUPPLY OF WHEAT FOR PEACE TO MEET THE EXPLODING

WORLD POPULATION?

FOOD FOR

WILL THE NEW DIMENSIONS AND DIRECTIONS INCLUDED IN THIS YEAR
BE IMPLEMENTED OUICKLY ENOUGH TO AVERT THE IMPENDING CATASTROPHE?

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LET'S TAKE JUST A QUICK LOOK AT THE WORLD'S FOOD POTENTIAL, PARTICULARLY IN WHEAT.

DR. JOHN HAGGERTY OF AGRICULTURE RESEARCH, INC., AND FORMER DIRECTOR OF
THE OFFICE OF FOREIGN AGRICULTURAL RELATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE

CULTURE WAS ONE OF THE 10 EXPERT WITNESSES THE HOUSE COMMITTEE ON AGRICULTURE

HEARD EARLIER THIS YEAR AS WE WERE PREPARING TO EXTEND PUBLIC LAW 480. HE

POINTED OUT TO US SOME VERY FUNDAMENTAL AND VERY IMPORTANT FACTS OF LIFE IN

REGARD TO WORLD GEOGRAPHY. WE WERE WONDERING WHETHER THERE IS ENOUGH SOIL

IN THE WORLD TO GROW FOOD FOR 7 BILLION PEOPLE, THE NUMBER EXPECTED BY THE

END OF THIS CENTURY. WHERE IS THIS LAND? WHAT IS IT GOING TO TAKE TO BRING

IT INTO FOOD PRODUCTION?

DR. HAGGERTY POINTED OUT THAT:

THERE ARE NOW SOME 3.5 BILLION ACRES OF CROPLAND IN THE WORLD. THIS INCLUDES ALL TREE CROPS, REGULAR FALLOW, AND ROTATIONAL PASTURE -- ABOUT 1 ACRE PER PERSON TODAY.

USDA AND FAO ESTIMATE POTENTIALLY ARABLE LAND IN THE WORLD (INCLUDING PRESENT CROPLAND) TO BE 6.6 BILLION ACRES.

IT WOULD BE A MASSIVE TASK TO RECLAIM SUBSTANTIAL NEW LANDS. THE

COST WOULD BE FANTASTIC -- NEARLY A HALF A TRILLION DOLLARS. A GOOD EXAMPLE

IS THE ASWAN DAM IN EGYPT. IT WILL INCREASE AGRICULTURAL LAND BY 30 PERCENT,

AT A COST OF 1 BILLION DOLLARS, BUT POPULATION BY 1980 WILL BE UP 35 PERCENT.

THUS EGYPT WILL BE RUNNING AN EXHAUSTIVE RACE JUST TO STAY IN SUBSTANTIALLY

THE SAME PLACE.

SUCCESSFUL AGRICULTURE IS CONCENTRATED IN THE NORTHERN TEMPERATE ZONE.

(MOST OF THE SOUTHERN HEMISPHERE IS WATER). LIKEWISE, MOST OF OUR AGRICULTURAL RESEARCH AND PRACTICAL FARMING EXPERIENCE IS IN THE TEMPERATE ZONES,

WHILE THE VAST BULK OF UNDERDEVELOPED LAND IS IN THE TROPICS.

ABOUT 70 PERCENT OF THE EARTH'S SURFACE IS WATER.

THE REMAINING 30 PERCENT OF THE EARTH IS LAND (SOME 33 BILLION ACRES) --

- (1) ONE-TWENTIETH OF OUR LAND IS UNDER POLAR ICE OR TUNDRA;
- (2) ONE-FIFTH IS MOUNTAIN CHAINS (ROCKIES, ANDES, ALPS, ATLAS, CARPATHIANS, CAUCASUS, AND HIMALAYAN);
- (3) GREAT LAND MASSES ARE IN SUBPOLAR REGIONS OF CANADA, ALASKA,

 AND RUSSIA (POSSIBLE FOR 10 PERCENT OR 320 MILLION ACRES TO BE

 POTENTIAL AGRICULTURAL AREAS);
- (4) ONE-FOURTH IS DESERT (USUALLY IN 20° TO 40° LATITUDES) WHICH INCLUDES THE DEAD HEART OF AUSTRALIA, THE KALAHARI AND SAHARA IN AFRICA,

THE ATACAMA AND PATAGONIAN DESERTS IN SOUTH AMERICA, THE SONORA IN NORTH

AMERICA, THE ARABIAN, THE THAR OF INDIA, AND THE TURKESTAN AND GOBI DESERTS

OF ASIA;

(5) IT IS POSSIBLE FOR PERHAPS 20 PERCENT (OR 800 MILLION ACRES) OF SAVANNAH LANDS (BETWEEN DESERTS AND TROPICAL RAIN FORESTS) TO BE DEVELOPED -- THESE INCLUDE THE LLANOS AND CAMPOS CERRADOS OF SOUTH AMERICA, THE SUDAN AND VELDT IN AFRICA, NORTHERN AUSTRALIA, AND THE "MONSOON SAVANNAHS" OF JAVA, EAST INDIA, VIETNAM; AND (6) - ALMOST EMPTY OF PEOPLE, THE WORLD'S REMAINING LAND RESOURCE IS THE TROPICAL RAIN FOREST BELT (AMAZON BASIN, CENTRAL AMERICA, CONGO REGION, INDONESIA, AND MALAYSIA) -- THIS AREA ACCOUNTS FOR 2.8 BILLION ACRES WHICH REPRESENT THREE-OUARTERS OF THE EARTH'S POTENTIAL NEW CROPLAND; MORE RESEARCH IS NEEDED BEFORE WE EVEN KNOW HOW TO FARM THEM OR TO DEVELOP THEM FOR FARMING. THE CENTRAL POINT THAT DR. HAGGERTY MADE WAS THAT IN VIEW OF THE PRACTICAL PROBLEMS, INCREASED

DUCTIVITY OF SOIL ALREADY UNDER CULTIVATION. THAT, OF COURSE, MEANS IN

LARGE PART THE UNITED STATES, AND WHEN IT COMES TO WHEAT, IT MEANS STATES

LIKE KANSAS AND OHIO.

THE YEARS AHEAD

IN THE YEARS AHEAD, U. S. FOOD WILL PLAY A VITAL ROLE IN INTERNATIONAL AFFAIRS, AND AS SUCH, WILL AFFECT THE LIVES OF ALL OF US.

OUR EFFORTS WILL GO FOR NAUGHT BECAUSE EVERYBODY FROM THE FOOD AND AGRICULTURAL

ORGANIZATION TO THE U. S. DEPARTMENT OF AGRICULTURE AGREES THAT THE UNITED

STATES CANNOT BY ITSELF FEED THE WORLD. FOREIGN NATIONS SIMPLY MUST GIVE

SERIOUS ATTENTION TO THEIR PROGRAMS OF AGRICULTURAL PRODUCTION AND DISTRIBUTION.

THE GENERAL SUCCESSFUL DIRECTION SHOULD BE CLEAR BY NOW. COMMUNISM

AND SOCIALISM OFFER STARVATION. CAPITALISM AND FREE ENTERPRISE OFFER ABUN
DANCE AND PROSPERITY. LET US NOW REDOUBLE OUR EFFORTS IN INSISTING UPON

SOME TANGIBLE SELF-HELP RESULTS.