

AGRICULTURE  
(LAND TRANSFER STUDY)  
USAID/BLM-USD (PASA)

INTRODUCTION

AGRARIAN REFORM IS A "CAN OF WORMS" IN BOTH A LITERAL AND PHYSICAL SENSE IN ALL OF THE DEVELOPING NATIONS. IN BRAZIL, IT IS A LARGER CAN, READILY IDENTIFIABLE BY THE CAUTION LETTERING ON THE LABEL, "OPEN AT YOUR OWN RISK." AS APPROPRIATE ADMINISTRATION AS THE "WORMS" OF U.S. POLICY WHICH SAY "OPEN AT YOUR OWN RISK." LET'S OPEN THIS "CAN" SLOWLY AND WITH CARE.

AGRARIAN REFORM

(LAND TRANSFER STUDY)

USAID/BLM-USD (PASA)

AGRARIAN REFORM HAS BEEN A MAJOR POLICY ISSUE IN THE WORLD. THE TERM HAS MANY DIFFERENT MEANINGS AND IS USUALLY ASSOCIATED WITH EXTREME EMOTIONALISM BY THOSE WHO SPEAK OF IT. DISTINCTION THEY ARE FOR OR AGAINST WHAT IT MEANS TO THEM. TOO MANY MEN LACKING COMPLETE UNDERSTANDING OF THE PROBLEM, AFTER SHORT TERM STUDIES AND EVALUATIONS, HAVE RECOMMENDED ILLUSORY SOLUTIONS TO AGRARIAN PROBLEMS IN NUMEROUS DEVELOPING NATIONS, WHICH THROUGH IMPLEMENTATION HAVE PROVEN COSTLY, RATHER IMPRACTICAL AND NON-PRODUCTIVE. THE PROBLEMS IN NO TWO COUNTRIES ARE ALIKE, THEREFORE THE SOLUTIONS ARE NOT THE SAME. THE DEEPER ONE DIGS IN THE CAN AND STUDIES THE "WORMS" THE MORE THIS BECOMES APPARENT.

BY  
WALTER E. BECK

BACKGROUND

BRAZIL IS SO LARGE WITH MANY VARIATIONS OF CLIMATE, SOIL, NATURAL AND HUMAN RESOURCES, AS WELL AS TRADITIONS, CULTURE AND INSTITUTIONS, IT IS ALMOST IMPOSSIBLE TO EVALUATE THE SITUATION AND "FIND THE NAIL" TO PROGRAM DEVELOPMENT AND AN ACTION PLAN WHICH CAN BE IMPLEMENTED.

HISTORY REFLECTS THAT SUPRA WHICH WAS CREATED UNDER THE GILBERT ADMINISTRATION FOSTERED A RADICAL PROGRAM OF LAND EXPROPRIATION, AND ORGANIZED FARM LABORERS FOR THE PURPOSE OF PROVOKING "SQUATTERS" TO INVADE PRIVATE PROPERTY. MANY EXPROPRIATIONS WERE MADE WHICH WERE OF A POLITICALLY PUNITIVE NATURE. IN MANY PARTS OF THE COUNTRY PERNICIOUS EXPROPRIATIONS WERE MADE OF ALL AGRICULTURAL LAND BORDERING ROADS AND NAVIGABLE STREAMS. MANY OF THESE WERE 20 KM IN WIDTH WITH 10 KM ON EITHER SIDE OF THE ARTERY.

RADICAL LEADERS SUPPORTED BY RADICAL GOVERNORS PARTICULARLY IN PERNAMBUCO, RIO GRANDE DO SUL AND GOIAS ORGANIZED BANDS OF "GRIL-LEIRAS" AND ENCOURAGED THEM TO INVADE AND SETTLE ON PRIVATE LAND. THE VIOLENCE, WHICH RESULTED IN CONSIDERABLE LOSS OF LIFE AND PROPERTY DAMAGE BROUGHT OUT STRONG COLORED REACTION AGAINST THIS KIND OF AGRARIAN REFORM AND WAS ONE OF THE STARKS WHICH BROUGHT ABOUT THE REVOLUTION.

PRIOR TO THE REVOLUTION WHICH TOOK PLACE APRIL 1, 1964, A SMALL GROUP OF DEDICATED MEN FORMED A RESEARCH AND STUDY ORGANIZATION WHERE THEY DEVELOPED RECOMMENDATIONS FOR AGRARIAN REFORM. THEIR PUBLICATION WAS NAMED "ATLAS OF AGRARIAN REFORM". THE LEADER OF THE GROUP, DR. PAULO DE ASSIS BASTOS, A WELL KNOWN ECONOMIST WITH MANY YEARS EXPERIENCE IN RESOURCE PLANNING, TOGETHER WITH OTHER EXPERTS DRAFTED THE BILL WHICH BECAME THE AGRARIAN REFORM LAW OF DECEMBER 30, 1964.

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AGRARIAN REFORM HAS MANY FACETS IN ANY COUNTRY IN THE WORLD. THE TERM HAS MANY DIFFERENT MEANINGS AND IS USUALLY ASSOCIATED WITH EXTREME EMOTIONALISM BY THOSE WHO SPEAK OF IT, WHETHER THEY ARE FOR OR AGAINST WHAT IT MAY MEAN TO THEM. TOO MANY MEN LACKING COMPLETE UNDERSTANDING OF THE PROBLEM, AFTER SHORT TERM STUDIES AND EVALUATION HAVE DRAWN CONCLUSIONS AND HAVE RECOMMENDED ILLOGICAL SOLUTIONS TO AGRARIAN REFORM PROBLEMS IN NUMEROUS DEVELOPING NATIONS, WHICH THROUGH IMPLEMENTATION HAVE PROVEN COSTLY, RATHER IMPRACTICAL AND NON PRODUCTIVE. THE PROBLEMS IN NO TWO COUNTRIES ARE ALIKE, THEREFORE THE SOLUTIONS ARE NOT THE SAME. THE DEEPER ONE DIGS IN THE CAN AND STUDIES THE "WORMS" THE MORE THIS BECOMES APPARENT.

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IBRA, THE INSTITUTO BRASILEIRO DE REFORMA AGRÁRIA, WAS CREATED AS AN AUTONOMOUS ENTITY ANSWERING ONLY TO THE PRESIDENT OF THE REPUBLIC. INDA, INSTITUTO NACIONAL DO DESENVOLVIMENTO AGRARIO, BECAME AN ARM OF THE MINISTRY OF AGRICULTURE WITH PRIMARY RESPONSIBILITY FOR PROMOTING COMMUNITY AND RURAL DEVELOPMENT MOSTLY THROUGH COOPERATIVE ACTIVITIES AND ALSO WAS RESPONSIBLE FOR PROMULGATING COLONIZATION "OUTSIDE OF THE PRIORITY ZONES". ON THE OTHER HAND, IBRA HAD PRIMARY RESPONSIBILITY TO CREATE NECESSARY LEGISLATION AND REGULATIONS TO CARRY OUT THE REFORMS NEEDED. AMONG ITS PRINCIPLE DUTIES WAS THE DESIGN AND IMPLEMENTATION OF THE NATIONAL CADASTER OF ALL RURAL PROPERTIES TO FACILITATE ESTABLISHMENT OF A TAX BASE. EXPROPRIATION OF UNDEVELOPED AGRICULTURAL LAND WAS ANOTHER. IBRA IS REQUIRED ALSO TO RESOLVE THE SOCIAL, ECONOMIC AND POLITICAL PROBLEMS WITHIN "FOUR PRIORITY ZONES". IN ADDITION, IT WAS ALSO GIVEN ADMINISTRATIVE JURISDICTION OF THE "FRONTIER STRIP", A "BUFFER STRIP" SOME 150 KM IN WIDTH WHERE BRASIL IS CONTIGUOUS TO OTHER LATIN AMERICAN COUNTRIES.

DR. PAULO DE ASSIS RIBEIRO WAS APPOINTED PRESIDENT-DIRECTOR OF IBRA IN DECEMBER 1964 AND CONTINUED TO DIRECT ITS OPERATIONS DURING THE CASTELO BRANCO ADMINISTRATION. BOTH INDA AND IBRA WERE SLOW TO GET ORGANIZED. REGULATIONS WHICH WERE TO GUIDE BOTH AGENCIES WERE NOT PROMULGATED UNTIL MARCH 31, 1965. THE LAW WAS IN REALITY MADE IN HASTE AND THE REGULATIONS TO IMPLEMENT THE LAW, ALTHOUGH WORDY, DID NOT COME CLOSE TO GIVING IBRA THE TOOLS TO WORK WITH. BETWEEN MARCH 31, 1965 AND MAY 1., 1967, IBRA PROMULGATED A COMBINATION OF NEARLY FOURTY FEDERAL DECREE LAWS, NEW REGULATIONS, INSTRUCTION ADVICES AND EDICTS IN ORDER TO CARRY OUT VARIOUS PROGRAMS IN AGRARIAN REFORM.

#### AGRARIAN REFORM ACCOMPLISHMENTS

DURING ITS TWO YEARS AND FOUR MONTHS AS AN AUTONOMOUS ENTITY, IBRA ENTERED INTO SOME SIXTY-EIGHT CONTRACTS AND AGREEMENTS WITH OTHER GOVERNMENT AGENCIES AND PRIVATE COMPANIES IN ORGANIZING THAT MANY PROJECTS AND SUB-PROJECTS. SOME OF THESE CONTRACTS WERE FOR LAND SURVEYS, CADASTRAL MAPPING, AERIAL PHOTOGRAMMETRIC COVERAGE OF WORK AREAS, LAND RESOURCE INVENTORIES, TRAINING OF FARM WORKERS, ESTABLISHING AND ASSISTING COOPERATIVES, SELECTION OF TENANT FARMERS FOR RESETTLEMENT PROJECTS, SPECIAL EXTENSION SERVICE TRAINING AND ASSISTANCE TO LOWER INCOME GROUPS, IMPROVED PUBLIC HEALTH SERVICES TO RURAL AREAS, CONTRACTS TO DEVELOP COLONIZATION PROJECTS, CONTRACTS WITH COMPANIES TO DEVELOP MIXED GOVERNMENT-PRIVATE ENTERPRISE COLONIES, ETC.

PRIMARY ACCOMPLISHMENT OF IBRA WAS THE CONDUCT OF THE NATIONAL CADASTER THROUGH WHICH SOME 3,457,000 RURAL PROPERTY OWNERS IN 3,987 OF THE 3,993 LEGALLY ACKNOWLEDGED MUNICIPIOS REGISTERED THEIR LAND AND TO DATE HAVE PAID IN TO THE FEDERAL GOVERNMENT NEARLY FORTY BILLION CRUZEIROS. THERE IS AN APPENDIX TO THIS REPORT IN WHICH I HAVE TABULATED SOME CADASTER STATISTICS AND MADE SOME COMMENTS ON SALIENT POINTS OF THE PARTICULARS AND REQUIREMENTS, THEREFORE I WILL NOT ELABORATE ON THESE AT THIS TIME. MOST OF THE WORK WAS DONE BETWEEN NOVEMBER 1965 AND DECEMBER 31, 1966. THERE WERE ONLY SIX PEOPLE IN THE CADASTRAL DIVISION IN SEPTEMBER 1965, YET SOME 122,000 PEOPLE WERE TRAINED AND CONDUCTED THIS GARGANTUAN TASK IN THIS SHORT PERIOD OF TIME.

ANOTHER EXTENSIVE GEOGRAPHIC AREA FOR WHICH IBRA HAS ADMINISTRATIVE JURISDICTION IS THE 150 KM "MILITARY BUFFER STRIP" ALONG THE FRONTIER BORDERS WITH OTHER LATIN AMERICAN COUNTRIES. WITHIN THIS ZONE, PARTICULARLY IN RIO GRANDE DO SUL AND PARANA THERE

IS MUCH CONFUSION, DISPUTES AND VIOLENCE OVER LAND OCCUPATION. HERE, IBRA HAD TO GET AERIAL PHOTO COVERAGE IN ORDER TO DELINEATE PROPERTY BOUNDARIES ON THE PHOTOS AND IN TURN MAKE LAND OWNERSHIP (CADASTRAL MAPS). THEY JUST EXAMINE TITLES AND OTHER CLAIMS OF TENANCY, THEN CONFIRM OR ISSUE NEW TITLES TO THOSE QUALIFIED AND FOR THOSE NOT QUALIFIED, IBRA MUST FIND NEW AGRICULTURAL AREAS FOR SETTLEMENT. IN RIO GRANDE DO SUL, FOR EXAMPLE, IBRA CONFIRMED 21,107 TITLES OF PERSONS LIVING WITHIN THE "STRIP". THEY ISSUED 987 NEW TITLES AND FOLLOWING THE FURTHER CHECKING OF ANOTHER 1,633 CLAIMS IT WILL SHORTLY ISSUE THAT MANY MORE TITLES.

ALTHOUGH IBRA HAS NOT DONE MUCH WITH NEW COLONIZATION IDEAS, IT HAS DEVELOPED ACTION PLANS FOR CAXANGA IN PERNAMBUCO, ALEXANDRE GUSMAO WITHIN THE FEDERAL DISTRICT AT BRASILIA, AND PAPUCAIA IN THE STATE OF RIO DE JANEIRO. THE FIRST AND THIRD AREAS INVOLVED EXPROPRIATION WHICH DELAYED THE START OF THE ACTION PROGRAMS. THESE ARE EXPENSIVE OPERATIONS AND WILL TAKE NEARLY FOUR YEARS TO SEE DEVELOPMENT TAKE PLACE FOR THE ENTIRE AREAS. IBRA HAS ALSO TRAINED NEARLY 200 MEN IN SUCH THINGS AS SURVEYING, PHOTOGRAMMETRY, CARTOGRAPHIC MAP MAKING AND NATURAL RESOURCE STUDIES EMPLOYING AERIAL PHOTOGRAMMETRY. IBRA HAS HAD OTHER ACCOMPLISHMENTS WHICH HAVE NOT BEEN PUBLICIZED, OR WIDELY HERALDED. THEY WERE VERY ACTIVE IN FLOOD RELIEF WORK AT RECIFE AND HERE IN RIO DE JANEIRO THIS PAST YEAR.

INDA ON THE OTHER HAND, UP THROUGH FEBRUARY 1967 HAD EXECUTED SOME 54 AGREEMENTS AND SIX CONTRACTS WITH OTHER FEDERAL, STATE AND LOCAL ENTITIES. THE AMOUNT OF MONEY INVOLVED IN THESE ACTIONS EXCEED TEN MILLION DOLLARS. THEY PROMOTED REGIONAL MEETINGS, BRINGING TOGETHER LEADERS OF DIFFERENT FARM ORGANIZATIONS OF BOTH FARM OWNERS AND FARM WORKERS. THEY HAD AGREEMENTS WITH CNA AND CONTAG FOR TRAINING PROGRAMS CONSISTING OF 54 COURSES FOR SOME 3,000 FARM LABORERS.

INDA HAS AN AGREEMENT WITH THE LAVRAS AGRICULTURAL SCHOOL FOR TRAINING LEADERS IN COOPERATIVES. THEY ALSO HAVE AGREEMENT WITH MOST STATES TO ESTABLISH COOPERATIVES, OR SMALL OFFICES WHERE INDA WOULD PROVIDE SPECIAL HELP IN COOPERATIVE ORGANIZATION AND DEVELOPMENT. IT ADMINISTERS SOME 26 COLONIES WHICH IT INHERITED FROM FORMER FEDERAL ENTITY, SUPRA, SOME OF WHICH HAD BEEN HAND-ED DOWN FROM INIC AND RSS. THESE COLONIES EMBRACE NEARLY FIVE MILLION ACRES. IT IS ALSO COOPERATING WITH THE STATES OF SAO PAULO, RIO GRANDE DO SUL, PERNAMBUCO AND BAHIA IN ADDITIONAL SETTLEMENT PROJECTS. INDA'S BUDGET FOR RURAL ELECTRIFICATION COVERING PLANS, STUDIES, PROGRAMS ETC. IN SIX STATES APPROXIMATES THREE MILLION DOLLARS.

INDA HAS AGREEMENTS WITH STATES IN A SPECIAL PROGRAM DIRECTED AT DEVELOPING MODEL COUNTIES, A SHOW ROOM SO TO SPEAK. HERE WILL BE DISPLAYED CONCENTRATED MAXIMUM EFFORT TO DEMONSTRATE WHAT CAN BE ACCOMPLISHED IN RURAL DEVELOPMENT. INDA HAS PURCHASED A LOT OF EQUIPMENT TO HELP WITH THIS DEVELOPMENT PROGRAM.

#### AID EFFORTS IN AGRARIAN REFORM

THUS FAR AID'S APPROACH TO AGRARIAN REFORM IN BRASIL HAS BEEN TO PROVIDE ASSISTANCE THROUGH RESEARCH ON VARIOUS ASPECTS OF LAND TENURE THROUGH AN AID/W CONTRACTS WITH THE UNIVERSITY OF WISCONSIN, ALSO SPECIFIC STUDIES AND SURVEYS OF LAND RESOURCES AND AREA PROBLEMS WITH CONTRACTS TO HAWAIIAN AGRONOMICS, FOR THE NORTHEAST SUGAR ZONE, AMERICAN INTERNATIONAL ASSOCIATION

FOR PLANALTO SURVEY, AND THE USDA-MINISTRY OF AGRICULTURE EXPLORATORY SOIL RESOURCE STUDY FOR TWO THIRDS OF BRASIL.

IBRA IS ONE OF THE AGENCIES INCLUDED IN DIRECT BUDGET SUPPORT LOAN. IN ADDITION, I HAVE BEEN ATTACHED TO IBRA IN AN ADVISORY CAPACITY SINCE NOVEMBER 1965. IBRA HAS APPLIED FOR AND SOON HOPES TO BE QUALIFIED TO PURCHASE CONSIDERABLE EXCESS PROPERTY TO AID THEM IN THEIR WORK PROJECTS. IBRA HAD THE SERVICES OF THREE CONSULTANTS FROM THE BUREAU OF LAND MANAGEMENT FOR THREE MONTHS IN 1966 AND WERE PRIVILEGED TO SEND FOUR OF ITS TOP SUPERVISORY PERSONNEL TO THE U.S. FOR SIX WEEKS IN 1967 ON A TRAINING ORIENTATION MISSION SPONSORED BY THE BUREAU OF LAND MANAGEMENT.

INDA RECEIVES TECHNICAL ASSISTANCE THROUGH THE USDA-PASA IN COOPERATIVES, AND IS RECEIVING SOME LOANS AND TECHNICAL ASSISTANCE FOR TRAINING AND RESEARCH. FOR SOME TIME THERE HAS BEEN UNDER CONSIDERATION AT AID A PROPOSAL OF A LOAN TO INDA TO PURCHASE HEAVY DUTY EQUIPMENT FOR LAND CLEARING AND ROAD CONSTRUCTION WORK. IN ADDITION, IT IS HOPED TO DEVELOP LOAN FUNDS TO BE SPENT ON COMMUNITY ACTION PROGRAMS ON A COST SHARING BASIS; WITH INDA ADMINISTERING THIS NATIONAL PROGRAM.

#### OBJECTIVES OF PROJECT

THE PROJECT TITLE HAS BEEN CHANGED THREE DIFFERENT TIME SINCE 1964 BUT THERE HAS BEEN LITTLE CHANGE IN THE OBJECTIVES. IN SHORT, THEY ARE TO DEVELOP AND IMPROVE THE CAPABILITIES OF THE IBRA, PARTICULARLY ITS NATURAL RESOURCE DIVISION, SO THAT IT CAN EFFECTIVELY AND EFFICIENTLY DISCHARGE ITS RESPONSIBILITIES FOR AGRARIAN REFORM IN BRASIL. SPECIFIC EMPHASIS IS PLACED ON MAKING CADASTRAL (LAND) SURVEYS; INTRODUCING LAND USE CLASSIFICATION AND ZONING PRACTICES; ESTABLISHING EFFICIENT LAND DISTRIBUTION SYSTEMS AND TITLING; AND PROMOTING IMPROVED MANAGEMENT PRACTICES ON PUBLIC AND PRIVATE LAND.

WE MAKE HASTE SLOWLY! IBRA RECOGNIZES THESE NEEDS OF THE COUNTRY AND THEY KNOW THAT ONE OBJECTIVE IS TIED TO THE OTHER. ALTHOUGH THE NATIONAL CADASTER REVEALS THAT SOME 55% OF BRASIL IS "PUBLIC LAND", NO ONE HAS THE REMOTEST IDEA AS TO WHERE THE PUBLIC LAND IS LOCATED. THIS IS SO BECAUSE THERE HAS NEVER BEEN A NATIONAL SYSTEM OR A STATE SYSTEM OF ORGANIZED LAND SURVEYS FROM WHICH RECORDS COULD BE DEVELOPED AND MAPS CONSTRUCTED WHICH WOULD REVEAL GEOGRAPHICAL LOCATIONS OF PRIVATE AND PUBLIC LAND.

CADASTRAL, OR (IN OUR VENACULAR) LAND STATUS MAPS MAY BE DEVELOPED THROUGH APPLICATION OF AERIAL PHOTOGRAMMETRY-PHOTO INTERPRETATION (WITH CERTAIN LIMITING FACTORS); FROM RECORDS MADE AS A RESULT OF THE ESTABLISHMENT OF A BASIC RECTANGULAR NETWORK LAND SURVEY SYSTEM AND/OR THROUGH ESTABLISHING A TRIANGULATION GROUND STATION NETWORK TO "TIE" THE METES AND BOUNDS SURVEYS TOGETHER. TO DEVELOP SUCH MAPS IN MANY PARTS OF BRASIL, ALL THREE PRINCIPLES MAY HAVE TO BE EMPLOYED.

MY RECENT SPECIAL REPORT ENTITLED "LAND TITLE REGISTRATION IN BRASIL" BRINGS OUT MANY PROBLEMS OF THE INSECURITY OF LAND TITLES. THE REPORT BRINGS OUT THE NEED TO ESTABLISH THESE "SYSTEMS" AT THE EARLIEST POSSIBLE DATE BECAUSE LAND TENURE BECOMES MORE CRITICAL EACH DAY, MONTH AND YEAR. UNITS OF MEASURE USED IN EXISTING METES AND BOUNDS SURVEYS AND THE WRITTEN LENGTHY DESCRIPTIONS ARE INCONCEIVABLY COMPLEX. I SHOULD HAVE INCLUDED IN MY LAND TITLE REGISTRATION IN BRASIL REPORT THESE UNITS OF

MEASURE I SAW ON MAPS OR IN LAND TITLE DESCRIPTIONS IN SIX DIFFERENT STATES. THE FOLLOWING WILL ILLUMINATE THE PROBLEM.

A MEASURED DISTANCE IS SOMETIMES REPORTED IN METERS, KILOMETERS, LEAGUES OR "BRAÇAS". WHILE WE GENERALLY UNDERSTAND THE FIRST THREE MEASUREMENTS, THE "BRAÇA" IS A STRANGER. IT IS 2.2 METERS OR 7' 3". IT TAKES 3,000 BRAÇAS TO EQUAL A LEAGUE WHICH MEASURES OUT AT 4.1 MILES. THE FOLLOWING TABLE REFLECTS THE MANY UNITS OF MEASURES, THE SQUARE METERS AND COMPUTED ACREAGES.

| NAME               | SQ. METERS | ACRES |
|--------------------|------------|-------|
| QUADRA DE SESMARIA | 871,200    | 214   |
| ALQUEIRE MINEIRO   | 48,400     | 11.96 |
| ALQUEIRE PAULISTA  | 24,200     | 5.98  |
| QUADRA GAUCHA      | 17,424     | 4.30  |
| QUADRA PARAIBANA   | 12,100     | 2.99  |
| HECTARE            | 10,000     | 2.47  |
| TAREFA BAHIANA     | 4,356      | 1.10  |
| TAREFA CEARENSE    | 3,630      | .90   |
| TAREFA NORDESTINA  | 3,025      | .75   |
| TAREFA GAUCHA      | 968        | .24   |

NOW, UNTIL WE CAN BE PERSUASIVE IN OUR REASONS WHY BRASIL MUST COME TO A NATIONAL SYSTEM FOR SURVEYING LAND AND MAKING OF CADASTRAL MAPS WE CANNOT EXPECT TO MAKE PROGRESS IN CARRYING OUT THE OTHER OBJECTIVES OF MY PROJECT. IN THE ABSENCE OF A BASIC SURVEY SYSTEM, RECORDS OF THE SURVEYS, MAPS AND SIMPLIFIED TITLES, THERE JUST ISN'T ANY POSSIBLE WAY TO IMPLEMENT THE PROJECT IN BRASIL. IT IS TOO LATE TO THINK OF LAND CLASSIFICATION AFTER PAPER SURVEYS HAVE BEEN MADE TO DEFINE UN-ECONOMIC SIZE FARM UNITS WHICH HAVE ALREADY BEEN ALLOTTED TO SETTLERS. IT IS ALSO TOO LATE TO "ZONE" THE LAND FOR SPECIFIC USES WHEN POOR PLANNING HAS ALREADY INDICATED THAT ALL THE LAND WAS TO BE CUT UP INTO ODD SHAPED PARCELS FOR AGRICULTURE WITHOUT ANY SPECIFIC ASSURANCE THAT THE LAND WAS AT ALL SUITABLE FOR AGRICULTURE. YOU CANNOT IMPROVE MANAGEMENT PRACTICES ON PUBLIC LAND IF YOU DO NOT KNOW WHERE IT IS LOCATED AND IF THERE IS NO INTEREST IN CONSERVATION AND MANAGEMENT. YOU CANNOT IMPROVE MANAGEMENT PRACTICES ON PRIVATE LAND (PRIMARILY COLONIZATION PROJECTS) WHEN YOU ARE DEALING WITH INEFFICIENT SIZED PARCELS OF LAND INTENDED ONLY FOR BARE SUBSISTENCE FARMING UNDER A PATERNALISTIC SYSTEM. YOU CANNOT BRING ABOUT GOOD SOIL PRACTICES WHERE BECAUSE OF LACK OF PROPER EQUIPMENT THE ONLY FEASIBLE MEANS OF CLEARING LAND IS BY CHOPPING THE TREES DOWN, SLASHING THE BRUSH AND THEN BURNING UP EVERYTHING INCLUDING THE COMBUSTIBLE HUMUS IN THE SOIL. IT IS THEN ALSO A LITTLE LATE AND FUTILE TO TRY TO TEACH CONSERVATION, EROSION CONTROL, AND WATER-SHED PROTECTION.

#### CONCLUSIONS AND RECOMMENDATIONS

AT THE MOMENT I FEEL THAT I SHOULD HAVE PRESENTED MY END OF TOUR REPORT TO LEAVE YOU ALL WITH SOME FOOD FOR THOUGHT ON THIS VERY CONTROVERSIAL AGRARIAN REFORM. I WOULD HAVE BUT IT WAS 13 OR 14 PAGES LONG AND I STARTED OUT WITH THIS PRESENTATION THINKING I COULD REDUCE THE LENGTH BY HALF BUT THIS HAS NOT BEEN POSSIBLE. MY END OF TOUR REPORT IS DONE WITH MUCH MORE CARE AND SHOULD BE USEFUL TO THOSE WHO PROGRAM FOR AGRARIAN REFORM IN THE FUTURE. IT TOO, ELABORATES ON THE "CAN OF WORMS". I PREFER TO OPEN UP A CAN OF "ALPHABET SOUP" WHERE WE HAVE SOMETHING TO

WORK WITH. AS EACH LETTER FALLS INTO PLACE IN OUR EFFORTS TO SPELL OUT SIMPLE ACTION PROGRAMS WE LOOK FORWARD TO SOLVING PROBLEMS BEFORE THEY BECOME PROBLEMS FOR AGRARIAN REFORM.

BRASIL HAS ONE BIG PROBLEM, A NATIONAL PROBLEM. IT IS ITS PUBLIC LAND AND WHAT TO DO WITH IT AND HOW TO DO IT. ACCORDING TO THE RESULTS OF THE NATIONAL CADASTER OF 1966 BRASIL HAS SOME 400,000,000 HECTARES OF PUBLIC LAND, BUT IT HAS NOT THE FAINTEST IDEA WHERE THE LAND IS LOCATED EXCEPT THAT IT IS KNOWN THAT THE BULK OF IT IS LOCATED IN SUCH STATES AS AMAZONAS, PARA, MARANHÃO, MATO GROSSO, GOIAS, AND TERRITORIES OF RONDONIA AND AMAPA. WHERE IS IT ALL GEOGRAPHICALLY LOCATED? HOW CAN IT BE IDENTIFIED? ONCE THESE QUESTIONS ARE RESOLVED, WHAT DO YOU DO WITH IT? HOW DO YOU DO IT? MANY SUCH QUESTIONS COME UP FOR ANSWER AND TO ANSWER THEM BRASIL NEEDS TO CONSIDER:

1. PROMULGATE LEGISLATION UNDER ARTICLE 157 OF THE NEW CONSTITUTION TO "FEDERALIZE" ITS PUBLIC LAND (EITHER ALL, OR WITHIN ONE STATE AS A PILOT PROJECT) THEREBY TRANSFERRING JURISDICTION FROM THE STATES OR A STATE TO THE FEDERAL GOVERNMENT (IBRA). SOME LEGISLATION SHOULD RESERVE AND WITHDRAW THIS "TERRAS DEVOLUTAS" FROM PUBLIC ENTRY PENDING LEGISLATION AND CLASSIFICATION AS TO ITS DISPOSITION.
2. ESTABLISH THE RECTANGULAR NETWORK SYSTEM GRID (AS IN THE U.S. TO IDENTIFY ITS PUBLIC LAND. EMPLOY LATEST MEANS OF EXECUTING SURVEY BY A.B.C. HOVERSIGHT ELECTRONICALLY EQUIPPED HELICOPTERS.
3. SURVEY WILL BE THE BASIS FOR CONSTRUCTION FOR THE FIRST TIME ACCURATE MAPS AND RECORDS.
4. ESTABLISH NETWORK OF DISTRICT MANAGEMENT OFFICES WHICH WILL BE RESPONSIBLE TO INITIATE NATURAL RESOURCE SURVEY AND CLASSIFY LAND ACCORDING TO ITS CAPABILITY AND HIGHEST AND BEST USES. THIS OFFICE WILL ALSO DIRECT THE EVENTUAL SETTLEMENT.
5. SIMULTANEOUSLY ESTABLISH LAND OFFICES WHICH WILL BE THE LAND DISTRICTS, CENTERS FOR MAINTENANCE OF THE SURVEY RECORDS, PLATS AND FIELD NOTES. THE LAND OFFICE WILL ALSO MAINTAIN THE CLASSIFICATION AND OTHER RECORDS FURNISHED BY THE DISTRICT MANAGEMENT OFFICE. MOST IMPORTANT, ITS RECORDS KEEPING FUNCTIONS WILL BE TO MAINTAIN UP TO DATE LAND STATUS RECORDS THROUGH USE OF PLAT AND TRACT BOOKS, MAPS, AND SERIAL REGISTERS ALL OF WHICH CONTAIN CORROLATED COMPLETE RUNNING RECORDS OF ALL TRANSACTIONS WITHIN THAT DISTRICT. THE ADJUDICATION FUNCTIONS OF THE OFFICE WOULD BE TO RECEIVE AND ACT UPON ALL APPLICATIONS FOR LAND, ISSUE TITLES, LEASES, PERMITS, RIGHTS-OF-WAY, TIMBER PERMITS, ETC. THE PRIME PURPOSE OF THE LAND OFFICE IS TO SERVE THE PUBLIC ON ALL PUBLIC LAND MATTERS.

#### BENEFITS TO BRASIL

ADOPTION OF THE PROPOSAL PATTERNED AFTER THE U.S. SYSTEM WILL:

1. CREATE AN EQUITABLE, REALISTIC APPROACH TO CONSERVATION AND MANAGEMENT OF THE VAST NATURAL RESOURCES AND BRING IN INCOME TO THE GOVERNMENT TO SUSTAIN THE PROGRAM.
2. PROMOTE ORDERLY DEVELOPMENT OF THE STATE IN A NATIONAL INTEREST.

3. SURVEY, RECORDS AND TITLING SYSTEMS WILL PLACE A NEW EMPHASIS ON LAND TITLE REGISTRATION AND BETTER GUARANTEE OF LAND TENURE.

4. GIVE IBRA A MEANS OF EXCHANGING SOME OF THESE NEWLY IDENTIFIED LANDS WHICH MAY NOT BE FOUND SUITABLE FOR AGRICULTURAL DEVELOPMENT FOR LANDS IN ONE OF THE PRIORITY AREAS PRIVATELY OWNED AND WHICH IBRA NEEDS FOR DEVELOPMENT.

5. ELIMINATE THE FRAUD AND LAND GIVE AWAY PREVALENT IN MOST FRONTIER STATES TODAY.

6. PROVIDE A LEGAL AND ORDERLY MEANS TO CREATE AND GUARANTEE INGRESS AND EGRESS TO PUBLIC LANDS AND WATERS. THIS IS DONE THROUGH CREATION OF AN EASEMENT (WHICH IS KNOWN AT THE TIME PHYSICAL ENTRY ON THE LAND IS ALLOWED AND IS MADE PERPETUAL BY HAVING THE EASEMENT MADE A PART OF THE DEED, PATENT, OR TITLE).

7. BY MAKING FUTURE PLANS TODAY, THE GOVERNMENT AVOIDS HAVING TO EXPROPRIATE OR CONDEMN PRIVATE LAND FOR HIGHWAY, PIPELINE AND TRANSMISSION LINES BY CREATING EASEMENTS FOR RIGHTS-OF-WAY ACROSS THE PUBLIC LAND IN ADVANCE OF OCCUPATION.

8. RECREATION, LANDS, FOREST LANDS AND OTHER RENEWABLE RESOURCES SUCH AS BABAÇU, BRASIL NUT, RUBBER, ETC., AREAS ARE RESERVED AND MANAGED FOR PUBLIC BENEFIT AND FUTURE POSTERITY.

9. BY LEGISLATION AND REGULATION, THE WELFARE OF THE NATION IS PROTECTED THROUGH SELLING OR LEASING LAND COMPETITIVELY AND AT A FAIR MARKET VALUE BASED ON COMPARABLE SALES IN THE VICINITY. ELIMINATION OF SPECULATION THROUGH REQUIREMENTS FOR LAND DEVELOPMENT IS A MUST. FOR NON COMPLIANCE, NON DEVELOPED LAND WILL REVERT TO THE GOVERNMENT.

10. BY LEGAL REFERENCE TO MERIDIAN, TOWNSHIP, RANGE, SECTION AND ALIQUOT PART, ALL LANDS ARE READILY IDENTIFIABLE AND DESCRIBABLE. THIS AIDS ALL STATE AND NATIONAL PURPOSES ESPECIALLY REGISTRATION OF TITLES AND FOR TAX PURPOSE AND ULTIMATELY AIDS IN FUTURE SUBDIVISION BY ALIQUOT PART DESCRIPTION WITHOUT NEED FOR REGISTERED SURVEYS.

11. INTERNATIONAL DEVELOPMENT WILL BE ENCOURAGED.

#### WHAT AID MIGHT DO ABOUT THIS PROBLEM

CONDITIONALLY, UPON ACTION BY THE LEGISLATURE AND PRESIDENT TO "FEDERALIZE" A SIZEABLE AREA OF PUBLIC LAND IN AT LEAST ONE STATE TO CREATE A PILOT PROJECT AREA, AID MIGHT CONSIDER:

1. MAKING A SECTOR LOAN AVAILABLE TO IBRA FOR THIS PROJECT.

2. FACILITATE IMPORT OF NECESSARY HELICOPTERS AND A.B.C. ELECTRONIC EQUIPMENT AND PROCUREMENT OF OTHER NECESSARY SUPPLIES FOR TRAINING PURPOSES.

3. NEGOTIATE PRO/AG WITH IBRA THROUGH MINISTRY OF AGRICULTURE AND PASA WITH BLM/USDI TO MAKE AVAILABLE TO BRASIL TECHNICIANS FOR TWO YEARS ASSIGNMENT TO TRAIN BRASILIANS IN ALL PHASES OF PUBLIC LAND ADMINISTRATION, I.E., 1 CADASTRAL ENGINEER, 1 ELECTRONIC GEODETIC CONTROL ENGINEER, 1 AIRBORNE CONTROL SYSTEM ENGINEER, 1 LAND CLASSIFICATION EXPERT, 1 LAND OFFICE MANAGER, AND 1 LAND LAWYER.

4. PROVIDE FUNDS FOR BLM IN THE U.S. TO CONDUCT SOME 3 MONTHS AND SOME 6 MONTHS TRAINING COURSES IN VARIOUS DISCIPLINES INCLUDING LAND OFFICE ADMINISTRATION AND ADJUDICATION, PUBLIC AND EMPLOYEE RELATIONS, PERSONNEL MANAGEMENT, BUDGETARY AND FISCAL AFFAIRS, RECORD KEEPING, EROSION CONTROL AND WATERSHED PROTECTION, RANGE REHABILITATION, REFORESTATION, FIRE CONTROL AND PRE-SUPPRESSION AND LAND SURVEYING.

AS RECRUITING TAKES SOME TIME WITH NEARLY A YEARS TIME LOSS BEFORE LONG TERM TECHNICIANS GET ON THE JOB, I FEEL THAT THE 3 TO 6 MONTHS TRAINING ASSIGNMENTS OF IBRA PERSONNEL DURING THIS PERIOD WILL HELP DEVELOP COUNTER-PART PERSONNEL FOR THE LONG TERM TECHNICIANS TO WORK WITH. HERE WE CAN SOLVE THE COUNTER-PART PROBLEM WHICH PLAGUES SO MANY PROGRAMS.

TO SUM UP THESE RECOMMENDATIONS, WE NEED TO ENCOURAGE APPLICATION OF PROVEN SYSTEMS, EFFICIENT ADMINISTRATION STABLE ORGANIZATION AND PROVEN LAND MANAGEMENT PRACTICES INTO THIS MODERN APPROACH TO AGRARIAN REFORM.

RIO DE JANEIRO,  
MAY 8, 1967.  
WEB/IM