



LIVELIHOODS AND LAND USE CHANGE IN SOUTH AFRICA: INTEGRATING SOCIAL SCIENCE AND REMOTE SENSING/GIS

DR. BRENT MCCUSKER

VISITING ASSISTANT PROFESSOR
DEPARTMENT OF GEOGRAPHY
WEST VIRGINIA UNIVERSITY

PREMISE OF THE STUDY

LAND REFORM WAS UNDERTAKEN IN SOUTH AFRICA AFTER 1994 WITH THE INTENTION OF REDRESSING THE LARGE LAND IMBALANCE IN THE COUNTRY AND STRENGTHENING LIVELIHOODS THROUGH THE PROMOTION OF AGRICULTURE. AT ONE TIME, AS MUCH AS 85% OF THE LAND WAS CONTROLLED BY THE WHITE MINORITY POPULATION. THE INTENTION OF THE LAND REFORM PROGRAM WAS TO TRANSFER WHITE LAND TO HISTORICALLY DISADVANTAGED BLACKS TO ALLEVIATE POVERTY AND PROMOTE ECONOMIC TRANSFORMATION IN THE RURAL AREAS. THIS STUDY WAS CONDUCTED TO EVALUATE THE IMPACTS OF LAND REFORM ON LIVELIHOODS AND LAND USE CHANGE. RESEARCH WAS CONDUCTED ON COMMUNAL PROPERTY ASSOCIATIONS. THE MAJOR MECHANISM OF LAND TRANSFER. PRODUCTION IS COMMUNAL AND MOST FARMS AVERAGE 100-200 MEMBERS.



METHODS

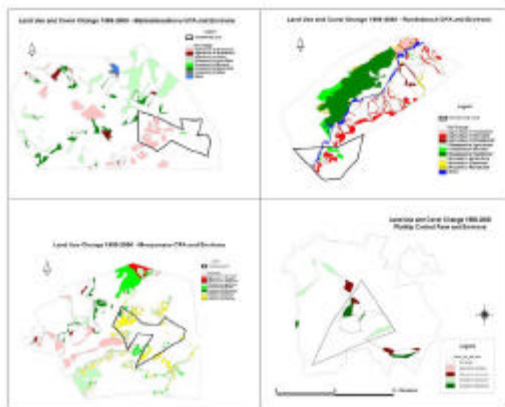
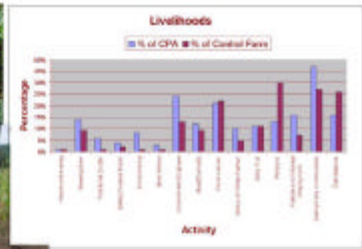
RATHER THAN APPROACH THE INVESTIGATION OF LIVELIHOODS FROM ONLY ONE PERSPECTIVE, THIS STUDY DRAWS ON MULTIPLE SOURCES TO EVALUATE THE IMPACT OF LAND REFORM. FIRST, TECHNIQUES MORE GENERALLY CONSIDERED AS SOCIAL SCIENCE, SUCH AS INTERVIEWS, COMMUNITY DISCUSSIONS, AND KEY INFORMANT INTERVIEWS WERE CONDUCTED.

A SEPARATE ANALYSIS OF LAND USE CHANGE USING REMOTE SENSING WAS USED TO CORROBORATE OR REJECT FINDINGS FROM INFORMANTS. FURTHER, IT ALLOWED FOR QUERRING THAT MAY HAVE OTHERWISE NOT OCCURRED. AREAS OF LAND USE CHANGE COULD BE IDENTIFIED AND QUESTIONS RAISED INDEPENDENTLY OF WHAT KEY INFORMANTS REPORTED. AREAS OF CHANGE THEY DID NOT NECESSARILY DISCUSS COULD BE INVESTIGATED. A FARM THAT HAD NOT UNDERGONE LAND REFORM (PLATKLIP FARM) WAS STUDIED TO MAKE COMPARISONS.

LIVELIHOODS

LIVELIHOODS ON THE TRANSFERRED LANDS DID NOT BENEFIT SIGNIFICANTLY FROM THE LAND REFORM PROGRAM. THE FEW BENEFITS THAT DID MATERIALIZE ACCRUED TO MEN DISPROPORTIONATELY. ALTHOUGH MEMBERS OF COMMUNAL PROPERTY ASSOCIATIONS HAD BROADER COPING MECHANISMS TO FOOD SHORTAGES THERE IS NO DIRECT EVIDENCE THAT MEMBERSHIP IN A CPA REDUCED VULNERABILITY.

THE MOST PREVALENT LIVELIHOOD ACTIVITIES OF CPA MEMBERS WAS PETTY COMMODITY PRODUCTION AND TRADE, PENSIONS, EMPLOYMENT IN THE CIVIL SERVICE AS TEACHERS, AND WORKING FOR HIRE AS A FARM LABORER. ON THE PLATKLIP FARM, PENSIONS AND REMITTANCES WERE THE MOST COMMON LIVELIHOOD ACTIVITIES.



LAND-USE CHANGE AND DRIVING FORCES

LAND USE CHANGE WAS FOUND TO BE LARGELY EXTENSIVE ON THE COMMUNAL PROPERTY ASSOCIATIONS. THE EXPECTATION WAS OF INTENSIFICATION, HOWEVER, INTENSIFICATION DID OCCUR IN THE AREAS JUST OUTSIDE THE TRANSFERRED LANDS. A PROCESS OF SIMULTANEOUS INTENSIFICATION AND EXTENSIFICATION IS OCCURRING, AS A RESULT OF THIS EARLY DISCOVERY, DETAILED QUESTIONS WERE RAISED REGARDING LAND USE CHANGE AND ITS DRIVING FORCES. ON CPAS, QUESTIONS WERE RAISED REGARDING THE REASONS FOR EXTENSIFICATION. THE MAJOR FACTORS BLOCKING INTENSIFICATION ON THE CPAS INCLUDED POOR MANAGERIAL ORGANIZATION, LACK OF LABOR AND SKILLS, TOO MANY MEMBERS, GENDER BIAS, POOR CAPITAL INVESTMENT AND MANAGEMENT, AND A HIGH NUMBER OF ELDERLY MEMBERS.

IN THE SURROUNDING AREAS (THOSE THAT EXPERIENCED INTENSIFICATION) THE DRIVING FORCES OF CHANGE INCLUDED PERCEPTIONAL FACTORS SUCH AS HERITAGE OF FARMING, NEED TO ACTIVELY UTILIZE ONES LAND, AND COMMUNITY LEVEL FORCES SUCH AS CONFLICT BETWEEN LOCAL GOVERNMENT AND CHIEFS OVER LAND USE, AND THE DEGREE OF HOUSEHOLD INCOME DIVERSIFICATION.

FUTURE RESEARCH

FUTURE RESEARCH IN THIS AREA WILL ADDRESS AND BUILD UPON THESE FINDINGS, SPECIFICALLY FOCUSING ON THE SOCIAL DRIVING FORCES OF LAND USE CHANGE. THE CHALLENGE FOR THE FUTURE IS TO CLOSE THE GAP BETWEEN SOCIAL PROCESSES OPERATING ON THE GROUND AND PATTERNS IDENTIFIED ON REMOTELY SENSED IMAGERY. RELATING THE SOCIAL FORCES DRIVING CHANGE TO PATTERNS IN THE IMAGERY WILL BUILD THE FRAMEWORK FOR BROADER REGIONAL OR NATIONAL SCALE ANALYSIS OF CHANGE.



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